

Changes in the supply of and need for low rent dwellings in the private rental market

authored by

Judith Yates, Maryann Wulff, Margaret Reynolds

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
Findings	ii
1. BACKGROUND	1
1.1. Background to the study.....	1
1.2. Research questions addressed	5
1.3. Data description for Positioning Paper	5
1.4. Data imputation	7
1.5. Summary	8
2. PRIVATE RENTAL: A NATIONAL OVERVIEW	9
2.1. Australia's stock of private rental housing	9
2.2. Changes in rental stock between 1996 and 2001	10
2.3. Household income of private renters in 2001	12
2.4. Aggregate estimates of shortage	15
3. PRIVATE RENTAL: A SPATIALLY DISAGGREGATED OVERVIEW	17
3.1. Metropolitan and Non-metropolitan data	17
3.2. State data	23
4. CONCLUSIONS	27
5. REFERENCES	28
APPENDIX A: VALUE ADDED CENSUS DATA	31
APPENDIX B: LGA DATA	35

LIST OF TABLES

Table 1-1: Nominal dwelling rent categories, 1996 and 2001	6
Table 1-2: Nominal household income categories, 1996 and 2001	6
Table 2-1: Occupied private dwellings in Australia by nature of occupancy, 2001	9
Table 2-2: Private rental dwellings in Australia, 2001	9
Table 2-3: Private rental dwellings in Australia, 1996	10
Table 2-4: Growth in private rental stock in Australia, 1996-2001	10
Table 2-5: Distribution of income of households in private rental in Australia, 2001	12
Table 2-6: Distribution of income of households in private rental in Australia, 1996	13
Table 2-7: Growth in households in private rental in Australia, 1996-2001	14
Table 2-8: Shortage of affordable rental stock: Australia, 2001	16
Table 2-9: Shortage of affordable rental stock: Australia, 1996	16
Table 3-1: Distribution of rents paid: metropolitan and non-metropolitan regions, 2001	17
Table 3-2: Distribution of rents paid: metropolitan and non-metropolitan regions, 1996 and growth 1996-2001	18
Table 3-3: Distribution of income of households in private rent: metropolitan and non- metropolitan regions, 2001	21
Table 3-4: Distribution of income of households in private rent: metropolitan and non- metropolitan regions, 1996 and growth 1996-2001	21
Table 3-5: Shortage of affordable rental stock: metropolitan and non-metropolitan regions, 2001	22
Table 3-6: Shortage of affordable rental stock: metropolitan and non-metropolitan regions, 1996	22
Table 3-7: Distribution of rent paid and income of households in metropolitan and non- metropolitan regions by State: 2001	24
Table 3-8: Shortage of affordable rental housing in metropolitan and non-metropolitan regions by State, 2001	25
Table 3-9: Shortage of affordable rental housing in metropolitan and non-metropolitan regions by State, 1996	25
Table 3-10: Distribution of rent paid and income of households in metropolitan and non- metropolitan regions by State: 1996	26
Table B 1: LGAs with highest absolute shortages of stock less than \$135 per week, 2001	36
Table B 2: LGAs with highest percentage of shortages of stock less than \$135 per week, 2001	37
Table B 3: Shortage of affordable rental housing in Sydney LGAs, 2001	38
Table B 4: Shortage of affordable rental housing in non-metropolitan NSW LGAs, 2001	39
Table B 5: Shortage of affordable rental housing in Melbourne LGAs, 2001	42
Table B 6: Shortage of affordable rental housing in non-metropolitan Victoria LGAs, 2001	43
Table B 7: Shortage of affordable rental housing in Brisbane SRSs, 2001	44

LIST OF FIGURES

Figure 2-1: Distribution of private rental stock: Australia, 1996 and 2001	11
Figure 2-2: Cumulative distribution of private rental stock: Australia, 1996 and 2001 ...	12
Figure 2-3: Income distribution of private rental households: Australia 1996 and 2001	14
Figure 2-4: Cumulative income distribution of private rental households: Australia 1996 and 2001.....	15
Figure 3-1: Distribution private rental stock: metro and non-metro regions 1996 and 2001.....	19
Figure 3-2: Cumulative private rental stock: metro and non-metro regions 1996 and 2001.....	20

