8 Is decentralisation the answer?

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8.1 Introduction

There are no simple 'single bullet' solutions to achieving a sustainable population in Australia. Balancing the need for some population growth with the fundamental need to significantly reduce environmental impacts represents a complex challenge but one that is achievable via an integrated economic, population and environmental strategy. Such a strategy must involve a range of considerations but one must relate to population distribution. The population discourse in Australia must not only be about how many people but also where they will live. An important part of a sustainable population strategy must involve working towards a better balance of population distribution and the distribution of resources.

Australia has a distinctive population distribution, the main structure of which has changed little in 140 years. This paper argues that we need to ask whether this pattern of human settlement is consistent with a future sustainable national population. Over the past century at state and federal levels, there have been many attempts, with little or no success, to decentralise the national population, which has been concentrated in state capital cities and coastal areas. However, it is argued here that, while it is important not to ignore the lessons of history, it is time to have a new look at the national settlement system.

8.2 A distinctive population distribution

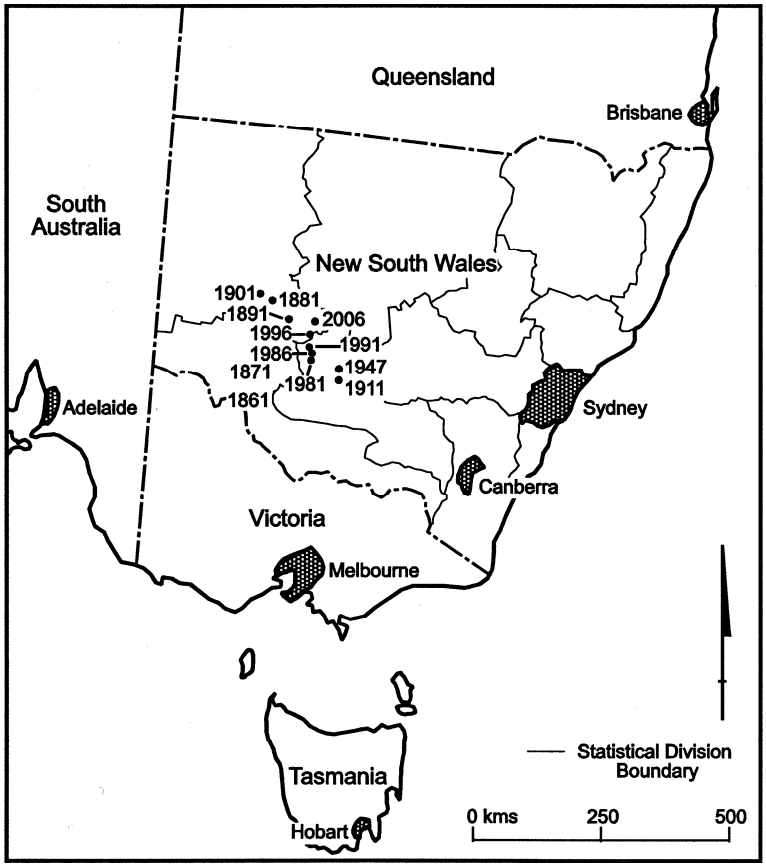
Australia also has one of the most spatially concentrated populations of any nation. This pattern of concentration has a number of dimensions (Hugo 2003):

- 87 per cent live in urban areas.
- 64 per cent live in capital cities.
- 81 per cent live within 50 kilometres of the coast.

- 0.8 per cent live in the 70.5 per cent of the land area of the continent with a population density of less than 0.1 people per square kilometre.
- 76 per cent live in the 0.33 per cent of the land area within 100 people or more per square kilometre.

This distinctive pattern has been remarkably stable over the past 150 years. Almost a century ago, geographer Griffith Taylor (1922) contended that the basic structure of Australia's population distribution had been established by 1860 and that future population growth would simply confirm that pattern, since it reflected the environmental constraints of the continent. In many ways, his contention has been proved correct. Figure 8.1 shows that the location of Australia's centre of gravity of population, or 'population centroid', has moved very little over the past century, with only a minor displacement north and west reflecting the faster growth of Queensland and Western Australia over recent decades. This pattern of overall stability in the structure of population distribution, however, is very much one of 'dynamic stability', since there is a great deal of mobility within the broad pattern of concentration of population.

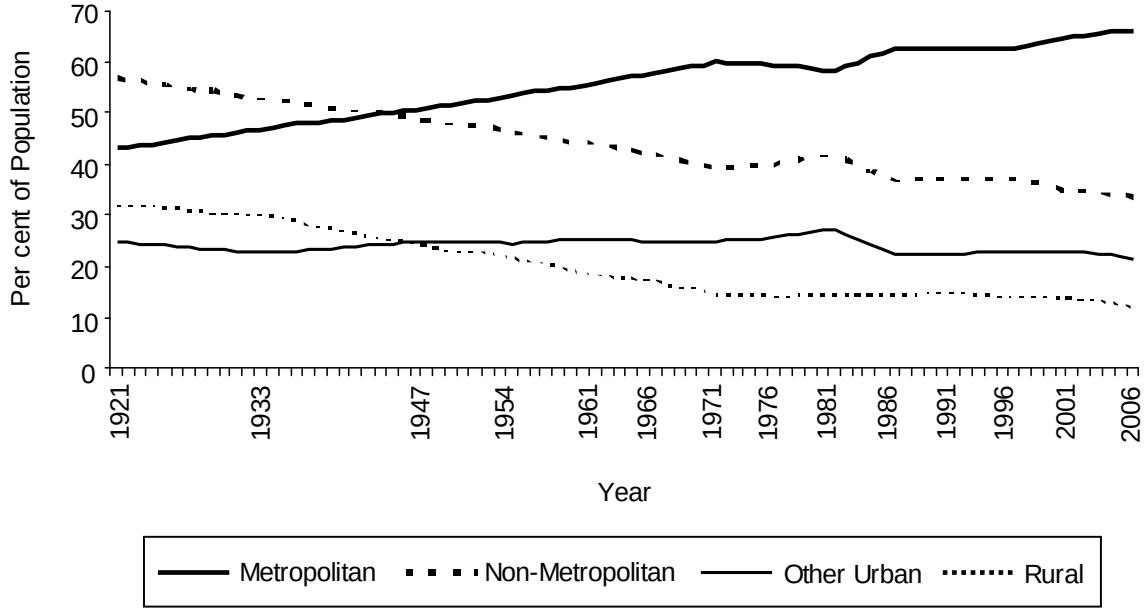
Figure 8.1 **Australia: centre of gravity of population, 1861 to 2009**



Data sources: Calculated from ABS historical statistics and ABS (2010a)

There is also a degree of stability in the proportions of the national population living in metropolitan, other urban and rural areas. Figure 8.2 indicates that there has been little change over the past few decades in the proportions of the national population living in the three main section of state categories identified by the ABS.

Figure 8.2 **Australia: changing distribution of the population between urban and rural sectors, 1921 to 2006**



Data sources: Australian censuses, 1921 to 2006.

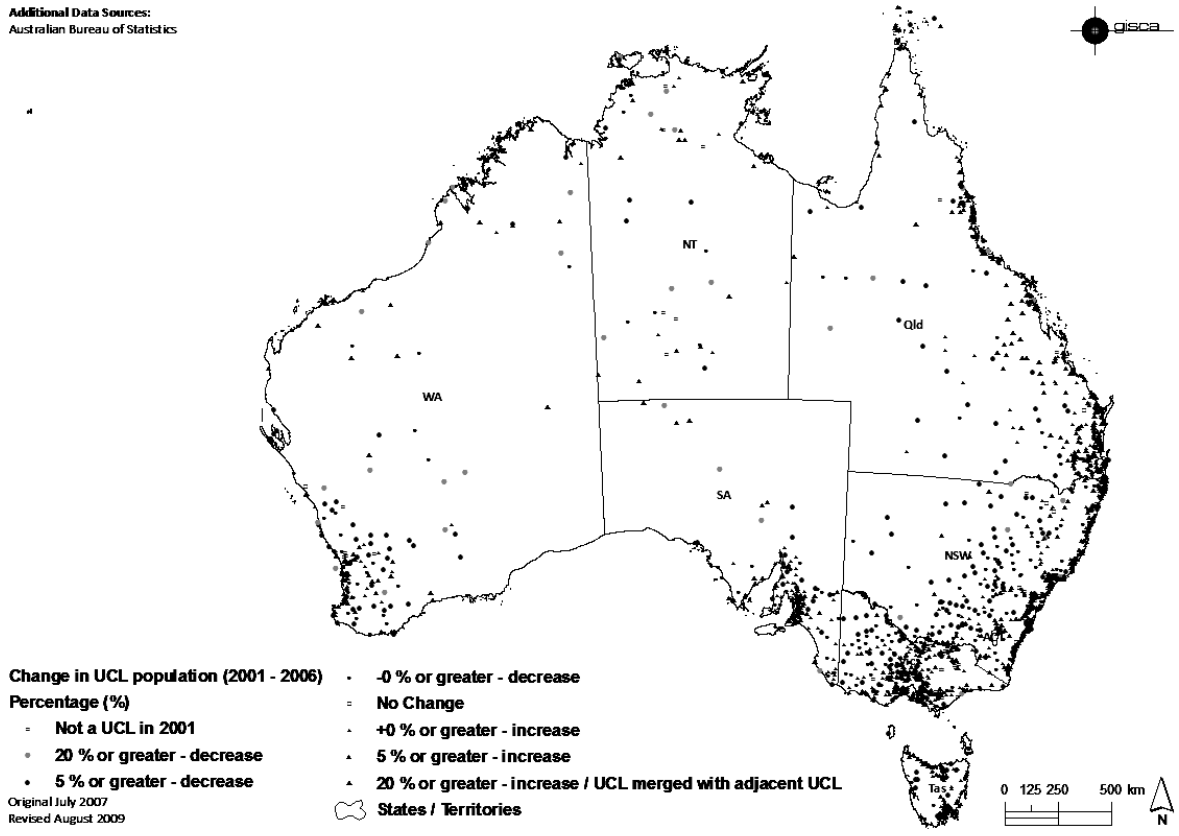
However, this pattern of stability within the Australian settlement system belies a great deal of dynamism and change. In fact, Australia's population has higher levels of international and internal migration than any other country:

- *International migration*. Half of the Australian population at any one time are permanent or temporary migrants or the Australia-born children of such migrants.
- *Internal migration*. A higher proportion of Australians change their permanent place of residence each year than any other national population (14.2 per cent of Australia's total population in 2006 lived elsewhere in Australia in 2005).
- *Temporary movement*. Australia has a high level of non-permanent movement involving long-distance commuting to work, seasonal migration (such as by 'grey nomads'), complex work-related and leisure-related movements and so on.

