

Relocation across the nation: internal migration and population growth

Between 2001 and 2006, more than one-third of Australians (or 6.6 million people) changed their address. While most (71%) people who moved relocated within their city or region, 1.9 million moved a greater distance to a different city or region. Such mobility is the most important factor in the different levels of population growth within Australia's regions.

Regions experiencing high levels of growth are of interest to policy makers and the wider community in terms of providing basic infrastructure (roads, power, sewerage) and adequate services (health, education), as well as the environmental pressures from increasing populations and development. Regions are often interested in attracting and retaining people, particularly skilled people who can add to the economic prosperity of the region.

**Between 2001 and 2006, close to 2 million
Australians moved regions.**

This article looks at the movements of people to particular cities and regions which had high rates of growth, with internal migration a significant component of that growth. It also examines some of the characteristics of the people moving to these places in terms of their age, education and labour force status, and

Data sources and definitions

The main source of data in this article is the 2006 Census of Population and Housing.

This article uses geographical units classified in the [Australian Standard Geographical Classification \(ASGC\)](#) (ABS cat. no. 1216.0).

Statistical Districts are predominantly urban areas located outside Capital Cities and are generally defined as having a population of 25,000 or more. Statistical Districts can consist of one or more urban areas located in close proximity to each other, and in some cases, may cross state boundaries.

Capital City is defined as the Capital City Statistical Division (SD) of each state and territory.

Major population regions are defined here as the eight Capital Cities and thirty-six Statistical Districts located across Australia. See Appendix 1 for a complete listing. The places featured in this article were the top ten in terms of the number of net migrants arriving (from elsewhere in Australia) between 2001 and 2006, and also had relatively fast average annual growth between 2003 and 2008.

compares them with people already living in these regions. For a more general overview of population mobility patterns in Australia see [A Picture of the Nation: the Statistician's Report, 2006, 'On the move'](#) (ABS cat. no. 2070.0).

Net internal migration and high growth in selected major population regions

	August 2001 to August 2006				June 2008	
	<i>People arriving</i>	<i>People leaving</i>	<i>Net internal migration</i>	<i>Net internal migration(a)</i>	<i>Population 2008(b)</i>	<i>Average annual growth rate(c)</i>
	'000	'000	'000	%	'000	%
Brisbane	178.0	138.3	39.7	2.4	1945.6	2.2
Gold Coast-Tweed	89.7	55.2	34.5	7.2	558.9	3.3
Sunshine Coast	48.3	30.8	17.5	9.0	237.6	3.2
Hervey Bay	14.5	7.3	7.2	16.1	56.2	5.4
Townsville	30.9	24.5	6.5	4.9	162.7	3.0
Mandurah	15.2	9.1	6.2	10.0	78.6	4.3
Cairns	22.9	17.9	5.0	4.6	142.0	3.7
Toowoomba	22.9	18.8	4.2	3.9	125.3	2.0
Mackay	15.9	12.0	3.9	5.9	81.1	3.4
Bunbury	11.0	7.7	3.3	6.4	63.2	4.2

(a) The difference between arrivals and departures as a proportion of the population usually resident at census night 2006.

(b) Preliminary estimated resident population at 30 June 2008.

(c) Between 2003 and 2008 estimated resident population.

Source: 2006 Census of Population and Housing, [Regional Population Growth, Australia, 2007-08](#) (ABS cat. no. 3218.0)

High net internal migration and growth regions

In the five years to the 2006 Census, high levels of internal migration and population growth occurred in Queensland (mainly in the south-east region) and two coastal regions of south-west Western Australia (Mandurah and Bunbury). Internal migration to inland regions was much less significant than to coastal locations, yet there were a small number of inland locations, such as Bendigo and Ballarat in central Victoria, that experienced population increase as a result of net internal migration.

Movement to the coast has long been an important trend in internal migration patterns within Australia (see [Australian Social Trends 2004, 'Seachange - new residents in coastal areas'](#)). Many coastal regions in Australia (such as the Gold Coast-Tweed region) have experienced high levels of population growth as a result of positive net internal migration.

...Brisbane

According to census data, of all the major population regions, Brisbane received the largest influx of new residents, an addition of 178,000 people between 2001 and 2006. Taking account of the people leaving Brisbane, this resulted in a net increase of around 40,000 people.