EXECUTIVE SUMMARY

This research project examines how the low rent end of the market Australian private rental market fared between the 1996 and 2001 censuses. The period from 1996 to 2001 contained significant changes, both temporary and structural, in the housing market. The number of households continued to outpace population growth; inflation and interest rates were low, and, overall, household incomes improved. These trends contributed to a housing boom that began in the late 1990s (Productivity Commission, 2003) and, with it, a worsening of housing affordability for many households (ABS, 2002). Associated with Australia's housing boom, there has been an unprecedented level of investment in private rental housing. Coincident with these trends, housing assistance in Australia has continued to shift away from the public housing sector and towards an increased reliance on rent based subsidies for eligible private tenants. This increase in investment in private rental housing, along with a continued reliance on the private market to meet the housing needs of lower income households, raises the question of how well the private market meets these needs.

To address this question, this research presented in this report builds upon an earlier study by Wulff and Yates (2001), which examined Australia's private rental supply in 1986 and 1996. It updates and monitors changes in the supply of private rental housing by examining the data from the 2001 Australian Census and comparing this with data from the 1996 Census. The earlier study showed that between 1986 and 1996, the private rental market grew by a robust 34 per cent, but this growth generally masked gains in the top end of the market and losses in the bottom. The stock of low rent dwellings fell dramatically. At the same time, the demand for the low rent stock (as measured by the number of low income households renting privately) almost doubled. By 1996 these trends led to a national shortage of approximately 50,000 low rent private dwellings, with Sydney accounting for more than half this national figure.

This Positioning Paper focuses on several research questions:

1. What has happened to the supply of private rental dwellings between 1996 and 2001 in terms of the distribution of dwelling rents?
2. Have the incomes of households in the private rental market changed between 1996 and 2001?
3. To what extent are there supply shortages for low-income households and has this worsened or improved since 1996?
4. To what extent are there differences between capital cities and non-metropolitan regions in each state?

The results reported in this Positioning Paper are based upon two special request ABS summary tabulations (dwelling rent and household income respectively), created to compare systematically data from the 1996 and 2001 Censuses. These tables were prepared on a spatial disaggregation to Local Government Areas (Statistical Region Sectors in the Brisbane metropolitan region). The results are analysed and reported on the basis of 12 rent categories and 12 household income categories chosen so that the rent data categories correspond to 30 per cent of the household income categories. Shortage in this analysis is measured by the difference between a cumulative count of households in each income category and the cumulative count of dwellings in the corresponding rent categories. The choice of 30 per cent of gross household income as an indicator of supply affordability for different household income groups maintains the measure used in the Yates and Wulff (2000) study.

In 2001, Australia's private rental market comprised 19.7 per cent of all households. This study employs the standard Australian Bureau of Statistics definition of private rental, that is, occupied private dwellings in which the household pays rent to either a real estate agent or a person not living in the same household. The analysis excludes

both dwellings that are only occupied by visitors (not residents) and those in which the household type is not classifiable.

In all Censuses, approximately 2 per cent of renter households had missing information on weekly rent. For household income, the comparable figures for missing information (including partial or not stated incomes) ranged between 8.2 per cent in 1996 to 11 per cent in 2001. Information has been imputed for all missing cases.

The 2001 Census data have been further refined to convert the 2001 household income categories recorded in the 2001 Census into the real equivalents of those recorded in the 1996 Census. This conversion was carried out by the Australian Bureau of Statistics and involved sophisticated statistical estimates based on continuous income distributions available from the 1999/2000 ABS Survey of Income and Housing Costs. All rent and income data for 2001 have been generated from a CPI adjustment to their 1996 equivalent. The CPI adjustment was June 2001/June 1996 ($133.8/119.8 = 1.116$).

