

# Housing across Brisbane and Melbourne city rings



The location and growth of housing in all metropolitan areas in Australia has been strongly influenced by the development of transportation systems.<sup>1</sup> Cities developed in stages out from a central area, initially as compact 'walking' cities, then to suburban areas extending along tram and rail lines, and with the increased use of automobiles, further along major road corridors. This article examines the characteristics of housing in Melbourne and Brisbane, using inner, middle and outer city rings that are based on these transport-driven patterns of growth.

Melbourne and Brisbane are the second and third most populous metropolitan areas in Australia after Sydney. In 2006, the census counted 3.6 million and 1.8 million residents in these cities respectively, making them home to almost one quarter of the country's population. While Melbourne and Brisbane share many similarities in population and dwelling characteristics, clear differences have arisen from the way the cities evolved. These characteristics have been influenced by political, social and economic factors. The function of the original settlements, as well as the timing of their main periods of development also contributed to these differences. Melbourne was established and planned with the expectation of it developing into a large city, becoming the federal capital before Canberra was established. Brisbane was developed as a penal settlement and its role as a city only came to be recognised late in the 19th century. The layout of these cities, as well as the types of housing and the characteristics of the people living in them, has also been influenced by their distinct climates and geographies.

The differences between the two cities continue to this day, and are reflected in their populations. Between 1996 and 2006, Brisbane's population increased by 22% (312,200), a stronger rate of population growth than in Melbourne, which increased by 14% (434,400)—the number of people in Melbourne grew by more than Brisbane because of its larger initial size. The movement of people into these cities contributed to

population growth in each city, but was a more significant factor in Brisbane's population growth. In 2006, 18% of Brisbane's population had lived at an address outside the city 5 years previously, compared with 8% of Melbourne's population.

In addition to the movement of people into these cities, there was substantial movement of people within them. Combining moves from outside the cities and moves within the cities, in 2006, 49% of Brisbane's population had changed their usual address in the previous 5 years compared with 39% of Melbourne residents. This movement of people into and within Melbourne and Brisbane, has influenced and been influenced by the type and tenure of housing in these cities.

## Inner city ring—mostly young renters in high-rises

In 2006, the inner city ring of Brisbane contained 99,700 dwellings (99,300 private dwellings) and 198,200 residents. The inner ring of Melbourne had slightly lower numbers with 95,500 dwellings (95,000 private dwellings) and a population of 176,000. As a result, the population density of the inner ring of Brisbane (2703 people per square kilometre) was slightly higher than Melbourne (2604 people per square kilometre). These differences between the two cities may be associated with inner Melbourne containing a larger commercial centre than inner Brisbane, leaving less area for residential dwellings and residents. These two inner rings include areas with some of the highest population densities in Australia (see maps on p. 226).

Although these rings have the smallest population of all rings, between 1996 and 2006 they had the highest rates of population growth of all urban rings in these two cities, with Melbourne growing by a greater proportion (38%) than Brisbane (26%) (see General characteristics table, next page).

Associated with this growth, people in the inner ring areas of both cities also had the highest rates of mobility of all rings. In 2006, 49% of people who lived in inner Brisbane and 45% of inner Melbourne residents had moved into the ring in the previous 5 years. Of all new residents in the inner ring, movers into inner Brisbane were more likely to have come from areas in Australia outside the city (38%), while new residents in inner Melbourne were more likely to have come from overseas (47%).

Higher density dwellings (such as flats, apartments and semi-detached dwellings) were the most common dwelling type in the inner rings of both cities in 2006 (see Dwelling structure table, p. 229), a strong factor in the high population densities. Since 1996, the proportion of higher density dwellings in the inner ring has increased, driven by an increase in the number of high-rise units (of four or more storeys), which more than tripled in both cities. Between 1996 and 2006, high-rise units increased from 9% to 20% of dwellings in inner Brisbane and from 16% to 38% of dwellings in inner Melbourne. These additional higher density dwellings have accommodated many of the people moving into the inner city rings.