This high level of mobility is a function of, and a contributing factor to, Australia's economic development and growth.

Moreover, although there has been little change in the proportions of the national population living in metropolitan and non-metropolitan Australia, there have been substantial shifts within those sectors. Figure 8.3, for example, shows that the urban centres and country towns that experienced growth from 2001 to 2006 are concentrated in coastal areas and areas around major cities. On the other hand, those losing population tend to be inland. Table 8.1 demonstrates how population growth in non-metropolitan areas varies between areas according to their accessibility.

Figure 8.3 **Australia: population change in country towns, 2001 to 2006**



Data sources: Australian censuses of 2001 and 2006.

Table 8.1 **Australia: population change by remoteness area, 1996-2009**

	Population change	*Growth rate (%) p.a.*		
	1996-2006	*1996-2001*	*2001-2006*	*2008-2009*
	('000)			
Major cities of Australia	2069.2	1.8	1.4	2.2
Inner regional Australia	330.2	0.3	1.4	2.1
Outer regional Australia	9.3	-0.7	0.8	1.7
Remote Australia	-12.2	-0.7	0.0	0.9
Very remote Australia	-5.7	-0.5	-0.2	1.2
Total	**2390.80**	**1.2**	**1.3**	**2.1**

Source: ABS.

8.3 Attempts to decentralise Australia's population

Concerns about the distribution of the Australian population and the 'balance' between urban and rural areas go back to the early years of federation (Borrie 1994, p. 203). It lay behind the initiation of land settlement schemes and soldier settlement schemes (Rowland 1979). However, as Day (1972, p. 1) pointed out:

> Since around the turn of the century decentralisation has been a commendable but unexciting part of the conventional wisdom. No one has ever been opposed to it. A great deal of lip service has been paid to it.

The 1964 Premiers' Conference set up the Commonwealth/State Officials' Committee on Decentralisation, which submitted its final report to the Prime Minister in 1972. At that time, the discussion on decentralisation gathered momentum due to rapid growth and emerging diseconomies in Australian cities and concerns about rural depopulation. However, for the first time the discussion about decentralisation began to focus on the relocation of manufacturing and service activities into non-metropolitan areas, rather than on the extension of agriculture. State governments produced reports on decentralisation (for example, Development Council of NSW 1969; Industries Development Committee 1964; Decentralisation Advisory Committee 1967), and there was active critiquing of such policies (Daly 1973; Hefford 1965; Simons and Lonergan 1973). There was debate not only as to whether decentralisation was desirable or not, but also as to whether decentralisation should be dispersed or selective and concentrated in particular areas.

By the early 1970s, the concentration of the Australian population in capital cities had reached unprecedented levels and was attracting increasing concern (Vipond

1989, p. 66). Neutze (1965) analysed the increasing diseconomies apparent in Australia's growing cities, there was concern that large cities added to income inequalities (Stretton 1970) and there was increasing pressure to develop a coherent national urban development strategy (Lloyd and Troy 1981). With the development of the Cities Commission and the Department of Urban and Regional Development in 1972, the newly elected Labor federal government saw Canberra become involved in settlement and population distribution for the first time in the postwar era (Logan et al. 1975; Logan and Wilmoth 1975). The National Growth Centre Policy was developed, and investment in regional centres such as Albury–Wodonga was initiated (Cities Commission 1974). Moreover, an effort to develop a comprehensive national settlement policy began (Nielson 1976). Such was the level of activity that in 1978 Pryor was able to compile an impressive list of state and federal authorities and specific policy measures related to decentralisation. However, as Whitelaw and Maher (1988, p. 133) subsequently pointed out, 'Attempts to create a national settlement strategy in the early 1970s lost momentum with a change in government.'

From time to time since then, interest in regional development has flared in the federal arena but there has been no attempt to develop a comprehensive national settlement policy.

8.4 Recent population dynamics in non-metropolitan Australia

For several of the most recent intercensal periods, growth in the population living outside capital city statistical divisions (SDs) has been greater than that within the metropolitan areas (see table 8.2). Net international migration gain has been the most significant driver of metropolitan population growth. Table 8.3 shows that the international migration contribution varied between 69 per cent of net growth in Sydney to 20 per cent of that in Brisbane. Net internal migration gains from within Australia were responsible for 31.6 per cent of Brisbane's growth and 3 per cent of Perth's but there were net outmigrations from the other capitals, especially Sydney (a net internal migration loss of 121 000).

Table 8.2 **Australia: distribution of overseas-born between capital cities and rest of states, 2001 and 2006**

	Number	*2001 %*	*Number*	*2006 %*	*Growth rate 2001 to 2006*
Major capital cities	3 307 577	81.1	3 557 486	80.6	1.47
Rest of states	771 574	18.9	857 873	19.4	2.14
Total	**4 079 151**	**100.0**	**4 415 359**	**100.0**	**1.60**

Source: ABS censuses.

Table 8.3 **Estimated components of population change in mainland state capital city statistical divisions, 2001 to 2006 ('000s)**

		Natural increase	*Net international migration*	*Net internal migration*	*Population change*
Sydney	'000s	159	84	-121	122
	per cent	130.3	68.9	-99.2	100
Melbourne	'000s	121	124	-19	266
	per cent	53.5	54.9	-8.4	100
Brisbane	'000s	66	27	43	136
	per cent	48.5	19.9	31.6	100
Perth	'000s	49	53	3	105
	per cent	46.7	50.5	2.9	100
Adelaide	'000s	21	22	-10	33
	per cent	63.6	66.7	-30.3	100

Source: Hugo and Harris (2011).

Table 8.4 estimates the components of population change in all SDs across Australia over the period from 2001 to 2006. In the table, net migration is the combined result of internal and international migration. It is interesting that over the period only eight of Australia's SDs experienced an absolute decline in population (remote, north-western and western New South Wales, south central and north-west Queensland, northern South Australia and the Kimberley in Western Australia). Only Wimmera in Victoria, located in the more closely settled wheat–sheep belt, is an exception to this pattern.

It is possible to identify a relatively small number of *sinks* of significant net migration gain in the non-metropolitan sectors of each state. They are marked with an asterisk in table 8.4. It is striking that Queensland has more than a third of them. In fact, of the 14 non-metropolitan SDs that recorded a net migration gain of 5000 or more from 2001 to 2006, half were in Queensland.

Table 8.4 **Australia: statistical divisions, 2001 to 2006**

				Net Migration		Natural Increase	
Statistical Division	*2001 Census*	*2006 Census*	*Population Change 2001-2006*	*Number*	*% of Population Change*	*Number*	*% of Population Change*
Sydney	3949989	4119191	169202	-9278	-5.5	178480	105.5
Hunter	562409	589240	26831	6262*	23.3	20569	76.7
Illawarra	380687	394211	13524	110	0.8	13414	99.2
Richmond-Tweed	205162	219329	14167	8338*	58.9	5829	41.1
Mid-North Coast	266825	284674	17849	11109*	62.2	6740	37.8
Northern	170659	172396	1737	-5267	-303.2	7004	403.2
North Western	112022	111231	-791	-6149	777.4	5358	-677.4
Central West	167666	170897	3231	-3661	-113.3	6892	213.3
South Eastern	183026	197942	14916	8110*	54.4	6806	45.6
Murrumbidgee	143410	147292	3882	-2982	-76.8	6864	176.8
Murray	105941	110523	4582	583	12.7	3999	87.3
Far West	22585	22030	-555	-1242	223.8	687	-123.8
Melbourne	3357888	3592593	234705	87696	37.4	147009	62.6
Barwon	243375	259012	15637	6403*	40.9	9234	59.1
Western District	95488	98855	3367	29	0.9	3338	99.1
Central Highlands	134555	142219	7664	2452*	32	5212	68
Wimmera	48656	48441	-215	-1337	621.9	1122	-521.9
Mallee	85770	88601	2831	-432	-15.3	3263	115.3
Loddon	158233	168843	10610	4395*	41.4	6215	58.6
Goulburn	184008	195239	11231	3770*	33.6	7461	66.4
Ovens-Murray	88104	92587	4483	940	21	3543	79
East Gippsland	76927	80117	3190	989	31	2201	69
Gippsland	152722	159483	6761	1427	21.1	5334	78.9
Brisbane	1581803	1763133	181330	98357	54.2	82973	45.8
Gold Coast	413729	482318	68589	50888*	74.2	17701	25.8
Sunshine Coast	235220	276263	41043	31947*	77.8	9096	22.2
West Moreton	62740	68630	5890	3137*	53.3	2753	46.7
Wide Bay-Burnett	225228	254658	29430	20716*	70.4	8714	29.6
Darling Downs	202405	213756	11351	4673*	41.2	6678	58.8
South West	24854	24780	-74	-1507	2036.5	1433	-1936.5
Fitzroy	171485	188406	16921	6863*	40.6	10058	59.4
Central West	11677	10851	-826	-1384	167.6	558	-67.6
Mackay	130140	150171	20031	12118*	60.5	7913	39.5
Northern	181569	196672	15103	5100*	33.8	10003	66.2
Far North	211823	231049	19226	6482*	33.7	12744	66.3
North West	32535	30938	-1597	-4060	254.2	2463	-154.2
Adelaide	1070837	1105839	35002	3644	10.4	31358	89.6
Outer Adelaide	108670	123700	15030	10737*	71.4	4293	28.6
Yorke and Lower North	42252	43878	1626	845*	52	781	48
Murray Lands	65195	66805	1610	-569	-35.3	2179	135.3

(Continued next page)