Findings

1. Changes in the rent distribution of private rental dwellings between 1996 and 2001.

Between 1996 and 2001, the private rental stock grew by 7.6 per cent. This growth in the private rental stock, however, occurred in the top quintile of the rent distribution. Despite the overall growth in the private rental stock, there was an absolute decline in the total number of dwellings that rented in the bottom four rent quintiles. Conversely, there was an absolute increase in the total number of dwellings for those that rented in the top quintile of rental values. In other words, the growth in the rental stock between 1996 and 2001 occurred solely at the top end of the private rental market.

2. Changes in the household incomes of private renters between 1996 and 2001

Overall between 1996 and 2001, the household income distribution of private renters improved. The analysis highlights the decline in the proportion of low-income households and the increase in the proportion of households with moderate to high and high levels of household income.

3. Estimate of supply shortages for low income households, 1996 and 2001

Despite fewer households in the lowest two income categories, the decline in the affordable stock of rental properties created an overall shortage of 59,000 rental dwellings on an Australian wide basis for low-income households. This income level is below benefit levels for all household types other than single persons. The comparable figure for 1996 was 76,000 dwellings. In other words, based on this basic shortage measure, the private rental supply situation for low-income households improved between the two census years. The Positioning Paper emphasises, however, that this represents a 'first-cut' estimate, and that the next stage in this research project will examine whether the estimate of shortage needs to be readjusted once the adequacy, location, and characteristics of occupants of low rent stock are taken into account.

4. Differences between capital cities and non-metropolitan regions in each state

Approximately two thirds of private renter households are located in metropolitan regions and the remaining one-third in non-metropolitan areas. The incidence of low rent stock is far greater in non-metropolitan Australia than the capital cities. In 2001, seventy-two per cent of dwellings in non-metropolitan Australia had low and low to moderate rents compared with 39 per cent of dwellings in metropolitan regions. On the other hand, 20 per cent of the dwellings in metropolitan regions had rents in the moderate-high to high range against only 4 per cent in non-metropolitan regions.

The national decline in the total number of rental dwellings with rents in the bottom four rent distribution quintiles is almost solely a metropolitan phenomenon. Declines in non-metropolitan regions are observed only for the extremely low valued rental stock (the bottom 2 per cent of rental dwellings). Within metropolitan regions, however, the number of rental dwellings declined in each rent segment through to the moderate-high rent range.

In 2001, household incomes continued to differ between private renters living in metropolitan and non-metropolitan regions. In metropolitan regions, more than 50 per cent had incomes above the moderate household income range of \$782 per week compared with only 30 per cent in non-metropolitan Australia. Between 1996 and 2001, the household incomes of private renters improved for the bottom 47 per cent of metropolitan households. In contrast, only the very lowest income households (bottom 20 per cent of households) showed an improved household income picture in non-metropolitan regions.

In 2001, in metropolitan regions households with low to moderate incomes of up to \$447 per week (the lowest 22 per cent of household incomes in metropolitan regions) experienced shortages in rental dwellings. The shortage at this level of income is estimated at 43,000 dwellings. Shortages are greater for households in metropolitan regions in low-income categories. In non-metropolitan areas, a 20,000 dwelling shortage was documented only for low-income households with incomes up to \$223 per week (the lowest 8 per cent of household incomes in non-metropolitan areas). Overall, for metropolitan renter households, the shortage worsened between 1996 and 2001. The shortage level remained about the same between the two census years for non-metropolitan regions.

The 43,000 shortage of affordable dwellings in metropolitan regions arises primarily from the pressures in the three largest capital cities. The greatest shortage is in Sydney (with a shortage of 36,000 dwellings) with smaller shortages in Melbourne (9,000 dwellings) and Brisbane (dwellings). In each of these cities, these figures represent a more severe shortage in 2001 than for equivalent rent and income levels in 1996.

The Final Report will build upon the information presented here by using a more comprehensive special matrix tabulation that allows a closer examination of the private rental supply in terms of the particular households which reside in those dwellings, their affordability, adequacy and location. This next stage will provide a fuller picture of affordability in the private rental market and offer more detailed policy implications. The first stage, however, reported in this Positioning Paper, does confirm earlier conclusions that the greatest pressures are in the metropolitan regions. The results also suggest that changes in household incomes have not been uniformly spread across all regions of Australia and raise the possibility that access to affordable housing may be one factor that contributes to this.

