



Population and settlement

Chapter 3

Introduction

Australia's major cities are home to around three-quarters of all Australian residents. Australia's population is growing and changing as explained in the Australian Government's 2010 Intergenerational Report *Australia to 2050: future challenges* (The Treasury 2010). Most of the growth will occur in the major cities and, combined with rapid ageing of the population, will greatly affect the social and demographic profiles of each of the cities over the coming decades.

This chapter presents some features of the population of the major cities and describes some of the changes occurring at the household level as a result of population ageing.

Summary indicators

Dimension	Indicators
Population	Number of persons Population distribution: <ul style="list-style-type: none">– Urban Indigenous population– Population growth– Overseas-born population in major cities
Ageing	Proportion of persons aged over 65 years
Household size	Number of persons in household by age
Household composition	Family households by age of youngest child Couple-only households by age Lone-person households by age
Dwelling stock	Proportion of housing stock by dwelling type Average dwelling size Dwelling approvals

Key findings

- Just over three-quarters of all Australians live in 17 major cities with populations over 100,000 at the 2006 Census.
- The majority of urban Australians live in the five largest cities of Sydney, Melbourne, Brisbane, Perth and Adelaide.

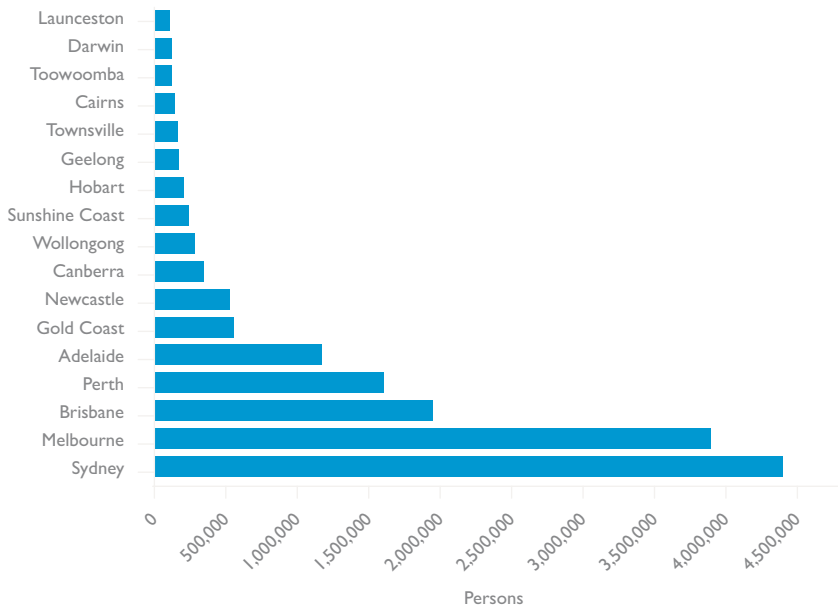
- Australia’s population is projected to reach more than 35 million people by around mid-century according to both ABS and Treasury projections. Most of this growth (72 per cent) will be in the capital cities.
- Treasury projections in the 2010 Intergenerational Report estimate that there will be 8.1 million people aged over 65 years by 2050, representing 23 per cent of the population compared to 2.6 million people or 13.3 per cent in 2006.
- The number of households in Australia is projected to increase from 7.4 million in 2001 to at least 10.2 million in 2026 while the average household size is expected to decline from 2.6 people per household in 2001 to less than 2.3 people per household in 2026.

Total population

In June 2008, an estimated 16,056,000 people were living in Australia’s 17 major cities (ABS 2009a)—that is, in cities with populations above 100,000 as at the 2006 Census. This represents just over three-quarters (75.2 per cent) of the Australian population.

Australia’s major cities range in size from the largest capital cities—Sydney with 4.4 million people and Melbourne with 3.9 million people—to the smaller regional cities like Townsville, Cairns and Toowoomba (Figure 3.1) (ABS 2009a).

Figure 3.1 Estimated Resident Population of Australia’s major cities, 2008



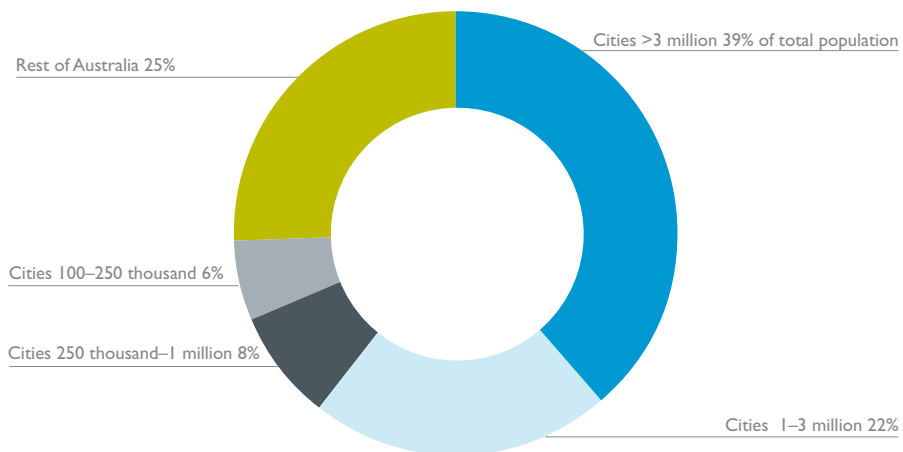
Source: ABS 2009a

There are other rapidly growing regions that did not have a population over 100,000 at the 2006 Census but are likely to reach or surpass that figure by the 2011 Census. Among them is Albury-Wodonga, an important regional centre and an emerging city that straddles the state boundary between New South Wales and Victoria along the Murray River. The estimated resident population of Albury-Wodonga in June 2008 reached 102,894 people. However, as it had not reached a population of 100 000 at the 2006 Census it is not incorporated as a major city in this report.

Population distribution

Australia's population is highly concentrated in urban centres. Nearly two-thirds (63.9 per cent) or 13,687,640 people were living in the capital cities in June 2008 (ABS 2009a). The majority of Australian people live in large cities of 1 million or more people. The five largest capital cities of Sydney, Melbourne, Brisbane, Perth and Adelaide, each with over 1 million people, account for 60.8 per cent of the total Australian population. As shown in Figure 3.2, the proportion of the Australian population living in cities of between 1 and 3 million people is 22 per cent, while 39 per cent of Australians are living in cities of more than 3 million people. In contrast, almost 70 per cent of Europe's total urban population live in medium and smaller sized cities of fewer than 500,000 people (UN-HABITAT 2008).