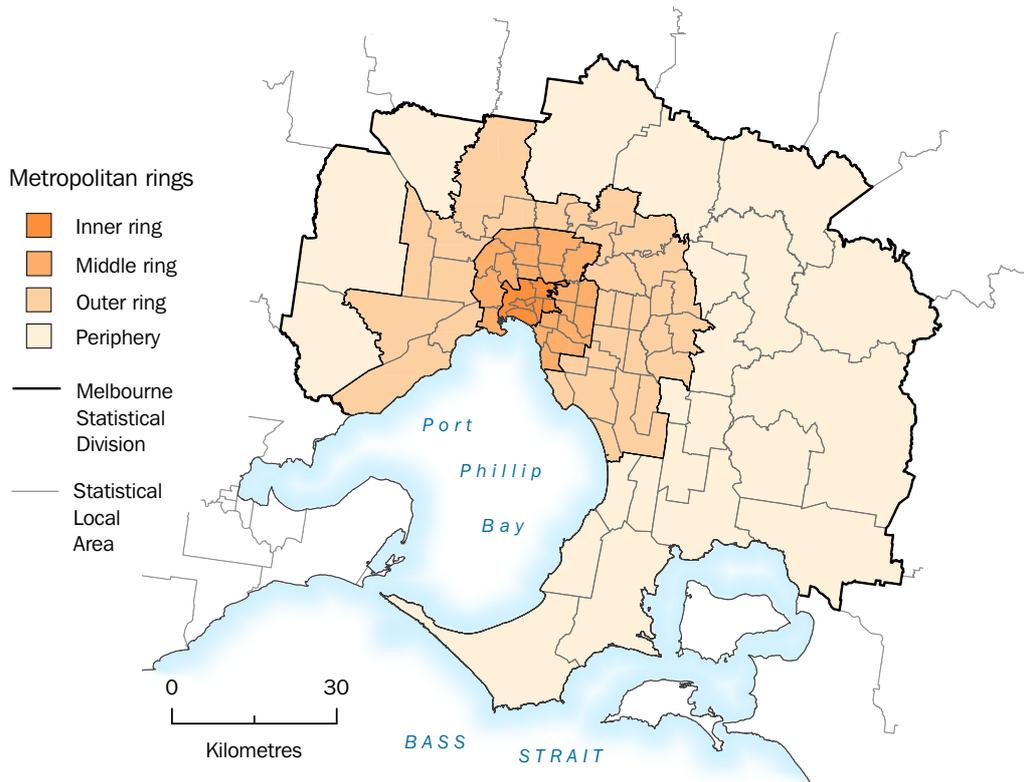
Historically, semi-detached, row and terrace houses have been a prominent housing type in inner Melbourne. Although their numbers have increased between 1996 and 2006, the proportion of this dwelling type has decreased from 39% to 30%. While semi-detached, row and terrace houses were less common in Brisbane, their proportion increased from 5% to 7% between 1996 and 2006.

In 2006, around half the people in each inner city ring were Generation X and Y (aged 20–39 years), accounting for 46% of the population who lived in inner Brisbane and 51% of the population in inner Melbourne. These young adults are attracted to the inner city for education, employment and entertainment. They are a highly mobile group<sup>3</sup> and made up 72% of new residents in inner Melbourne and 64% of new residents in inner Brisbane. Inner city suburbs with over 60% of their population aged 20–39 years included Fortitude Valley in Brisbane; and Docklands, Cremorne and Southbank in Melbourne.