1. BACKGROUND

1.1. Background to the study

In Australia, as elsewhere, there is by now a well-established literature that points to significant affordability problems faced by many low-income households. Recent examples can be found in ABS (1999); Berry and Hall (2001); Harding and Szulkalska (2000); Karmel (1998); Ministerial Taskforce on Affordable Housing (1998); Randolph and Holloway (2002); and SCRCSSP (2003). In the main, this research focuses on the burden that housing costs place on low to moderate-income households, and particularly on low to moderate-income households in the private rental market. Housing affordability problems in rental markets can be alleviated by policies that serve to reduce the rents paid by households or that increase the income from which households pay their rent. For well over a decade, the Australian government has been relying on increased rent assistance as the primary means of ameliorating housing affordability problems, with a resultant increased reliability on the private rental market in meeting the needs of low-income households.¹ The efficacy of such an approach, however, will depend critically on the availability of affordable rental housing.

Concerns with affordability have been expressed because of the impact of high housing costs on the economic and social well being of lower income households. High housing costs can cause households to sacrifice other essentials such as food and clothing; lead to long commuting distances; and potentially affect their ability to find suitable work and/or perform well in school (Belsky and Lambert 2001; JCHS 2003; Bridge et al, 2003). Moreover, the lack of affordable housing is seen as a significant impediment to local economic growth (Stegman et al. 2000).

Determining the extent to which housing costs contribute to affordability problems for households is relatively straightforward. In addition, it is a relatively uncomplicated statistical exercise to estimate the extent to which housing assistance reduces these problems for low-income households. What is more complex, however, is explaining why particular households are faced with an affordability problem. An answer to this question requires, inter alia, an answer to the question of whether affordability problems arise from inadequate household income or excessive housing consumption (in other words, a demand related problem) or whether they arise because of a lack of affordable housing (in other words, a supply related problem). It requires an answer to the question of the extent to which housing affordability problems a matter of choice or of necessity.

Whilst these questions cannot be answered definitively from an analysis of the supply side of the private rental market, the possibility that outcomes arise from necessity rather than choice is increased when the supply of affordable housing is inadequate. There is increasing evidence that this is the case in a number of other countries where there has been a similar policy reliance on the private sector. Malpezzi and Green (1996) and Nelson (1994), for example, demonstrated serious supply shortages in low rent units in the United States in the mid 1980s and early 1990s. More recent reports of shortage in the U.S. can be found in both academic and government reports in the US (eg Joint Center for Housing Studies 2001, 2003; US Dept of HUD 2000).

...affordable housing is increasingly scarce across all regions of the country and among all racial and ethnic groups...there are currently about 4.4 million fewer affordable units than low-income renter families, and this gap is expected to widen (Warson 2000).

¹ In order to receive rent assistance, a private tenant must first qualify for a social security income support payment, more than the base rate of Family Tax Benefit or a service pension.

The supply of affordable, decent quality housing in the United States has diminished in the recent past. Driven largely by increasing real costs and declining real incomes, Americans at many levels and in many places – urban and rural, low income and middle class – are unable to find an adequate supply of affordable housing. Throughout this paper, the term “affordable housing” is defined as that which costs no more than 30 percent of the income of the occupant household (Andrews 1998).

Likewise, in Canada, there have been official expressions of concern (Ontario Ministry of Municipal Affairs and Housing 2001; Toronto Board of Trade 2003) that have resulted in issues of shortage being placed on the political agenda. For example:

...at the most affordable level, there is still an inadequate supply of units. Therefore, there is a need to add to the affordable rental stock. This fact is reinforced by evidence that a large proportion of low income families have to pay more than 30 per cent of their income for rent (CMHC 2003a).