Figure 3.2 Population distribution, Australia, 2008

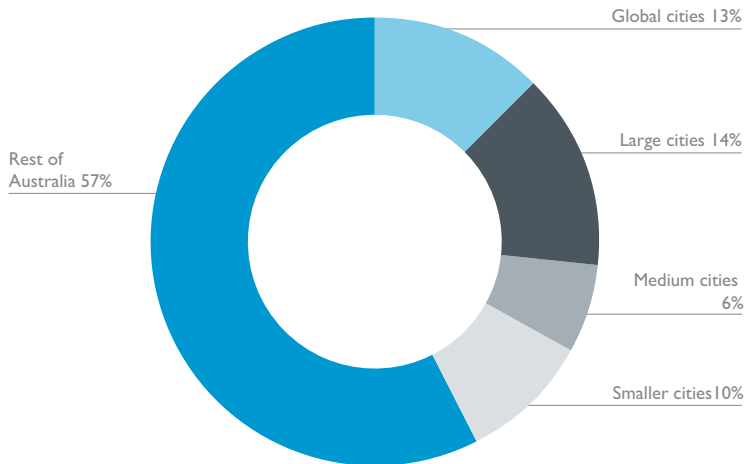


Source: ABS 2009a.

Urban Indigenous population

A far greater proportion of Australia's Indigenous people live in non-urban areas than non-Indigenous. Nevertheless, Australia's 17 major cities are home to 43 per cent of Australia's Indigenous population (Figure 3.3).

Figure 3.3 Indigenous population in Australian cities, by category, 2006



Source: ABS 2006.

Although Australia's Indigenous people represent a much higher proportion of the population in rural and remote areas than in the cities, there are large numbers of Aboriginal and Torres Strait Islander people in metropolitan areas (Table 3.1).

At the 2006 Census, urban Indigenous people comprised less than 2 per cent of the populations of most of the capital cities. The exceptions were in Darwin where the Indigenous population represents 11.1 per cent and in Hobart where 3 per cent of the population identified as being Indigenous.

Table 3.1 Indigenous Australians in capital cities, 2006

City ^(a)	Number	Indigenous people as a proportion of city population (%)
Sydney	34 515	1.0
Melbourne	13 309	0.4
Brisbane	29 249	1.8
Perth	20 910	1.5
Adelaide	12 443	1.2
Hobart	4 587	3.0
Darwin and Palmerston	9 002	11.1
Canberra/Queanbeyan	4 757	1.4

(a) Urban centres
Source: ABS 2006

The urban Indigenous populations tend to be concentrated in particular localities and regions within cities, except for Melbourne, where they are more dispersed across the city (ABS 2008a).

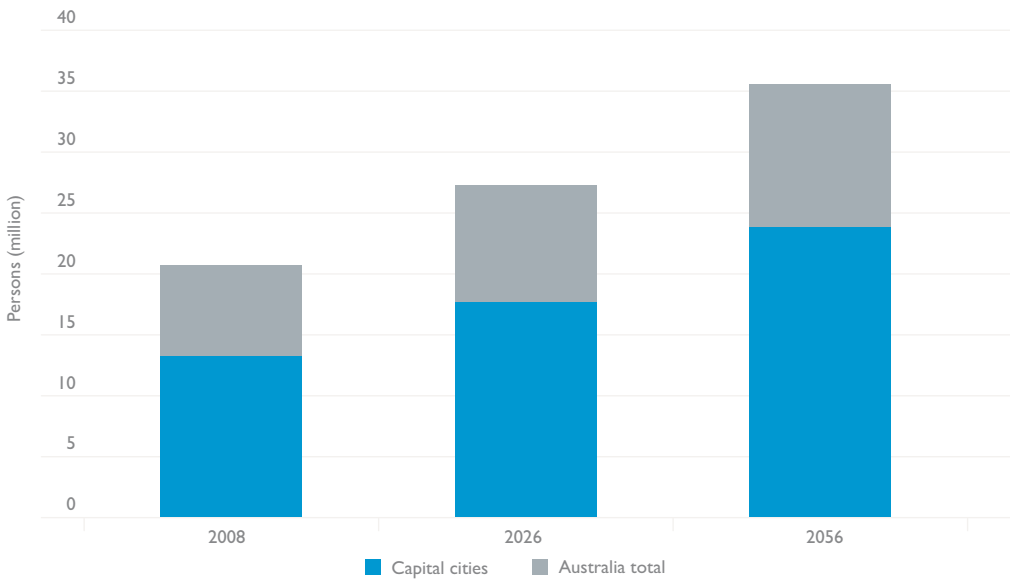
Population growth

Under the Australian Bureau of Statistics population projections, using a medium growth scenario, Australia's population is projected to grow to 35.5 million by 2056, based on recent trends in fertility, net overseas migration and life expectancies (ABS 2008b).¹ It is projected that 72 per cent of this growth will be in the capital cities, an increase of more than 10 million people (Figure 3.4).

Population projections released in the 2010 Intergenerational Report by The Treasury (2010) reflect slightly higher life expectancies, levels of overseas net migration and fertility rates, which suggest that the population of 35.9 million will more likely be reached sooner, by 2050.

This represents a lower average annual rate (1.2 per cent) of population growth than has been experienced over the past 40 years (1.4 per cent).

Figure 3.4 ABS Population projections to 2056



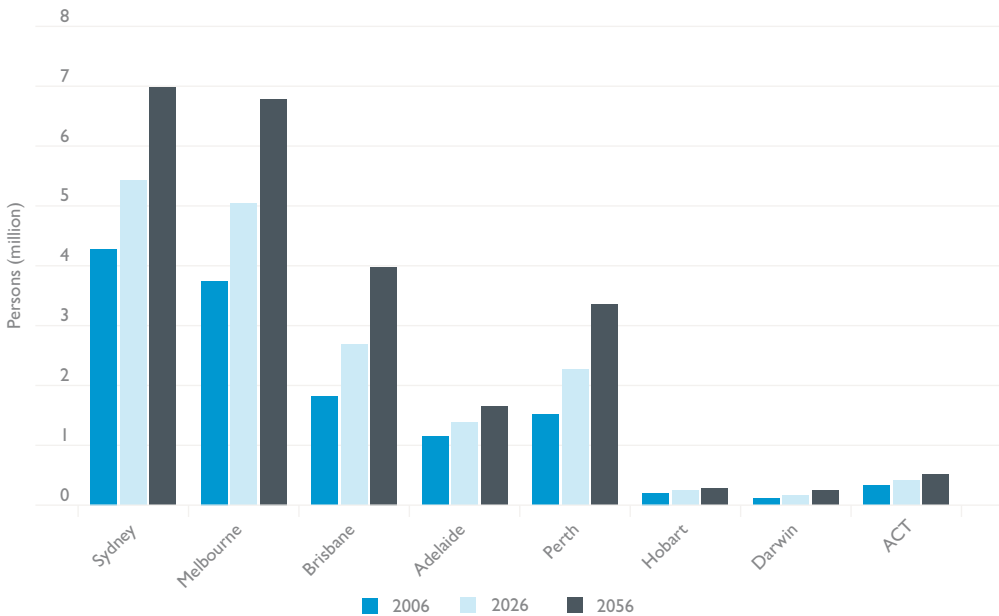
Source ABS 2008b, Medium growth assumptions (series B).