Table 8.4 (continued)

Statistical Division	2001 Census	2006 Census	Population Change 2001-2006	Net Migration		Natural Increase	
				Number	% of Population Change	Number	% of Population Change
South East	59456	62219	2763	169	6.1	2594	93.9
Eyre	32190	33343	1153	-206	-17.9	1359	117.9
Northern	76146	75927	-219	-3378	1542.5	3159	-1442.5
Perth	1332002	1445077	113075	52653	46.6	60422	53.4
South West	180269	207343	27074	18587*	68.7	8487	31.3
Lower Great Southern	49548	52592	3044	870*	28.6	2174	71.4
Upper Great Southern	17564	17714	150	-675	-450	825	550
Midlands	49903	50411	508	-1718	-338.2	2226	438.2
South Eastern	51307	51894	587	-2930	-499.1	3517	599.1
Central	56766	57428	662	-2320	-350.5	2982	450.5
Pilbara	37137	41004	3867	456	11.8	3411	88.2
Kimberley	30340	29297	-1043	-3388	324.8	2345	-224.8
Greater Hobart	191128	200523	9395	3073	32.7	6322	67.3
Southern	33036	34927	1891	593	31.4	1298	68.6
Northern	128397	133930	5533	1537*	27.8	3996	72.2
Mersey-Lyell	101786	106131	4345	1030*	23.7	3315	76.3
Darwin	99320	105992	6672	579	8.7	6093	91.3
Northern Territory - Bal	83791	84910	1119	-5279	-471.8	6398	571.8
Canberra	307834	323056	15222	29	0.2	15193	99.8

*Non-metropolitan net migration sinks.
Source: Calculated from 2001 and 2006 Census population data.

Examination of internal migration data from the 2006 Census allows us to identify the number of people who moved into and out of each SD between 2001 and 2006 (this information is shown in Appendix A). From this, it is possible to identify the SDs that act as *sources* and experience net migration loss, and those that act as sinks and experience net migration gain. Table 8.5 shows the top 10 sinks and sources based on net migration between 2001 and 2006. Of the top 10 sinks, four are in Queensland and four in New South Wales, and one is in South Australia and one in Western Australia. In Queensland, the Gold Coast, Sunshine Coast and Wide Bay–Burnett SDs shared a net gain of some 66 000 people between 2001 and 2006. Mackay experienced a net gain of 5000 movers during the period, and while attractive living opportunities may account for some of the influx, agriculture and mining activity in the hinterland is clearly an additional factor accounting for the net gains. In New South Wales, the four main sink SDs gained around 32 000 people in the five years to 2006. Three of these SDs — Richmond–Tweed, Mid-North Coast and Hunter — are to the north of the Sydney SD, while the South Eastern SD is to the south. Each of these SDs is in the coastal zone and has attracted substantial

numbers of Sydney people leaving the increasingly congested environment of Sydney for the north and south coast regions. The other areas of growth are in the peri-urban areas of Perth and Adelaide. On the other hand, the major sources suffering significant net outmigration losses were the capital cities of Sydney, Melbourne and Adelaide. Hence, the overall net flow of resident population from capital cities to non-metropolitan areas is one of the most striking trends in Australian internal migration.

Table 8.5 **Australia statistical divisions: major sinks and sources of net internal migration, 2001 to 2006**

Net gains		*Net losses*	
Sinks		*Sources*	
Statistical Division	*Net Migration*	*Statistical Division*	*Net Migration*
Brisbane (Q)	42,750	Sydney (NSW)	121,012
Gold Coast (Q)	29,312	Melbourne (V)	18,709
Sunshine Coast (Q)	20,561	Adelaide (SA)	9,611
Wide Bay-Burnett (Q)	15,798	North West (Q)	6,506
Southwest (WA)	10,805	Balance (NT)	4,443
Mid North Coast (NSW)	10,254	South Eastern (WA)	3,725
Hunter (NSW)	9,656	Northwest (NSW)	3,439
Outer Adelaide (SA)	7,454	Northern (SA)	3,089
South Eastern (NSW)	6,501	Northern (NSW)	3,033
Richmond Tweed (NSW)	6,143	Murrumbidgee (NSW)	2,849

Source: ABS 2006 Census.

Turning to international migration, one of the major features of postwar immigration not only to Australia but also to North America and Europe was the increasing tendency with each census for a greater proportion of immigrant arrivals to settle in a few large 'gateway cities' (Price and Benton-Short 2008). This pattern prevailed up to 2000, but table 8.1 shows that in 2001–2006 intercensal period the overseas population grew faster outside the major capital city SDs than within them. This was the first time this occurred in the postwar period. Moreover, this decentralisation of migrant settlement has also been observed in the United States (Massey 2008), Canada (Carter et al. 2008), Europe (Jentsch 2007) and New Zealand (Spoonley and Bedford 2008).

This is a small, but perhaps significant, change that is a function of:

- the introduction of the State Specific and Regional Migration scheme, which provides bonus points for settling outside the main gateways
- the Department of Immigration and Citizenship scheme for encouraging refugee-humanitarian settlers to move initially to regional areas (Hugo et al. 2010)

- a trend throughout OECD countries for migrants to settle outside major cities
- job shortages in regional Australia.

8.5 Rethinking the national settlement system

There are a number of reasons why the time seems opportune for us to examine the whole issue of whether or not the contemporary Australian settlement system is the most appropriate one to achieve national goals. The economic and environmental imperatives of the next four decades will present a very different set of challenges and opportunities from those that prevailed in the three decades following World War II, when decentralisation and regional development policies were last seriously put forward in Australia. Is our settlement structure in part an artefact of earlier political economies? Certainly, the Australian settlement system will remain dominated by a few large metropolitan centres, but may it serve the nation better if a greater proportion of future growth can be located in non-metropolitan Australia rather than added on to large metropolitan areas? These are questions for which we do not, at present, have the empirical evidence to give definitive answers.

Where people live is important to their wellbeing. Under any realistic scenario of the next four decades, most Australians will continue to live in major urban areas, especially the capital cities. However, the question must be asked as to whether the current settlement system will deliver the most sustainable, efficient and liveable outcomes for Australians over the next two decades in the light of emerging environmental, economic and social trends. Two issues are of particular relevance:

- How can we reshape our large cities so that they are more liveable, equitable, efficient and environmentally sustainable?
- Can a shift in the regional balance of development between metropolitan and non-metropolitan Australia deliver more liveable, equitable, efficient and environmentally sustainable outcomes for Australians?

It is the second question with which this paper is concerned.

Why should we revisit the issue of regional development and decentralisation? Some would argue that policy initiatives for decentralisation in the 1950s and early 1970s were tried with limited, if any, success. There are at least five reasons why the issue needs to be revisited:

- First, earlier initiatives often attempted to attract people ‘artificially’ to areas by creating job opportunities where there was not an existing economic potential.

- Second, the 21st century economic context is totally different from that which prevailed a half-century ago, when manufacturing was the key driver of economic and employment growth in Australia.
- Third, environment has been a major influence shaping Australia's settlement system since initial European settlement (Taylor 1922), and climate change will add a new dimension to this.
- Fourth, the dynamics of internal migration and international migrant settlement in Australia have changed significantly in the past decade.
- Fifth, in other OECD countries there are many examples of regions that are more economically dynamic than major cities.

The broad structure of Australia's settlement system has been in place for 150 years, and the question needs to be asked as to whether that system is an optimal one to facilitate Australia moving towards a more economically and environmentally sustainable future. It is increasingly being asked whether modifying Australia's long-established settlement system based on capital cities could deliver several medium and long-term dividends, such as:

- a release of the economic potential of regions, which has been held back by lack of infrastructure investment
- achievement of a better balance between the distribution of people and the distribution of water in Australia
- relieving the pressure of rapid growth in and near the capital cities and hence saving scarce quality agricultural land and providing the opportunity to catch up in infrastructure
- reducing pollution and environmental degradation in large cities
- increasing housing availability and affordability
- reducing journey-to-work costs overall.

Employment and regional growth

A basic premise of discussions about regional development must be that regions identified for policy attention must have the potential to develop a sustained demand for employment. Jobs are a *sine qua non* of regional development. Failed early efforts at decentralisation have clearly demonstrated that the jobs cannot be created artificially. Any effort at regional development must be focused on regional communities where there is demonstrated evidence that the local economy provides the basis for sustained demand for workers. There are indications that in the

