Final Report

Medium and long-term projections of housing needs in Australia: final narrative report

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1 INTRODUCTION

1.1 Introduction

This paper reports research by the Australian National University on behalf of the Australian Housing and Urban Research Institute. The research examines the future demand for housing in Australia through the development and application of new methods of projection of households and dwellings. In the past, projections of future housing needs were provided by the Indicative Planning Council for the Housing Industry (IPC). The methodology used by the IPC was called into question in the early-1990s primarily because:

- the simple 'headship' method used by the IPC had become difficult to apply because of changes in census definitions. Specifically, the category, head of household, upon which the method depended, was abandoned by the Australian Bureau of Statistics;
- the approach used did not take into account the effect of economic variables on the establishment of new households. For example, rates of marriage, birth or children leaving home may be affected by prevailing economic circumstances or by longer-term economic trends such as trends in the affordability of housing, unemployment or wage rates: and
- users were interested in more detailed outputs than had been provided by the Council (King 2000).

Papers were commissioned to examine possible alternative methodologies (Bell, Cooper and Les 1995); however, no action was taken to produce new projections of housing needs. At this time, no organisation has responsibility for the important task of producing forecasts of underlying housing requirements in Australia.

1.2 Brief Methodological Description

In the late 1990s, Peter McDonald and Rebecca Kippen (1998), both involved with this project, were commissioned by the Victorian Department of Infrastructure to provide household projections by household type for the State of Victoria. The basic method developed by McDonald and Kippen for the Victorian projections was subsequently adopted by the Australian Bureau of Statistics to produce a new series of household projections for Australia by States and Territories. These projections were published for the first time in 1999 (ABS 1999).

The innovation made by McDonald and Kippen (1998) was to project all individuals (not just household heads) according to their household classification type (HCT). Household projections by type were then obtained by collapsing individuals into households using a simple technique. The same individual approach has been used here. The HCT categories used in this study are as follows:

- 1. Parent in a couple family with coresident children.
- 2. Parent in a one-parent family.
- 3. Child in a couple family with children.
- 4. Child in a one-parent family.
- 5. Partner in a couple family without children.
- 6. Not partnered and no coresident children, living alone.
- 7. Not partnered and no coresident children, living with a couple family or a oneparent family, not including children in HCT3 and HCT4
- 8. Not partnered and no coresident children, living with others
- 9. Usual residence is a non-private dwelling

To further simplify the collapsing of individuals into households, this classification is slightly different to that used by McDonald and Kippen (1998) and by ABS (1999)¹. Note that there is no age limitation on the status of being a 'child'. A child may be a 50 year old living with a 75 year old parent.

These individual classifications collapse easily into the following household types:

- 1. Couples with coresident children (number defined by HCT1 for females and subsuming HCT3 and part of HCT7)
- 2. One-parent families (number defined by HCT2 for both sexes and subsuming HCT4 and part of HCT7)
- 3. Couples with no coresident children (number defined by HCT5 for females and subsuming the remainder of HCT7)
- 4. Lone persons (number defined by HCT6 for both sexes)
- 5. Group households, including households consisting of related individuals so long as the relationship is not a parent–child or a partner relationship (obtained by applying a factor of average size of group households to the numbers of both sexes in category, HCT8).

A further correction for the incidence of multiple family households yields an estimate of the projected demand for dwellings in a particular region. A very detailed table indicating the propensity of particular household types (by age and sex of a reference person) to live in particular types of dwellings (structure and tenure) in each region was obtained from the 1996 Census. These propensities were then applied to the household projections for each year to obtain projections, within household types, of the demand for dwellings by structure and tenure.

The main innovation in the present projection is the use of 'transition probabilities' to estimate changes in HCT categories as people age. McDonald and Kippen (1998) and ABS (1999) based their projections on projections of age-specific propensities to be in a particular HCT category². In this work, for selected changes of HCT category, age and sex specific probabilities of change have been used. For example, use is made of measures such as the probability that a male age 20 living at home with parents will not be living at home at the age of 21. A detailed description of the methodology used in the projections is provided in the associated project paper: Methods for projecting the populations of household-classification-type (HCT) categories by Rebecca Kippen and Peter McDonald. The particular advantage of the transition probability approach compared to the propensity approach is that changes that have already occurred to a particular age cohort are taken into account when transition probabilities are used whereas this is more haphazard when the propensity approach is used. For example, a propensity table on living at home with parents might show that 80 per cent of 20-24 year old men and 40 per cent of 25-29 year old men were living with their parents in 1996. However, we may also know that, in 1991, when the 25-29 year olds of 1996 were aged 20-24, only 60 per cent were living with their parents. The transitional probability approach would make use of the cohort change between 1991 and 1996. That is, between age group 20-24 (in 1991) and age group 25-29 (in 1996), the proportion of men at home changes from 60 per cent to 40 per cent (one third leave home). The propensity table approach would simply apply the 1996 cross-sectional data on the percentages of men at different ages who

¹ In the earlier work, related individuals (those not in a partner relationship or a parent-child relationship, for example, two sisters living together) who were not living in a family household were combined with category 7 while here they are included in category 8 (group household members).

² Differences between the propensity approach and the transitional probability approach are discussed in McDonald (2001).

were living at home implying that, between the ages of 20-24 and 25-29, the proportion at home changes from 80 per cent to 40 per cent (half leave home).

1.3 Geographic Classification

Projections are made for 71 regions of Australia. Summary tables shown later in the report provide results for each region. All regions consist of accumulations of ABS Statistical Local Areas (SLA). In the main, outside of the major cities, the regions are equivalent to ABS Statistical Divisions (1996 boundaries). Cities are divided into zones of inner, middle and outer, with the Sydney and Melbourne outer areas being further divided into two parts. The SLAs constituting each region are listed in the Appendix.

The tables shown later in the report indicate that the population size of some of the 71 regions is relatively small. This means that estimates of the input parameters to the projections can be unstable (subject to random fluctuation due to small numbers). The following regions had populations under 50,000 in 1996: Far West (NSW), South West (Qld), Central West (Qld), North West (Qld), Eyre (SA), York and Lower North (SA), Upper Great Southern (WA), Pilbara (WA) and Southern (Tas). Results for these regions should be treated with particular caution.

Additional projections are made at the State and Territory level that are consistent with the regional projections. However, while the regional projections are made only to the year, 2011, the State and Territory projections are extended out to 2031.

1.4 Regional Projection Assumptions

Fertility and mortality rates have been projected to 2011 at a regional level using data on trends up to 1999. Projected net migration by age and sex for each region has been obtained using the assumption that regional net migration rates (international and internal combined) by age and sex remain the same across the period 1996-2001 as they were in the years, 1996-99. This latter assumption could now be improved through use of the estimated resident populations for 2001 that take the results of the 2001 Census into account. When net migration levels projected for each age and sex group for each of the 71 regions are totaled, the result is the implied net migration level for Australia as a whole. The results thus obtained show annual net migration for Australia increasing gradually from a level of 90,000 in 1996 to 113,000 in 2011. This seems to be a quite reasonable scenario given that the Federal Government in 2002 announced a four-year target of between 100,000 and 110,000 new settlers and estimated that this would convert to an annual net migration for Australia around 100,000.

When the projections were produced, estimates of the required transition probabilities could only be obtained for the 1991-1996 intercensal period. This means that there were no data available on trends in these transitional probabilities. Accordingly, the projections assume that transition probabilities in the period 1996-2011 remain the same as they were in the 1991-1996 period. This is a limitation of the work. It is now possible to use two-point trend data employing both the 1991-96 and the 1996-2001 intercensal periods. The projections reported here could be improved through the use of this more recent data. Where propensities have been used, these are assumed to be constant at 1996 levels. Again, it is now possible to use 2001 census propensities.

Overall, the projections are based largely on assumptions that input parameters for the period 1996-2011 remain the same as they were in the 1990s. Except for fertility and mortality, no assumptions are made about changes in future levels of inputs to the projections. Of course, the changing age composition of the population is factored into the projections through the use of a cohort-component methodology (Hinde 1998, Chapter17).

Beyond the fact that some input parameters are assumed to be unchanged during the projection period, discrepancies with reality can occur because the projected outcomes are not feasible or are very unlikely to occur. For example, in Inner Sydney, when constant propensities of dwelling structure from 1996 are applied to 2011 projected households, the projection yields a demand for 22 per cent more separate houses than existed in 1996. This outcome is extremely unlikely to be realised and so, necessarily, there would be adjustment. The adjustment in this case could take the form of particular household types changing the type of dwelling structure in which they live, increased migration out of Inner Sydney to places where the particular dwelling type is available or, even, changes in behaviour such that the particular household type is not formed in the first place (feedback from dwelling availability to behaviour). None of these adjustments have been considered in the projections. They are left to the ingenuity (and local knowledge) of the user. Our approach is to project housing demand on the basis of current and recent trends so as to highlight areas where these projections would lead to problems in relation to dwelling supply.

An AHURI project, 'Evaluation of medium term projections of housing demand in Australia, will be undertaken in the near future to assess the accuracy of the projections, both inputs and outputs, based on the 2001 Census results. A cursory examination of the projected number of dwellings in 2001 against the 2001 Census, adjusted number of dwellings by region suggests a high degree of accuracy at this gross level at least over a five-year period. This good result may be partly due to the fact that we have used recorded fertility and mortality rates and estimated rather than projected migration rates for the period 1996-99. This means that, in effect, our population base is not 1996 but the estimated resident populations for 1999.

2 DESCRIPTION OF SUMMARY RESULTS

The main product of this project is not the narrative reports but the projected numbers themselves. These are available through AHURI Ltd. Users can obtain the following detail:

- 1. Projected population by single years of age by sex by household classification type (HCT) by region for each of the years, 1996-2011. A graphical representation of these results is provided in the form of a dynamic age pyramid for each region.
- 2. Projected demand for dwellings by age and sex of a household reference person by household type by dwelling structure by tenure type by region for each of the years, 1996-2011. A graphic of the change in demand for each dwelling type in each region is provided.
- 3. In total, this represents a vast array of numbers. The purpose of this report is to provide a narrative description of the main results of the projected demand for housing at a regional level in Australia by 2011.

The results are described initially by State and Territory. This is followed by general findings for Australia as a whole.

The results for each State and Territory are shown in four summary tables³ in chapters three to nine. Table 1 shows:

- population-related results including the projected fertility rate in 2011
- three indicators of age structure in 2011
- annual net migration in 2011
- the total 1996 population size to provide a measure of the size of a region
- the ratio of the projected 2011 population to the 1996 population, and
- the increment to population size from 2002 to 2011.

Table 2 shows the percentage distribution of household types at the time of the 1996 Census by region. This is provided as background to indicate the 'household character' of each region at the beginning of the projection period.

Table 3 shows the ratio of projected household types in 2011 compared to 1996. This shows the growth (or decline) of particular household types. The table also shows the ratio of persons in non-private dwellings in 2011 compared to 1996. This largely reflects the projected numbers living in aged care facilities.

Finally, Table 4 shows the projected ratio of dwellings by type in 2001 compared to 1996 as well as the projected increment in the number of dwellings from 2002 to 2011.

The report also describes projected changes in the demand for public housing that would result from the demographic changes assumed in the projections. However, future public housing provision will be more substantially influenced by policy as distinct from demographic changes. Thus, the projected demand for public housing is indicative only of what would be expected if current levels of provision remained the same for each demographic category, an unlikely scenario.

³ This outline provides a generic description of the summary tables that are contained in each section of the report. For example, Table 1 for NSW/ACT is on page 7 and Table 1 for Victoria is on page 12.

3 SUMMARY RESULTS FOR NEW SOUTH WALES AND ACT

3.1 Population and demographic trends (Table 3.1)

New South Wales is divided into 15 regions, four of which are in Sydney. Total fertility rates (TFR) in 2011 are projected to range from 1.13 children per woman in Inner Sydney to 2.13 in the North Western region.

The total annual net migration to New South Wales and ACT in 2011 is projected to be 23,000 of which 22,000 represents an increment to Sydney's population. The near-to-zero net migration for the rest of the state and ACT results from a balance between positive migration for the coastal regions and negative migration for all regions west of the divide. In Sydney, in numerical terms, net migration is focused on the two outer areas, particularly the outer north. In turn, positive migration for the outer north of Sydney is related to strong movement into the area of those in the 30-49 year-old age group. Inner Sydney experiences heavy in-migration of 20-24 year olds but net out migration at ages beyond 30 years. Nevertheless, housing futures in Inner Sydney are influenced by the ageing in place of young people who have moved to Inner Sydney in earlier periods. Coastal regions outside Sydney tend to experience high out-migration rates for 20-24 year olds but high in-migration rates above age 30 and particularly at ages 50 and over. West of the divide, there are high rates of out migration at ages 20-24 and some out migration at older ages as well. Relatively high rates of out migration at all ages are evident for ACT. In this regard. the years, 1996-99, upon which the estimates of out migration are based were years in which employment cutbacks were made in the public sector in Canberra. As these cut-backs were largely a one-off phenomenon, projection of these trends into the future is a doubtful approach. In addition, Canberra's future population scenario will depend vitally on the residential decisions of the very large baby-boom cohort in the city as it moves towards retirement over the coming decade.

The population of New South Wales and ACT as a whole is projected to grow between 2001 and 2011 by 529,000 of whom 441,000 (83%) would be in Sydney. Both the Outer North and the Outer South of Sydney would grow in population by around 23%. Population growth is evident for all four regions of Sydney and all five coastal regions outside Sydney (Hunter, Illawarra, Richmond-Tweed, Mid North Coast and South Eastern) while population decline is evident for all seven inland regions. A population decline of 22% is projected for the Far West between 1996 and 2011.