¹ Australia Bureau of Statistics, Series B population projections are based on final estimated resident populations at 30 June 2006 assuming a fertility rate of 1.8, net overseas migration of 180,000 a year and life expectancies of 85 years for males and 88 years for females.

Distribution of population growth

Population growth is projected to not be evenly distributed between cities. Perth and Brisbane are projected to more than double in size by 2056 growing by 116 per cent and 114 per cent respectively (Figure 3.5). Perth's population is projected to increase from 1.6 million people at 30 June 2007 to 3.4 million in 2056. Brisbane's population is projected to increase from 1.9 million people to 4.0 million people in that period. While Sydney and Melbourne will not grow as rapidly, their populations are projected to approach 7 million each. On the other hand, cities like Hobart and Adelaide are projected to have more limited population growth.

Figure 3.5 ABS Population projections for capital cities to 2056



Source: ABS 2008b. Medium growth assumptions (series B).

Rapidly growing areas within capital cities

Major urban centres within the largest capital cities are growing rapidly. The local government areas (LGAs) of Wyndham, Melton and Whittlesea in Melbourne; Wanneroo, Swan and Rockingham in Perth and Ipswich in Brisbane were among the fastest and largest growth areas for 2007–08 in the country, with growth rates above 4.0 per cent and population increases around 4,000 or more for the year. Other LGAs that already have populations over 200,000 people and experienced increased population over 5,000 for the year to 2008 but at slower rate were Casey in Melbourne, Blacktown in western Sydney, and Logan in Brisbane (ABS 2009b). This large growth in population in major urban centres will put pressure on existing infrastructure systems, facilities and services within capital cities.

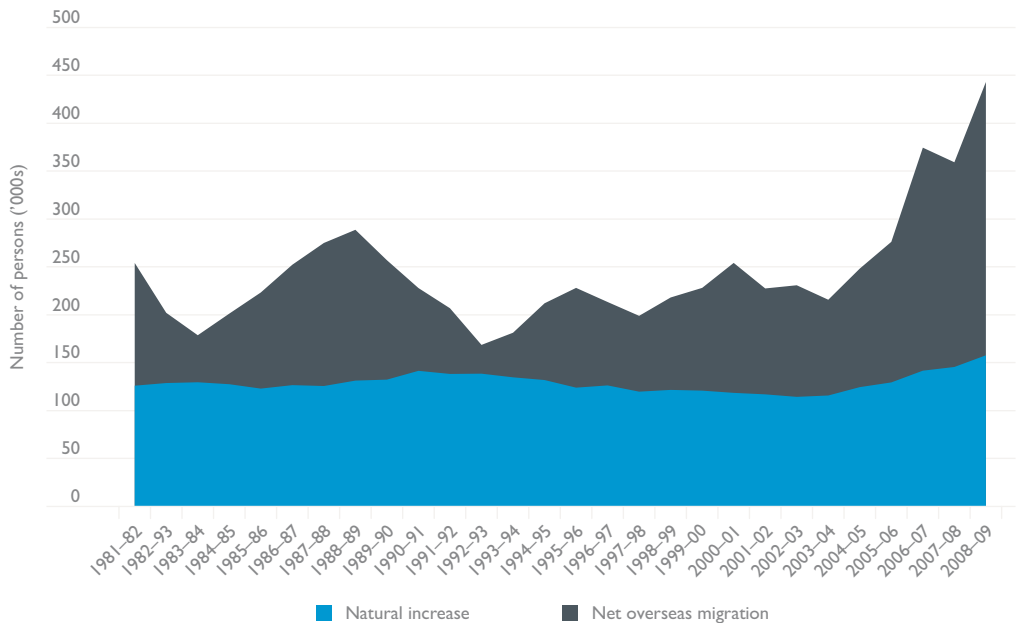
Components of population growth

The main components of population growth are net overseas migration, natural increase (births less deaths) and internal migration (population movement between locations). Australia's population growth in 2007–08 was made up of 145,000 people through natural increase and 213,500 through net overseas migration (DIAC 2009a).

Net overseas migration

Since the turn of this century a greater proportion of Australia's population growth has been attributable to Australia's migration program more than to natural increase (Figure 3.6).

Figure 3.6 Components of population growth to Australia, 1981–2009



Source: ABS 2009a.

In the year 2007–08 net migration contributed 60 per cent to the population growth. The ratio of net migration to population will remain above 0.5 for the next four decades according to projections in the 2010 Intergenerational report (The Treasury 2010).

As a result of long-term immigration, almost one-quarter (24 per cent) of Australia's population was born overseas. The vast majority of people born overseas live in the major cities and, as demonstrated by Figure 3.7, the larger Australian cities have higher shares of overseas-born people.

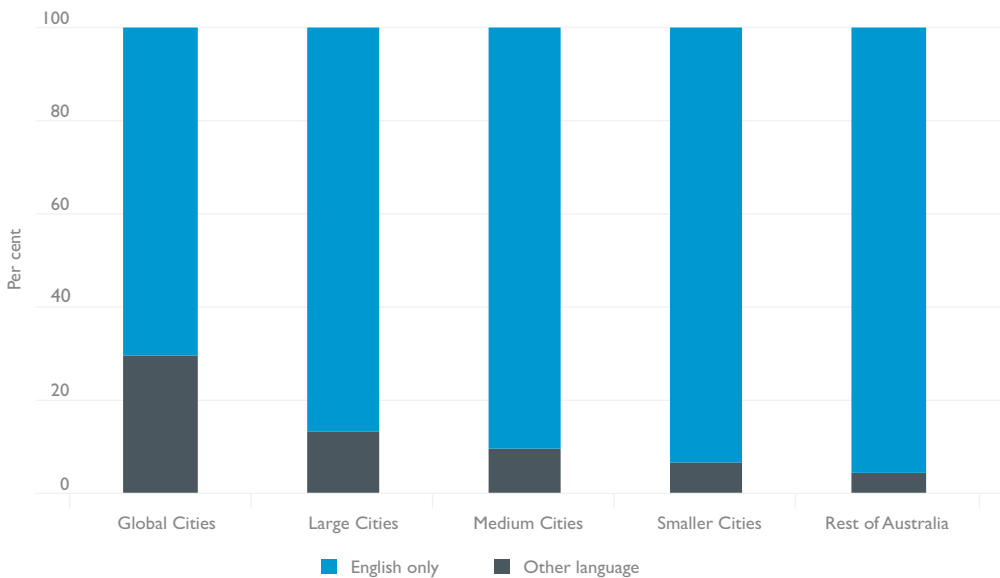
Figure 3.7 Overseas-born population in major cities, 2006



Source: ABS 2006.

One outcome of the large net overseas migration and the concentration of overseas-born people in cities has been the cultural and linguistic diversity that has become a characteristic of Australia’s cities (Cully 2009). Such diversity has been generated from the multiple waves of overseas migration since the end of World War II and especially since the mid 1970s. At the 2006 Census as much as 93.1 per cent of people who spoke a language other than English lived in the major cities (Figure 3.8).