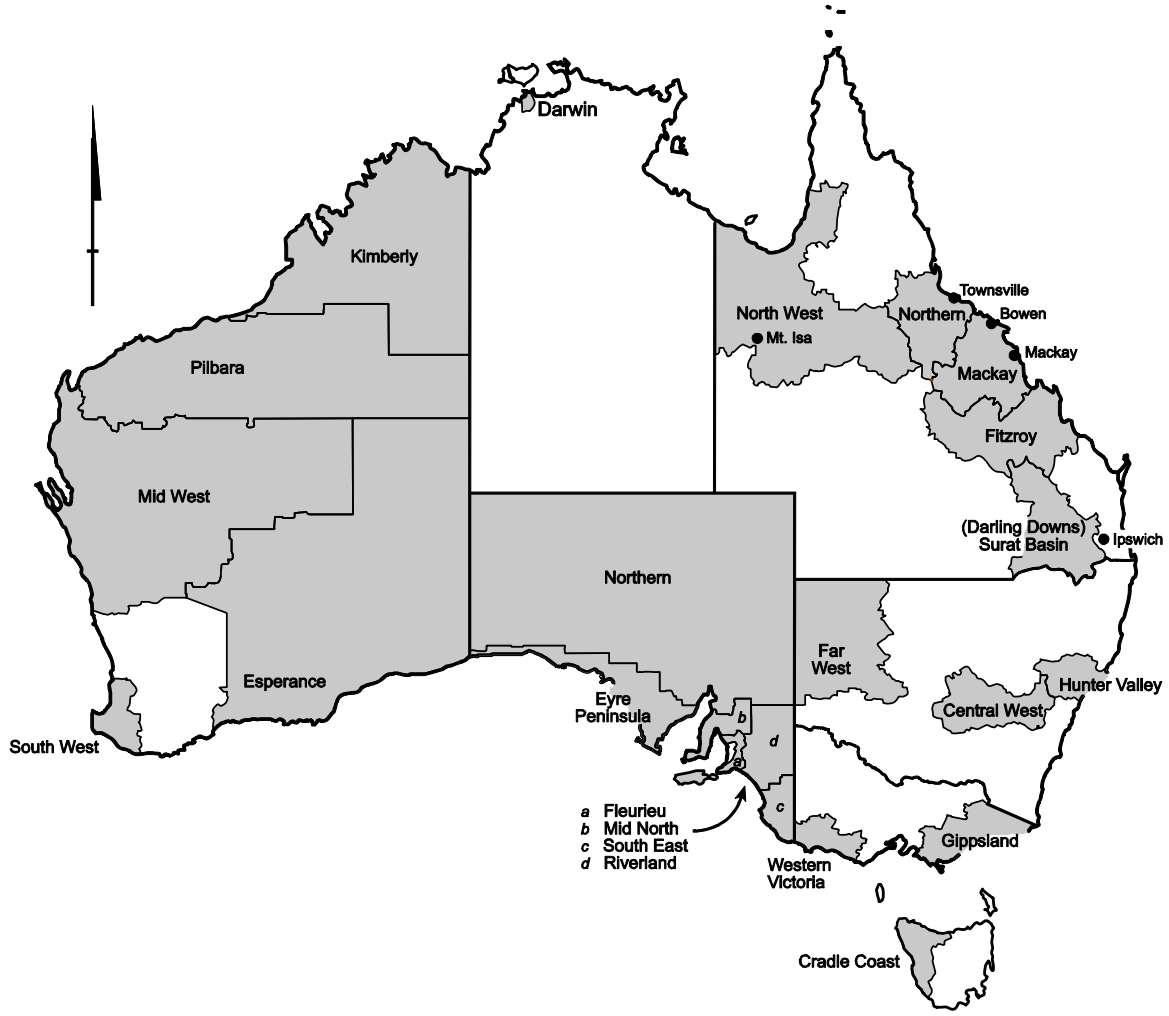
Australian economy of the 2010s a smaller proportion of economic activity is tied to a location in a major metropolitan centre.

One obvious candidate is mining. Mining is a quintessentially regionally based activity, as figure 8.4 demonstrates. At the 2006 Census, mining employed 90 833 Australians and that has probably subsequently increased by 50 per cent. However, as has been conclusively demonstrated by McMahon and Remy (2001) in a cross-national study, the mining industry has a profound impact on regional communities, especially in remote areas, with a local multiplier effect of more than 3. In Australia, however, the fly in, fly out and drive in, drive out phenomena have meant that the local multiplier impact is being muted. In the 2006 Census, 31.3 per cent of those employed in the mining industry were enumerated in cities with more than 100 000 people, and the two largest groups were in Perth and Brisbane.[1] Clearly, careful consideration needs to be given to the potential role of mining in facilitating regional development. In this consideration, however, it must also be borne in mind that while mining played an important role historically in developing non-metropolitan urban areas, many such centres went into rapid decline as deposits were exhausted or global mineral prices declined (Blainey 1963). In addition, there are documented cases in which the premature and sudden closure of a mining activity had a devastating impact on local communities, as in the case of the BHP Billiton's Ravensthorpe nickel operation in Western Australia (Browne, Buckley and Stehlik 2009).

However, mining is not the only growing element in the Australian economy that has a strong non-metropolitan orientation. Tourism, for example, currently accounts for 4.5 per cent of GDP and has a strong regional orientation because many remote areas are also significant tourist destinations. Building on tourism and mining in such areas to widen the economic base of those communities would seem to be one potential strategy for regional development that could deliver positive outcomes in liveability, economic growth and environmental sustainability. Moreover, the increasing Indigenous involvement in these activities can have an important social inclusion dividend. However, such outcomes will not just happen — careful and targeted infrastructure development are needed.

1 Equally, however, it needs to be noted that the phenomenon has also facilitated development in many regional (especially coastal) communities because large numbers of mining workers have their usual place of residence in other non-metropolitan areas. Roxby Downs in South Australia has been called Kimba East because it has attracted a large number of workers whose usual place of residence remains in the northern Eyre Peninsula.

Figure 8.4 **Location of mining regions identified by the Australian Minerals Council**



The revolution in communication and information technologies has freed a whole range of economic activities in the tertiary and quaternary sectors of the economy from the need to be located in large metropolitan centres. In this context, the rollout of the National Broadband Network is especially relevant because it provides an important part of infrastructure to facilitate regional development. It needs to be stressed that there are other infrastructure elements that will also be crucial if internal and international migrants are to locate in regional areas.

Another economic issue of significance to non-metropolitan areas is retirement. Already, regional Australia has a higher representation of retired people than metropolitan Australia. A maintenance of this trend alone will see a large increase in the older population in these areas, with an attendant increase in demand for services and job creation effects because of the large numbers of baby boomers entering this stage of their lives over the next two decades. However, there are

strong indications that a larger *proportion* of baby boomers will move to regional areas than has been the case for earlier generations (Jackson and Felmington 2002).

With increasing demand for food, it is already apparent that some sectors of primary production and primary product processing are experiencing shortages of workers in non-metropolitan areas. This is exacerbated by outmigration of young adults from those areas and the fact that in almost two thirds of non-metropolitan local government areas the number of retirees leaving the workforce is larger than the number of school leavers entering the workforce.

Infrastructure

The key to shifting the balance of growth from the large cities to regional areas, however, is infrastructure. Mining and tourism, among other industries, provide the economic basis for sustainable economic development in several parts of Australia but they need infrastructure investment. Developing smart models in which industries such as mining and tourism can see a benefit in investing in that infrastructure in partnership with government provides a potential way forward.

A key question relates to where investments in infrastructure need to be targeted. While backlogs in the existing 'sinks' of rapid population growth need to be filled, there is also a need to think strategically about where infrastructure investment is targeted. In particular, the following question needs to be investigated carefully:

> Given that Australia is likely to experience a significant continued increase in population (albeit not at the high levels of 2008-09), is there a case for providing infrastructure to facilitate growth in some regions outside the capital cities where there is both the economic potential to sustain a much larger community, the resources available to support a larger population and, with appropriate policy and safeguards, the ability to absorb population growth without compromising environmental sustainability?

The backlogs in contemporary hotspots of growth make it difficult to redirect infrastructure investments.

In most Australian States and Territories, there have been developed regional plans to provide a framework for their development. Such plans are a critically important prerequisite for accommodating growth (or decline) in a sustainable way. It needs to be stressed that there is a direct relationship between population growth and infrastructure need, and that provision of appropriate infrastructure in a timely way in the places where it is needed is crucial. It is apparent that governments (federal, state and local) have important and key roles to play in the provision of that infrastructure. However, the current growth of population and expected increases

raise the question of how increases in infrastructure can be funded when there are clearly backlogs of existing need for infrastructure. Governments will play a role, but increasingly models involving public–private partnerships and user-pays elements will need to be considered.

A study undertaken for Regional Cities Victoria by Essential Economics (2009) demonstrated that significant costs and efficiencies are associated with adding greater population to the outer suburbs of Melbourne. SGS Planning and Economics (2008) estimated the extra costs of congestion and greenhouse gas emissions associated with population growth in Melbourne at $6270 per annum per additional person. The Regional Cities Victoria study estimated the costs of providing critical 'hard infrastructure' in regional cities to support higher populations compared with congestion inefficiencies associated with a similar level of growth in metropolitan Melbourne and found that by 2036:

- the additional cumulative cost of providing critical infrastructure to support a redistribution of approximately 50 000 people from metropolitan Melbourne to the regional cities is estimated to be $1.0 billion (this compares with inefficiency costs of $3.1 billion associated with the same number of people being accommodated in metropolitan Melbourne)
- the additional cumulative cost of redistributing approximately 115 000 people between metropolitan Melbourne and the regional cities is estimated to be $2.1 billion, compared to inefficiency costs of $7.0 billion associated with that population being accommodated in metropolitan Melbourne.

The Regional Cities Victoria report (Essential Economics 2009, p. 83) concluded that a number of net state benefits are associated with the redistribution of population growth from metropolitan Melbourne to the Regional Cities, including the following:

1. efficient use of taxpayer funds associated with the provision of infrastructure and resources to support population growth
2. redistribution of population growth reduces stress on metropolitan Melbourne infrastructure and reduces associated congestion and greenhouse gas emissions costs
3. better economic and social outcomes for regional communities that are likely to be achieved, such as:
   - enhanced investment opportunities for business
   - improved skills base
   - industry diversification

- improved service provision
- enhanced lifestyle
- support for small towns
- improved social outcomes.

The third Intergenerational Report (Treasury 2010) shows that counterbalancing the impacts of ageing of the Australian population will necessitate increases in the three 'Ps' — population, participation and productivity, the last of which is most significant. Achieving increments in productivity is critical to Australia's future. The implications for productivity of diverting a greater proportion of national population growth towards regional centres are unclear. Certainly, the modelling undertaken for Regional Cities Victoria cited above point to a productivity dividend, but this would require more detailed investigation.