			2011				Ratio of 2011	<u> </u>
		Stdised	annual net migr	Annual	T . 1 / 000	population to		
Region	TFR	(po 20-24 years	30-49 years	on) 50+ years	net migration	l otal 1996 population	1996 population	population 2002-2011
1010 Inner Sydney	1.13	80.3	-10.4	-7.9	3,980	700,737	1.168	68,286
1020 Middle Sydney	1.69	14.6	3.6	-5.9	3,524	1,096,791	1.131	84,330
1031 Outer Sydney North	1.73	-3.9	15.0	6.2	9,117	784,327	1.236	111,666
1032 Outer Sydney South	1.91	12.7	4.6	-2.7	5,425	1,299,284	1.229	176,241
1040 Hunter	1.76	-3.6	4.8	5.9	2,980	555,153	1.140	45,158
1050 Illawarra	1.83	-6.6	3.4	7.3	2,041	372,862	1.147	31,732
1060 Richmond-Tweed	1.87	-17.6	16.5	11.8	2,147	200,542	1.193	22,697
1070 Mid-North Coast	1.98	-16.3	12.6	15.7	2,291	262,443	1.139	20,804
1080 Northern	1.99	-37.8	-10.5	-5.3	-1,953	178,579	0.877	-13,688
1090 North Western	2.13	6.7	-4.9	-3.1	-922	117,264	0.967	-3,292
1100 Central West	1.99	-21.0	-3.2	-0.2	-770	172,439	0.997	-1,057
1110 South Eastern	2.00	-23.9	4.3	7.0	-47	178,940	1.030	1,495
1120 Murrumbidgee	2.04	-23.5	-4.9	-2.3	-1,201	149,150	0.962	-4,162
1130 Murray	1.92	-20.8	-4.5	-1.3	-664	110,883	0.959	-3,459
1140 Far West	1.76	-18.1	-15.8	-7.9	-315	25,344	0.783	-3,213
8010 ACT	1.58	-19.8	-11.9	-4.2	-2,507	308,251	0.990	-4,347

Table 3.1. New South Wales and the Australian Capital Territory

TFR = Total fertility rate, the average number of children that would be born to a woman during her lifetime if she experienced the age specific fertility rates applying in the given year.

3.2 Regional variations in household type in 1996 (Table 3.2)

With the exception of Inner Sydney and Outer Sydney South, the distribution of households in 1996 across the five standard types was similar in all regions of NSW and ACT. As is observed later in the report, this similarity of household composition extends right across Australia in 1996 with the exception of the inner and outer regions of the big cities. Compared to most regions in the state, Inner Sydney, as expected, had a low concentration of two parent family households and high concentrations of lone person households and group households. In contrast, Outer Sydney North had a high concentration of two parent and one parent family households and low concentrations of group households and lone person households.

			Percentage distributi	on of households in	1996	
Region	2-parent families	1-parent families	Couples without children	Lone person households	Group households	Total
1010 Inner Sydney	22.2	9.0	22.5	34.8	11.5	100.0
1020 Middle Sydney	38.4	10.7	23.9	23.0	4.1	100.0
1031 Outer Sydney North	39.7	10.2	26.1	20.7	3.3	100.0
1032 Outer Sydney South	45.6	13.6	21.7	16.3	2.9	100.0
1040 Hunter	34.3	11.3	26.6	23.9	3.8	100.0
1050 Illawarra	35.6	11.2	27.3	22.5	3.5	100.0
1060 Richmond-Tweed	30.3	12.4	28.0	24.4	4.8	100.0
1070 Mid-North Coast	30.8	11.3	30.5	24.4	3.0	100.0
1080 Northern	35.0	11.1	26.0	24.5	3.5	100.0
1090 North Western	35.0	12.0	25.3	24.5	3.2	100.0
1100 Central West	35.5	10.7	25.6	24.7	3.5	100.0
1110 South Eastern	32.9	9.7	28.5	26.1	2.8	100.0
1120 Murrumbidgee	36.7	10.5	25.0	24.0	3.8	100.0
1130 Murray	33.5	8.1	27.1	26.5	4.8	100.0
1140 Far West	31.1	11.2	26.5	29.0	2.1	100.0
8010 ACT	37.5	11.2	22.5	22.4	6.4	100.0

Table 3.2. New South Wales and the Australian Capital Territory

3.3 Growth of households by type (Table 3.3)

Between 1996 and 2011, two parent families are projected to grow between 11% and 18% in the four regions of Sydney but to fall in number in every region outside of Sydney. Some of these falls are quite significant (34% in Far West, 29% in Murray and Northern). One-parent family numbers also rise significantly in all four areas of Sydney and also in Hunter, Illawarra and Richmond-Tweed. In most other regions, there are relatively small changes in the number of one-parent families. The number of couple families without children is projected to grow very substantially (35-39%) in the two outer regions of Sydney, while strong growth is also evident for this family type in all the coastal regions. The growth in the outer regions of Sydney is largely due to children leaving the parental home as their parents age in place while inmigration explains the coastal growth.

All regions in NSW and ACT experience substantial growth in the number of lone person households. In the outer areas of Sydney and the coastal regions, this growth ranges from 67% to 86% (a near doubling in just 15 years). Again, ageing in place is the principal driving force for this trend. It is very important for policy makers to realize that most dwellings in the outer regions of Sydney will continue to be occupied by the same people at least to 2011, but the composition of the households will change. This means that the number of dwellings being freed up for occupation by younger families will be relatively limited. In other words, there will continue to be strong demand for new housing for young families in the outer regions of Sydney

		Ratio of households in 2011 to households in 1996									
Region	2-parent families	1-parent Co families	uples without children	Lone person households	Group households	Total households	NPDs in 2011 to persons in NPDs in 1996				
1010 Inner Sydney	1.18	1.17	1.09	1.34	1.18	1.21	1.12				
1020 Middle Sydney	1.11	1.23	1.11	1.30	1.25	1.17	1.32				
1031 Outer Sydney North	1.12	1.28	1.35	1.67	1.49	1.33	1.22				
1032 Outer Sydney South	1.13	1.29	1.39	1.86	1.61	1.34	1.64				
1040 Hunter	0.94	1.21	1.22	1.69	1.51	1.24	1.40				
1050 Illawarra	0.95	1.19	1.23	1.73	1.52	1.25	1.55				
1060 Richmond-Tweed	0.93	1.24	1.26	1.86	1.62	1.32	1.28				
1070 Mid-North Coast	0.86	1.08	1.29	1.83	1.69	1.28	1.77				
1080 Northern	0.71	0.91	1.00	1.36	1.14	0.98	1.06				
1090 North Western	0.83	0.95	1.06	1.44	1.29	1.06	1.44				
1100 Central West	0.87	1.01	1.10	1.42	1.22	1.09	1.14				
1110 South Eastern	0.84	0.97	1.23	1.49	1.19	1.14	1.31				
1120 Murrumbidgee	0.83	1.06	1.08	1.41	1.13	1.07	1.12				
1130 Murray	0.71	1.18	0.94	1.58	1.30	1.07	1.36				
1140 Far West	0.66	0.72	0.91	1.09	0.98	0.86	1.10				
8010 ACT	0.82	1.06	1.15	1.66	1.09	1.13	1.18				

Table 3.3. New South Wales and the Australian Capital Territory

NPD = Non private dwelling

Growth in group households is projected to be relatively strong in most regions as well, particularly in the same regions that there is substantial growth in lone person households. However, interestingly, the growth is not so strong in the region where group households are in greatest concentration, Inner Sydney.

Overall, while population is projected to fall in seven of the 16 regions, the number of households is projected to fall in only two regions (by 2% in Northern and by 14% in Far West). An increase in the number of households of the order of 20-35% is projected for all Sydney regions and all coastal regions other than South Eastern. In outer Sydney, the number of households is projected to grow by one third. The shift to smaller households reflects the distributional change in household type from the

larger types (couples with children) to the smaller types (single person households and couples without children).

Finally, the number of persons living in non-private dwellings is projected to increase fairly substantially in all regions as the population ages. Regions of highest growth are Mid North Coast (77%), Outer Sydney North (64%) and Illawarra (55%).

3.4 Growth in dwellings by type (Table 3.4)

Demand for an additional 335,000 dwellings is projected for NSW and ACT between 2002 and 2011 of which 68% would be in Sydney. It has already been observed that Sydney would experience 83% of population growth in NSW and ACT in the same period. This means, of course, that household size gets smaller faster in the regions outside of Sydney. This is a reflection of the increased concentration of families with children in Sydney and the more rapid ageing of populations outside of Sydney. In numerical terms, the demand for new dwellings is projected to be very high in some regions with Outer Sydney South leading the way (90,000 new dwellings or 10,000 per year in the period 2002-11).

The projections also indicate the type of dwelling demanded summarised in this table into separate houses (houses on their own block not connected to other houses) and all 'other dwellings' from townhouses and villa homes, through apartments and dwellings connected to shops, to fixed caravans in caravan parks (medium and high density housing). While the increase in demand is higher in all regions for 'other dwellings' than for separate houses, there is considerable demand for new separate houses in all regions of Sydney and in the coastal regions. This raises issues of feasibility in terms of land availability, environmentally sustainable development, housing mix, affordability and regional development, however, these issues are not the subject of this project.

The projection also provide estimates of the future demand for public rental housing based on the assumption that rates of occupation of public rental housing by region, age and household type remain the same as they have been in recent years. In other words, what is the impact on the demand for public housing from the demographic shifts that will occur to 2011. The general conclusion is that the demographic shifts, all else being equal, mean that the increase in demand for public housing would be slightly higher than the demand for all housing. This is a conclusion that applies, essentially, across all regions. As expected, the public housing demand would be highest in those areas that were ageing rapidly. In New South Wales, the region that stands out most is Murray where the demand for all dwellings is projected to rise by 7% between 1996 and 2011, but the demand for public rental dwellings would rise by 32% and for public rental dwellings by 40%. In all other regions, the difference between the demand for all dwellings and the demand for public rental dwellings is small.

	ellinas in 1996	Increment to		
	Separate	Other	Total	total dwellings
Region	house	dwellings	dwellings	2002-2011
1010 Inner Sydney	1.22	1.21	1.22	37,807
1020 Middle Sydney	1.17	1.18	1.17	41,199
1031 Outer Sydney North	1.30	1.43	1.33	57,271
1032 Outer Sydney South	1.32	1.45	1.34	90,467
1040 Hunter	1.21	1.45	1.25	32,015
1050 Illawarra	1.21	1.43	1.25	21,362
1060 Richmond-Tweed	1.26	1.50	1.32	15,945
1070 Mid-North Coast	1.22	1.51	1.28	17,916
1080 Northern	0.96	1.15	0.98	-1,041
1090 North Western	1.04	1.23	1.07	1,698
1100 Central West	1.07	1.24	1.09	3,472
1110 South Eastern	1.13	1.24	1.14	5,918
1120 Murrumbidgee	1.05	1.21	1.07	2,144
1130 Murray	1.01	1.22	1.07	1,713
1140 Far West	0.86	0.96	0.87	-802
8010 ACT	1.08	1.29	1.13	7,724

Table 3.4. New South Wales and the Australian Capital Territory

4 SUMMARY RESULTS FOR VICTORIA

4.1 Population and demographic trends (Table 4.1)

Fertility rates in 2011 range from a high of 2.11 births per woman in East Gippsland to a low of 0.96 in Inner Melbourne. Annual net migration for the state of Victoria in 2011 is projected to be 24,000, all of which is in Melbourne. Migration levels are relatively small in numeric terms for all regions outside Melbourne although most non-Metropolitan regions have high rates of out migration of young people (20-24). There is a very high rate of in migration of young people to inner Melbourne, while the rates at older ages are negative for this region.

			2011				Ratio of 2011	
		Stdised	annual net migra	tion rate	Annual	Tetel 4000	population to	Increment to
Region	TFR	20-24 years	30-49 years	50+ years	migration	population	population	2002-2011
2001 Inner Melbourne	0.96	91.9	-17.9	-6.3	2,508	314,638	1.224	41,400
2002 East Melbourne	1.36	8.3	8.5	-1.4	5,389	683,590	1.143	58,787
2003 West Melbourne	1.59	18.9	3.2	0.3	6,976	980,638	1.218	125,093
2004 South Melbourne	1.60	7.3	5.6	3.6	9,450	1,289,374	1.190	143,578
2040 Barwon	1.71	-6.7	4.1	3.8	962	240,654	1.105	14,327
2050 Western District	1.80	-32.7	-5.8	-3.4	-683	92,354	0.915	-5,290
2060 Central Highlands	1.72	-29.0	3.9	1.5	221	127,369	1.088	6,090
2070 Wimmera	1.83	11.9	-5.0	-3.4	-345	52,204	0.913	-2,916
2080 Mallee	2.10	17.7	0.4	0.1	-244	87,181	1.032	1,166
2090 Loddon	1.82	-24.6	10.3	0.9	502	171,299	1.105	10,257
2100 Goulburn	2.08	2.9	5.5	2.8	99	182,679	1.081	7,653
2110 Ovens-Murray	1.85	-18.5	1.1	4.4	-12	89,091	1.055	2,403
2120 East Gippsland	2.11	-10.5	-0.8	5.9	-249	67,557	0.979	-1,142
2130 Gippsland	1.84	-19.0	-3.0	2.8	-807	182,383	0.961	-5,623

TFR = Total fertility rate, the average number of children that would be born to a woman during her lifetime if she experienced the age specific fertility rates applying in the given year.

The total population is projected to fall between 1996 and 2011 in four of the 14 regions with the largest proportional falls being 9% in Western District and Wimmera. The increment to the total population of Victoria in the period 2002-11 is projected to be 396,000 with 93% of this increase being in Melbourne. In turn, most of Melbourne's increase in population is projected to occur in the two outer areas of West Melbourne (125,000 increase) and South Melbourne (144,000 increase).

4.2 Regional variations in household type in 1996 (Table 4.2)

Like NSW, outside of the metropolitan area, there was considerable regional similarity in the 1996 Census household type distributions. In Melbourne, however, Inner Melbourne had a high concentration of lone person and group households, together representing 53% of all households. Correspondingly, the inner city had a very low proportion of two parent families. The household distribution for East Melbourne was similar to that in the non-metropolitan regions, but both outer regions (West and South) had much higher proportions of households consisting of families with children , the higher being 56% in West Melbourne.

Table 4.2. Victoria

	Percentage distribution of households in 1996								
	2-parent	1-parent	Couples without	Lone person	Group				
Region	families	families	children	households	households	Total			
2001 Inner Melbourne	17.9	8.6	20.2	39.8	13.5	100.0			
2002 East Melbourne	35.9	9.1	23.9	26.2	5.0	100.0			
2003 West Melbourne	43.9	11.9	22.0	19.1	3.1	100.0			
2004 South Melbourne	40.7	11.0	24.6	20.5	3.2	100.0			
2040 Barwon	34.7	10.3	26.2	25.3	3.5	100.0			
2050 Western District	34.5	9.4	26.1	26.5	3.5	100.0			
2060 Central Highlands	35.3	11.2	24.3	24.6	4.5	100.0			
2070 Wimmera	33.4	7.7	28.7	27.5	2.8	100.0			
2080 Mallee	35.3	9.4	27.6	25.0	2.7	100.0			
2090 Loddon	34.7	10.8	25.5	24.8	4.2	100.0			
2100 Goulburn	36.0	9.8	27.7	23.7	2.8	100.0			
2110 Ovens-Murray	36.1	10.2	26.2	23.6	4.0	100.0			
2120 East Gippsland	32.6	9.5	29.1	26.3	2.5	100.0			
2130 Gippsland	34.8	10.3	26.6	25.5	2.8	100.0			

4.3 Growth of households by type (Table 4.3)

Again like NSW, two parent families grow over the projection period from 1996 to 2011 in only the four metropolitan regions. Falls are evident in all non-metropolitan regions with the largest falls in this family type being in Western District (23%), Wimmera (25%), Gippsland (25%) and East Gippsland (27%).