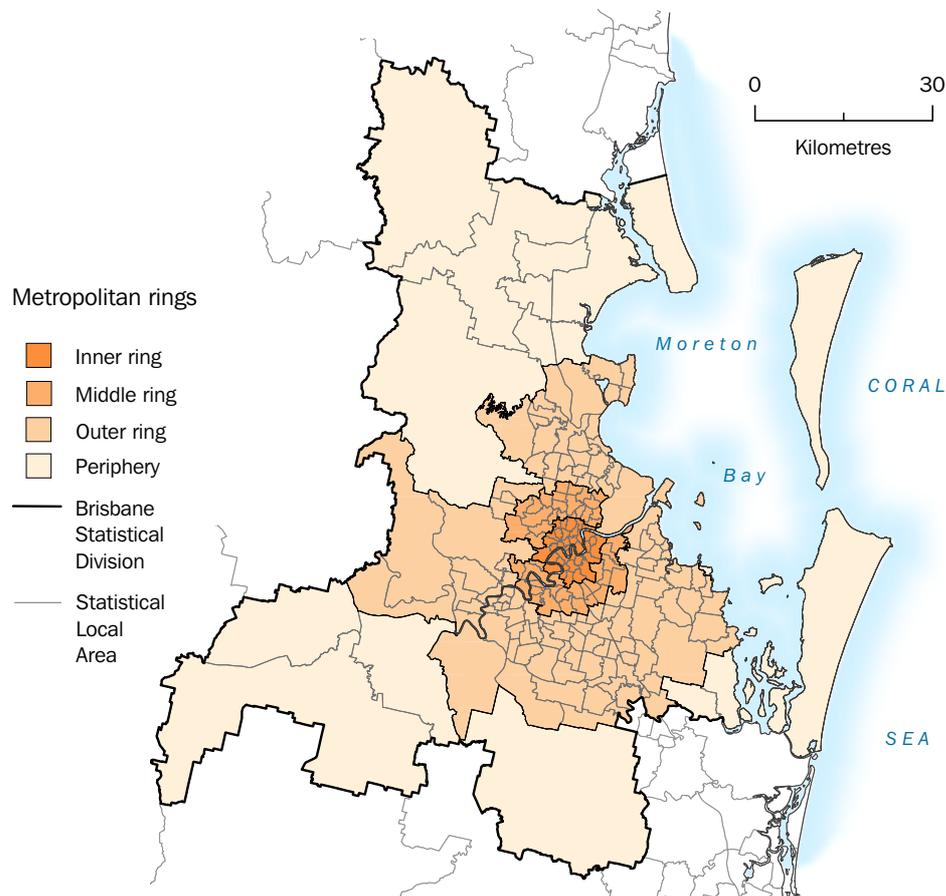
### General characteristics: Brisbane and Melbourne city rings

	Population(a)			Change of usual address— proportion of 2006 population			Dwellings(b)		
	No.	Growth 1996– 2006	Area km <sup>2</sup>	Pop. density person per km <sup>2</sup>	From outside of ring	Private dwell- ings	Growth 1996– 2006	No.	%
		'000			%				
<b>Brisbane</b>									
Inner	198.2	26.3	73.3	2 703.4	49.1	63.3	99.3	99.7	29.5
Middle	320.8	8.6	209.0	1 534.8	32.6	46.1	137.0	137.1	10.7
Outer	948.7	25.2	1 676.7	565.8	23.6	47.8	354.9	355.2	30.0
Periphery	295.5	22.7	3 943.0	74.9	29.9	49.1	114.6	114.7	25.9
<b>Total</b>	<b>1 763.1</b>	<b>21.5</b>	<b>5 902.0</b>	<b>298.7</b>	<b>..</b>	<b>49.4</b>	<b>705.8</b>	<b>706.7</b>	<b>25.0</b>
<b>Melbourne</b>									
Inner	176.0	38.1	67.6	2 603.7	44.8	63.7	95.0	95.5	54.1
Middle	930.8	5.0	359.0	2 592.7	22.3	40.1	413.9	414.6	7.8
Outer	1 694.1	10.9	1 714.4	988.1	13.4	34.5	640.7	641.3	17.3
Periphery	791.7	28.3	5 553.0	142.6	15.8	41.5	321.6	321.9	32.4
<b>Total</b>	<b>3 592.6</b>	<b>13.8</b>	<b>7 694.0</b>	<b>466.9</b>	<b>..</b>	<b>38.8</b>	<b>1 471.2</b>	<b>1 473.3</b>	<b>19.2</b>
(a) Usual residents.									
(b) Includes private and non-private dwellings.									

