Trends in housing utilisation



Australians are building and living in bigger homes than ever before.¹ Increased (real) household income and wealth, changing lifestyle preferences, continued low unemployment and low interest rates over this period have contributed to many home owners moving to a bigger home or renovating their existing home. Over the past 20 years, the size of occupied private dwellings has increased both in terms of floor area and the average number of bedrooms. Despite the trend towards larger homes, the average number of residents per household is declining. Consistent with this decline, the number of dwellings in Australia increased faster than population growth. For more detail on household and dwelling sizes, see the 'Housing overview', p. 204–214.

As a result of larger homes and decreasing household size, there is increasing underutilisation of housing-as measured in this article by 2 or more bedrooms in a dwelling being excess to the requirements of the household (for details see 'Housing utilisation' box, next page). This trend has implications for the ongoing sustainability of residential development in Australia: declining household size accelerates the demand for new housing development, while growth in excess bedrooms indicates less efficient use of housing, both of these factors increase the demand for resources and energy. For example, a decrease in household size is linked to projected increases in residential energy use over the next 20 years.2

Housing underutilisation grows, while overutilisation is less common

In the 2006 Census, 41% of all occupied private dwellings in Australia had 2 or more bedrooms above minimum household requirements, based on the Canadian National Occupancy Standard of housing utilisation. These underutilised dwellings housed 33% of the population living in private dwellings in 2006. This was a substantial increase from 34% of underutilised dwellings measured in the 1996 Census, which then housed 26% of the population in private dwellings (see Housing utilisation graph below).

In 2006, another 36% of occupied private dwellings had one extra bedroom above minimum household requirements; down from 38% in 1996. A further one fifth (20%) of dwellings in 2006 had the required number of bedrooms for the household, compared with 24% in 1996. Only a small proportion of occupied private dwellings were overutilised, with fewer bedrooms than required according to the Canadian National Occupancy Standard. In the decade before the 2006 Census, the proportion of all dwellings requiring extra bedrooms decreased, from 4.2% in 1996 to 3.2% in 2006.

The terms underutilisation and overutilisation are used in this article to describe broad housing trends. However, for individual households there may be many reasons for having either bedrooms spare or a requirement for extra bedrooms in their houses.

Firstly, it appears that community standards for dwelling sizes are changing towards bigger houses with more bedrooms (see the 'Housing

Housing utilisation(a), 1996, 2001 and 2006

(a) Based on the Canadian National Occupancy Standard for housing suitability.(b) No extra bedrooms needed or one bedroom spare.

Housing utilisation

The concept of housing utilisation in this article is based upon a comparison of the number of bedrooms in a dwelling with a series of household demographics such as the number of usual residents, their relationship to one another, age and sex. There is no single standard or measure for housing utilisation; however the Canadian National Occupancy Standard presented in this article is widely used internationally and in Australia.

The Canadian National Occupancy Standard for housing appropriateness is sensitive to both household size and composition. The measure assesses the bedroom requirements of a household by specifying that:

- there should be no more than 2 persons per bedroom
- children less than 5 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 and over should have a separate bedroom, as should parents or couples.

This standard applies for occupied private dwellings only and excludes households where the number of bedrooms were not stated and where there were persons temporarily absent, other than spouses. For more information see, *Housing Occupancy and Costs, Australia, 2003–04* (ABS cat. no.4130.0.55.001).

For the purposes of this article, the following terms are used to describe the relationship between the number of bedrooms in a dwelling and the minimum bedroom requirements of the household living in that dwelling, as defined by the occupancy standard.

Overutilisation describes dwellings where one or more bedrooms are required.

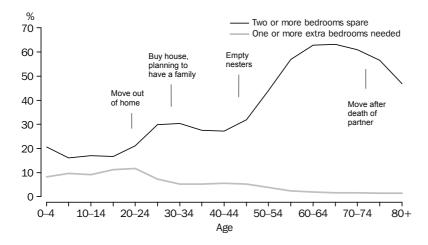
Underutilisation describes dwellings where there are two or more bedrooms excess to minimum requirements.

overview', p. 204–214). Combined with declines in average household size, in 2006 just over three quarters (77%) of all occupied private dwellings had spare bedrooms. Many households use these extra bedrooms as a study or computer room, or as a spare room for guests or visitors.