Table 4.3. Victoria

		Ratio	of households in	2011 to househole	ds in 1996		Ratio of persons in
Region	2-parent families	1-parent (families	Couples without children	Lone person households	Group households	Total households	NPDs in 2011 to persons in NPDs in 1996
2001 Inner Melbourne	1.20	1.14	1.06	1.49	1.36	1.30	1.20
2002 East Melbourne	1.09	1.20	1.17	1.37	1.32	1.20	1.22
2003 West Melbourne	1.08	1.38	1.23	1.91	1.70	1.33	1.95
2004 South Melbourne	1.05	1.26	1.29	1.86	1.62	1.32	1.48
2040 Barwon	0.90	1.15	1.18	1.69	1.54	1.22	1.53
2050 Western District	0.77	0.97	1.00	1.27	1.09	0.99	1.13
2060 Central Highlands	0.93	1.12	1.22	1.57	1.33	1.20	1.23
2070 Wimmera	0.75	1.02	0.94	1.35	1.28	1.01	1.34
2080 Mallee	0.91	1.09	1.09	1.46	1.33	1.12	1.39
2090 Loddon	0.90	1.15	1.20	1.69	1.54	1.23	1.36
2100 Goulburn	0.86	1.20	1.21	1.67	1.47	1.20	1.38
2110 Ovens-Murray	0.84	1.10	1.19	1.67	1.38	1.17	1.42
2120 East Gippsland	0.73	0.94	1.17	1.60	1.28	1.12	1.43
2130 Gippsland	0.75	0.99	1.13	1.57	1.32	1.10	1.69

NPD = Non private dwelling

All regions experience substantial increases in lone person households, especially the two outer regions of Melbourne. In West Melbourne, the number of lone person households would almost double (1.91 ratio) in the projection period. Other regions in which the number of lone persons would rise considerably include Barwon (69%), Loddon (69%), Goulburn (67%) and East Gippsland (60%). There is also projected to be a large increase in the numbers of group households in the outer regions of Melbourne (70% in West and 62% in South Melbourne). Group households would also increase in number in all regions of the state.

Overall, the number of households would increase in all regions except Western District where the fall is minor, but growth in the total number of households is much higher in the regions of Melbourne (30-33% in Inner, West and South Melbourne).

The numbers of persons in non-private dwellings also increase in all regions and, in many, very substantially. West Melbourne stands out with the numbers in NPDs almost doubling in the projection period. The second highest growth was in Gippsland.

4.4 Growth in dwellings by type (Table 4.4)

Overall, the state could expect to require an additional 265,000 dwellings between 2002 and 2011 with 82% of these being in Melbourne. Like NSW, the fall in the size of households is greater outside the city and so the growth in the number of dwellings in the metropolitan region is not commensurate with its share of population growth. Nevertheless, the future demand for housing in Melbourne is projected to be considerable. In the South Melbourne region alone, 90,000 new dwellings would be required in the nine years from 2002 to 2011, West Melbourne would require 70,000, East Melbourne 33,000 and Inner Melbourne 26,000. In the same period, the regions of Barwon, Loddon and Goulburn are projected to require new dwellings at the rate of about 1,000 per year. Regarding the types of dwellings required, as with NSW, the ratio of projected dwellings in 2011 to dwellings in 1996 is higher for 'other dwellings' than for separate houses, but, particularly in the two outer Melbourne regions (West and South), the demand for separate houses is expected to remain high. Interestingly, as in Sydney, the rate of growth of the demand for 'other dwellings' is higher in the outer areas than in the inner areas. This reflects the huge increases in lone person households in these regions.

In regard to public rental housing, the areas in which the demand for public rental dwellings exceeded the demand for all dwellings by the largest margin was Melbourne West (all dwellings, 33% increase; public rental, 42% increase). In all other regions, except Inner Melbourne, the increase in public rental demand was almost exactly the same as the increased demand for all dwellings. In Inner Melbourne, unusually, the demand for all dwellings increase; public rental, 22% increase).

Table 4.4. Victoria

	Ratio of dwelling	Ratio of dwellings in 2011 to dwellings in 1996						
	Separate	Other	Total	total dwellings				
Region	house	dwellings	dwellings	2002-2011				
2001 Inner Melbourne	1.27	1.32	1.30	25,861				
2002 East Melbourne	1.18	1.26	1.21	32,933				
2003 West Melbourne	1.30	1.53	1.33	68,112				
2004 South Melbourne	1.28	1.53	1.32	89,734				
2040 Barwon	1.19	1.48	1.22	12,546				
2050 Western District	0.98	1.13	0.99	-132				
2060 Central Highlands	1.17	1.38	1.20	5,730				
2070 Wimmera	0.99	1.21	1.01	62				
2080 Mallee	1.10	1.29	1.12	2,492				
2090 Loddon	1.20	1.47	1.23	9,416				
2100 Goulburn	1.17	1.44	1.20	8,503				
2110 Ovens-Murray	1.14	1.39	1.17	3,631				
2120 East Gippsland	1.09	1.36	1.12	1,966				
2130 Gippsland	1.08	1.36	1.10	4,186				

5 SUMMARY RESULTS FOR QUEENSLAND

5.1 Population and demographic trends (Table 5.1)

Queensland was divided into 15 regions, three of which had small populations in 1996. Fertility rates for 2011 ranged from 0.90 births per woman in Inner Brisbane to 2.49 in South West, respectively the lowest and second highest fertility rates across all regions of Australia. Net migration to Queensland in 2001 is estimated to be 43,000, almost all of which would be in Brisbane (16,000) or the remainder of South East Queensland (25,000). Rates of in migration tend to be high in these regions at the older ages rather than at the younger ages. High rates of population growth are projected for the Gold Coast (60%) and Caboolture (aka Sunshine Coast)(53%) between 1996 and 2011. Inner and Outer Brisbane are projected to increase in population by 36% between 1996 and 2011. Between 2002 and 2011, in numerical terms, the largest increment to population would be in Outer Brisbane (166,000), followed by Gold Coast (139,000) and Caboolture (104,000). With high in migration of young people, the Far North region (Cairns and its surrounds) also grows strongly by an additional 32,000 people.

Population is projected to increase in 13 of the 15 regions of Queensland. The exceptions are South West where the population is projected to fall by 14% between 1996 and 2011 and North West where a 9% fall is projected. This continues the picture of population decline in all of the western regions of the three eastern states.

In general, these trends in population growth in Queensland are well known. We simply project their continuation. Overall, Queensland's population is projected to increase by 541,000 between 2002 and 2011 with 201,000 of the increment being in Brisbane and 281,000 in the remainder of South East Queensland.

			2011				Ratio of 2011	
		Stdised annual net migration rate (per 1000 population)			Annual net	Total 1996	population to 1996	Increment to
Region	TFR	20-24 years	30-49 years	50+ years	migration	population	population	2002-2011
3010 Inner Brisbane	0.90	80.5	-2.1	2.9	1,657	65,266	1.360	15,203
3020 Middle Brisbane	1.34	-6.2	-4.5	-8.3	835	402,933	1.086	20,386
3030 Outer Brisbane	1.73	-4.4	18.2	11.6	13,678	773,030	1.351	165,591
3040 Gold Coast	1.47	36.6	28.9	16.2	14,733	356,444	1.600	139,179
3050 Ipswich	1.95	-21.5	4.0	-0.2	-195	226,125	1.127	15,618
3060 Caboolture	1.83	17.4	29.0	24.8	10,765	314,427	1.525	104,306
3070 Wide Bay-Burnett	1.88	-5.3	13.2	11.8	1,682	224,281	1.167	21,546
3080 Darling Downs	2.00	-25.9	-2.2	-0.1	-876	199,920	1.014	633
3090 South West	2.49	35.6	-25.2	-1.7	-484	31,155	0.862	-2,817
3100 Fitzroy	1.90	-16.5	-0.4	-3.3	-791	173,374	1.057	4,643
3110 Central West	1.88	15.5	-1.8	31.4	185	11,660	1.213	1,498
3120 Mackay	1.86	28.8	5.9	-2.8	507	120,324	1.211	14,670
3130 Northern	1.73	-12.5	-5.9	-0.8	-119	192,178	1.101	10,446
3140 Far North	1.73	41.2	8.0	0.6	1,902	210,766	1.259	32,364
3150 North West	2.33	40.4	-23.1	-26.5	-701	35,947	0.918	-2,136

Table 5.1. Queensland

TFR = Total fertility rate, the average number of children that would be born to a woman during her lifetime if she experienced the age specific fertility rates applying in the given year.

5.2 Regional variations in household type in 1996 (Table 5.2)

The surprising degree of similarity of the distribution of households by type in regions outside of the metropolitan areas in 1996 is once more evident in Queensland, although, as expected, the Gold Coast and Caboolture regions display a pattern more related to an older population than the other regions in Queensland. Outer Brisbane and Ipswich had high concentrations of two parent families, while Inner Brisbane had a very high proportion of Ione person households and group households.

			Percentage distributi	ion of households in	1996	
	2-parent	1-parent	Couples without	Lone person	Group	
Region	families	families	children	households	households	Total
3010 Inner Brisbane	13.6	7.3	19.0	42.1	17.9	100.0
3020 Middle Brisbane	27.1	10.1	24.3	29.1	9.4	100.0
3030 Outer Brisbane	41.0	12.2	24.9	18.1	3.8	100.0
3040 Gold Coast	29.2	11.2	28.7	23.6	7.3	100.0
3050 Ipswich	41.2	11.4	26.3	17.6	3.5	100.0
3060 Caboolture	32.9	11.1	30.4	21.4	4.1	100.0
3070 Wide Bay-Burnett	33.5	10.2	30.7	22.8	2.9	100.0
3080 Darling Downs	35.3	9.6	26.8	23.9	4.4	100.0
3090 South West	38.1	9.9	24.9	23.8	3.4	100.0
3100 Fitzroy	37.4	10.3	25.7	22.0	4.6	100.0
3110 Central West	38.1	7.7	23.1	27.2	3.9	100.0
3120 Mackay	39.2	9.4	26.0	21.0	4.3	100.0
3130 Northern	36.3	11.0	25.3	21.8	5.6	100.0
3140 Far North	32.9	12.0	25.1	23.2	6.8	100.0
3150 North West	37.3	12.2	22.0	22.6	5.9	100.0

Table 5.2. Queensland

5.3 Growth of households by type (Table 5.3)

Very substantial growth in the number of lone persons households is projected for most regions in Queensland. An increase between 1996 and 2011 of 143% is projected for lone person households in Caboolture, 138% for Outer Brisbane, 131% for Gold Coast, 90% for Ipswich and 80% for Wide Bay-Burnett. In the same regions, high growth is also expected for group households and households of couples without children. Outside Brisbane, falls in the number of two parent families are more moderate in Queensland than in the two southern states already discussed, and, in some regions their number is projected to rise.

Table 5.3. Queensland

		Ratio of households in 2011 to households in 1996								
Region	2-parent families	1-parent Co families	uples without children	Lone person households	Group households	Total households	NPDs in 2011 to persons in NPDs in 1996			
3010 Inner Brisbane	1.51	1.20	1.32	1.42	1.38	1.39	1.26			
3020 Middle Brisbane	0.98	1.17	0.93	1.44	1.23	1.14	1.13			
3030 Outer Brisbane	1.12	1.44	1.50	2.38	1.87	1.51	1.51			
3040 Gold Coast	1.31	1.63	1.58	2.31	1.99	1.71	1.80			
3050 Ipswich	0.95	1.18	1.34	1.90	1.51	1.26	1.34			
3060 Caboolture	1.18	1.48	1.74	2.43	2.07	1.69	2.22			
3070 Wide Bay-Burnett	0.94	1.12	1.38	1.80	1.55	1.31	1.64			
3080 Darling Downs	0.84	1.07	1.10	1.50	1.16	1.11	1.16			
3090 South West	0.67	1.00	0.93	1.39	0.98	0.95	1.30			
3100 Fitzroy	0.91	1.09	1.23	1.54	1.24	1.16	1.18			
3110 Central West	1.06	1.20	1.58	1.64	1.24	1.36	1.63			
3120 Mackay	1.07	1.22	1.42	1.69	1.39	1.32	1.54			
3130 Northern	0.94	1.15	1.18	1.57	1.28	1.18	1.30			
3140 Far North	1.16	1.20	1.44	1.70	1.38	1.38	1.39			
3150 North West	0.71	1.02	0.88	1.41	1.17	0.97	1.42			

NPD=Non-private dwelling

Overall, the number of households is projected to increase between 1996 and 2001 in all regions of Queensland except for small falls in South West and North West. As expected, the largest rises are expected to be in Gold Coast (71%), Caboolture (69%) and Outer Brisbane (51%).

Like the other eastern states, rapid increases in the numbers of people in non-private dwellings are expected in almost all regions with Caboolture (122% increase), Gold Coast (80%) and Wide Bay-Burnett (64%) leading the way.

5.4 Growth in dwellings by type (Table 5.4)

Overall, an additional 306,000 dwelling units are projected to be required in Queensland between 2002 and 2011. The largest number of these (88,000) would be required in Outer Brisbane, followed by 67,000 for Gold Coast and 56,000 for Caboolture. Thus, 69% of all dwelling requirements in the state would be in these three regions. Far North also has a sizeable demand with an additional 18,000 dwellings from 2002 to 2011. All regions would require more dwellings in 2011 than they do now with the exception of very small falls in demand in North West and South West.

The story in regard to the type of dwelling required is similar to the other eastern states. The growth in demand is higher everywhere for 'other dwellings' but there is still very substantial projected new demand for separate houses in many regions and particularly in the main growth areas, Outer Brisbane, Gold Coast and Caboolture. Counter to the southern states, the expected rate of dwelling growth in Queensland is similar to the expected rate of population growth.

In Queensland, there was no region where the increase in demand for public rental dwellings noticeably exceeded the increase in demand for all dwellings. However, the reverse was true in Central West where the projected increased demand for all dwellings was 36% while that for public rental was 17%.