Melbourne city rings



Brisbane city rings



### City rings

The areas used in this article are rings based primarily on transportation systems and development. The Statistical Local Areas (SLAs) in the Statistical Divisions of Brisbane and Melbourne in 2006 have been divided into three rings: inner, middle and outer. The rings are not concentric circles as the boundaries of the rings are the boundaries of the selected SLAs. SLAs were selected for each ring if their centre point (centroid) fell within the defined distance from the historical general post office (GPO). The Statistical Divisions of Brisbane and Melbourne are the geographic areas used to define the cities in this article. As the article compares 1996 with 2006 data, the 1996 ring boundaries are based on the 1996 SLA boundaries matched on a best-fit basis to the 2006 ring boundaries.

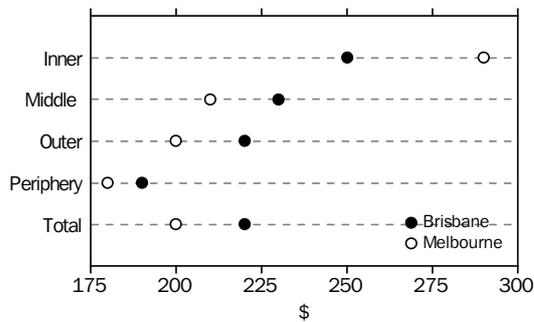
**Inner ring:** The inner ring of both cities is an area defined by a 5 km radius from the GPO. This is a common distance when defining inner city areas—being an approximate measure of the maximum walking distance to the city centre.<sup>2</sup>

**Middle ring:** The middle ring contains the majority of the tram network in each city (although Brisbane no longer has a tram network). For Brisbane the outer edge of the middle ring is 10 km from the GPO and for Melbourne, 12.5 km.

**Outer ring:** The outer ring extends to 30 km from the city centre for both cities. This approximates an accepted distance for commuting by motor vehicle (reflecting a maximum journey of approximately one hour).<sup>2</sup>

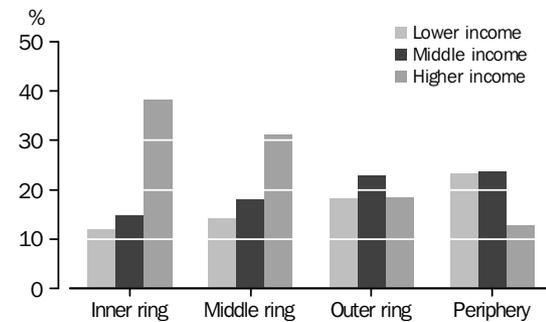
**Periphery:** The remaining area of the Statistical District is referred to as the periphery. They contain areas such as Ipswich for Brisbane and Mornington Peninsula for Melbourne.

### Median weekly rent

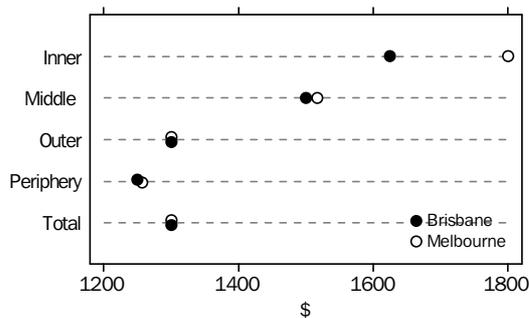


### Persons in selected income groups(a)

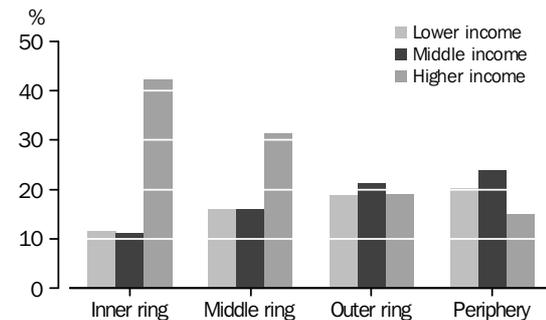
#### Brisbane city rings



### Median monthly housing loan repayments



#### Melbourne city rings



(a) For details of the income groups used see Glossary.