Secondly, most people's living arrangements change many times over their lifetime, and their home will not always 'fit' their current household size. For example, many dwellings with spare bedrooms could house couples planning to have families, empty nesters or families who have children who stay part-time. In 2006–07 there were around 444,000 children aged under 18 who stayed part-time (at least once per fortnight) with a natural parent living elsewhere.³ Conversely, people in dwellings requiring extra bedrooms could be planning to extend or to move into larger accommodation. For example, a new baby in a family can increase the bedroom requirements of a household.

Finally, some people in households requiring extra bedrooms may forgo a larger dwelling for living close to extended family, living in a convenient location or having lower housing costs. In other cases, people's desire for location and for future resale potential may involve home purchases that have spare bedrooms compared to their current or expected future needs. Moving costs, such as removal expenses and, especially for homeowners, transaction costs, including commissions and legal costs can also be strong influences to sustain situations of underutilisation or overutilisation. These factors can mean that for some this state may be deliberately transient, while for others it may be long term.

For some people, living in a dwelling which requires extra bedrooms reflects a level of social disadvantage resulting from a limited range of housing to choose from or low levels of economic resources.



Housing utilisation: proportion of people by age group(a)

(a) The life event labels on this graph are indicative only.

Underutilisation

Underutilisation can occur for many reasons. Many households living in underutilised dwellings enjoy a higher household income. However, many older couples and older people living alone have lower incomes and their home is their only major asset. While some older home owners move into units or retirement villages because of ill health, to be closer to services or to release equity from their home, many others choose to remain in the family home, and stay close to the local community, family and friends.⁴

... increases with age

In 2006, people in older age groups were more likely to be living in underutilised housing than younger people (see graph above). Overall, 33% of people in private dwellings were living in an underutilised dwelling. However, less than a fifth (18%) of people under the age of 25 were living in an underutilised dwelling. For people aged 25 to 44, this proportion was 29%, and among people 45 years or more this was considerably higher, at 51%.

Among family types, couple only households were more likely than other households to live in underutilised dwellings (see life-cycle groups table, next page). In 2006, 83% of *middle-aged couple families without children* and 75% of *older couple families without children* were living in dwellings with 2 or more spare bedrooms, reflecting the high levels of underutilisation among older people. This is associated with the emergence of new empty nesters as children leave home. However, *young couple families without children* also had high levels of housing underutilisation, at 56%. This is perhaps owing to the higher household income levels among this group, and that many move into a home anticipating having children. For more information on different family and household types, see the 'Living arrangements overview', p. 60–72.

...varies with income

The connection between housing utilisation and *bousebold income*⁵ is complex. Households in dwellings with 2 or more bedrooms spare were more likely than all households in Australia to have a *higher bousebold income* (27% compared with 21%). That said, households in underutilised dwellings were just as likely as all households to have a lower household income (22% for both), but were less likely to have a *household income* in the middle range (15% compared to 18%). In part this pattern of incomes was due to the particular characteristics of the households that commonly occupy these dwellings. This can be seen when comparing the *bousebold incomes* of two life-cycle groups with high rates of underutilisation. In 2006, 60% of older couple families without children in underutilised dwellings had a lower household income and 7% had a *higher household income*, while only 3% of young couple families without children in underutilised dwellings had a lower bousehold income and 51% had a higher *bousebold income* (see table of selected characteristics on p. 219).