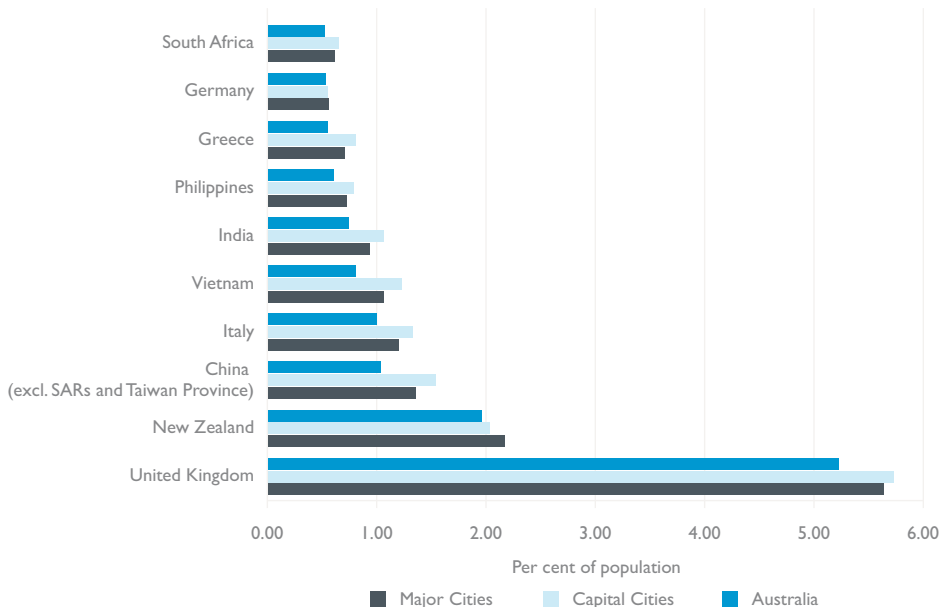
Figure 3.8 Language spoken at home, 2006



Source: ABS 2006.

While the United Kingdom remains the source of the largest overseas-born group, its proportion of the total overseas-born is declining. Almost two-thirds of the overseas-born population (62 per cent) in Australia were born in non-English speaking countries (DIAC 2009a) (Figure 3.9).

Figure 3.9 Top ten countries of birth of people born overseas, 2006



Source: ABS 2006.

For the decade 1995 to 2004 migration intake was relatively stable at around 100,000 permanent settlers per year. However, following concerns that this level would not support desired levels of economic growth (see for example McDonald & Temple 2009) the migration intake levels were increased and have been around twice as much since. In addition to permanent settlers there were the over 4 million temporary entrants arriving in 2007–08 for the purposes of work or study and tourism (DIAC 2009b).

Based on current migration program targets and recent trends it is likely that the contribution of net overseas migration will continue to be the main contributor to population growth.

Distribution of overseas settler arrivals

The population growth generated by immigration has contributed to economic growth but the distribution of the migrant settlers has, in the main, not been restricted. As a result the majority of overseas migrants settle in the major cities rather than in smaller cities or regional towns. New South Wales remains the destination for the majority of new settlers, but distribution to other states, especially Queensland and Western Australia, has been increasing.

Within cities there has also been uneven distribution of new settlers. There are clusters of new arrivals in particular localities based on country of origin, religion, language, or relating

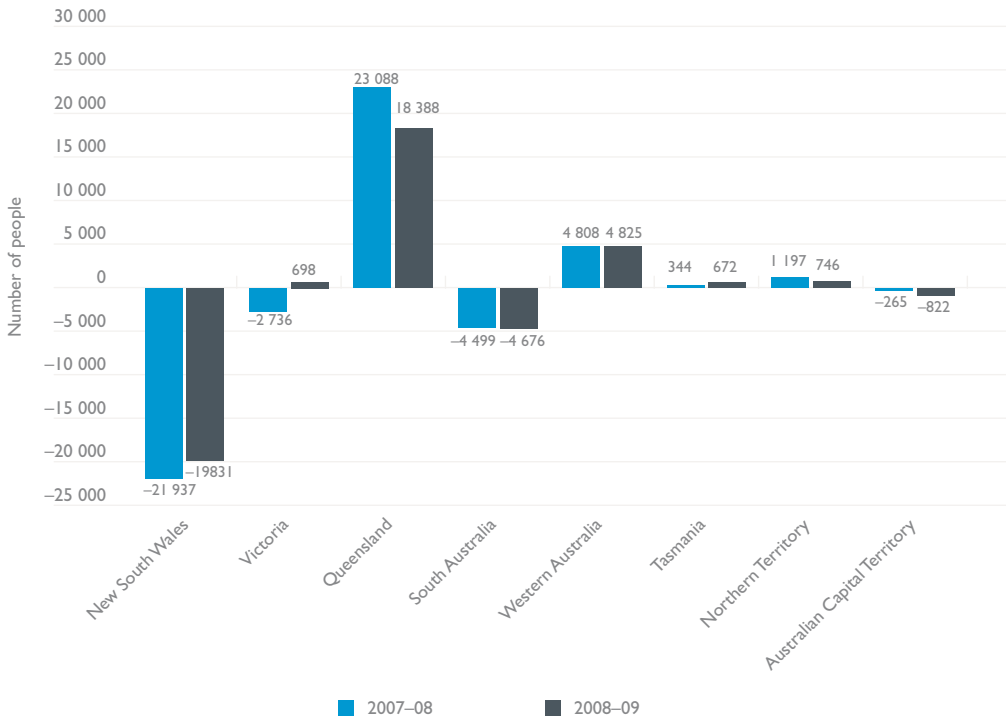
to their economic circumstances or the settlement and migration stream under which they have arrived.

ABS population projections for medium growth (ABS 2008b) and National Housing Supply Council (2009) demand and supply projections have been based on the Migration Program being maintained at a net overseas migration of 180,000 people a year. However, the permanent skilled migrant intake was reduced in March 2009 and again in May to bring the total for the 2009–10 migration program from 133,500 to 108,100 places in response to the economic downturn (Evans 2009). Nevertheless, even at these numbers there will still be considerable population growth.

Internal migration

In addition to large net overseas migration some cities are experiencing accelerated population growth as a result of interstate migration. In the year 2007–08 New South Wales experienced a net loss of 19,831 people, while Queensland experienced a similar net gain of 18,388 people (ABS 2009a). Western Australia recorded a net gain 4,825 people from interstate migration as shown in Figure 3.10.

Figure 3.10 Interstate migration, 2007–08 and 2008–09



Source: ABS 2009a.

