

*Final Report*

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

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# TABLE OF CONTENTS

|           |                                                                                                  |           |
|-----------|--------------------------------------------------------------------------------------------------|-----------|
| <b>1</b>  | <b>Introduction .....</b>                                                                        | <b>1</b>  |
| 1.1       | Introduction .....                                                                               | 1         |
| 1.2       | Brief Methodological Description.....                                                            | 1         |
| 1.3       | Geographic Classification.....                                                                   | 3         |
| 1.4       | Regional Projection Assumptions .....                                                            | 3         |
| <b>2</b>  | <b>Description of Summary Results .....</b>                                                      | <b>5</b>  |
| <b>3</b>  | <b>Summary Results for New South Wales and ACT .....</b>                                         | <b>6</b>  |
| 3.1       | Population and demographic trends (Table 3.1) .....                                              | 6         |
| 3.1.1     | Regional variations in household type in 1996 (Table 3.2) .....                                  | 7         |
| 3.1.2     | Growth of households by type (Table 3.3).....                                                    | 8         |
| 3.1.3     | Growth in dwellings by type (Table 3.4) .....                                                    | 10        |
| <b>4</b>  | <b>Summary Results for Victoria.....</b>                                                         | <b>12</b> |
| 4.1       | Population and demographic trends (Table 4.1) .....                                              | 12        |
| 4.2       | Regional variations in household type in 1996 (Table 4.2) .....                                  | 12        |
| 4.3       | Growth of households by type (Table 4.3) .....                                                   | 13        |
| 4.4       | Growth in dwellings by type (Table 4.4).....                                                     | 14        |
| <b>5</b>  | <b>Summary Results for Queensland.....</b>                                                       | <b>16</b> |
| 5.1       | Population and demographic trends (Table 5.1) .....                                              | 16        |
| 5.2       | Regional variations in household type in 1996 (Table 5.2) .....                                  | 17        |
| 5.3       | Growth of households by type (Table 5.3) .....                                                   | 17        |
| 5.4       | Growth in dwellings by type (Table 5.4).....                                                     | 18        |
| <b>6</b>  | <b>Summary Results for South Australia.....</b>                                                  | <b>20</b> |
| 6.1       | Population and demographic trends (Table 6.1) .....                                              | 20        |
| 6.2       | Regional variations in household type in 1996 (Table 6.2) .....                                  | 20        |
| 6.3       | Growth of households by type (Table 6.3) .....                                                   | 21        |
| 6.4       | Growth in dwellings by type (Table 6.4).....                                                     | 21        |
| <b>7</b>  | <b>Chapter 7. Summary Results for Western Australia.....</b>                                     | <b>23</b> |
| 7.1       | Population and demographic trends (Table 7.1) .....                                              | 23        |
| 7.2       | Regional variations in household type in 1996 (Table 7.2) .....                                  | 23        |
| 7.3       | Growth of households by type (Table 7.3) .....                                                   | 24        |
| 7.4       | Growth in dwellings by type (Table 7.4).....                                                     | 24        |
| <b>8</b>  | <b>Summary Results for Tasmania.....</b>                                                         | <b>26</b> |
| <b>9</b>  | <b>Summary Results for Northern Territory.....</b>                                               | <b>28</b> |
| <b>10</b> | <b>General Conclusions for Australia from the Regional Projections, 1996-2011.....</b>           | <b>30</b> |
| <b>11</b> | <b>Long-Term Projections for States and Territories (1996-2031).....</b>                         | <b>31</b> |
|           | <b>REFERENCES.....</b>                                                                           | <b>35</b> |
|           | <b>Appendix: Detailed Description of Geographic Regions by Statistical Local Area (SLA) ....</b> | <b>36</b> |

# 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 one-parent 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)<sup>1</sup>. 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 category<sup>2</sup>. 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

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<sup>1</sup> 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).

<sup>2</sup> 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, Chapter 17).

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 tables<sup>3</sup> 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.

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<sup>3</sup> 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.