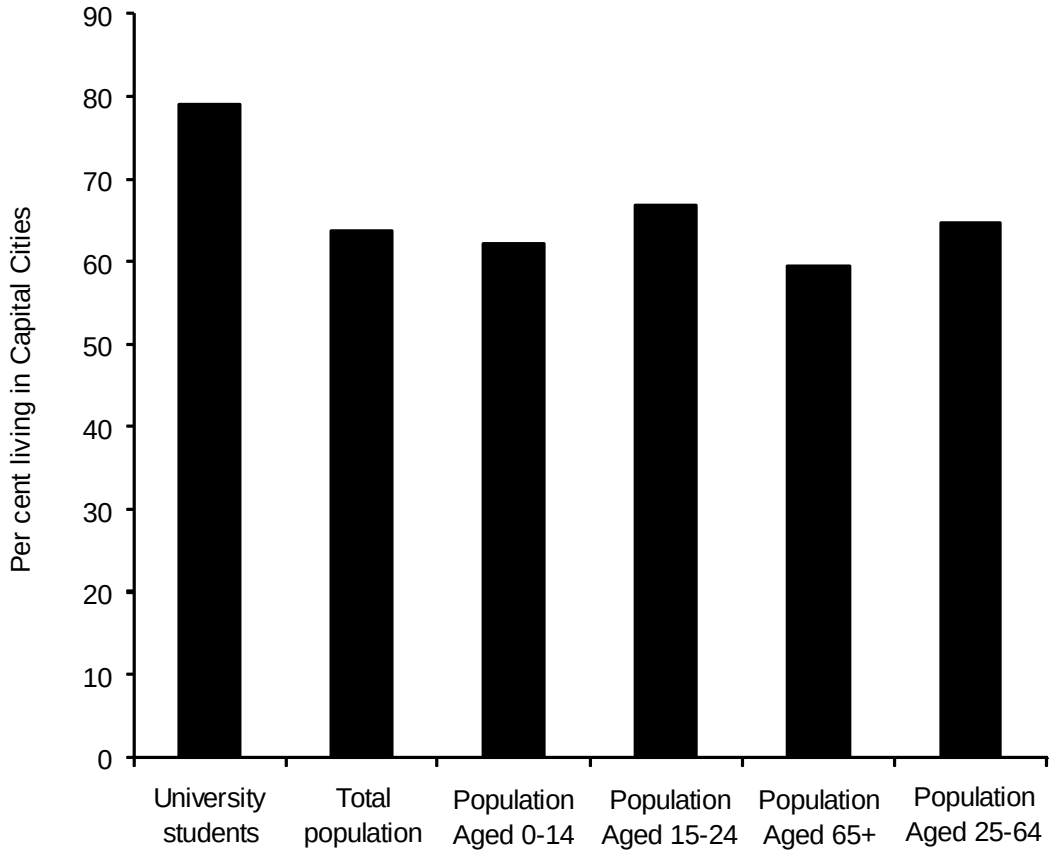
Internal migration

One of the major issues of concern in regional Australia is the large outflow of young adults. Many non-metropolitan young adults move to the capitals to pursue higher education or to seek work, as well as to experience the bright lights of a big city. This raises the question of the extent to which these young Australians would move into capitals if there were more extensive higher education opportunities available locally in non-metropolitan areas. Figure 8.5 shows that university students are more concentrated in capital cities than the total population, and a greater part of the total population in the 15–24 age group. The development of Australia's regional universities has been considerable in the past two decades (figure 8.6 shows the locations and populations of all cities in Australia with significant university campuses). However, the question needs to be asked as to whether there is more scope for the location of university activity in regional centres. All of the great university countries in the world have a mix of high-quality large universities in their gateway cities and regional areas. The concept of the 'university regional city' is an important one in North America and Europe. The outlook for the Australian university sector over the next three decades must be one of growth in order to accommodate:

- the increased numbers of students resulting from the steady growth in numbers of 18–24-year-olds in most projections
- the Australian Government's objective of increasing the proportion of 25–34-year-olds with a university education from 32 to 40 per cent
- the necessity for Australia to produce a new generation of skilled and better trained workers to enhance national productivity and competitiveness.

The extent to which some of the growth in universities can be integrated with and facilitate regional development needs to be considered.

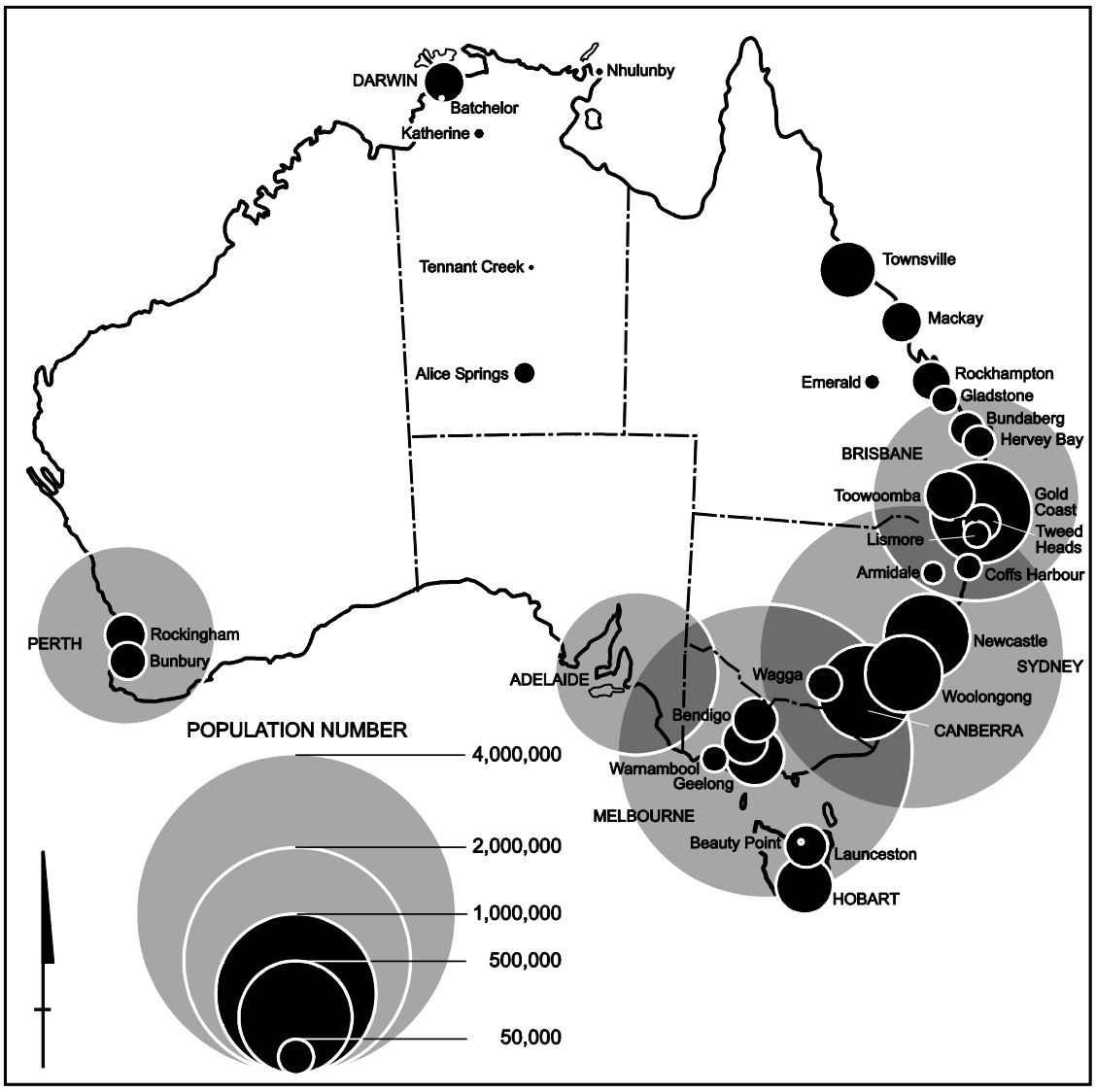
Figure 8.5 **Australia: university students, total population and population by age group, 2006**



Data source: ABS 2006 Census.

Another relevant factor in future internal migration relates to the impending retirement of baby boomers and their intentions about where they will live during their later working and retirement years. There are some indications that there will be a greater tendency for them to move from metropolitan to non-metropolitan locations at this stage of their lives than was the case for earlier cohorts. How can this phenomenon be incorporated into regional development? The potential for this group to create employment multipliers in regional communities has been established (Jackson and Felmington 2002).

Figure 8.6 **Locations and sizes of Australian urban places with university campuses, 2006**



Data source: ABS 2006 Census data

A number of findings about contemporary internal migration in Australia need to be considered in developing regional development policy:

- Some groups in the population are already demonstrating a preference for settling outside large cities by moving out of them. Understanding their motivations is important so that this trend can be enhanced and facilitated as part of a regional development strategy.
- The groups moving out of the capitals in larger numbers than they are moving in are not only those in the pre-retirement and early retirement years, but also

young families, so the potential for them to be active in the regional workforce is considerable.

- Having a satisfying and appropriately remunerated job to go to is of basic importance if Australians are to move to regional communities. However, while it is a necessary condition of internal migration it is often not sufficient. For young families, a crucial consideration is the availability of high-quality education and health services. This is an often overlooked factor in regional development but it is crucial. Governments cannot withdraw or downgrade services in regional areas and expect that people will move to those areas. Lifestyle and environment-related considerations are also important to young family movers, so integrating regional development explicitly with sustainable environment policy is also relevant.
- Contemporary internal migration from capitals to non-metropolitan centres has a strong geographical focus. The movement is *not* to all regional areas. A policy that seeks to distribute growth across the entire non-metropolitan sector will not be effective. There will need to be a focus on regional development in a limited number of communities that have the demonstrated potential for sustainable economic development.
- An important element in contemporary migration from capitals to non-metropolitan areas is the return movement of young families with members who left regional areas as young adults. Facilitating and encouraging that movement should be an important part of any regional development strategy.

International migration

One of the most pervasive trends in global international migration in OECD countries in the postwar era has been the concentration of immigrant settlers in a few gateway cities and their virtual absence in regional areas. However, the past decade has produced a change across Europe, North America and Australia. While large metropolitan centres are still the dominant destinations, there has been an important change: for the first time since World War II, the growth of immigrant populations has been greater outside gateway cities than in them. Table 8.2 shows that this was the case in Australia between the 2001 and 2006 censuses. A number of factors in the increased settlement of immigrants outside large cities involve both the changing dynamics of settlement processes and policy interventions. Among the former are:

- labour shortages in non-metropolitan areas because low fertility and ageing have been exacerbated by youth outmigration, so that more non-metropolitan than

metropolitan local government areas are experiencing more retirements than entries of young people to the labour force

- significant growth in job opportunities in some regional areas due to mining, tourism, retirement migration and increased demand for primary produce, both processed and unprocessed
- increasing awareness among local and regional government authorities and communities and private sector employers of international migrants as a source of workers (this has been evidenced by state, and to a lesser extent local, governments setting up institutional structures to facilitate immigrant recruitment and settlement)
- an increasing network effect once immigrant communities become established in regional areas.