Most new residents to Brisbane arrived from the east coast Capital Cities and other regional areas of Queensland. Sydney was the largest sole contributor of new residents to Brisbane, responsible for approximately 30,000 people over the period (17% of all arrivals). A number of new arrivals to the region had also come from Melbourne (nearly 15,000 people, or 8% of arrivals). Intrastate migration from elsewhere in Queensland also contributed to a lot of the growth in Brisbane.

...other regions of south-east Queensland

The south-east corner of Queensland (roughly stretching from Noosa on the Sunshine Coast, to the Gold Coast-Tweed region on the Queensland/New South Wales border) is a region characterised by rapid population growth and high rates of internal migration.

Between 2001 and 2006, the Gold Coast-Tweed region grew by over 34,000 people as a result of net internal migration. After the Gold Coast, the Sunshine Coast had the third highest net internal migration. In the five years to 2006, the Sunshine Coast experienced a net population increase of more than 17,000 people, equivalent to 9% of the 2006 census usual resident population.

Migration patterns

Population growth or decrease at the regional level is the result of natural increase (the difference between births and deaths), net overseas migration and net internal migration. Rapid and/or large changes in the size and structure of regional populations typically reflect high levels of positive or negative net internal migration.

Net internal migration is the difference between the number of people who changed their usual residence by moving into a region and the number who have changed their usual residence by moving out of that region during a specified time period. This difference can be positive or negative.

Measuring population growth

Two measures can be used to identify regions experiencing high levels of population growth over specified time periods:

- *Population change* measures change in the total number of people in a region.
- *Average annual growth rates* measure the average yearly growth of the population relative to its size at the beginning of the period.

For more information on migration patterns and population growth, see [Australian Demographic Statistics, September 2008](#) (ABS cat. no. 3101.0) and [Regional Population Growth Australia, 2007–08](#) (ABS cat. no. 3218.0).

Census data and internal migration

The census asks people where they usually lived one year and five years prior to the census date. This information can be compared with place of usual residence on census night to examine internal migration patterns within Australia.

There are some limitations in using census data to determine patterns of internal migration. Movements of people within Australia could only be determined for those who were counted in the 2006 census and stated a place of usual residence in Australia in 2001 or 2005. People who made multiple moves between these periods would only be counted as moving once (or not at all if they moved back to where they came from).

Additionally, 7% of the census population aged five years and over did not state their usual address in 2001. These people have been excluded from this analysis, and therefore the migration numbers may undercount the actual number of people who moved between 2001 and 2006.

A large number of new residents to Gold Coast-Tweed and the Sunshine Coast came from the east coast Capital Cities. Over half of the new residents who moved to these regions between 2001 and 2006 came from Sydney, Brisbane and Melbourne. Brisbane accounted for around one-quarter of arrivals to both locations. Close to one-fifth had come from Sydney and around 8% were from Melbourne.

Hervey Bay, on the south-east Queensland coast, north of Noosa, experienced the highest average annual growth rate of the major population regions between 2003 and 2008, at 5.4%. This growth occurred as a result of high

rates of net internal migration to the region. In the five years to 2006, Hervey Bay had almost twice as many arrivals from elsewhere in Australia (14,000) as departures (7,000), equivalent to a net population increase of 16% since 2001.

A large portion of the growth in Hervey Bay was due to an influx of people from other regions in Queensland, with many arriving from Brisbane (nearly 3,000 people, or 18% of arrivals), the Gold-Coast Tweed (7%) and other regional areas of Queensland such as Toowoomba, the Sunshine Coast and the Hervey Bay hinterland. A significant number of arrivals to Hervey Bay also came from Sydney and Melbourne (16% in total).

...Mandurah

In the five years to 2008, Mandurah, a coastal city around 75 km south of Perth, had the second highest annual average growth rate of the major population regions. Contributing to this rate of growth, the region received more than 15,000 new arrivals between 2001 and 2006, and grew by over 6,000 residents as a result of net internal migration.

Due to its proximity to Perth, it is unsurprising that the majority of arrivals to Mandurah were from the capital city. In 2006, more than half (56%) of new arrivals had come from Perth. A number of arrivals to Mandurah also came from other regional areas in Western Australia including the Kalgoorlie/Boulder and Pilbara regions.