**Table 3.1. New South Wales and the Australian Capital Territory**

| Region                  | 2011 |                                                         |             |           |                      | Total 1996 population | Ratio of 2011 population to 1996 population | Increment to population 2002-2011 |
|-------------------------|------|---------------------------------------------------------|-------------|-----------|----------------------|-----------------------|---------------------------------------------|-----------------------------------|
|                         | TFR  | Stdised annual net migration rate (per 1000 population) |             |           | Annual net migration |                       |                                             |                                   |
|                         |      | 20-24 years                                             | 30-49 years | 50+ years |                      |                       |                                             |                                   |
| 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                            |

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.

**Table 3.2. New South Wales and the Australian Capital Territory**

| Region                  | Percentage distribution of households in 1996 |                   |                          |                        |                  | Total |
|-------------------------|-----------------------------------------------|-------------------|--------------------------|------------------------|------------------|-------|
|                         | 2-parent families                             | 1-parent families | Couples without children | Lone person households | Group households |       |
| 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 |

### 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 immigration 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

**Table 3.3. New South Wales and the Australian Capital Territory**

| Region                  | Ratio of households in 2011 to households in 1996 |                   |                          |                        |                  |                  | Ratio of persons in NPDs in 2011 to persons in NPDs in 1996 |
|-------------------------|---------------------------------------------------|-------------------|--------------------------|------------------------|------------------|------------------|-------------------------------------------------------------|
|                         | 2-parent families                                 | 1-parent families | Couples without children | Lone person households | Group households | Total households |                                                             |
| 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                                                        |

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 24%. Following Murray, is Richmond-Tweed where the demand for all 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.

**Table 3.4. New South Wales and the Australian Capital Territory**

| Region                  | Ratio of dwellings in 2011 to dwellings in 1996 |                 |                 | Increment to total dwellings 2002-2011 |
|-------------------------|-------------------------------------------------|-----------------|-----------------|----------------------------------------|
|                         | Separate house                                  | Other dwellings | Total dwellings |                                        |
| 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                                  |

## 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.

**Table 4.1. Victoria**

| Region                 | 2011 |                                                         |             |           | Annual net migration | Total 1996 population | Ratio of 2011 population to 1996 population | Increment to population 2002-2011 |
|------------------------|------|---------------------------------------------------------|-------------|-----------|----------------------|-----------------------|---------------------------------------------|-----------------------------------|
|                        | TFR  | Stdised annual net migration rate (per 1000 population) |             |           |                      |                       |                                             |                                   |
|                        |      | 20-24 years                                             | 30-49 years | 50+ years |                      |                       |                                             |                                   |
| 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**

| Region                 | Percentage distribution of households in 1996 |                   |                          |                        |                  | Total |
|------------------------|-----------------------------------------------|-------------------|--------------------------|------------------------|------------------|-------|
|                        | 2-parent families                             | 1-parent families | Couples without children | Lone person households | Group households |       |
| 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**

| Region                 | Ratio of households in 2011 to households in 1996 |                   |                          |                        |                  | Total households | Ratio of persons in NPDs in 2011 to persons in NPDs in 1996 |
|------------------------|---------------------------------------------------|-------------------|--------------------------|------------------------|------------------|------------------|-------------------------------------------------------------|
|                        | 2-parent families                                 | 1-parent families | Couples without children | Lone person households | Group households |                  |                                                             |
| 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 increased more than the demand for public rental dwellings (all dwellings, 30% increase; public rental, 22% increase).

**Table 4.4. Victoria**

| Region                 | Ratio of dwellings in 2011 to dwellings in 1996 |                 |                 | Increment to total dwellings 2002-2011 |
|------------------------|-------------------------------------------------|-----------------|-----------------|----------------------------------------|
|                        | Separate house                                  | Other dwellings | Total dwellings |                                        |
| 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                                  |
| <u>2130 Gippsland</u>  | <u>1.08</u>                                     | <u>1.36</u>     | <u>1.10</u>     | <u>4,186</u>                           |

## 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.

**Table 5.1. Queensland**

| Region                | 2011 |                                                         |             |           |        | Annual net migration | Total 1996 population | Ratio of 2011 population to 1996 population | Increment to population 2002-2011 |
|-----------------------|------|---------------------------------------------------------|-------------|-----------|--------|----------------------|-----------------------|---------------------------------------------|-----------------------------------|
|                       | TFR  | Stdised annual net migration rate (per 1000 population) |             |           |        |                      |                       |                                             |                                   |
|                       |      | 20-24 years                                             | 30-49 years | 50+ years |        |                      |                       |                                             |                                   |
| 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                                      |                                   |

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 lone person households and group households.