In addition, a number of policy initiatives have encouraged immigrant settlement in non-metropolitan areas:

- The State Specific and Regional Migration (SSRM) scheme was expressly developed in the mid-1990s to attract immigrants to regional areas (communities with fewer than 200 000 people and/or experiencing a population growth of less than half the national average in the last intercensal period). This program has accounted for an increasing share of the immigration program intake over the past decade: 26 per cent of the 2009-10 intake was in the SSRM scheme (see table 8.6). While some of the SSRM migrants have been able to settle in capitals such as Adelaide (Hugo 2008), there has been an increased inflow to regional areas of skilled immigrants taking advantage of the discounts on the points requirement for qualification for settlement.

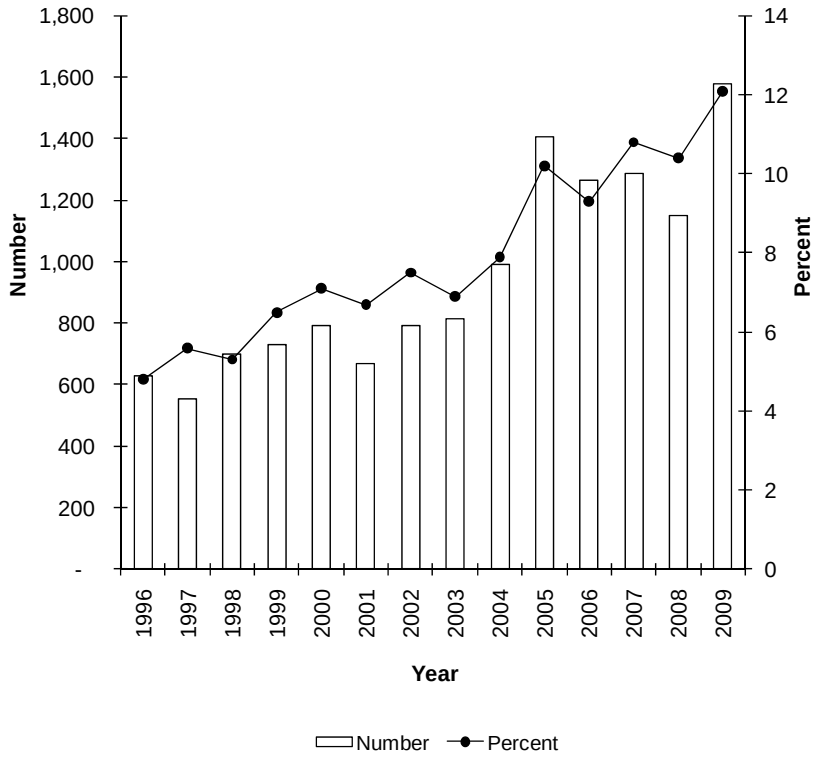
Table 8.6 **Number of immigrants with visas granted under the state regional specific migration mechanisms and their proportion of the total non-humanitarian intake, 1997-98 to 2009-10**

Year	*Number*	*Percentage of total non-humanitarian intake*
1997-1998	1 753	2.3
1998-1999	2 804	3.3
1999-2000	3 309	3.6
2000-2001	3 846	3.6
2001-2002	4 136	4.6
2002-2003	7 941	8.5
2003-2004	12 725	11.4
2004-2005	18 697	15.6
2005-2006	27 488	19.2
2006-2007	25 845	17.4
2007-2008	26 162	17.5
2008-2009	33 474	21.2
2009-2010	36 570	26.0

Sources: DIAC (n.d), DIAC (2010).

- The Department of Immigration and Citizenship established a special program in regional areas to facilitate the settlement of humanitarian settlers in regional areas. Figure 8.7 shows clearly how humanitarian settlers have in recent years shown a greater propensity to settle outside capital cities. This has partly been facilitated by the fact that humanitarian settlers include a greater proportion of settlers who derive from rural community backgrounds than other visa groups. Case studies indicate that, while such settlement has some problems, by and large the experience of refugee settlement in non-metropolitan areas has been positive. While local social capital is to some extent playing the role of ethnic networks and formal immigrant post-arrival services in the capitals, there is a need for relevant specific service provision and the sensitising of mainstream services to the needs of new settlers.
- The development of the skilled temporary (457 visa) migration program has been embraced by many regional employers to fill regional skilled labour shortages. Figure 8.8 shows that while 457 temporary skilled migrants are concentrated in capitals significant numbers have been recruited in regional Australia. A study of 457s by Hugo, Khoo and McDonald (2006) found that a significant proportion of 457s were prepared to go to regional areas provided that the work was appropriate to their skills and remuneration expectations and that there were appropriate housing, education and health services to meet the needs of them and their families.

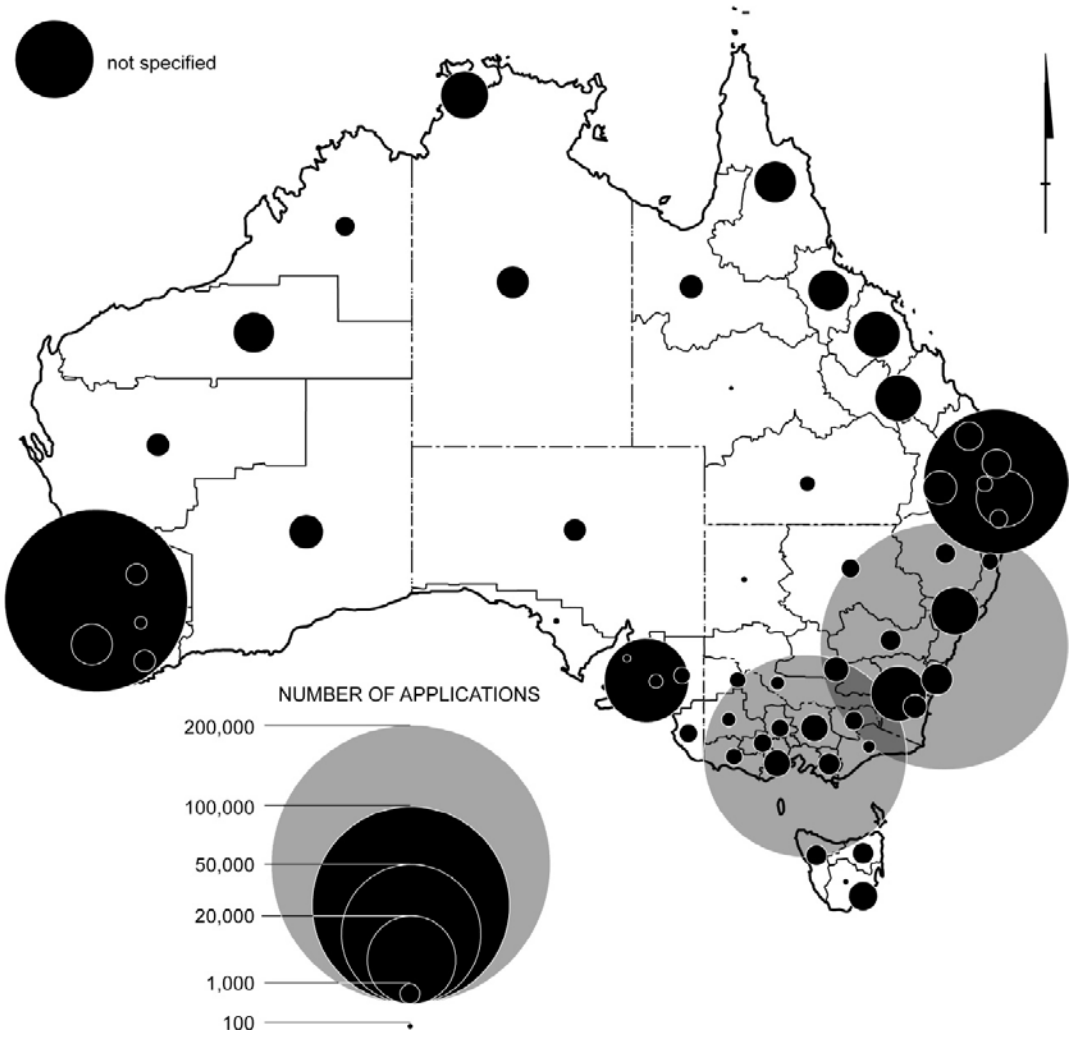
Figure 8.7 **Australia: settlement of refugee-humanitarian settlers outside capital cities, 1996 to 2009**



Data source: Department of Immigration and Citizenship, unpublished data.

- State and local governments have become unprecedentedly active in developing institutions and structures to attract and settle immigrants in their jurisdictions as they and their communities increasingly recognise the difficulties of attracting workers and families from other parts of Australia.
- Research on immigrant settlement in regional areas has drawn attention to the importance of immigrant settlers having access to appropriate services in their early years of settlement. This element is critical to their longer term settlement. A range of policies such as those under the SSRM scheme can ensure that immigrants are directed to initially settle and work in particular areas, but the key issue is what proportion remain in those areas. A recent study by Collins (2009) of immigrants in regional areas found that access to services and amenities was critical to the level of satisfaction of immigrants.

Figure 8.8 **Australia: location of temporary skilled migrants, by statistical division, 2004-05 to 2010-11**



Data source: Department of Immigration and Citizenship, unpublished data.

Despite the lack of empirical information on the settlement of new immigrant groups, a few policy dimensions are clear:

- Regional settlement will involve less clustering of immigrant groups and make the provision of post-arrival services more difficult than it is for immigrants who mainly settle in capital cities. It will be necessary to consider new ways of providing services to accommodate those needs.
- There will be less informal support available from existing ethnic communities, than is often available in large cities.
- There is a need to involve local government heavily in supplying needed post-arrival services.

These developments are not confined to Australia: there is increased settlement of immigrants outside gateway cities in Europe (Fonseca 2008; Halfacree 2008; Kasimis 2008; Moren-Alegret 2008; Rogaly 2008), the United States (Massey 2008), Canada (Asal 2008; Couton and Gaudet 2008) and New Zealand (Spoonley and Bedford, 2008). Policy has an important role in facilitating this process, as has the adaptation of local communities who have not previously experienced the settlement of diverse groups within them.