Growth in inland regions

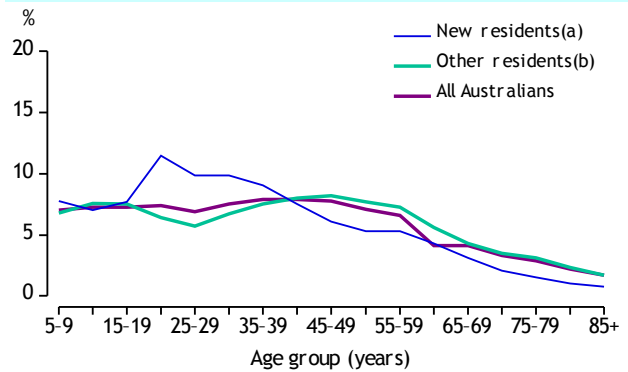
Over the five years to 2006, a number of inland regions lost more people than they gained as a result of net internal migration. Overall, levels of growth in the inland regions were much less significant than elsewhere.

Bendigo and Ballarat in central Victoria were exceptions to this general trend and were the only two inland regions that experienced positive net internal migration of more than 2,000 people between 2001 and 2006. Almost all the growth in these regions was due to internal migration from elsewhere in Victoria. In the five years to 2006, half of all arrivals to Bendigo (6,000 people of nearly 13,000 arrivals) were from country Victoria and one-quarter arrived from Melbourne.

Who moves?

Regional population growth brings with it social and economic change. Changing populations can put pressure on existing infrastructure and local environments, as well as contributing to local economies and impacting on the social fabric of a community.

Age distribution of selected major population regions – 2006



- (a) People living in one of the selected regions on census night whose usual address five years earlier was elsewhere in Australia.
- (b) People living in one of the selected regions on census night whose usual address five years earlier was the same.

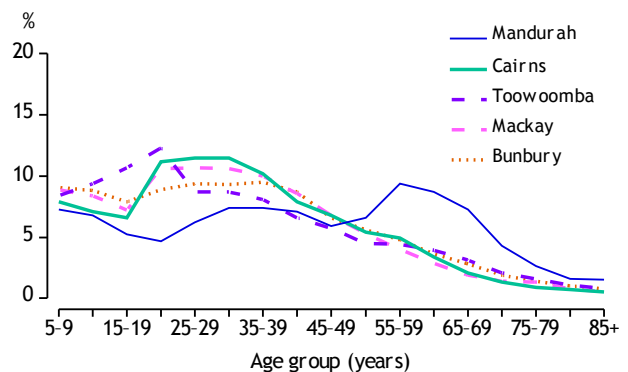
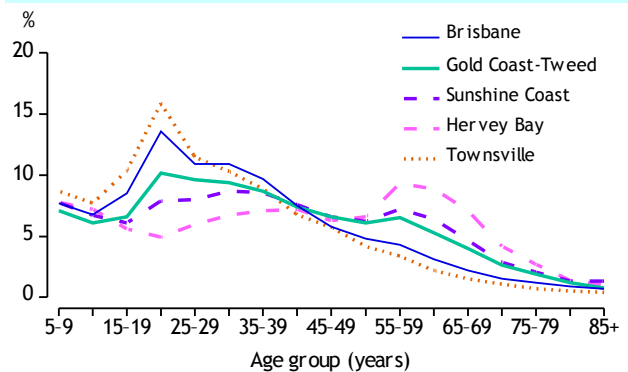
Source: 2006 Census of Population and Housing

...age profile

Age is strongly associated with mobility. Younger people are more mobile as they are less likely to own their own home or to have a family.

New residents who moved to the selected high growth regions during the five years before the 2006 census had a younger age profile than the Australian population as a whole, and were

Age distribution of arrivals(a) to selected major population regions – 2006



- (a) People living in the selected regions on census night whose usual address five years earlier was elsewhere in Australia.

Source: 2006 Census of Population and Housing

younger than people who were already resident in these regions. Overall, more than 40% of new residents were aged 20–39 years, compared with 26% of existing residents, and 30% of all Australians. Less than 9% of new residents were aged 65 years and over, while close to 15% of people already resident were this age in 2006.

As an exception to the general trend of movers being a younger group, the age profiles of arrivals to Hervey Bay and Mandurah were older: people aged 60 years and over accounted for more than one-quarter of new residents to both locations, and around one-quarter were aged 20–39 years. This is a reflection of older people retiring to popular coastal locations.

...education

On the whole, new residents to the high growth regions had higher educational qualifications than people who had not moved. In 2006, of all new residents aged 25–64 years who had moved to the selected regions in the year prior to the census, 57% had a non-school qualification while just over half of other residents did (52%). When examining internal migration between 2001 and 2005, a similar pattern was evident.