**Table 5.2. Queensland**

| Region                | Percentage distribution of households in 1996 |                   |                          |                        |                  | Total |
|-----------------------|-----------------------------------------------|-------------------|--------------------------|------------------------|------------------|-------|
|                       | 2-parent families                             | 1-parent families | Couples without children | Lone person households | Group households |       |
| 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 |

## 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**

| Region                | Ratio of households in 2011 to households in 1996 |                   |                          |                        |                  |                  | Ratio of persons in NPDs in 2011 to persons in NPDs in 1996 |
|-----------------------|---------------------------------------------------|-------------------|--------------------------|------------------------|------------------|------------------|-------------------------------------------------------------|
|                       | 2-parent families                                 | 1-parent families | Couples without children | Lone person households | Group households | Total households |                                                             |
| 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%.

**Table 5.4. QueenslandChapter 6. Summary Results for South Australia**

| Region                | Ratio of dwellings in 2011 to dwellings in 1996 |                 |                 | Increment to total dwellings 2002-2011 |
|-----------------------|-------------------------------------------------|-----------------|-----------------|----------------------------------------|
|                       | Separate house                                  | Other dwellings | Total dwellings |                                        |
| 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                                   |

## 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 Peri-metro 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.

**Table 6.1. South Australia**

| Region                   | 2011 |                                                         |             |           |                      | Total 1996 population | Ratio of 2011 population to 1996 population | Increment to population 2002-2011 |
|--------------------------|------|---------------------------------------------------------|-------------|-----------|----------------------|-----------------------|---------------------------------------------|-----------------------------------|
|                          | TFR  | Stdised annual net migration rate (per 1000 population) |             |           | Annual net migration |                       |                                             |                                   |
|                          |      | 20-24 years                                             | 30-49 years | 50+ years |                      |                       |                                             |                                   |
| 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                            |

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**

| Region                   | Percentage distribution of households in 1996 |                   |                          |                        |                  | Total |
|--------------------------|-----------------------------------------------|-------------------|--------------------------|------------------------|------------------|-------|
|                          | 2-parent families                             | 1-parent families | Couples without children | Lone person households | Group households |       |
| 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.

**Table 6.3. South Australia**

| Region                   | Ratio of households in 2011 to households in 1996 |                   |                          |                        |                  |                  | Ratio of persons in NPDs in 2011 to persons in NPDs in 1996 |
|--------------------------|---------------------------------------------------|-------------------|--------------------------|------------------------|------------------|------------------|-------------------------------------------------------------|
|                          | 2-parent families                                 | 1-parent families | Couples without children | Lone person households | Group households | Total households |                                                             |
| 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                                                        |

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 Peri-metro 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**

| Region                   | Ratio of dwellings in 2011 to dwellings in 1996 |                    |                    | Increment to<br>total dwellings<br>2002-2011 |
|--------------------------|-------------------------------------------------|--------------------|--------------------|----------------------------------------------|
|                          | Separate<br>house                               | Other<br>dwellings | Total<br>dwellings |                                              |
| 4010 Inner Adelaide      | 1.16                                            | 1.16               | 1.16               | 4,045                                        |
| 4020 Middle Adelaide     | 1.07                                            | 1.24               | 1.12               | 15,555                                       |
| 4030 Outer Adelaide      | 1.14                                            | 1.57               | 1.20               | 19,190                                       |
| 4040 Eyre                | 1.06                                            | 1.15               | 1.08               | 609                                          |
| 4050 Murray Lands        | 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 & Lower 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.