Housing issues

Having access to affordable, secure, healthy housing is fundamental to the wellbeing of Australians. Housing has significance for wellbeing and liveability beyond its shelter functions. It is clear that the Australian housing market is currently under stress and is a barrier to the wellbeing of a significant number of Australians and this is especially the case in growing regional areas.

Indications of disequilibrium in the Australian housing market include the following:

- The National Housing Supply Council (2010) estimates that there were 178 000 more potential house buyers than available houses, and that this 'housing gap' is widening.
- There is an estimated shortage of almost half a million dwellings that are both affordable and available to people in the bottom 40 per cent of the income distribution.
- The Henry Tax Review found that in mid-2009, 418 000 individuals and families paid more than 30 per cent of their income on housing in mid-2009 (Roux and Stanley 2010).

It is apparent that housing is a major constraint on regional development, and that housing shortages and affordability problems are significant in non-metropolitan as well as metropolitan areas. Demand for housing is closely linked to population growth, but for much of the recent era growth in demand has outpaced population growth. Continued high levels of population growth undoubtedly put pressure on housing markets, inflating prices and influencing housing affordability. Initiatives to accommodate a greater proportion of immigrant intake in regional areas should include consideration of the pressure that this will place on local housing markets. There is general recognition that Australia is experiencing a housing crisis, but this is often seen as being a crisis in Australia's major cities. Strategic initiatives to overcome the crisis must include full consideration of regional areas.

Environmental sustainability

Striving for economic growth and the improved wellbeing of the Australian population need not be, and indeed must not be, at the cost of the environment. Too often in discussions of population, economic growth and environmental sustainability are seen as alternatives, but that need not be the case. The key challenge for Australian governments and the Australian people is to achieve a balance that takes environmental sustainability into account not only in policy and programs but in the behaviour of individuals, families and businesses. This is not an easy process and involves hard decisions not only by governments but by businesses and individual Australians. As the Victorian State of the Environment Report points out, to achieve growth with sustainability:

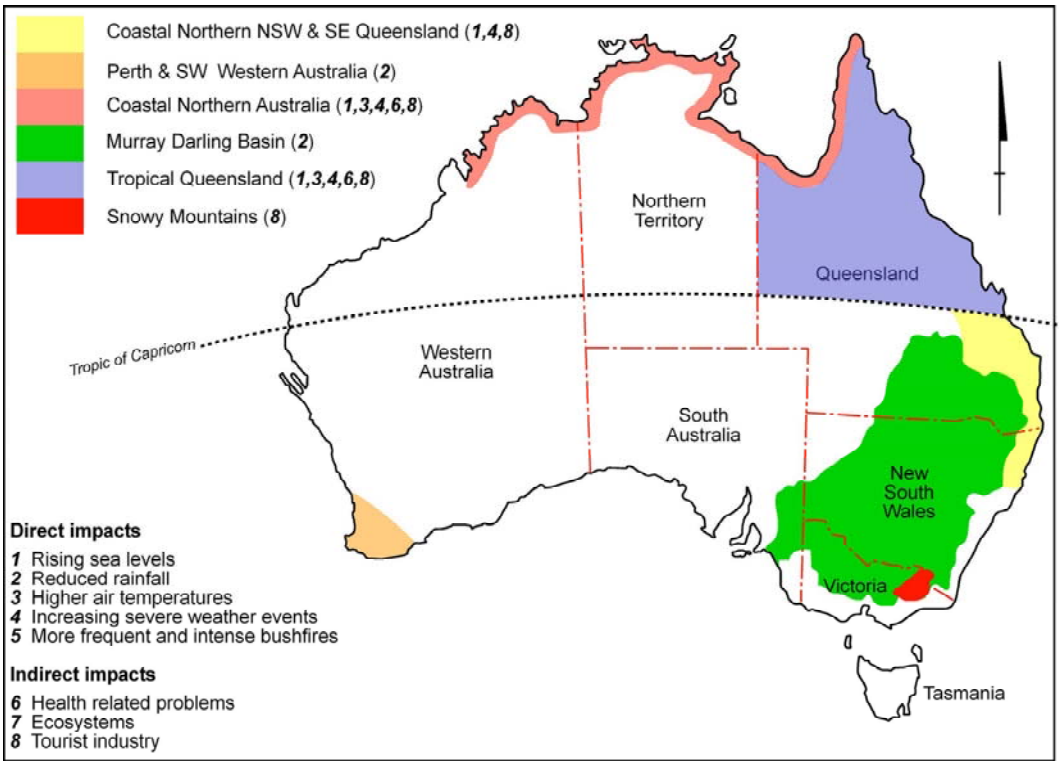
> … the value of environmental services will need to be brought more comprehensively, transparently and explicitly into decision making. This will mean changes, but the sooner we act to improve the health of our environment the less dramatic the changes will need to be. (Commission of Environmental Sustainability Victoria 2010, p. 2)

The implications of regional development for moving towards sustainability are also unclear. Certainly, to the extent that pressures on metropolitan environments are reduced by diverting population growth elsewhere, there are environmental dividends. On the other hand, many regional environments are also fragile and subject to deterioration if population densities increase. Moreover, it is apparent from figure 8.9 that many of the hotspots of future climate change impact in Australia are in regional areas.

One of the elements to consider in the discussion on regional development is the extent to which better *matching* in the distribution of people and the distribution of natural resources will be achieved. Water is a key environmental issue that has an all-important population dimension, and the development of water and population policy needs to be an integrated process. Water must be an important consideration in decision making about the location of future investments and, while the mismatch between water and population in Australia does *not* call for a wholesale redistribution of population, there are a number of important population dimensions as we face a drier future for south-eastern and south-western Australia:

- Agriculture uses 50 per cent of water in Australia (ABS 2010b).
- The implications for agriculture need to be fully worked through. Do we need to consider some intensive agriculture being phased out in south-eastern Australia and developed in northern Australia and Tasmania, where there are assured sustainable water supplies? If the science means such a redistribution is necessary, a number of population elements need to be considered:

Figure 8.9 **Climate change impact hotspots**



Data source: Climate Action Network (http://cana.net.au/).

– The agricultural workforce in Australia is the oldest of any sector. To what extent can intensive agriculturalists be bought out so they can retire into local communities and hence maintain local economies where they have established social networks?

– To what extent can the skills built up in irrigated agriculture in areas such as the Murray–Darling Basin be utilised to develop new specialised agriculture elsewhere? That was how the agricultural frontier progressed in Australia in the 19th and 20th centuries. How can that process be carried out in the 21st century to fully compensate those displaced, facilitate their migration and settlement elsewhere, and encourage the growth of new agricultural industries in new parts of Australia?

These processes will not be easy. They need to be given time, they must be based on not only the best physical science but the best social science, and the rights and welfare of the Australians involved must be protected.

- Changing Australians' behaviour in the use of water, especially in cities, is clearly an area of enormous possibility. The response to recent water shortages in Australian cities has demonstrated conclusively that, given appropriate information, Australians can and will considerably modify their water consumption. Building on this experience to make better and less use of water is

crucial. Indeed, that experience can be built upon to change other environmentally relevant behaviours. Again, a combination of the best physical and social science, together with the full engagement of the community, will be necessary in this area.

- An additional part of the national strategy will also involve the traditional Australian response to expanding populations — seeking other water sources (Troy 2008). However, while in the past this has involved building new resources and pipelines, there is a great deal of scope to develop new technologies for water storage (especially in aquifers), capturing run-off and water reuse.

More than two decades ago, Nix (1988, p. 72) pointed to the mismatch in Australia between the distribution of water and that of population. Table 8.7, extracted from his work, demonstrates that southern Australia had 82 per cent of the population but only 27 per cent of the annual mean surface run-off. Of course, water is only one of the elements required for human settlement, and the table shows that there was a better matching of the distribution of arable land and population.

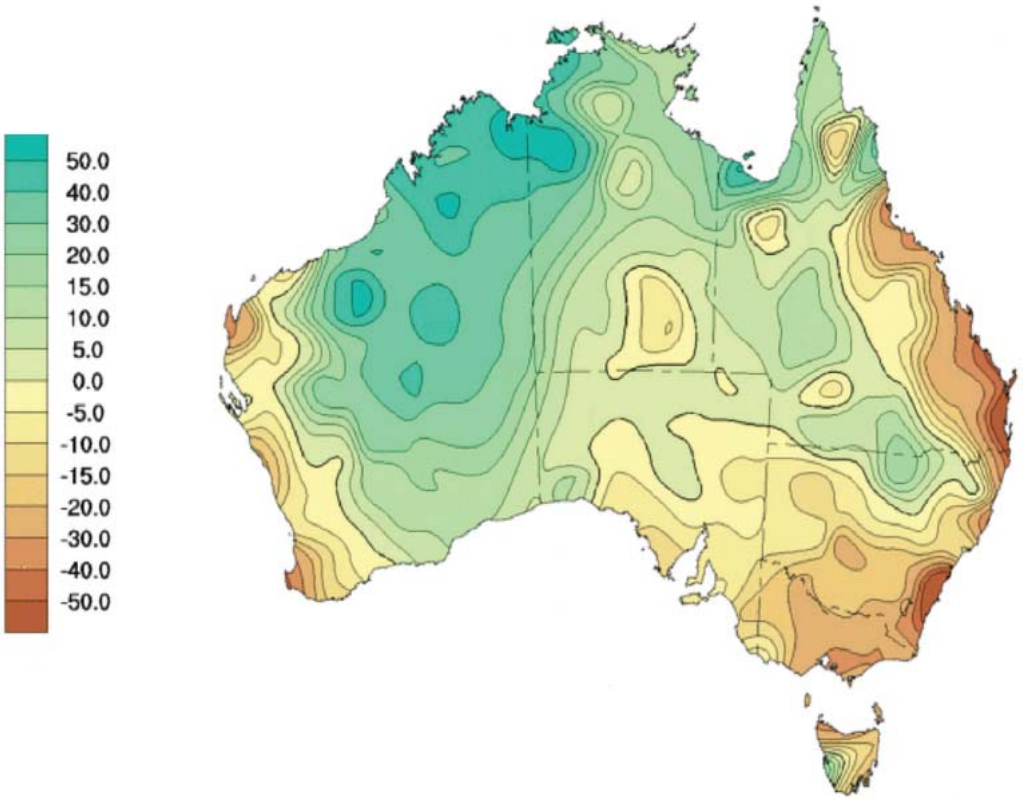
Nevertheless, water must be an important consideration in assessing where future population growth should be located, and the potential effects of climate change must be factored into those considerations. Figure 8.10 is a map of Australia produced by the CSIRO and the Bureau of Meteorology showing trends in annual total rainfall between 1960 and 2009. It shows a clear pattern of sustained rainfall decline in the south-east of the country and of increase in the north-west. Table 8.8 indicates that almost 90 per cent of Australia's population lives in the areas where climate change models suggest that rainfall and run-off are experiencing a long-term decline. Such a pattern does *not* call for a wholesale redistribution of population. However, it must be an influence on where future investment and growth is located. It is noticeable that only Darwin is outside the rainfall decline zone among capital cities. There is much that can be done in the capital cities to become more efficient in our use of water, but water will become an even more influential location factor in human settlement in Australia than it was in the past and it is one of the elements to consider in regional development strategies.