## Housing...Housing across city rings

For both cities the inner city was the ring most likely to have rented dwellings, with over half of all private dwellings being rented (see Tenure type table below). Relatively high proportions of rented dwellings may be linked to the characteristics of the population in inner city areas. Rental tenure offers flexibility for highly mobile tenants, and is evident in the high rates of young adults living in rented dwellings: 77% of people aged 20–29 years who lived in inner Brisbane and 80% of people in this age group in inner Melbourne lived in rented dwellings, the next highest proportion for this age group was 57% in the middle ring in Brisbane and 59% in middle Melbourne.

High rates of renting in inner city areas by this group may also reflect the strong association between tenure and life-cycle stages, as young adults often live in rented dwellings before moving on to purchasing a home at the formation of partnerships and/or family.<sup>4</sup>

The inner city rings had the highest housing costs of all the city rings in both Brisbane and Melbourne (see rent and housing loan repayment graphs on the previous page). The median weekly rent was \$250 in inner Brisbane and \$290 in inner Melbourne. Median monthly housing loan repayments followed a similar pattern and were \$1625 in inner Brisbane and

\$1800 in Melbourne. Closely associated with higher housing costs was the concentration of people with *higher household incomes*<sup>5</sup>. In 2006, 38% of the inner Brisbane population and 42% of the inner Melbourne population had *higher household incomes* (see income group graphs on the previous page), compared with 22% each for the total Brisbane and Melbourne populations.

## Middle ring—the stable suburbs

In 2006, the middle ring in Brisbane contained 137,100 dwellings (137,000 private dwellings) and 320,800 residents. The middle ring of Melbourne was more highly populated with 414,600 dwellings (413,900 private dwellings) and 930,800 residents. The higher number of people and dwellings in middle Melbourne is in part because of the larger size of this ring: because Melbourne's tram network is larger than Brisbane's was (see City rings definition box, p. 227). The middle ring of Brisbane had a population density of 1535 people per square kilometre, whereas the middle ring in Melbourne had a density of 2593 people per square kilometre which was only slightly less than the density in the inner ring (2604 people per km<sup>2</sup>).

### Tenure type: Brisbane and Melbourne city rings

	1996				2006			
	Owned outright	Owned with a mortgage	Being rented	Total private dwellings (a)	Owned outright	Owned with a mortgage	Being rented	Total private dwellings (a)
	%	%	%	%	%	%	%	%
<b>Brisbane</b>								
Inner	31.2	17.0	50.9	100.0	21.6	24.6	52.9	100.0
Middle	43.4	23.5	32.3	100.0	33.1	33.1	33.2	100.0
Outer	38.5	33.2	27.4	100.0	30.9	40.3	27.9	100.0
Periphery	38.3	36.2	24.6	100.0	32.2	40.9	26.3	100.0
<b>Total</b>	<b>38.6</b>	<b>29.4</b>	<b>31.1</b>	<b>100.0</b>	<b>30.3</b>	<b>37.0</b>	<b>31.9</b>	<b>100.0</b>
<b>Melbourne</b>								
Inner	26.5	16.6	56.2	100.0	19.9	21.1	58.3	100.0
Middle	44.8	20.0	34.4	100.0	36.5	28.6	34.4	100.0
Outer	48.3	30.8	20.0	100.0	39.3	39.3	20.8	100.0
Periphery	38.4	42.2	18.3	100.0	31.5	48.8	18.9	100.0
<b>Total</b>	<b>44.3</b>	<b>28.9</b>	<b>25.8</b>	<b>100.0</b>	<b>35.7</b>	<b>37.2</b>	<b>26.4</b>	<b>100.0</b>

(a) Other tenure included in total when calculating percentages.