Demographic change

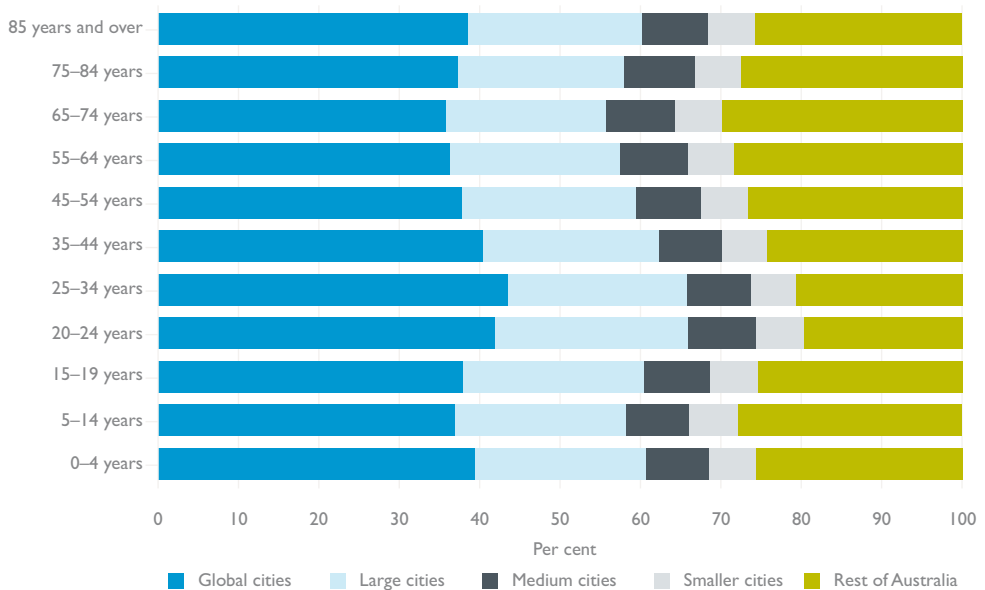
The two most important demographic changes occurring within the Australia population are the ageing of the population and changes to household size and composition.

Population ageing in our cities

Population ageing refers to the age structure of the population which, with declining fertility rates, is changing. An ageing population means that older people will make up a greater proportion of the population. Ageing of the population is expected to continue under all projections. The 2010 Intergenerational Report projections state that by 2050 there will be 8.1 million people over 65 years, representing 23 per cent of the population (The Treasury 2010) compared to 2.6 million people or 13.3 per cent in 2006.

Large cities tend to have a younger age profile than the medium and smaller cities and the rest of Australia because of the higher representation of tertiary students and people of working age between 20 and 34 years (Figure 3.11).

Figure 3.11 Age structure of Australian cities, 2006



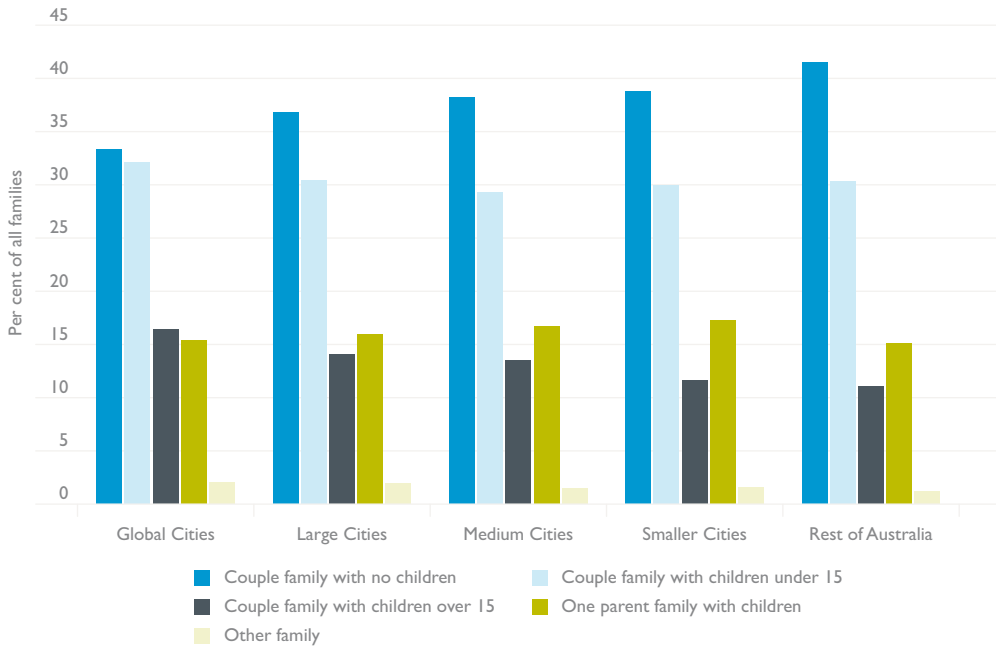
Source: ABS 2006.

Household size and composition

The composition of households varies between major cities and the rest of Australia, and varies with the size of cities. Further substantial regional variation in household composition also exists within cities.

Family structures differ with city size. Larger cities have lower percentages of families with no children and a higher percentage of families with children (Figure 3.12). Larger cities also have higher percentages of younger children (couple families with children under 15). One-parent families tend to be most highly represented in smaller cities.

Figure 3.12 Family types as a proportion of households, 2006



Source: ABS 2006.

There has been a notable trend towards smaller households over the past decade. This trend reflects the increase in the number of lone-person households and couple-only households. These various households will require more diverse housing stock but there is a mismatch between these demographic trends and current patterns of housing development, firstly in the types of dwellings being built and secondly in the size of the dwellings.

The decline in household size is producing an increase in the number of households relative to population growth. The number of households in Australia is projected to increase from 7.4 million in 2001 to between 10.2 and 10.8 million in 2026, an increase of between 39 per cent and 47 per cent (ABS 2004). This growth in the number of households is much faster than Australia's projected population growth of 25 per cent for the same period.

The average household size in Australia is projected to decline from 2.6 people per household in 2001 to between 2.2 and 2.3 people per household in 2026. Australia's household size (2.5) in 2011 is projected to be smaller than New Zealand (2.6) and Japan (2.6), the same as the United States of America (2.5) and Canada (2.5), and larger than England (2.2).