	Ratio of dwellin	Ratio of dwellings in 2011 to dwellings in 199							
	Separate	Other	Total	total dwellings					
Region	house	dwellings	dwellings	2002-2011					
3010 Inner Brisbane	1.38	1.39	1.39	7,571					
3020 Middle Brisbane	1.10	1.26	1.14	13,235					
3030 Outer Brisbane	1.46	1.89	1.52	87,785					
3040 Gold Coast	1.62	1.88	1.71	67,485					
3050 Ipswich	1.25	1.51	1.27	12,586					
3060 Caboolture	1.62	2.00	1.69	55,657					
3070 Wide Bay-Burnett	1.28	1.53	1.31	16,477					
3080 Darling Downs	1.08	1.28	1.11	4,589					
3090 South West	0.93	1.11	0.95	-379					
3100 Fitzroy	1.14	1.31	1.16	6,131					
3110 Central West	1.36	1.37	1.36	963					
3120 Mackay	1.29	1.45	1.32	8,453					
3130 Northern	1.15	1.32	1.18	7,608					
3140 Far North	1.36	1.42	1.38	18,385					
3150 North West	0.94	1.12	0.97	-241					

Table 5.4. QueenslandChapter 6. Summary Results for South Australia

6 SUMMARY RESULTS FOR SOUTH AUSTRALIA

6.1 Population and demographic trends (Table 6.1)

South Australia is divided into nine regions, three in Adelaide and one being Perimetro Adelaide. Eyre has the highest projected fertility in 2011(2.32 births per woman) and Inner Adelaide the lowest (1.12). Net migration for South Australia in 2011 is projected to be close to zero as is net migration for Adelaide. Nevertheless, there would be some transfers of population within the state with relatively high out migration from Outer Adelaide and Northern region and in migration to Middle Adelaide and Peri-metro Adelaide. Negative migration for the outer area and positive migration for the middle area of the metropolis is an unusual pattern not evident in the other large Australian cities.

			2011				Ratio of 2011	
		Stdised	annual net migra er 1000 populati	nnual net migration rate Annual population to In r 1000 population) net Total 1996 1996		Increment to population		
Region	TFR	20-24 years	30-49 years	50+ years	migration	population	population	2002-2011
4010 Inner Adelaide	1.12	18.5	-6.8	5.0	588	93,211	1.097	6,077
4020 Middle Adelaide	1.41	-3.1	1.8	1.1	1,546	527,246	1.045	12,730
4030 Outer Adelaide	1.73	-16.9	-3.8	-1.3	-2,002	458,652	1.042	6,940
4040 Eyre	2.32	10.0	-3.7	-3.9	-148	33,011	1.020	265
4050 Murray Lands	1.97	9.3	-1.6	-4.2	-237	67,454	0.989	-979
4060 Northern	1.92	4.2	-14.4	-5.8	-856	83,524	0.906	-5,386
4070 Peri-metro Adelaide	1.84	-6.4	13.4	11.2	1,131	104,388	1.200	11,931
4080 South East	2.05	5.0	-5.3	-3.7	-345	62,707	0.997	-438
4090 York & Lower North	1.98	18.2	5.4	2.9	-43	44,058	0.965	-1,112

Table 6.1. South Australia

TFR = Total fertility rate, the average number of children that would be born to a woman during her lifetime if she experienced the age specific fertility rates applying in the given year.

The populations of five regions are projected to rise from 1996 to 2011, while the population would fall in four regions but only in Northern would the fall be significant (9%). The main areas of population growth are projected to be Middle Adelaide and Peri-metro Adelaide, each adding about 12,000 people from 2002 to 2011. Inner and Outer Adelaide would both add about 6,000 people in the same period.

6.2 Regional variations in household type in 1996 (Table 6.2)

Again, the 1996 distribution of households by type was similar in most regions of South Australia to most regions of Australia, especially the regions outside Adelaide. Inner Adelaide, like the inner areas of other cities, had a concentration of lone person and group households and a lower proportion of two parent families. The reverse was the situation in Outer Adelaide.

Table 6.2. South Australia

	ution of households	in 1996				
Region	2-parent families	1-parent families	Couples without children	Lone person households	Group households	Total
4010 Inner Adelaide	22.6	7.5	22.2	38.0	9.6	100.0
4020 Middle Adelaide	28.0	10.4	26.0	31.4	4.2	100.0
4030 Outer Adelaide	40.0	12.0	26.1	19.2	2.7	100.0
4040 Eyre	34.1	8.1	29.7	25.6	2.5	100.0
4050 Murray Lands	33.4	8.8	29.7	25.9	2.2	100.0
4060 Northern	33.4	9.9	25.6	28.9	2.3	100.0
4070 Peri-metro Adelaide	35.6	8.5	31.7	22.1	2.0	100.0
4080 South East	36.1	8.6	27.8	25.0	2.5	100.0
4090 York & Lower North	30.3	7.3	34.6	26.2	1.6	100.0

6.3 Growth of households by type (Table 6.3)

In total, the number of households is expected to grow or remain the same in all nine regions of South Australia. The highest growth in the number of households is projected to be in Peri-metro Adelaide and in Outer Adelaide. While the rate of population increase in Outer Adelaide is projected to be marginally lower than the rate for Middle Adelaide, the rate of increase of households is projected to be much greater in Outer Adelaide than in Middle Adelaide. This occurs because the household compositional change is much greater in Outer Adelaide. Outer Adelaide is projected to experience a large fall in the number of two parent families and large rises in households consisting of lone persons, groups and couples without children. The large fall in the projected number of two parent families in Outer Adelaide is a result very different to the outer areas of the other large cities. This may be partly the result of a difference in the definition of the regional zones. As defined here, Outer Adelaide has a smaller population than Middle Adelaide. In all the other cities, the outer zones are very considerably larger than the middle zones.

		Ratio of persons in					
Region	2-parent families	1-parent Cou families	ples without children	Lone person households	Group households	Total households	NPDs in 2011 to persons in NPDs in 1996
4010 Inner Adelaide	1.13	1.01	1.14	1.21	1.15	1.16	0.91
4020 Middle Adelaide	0.90	1.09	1.00	1.41	1.26	1.12	1.16
4030 Outer Adelaide	0.80	1.06	1.22	2.01	1.52	1.20	1.67
4040 Eyre	0.88	0.97	1.18	1.25	1.00	1.08	1.48
4050 Murray Lands	0.81	0.96	1.04	1.54	1.35	1.09	1.67
4060 Northern	0.76	0.85	1.03	1.30	1.12	1.00	1.38
4070 Peri-metro Adelaide	0.99	1.19	1.40	1.83	1.62	1.34	1.79
4080 South East	0.85	0.99	1.11	1.43	1.10	1.09	1.26
4090 York & Lower North	0.80	0.79	1.06	1.44	1.48	1.07	1.33

Table 6.3. South Australia

NPD = Non private dwelling

6.4 Growth in dwellings by type (Table 6.4)

South Australia could expect an increment to total dwelling demand of 51,000 in the period 2002 to 2011. Of this number, 39,000 would be in Adelaide and 8,500 in Perimetro Adelaide. Expected changes in the demand for dwellings in all other regions are very small. As in other states, increased demand is greater in all regions for 'other dwellings' than for separate houses because of the compositional shift in households towards older households.

The largest difference in projected demand between all dwellings and public rental dwellings was in Outer Adelaide (all dwellings, 20% increase; public rental, 39% increase). Other regions of interest in this regard are Middle Adelaide (all dwellings, 12% increase; public rental, 21% increase) and York &Lower North (all dwellings, 7% increase; public rental, 15% increase).

Table 6.4. South Australia	ł
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		Ratio of dwelling	as in 2011 to dw	ellinas in 1996	Increment to
		Separate	Other	Total	total dwellings
Region		house	dwellings	dwellings	2002-2011
4010 Inner Adela	aide	1.16	1.16	1.16	4,045
4020 Middle Ade	laide	1.07	1.24	1.12	15,555
4030 Outer Adel	aide	1.14	1.57	1.20	19,190
4040 Eyre		1.06	1.15	1.08	609
4050 Murray Lar	nds	1.07	1.28	1.09	1,357
4060 Northern		0.98	1.05	1.00	-127
4070 Peri-metro	Adelaide	1.32	1.55	1.34	8,467
4080 South East		1.06	1.22	1.09	1,091
4090 York & Lov	ver North	1.06	1.19	1.07	795

7 SUMMARY RESULTS FOR WESTERN AUSTRALIA

7.1 Population and demographic trends (Table 7.1)

Western Australia is divided into 11 regions, three being in Perth. In 1996, 73% of the population of the state lived in Perth and this division is not expected to change over the projection period. The state is projected to have a net in migration of 22,000 in 2011, with most of this occurring in two regions, Outer Perth (13,000) and South West (6,000). The pattern of out migration of 20-24 year olds from regions outside the capital city, common in other states, is not evident in Western Australia. If anything, out migration from the non-metropolitan regions occurs at the older ages in most regions. The outstanding exception to this is South West where large scale in migration is projected at the older ages. Overall, Western Australia's population is projected to grow by 304,000 from 2002 to 2011 with 74% of this growth being in the two regions, Outer Perth and South West. The population is projected to fall in only one region, Upper Great Southern. In the smaller regions in Western Australia, population growth tends to be affected by fluctuations in mining activities. No account has been taken of this factor in these projections.

			2011		Ratio of 2011			
		Stdised (p	annual net migra er 1000 populati	ation rate on)	Annual net	Total 1996	population to 1996	Increment to population
Region	TFR	20-24 years	30-49 years	50+ years	migration	population	population	2002-2011
5010 Inner Perth	1.25	23.8	-1.1	-2.2	1,474	212,360	1.120	15,780
5020 Middle Perth	1.44	8.9	3.8	-4.0	1,617	435,417	1.132	33,383
5030 Outer Perth	1.82	13.6	16.9	7.5	12,558	647,314	1.414	167,021
5040 South West	1.92	37.1	24.6	19.0	5,535	167,274	1.531	57,500
5050 Lower Great Southern	2.24	15.9	7.4	7.2	215	50,114	1.146	4,125
5060 Upper Great Southern	2.22	33.3	-12.2	2.4	-144	19,829	0.959	-522
5070 Midlands	2.29	40.4	-0.8	-3.7	-78	51,436	1.104	3,150
5080 South Eastern	2.11	69.8	-11.6	-20.6	-160	54,966	1.162	4,930
5090 Central	2.01	35.5	-9.5	2.1	56	60,446	1.100	3,552
5100 Pilbara	2.06	60.1	-20.2	-23.1	-764	40,426	1.021	-160
5110 Kimberley	1.90	90.8	29.7	1.2	1,495	25,672	1.914	15,690

Table 7.1. Western Australia

TFR = Total fertility rate, the average number of children that would be born to a woman during her lifetime if she experienced the age specific fertility rates applying in the given year.

7.2 Regional variations in household type in 1996 (Table 7.2)

In 1996, 43% of households in the Pilbara region were two parent families. This is unusually high for a non-metropolitan region in Australia. On the other hand, Kimberley had an unusually high proportion of one-parent families. Otherwise, the household composition of the regions of Western Australia followed the same pattern as other states. Like the inner areas in other cities, Inner Perth had a high proportion of lone person and group households and a low proportion of two parent family households while Outer Perth had a high proportion of two parent families.

Table 7.2. Western Australia

	Percentage distribution of households in 1996								
Region	2-parent families	1-parent families	Couples without children	Lone person households	Group households	Total			
5010 Inner Perth	22.4	8.7	22.7	36.9	9.4	100.0			
5020 Middle Perth	31.0	10.7	24.8	28.2	5.3	100.0			
5030 Outer Perth	43.7	11.5	25.4	16.8	2.7	100.0			
5040 South West	35.2	9.9	29.4	22.5	3.0	100.0			
5050 Lower Great Southern	35.0	9.2	29.0	24.1	2.6	100.0			
5060 Upper Great Southern	37.8	6.7	28.3	24.9	2.3	100.0			
5070 Midlands	36.7	7.7	29.1	24.1	2.4	100.0			
5080 South Eastern	38.5	8.9	24.2	20.8	7.6	100.0			
5090 Central	36.2	10.3	26.2	23.8	3.6	100.0			
5100 Pilbara	43.3	8.3	22.3	21.7	4.4	100.0			
5110 Kimberley	35.3	16.6	19.8	21.4	6.9	100.0			

7.3 Growth of households by type (Table 7.3)

Projected changes in household composition in Western Australia have a similar pattern to those in the eastern states, particularly Queensland. There are substantial rises expected in the number of two parent families in Outer Perth and in South West. While there is a considerable difference in scale, South West is taking on similar demographic attributes to Southeast Queensland outside of Brisbane. Households consisting of lone persons, groups and couples without children are all expected to grow very substantially in Outer Perth and South West, but in these areas, the numbers of two parent family households also increase sharply. Numbers in non-private dwellings are expected to almost double between 1996 and 2001 in Outer Perth and South West.

		Ratio of persons in					
Region	2-parent families	1-parent Co families	uples without children	Lone person households	Group households	Total households	NPDs in 2011 to persons in NPDs in 1996
5010 Inner Perth	1.09	1.10	1.10	1.33	1.24	1.19	0.90
5020 Middle Perth	0.99	1.13	1.11	1.69	1.42	1.25	1.41
5030 Outer Perth	1.23	1.42	1.68	2.46	1.99	1.59	1.94
5040 South West	1.35	1.45	1.74	2.21	2.02	1.69	1.97
5050 Lower Great Southern	0.97	1.10	1.31	1.66	1.35	1.26	1.49
5060 Upper Great Southern	0.79	1.11	1.11	1.46	1.27	1.08	1.16
5070 Midlands	0.96	0.95	1.26	1.60	1.48	1.21	1.55
5080 South Eastern	1.00	1.26	1.23	1.62	1.30	1.23	1.47
5090 Central	1.00	1.05	1.27	1.52	1.22	1.21	1.20
5100 Pilbara	0.89	1.06	1.05	1.54	1.25	1.10	1.40
5110 Kimberley	1.79	1.85	2.09	2.76	2.47	2.11	2.45

Table 7.3. Western Australia

NPD = Non private dwelling

7.4 Growth in dwellings by type (Table 7.4)

The increment to dwelling demand in Western Australia between 2002 and 2011 is projected to be 171,000 with 123,000 of these dwellings being in Perth. Outer Perth is projected to require 85,000 new dwellings between 2002 and 2011. Around 29,000 new dwellings are projected to be required in South West in the same period. The projection suggests a very large increase in the number of dwellings required in the Kimberley region (113% increase from 1996 to 2011). As the population of this region

is small and its growth is affected by region-specific development trends, more local knowledge should be applied to assessment of this projection.

The number of dwellings required is projected to rise in all of the 11 regions of Western Australia. This conclusion also applies to both types of dwelling, separate houses and 'other dwellings'.

The largest difference in projected demand between all dwellings and public rental dwellings was in Outer Perth (all dwellings, 59% increase; public rental, 75% increase). Other regions of interest in this regard are Middle Perth (all dwellings, 25% increase; public rental, 33% increase) and South West (all dwellings, 69% increase; public rental, 76% increase).