**Table 7.1. Western Australia**

| Region                    | 2011 |                                                         |             |           | Annual net migration | Total 1996 population | Ratio of 2011 population to 1996 population | Increment to population 2002-2011 |
|---------------------------|------|---------------------------------------------------------|-------------|-----------|----------------------|-----------------------|---------------------------------------------|-----------------------------------|
|                           | TFR  | Stdised annual net migration rate (per 1000 population) |             |           |                      |                       |                                             |                                   |
|                           |      | 20-24 years                                             | 30-49 years | 50+ years |                      |                       |                                             |                                   |
| 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                            |

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**

| Region                    | Percentage distribution of households in 1996 |                   |                          |                        |                  | Total |
|---------------------------|-----------------------------------------------|-------------------|--------------------------|------------------------|------------------|-------|
|                           | 2-parent families                             | 1-parent families | Couples without children | Lone person households | Group households |       |
| 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.

**Table 7.3. Western Australia**

| Region                    | Ratio of households in 2011 to households in 1996 |                   |                          |                        |                  |                  | Ratio of persons in NPDs in 2011 to persons in NPDs in 1996 |
|---------------------------|---------------------------------------------------|-------------------|--------------------------|------------------------|------------------|------------------|-------------------------------------------------------------|
|                           | 2-parent families                                 | 1-parent families | Couples without children | Lone person households | Group households | Total households |                                                             |
| 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                                                        |

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).

**Table 7.4. Western Australia**

| Region                    | Ratio of dwellings in 2011 to dwellings in 1996 |                 |                 | Increment to total dwellings 2002-2011 |
|---------------------------|-------------------------------------------------|-----------------|-----------------|----------------------------------------|
|                           | Separate house                                  | Other dwellings | Total dwellings |                                        |
| 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                                    |
| 5110 Kimberley            | 2.07                                            | 2.32            | 2.13            | 6,100                                  |

## 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 annual net migration rate<br>(per 1000 population) |             |           | Annual net | Total 1996<br>population | population to<br>1996 | Increment to<br>population<br>2002-2011 |
| Region              | TFR  | 20-24 years                                                | 30-49 years | 50+ years | migration  |                          |                       |                                         |
| 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**

| Region              | Percentage distribution of households in 1996 |                   |                          |                        |                  | Total |
|---------------------|-----------------------------------------------|-------------------|--------------------------|------------------------|------------------|-------|
|                     | 2-parent families                             | 1-parent families | Couples without children | Lone person households | Group households |       |
| 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 one-parent 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**

| Region              | Ratio of households in 2011 to households in 1996 |                   |                          |                        |                  |                  | Ratio of persons in NPDs in 2011 to persons in NPDs in 1996 |
|---------------------|---------------------------------------------------|-------------------|--------------------------|------------------------|------------------|------------------|-------------------------------------------------------------|
|                     | 2-parent families                                 | 1-parent families | Couples without children | Lone person households | Group households | Total households |                                                             |
| 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**

| Region              | Ratio of dwellings in 2011 to dwellings in 1996 |                 |                 | Increment to total dwellings 2002-2011 |
|---------------------|-------------------------------------------------|-----------------|-----------------|----------------------------------------|
|                     | Separate house                                  | Other dwellings | Total dwellings |                                        |
| 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**

| Region             | 2011                                                    |             |             |           |       | Annual net migration | Total 1996 population | Ratio of 2011 population to 1996 population | Increment to population 2002-2011 |
|--------------------|---------------------------------------------------------|-------------|-------------|-----------|-------|----------------------|-----------------------|---------------------------------------------|-----------------------------------|
|                    | Stdised annual net migration rate (per 1000 population) |             |             |           |       |                      |                       |                                             |                                   |
|                    | TFR                                                     | 20-24 years | 30-49 years | 50+ years |       |                      |                       |                                             |                                   |
| 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**

| Region             | Percentage distribution of households in 1996 |                   |                          |                        |                  | Total |
|--------------------|-----------------------------------------------|-------------------|--------------------------|------------------------|------------------|-------|
|                    | 2-parent families                             | 1-parent families | Couples without children | Lone person households | Group households |       |
| 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**