Lone-person households are projected to show the greatest percentage increase of all household types over the 25-year projection period of 2001 to 2026. This is related to the ageing of the population and the fact that older women, in particular, are more likely to live alone. The number of lone-person households is projected to increase by between 57 per cent

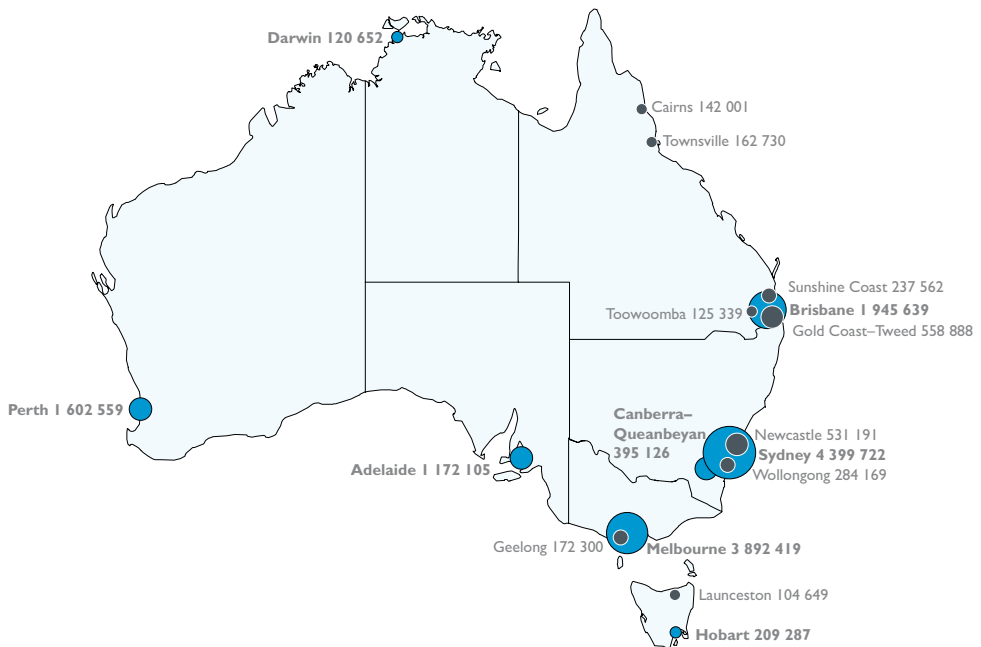
and 105 per cent, from 1.8 million households in 2001 to between 2.8 million and 3.7 million households in 2026.

More information on appropriate housing can be found in Chapter 6 (Liveability) in this report.

Urban settlement

Australia's major cities are located predominantly in coastal areas (Figure 3.13). The shapes of these cities follow the natural contours, with 'outer areas' located often at long distances from the 'central' business districts (CBDs). In south-east Queensland, for example, the metropolitan region stretches along 200 kilometres of coastline. This combination of a highly urbanised population and the coastal locations of cities mean that nearly 80 per cent of Australians now live within 50 kilometres of the sea coast.

Figure 3.13 Australia's major cities, estimated resident population at June 30, 2008



Source: ABS 2009a.

The patterns of outward growth of major urban areas and improved transport linkages to regional centres have expanded our metropolitan regions. There are now major metropolitan regions that spread from Newcastle to Wollongong, from Bellarine to Mornington Peninsula, from Yancheep to Mandurah and from the Sunshine Coast to the Gold Coast and Coolangatta and beyond the border to Far North Coast New South Wales.

Rapid population growth in the post-war years in the larger capitals and in the later decades of the 20th century in the emerging cities has mostly been accommodated by new housing developments located at long distances from the central business districts where jobs, higher

education facilities and services have been concentrated. The majority of new housing development in outer areas has been single detached dwellings.

As a result of this type of urban development, the populations of Australia's major cities are distributed over relatively large land areas. As at the 2006 Census the area covered by the major cities was 48,908 square kilometres with an average of 1,332.2 persons per square kilometre. However, considerable differences exist between the cities in the relationship between area of land covered by urban development and the number of persons per square kilometre as shown in Table 3.2 below.

Table 3.2 Population distribution within major cities, Australia, 2006

City (a)	Persons per sq km
Sydney	2 037
Melbourne	1 566
Brisbane	918
Perth	1 213
Adelaide	1 374
Gold Coast	553
Newcastle	1 102
Canberra	1 081
Wollongong	1 272
Sunshine Coast	848
Hobart	1 027
Geelong	1 356
Townsville	8 28
Cairns	775
Toowoomba	803
Darwin	845
Launceston	747

(a) Geographic unit of analysis for capital cities is 'urban centre'; for regional cities this is 'statistical sub-division'.

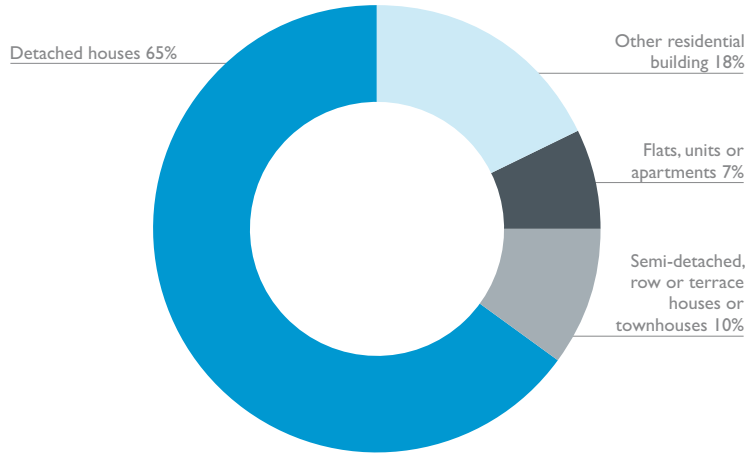
Source: ABS 2006

The impacts of outward urban expansion and low-density residential development have been a greater separation between residential areas and locations of employment, greater use of cars for mobility, higher costs of transport and vulnerability to oil price rises, and a loss of productive agricultural land or habitat.

Dwelling stock

The most common type of housing in Australian cities has been for most of the past century owner-occupied detached houses. The composition of dwelling stock in Australia has remained relatively stable over the past decade. In 2007, 79 per cent of dwellings were single detached houses, down only slightly from 80 per cent in 1997, with 9.4 per cent being semi-detached dwellings and 10.4 per cent being flats, units or apartments (ABS 2008c). In the year 2008–09, 71 per cent of dwelling approvals were for new houses (Figure 3.14).

Figure 3.14 Building approvals by dwelling category, Australia, 2008–09

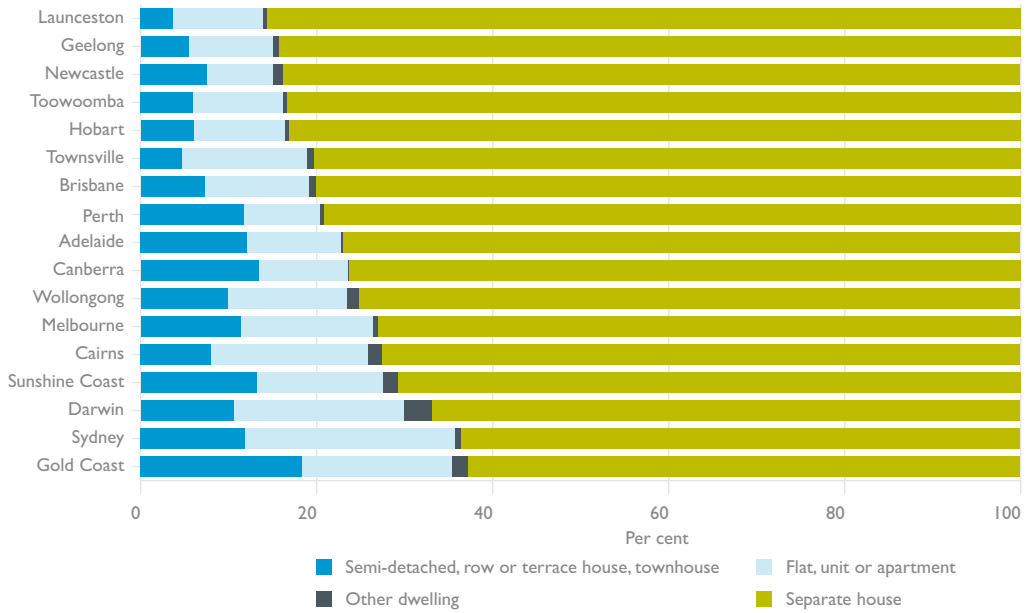


Source: ABS 2009c.