With a low national vacancy rate, the country's largest urban centers are losing affordable rental units at an alarming rate. Canada Mortgage and Housing Corporation's annual rental market survey shows rents also increasing, creating less available and affordable low-cost rental housing in larger urban areas. The situation particularly affects the working poor and low-to-middle income earners. Every day, hundreds more families face eviction and homelessness (Prime Minister's Caucus Task Force on Urban Issues 2002).

This present research project, therefore, examines outcomes in the Australian private rental market from 1996 to 2001 with a particular focus on outcomes at the low rent end of the market. The period from 1996 to 2001 is a period of significant changes, both temporary and structural, in the housing market. It is a period when growth in the number of households has continued to outpace population growth; a period of low inflation, low rates of interest and of easy credit; and, for most locations, a period of considerable growth in household incomes. These pressures have brought with them a long-lasting housing boom and concomitant worsening of affordability (ABS 2002a), and an unprecedented level of investment in private rental housing (Productivity Commission 2003). Coincident with these trends, during 1996 to 2001, the capacity of the public housing sector continued to diminish and reliance on rent based subsidies expanded. These on-going economic, demographic and social developments in Australia underpin the importance of continually mapping trends in the low rent end of the private rental market. Taken together, it is critical that the most recent 2001 Census data are fully exploited to ensure that the information base for policy is as current as possible.

This research builds upon an earlier study by Wulff and Yates (2001), which examined Australia's private rental supply in 1986 and 1996 and changes in the rent distribution and characteristics of private renters that took place during that period. The approach and key findings of this earlier work are briefly reviewed below in order to place this present research into context. This is because an essential element of this present study is to update and monitor changes in the rental supply between 1996 and 2001. As does the present research, the earlier study focused mainly on the low rent stock. That research was based on two ABS special request census matrices, which included categorical data related to dwellings (tenure, number of bedrooms and type of dwelling), household and family type, the number of earners in each household, household income, and dwelling rents. These variables were defined to be consistent in each census year and the dwelling rent and household income variables were adjusted to real 1996 dollars. The analysis was presented for each capital city and non-metropolitan part of each state and territory. Key findings showed that between 1986 and 1996 in Australia:

- The private rental market grew by a robust 34 per cent compared with an overall growth of 23 per cent of total households
- This growth in private rental stock generally masked gains in the top end of the market and losses in the bottom. During the ten year period examined, the stock of low rent dwellings fell dramatically.
- At the same time, the demand for the low rent stock (as measured by the number of low income households renting privately) almost doubled.
- By 1996 these trends led to a national shortage of approximately 50,000 low rent private dwellings.
- This shortage of low rent dwellings available for low-income households was exacerbated by the fact that a sizeable share of the low rent stock was rented by higher income households. This further removed large numbers of dwellings from potential occupation by low-income households and resulted in an estimated Australia wide shortage of approximately 150,000 dwellings in 1996.
- The spatial analysis revealed that the greatest shortage in 1996 was in the Sydney metropolitan area. The shortage in Sydney alone accounted for more than half the national private rental shortage.

Shortage or surplus was measured by the difference between a cumulative count of the number of households in each category and the cumulative count of dwellings in the corresponding rent categories. A dwelling was defined as affordable as long as rent was no more than 30 per cent of household income. This definition was applied uniformly across all capital cities and non-metropolitan regions in order to provide a common basis for comparison. The broad categories used to define dwelling rent and household income ruled out the possibility of undertaking any sensitivity analysis with respect to the ratio chosen (whether 30 per cent or 25 per cent for example), or with respect to the effect of the category boundaries (for example, \$99 or \$100) on the results. In order to address the second of these constraints, this Positioning Paper reports on results from two special request ABS tables on dwelling rent and household income that have a much finer categorical breakdown than the 4 rental and 5 household income categories used in the earlier work.

This Positioning Paper focuses on several research questions:

1. What has happened to the supply of private rental dwellings between 1996 and 2001 in terms of the distribution of dwelling rents?
2. Have the incomes of households in the private rental market changed between 1996 and 2001?
3. To what extent are there supply shortages for low-income households and has this worsened or improved since 1996?
4. To what extent are there differences between capital cities and non-metropolitan regions in each state?