| Region             | Ratio of households in 2011 to households in 1996 |                      |                             |                           |                     |                     | Ratio of persons in<br>NPDs in 2011 to<br>persons in NPDs in 1996 |
|--------------------|---------------------------------------------------|----------------------|-----------------------------|---------------------------|---------------------|---------------------|-------------------------------------------------------------------|
|                    | 2-parent<br>families                              | 1-parent<br>families | Couples without<br>children | Lone person<br>households | Group<br>households | Total<br>households |                                                                   |
| 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**

| Region             | Ratio of dwellings in 2011 to dwellings in 1996 |                    |                    | Increment to<br>total dwellings<br>2002-2011 |
|--------------------|-------------------------------------------------|--------------------|--------------------|----------------------------------------------|
|                    | Separate<br>house                               | Other<br>dwellings | Total<br>dwellings |                                              |
| 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:

**Table 10.1. Estimated additional demand for dwellings, 2002-2011 ('000s)**

| 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.

**Table 11.1. Demographic input to projections**

| 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    |

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.

**Table 11.2. Demographic outcomes to projections**

| State or Territory | Population<br>1996 (000s) | Population<br>2030 (000s) | Households<br>1996 (000s) | Households<br>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 11.3 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.

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

| State or Territory | Two parent families | One parent families | Couples, no children | Lone persons | Group 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 11.4 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.

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

| 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  |

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.

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

| State or Territory | Public rental | All dwellings |
|--------------------|---------------|---------------|
| 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          |

## 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](http://www.ahuri.edu.au)).

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

| No.  | Region             | SLA<br>Code | SLA Name               |
|------|--------------------|-------------|------------------------|
| 1010 | Inner 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)          |
| 1020 | Middle 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)        |
| 1031 | Outer Sydney North | 18250       | Willoughby (C)         |
|      |                    | 10500       | Baulkham Hills (A)     |
|      |                    | 13100       | Gosford (C)            |
|      |                    | 13800       | Hawkesbury (C)         |
|      |                    | 14000       | Hornsby (A)            |
|      |                    | 16370       | Pittwater (A)          |
|      |                    | 18000       | Warringah (A)          |
|      |                    | 18550       | Wyong (A)              |
| 1032 | Outer Sydney South | 10750       | Blacktown (C)          |
|      |                    | 10900       | Blue Mountains (C)     |
|      |                    | 11450       | Camden (A)             |
|      |                    | 11500       | Campbelltown (C)       |

|                            |       |                           |
|----------------------------|-------|---------------------------|
| 1040 Hunter (NSW)          | 12850 | Fairfield (C)             |
|                            | 13950 | Holroyd (C)               |
|                            | 14900 | Liverpool (C)             |
|                            | 16350 | Penrith (C)               |
|                            | 17150 | Sutherland (A)            |
|                            | 18400 | Wollondilly (A)           |
|                            | 11720 | Cessnock (C)              |
|                            | 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)             |
| 1050 Illawarra (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 | Kyogle (A)                |
|                            | 14850 | Lismore (C)               |
|                            | 16600 | Richmond River (A)        |
|                            | 17551 | Tweed (A) - Pt A          |
|                            | 17552 | Tweed (A) - Pt B          |
|                            | 10600 | Bellingen (A)             |
|                            | 11800 | Coffs Harbour (C)         |
| 1070 Mid-North Coast (NSW) | 12250 | Copmanhurst (A)           |
|                            | 13200 | Grafton (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          |
| 1080 Northern (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)          |

|                          |       |                        |
|--------------------------|-------|------------------------|
| 1110 South Eastern (NSW) | 16150 | Orange (C)             |
|                          | 16200 | Parkes (A)             |
|                          | 16750 | Rylstone (A)           |
|                          | 18100 | Weddin (A)             |
|                          | 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)              |
| 1120 Murrumbidgee (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)        |
| 1130 Murray (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)         |