		Ratio of dwelling	<u>Ratio of dwellings in 2011 to dwellings in 19</u>								
		Separate	Other	Total	total dwellings						
Regio	n	house	dwellings	dwellings	2002-2011						
5010	Inner Perth	1.17	1.24	1.19	11,029						
5020	Middle Perth	1.19	1.42	1.25	26,519						
5030	Outer Perth	1.54	2.05	1.59	85,298						
5040	South West	1.65	1.95	1.69	29,249						
5050	Lower Great Southern	1.24	1.47	1.26	3,068						
5060	Upper Great Southern	1.07	1.29	1.08	354						
5070	Midlands	1.20	1.40	1.21	2,576						
5080	South Eastern	1.21	1.31	1.23	2,833						
5090	Central	1.17	1.38	1.21	2,858						
5100	Pilbara	1.05	1.22	1.10	700						
<u>5110</u>	Kimberlev	2.07	2.32	2.13	6,100						

Table 7.4. Western Australia

8 SUMMARY RESULTS FOR TASMANIA

All four regions of Tasmania are projected to experience net out migration in 2011 with a total of just over 3,000 net out migration from the state as a whole in that year (Table 8.1). Out migration rates are particularly high in all regions for young people. Between 1996 and 2011, the population is projected to fall in all the regions of Tasmania except Southern which maintains the same population size. Between 2002 and 2011, the projection suggests a net population loss to Tasmania of around 18,000 people.

Table 8.1. Tasmania

			2011			Ratio of 2011		
		Stdised (pe	Stdised annual net migration rate (per 1000 population)			Total 1996	population to 1996	Increment to population
Region	TFR	20-24 years	30-49 years	50+ years	migration	population	population	2002-2011
6010 Greater Hobart	1.79	-32.9	-5.2	0.3	-1,298	208,644	0.959	-6,075
6020 Southern	2.57	-15.8	0.0	1.8	-117	21,545	1.000	-164
6030 Northern	1.79	-27.3	-7.9	3.6	-795	134,047	0.949	-4,737
6040 Mersey-Lyell	1.78	-12.9	-9.7	0.0	-935	110,211	0.900	-7,188

TFR = Total fertility rate, the average number of children that would be born to a woman during her lifetime if she experienced the age specific fertility rates applying in the given year.

Table 8.2. Tasmania

		Percentage distribution of households in 1996							
Region	2-parent families	1-parent families	Couples without children	Lone person households	Group households	Total			
6010 Greater Hobart	32.8	11.5	24.7	26.6	4.4	100.0			
6020 Southern	38.0	9.7	28.6	21.7	2.0	100.0			
6030 Northern	33.2	10.1	26.7	26.3	3.7	100.0			
6040 Mersey-Lyell	35.6	10.3	27.2	24.7	2.3	100.0			

Household composition in Tasmania in 1996 was very similar in all regions to the Australian average pattern already described and, hence, did not vary much across the four regions (Table 8.2).

All regions of Tasmania are projected to experience substantial falls in the number of two parent family households between 1996 and 2011 (Table 8.3). The state also would see the more unusual circumstance of substantial falls in the number of oneparent family households. Conversely, the number of lone person households would rise considerably in all regions and there would be moderate rises in the numbers of couple only households and group households. The number of persons in non-private dwellings is also projected to rise in all regions.

Table 8.3. Tasmania

	Ratio of households in 2011 to households in 1996						Ratio of persons in	
Region	2-parent families	1-parent (families	Couples without children	Lone person households	Group households	Total households	NPDs in 2011 to persons in NPDs in 1996	
6010 Greater Hobart	0.79	0.93	1.09	1.44	1.15	1.07	1.30	
6020 Southern	0.68	1.06	1.24	1.77	1.71	1.13	2.14	
6030 Northern	0.81	0.88	1.10	1.40	1.07	1.06	1.26	
6040 Mersey-Lyell	0.74	0.88	1.05	1.44	1.12	1.02	1.52	

NPD = Non private dwelling

Despite the story of falling population, the projected change in household composition is such that every region in Tasmania would experience an increase in dwelling demand between 1996 and 2011 although, in most cases, the increase would be small (Table 8.4). A total of 5,600 additional dwelling units would be required in the state in the period, 2002-11. In all four regions, the percentage increase in demand for public rental housing was almost the same as the increased demand for all dwellings.

Table 8.4. Tasmania

	Ratio of dwelling	Increment to		
	Separate	Other	Total	total dwellings
Region	house	dwellings	dwellings	2002-2011
6010 Greater Hobart	1.04	1.23	1.07	3,134
6020 Southern	1.12	1.40	1.13	642
6030 Northern	1.04	1.21	1.06	1,681
6040 Mersey-Lyell	0.99	1.24	1.02	209

9 SUMMARY RESULTS FOR NORTHERN TERRITORY

Fertility rates are projected to be relatively high in the Northern Territory by 2011 and a small positive net migration would be expected (Table 9.1). The population is projected to increase between 1996 and 2001 by 39% for Darwin and 21% for the rest of the territory. An additional 32,000 persons are projected to be added to the Territory's population between 2002 and 2011. It should be noted that these projections are based on trends in the 1990s. With small populations, significant shifts of outcome are possible on the basis of a relatively small number of development decisions.

Table 9.1. Northern Territory

		Stdised	2011 annual net migra er 1000 populatio	tion rate	Annual	Total 1996	Ratio of 2011 population to 1996	Increment to
Region	TER	20-24 years	30-49 years	50+ years	migration	population	population	2002-2011
7010 Darwin	1.75	53.5	-1.0	-4.9	1,232	83,396	1.393	19,923
7020 Balance of NT	2.26	41.2	-1.1	-31.5	-329	98,447	1.207	11,621

TFR = Total fertility rate, the average number of children that would be born to a woman during her lifetime if she experienced the age specific fertility rates applying in the given year.

As expected, household composition in the Northern Territory in 1996 was weighted more strongly towards the younger household types than was the case in the states (Table 9.2). However, as in the states, it is the older household types (lone persons and couples without children) that increase more rapidly over the projection period, 1996-2011 (Table 9.3). Consequently, household growth is projected to be faster than population growth (50% increase in Darwin and 30% increase in the rest of the Territory). Persons in non-private dwellings would increase at about the same rate as households in each region.

Between 2002 and 2011, an additional 14,500 dwelling units are projected as the requirement for the territory, 9,500 in Darwin and 5,000 in the rest of the territory (Table 9.4). The projected increase in demand for public rental dwellings between 1996 and 2011 was 50% for Darwin and 30 for the Balance of the Northern Territory.

Table 9.2. Northern Territory

		Percentage distribution of households in 1996							
Region	2-parent families	1-parent families	Couples without children	Lone person households	Group households	Total			
7010 Darwin	36.3	12.9	21.4	21.1	8.2	100.0			
7020 Balance of NT	40.8	14.3	21.2	19.1	4.5	100.0			

Table 9.3. Northern Territory

		Ratio of households in 2011 to households in 1996					
Region	2-parent families	1-parent Co families	uples without children	Lone person households	Group households	Total households	NPDs in 2011 to persons in NPDs in 1996
7010 Darwin	1.29	1.41	1.48	1.95	1.52	1.50	1.53
7020 Balance of NT	1.20	1.15	1.45	1.44	1.31	1.30	1.28

NPD = Non private dwelling

Table 9.4. Northern Territory

	Ratio of dwelling	Increment to		
	Separate	Other	Total	total dwellings
Region	house	dwellings	dwellings	2002-2011
7010 Darwin	1.44	1.62	1.50	9,560
				,
7020 Balance of NT	1.29	1.34	1.30	4,971

10 GENERAL CONCLUSIONS FOR AUSTRALIA FROM THE REGIONAL PROJECTIONS, 1996-2011

Between 2002 and 2011, a nine-year period, an additional 1,149,000 dwellings are projected to be required in Australia. In the past three years (1999-2000, 2000-01 and 2001-02), new dwelling commencements in Australia have averaged 148,000 per year, but these have been regarded as boom years (ABS 2002, Table 15). Thus, at around 128,000 new dwelling units per annum, the projected average demand over the next nine years remains high. The breakdown of this future nine-year demand across States and Territories, dwelling type and tenure is as follows:

State or Territory	Total	Separate houses	Other dwellings	Private dwellings	Public dwellings
NSW & ACT	335	216	119	310	25
Victoria	265	183	82	255	10
Queensland	306	214	92	293	13
South Australia	51	28	23	42	9
West. Australia	171	126	45	160	11
Tasmania	6	2	4	5.4	0.6
Nth. Territory	15	9	6	12	3
Australia	1,149	778	371	1,077.4	71.6

The basic reasons for the continuation of relatively high demand in the future are continued population growth and an accelerated movement towards smaller household size as the population ages. In simple terms, in this period, the rate at which existing households disappear completely (through the death of the last occupant) will remain low. Instead, households will become smaller as children leave home, relationships breakdown and partners die. This means that dwellings occupied at present, in the main, will continue to be occupied by the same household (albeit, smaller) or by a like household while the demand for new dwellings will continue among young people wanting to set up new households or from households split by relationship breakdown. This scenario is particularly prominent in the outer regions of the large cities (including areas beyond the existing boundaries of the large cities) and this is why the projection suggests that high demand for new dwellings will continue in the outer regions of large cities. Parents will still be occupying their existing dwellings while young people will be seeking new housing. In each of Outer Perth, Outer Brisbane, South Melbourne and Outer South Sydney, there will be a demand for around 10,000 new dwellings per annum between 2002 and 2011. Most of this outer suburban demand as in the past will be for separate houses explaining why the projection shows that two-thirds of future demand will be for separate houses. If tenure profiles remain the same by region, age and household type (the assumption of the model), the demand for additional public housing would constitute about six per cent of the total demand.

The projections (as projections of trends in the 1990s) indicate a continuation of high growth in the coastal regions on the east coast and in Barwon in Victoria, Peri-metro Adelaide and the South West and Kimberley regions in Western Australia.

There are obvious issues of feasibility, sustainability and affordability related to the continued high growth of the outer regions of the major cities and the coastal regions, however, these are not the subject of this report.

11 LONG-TERM PROJECTIONS FOR STATES AND TERRITORIES (1996-2031)

The projections to 2030 extend all assumptions of the projections to 2011 as detailed above across the 29 year period, 2011-2030. In some cases, this may lead to unrealistic results. The ACT is a particular case in point where the net migration assumption in the 1996-2001 projections is very unlikely to be sustained over the long term. This is probably also the case for the net migration assumption for Tasmania. The authors do not give great credence to the results of these long-term projections, especially for the smaller States and Territories. However, the broad trends for the larger States are indicative of the outcomes that would result if demographic trends and housing situations remain the same over the next 30 years as they have in the past decade.

Table 11.1 shows the trend for two of the three demographic inputs to the projections, fertility and net migration. Fertility rates are assumed to fall slowly over the entire period reaching levels in 2030 that some might describe as optimistic given current levels in other countries. Levels of annual net migration do not change much except for Queensland and Western Australia which both experience a strong increase over the period. In terms of the expectation of life at birth, the change for females between 1996 and 2030 is assumed to be from 81.1 years to 85.8 years. States and Territories experience similar increases in expectation of life at birth.

State or Territory	TFR 1996	TFR 2030	ANM 1996	ANM 2030
NSW	1.82	1.73	23.5	26.2
Victoria	1.71	1.54	21.7	25.0
Queensland	1.85	1.67	31.0	54.0
South Australia	1.75	1.62	-0.8	0.3
West Australia	1.82	1.71	17.1	28.7
Tasmania	1.94	1.81	-3.5	-2.3
Nth. Territory	2.19	2.01	1.0	0
ACT	1.67	1.58	-2.5	-1.6
Australia	1.89	1.66	90.6	130.0

Table 11.1. Demo	ographic input	to projections
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TFR = Total fertility rate ANM + Annual net migration in thousands

The resulting changes in the population size and the numbers of households are shown in Table 11.2. The 37% increase in Australia's population between 1996 and 2030 is accompanied by a 61% increase in the number of households. Average household size would fall from 2.64 to 2.25 persons per household. This is the result of the shift away from large households, especially couples with children, to small households especially single person households and couple only households as the population ages. The variations by State and Territory are evident from the table. Growth is fastest in Queensland and Western Australia while, in numerical terms, the increase in the number of households in New South Wales and Victoria is also substantial.

State or Territory	Population	Population	Households	Households
	1996 (000s)	2030 (000s)	1996 (000s)	2030 (000s)
NSW	6,205	8,118	2,331	3,525
Victoria	4,561	5,973	1,719	2,667
Queensland	3,338	5,448	1,264	2,451
South Australia	1,474	1,558	589	746
West Australia	1,765	2,983	670	1,330
Tasmania	474	394	187	190
Nth. Territory	182	291	61	111
ACT	308	279	115	132
Australia	18,308	25,044	6,935	11,152

Table 11.2. Demographic outcomes to projections

Table 11.3 shows the ratio of the projected number of households in 2030 to the number in 1996 according to household type. For Australia as a whole, the number of lone person households is projected to grow 2.5 times (249% increase) while the number of households consisting of couples with children is projected to remain about the same as it is now (4% increase). All other household types would increase by between 50% and 70%. The pattern of change is similar across States and Territories, meaning that the regional variations in Table 11.3 are due mainly to differences in rates of overall population growth.

Chata an Tamitan (Two parent	One parent	Couples,	Lone	Group	Tatal
State of Ternitory	families	families	no children	persons	households	Total
NSW	1.04	1.48	1.49	2.25	1.60	1.52
Victoria	1.00	1.57	1.47	2.44	1.76	1.55
Queensland	1.19	1.84	1.97	3.11	1.96	1.94
South Australia	0.72	1.13	1.22	2.01	1.38	1.27
West Australia	1.32	1.75	1.97	3.06	1.97	1.98
Tasmania	0.57	0.87	1.05	1.66	0.94	1.02
Nth. Territory	1.48	1.62	1.98	2.48	1.72	1.83
ACT	0.61	0.97	1.16	2.17	0.93	1.15
Australia	1.04	1.54	1.58	2.49	1.71	1.61

Table 11.3. Ratio of households in 2030 to households in 1996, by type

Table 11.4 shows that the demand for dwellings in Australia is projected to increase by 61% between 2002 and 2030 with the percentage increase in demand being higher for semi-detached houses (79%), flats and apartments (89%) and other dwellings (97%) than for separate houses (54%). However, as separate houses are by far the most common type of dwelling at present (consisting of 77% of all dwellings), the numerical increase in demand is much greater for separate houses (2,870,000 additional dwellings) than for the other types of dwellings (semi-detached houses, 448,000; flats and apartments, 787,000; other dwellings, 96,000). Once again, this underlines the main conclusion of this report that the projected substantial changes in household type (Table 11.3) do not follow through to substantial changes in dwelling type. As the population ages, most older people will remain living in separate houses as their children leave home or their spouse dies. At the same time, newly-formed families, especially those with children or the prospect of children, will be seeking separate houses. This conclusion will stand so long as housing choices do not change substantially or so long as land shortages do not force a change in preferences. As with household change, the pattern of change is similar across States and Territories with differences reflecting differences in overall population growth.