For young people, the ages between 18 and 24 are years of transition as they move from school to further education, and from education into the workforce. Young people of this age group are also highly mobile, often as a result of furthering their educational or work opportunities (see *Australian Social Trends 2003, 'Youth migration within Australia'*).

In 2006, new residents aged 18–24 years who had moved in the year prior to the census were more likely to have completed a non-school qualification than other residents of the same

age (40% and 34% respectively). The new residents were also less likely to be attending an educational institution than the existing residents that age (31% compared with 35%). This suggests that young people are more likely to move after completing an educational qualification.

Not surprisingly, young people aged 18–24 who had moved were less likely to be living with their parents (14%), than other residents of the same age (47%) and this pattern was similar for both those with and without a non-school qualification. For more information on young people's living arrangements and how they relate to work and study, see the article in this edition of *Australian Social Trends (June 2009), 'Home and away: the living arrangements of young people'*.

...work

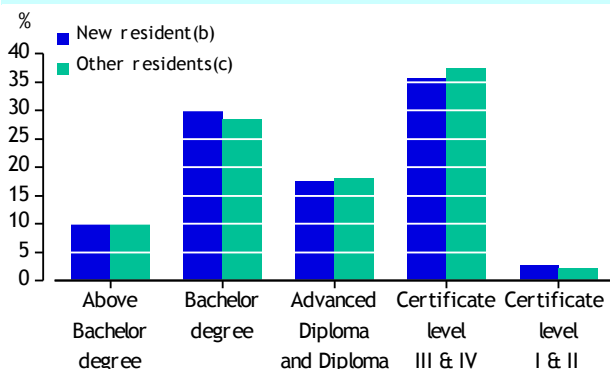
The length of time that a person has lived in a region is related to their employment status. In general, more recent arrivals were less likely to be working and had higher unemployment rates than those people who have been living in a region for longer, especially for older age groups.

Overall, new arrivals were less likely than other residents to be working, but this differs according to how long they had lived in the new location. Of those people aged 15–64 who had moved to the regions in the year prior to the census, 69% were employed, compared with close to three-quarters (74%) of other residents of the same age. The difference between the proportion of new and other residents who were employed was less marked for those who had arrived in the four years to 2005, with around three-quarters of all residents working in 2006 (73% of new arrivals and 75% of other residents).

Of new residents aged 55–64 years who arrived in the year prior to the census, the proportion who were employed was substantially lower (42%) than for other residents that age (57%). Similarly, of people who moved to the selected regions between 2001 and 2005, 45% were employed. Consistent with this pattern, new residents aged 55–64 years who arrived in the four years to 2005 were more likely than other residents to not be in the labour force (52% and 40% respectively), suggesting that movers in this age group were more likely to be retired.

New residents in the high growth regions had high rates of unemployment, especially the most recent arrivals. The unemployment rate for new residents aged 15–64 years who moved in the year prior to the census was 10%, considerably higher than that of other residents, at only 4%. People who arrived from 2001 to 2005 were still more likely than other residents to be unemployed (6%), but to a lesser extent.

People aged 25–64 years: level of highest non-school qualification(a) – 2006



- (a) For more information regarding non-school qualifications and the census, see *Census Dictionary 2006* (ABS cat. no. 2901.0).
 (b) People living in one of the selected regions on census night whose usual address one year earlier was elsewhere in Australia.
 (c) People living in one of the selected regions on census night whose usual address one year earlier was the same.

Source: 2006 Census of Population and Housing

Selected labour force indicators in the selected high growth regions – 2006

	2001-05		2005-06	
	New residents(a)	Other residents(b)	New residents(c)	Other residents(d)
	%	%	%	%
Proportion employed(e)				
People aged 15-64 years	72.9	74.8	68.6	74.3
People aged 55-64 years	45.1	58.0	42.0	56.5
Employed part-time(f)	27.6	29.5	25.8	29.3
Unemployment rate				
People aged 15-64 years	5.7	4.0	10.0	4.2
People aged 55-64 years	6.6	2.8	11.3	3.1

(a) People living in one of the selected regions on census night 2006 who arrived from elsewhere in Australia between 2001 and 2005.

(b) People living in one of the selected regions on census night 2006 and who also lived in that region in 2001.

(c) People living in one of the selected regions on census night 2006 who arrived from elsewhere in Australia in the 12 months to census night.

(d) People living in one of the selected regions on census night 2006 whose usual address one year earlier was the same.

(e) The number of employed people as a proportion of the population, excluding those who did not state their labour force status.