Table 8.7 **The mismatch between water and population**

	Far north Australia (%)	*Southern Australia (%)*
Population	2	82
Potentially arable land	4	65
Annual mean surface run-off	52	27

Source: Nix (1988, p. 72).

Figure 8.10 **Trends in annual total rainfall, 1960 to 2009 (mm/10 years)**



Data source: CSIRO and Bureau of Meteorology (2010).

Table 8.8 **Australia: rainfall trends and population in 2006**

Rainfall trend 1996-2009	*% of population 2006*	*2006 population*	*Growth rate*	*% of land area*
Declining	89.6	17 749 462	0.98	38
Stable	7.23	1 432 090	0.70	18
Increasing	3.17	628 865	-1.57	44

One issue that needs to be considered in the regional development discussion is the extent to which growth in regional areas can be more environmentally friendly than growth in large capital cities. Can the concept of 'green cities' be more effectively initiated in greenfield regional locations than it can in adding extra growth to capital cities and retrofitting them?

8.6 Conclusion

The argument presented here is *not* that Australia should immediately adopt a major strategy for realigning the national settlement system. It does, however, suggest that

there needs to be a careful investigation that brings together the best multidisciplinary knowledge to answer the following questions:

- To what extent do the new economic and environmental realities of the 21st century render the settlement system that we have inherited from previous generations less than optimal for achieving economic, social and environmental sustainability?
- To what extent can goals of greater environmental sustainability, enhanced economic productivity, greater liveability and social inclusion be enhanced by regional development?
- What are the best strategies to facilitate development outside the capital cities?

This paper is not a plea for decentralisation. Its chief argument is that there needs to be a new consideration of our settlement system in a context in which population is likely to continue growing. Much of the growth will be in the capital cities, but can a significant amount be directed to regional areas? Perhaps decentralisation policies in the past have largely failed because they flew in the face of market forces. Any future regional development policy must not repeat that mistake. If research indicates that there would be gains from decentralisation, we need to identify the elements in the Australian economy and society that are currently encouraging movement into regional areas and develop policies and programs to facilitate and encourage those tendencies.

Any regional development policy would be likely to be concentrated on a few localities with good potential for substantial, environmentally sustainable, job creation. Decentralisation will be largely through urban development, although perhaps there are more opportunities for developing environmentally sustainable 'green cities' in regional areas than in the large capital cities.

Is decentralisation the answer? The answer is that we don't know. However, a policy of regional development based on a sound understanding of the economic and environmental potential of regional areas may be one of the ways Australia can move towards a more sustainable future.

Table 8.9 Appendix: Australian statistical divisions: intrastate and interstate internal migration, 2001 to 2006

Statistical Division	*Total Departures (outs)*	*Total Arrivals (ins)*	*Net migration*	*Intrastate Departures (outs)*	*Intrastate Arrivals (ins)*	*Net Intrastate migration*	*Interstate Departures (outs)*	*Interstate Arrivals (ins)*	*Net Interstate migration*
	Total population 2001-2006								
Sydney	243191	122179	-121012	112912	58408	-54504	130279	63771	-66508
Melbourne	159353	140644	-18709	70755	54759	-15996	88598	85885	-2713
Brisbane	134353	177103	42750	83048	81415	-1633	51305	95688	44383
Adelaide	71197	61586	-9611	30626	27267	-3359	40571	34319	-6252
Perth	86423	89685	3262	45753	47446	1693	40670	42239	1569
Greater Hobart	17033	19398	2365	5375	7902	2527	11658	11496	-162
Canberra	42227	41766	-461	34	48	14	42193	41718	-475
Darwin	23067	21068	-1999	1714	3216	1502	21353	17852	-3501
Gold Coast	51613	80925	29312	30534	29866	-668	21079	51059	29980
Sunshine Coast	33488	54049	20561	24634	29563	4929	8854	24486	15632
Wide Bay-Burnett	33937	49735	15798	26568	32207	5639	7369	17528	10159
South West – WA	23430	34235	10805	18805	28741	9936	4625	5494	869
Mid-North Coast	34402	44656	10254	19274	34868	15594	15128	9788	-5340
Hunter	46571	56227	9656	28266	43422	15156	18305	12805	-5500
Outer Adelaide	17109	24584	7475	13050	19989	6939	4059	4595	536
South Eastern – NSW	27637	34138	6501	12469	17825	5356	15168	16313	1145
Richmond-Tweed	27320	33463	6143	8593	17984	9391	18727	15479	-3248
Mackay	20638	25784	5146	15908	16443	535	4730	9341	4611
Northern - Qld	27372	32276	4904	17565	19477	1912	9807	12799	2992
Barwon	20929	25594	4665	14348	19769	5421	6581	5825	-756
Loddon	19457	23066	3609	14277	18416	4139	5180	4650	-530
Darling Downs	29960	33136	3176	23098	23056	-42	6862	10080	3218

(Continued next page)

Table 8.9 (Continued)

Statistical Division	Total Departures (outs)	Total Arrivals (ins)	Net migration	Intrastate Departures (outs)	Intrastate Arrivals (ins)	Net Intrastate migration	Interstate Departures (outs)	Interstate Arrivals (ins)	Net Interstate migration
	Total population 2001-2006								
Far North	26932	29403	2471	18048	14548	-3500	8884	14855	5971
Central Highlands	16384	18792	2408	12236	15511	3275	4148	3281	-867
West Moreton	13811	15916	2105	11863	12882	1019	1948	3034	1086
Fitzroy	26347	28229	1882	21079	19928	-1151	5268	8301	3033
Gippsland	16992	18564	1572	12462	15165	2703	4530	3399	-1131
Northern – Tas	11789	13325	1536	4160	4095	-65	7629	9230	1601
Goulburn	25207	26683	1476	16591	19276	2685	8616	7407	-1209
Illawarra	38018	38907	889	24127	32156	8029	13891	6751	-7140
East Gippsland	9923	10724	801	6785	7590	805	3138	3134	-4
Yorke and Lower North	6858	7435	577	5593	6233	640	1265	1202	-63
Southern	6290	6821	531	4762	3517	-1245	1528	3304	1776
Ovens-Murray	12913	13378	465	5910	6169	259	7003	7209	206
Mersey-Lyell	10026	10267	241	4041	2824	-1217	5985	7443	1458
Murray	17211	17419	208	4515	5574	1059	12696	11845	-851
Australian Capital Territory – Bal	135	70	-65	48	34	-14	87	36	-51
Western District	10263	9739	-524	6977	6659	-318	3286	3080	-206
Eyre	4490	3842	-648	3364	2803	-561	1126	1039	-87
Lower Great Southern	8624	7888	-736	7543	6800	-743	1081	1088	7
Upper Great Southern	4151	3110	-1041	3918	2894	-1024	233	216	-17
Far West	3401	2314	-1087	1149	1019	-130	2252	1295	-957
Murray Lands	9243	8136	-1107	6704	6112	-592	2539	2024	-515
South East	7579	6253	-1326	4135	3362	-773	3444	2891	-553
Central West - Qld	3547	2153	-1394	3081	1754	-1327	466	399	-67

(Continued next page)

Table 8.9 (Continued)

Statistical Division	Total Departures (outs)	Total Arrivals (ins)	Net migration	Intrastate Departures (outs)	Intrastate Arrivals (ins)	Net Intrastate migration	Interstate Departures (outs)	Interstate Arrivals (ins)	Net Interstate migration
	Total population 2001-2006								
Wimmera	6848	5257	-1591	4927	3630	-1297	1921	1627	-294
Kimberley	7305	5495	-1810	4368	3369	-999	2937	2126	-811
Mallee	12076	10186	-1890	6695	5019	-1676	5381	5167	-214
Central	11160	9139	-2021	9296	7485	-1811	1864	1654	-210
Pilbara	13524	11499	-2025	9985	8412	-1573	3539	3087	-452
South West – Qld	6524	4210	-2314	5605	3373	-2232	919	837	-82
Midlands	12727	10388	-2339	11678	9486	-2192	1049	902	-147
Central West - NSW	23574	20824	-2750	16441	17524	1083	7133	3300	-3833
Murrumbidgee	19651	16802	-2849	10401	11190	789	9250	5612	-3638
Northern - NSW	24341	21308	-3033	13796	15540	1744	10545	5768	-4777
Northern – SA	12003	8914	-3089	8276	5982	-2294	3727	2932	-795
North West	9669	6230	-3439	8057	4576	-3481	1612	1654	42
South Eastern - WA	13253	9528	-3725	9772	6485	-3287	3481	2043	-438
Northern Territory - Bal	15658	11215	-4443	3216	1714	-1502	12442	9501	-2941
Northern Western	19405	12899	-6506	13941	10374	-3567	5464	2525	-2939
Total	**1688559**	**1688559**			**943151**		**745408**	**745408**	

Sources: ABS 2006 Census, unpublished data.

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