The Positioning Paper provides necessary background for the next and final stage of the analysis on changes in demand and access to low rent stock and the basic housing characteristics of the low rent stock. In this Positioning Paper, the focal point is the supply of low rent dwellings; the household incomes of private renters; and the estimate of shortage or surplus of rental dwellings affordable to low-income households.

The results presented here draw upon two ABS summary tabulations (dwelling rent and household income) created from the 1996 and 2001 Censuses. The results are analysed and reported on the basis of 12 rent categories (R1-R12) and 12 household income categories (Y1-Y12) chosen so that the rent data categories correspond to 30 per cent of the household income categories. This enables consistent comparisons to be made on the basis of the same benchmark employed in the 2001 study (Wulff and Yates 2001; Yates and Wulff 2000).

In assessing the extent or otherwise of shortage in the low rent segment of the private rental market, this study employs a 30 per cent of gross household income benchmark. As mentioned above, this particular benchmark was chosen in order to maintain the measure used in the Yates and Wulff (2000) study. The 30 per cent benchmark is a simple ratio measure and can be deemed high under any household circumstance, particularly for households with children.

As argued by Andrews (1998) who relies on a similar measure in the U.S. context:

...the 30 percent threshold is deceptive because, for many low income families, spending 30 percent on housing costs leaves very little for all other necessities, whereas for middle income families, it is an appropriate expenditure level. Despite these problems, the 30 percent threshold is currently the most widely used and widely accepted indicator of affordability...

Because a simple ratio measure, such as that employed in this study, does not take household structure into account, it may have the effect of underestimating the extent of any shortage of affordable rental housing. By not adjusting for household size, the 30 per cent benchmark assumes that a dwelling that is affordable for a single person household on a given income is also affordable for a multiple person household on the same income. Needless to say, this assumption is extremely conservative in relation to an assessment of affordability. Another conservative and unlikely assumption is that dwellings that are appropriate for a single person would be equally appropriate for a multiple person household.

The use of a simple gross rent to income ratio has a long and established tradition both in Australia and elsewhere. Public housing rents, for example, have been set more or less at 25 per cent of gross income for many decades. The National Housing Strategy increased this to 30 per cent but maintained the simplicity of the simple ratio (NHS 1991). Since then, most research into affordable housing has maintained this approach. Before its abolition, the Centre for Affordable Housing in the NSW Department of Urban Affairs and Planning defined housing as 'affordable when the cost of housing is reasonable in relation to income. The accepted measure is where housing costs for low- to medium-income earners... are not greater than 30% of their income. The Affordable Housing National Research Consortium has a similar definition which also uses the 30% benchmark, but has a more restrictive income definition, that is, households in the lower 40% income bracket' (AHS 1999; AHNRC 2001). Overseas, it has been established practice to employ this simple rent to gross income ratio in a number of influential reports. The reputable State of the Nation report, produced by Harvard University's Joint Centre for Housing Studies, utilises a rent to gross income 30 per cent measure to define affordability for lower income households (JCHS 2003). Likewise, the Canadian Mortgage and Housing Corporation in its frequently asked questions website (CMHC 2003b), quotes the 30 per cent benchmark in response to the question, 'What is the common definition of affordability?'.

Importantly, for the purpose of this study, using the 30 per cent ratio and constant real rent and real household income categories provides (1), a direct comparison with the 1996 Census results reported in Wulff and Yates (2000) and (2), comparable information on trends in rental supply nationally and across metropolitan and non-metropolitan regions. The results of this study show what changes have occurred between 1996 and 2001 in the distribution of rents of dwellings in the private rental

market. Whether or not there has been an increase or decline in the stock of dwellings that rent for a particular real dollar value from one period to the next has an inherent interest in and of itself, regardless of which households occupy that stock. This question is one of the first addressed in this study.