(f) Of all employed people aged 15-64 years.

Source: 2006 Census of Population and Housing

Differences in the unemployment rate of new and longer term residents increased with age over both time periods. The unemployment rate for new residents aged 55–64 years who migrated between 2001 and 2005 was 7%, compared with 3% for other residents. More recent arrivals of the same age group had an unemployment rate of 11%, eight percentage points higher than other residents (3%).

High rates of unemployment and lower levels of employment among new residents (especially those more recent new residents) could be related to the difficulties in finding work after moving to a new region, and the lack of those networks that are important in job seeking (see [Australian Social Trends 2002, 'Searching for work'](#)).

However, the decrease in unemployment rate for those arrivals who have been in a region longer could also be influenced by unsuccessful job seekers leaving the region or leaving the labour force. Some people may move to a new region in the hope of finding work and improving their job prospects rather than moving as a result of gaining a job.

According to the census, the period of time a resident had lived in a high-growth region (whether they were a new arrival or not), had little effect on the industry in which they were employed. As 'new' residents who had arrived in the four years to 2005 were more likely to be working than more recent arrivals, the following analysis is based on those people who arrived in the high growth regions between 2001 and 2005.

Similar proportions of employed new and existing residents aged 15–64 were working in Retail trade (both 13%); Health care and social assistance (10% new residents and 11% other residents); and Construction (9% new, 10% other). New residents were slightly more likely to be working in Public administration and safety (8% new residents, 7% other), and Accommodation, cafes and restaurants (9% compared with 7%).

Summary

People may move regions for a number of different reasons, often related to lifestyle, employment or the desire to be near other family members. Young adults are the most mobile population, with 17% of people aged 20-39 years in 2006 having moved regions in the five years prior to the census.

The ten fastest growing regions with high levels of internal migration, featured in this article, accounted for 20% of the total population of the major regions, yet received 36% of all people who moved regions. While people moving to these regions were slightly more likely to have a non-school qualification, they also tended to have slightly higher levels of unemployment; perhaps indicating that much of the attraction of these places is lifestyle rather than employment opportunities.

Appendix 1: Internal migration indicators, major population regions

	2006 Census of Population and Housing							June 2008	
	Internal migration – 2001 to 2006				New residents arriving:			Population 2008(d)	Average annual growth rate(e)
	Arrivals	Departures	Net internal migration psns	Net internal migration(a) %	2001-06(b)		2005-06(c)		
					Aged 20-39 years %	Aged 60 years and over %	15-64 years employed %		
Brisbane (QLD)	178,015	138,312	39,703	2.4	45.1	9.5	69.3	1,945,639	2.2
Gold Coast-Tweed (QLD/NSW)	89,706	55,171	34,535	7.2	37.9	15.8	67.7	558,888	3.3
Sunshine Coast (QLD)	48,313	30,827	17,486	9.0	33.2	18.7	67.0	237,562	3.2
Newcastle (NSW)	48,512	39,998	8,514	1.8	41.5	13.7	60.2	531,191	1.1
Hervey Bay (QLD)	14,509	7,283	7,226	16.1	24.6	25.4	51.5	56,165	5.4
Townsville (QLD)	30,903	24,452	6,451	4.9	46.6	6.5	72.8	162,730	3.0
Mandurah (WA)	15,249	9,099	6,150	10.0	25.6	26.0	59.8	78,612	4.3
Cairns (QLD)	22,920	17,880	5,040	4.6	44.5	8.9	72.2	142,001	3.7
Toowoomba (QLD)	22,965	18,785	4,180	3.9	37.8	12.6	65.7	125,339	2.0
Mackay (QLD)	15,907	12,033	3,874	5.9	41.9	8.8	75.6	81,148	3.4
Bunbury (WA)	10,985	7,710	3,275	6.4	37.0	11.6	71.9	63,202	4.2
Perth (WA)	90,694	87,692	3,002	0.2	43.4	8.4	70.6	1,602,559	2.2
Bendigo (VIC)	12,759	9,793	2,966	3.9	43.2	10.9	60.8	88,031	1.6
Ballarat (VIC)	12,767	10,235	2,532	3.2	43.4	11.2	59.7	91,787	1.5
Port Macquarie (NSW)	9,111	6,644	2,467	6.6	30.9	23.0	57.1	42,900	1.5
Bundaberg (QLD)	12,708	10,250	2,458	4.5	29.6	20.6	58.1	66,176	2.4
Geelong (VIC)	18,446	16,100	2,346	1.5	44.6	11.8	64.1	172,300	1.2
Coffs Harbour (NSW)	10,048	7,706	2,342	5.3	33.8	16.7	56.3	51,538	1.5
Hobart (TAS)	19,537	17,215	2,322	1.2	41.6	11.2	63.0	209,287	0.9
Canberra-Queanbeyan (ACT/NSW)	44,733	42,698	2,035	0.6	54.6	5.6	78.7	395,126	1.3
Launceston (TAS)	12,521	10,854	1,667	1.8	40.5	13.0	58.5	104,649	0.8
Albury-Wodonga (NSW/VIC)	14,233	12,909	1,324	1.5	45.6	9.0	65.8	102,894	1.1
Gladstone (QLD)	8,762	7,482	1,280	3.2	42.4	5.7	69.3	48,796	3.3
Burnie-Devonport (TAS)	9,924	8,685	1,239	1.7	34.2	16.9	55.2	81,144	0.7
Wagga Wagga (NSW)	10,443	9,335	1,108	2.2	47.8	7.5	68.2	56,911	1.5
Bathurst (NSW)	6,359	5,448	911	3.2	43.8	9.6	53.5	32,942	1.1
Tamworth (NSW)	7,417	6,826	591	1.5	39.3	12.0	65.6	45,615	1.1
Rockhampton (QLD)	12,293	11,732	561	0.9	39.4	8.8	67.0	75,497	1.8