|                      |       |                                |
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| 1140 Far West (NSW)  | 17700 | Urana (A)                      |
|                      | 17800 | Wakool (A)                     |
|                      | 18200 | Wentworth (A)                  |
|                      | 18300 | Windouran (A)                  |
|                      | 11250 | Broken Hill (C)                |
| 2001 Melbourne Inner | 11700 | Central Darling (A)            |
|                      | 18809 | Unincorporated Far West        |
|                      | 21891 | Darebin (C) - Northcote        |
|                      | 24601 | Melbourne (C) - Inner          |
|                      | 24602 | Melbourne (C) - Remainder      |
| 2002 Melbourne East  | 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           |
|                      | 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          |
| 2003 Melbourne West  | 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      |
|                      | 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 | Maribyrnong (C)                |
|                      | 24651 | Melton (S) - East              |
|                      | 24654 | Melton (S) - Bal               |
|                      | 25063 | Moonee Valley (C) - Essendon   |
|                      | 25065 | Moonee Valley (C) - West       |
|                      | 25252 | Moreland (C) - Coburg          |
|                      |       |                                |

|                      |       |                                |
|----------------------|-------|--------------------------------|
| 2004 Melbourne South | 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              |
|                      | 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               |
| 2040 Barwon (Vic)    | 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  |
|                      | 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)               |

|                              |       |                                |
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| 2050 Western District (Vic)  | 26493 | Surf Coast (S) - East          |
|                              | 26495 | Surf Coast (S) - West          |
|                              | 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    |
| 2060 Central Highlands (Vic) | 26264 | S. Grampians (S) - Wannon      |
|                              | 26265 | S. Grampians (S) Bal           |
|                              | 26730 | Warrnambool (C)                |
|                              | 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  |
| 2070 Wimmera (Vic)           | 25154 | Moorabool (S) - Ballan         |
|                              | 25155 | Moorabool (S) - West           |
|                              | 25991 | Pyrenees (S) - North           |
|                              | 25994 | Pyrenees (S) - South           |
|                              | 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)               |
| 2080 Mallee (Vic)            | 27631 | Yarriambiack (S) - North       |
|                              | 27632 | Yarriambiack (S) - South       |
|                              | 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             |
| 2090 Loddon (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   |

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| 2100Goulburn (Vic)       | 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        |
|                          | 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 | Moir (S) - East                |
|                          | 24904 | Moir (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        |
| 2130Gippsland (Vic)      | 26815 | Wellington (S) - Sale          |
|                          | 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                |
| 3010 | Inner 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                |
| 3020 | Middle 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               |

|       |                      |
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| 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 Ommaney        |
| 31413 | Murarrie             |
| 31416 | Nathan               |
| 31424 | Newmarket            |
| 31432 | Norman Park          |
| 31446 | Nundah               |
| 31451 | Oxley                |
| 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              |

|                     |       |                                |
|---------------------|-------|--------------------------------|
| 3030 Outer Brisbane | 31563 | Tarragindi                     |
|                     | 31574 | Toowong                        |
|                     | 31588 | Upper Mount Gravatt            |
|                     | 31604 | Wavell Heights                 |
|                     | 31612 | Westlake                       |
|                     | 31618 | Wilston                        |
|                     | 31623 | Windsor                        |
|                     | 31634 | Woolloowin                     |
|                     | 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                        |

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| 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                  |

|                       |                   |                           |
|-----------------------|-------------------|---------------------------|
| 3040 Gold Coast (Qld) | 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 |                           |

|                      |                    |                             |
|----------------------|--------------------|-----------------------------|
|                      | 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            |
| 3050Ipswich (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              | Ipswich (C) - Central       |
|                      | 33965              | Ipswich (C) - East          |
|                      | 33968              | Ipswich (C) North           |
|                      | 33973              | Ipswich (C) - South-West    |
| 33976                | Ipswich (C) - West |                             |
| 3060Caboolture (Qld) | 34450              | Laidley (S)                 |
|                      | 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) - Maroochydhore   |
|                             | 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                  |
| 3070 Wide 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 | Isis (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)                     |
| 3080 Darling 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         |                    |
|                   | 3090South 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)                 |                    |
| 3100Fitzroy (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)           |                    |