State/Territory	Separate houses	Semi detached	Flats, apartments	Other dwellings	Total
NSW	1.47	1.56	1.67	1.87	1.52
Victoria	1.48	1.77	1.89	1.91	1.56
Queensland	1.86	2.18	2.35	2.44	1.94
South. Australia	1.18	1.48	1.70	1.47	1.27
West Australia	1.87	2.41	2.57	2.35	1.99
Tasmania	0.98	1.33	1.30	1.09	1.02
Nth. Territory	1.74	2.04	2.04	1.96	1.83
ACT	1.07	1.45	1.51	1.81	1.16
Australia	1.54	1.79	1.89	1.97	1.61

Table 11.4. Ratio of dwellings in 2030 to dwellings in 1996, by type

In regard to tenure, the increase in demand for public housing as a result of demographic changes is projected to be a little higher than for all dwellings. For Australia, an increase in demand of 76% is projected for public housing as compared to 61% for all dwellings (Table 11.5). The relative increase in public housing demand compared to total dwelling demand would be greater in the more rapidly ageing States and Territories (South Australia, Tasmania, ACT). The future of public rental,

however, is dependent upon future policy much more than upon demographic change. The projections do not take future policy approaches into account.

State or	Public rental	All dwellings
Territory		
NSW	1.63	1.52
Victoria	1.69	1.56
Queensland	2.01	1.94
South Australia	1.48	1.27
West Australia	2.27	1.99
Tasmania	1.07	1.02
North Territory	2.13	1.83
ACT	1.52	1.16
Australia	1.76	1.61

Table 11.5. Ratio of dwellings in 2030	0 - compared 2002, by tenure
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REFERENCES

Australian Bureau of Statistics (1999) *Household and Family Projections, Australia,* ABS Catalogue No. 3236.0, ABS, Canberra.

Australian Bureau of Statistics (2002) *Building Activity Australia*, ABS Catalogue No. 8752.0, ABS, Canberra.

Bell, M., Cooper, J. and Les, M. (1995) *Household and Family Forecasting Models: A Review*, Department of Housing and Regional Development, Canberra.

Hinde, A. (1998) Demographic Methods, Arnold, London.

King, A. (2000) AHURI Research Agenda for 2000: Overview paper on housing futures Australian Housing and Urban Research Institute, Melbourne.

McDonald, P. and Kippen, R. (1998) *Household Trends and Projections: Victoria 1986-2011*, Demography Program, Australian National University, Canberra.

McDonald, P. (2001) *Medium and long-term projections of housing needs in Australia*, Positioning Paper, AHURI, Melbourne (www.ahuri.edu.au).

APPENDIX: DETAILED DESCRIPTION OF GEOGRAPHIC REGIONS BY STATISTICAL LOCAL AREA (SLA)

No. Region	SLA Code	SLA Name
1010Inner Sydney	10150	Ashfield (A)
	11100	Botany Bay (C)
	12550	Drummoyne (A)
	14700	Lane Cove (A)
	14800	Leichhardt (A)
	15200	Marrickville (A)
	15350	Mosman (A)
	15950	North Sydney (A)
	16550	Randwick (C)
	17070	South Sydney (C)
	17201	Sydney (C) - Inner
	17202	Sydney (C) - Remainder
	18050	Waverley (A)
	18500	Woollahra (A)
1020Middle Sydney	10200	Auburn (A)
	10350	Bankstown (C)
	11300	Burwood (A)
	11550	Canterbury (C)
	11900	Concord (A)
	14100	Hunter's Hill (A)
	14150	Hurstville (C)
	14450	Kogarah (A)
	14500	Ku-ring-gai (A)
	15150	Manly (A)
	16250	Parramatta (C)
	16650	Rockdale (A)
	16700	Ryde (C)
	17100	Strathfield (A)
	18250	Willoughby (C)
1031 Outer Sydney North	10500	Baulkham Hills (A)
	13100	Gosford (C)
	13800	Hawkesbury (C)
	14000	Hornsby (A)
	16370	Pittwater (A)
	18000	Warringah (A)
	18550	Wyong (A)
1032Outer Sydney South	10750	Blacktown (C)
	10900	Blue Mountains (C)
	11450	Camden (A)
	11500	Campbelltown (C)

	12850	Fairfield (C)
	13950	Holrovd (C)
	1/000	Liverpool (C)
	16350	Poprith (C)
	17150	Fernin (C)
	17150	
	18400	
1040Hunter (NSW)	11/20	
	12700	Dungog (A)
	13050	Gloucester (A)
	13400	Great Lakes (A)
	14650	Lake Macquarie (C)
	15050	Maitland (C)
	15250	Merriwa (A)
	15600	Murrurundi (A)
	15650	Muswellbrook (A)
	15901	Newcastle (C) - Inner
	15902	Newcastle (C) - Remainder
	16400	Port Stephens (A)
	16800	Scone (A)
	17000	Singleton (A)
1050Illawarra (NSW)	14400	Kiama (A)
	16900	Shellharbour (C)
	16950	Shoalhaven (C)
	18350	Wingecarribee (A)
	18450	Wollongong (C)
1060 Richmond-Tweed (NSW)	10250	Ballina (A)
	11350	Byron (A)
	11650	Casino (A)
	14550	Kvogle (A)
	14850	Lismore (C)
	16600	Richmond River (A)
	17551	Tweed (Δ) - Pt Δ
	17552	Tweed $(A) = Pt B$
1070 Mid-North Coast (NSW)	10600	Bollingon (A)
	110000	Coffe Harbour (C)
	1000	Conmonburgt (A)
	12200	Copinalituist (A)
	13200	Gration (C)
	13350	Greater Taree (C)
	13750	Hastings (A)
	14350	Kempsey (A)
	15000	Maclean (A)
	15700	Nambucca (A)
	16050	Nymboida (A)
	17600	Ulmarra (A)
	18859	Lord Howe Island
1080Northern (NSW)	10100	Armidale (C)
	10400	Barraba (A)

	10700	Bingara (A)
	12650	Dumaresq (A)
	13000	Glen Innes (A)
	13550	Gunnedah (A)
	13650	Guyra (A)
	14201	Inverell (A) - Pt A
	14202	Inverell (A) - Pt B
	15100	Manilla (A)
	15300	Moree Plains (A)
	15750	Narrabri (A)
	16000	Nundle (A)
	16300	Parry (A)
	16500	Quirindi (A)
	16850	Severn (A)
	17300	Tamworth (C)
	17400	Tenterfield (A)
	17650	Uralla (A)
	17850	Walcha (A)
	18600	Yallaroi (A)
1090North Western (NSW)	10950	Bogan (A)
	11150	Bourke (A)
	11200	Brewarrina (A)
	11750	Cobar (A)
	11950	Coolah (A)
	12100	Coonabarabran (A)
	12150	Coonamble (A)
	12600	Dubbo (C)
	12950	Gilgandra (A)
	15400	Mudgee (A)
	15850	Narromine (A)
	17900	Walgett (A)
	17950	Warren (A)
	18150	Wellington (A)
1100Central West (NSW)	10450	Bathurst (C)
	10800	Bland (A)
	10851	Blayney (A) - Pt A
	10852	Blayney (A) - Pt B
	11401	Cabonne (A) - Pt A
	11402	Cabonne (A) - Pt B
	11403	Cabonne (A) - Pt C
	12350	Cowra (A)
	12801	Evans (A) - Pt A
	12802	Evans (A) - Pt B
	12900	Forbes (A)
	13300	Greater Lithgow (C)
	14600	Lachlan (A)
	16100	Oberon (A)

	16150	Orange (C)
	16200	Parkes (A)
	16750	Rylstone (A)
	18100	Weddin (A)
1110South Eastern (NSW)	10550	Bega Valley (A)
	11000	Bombala (A)
	11050	Boorowa (A)
	12050	Cooma-Monaro (A)
	12400	Crookwell (A)
	12750	Eurobodalla (A)
	13150	Goulburn (C)
	13600	Gunning (A)
	13700	Harden (A)
	15450	Mulwaree (A)
	16450	Queanbeyan (C)
	17050	Snowy River (A)
	17250	Tallaganda (A)
	18651	Yarrowlumla (A) - Pt A
	18652	Yarrowlumla (A) - Pt B
	18700	Yass (A)
	18750	Young (A)
1120Murrumbidgee (NSW)	11600	Carrathool (A)
	12000	Coolamon (A)
	12200	Cootamundra (A)
	13450	Griffith (C)
	13500	Gundagai (A)
	13850	Hay (A)
	14300	Junee (A)
	14750	Leeton (A)
	14950	Lockhart (A)
	15550	Murrumbidgee (A)
	15800	Narrandera (A)
	17350	Temora (A)
	17500	Tumut (A)
	17750	Wagga Wagga (C)
1130Murray (NSW)	10050	Albury (C)
	10300	Balranald (A)
	10650	Berrigan (A)
	11850	Conargo (A)
	12300	Corowa (A)
	12450	Culcairn (A)
	12500	Deniliquin (A)
	13900	Holbrook (A)
	14050	Hume (A)
	14250	Jerilderie (A)
	15500	Murray (A)
	17450	Tumbarumba (A)

	17700	Urana (A)
	17800	Wakool (A)
	18200	Wentworth (A)
	18300	Windouran (A)
1140Far West (NSW)	11250	Broken Hill (C)
	11700	Central Darling (A)
	18809	Unincorporated Far West
2001 Melbourne Inner	21891	Darebin (C) - Northcote
	24601	Melbourne (C) - Inner
	24602	Melbourne (C) - Remainder
	25251	Moreland (C) - Brunswick
	25901	Port Phillip (C) - St Kilda
	25902	Port Phillip (C) - West
	26351	Stonnington (C) - Prahran
	27351	Yarra (C) - North
	27352	Yarra (C) - Richmond
2002Melbourne East	20661	Banyule (C) - Heidelberg
	20911	Bayside (C) - Brighton
	20912	Bayside (C) - South
	21111	Boroondara (C) - Camberwell N.
	21112	Boroondara (C) - Camberwell S.
	21113	Boroondara (C) - Hawthorn
	21114	Boroondara (C) - Kew
	22311	Glen Eira (C) - Caulfield
	22314	Glen Eira (C) - South
	24211	Manningham (C) - East
	24214	Manningham (C) - West
	25713	Nillumbik (S) - South
	25715	Nillumbik (S) - South-West
	25718	Nillumbik (S) - Bal
	26352	Stonnington (C) - Malvern
	26981	Whitehorse (C) - Box Hill
2003Melbourne West	20662	Banyule (C) - North
	21181	Brimbank (C) - Keilor
	21182	Brimbank (C) - Sunshine
	21892	Darebin (C) - Preston
	23111	Hobsons Bay (C) - Altona
	23112	Hobsons Bay (C) - Williamstown
	23271	Hume (C) - Broadmeadows
	23274	Hume (C) - Craigieburn
	23275	Hume (C) - Sunbury
	24330	Maribybnong (C)
	24651	Melton (S) - East
	24654	Melton (S) - Bal
	25063	Moonee Valley (C) - Essendon
	25065	Moonee Valley (C) - West
	25252	Moreland (C) - Coburg

	25253	Moreland (C) - North
	27071	Whittlesea (C) - North
	27074	Whittlesea (C) - South
	27262	Wyndham (C) - North-West
	27265	Wyndham (C) - Werribee
	27268	Wyndham (C) - Bal
2004Melbourne South	21452	Cardinia (S) - North
	21453	Cardinia (S) - Pakenham
	21454	Cardinia (S) - South
	21612	Casey (C) - Berwick
	21613	Casey (C) - Cranbourne
	21616	Casey (C) - Hallam
	21618	Casey (C) - South
	22171	Frankston (C) - East
	22174	Frankston (C) - West
	22671	Gr. Dandenong (C) - Dandenong
	22674	Gr. Dandenong (C) Bal
	23431	Kingston (C) - North
	23434	Kingston (C) - South
	23671	Knox (C) - North
	23674	Knox (C) - South
	24411	Maroondah (C) - Croydon
	24412	Maroondah (C) - Ringwood
	24971	Monash (C) - South-West
	24974	Monash (C) - Waverley East
	24975	Monash (C) - Waverley West
	25341	Mornington P sula (S) - East
	25344	Mornington P sula (S) - South
	25345	Mornington P sula (S) - West
	26984	Whitehorse (C) - Nunawading E.
	26985	Whitehorse (C) - Nunawading W.
	27454	Yarra Ranges (S) - North
	27455	Yarra Ranges (S) - South-West
2040Barwon (Vic)	21751	Colac -Otway (S) - Colac
	21754	Colac -Otway (S) - North
	21755	Colac-Otway (S) - South
	21832	Corangamite (S) - South
	22492	Golden Plains (S) - South-East
	22751	Bellarine - Inner
	22752	Corio - Inner
	22753	Geelong
	22754	Geelong West
	22755	Newtown
	22756	South Barwon - Inner
	22757	Greater Geelong (C) - Pt B
	22758	Greater Geelong (C) - Pt C
	26080	Queenscliffe (B)

	26493	Surf Coast (S) - East
	26495	Surf Coast (S) - West
2050Western District (Vic)	21831	Corangamite (S) - North
	22411	Glenelg (S) - Heywood
	22412	Glenelg (S) - North
	22413	Glenelg (S) - Portland
	25491	Moyne (S) - North-East
	25493	Moyne (S) - North-West
	25496	Moyne (S) - South
	26261	S. Grampians (S) - Hamilton
	26264	S. Grampians (S) - Wannon
	26265	S. Grampians (S) Bal
	26730	Warrnambool (C)
2060Central Highlands (Vic)	20260	Ararat (RC)
	20571	Ballarat (C) - Central
	20572	Ballarat (C) - Inner North
	20573	Ballarat (C) - North
	20574	Ballarat (C) - South
	22491	Golden Plains (S) - North-West
	25151	Moorabool (S) - Bacchus Marsh
	25154	Moorabool (S) - Ballan
	25155	Moorabool (S) - West
	25991	Pyrenees (S) - North
	25994	Pyrenees (S) - South
2070Wimmera (Vic)	22980	Hindmarsh (S)
	23191	Horsham (RC) - Central
	23194	Horsham (RC) - Bal
	25811	N. Grampians (S) - St Arnaud
	25814	N. Grampians (S) - Stawell
	26890	West Wimmera (S)
	27631	Yarriambiack (S) - North
	27632	Yarriambiack (S) - South
2080Mallee (Vic)	21271	Buloke (S) - North
	21272	Buloke (S) - South
	22250	Gannawarra (S)
	24781	Mildura (RC) - Pt A
	24782	Mildura (RC) - Pt B
	26611	Swan Hill (RC) - Central
	26614	Swan Hill (RC) Robinvale
	26616	Swan Hill (RC) Bal
2090Loddon (Vic)	21671	C. Goldfields (S) - M'borough
	21674	C. Goldfields (S) Bal
	22621	Gr. Bendigo (C) - Central
	22622	Gr. Bendigo (C) - Eaglehawk
	22623	Gr. Bendigo (C) - Inner East
	22624	Gr. Bendigo (C) - Inner North
	22625	Gr. Bendigo (C) - Inner West