This difference in the population size and density of the middle rings is due in part to the time periods that development occurred in these rings in each city. Higher-density housing was more common at the time of much of Melbourne's middle ring development, resulting in higher population densities. Further, the colder climate of Melbourne has made common-wall housing (included in higher density housing) a more accepted style of housing than in Brisbane. In Brisbane separate housing is more suitable to the climate as it permits air flow and cooling.

Between 1996 and 2006 the middle ring of both cities experienced the lowest growth in the number of dwellings of all the rings—Brisbane 11% and Melbourne 8% (see General characteristics table on p. 225). The relatively lower growth in the middle rings is because the type of development in the other rings, which leads to substantial growth in dwelling numbers, is less common in the middle ring. For example, higher land values support redevelopment driven by gentrification and urban renewal in the inner ring (including the construction of high-rise units), while undeveloped land permits new development in the outer rings. Closely linked to low dwelling growth, population growth in the

middle ring was also the lowest of all city rings for both cities over the period (Brisbane 9% and Melbourne 5%).

While population numbers have been relatively stable, some characteristics of the population in the middle ring have changed. Between 1996 and 2006, there were approximately 20% fewer *young lone person households* in both Brisbane and Melbourne middle rings, and a similar decline in *couple families with young adult children* (10% and 13% respectively). This may be associated with the departure of younger people from this ring to both the inner and outer areas, and elsewhere.

There has also been some rejuvenation of these areas. This has been occurring through the inward movement of young couples and families with children, or people forming these family types: in some instances these may have been from those people previously in younger lone person households. These families have to some extent balanced the movement of young people out of these areas. In 2006, people in *young couple families without children*, *couple families with young children* and *couple families with school-aged children* together represented 37% of the middle ring population in Brisbane and 34% of the

### Dwelling structure: Brisbane and Melbourne city rings

	1996				2006			
	Separate house	Semi-detached (a)	Flat, unit or apartment	Total private dwellings (b)	Separate house	Semi-detached (a)	Flat, unit or apartment	Total private dwellings (b)
	%	%	%	%	%	%	%	%
<b>Brisbane</b>								
Inner	52.1	5.1	42.0	100.0	40.5	7.2	51.6	100.0
Middle	78.9	4.3	16.3	100.0	74.5	8.1	17.0	100.0
Outer	88.0	6.5	4.0	100.0	86.2	8.4	4.5	100.0
Periphery	90.0	3.5	4.0	100.0	90.4	3.7	4.2	100.0
<b>Total</b>	<b>81.5</b>	<b>5.4</b>	<b>11.8</b>	<b>100.0</b>	<b>78.2</b>	<b>7.4</b>	<b>13.5</b>	<b>100.0</b>
<b>Melbourne</b>								
Inner	17.5	39.1	41.5	100.0	11.1	30.0	58.0	100.0
Middle	61.3	10.1	27.7	100.0	56.9	14.7	27.8	100.0
Outer	85.6	5.7	8.1	100.0	80.1	10.2	9.2	100.0
Periphery	91.5	2.8	4.8	100.0	90.1	4.7	4.5	100.0
<b>Total</b>	<b>75.9</b>	<b>8.1</b>	<b>15.2</b>	<b>100.0</b>	<b>71.3</b>	<b>11.5</b>	<b>16.6</b>	<b>100.0</b>
(a) Includes semi-detached, row or terrace house, townhouse etc.								
(b) Other dwelling included in total when calculating percentages.								

## Housing...Housing across city rings

population of middle Melbourne. Of the new residents to these rings, a relatively large proportion were in these family types in 2006—Brisbane (42%) and Melbourne (38%).

Despite slow growth in the absolute number of dwellings in the middle ring since 1996, the type of dwellings in this ring in both cities has changed. Separate houses, which continued to be the dominant dwelling structure in the middle ring, made up 74% of private dwellings in Brisbane and 57% in Melbourne in 2006 (see Dwelling structure table on previous page). However, both of these proportions had decreased since 1996 (from 79% and 61% respectively), while the proportions of semi-detached dwellings increased from 4% to 8% of dwellings in Brisbane and 10% to 15% in Melbourne.