Proportions of housing types are not uniformly distributed. High concentrations of multistorey residential apartment buildings are usually found around CBDs, with decreasing densities towards the outer areas. The exceptions to this pattern can be found in Gold Coast City, where high-rise residential buildings extend along the coastline, and in Sydney, where higher-density residential development can be found around each of the major centres encompassed by the metropolitan area.

The proportions of dwelling type differ across our major cities. Sydney and the Gold Coast have the lowest portion of detached dwellings (Figure 3.15).

Figure 3.15 Proportion of housing stock by dwelling type in the major cities



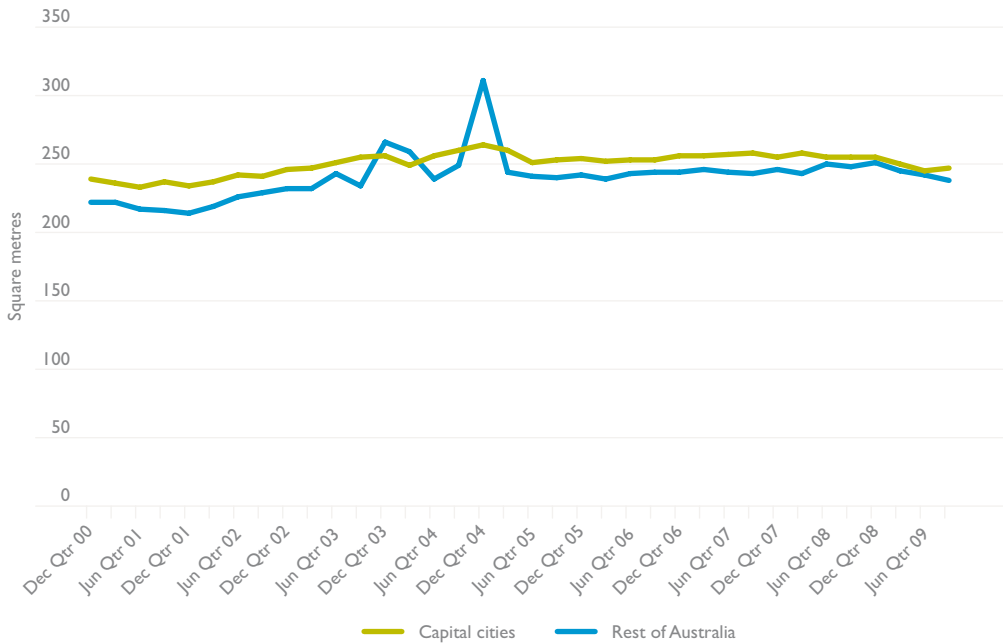
Source: ABS 2006.

Dwelling size

There has been a long-term trend to larger-sized homes in Australia to the extent that a recent analysis by the Commonwealth Bank showed that Australian homes now have the largest average floor size in the world (James 2009). The average size of new houses in Australia in 2008–09 was a record 245.3 square metres, up from around 160 square metres in 1985–86.

Since 2008, however, there has been a slight decline in the size of houses as shown in Figure 3.16. This may partly reflect the onset of the global financial crisis in 2008.

Figure 3.16 Average size of private sector houses, 2000–2009



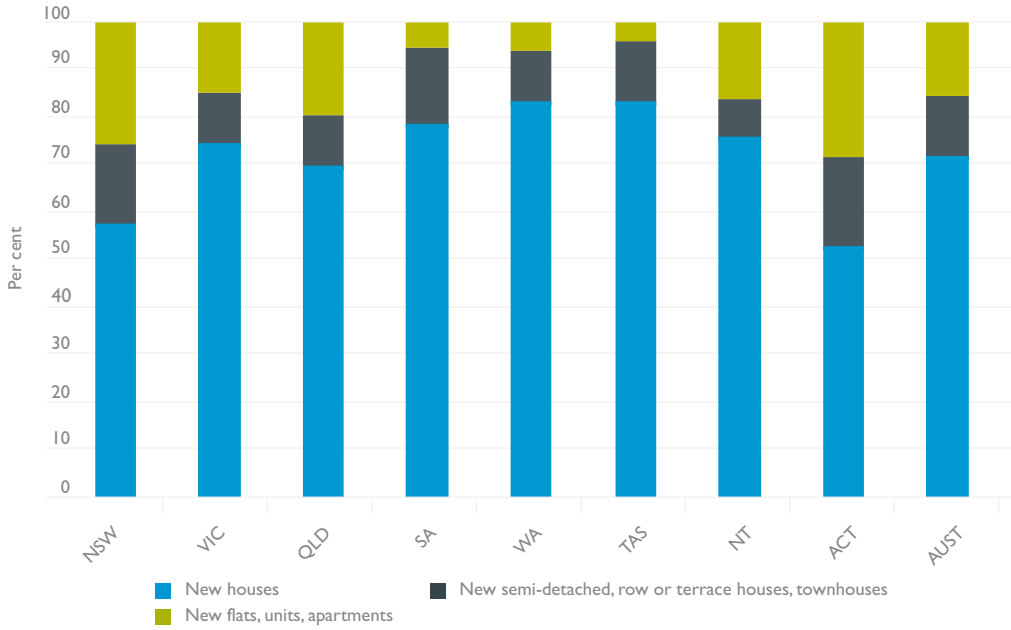
Source: ABS 2009c.

Relationship between housing stock and household composition

Traditionally, the progression along the life course for households from couple-only to families with dependent children means that the majority of first-home buyers are buying single detached dwellings. However, the social trends towards couples having children later in life, more people living alone and a greater proportion of older couples whose children have left home are increasing the number of households overall, and even more rapidly increasing the number of smaller households. Between 1997 and 2006, the average household size reduced from 2.7 persons to 2.5 persons.

Despite these social trends, the preference to build and buy detached houses has continued. In some jurisdictions, up to 80 per cent of all new dwellings (including non-residential) continue to be single detached housing (Figure 3.17).