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| 3110 Central West (Qld) | 35850 | Peak Downs (S)             |
|                         | 36350 | Rockhampton (C)            |
|                         | 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)                 |
|                         | 30600 | Belyando (S)               |
|                         | 31700 | Broadsound (S)             |
| 3120 Mackay (Qld)       | 34762 | Mackay (C) - Pt A          |
|                         | 34765 | Mackay (C) - Pt B          |
|                         | 35050 | Mirani (S)                 |
|                         | 35700 | Nebo (S)                   |
|                         | 36550 | Sarina (S)                 |
|                         | 37330 | Whitsunday (S)             |
|                         | 30950 | Bowen (S)                  |
|                         | 31900 | Burdekin (S)               |
|                         | 32300 | Charters Towers (C)        |
|                         | 32700 | Dalrymple (S)              |
| 3130 Northern (Qld)     | 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-Shelley Beach   |

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| 3140 Far North (Qld)  | 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 | Townsville (C) - Pt B         |
|                       | 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)                   |
| 3150 North West (Qld) | 36950 | Torres (S)                    |
|                       | 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)                  |
|                       | 40070 | Adelaide (C)                  |
| 4010 Inner Adelaide   | 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)                  |

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|------------------------|-------|-----------------------------|
|                        | 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)               |
| 4030 Outer Adelaide    | 48470 | West Torrens (C)            |
|                        | 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)          |
| 4040 Eyre (SA)         | 48610 | Willunga (DC)               |
|                        | 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)              |
| 4050 Murray Lands (SA) | 49249 | Unincorp. West Coast        |
|                        | 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)               |

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| 4060Northern (SA)       | 46650 | Renmark (M)                |
|                         | 46730 | Ridley - Truro (DC)        |
|                         | 48120 | Waikerie (DC)              |
|                         | 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        |
| 4070Peri-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)             |

|                              |       |                               |
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|                              | 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 | Yorke town (DC)               |
| 5010 Inner 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)                   |
| 5020 Middle 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  |
| 5030 Outer Perth             | 50210 | Armadale (C)                  |
|                              | 51820 | Cockburn (C)                  |

|                                  |       |                                |
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|                                  | 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      |
|                                  | 58757 | Wanneroo (C) - South-East      |
|                                  | 58758 | Wanneroo (C) - South-West      |
| 5040 South West (WA)             | 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 | Waroonna (S)                   |
| 5050 Lower 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)               |
| 5060 Upper Great Southern (WA)   | 50910 | Brookton (S)                   |
|                                  | 52100 | Corrigin (S)                   |
|                                  | 52310 | Cuballing (S)                  |
|                                  | 53010 | Dumbleyung (S)                 |
|                                  | 54620 | Kondinin (S)                   |
|                                  | 54760 | Kulin (S)                      |

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| 5070Midlands (WA)      | 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)           |
|                        | 50560            | Beverley (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)       |
| 5080South Eastern (WA) | 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            | Toodyay (S)            |
|                        | 58400            | Trayning (S)           |
|                        | 58540            | Victoria Plains (S)    |
|                        | 59030            | Westonia (S)           |
|                        | 59310            | Wongan-Ballidu (S)     |
|                        | 59450            | Wyalkatchem (S)        |
|                        | 59660            | Yilgarn (S)            |
|                        | 59730            | York (S)               |
| 5090Central (WA)       | 51960            | Coolgardie (S)         |
|                        | 53080            | Dundas (S)             |
|                        | 53290            | Esperance (S)          |
|                        | 54280            | Kalgoorlie/Boulder (C) |
|                        | 54970            | Laverton (S)           |
|                        | 55040            | Leonora (S)            |
|                        | 55390            | Menzies (S)            |
| 57420                  | Ravensthorpe (S) |                        |
|                        | 51470            | Carnamah (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                          |       |                              |

## **AHURI Research Centres**

Sydney Research Centre  
UNSW-UWS Research Centre  
RMIT NATSEM Research Centre  
Swinburne-Monash Research Centre  
Queensland Research Centre  
Western Australia Research Centre  
Southern Research Centre

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National Community Housing Forum



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