The average number of bedrooms in private dwellings in the middle ring has also increased since 1996. Between 1996 and 2006, the proportion of private dwellings with 4 or more bedrooms increased from 22% to 27% in middle Brisbane and from 14% to 18% in middle Melbourne. Most of these 4 bedroom dwellings were separate houses. New houses generally have more bedrooms and their construction in these areas has contributed to this growth. In contrast, the number of

1, 2 and 3 bedroom houses decreased in the middle rings of both cities. This indicates that the increased proportion of larger houses was the result not only of new construction on vacant land, but also extensions to existing dwellings, and the demolition of smaller dwellings to make way for larger dwellings and/or higher density dwellings. Higher density dwellings also have become larger over this time. Semi-detached dwellings with 3 or more bedrooms increased from 37% to 50% of this dwelling type in Melbourne and from 39% to 53% in Brisbane.

## Outer ring—different city growth patterns

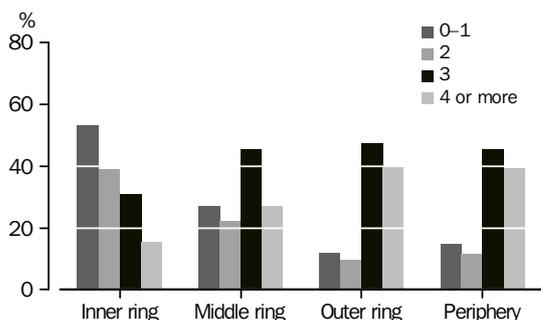
In 2006, the outer ring of Brisbane contained 355,200 dwellings (354,900 private dwellings) and 948,700 residents. The outer ring of Melbourne had 641,300 dwellings (640,700 private dwellings) and 1.7 million residents: almost double the population of the outer ring of Brisbane. The population density of outer Brisbane was 566 people per square kilometre, substantially lower than the 988 people per square kilometre in outer Melbourne. This difference in the population size and density of the outer rings of these cities is principally due to the larger overall population of Melbourne which has spread more into Melbourne's outer ring. Much of the development of the outer ring of Melbourne occurred earlier than outer Brisbane and so suburbs are older and more established.

Between 1996 and 2006 the population of the outer Melbourne ring increased by 167,000 (11%): a smaller number and proportion than outer Brisbane, which increased by 191,000 (25%) over this time. The higher growth in Brisbane's outer ring may be a result of new development occurring in this area, while more recent growth in Melbourne has flowed out to the periphery to a greater degree.

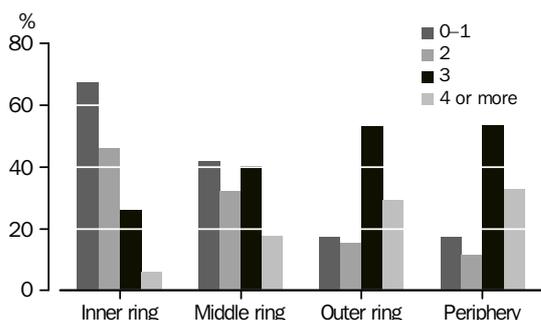
While the population growth between 1996 and 2006 was higher in outer Brisbane, the increase in the number of private dwellings over this period was actually higher in outer Melbourne than outer Brisbane (94,700 and 82,000 dwellings respectively). This is likely to be associated with higher density dwellings accounting for a larger share of the additional dwellings in Melbourne than in Brisbane: where higher density dwellings generally house fewer people per dwelling than separate dwellings. Between 1996 and 2006, 50,500 higher density dwellings in Melbourne and 17,600 in Brisbane were added to the housing stock in these areas.

### Bedrooms in occupied private dwellings

#### Brisbane city rings



#### Melbourne city rings



The increase in the share of dwellings that were higher density in the outer rings of both cities is partly a response to government initiatives to expand this type of housing in new residential developments in outer suburban areas. This is driven by a desire to limit urban expansion, save on infrastructure costs and provide a greater range of housing types for smaller households.<sup>6</sup> Another factor contributing to more higher density housing in Melbourne could be that there is less undeveloped land available for further residential development in the outer ring of Melbourne.