...is more common in fully owned, separate dwellings

Consistent with the older age profile of people living in underutilised dwellings, in 2006 almost half (49%) of these dwellings were owned

Housing...Trends in housing utilisation

Housing utilisation by life-cycle groups(a)

	Requiring one or more extra bedrooms	Two or more bedrooms spare	Total households (b)
Life-cycle group	%	%	'000 '
Young group household	11.4	5.9	155.0
Young lone person		40.2	291.2
Young couple family without children	0.9	55.6	341.6
Couple family with young children	5.3	21.9	727.8
One parent family with young children	14.3	6.5	119.6
Couple family with school-aged children	5.0	21.3	861.9
One parent family with school-aged children	9.7	9.4	291.8
Couple family with young adult children	4.0	27.0	577.1
One parent family with young adult children	7.2	13.8	218.8
Middle-aged couple family without children	0.3	83.4	813.6
Older couple family without children	0.2	75.3	485.0
Older lone person		49.1	649.1
Multiple-family households	29.0	13.2	93.2
Other living arrangements	1.3	43.5	1 518.2
Total(c)	3.2	41.3	7 144.1

(a) See Glossary for more information on life-cycle groups.

(b) Includes households in dwellings meeting minimum bedroom requirements and without two or more bedrooms spare, and households where bedroom requirements could not be determined. Excludes visitor only and non-classifiable households.

(c) Includes households not included in selected life-cycle groups.

outright, another 35% were owned with a mortgage and 15% were rented. As renters generally live in their homes for a shorter length of time than home owners, they may be more likely to live in a dwelling better suited to their current needs. Emotional and social attachment, transaction costs, and investment considerations all mean that owner households are less likely to move. When these factors are combined with changes in their household composition, such as children leaving, higher levels of underutilisation result.

Overall, separate houses made up 77% of all occupied private dwellings but 91% of underutilised dwellings. This reflects the dominance of separate houses for *older couple families without children* and *older lone person households*.

Underutilisation in different parts of Australia has different causes

The highest levels of housing underutilisation occurred in a mixture of city, regional and remote areas. In 2006, the area in Australia with the highest proportion of dwellings with 2 or more spare bedrooms was Lakes Statistical Subdivision (SSD) in the Wheatbelt region of southern Western Australia (WA), with 61% of households living in underutilised dwellings. This is related to a number of factors, including a relatively high proportion of older people and declining numbers of families with children living in them, a recent decline in population and, like many rural areas, a high proportion of older, separate houses.

In urban areas, high underutilisation was more common in regional areas with high population growth and newly-built areas on the outskirts of major cities. In 2006, both Mandurah SSD, south of Perth in WA, and Beaudesert Shire Part A SSD, on the outskirts of Brisbane, had high underutilisation (60% and 55% of dwellings respectively). Both areas have recently experienced high population growth, accompanied by a growing number of new, larger dwellings. In Mandurah this was compounded by a low proportion of households containing families with children (35% of households, compared with 42% of all households in Australia) and a high proportion of older people. In contrast, there was a large proportion of families with young children in Beaudesert Shire (58% of households) although these families tended to live in larger dwellings. Occupied private dwellings in this area were the largest in Australia-having an average of 3.6 bedrooms, compared to 3.0 bedrooms for all dwellings in Australia.

Overutilisation

Like underutilisation, different family and household circumstances may be associated with overutilisation. Overcrowded conditions and the lack of privacy associated with these conditions have been identified as a cause of stress and conflict in the home.⁶ Other studies have linked overcrowding to poor physical and mental health, and low educational performance in children.⁷

However, a dwelling that requires extra bedrooms may not be overcrowded. For example, it could have large bedrooms or extra rooms not reported as bedrooms. Furthermore, some people's cultural norms may be that families live together regardless of dwelling size, and adults of the same sex may commonly share bedrooms, while other people may be living in overcrowded dwellings as a temporary measure. Nevertheless, certain groups in the community, including people born overseas

	Requiring one or more extra bedrooms	Two or more bedrooms spare	Total households(a)
	%	%	%
Dwelling structure			
Separate house	67.0	90.8	76.6
Higher density(b)	30.6	8.9	22.3
Dwelling tenure			
Owned outright	16.8	49.4	35.0
Owned with a	29.1	35.4	35.1
mortgage			
Rented	53.3	14.6	29.0
Household income(c)			
Lower income	27.4	22.4	21.9
Middle income	20.4	15.5	17.6
Higher income	7.2	26.6	21.3
Total(d)	100.0	100.0	100.0

Housing utilisation: selected characteristics

(a) Includes households in dwellings meeting minimum bedroom requirements and without two or more bedrooms spare, and households where bedroom requirements could not be determined. Excludes visitor only and non-classifiable households.