	22626	Gr. Bendigo (C) - S'saye
	22628	Gr. Bendigo (C) - Pt B
	22911	Hepburn (S) - East
	22912	Hepburn (S) - West
	23943	Loddon (S) - North
	23945	Loddon (S) - South
	24131	Macedon Ranges (S) - Kyneton
	24134	Macedon Ranges (S) - Romsey
	24135	Macedon Ranges (S) Bal
	25431	Mount Alexander (S) - C'maine
	25434	Mount Alexander (S) Bal
2100Goulburn (Vic)	21371	Campaspe (S) - Echuca
	21374	Campaspe (S) - Kyabram
	21375	Campaspe (S) - Rochester
	21376	Campaspe (S) - South
	21951	Delatite (S) - Benalla
	21954	Delatite (S) - North
	21955	Delatite (S) - South
	22831	Gr. Shepparton (C) - Pt A
	22834	Gr. Shepparton (C) - Pt B East
	22835	Gr. Shepparton (C) - Pt B West
	24851	Mitchell (S) - North
	24854	Mitchell (S) - South
	24901	Moira (S) - East
	24904	Moira (S) - West
	25621	Murrindindi (S) - East
	25622	Murrindindi (S) - West
	26430	Strathbogie (S)
2110Ovens-Murray (Vic)	20111	Alpine (S) - East
	20112	Alpine (S) - West
	23351	Indigo (S) - Pt A
	23352	Indigo (S) - Pt B
	26671	Towong (S) - Pt A
	26672	Towong (S) - Pt B
	26701	Wangaratta (RC) - Central
	26704	Wangaratta (RC) - North
	26705	Wangaratta (RC) - South
	27170	Wodonga (RC)
2120East Gippsland (Vic)	22111	E. Gippsland (S) - Bairnsdale
	22113	E. Gippsland (S) - Orbost
	22115	E. Gippsland (S) - South-West
	22117	E. Gippsland (S) Bal
	26812	Wellington (S) - Avon
	26813	Wellington (S) - Maffra
	26815	Wellington (S) - Sale
2130Gippsland (Vic)	20741	Bass Coast (S) - Phillip Is.
	20744	Bass Coast (S) Bal

	20831	Baw Baw (S) - Pt A
	20834	Baw Baw (S) - Pt B East
	20835	Baw Baw (S) - Pt B West
	23811	La Trobe (S) - Moe
	23814	La Trobe (S) - Morwell
	23815	La Trobe (S) - Traralgon
	23818	La Trobe (S) Bal
	26171	South Gippsland (S) - Central
	26174	South Gippsland (S) - East
	26175	South Gippsland (S) - West
	26811	Wellington (S) - Alberton
	26814	Wellington (S) - Rosedale
	27451	Yarra Ranges (S) - Central
	27458	Yarra Ranges (S) - Pt B
	28509	Yallourn Works Area
3010Inner Brisbane	31067	Bowen Hills
	31143	City - Inner
	31146	City - Remainder
	31187	Dutton Park
	31195	East Brisbane
	31228	Fortitude Valley - Inner
	31233	Fortitude Valley - Remainder
	31274	Herston
	31277	Highgate Hill
	31304	Kangaroo Point
	31315	Kelvin Grove
	31378	Milton
	31421	New Farm
	31427	Newstead
	31454	Paddington
	31481	Red Hill
	31525	South Brisbane
	31528	Spring Hill
	31607	West End
	31631	Woolloongabba
3020Middle Brisbane	31004	Albion
	31007	Alderley
	31015	Annerley
	31026	Ascot
	31031	Ashgrove
	31042	Balmoral
	31048	Bardon
	31086	Bulimba
	31097	Camp Hill
	31102	Cannon Hill
	31113	Carina
	31116	Carina Heights

31127	Chapel Hill
31132	Chelmer
31135	Chermside
31151	Clayfield
31154	Coopers Plains
31157	Coorparoo
31162	Corinda
31214	Fairfield
31222	Fig Tree Pocket
31241	Graceville
31244	Grange
31247	Greenslopes
31255	Hamilton
31258	Hawthorne
31271	Hendra
31282	Holland Park
31285	Holland Park West
31293	Indooroopilly
31296	Jamboree Heights
31301	Jindalee
31312	Kedron
31318	Kenmore
31345	Lutwyche
31356	MacGregor
31375	Middle Park
31391	Moorooka
31397	Morningside
31402	Mount Gravatt
31405	Mount Gravatt East
31408	Mount Ommanev
31413	Murarrie
31416	Nathan
31424	Newmarket
31432	Norman Park
31446	Nundah
31451	Oxlev
31487	Riverhills
31492	Robertson
31498	Rocklea
31506	St Lucia
31511	Salisbury
31517	Seventeen Mile Rocks
31522	Sherwood
31533	Stafford
31536	Stafford Heights
31547	Sunnybank
31558	Taringa

31563	Tarragindi
31574	Toowong
31588	Upper Mount Gravatt
31604	Wavell Heights
31612	Westlake
31618	Wilston
31623	Windsor
31634	Wooloowin
31645	Yeerongpilly
31648	Yeronga
31001	Acacia Ridge
31012	Algester
31018	Anstead
31023	Archerfield
31034	Aspley
31037	Bald Hills
31045	Banyo
31053	Bellbowrie
31057	Belmont-Mackenzie
31062	Berrinba-Karawatha
31064	Boondall
31072	Bracken Ridge
31075	Bridgeman Downs
31078	Brighton
31083	Brookfield (incl. Mt Coot-tha)
31091	Burbank
31094	Calamvale
31105	Capalaba West
31108	Carindale
31121	Carseldine
31124	Chandler
31138	Chermside West
31167	Darra-Sumner
31173	Deagon
31176	Doolandella-Forest Lake
31184	Durack
31198	Eight Mile Plains
31203	Ellen Grove
31206	Enoggera
31211	Everton Park
31217	Ferny Grove
31236	Geebung
31252	Gumdale
31265	Hemmant-Lytton
31288	Inala
31323	Kenmore Hills
31326	Keperra

3030Outer Brisbane

31331	Kuraby
31337	Lota
31353	McDowall
31364	Manly
31367	Manly West
31372	Mansfield
31383	Mitchelton
31386	Moggill
31394	Moreton Island
31435	Northgate
31438	Nudgee
31443	Nudgee Beach
31456	Pallara-Heathwood-Larapinta
31463	Parkinson-Drewvale
31465	Pinjarra Hills
31467	Pinkenba-Eagle Farm
31473	Pullenvale
31476	Ransome
31484	Richlands
31495	Rochedale
31503	Runcorn
31514	Sandgate
31541	Stretton-Karawatha
31552	Sunnybank Hills
31556	Taigum-Fitzgibbon
31566	The Gap (incl. Enoggera Res.)
31571	Tingalpa
31582	Upper Brookfield
31585	Upper Kedron
31593	Virginia
31596	Wacol
31601	Wakerley
31615	Willawong
31626	Wishart
31637	Wynnum
31642	Wynnum West
31653	Zillmere
34601	Browns Plains
34603	Carbrook-Cornubia
34605	Daisy Hill-Priestdale
34608	Greenbank - Pt B
34612	Kingston
34615	Loganholme
34618	Loganlea
34623	Marsden
34631	Rochedale South
34634	Shailer Park

34637	Slacks Creek
34642	Springwood
34645	Tanah Merah
34651	Underwood
34654	Waterford West
34656	Woodridge
34663	Logan (C) - Bal
35951	Albany Creek
35954	Arana Hills
35957	Bray Park
35962	Everton Hills
35965	Ferny Hills
35968	Kallangur
35973	Lawnton
35974	Petrie
35976	Strathpine
35983	Pine Rivers (S) - Bal
36201	Clontarf
36204	Margate-Woody Point
36206	Redcliffe-Scarborough
36208	Rothwell-Kippa-Ring
36251	Alexandra Hills
36254	Birkdale
36257	Capalaba
36262	Cleveland
36264	Ormiston
36265	Redland Bay
36267	Sheldon-Mt Cotton
36268	Thorneside
36271	Thornlands
36273	Victoria Point
36276	Wellington Point
36283	Redland (S) - Bal
33461	Beenleigh
33463	Bethania-Waterford
33466	Eagleby
33471	Edens Landing-Holmview
33476	Mt Warren Park
33494	Windarroo-Bannockburn
33496	Gold Coast (C) Bal in BSD
33497	Arundel
33501	Ashmore
33504	Benowa
33507	Biggera Waters
33512	Bilinga
33513	Broadbeach
33515	Broadbeach Waters

3040 Gold Coast (Qld)

	33517	Bundall
	33521	Burleigh Heads
	33523	Burleigh Waters
	33525	Carrara-Merrimac
	33527	Coolangatta
	33531	Coombabah
	33532	Coomera-Cedar Creek
	33533	Currumbin
	33535	Currumbin Waters
	33537	Elanora
	33541	Ernest-Molendinar
	33542	Guanaba-Currumbin Valley
	33543	Helensvale
	33545	Hollywell
	33547	Hope Island
	33548	Kerrydale-Stephens
	33553	Labrador
	33555	Main Beach-Broadwater
	33557	Mermaid Beach
	33561	Mermaid Waters
	33563	Miami
	33565	Mudgeeraba
	33567	Nerang
	33571	Oxenford
	33573	Palm Beach
	33575	Paradise Point
	33577	Parkwood
	33581	Robina-Clear Island Waters
	33583	Runaway Bay
	33585	Southport
	33587	Surfers Paradise
	33591	Tugun
	33593	Worongary-Tallai
3050 lpswich (Qld)	30551	Greenbank - Pt A
	30554	Beaudesert (S) - Bal in BSD
	30557	Beaudesert (S) - Pt B
	30800	Boonah (S)
	33050	Esk (S)
	33250	Gatton (S)
	33962	lpswich (C) - Central
	33965	lpswich (C) - East
	33968	Ipswich (C) North
	33973	Ipswich (C) - South-West
	33976	lpswich (C) - West
	34450	Laidley (S)
3060Caboolture (Qld)	32002	Bribie Island
	32005	Burpengary-Narangba

	32008	Caboolture (S) - Central
	32013	Caboolture (S) - East
	32016	Deception Bay
	32018	Morayfield
	32023	Caboolture (S) Bal in BSD
	32031	Caboolture (S) - Pt B
	32132	Caloundra (C) - Caloundra N.
	32133	Caloundra (C) - Caloundra S.
	32135	Caloundra (C) - Kawana
	32136	Caloundra (C) - Hinterland
	32138	Caloundra (C) - Rail Corridor
	34250	Kilcoy (S)
	34902	Maroochy (S) - Buderim
	34905	Maroochy (S) - Coastal North
	34907	Maroochy (S) - Maroochydore
	34911	Maroochy (S) - Mooloolaba
	34914	Maroochy (S) - Nambour
	34917	Maroochy (S) Bal in S C'st SSD
	34918	Maroochy (S) Bal
	35752	Noosa (S) - Noosa-Noosaville
	35755	Noosa (S) - Sunshine-Peregian
	35756	Noosa (S) - Tewantin
	35758	Noosa (S) Bal
3070Wide Bay-Burnett (Qld)	30700	Biggenden (S)
	31810	Bundaberg (C)
	31981	Burnett (S) - Pt A
	31984	Burnett (S) - Pt B
	32532	Cooloola (S) (excl. Gympie)
	32535	Cooloola (S) (Gympie only)
	32950	Eidsvold (S)
	33300	Gayndah (S)
	33750	Hervey Bay (C)
	34000	lsis (S)
	34300	Kilkivan (S)
	34350	Kingaroy (S)
	34400	Kolan (S)
	34950	Maryborough (C)
	35100	Miriam Vale (S)
	35150	Monto (S)
	35450	Mundubbera (S)
	35500	Murgon (S)
	35650	Nanango (S)
	35900	Perry (S)
	36850	Tiaro (S)
	37450	Wondai (S)
	37500	Woocoo (S)
3080Darling Downs (Qld)	32150	Cambooya (S)

	32350	Chinchilla (S)
	32400	Clifton (S)
	32550	Crow's Nest (S)
	32650	Dalby (T)
	33600	Goondiwindi (T)
	33900	Inglewood (S)
	34200	Jondaryan (S)
	35000	Millmerran (S)
	35550	Murilla (S)
	36050	Pittsworth (S)
	36450	Rosalie (S)
	36600	Stanthorpe (S)
	36700	Tara (S)
	36750	Taroom (S)
	36901	Toowoomba (C) - Central
	36903	Toowoomba (C) - North-East
	36905	Toowoomba (C) - North-West
	36906	Toowoomba (C) - South-East
	36908	Toowoomba (C) - West
	37100	Waggamba (S)
	37150	Wambo (S)
	37262	Warwick (S) - Central
	37263	Warwick (S) - East
	37265	Warwick (S) - North
	37266	Warwick (S) - West
h West (Qld)	30300	Balonne (S)
	30650	Bendemere (S)
	30850	Booringa (S)
	31750	Bulloo (S)
	31850	Bungil (S)
	33151	Fitzroy (S) - Pt A
	35600	Murweh (S)
	35800	Paroo (S)
	36150	Quilpie (S)
	36400	Roma (T)
	37200	Warroo (S)
oy (Qld)	30350	Banana (S)
	30500	Bauhinia (S)
	32101	Calliope (S) - Pt A
	32104	Calliope (S) - Pt B
	32850	Duaringa (S)
	33000	Emerald (S)
	33154	Fitzroy (S) - Pt B
	33350	Gladstone (C)
	34100	Jericho (S)
	34550	Livingstone (S)
	35350	Mount Morgan (S)