The difference in types of dwellings in the outer rings of these two cities has influenced the size of private dwellings (that is, number of bedrooms). Outer Brisbane was more likely to have larger homes than outer Melbourne, in terms of the number of bedrooms. In 2006, 40% of dwellings in outer Brisbane and 29% of dwellings in outer Melbourne had 4 or more bedrooms (see Bedrooms graphs on previous page), an increase from 30% and 24% respectively in 1996. The difference in the number of bedrooms is associated with the higher proportion of separate houses in outer Brisbane than in outer Melbourne. In addition, the general shift over time towards larger private dwellings<sup>7</sup> may have contributed to this difference, as homes in outer Brisbane were generally newer than those in outer Melbourne. See the 'Housing overview', p. 204–214, for further details on the general increase in the size of houses in Australia.

In 2006, private dwellings in outer Melbourne were more likely to be owned outright (39%) than in outer Brisbane (31%) (see Tenure table on p. 228). This may be a result of the outer ring of Melbourne containing more established suburbs than outer Brisbane, and therefore its residents have generally had more time to pay off mortgages. Dwellings in outer Melbourne were also less likely to be rented (21%) than in outer Brisbane (28%). As in the inner ring, relatively higher proportions of rented dwellings in outer Brisbane were associated with a more highly mobile population than in outer Melbourne. Just over two thirds of new residents in the Brisbane outer ring were from areas outside Brisbane, compared with just over half the new residents in outer Melbourne. Renting may offer greater flexibility to new residents while they decide whether to make the move more permanent and/or decide where they finally want to live.

## City periphery —further city spread

In 2006, the periphery of Brisbane contained 114,700 dwellings (114,600 private dwellings) and 295,500 residents. The population of the periphery of Melbourne was 321,900 dwellings (321,600) and 791,700 residents. In both cities, the number of people in these areas has experienced substantial growth since 1996, growing by 23% (54,700) in Brisbane and 28% (174,500) in Melbourne.

The periphery had some characteristics in common with the outer ring. For example, it was dominated by separate houses and had a growing number of larger homes. The most notable difference in housing characteristics was the tenure. In 2006, the periphery in Melbourne had a higher proportion of dwellings that were owned with a mortgage (49%) than Brisbane (41%), while in Melbourne dwellings were less likely to be rented than Brisbane (19% and 26% respectively) and similar proportions of homes were owned outright (see Tenure table on p. 228). As with the outer ring, the tenure pattern in the periphery areas of Brisbane was associated with a more highly mobile population compared with Melbourne. Further, new residents are more likely to live in areas where many of the homes are available for rent or to purchase, which is a feature of these areas.

## Endnotes

1 Marsden, S. 2000, *Urban Heritage: the rise and post-war development of Australia's capital city centres*, Australian Council of National Trusts and the Australian Heritage Commission, Canberra.

2 Newman, P. 2001, Walking in Historical and International Context—What is the role of walking in cities for 21st Century economies?, paper presented at Australia: Walking the 21<sup>st</sup> Century, An International Walking Conference, Perth, 20–22 February 2001.

3 Australian Bureau of Statistics (ABS) 1999, 'Housing Stock: Inner city residential development' in *Australian Social Trends 1999*, cat. no. 4102.0, ABS, Canberra.

4 ABS 2007, *Housing Occupancy and Costs, Australia, 2005–06*, cat. no. 4130.0.55.001, ABS, Canberra.

5 Household income is equivalised gross household income. For details of the household income groups used see Glossary.

## **Housing...Housing across city rings**

6 Randolph, W. 2006, *Delivering the compact city in Australia: current trends and future implications*, Research Paper No. 6, City Futures Research Centre, University of New South Wales.

7 ABS 2007, 'Larger dwellings, smaller households' in *Australian Social Trends 2007*, cat. no. 4102.0, ABS, Canberra.