(b) Includes semi-detached, row or terrace house, townhouse, flat, unit or apartment.

(c) Levels for household income groups are based on the distribution of equivalised gross household income for persons. For more details see Glossary.

(d) Total includes categories not listed in table.

and Indigenous Australians are more likely to be living in overutilised housing. Further, the number of children in these households is of particular concern due to the potential impacts overcrowding may have on them.

...linked with households on lower income, renting

Overcrowding has been linked with lower income and the associated reduced ability to afford a suitable dwelling in which to live.⁸ In 2006, 27% of households in dwellings requiring one or more extra bedrooms had a *lower bousehold income*, and only 7% had a *bigber bousehold income*.

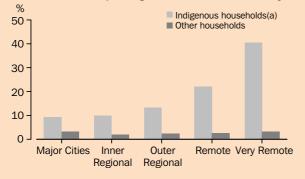
Further, overutilisation was more common in rented dwellings. Half of all overutilised dwellings were rented (53%), while only 17% were owned outright. In comparison, 29% of all households in 2006 lived in rented dwellings and 35% lived in dwellings that were owned outright (see table of selected characteristics on previous page).

Almost a third (31%) of households requiring extra bedrooms were in higher density dwellings (that is, flats or semi-detached dwellings), in comparison these dwelling types housed 22% of all households. This is likely to be associated with these dwellings having fewer bedrooms on average than separate houses. That said, these dwelling types also house a somewhat different population, on average, than separate houses. For example in 2006, 25% of overseas-born people lived in higher density dwellings, compared with 14% of the Australianborn population, and as can be seen below this group was generally more likely to live in overutilised dwellings.

Aboriginal and Torres Strait Islander households

In 2006, 14% of Indigenous households (households with one or more Indigenous residents) required at least one extra bedroom to adequately accommodate all members of the household. For these households, average household size and the proportion of households requiring an extra bedroom rose with increasing remoteness, from 9% in Major Cities to 40% in Very Remote areas.

Results from the 2006 Census suggest that households requiring one or more extra bedrooms that were Indigenous households had different characteristics to other households requiring extra bedrooms. Overutilised Indigenous households were more likely to contain children under 15 than other overutilised households (82% compared with 63%). Further, overutilised Indigenous households were more likely to contain more than one family than other overutilised households (24% compared with 10%). Reflecting both of these patterns, overutilised Indigenous households were larger than other overutilised households (an average of 5.9 people, compared with 4.7). For more 2006 Census information about Aboriginal and Torres Strait Islander Australians, refer to *Population Characteristics, Aboriginal and Torres Strait Islander Australians* (ABS cat. no. 4713.0).



Households requiring an extra bedroom, by Remoteness Areas

(a) An Indigenous household is any household that had at least one resident of any age who identified as being of Aboriginal and/or Torres Strait Islander origin in the 2006 Census.

Housing...Trends in housing utilisation

... more common among multiple family households and one-parent families with young children

In 2006, close to one third (29%) of households that contained more than one family required extra bedrooms. Most of these households (91%) contained children aged under 15. Of all life-cycle groups, *one-parent families with young children* had the highest level of overutilisation of their dwellings, with 14% requiring extra bedrooms.

In 2006, children and young adults were more likely than older people to be living in a household requiring one or more extra bedrooms. This was consistent with the types of families and households more likely to experience overutilisation of their dwellings. Overall, 6% of people in private dwellings were living in an overutilised dwelling. For children under the age of 15 the proportion was higher, at 9% or 326,900 children.

...more common among overseasborn

In 2006, people born overseas were more likely than those born in Australia to live in a household that required one or more extra bedrooms: 8% of overseas-born residents compared to 5% of Australian-born residents. People born overseas were less likely to be living alone and more likely to live in family households than those born in Australia; this would increase the likelihood of living in overutilised housing.