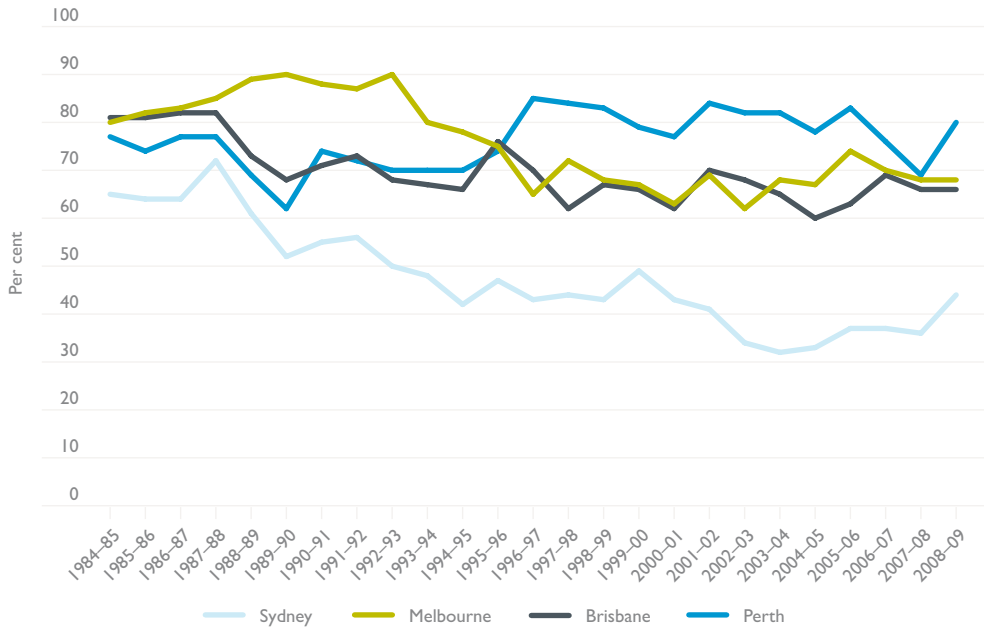
Figure 3.17 Proportion of dwellings approved by dwelling type, states and territories, 2008–09



Source: ABS 2009c.

However, in Sydney approvals for houses as a proportion of new dwellings declined from 84 per cent in 1984–85 to 50 per cent in 1992–93. It has remained below 50 per cent since, and was 44 per cent in 2008–09 (Figure 3.18).

Figure 3.18 Building approvals—houses as a per cent of total dwelling units

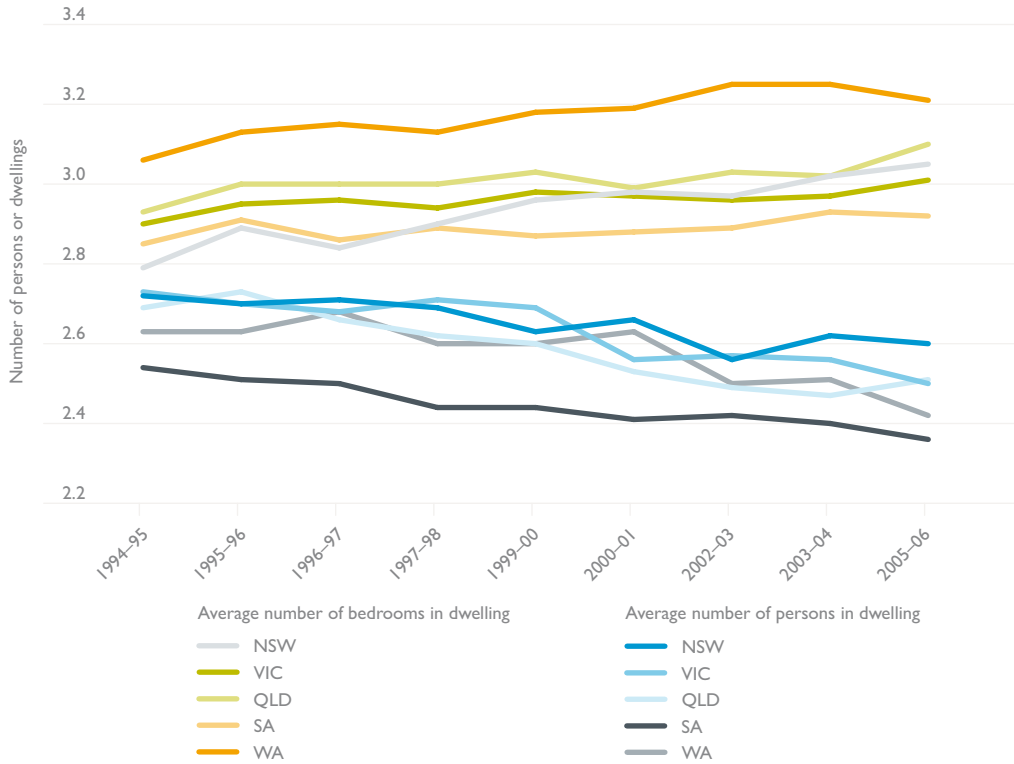


Source: ABS 2009c.

The trend to building and purchasing larger houses is also reflected in the number of bedrooms per dwelling. Between 1997 and 2006 the average number of bedrooms per dwelling increased from 2.9 to 3.1 (Figure 3.19). The Australian Bureau of Statistics has adopted the Canadian National Occupancy Standard² as one measure of housing appropriateness (ABS 2007b). Using this standard, figures for 2006 show that a very small percentage of households (2.8 per cent) in Australia had an insufficient number of bedrooms. By contrast, 42.4 per cent of households have above their required number of bedrooms (ABS 2008c).

2 The Canadian National Occupancy Standard measures the bedroom requirements of a household by specifying that: there should be no more than two people per bedroom; children less than five years of age of different sexes may reasonably share a bedroom; children less than 18 years of age and of the same sex may reasonably share a bedroom; single household members 18 years and over should have a separate bedroom, as should parents or couples; and a lone-person household may reasonably occupy a bed sitter.

Figure 3.19 Average number of persons per household and bedrooms per dwelling for five states



Source: BITRE analysis of ABS 2007b.

Both the extra bedrooms and the reduction in household size can, in part, be explained by an ageing population as people remain in homes built for their families long after their children move out. This is evidenced by the 77.5 per cent of couple-only households aged over 65 years having two or more spare bedrooms. However, there is also a trend towards larger houses for family households. In 2003–04, 73 per cent of family households in new dwellings had four or more bedrooms compared with 52 per cent of the total stock of owner-occupied dwellings having four or more bedrooms (ABS 2007a).

The evidence of this increasing housing size is also shown by overall floor space of new houses. In Perth for example, between 1994–95 and 2003–04 the average size of new separate houses grew by 17 per cent while household size declined by 10 per cent. The overall implication for cities is an apparent mismatch between housing stock and the diversity of needs of households, especially in respect to the ageing of the population and changing demographic profile of households. This trend also has implications for housing affordability, consumption and associated greenhouse gas emissions, and environmental sustainability.

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