Appendix 1: Internal migration indicators, major population regions (continued)

	2006 Census of Population and Housing							June 2008		
	Internal migration – 2001 to 2006				New residents arriving:				Population 2008(d)	Average annual growth rate(e)
	Arrivals	Departures	Net internal migration	Net internal migration(a)	2001-06(b)		2005-06(c)			
					Aged 20-39 years	Aged 60 years and over	15-64 years employed			
psns	psns	psns	%	%	%	%	psns	%		
Nowra-Bomaderry (NSW)	6,248	5,698	550	1.9	35.4	18.3	58.2	33,212	1.4	
Lismore (NSW)	6,755	6,345	410	1.5	42.0	10.4	54.7	31,926	0.8	
Warrnambool (VIC)	4,747	4,338	409	1.4	46.4	9.5	64.4	32,712	1.5	
Mildura (VIC)	6,101	5,921	180	0.4	40.7	11.0	61.6	49,280	1.4	
Geraldton (WA)	5,733	5,695	38	0.1	36.2	10.2	62.1	35,361	2.1	
La Trobe Valley (VIC)	7,551	8,392	-841	-1.2	40.3	14.6	52.1	78,531	1.0	
Dubbo (NSW)	5,646	6,643	-997	-3.2	42.6	11.0	67.2	36,653	0.7	
Shepparton (VIC)	5,714	6,729	-1,015	-2.4	45.8	10.2	62.2	47,710	0.9	
Orange (NSW)	5,689	7,166	-1,477	-4.5	42.0	10.0	61.4	37,991	0.5	
Wollongong (NSW)	21,592	23,336	-1,744	-0.7	44.3	12.1	62.2	284,169	0.7	
Kalgoorlie-Boulder (WA)	6,240	8,956	-2,716	-11.1	51.2	3.3	73.6	31,509	1.1	
Darwin (NT)	21,273	24,224	-2,951	-3.2	51.0	4.1	79.2	120,652	2.3	
Adelaide (SA)	61,980	72,227	-10,247	-1.0	44.3	9.8	63.3	1,172,105	0.9	
Melbourne (VIC)	141,644	161,462	-19,818	-0.6	54.0	8.0	68.9	3,892,419	1.7	
Sydney (NSW)	123,231	246,591	-123,360	-3.3	54.6	8.6	69.8	4,399,722	1.0	

(a) The difference between internal arrivals and departures as a proportion of the population usually resident on census night 2006.

(b) As a proportion of new residents who moved to the selected high growth regions in the five years prior to the 2006 Census.

(c) As a proportion of new residents aged 15-64 years who moved to the selected high growth regions in the year prior to the 2006 Census.

(d) Preliminary Estimated Resident Population as at 30 June 2008.

(e) Average annual growth rate is measured on the five years to 2008, based on Estimated Resident Population for 2003 and 2008.

Source: 2006 Census of Population and Housing, [Regional Population Growth Australia 2007-08](#) (ABS cat. no. 3218.0)