In terms of country of birth, people born in Afghanistan and Sudan had the highest rates of overutilisation (46% of each). Most recent migrants to Australia from Sudan and Afghanistan have come through Australia's Humanitarian Program rather than migrating for work or to join family already in Australia.⁹ As a result, these migrants are likely to have very few economic resources at their disposal in Australia.

...highest in areas with a large Indigenous population

Many regions of Australia with high proportions of overutilised housing also had a large Indigenous population. For example, in the Kimberley Statistical Division (SD) in WA, 15% of households were living in dwellings requiring extra bedrooms, three quarters (77%) of which were Indigenous households. In the Northern Territory (NT), excluding Darwin (NT Balance SD), 20% of households were overutilised, and 88% of these were Indigenous households.

Similarly, 7% of households in North West Queensland SD were overutilised, of which 63% were Indigenous (see Aboriginal and Torres Strait Islander households box on previous page for further information on Indigenous households).

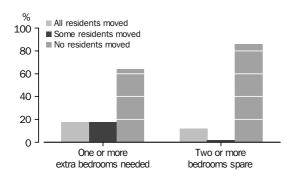
...also high in some urban areas

Overutilisation in urban areas tended to occur in major cities, and was more common in Sydney than other cities in 2006. Canterbury-Bankstown SSD, Central Western Sydney SSD and Fairfield-Liverpool SSD—all in Sydney each had the highest rate of overutilisation in major cities (9% each). The next highest levels were in Greater Dandenong City SSD (8%) in Melbourne, Inner Sydney SSD and Inner Western Sydney SSD (both 7%).

Several factors could contribute to high overutilisation in Central Western Sydney, Inner Sydney and Inner Western Sydney: such as the higher housing costs and high proportions of flats and apartments. In Canterbury-Bankstown, Fairfield-Liverpool and Greater Dandenong City, lower *household income* levels and high numbers of recent overseas arrivals may make overutilisation higher in these areas.

Mobility higher in households requiring extra bedrooms

People generally move residence to improve the quality or suitability of their accommodation, or because of a change in life events; for example, additional children in the family or a new job in a different location. A move to a dwelling that does not have enough bedrooms for the household could result from not having enough resources to live in a home more suited to the household's needs. Alternatively, some households may trade off the number of bedrooms for other aspects of amenity, such as location, or investment potential. For others, it may be a temporary measure—if a family is renovating their permanent home, for example.



Households with residents who moved in the year before the 2006 census(a)

(a) Proportion of total households requiring extra bedrooms and proportion of total households with two or more bedrooms spare.

Residents living in households requiring extra bedrooms were more likely to have moved in the year before the 2006 Census than those in other households (see graph above). Over one third (36%) of all households in overutilised dwellings included residents (either some or all) who had moved in the year before the 2006 Census, compared to 14% of households in underutilised dwellings. Half of these movements of people into overutilised dwellings were due to people moving in to live with existing residents. Just as a house can become underutilised when people such as children leave home, a house may require extra bedrooms if new people move in to live with the existing residents. For example, a household may take in family members studying away from home. See 'On the move', p. 24-32, for more information on mobility in Australia.

Endnotes

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3 ABS 2008, *Family Characteristics and Transitions, Australia, 2006–07*, cat. no. 4442.0, ABS, Canberra.

4 Olsberg, D. and Winters, M. 2005, *Ageing in place: intergenerational and intrafamilial housing transfers and shifts in later life*, Final Report No. 88, Australian Housing and Urban Research Institute, Melbourne.

5 Household income is equivalised gross household income. The household income groups used are defined according to the distribution of household income of persons, for more detail see Glossary.

6 Dockery and Milsom 2006, *Who cares about bousing anyway?*, paper presented at the 4th National Housing Conference 2005, Darby, Flateau and Hafekost (eds.), Department of Housing Works, Perth.

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9 Department of Immigration and Citizenship (DIAC) 2008, *Top 20 Countries by Migration Stream*, DIAC Settlement Database, data extracted on 11 April 2008, <www.settlement.immi.gov.au>.