3090 Sout

3100Fitzro

	35850	Peak Downs (S)
	36350	Rockhampton (C)
3110Central West (Qld)	30150	Aramac (S)
	30400	Barcaldine (S)
	30450	Barcoo (S)
	30750	Blackall (S)
	30900	Boulia (S)
	32750	Diamantina (S)
	33850	Ilfracombe (S)
	34050	Isisford (S)
	34700	Longreach (S)
	36650	Tambo (S)
	37400	Winton (S)
3120Mackay (Qld)	30600	Belyando (S)
	31700	Broadsound (S)
	34762	Mackay (C) - Pt A
	34765	Mackay (C) - Pt B
	35050	Mirani (S)
	35700	Nebo (S)
	36550	Sarina (S)
	37330	Whitsunday (S)
3130Northern (Qld)	30950	Bowen (S)
	31900	Burdekin (S)
	32300	Charters Towers (C)
	32700	Dalrymple (S)
	33800	Hinchinbrook (S)
	36801	Kelso
	36804	Kirwan
	36807	Thuringowa (C) - Pt A Bal
	36831	Thuringowa (C) - Pt B
	37001	Aitkenvale
	37003	City
	37007	Cranbrook
	37012	Currajong
	37014	Douglas
	37015	Garbutt
	37018	Gulliver
	37023	Heatley
	37026	Hermit Park
	37027	Hyde Park-Mysterton
	37031	Magnetic Island
	37033	Mt Louisa-Mt St John-Bohle
	37034	Mundingburra
	37038	Murray
	37041	North Ward-Castle Hill
	37044	Oonoonba-Idalia-Cluden
	37047	Pallarenda-Shellev Beach
	-	

	37051	Pimlico
	37054	Railway Estate
	37058	Rosslea
	37062	Rowes Bay-Belgian Gardens
	37065	South Townsville
	37068	Stuart-Roseneath
	37071	Vincent
	37074	West End
	37078	Wulguru
	37084	Towns ville (C) - Pt B
3140Far North (Qld)	30200	Atherton (S)
	30250	Aurukun (S)
	32062	Cairns (C) - Barron
	32065	Cairns (C) - Central Suburbs
	32066	Cairns (C) - City
	32068	Cairns (C) - Mt Whitfield
	32072	Cairns (C) - Northern Suburbs
	32074	Cairns (C) - Trinity
	32076	Cairns (C) - Western Suburbs
	32078	Cairns (C) - Pt B
	32200	Cardwell (S)
	32501	Cook (S) (excl. Weipa)
	32504	Cook (S) - Weipa only
	32600	Croydon (S)
	32800	Douglas (S)
	32900	Eacham (S)
	33100	Etheridge (S)
	33700	Herberton (S)
	34150	Johnstone (S)
	34850	Mareeba (S)
	36950	Torres (S)
3150North West (Qld)	31950	Burke (S)
	32250	Carpentaria (S)
	32450	Cloncurry (S)
	33200	Flinders (S)
	34800	McKinlay (S)
	35250	Mornington (S)
	35300	Mount Isa (C)
	36300	Richmond (S)
4010 Inner Adelaide	40070	Adelaide (C)
	43150	Kensington & Norwood (C)
	46510	Prospect (C)
	47070	St Peters (M)
	47980	Unley (C)
	48260	Walkerville (M)
4020 Middle Adelaide	40560	Brighton (C)
	40700	Burnside (C)

	40910	Campbelltown (C)
	41821	Enfield (C) - Pt A
	41822	Enfield (C) - Pt B
	42240	Glenelg (C)
	42590	Henley & Grange (C)
	42670	Hindmarsh and Woodville (C)
	44060	Marion (C)
	44340	Mitcham (C)
	45530	Payneham (C)
	46020	Port Adelaide (C)
	47770	Thebarton (M)
	48470	West Torrens (C)
4030Outer Adelaide	41610	East Torrens (DC)
	41680	Elizabeth (C)
	42030	Gawler (M)
	42450	Happy Valley (C)
	44900	Munno Para (C)
	45250	Noarlunga (C)
	47140	Salisbury (C)
	47350	Stirling (DC)
	47700	Tea Tree Gully (C)
	48610	Willunga (DC)
4040Eyre (SA)	41010	Ceduna (DC)
	41190	Cleve (DC)
	41750	Elliston (DC)
	41960	Franklin Harbor (DC)
	43220	Kimba (DC)
	43570	Le Hunte (DC)
	43710	Lower Eyre Peninsula (DC)
	46300	Port Lincoln (C)
	47490	Streaky Bay (DC)
	47910	Tumby Bay (DC)
	49249	Unincorp. West Coast
4050Murray Lands (SA)	40210	Barmera (DC)
	40420	Berri (DC)
	40630	Browns Well (DC)
	41400	Coonalpyn Downs (DC)
	43080	Karoonda-East Murray (DC)
	43430	Lameroo (DC)
	43780	Loxton (DC)
	43990	Mannum (DC)
	44130	Meningie (DC)
	44480	Morgan (DC)
	45040	Murray Bridge (DC)
	45460	Paringa (DC)
	45600	Peake (DC)
	45880	Pinnaroo (DC)

	46650	Renmark (M)
	46730	Ridley-Truro (DC)
	48120	Waikerie (DC)
4060Northern (SA)	40980	Carrieton (DC)
	41330	Coober Pedy (DC)
	41480	Crystal Brook -Redhill (DC)
	42380	Hallett (DC)
	42520	Hawker (DC)
	42740	Jamestown (DC)
	42940	Kanyaka-Quorn (DC)
	44830	Mount Remarkable (DC)
	45390	Orroroo (DC)
	45740	Peterborough (M)
	45810	Peterborough (DC)
	45950	Pirie (DC)
	46090	Port Augusta (C)
	46440	Port Pirie (C)
	46950	Rocky River (DC)
	46970	Roxby Downs (M)
	48540	Whyalla (C)
	49389	Unincorp. Whyalla
	49459	Unincorp. Pirie
	49529	Unincorp. Flinders Ranges
	49589	Unincorp. Far North
4070 Peri-metro Adelaide	40140	Angaston (DC)
	40280	Barossa (DC)
	41540	Dudley (DC)
	42310	Gumeracha (DC)
	43010	Kapunda (DC)
	43290	Kingscote (DC)
	43640	Light (DC)
	43920	Mallala (DC)
	44550	Mount Barker (DC)
	44760	Mount Pleasant (DC)
	45320	Onkaparinga (DC)
	46230	Port Elliot & Goolwa (DC)
	47420	Strathalbyn (DC)
	47560	Tanunda (DC)
	48050	Victor Harbor (DC)
	48750	Yankalilla (DC)
4080South East (SA)	40350	Beachport (DC)
	43360	Lacepede (DC)
	43850	Lucindale (DC)
	44200	Millicent (DC)
	44620	Mount Gambier (C)
	44690	Mount Gambier (DC)
	45110	Naracoorte (M)

	45180	Naracoorte (DC)
	45670	Penola (DC)
	46370	Port MacDonnell (DC)
	46860	Robe (DC)
	47630	Tatiara (DC)
4090 York & Lower North (SA)	40510	Blyth-Snowtown (DC)
	40770	Burra Burra (DC)
	40840	Bute (DC)
	41040	Central Yorke Peninsula (DC)
	41120	Clare (DC)
	41890	Eudunda (DC)
	44270	Minlaton (DC)
	45280	Northern Yorke Peninsula (DC)
	46160	Port Broughton (DC)
	46790	Riverton (DC)
	46930	Robertstown (DC)
	47000	Saddleworth & Auburn (DC)
	47280	Spalding (DC)
	48190	Wakefield Plains (DC)
	48330	Wallaroo (M)
	48400	Warooka (DC)
	48820	Yorketown (DC)
5010Inner Perth	51310	Cambridge (T)
	51750	Claremont (T)
	52170	Cottesloe (T)
	53150	East Fremantle (T)
	53431	Fremantle (C) - Inner
	53432	Fremantle (C) - Remainder
	55740	Mosman Park (T)
	56580	Nedlands (C)
	56930	Peppermint Grove (S)
	57081	Perth (C) - Inner
	57082	Perth (C) - Remainder
	57840	South Perth (C)
	57980	Subiaco (C)
	58510	Victoria Park (T)
	58570	Vincent (T)
5020Middle Perth	50350	Bassendean (T)
	50420	Bayswater (C)
	50490	Belmont (C)
	51330	Canning (C)
	55320	Melville (C)
	57914	Stirling (C) - Central
	57915	Stirling (C) - Coastal
	57916	Stirling (C) - South-Eastern
5030Outer Perth	50210	Armadale (C)
	51820	Cockburn (C)

	53780	Gosnells (C)
	54200	Kalamunda (S)
	54830	Kwinana (T)
	56090	Mundaring (S)
	57490	Rockingham (C)
	57700	Serpentine-Jarrahdale (S)
	58050	Swan (S)
	58751	Wanneroo (C) - Central Coastal
	58753	Wanneroo (C) - North-East
	58755	Wanneroo (C) - North-West
5040South West (WA)	58757	Wanneroo (C) - South-East
	58758	Wanneroo (C) - South-West
	50280	Augusta-Margaret River (S)
	50630	Boddington (S)
	50770	Boyup Brook (S)
	50840	Bridgetown-Greenbushes (S)
	51190	Bunbury (C)
	51260	Busselton (S)
	51400	Capel (S)
	51890	Collie (S)
	52660	Dardanup (S)
	52870	Donnybrook-Balingup (S)
	53990	Harvey (S)
	55110	Mandurah (C)
	55180	Manjimup (S)
	56230	Murray (S)
	56300	Nannup (S)
	58820	Waroona (S)
5050Lower Greater Southern (WA)50070	Albany (T)
	50140	Albany (S)
	51050	Broomehill (S)
	52240	Cranbrook (S)
	52730	Denmark (S)
	53640	Gnowangerup (S)
	54130	Jerramungup (S)
	54340	Katanning (S)
	54480	Kent (S)
	54550	Kojonup (S)
	57210	Plantagenet (S)
	58120	Tambellup (S)
	59380	Woodanilling (S)
5060Upper Great Southern (WA)	50910	Brookton (S)
	52100	Corrigin (S)
	52310	Cuballing (S)
	53010	Dumbleyung (S)
	54620	Kondinin (S)
	54760	Kulin (S)

	54900	Lake Grace (S)
	56440	Narrogin (T)
	56510	Narrogin (S)
	57140	Pingelly (S)
	58610	Wagin (S)
	58680	Wandering (S)
	58890	West Arthur (S)
	59100	Wickepin (S)
	59170	Williams (S)
5070Midlands (WA)	50560	Beverlev (S)
	51120	Bruce Rock (S)
	51680	Chittering (S)
	52450	Cunderdin (S)
	52520	Dalwallinu (S)
	52590	Dandaragan (S)
	52940	Dowerin (S)
	53570	Gingin (S)
	53710	Goomalling (S)
	54410	Kellerberrin (S)
	54690	Koorda (S)
	55460	Merredin (S)
	55600	Moora (S)
	55880	Mount Marshall (S)
	55950	Mukinbudin (S)
	56370	Narembeen (S)
	56650	Northam (T)
	56720	Northam (S)
	56860	Nungarin (S)
	57350	Quairading (S)
	58190	Tammin (S)
	58330	Toodvay (S)
	58400	Travning (S)
	58540	Victoria Plains (S)
	50070	Westonia (S)
	59310	Wongan-Ballidu (S)
	59450	Wyalkatchem (S)
	59660	Vilgarn (S)
	59730	York (S)
5080 South Eastern (M/A)	51960	Coolgardie (S)
	53080	Dundas (S)
	53200	Esperance (S)
	54280	Kalgoorlio/Bouldor (C)
	54200	Lavorton (S)
	54970	Lavenun (3)
	55040	Leonora (S)
	57400	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
E000 Control (\\/\)	57420	Corporate (S)
	51470	Camaman (S)

	51540	Carnarvon (S)
	51610	Chapman Valley (S)
	52030	Coorow (S)
	52380	Cue (S)
	53360	Exmouth (S)
	53500	Geraldton (C)
	53850	Greenough (S)
	54060	Irwin (S)
	55250	Meekatharra (S)
	55530	Mingenew (S)
	55670	Morawa (S)
	55810	Mount Magnet (S)
	56020	Mullewa (S)
	56160	Murchison (S)
	56620	Ngaanyatjarraku (S)
	56790	Northampton (S)
	57000	Perenjori (S)
	57770	Shark Bay (S)
	58260	Three Springs (S)
	59250	Wiluna (S)
	59590	Yalgoo (S)
5100Pilbara (WA)	50250	Ashburton (S)
	53220	East Pilbara (S)
	57280	Port Hedland (T)
	57560	Roebourne (S)
5110Kimberley (WA)	50980	Broome (S)
	52800	Derby-West Kimberley (S)
	53920	Halls Creek (S)
	59520	Wyndham-East Kimberley (S)
6010Greater Hobart	60410	Brighton (M)
	61410	Clarence (C)
	61511	Derwent Valley (M) - Pt A
	62410	Glamorgan/Spring Bay (M)
	62610	Glenorchy (C)
	62811	Hobart (C) - Inner
	62812	Hobart (C) - Remainder
	63611	Kingborough (M) - Pt A
	64811	Sorell (M) - Pt A
	64812	Sorell (M) - Pt B
	65010	Southern Midlands (M)
	65210	Tasman (M)
6020Southern (TAS)	61010	Central Highlands (M)
	61512	Derwent Valley (M) - Pt B
	63010	Huon Valley (M)
	63612	Kingborough (M) - Pt B
6030Northern (TAS)	60210	Break O'Day (M)
	61810	Dorset (M)

	62010	Flinders (M)
	62211	George Town (M) - Pt A
	62212	George Town (M) - Pt B
	64011	Launceston (C) - Inner
	64012	Launceston (C) - Pt B
	64013	Launceston (C) - Pt C
	64211	Meander Valley (M) - Pt A
	64212	Meander Valley (M) - Pt B
	64611	Northern Midlands (M) - Pt A
	64612	Northern Midlands (M) - Pt B
	65811	West Tamar (M) - Pt A
	65812	West Tamar (M) - Pt B
6040Mersey-Lyell (TAS)	60611	Burnie (C) - Pt A
	60612	Burnie (C) - Pt B
	60811	Central Coast (M) - Pt A
	60812	Central Coast (M) - Pt B
	61210	Circular Head (M)
	61610	Devonport (C)
	63210	Kentish (M)
	63410	King Island (M)
	63811	Latrobe (M) - Pt A
	63812	Latrobe (M) - Pt B
	65411	Waratah/Wynyard (M) - Pt A
	65412	Waratah/Wynyard (M) - Pt B
	65610	West Coast (M)
7010Darwin		
7020Northern Territory - Balance		

8010ACT

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