In this present research, the private rental market is defined as comprising occupied private dwellings in which the household pays rent to either a real estate agent or a person not living in the same household. This accords with the definition used in the 1999 Australian Housing Survey, in which to be defined as a renter household, 'money is exchanged to another person or organisation in return for lodging' (ABS 1999). In other words, dwellings in which the household lives rent free (zero rent) do not qualify as part of the private rental market. Moreover, dwellings occupied by visitors only, or dwellings in which the household type is not classifiable, are excluded.

The results are presented first at an Australia wide level and then spatially disaggregated to the metropolitan and non-metropolitan regions for the 6 Australian states and the 2 territories. Selected data at a more spatially disaggregated level (Local Government Area and Statistical Region Sector for Brisbane) are reported in an Appendix.

1.2. Research questions addressed

As indicated, this Positioning Paper addresses the following questions related specifically to the supply of private rental dwellings:

1. To what extent are there shortages of low rent dwellings for low-income renters in 2001?
2. How has this changed since 1996?
3. How is the existing low rent stock spatially distributed throughout Australia?
4. To what extent are there differences between capital cities and non-metropolitan regions in each state?

The Final Report will discuss the remaining research questions, which are associated more with demand characteristics and the nature of the dwelling stock:

1. To what extent do low-income renters reside in low rent dwellings?
2. To what extent do medium to high-income earners utilise existing low rent private rental housing stock (and, hence, to what extent can any mismatch in the availability of, and need for, low rent stock be attributed to the use that is made of that stock)?
3. What are the socio-demographic characteristics of low-income households in private rental?
4. How have these changed since 1996?
5. What are the characteristics of low rent dwellings?

The ABS 2001 Special Matrix, which is used for all analysis contained in the Final Report, is described in Appendix A. The summary data used in this report are described below.

1.3. Data description for Positioning Paper

The ABS summary dwelling rent and household income tables (created from the 1996 and 2001 Censuses) were designed to address perceived weaknesses of the earlier study (Wulff and Yates 2001) arising from rent and income categories that were too broad. The tables used in this Positioning Paper analysis have been generated on a consistent definition basis and at a finer level of detail for constant real values for household income and rent paid than was possible with the more detailed data matrix. The summary tables also offer a finer level of spatial detail, with the data disaggregated to the Local Government Area (LGA) level. All rent and income data for 2001 have

been generated from a CPI adjustment to their 1996 equivalent. The CPI adjustment was June 2001/June 1996 ($133.8/119.8 = 1.116$).

The 12 dwelling rent and household income categories (both in dollars per week) are shown in the following tables. The segment description in the tables below is included to facilitate comparison with the Wulff and Yates (2001) analysis of the low rent stock.

Table 1-1: Nominal dwelling rent categories, 1996 and 2001

(\$pw in \$1996)	(\$pw in \$2001)	Weekly rent segment	Segment description
\$1-\$60	\$1-\$67	R1	Low
\$61-\$90	\$68-\$100	R2	Low
\$91-\$120	\$101-\$134	R3	Low-moderate
\$121-\$150	\$135-\$167	R4	Low-moderate
\$151-\$180	\$168-\$201	R5	Moderate
\$181-\$210	\$202-\$234	R6	Moderate
\$211-\$240	\$235-\$268	R7	Moderate
\$241-\$300	\$269-\$335	R8	Moderate-high
\$301-\$360	\$336-\$402	R9	Moderate-high
\$361-\$450	\$403-\$502	R10	High
\$451-\$600	\$503-\$670	R11	High
\$601+	\$671+	R12	High

Table 1-2: Nominal household income categories, 1996 and 2001

(\$pw in \$1996)	(\$pw in \$2001)	Weekly household income group	Description
\$0-\$199	\$0-\$222	Y1	Low
\$200-\$299	\$223-\$334	Y2	Low
\$300-\$399	\$335-\$446	Y3	Low-moderate
\$400-\$499	\$447-\$557	Y4	Low-moderate
\$500-\$599	\$558-\$669	Y5	Moderate
\$600-\$699	\$670-\$781	Y6	Moderate
\$700-\$799	\$782-\$892	Y7	Moderate
\$800-\$999	\$893-\$1116	Y8	Moderate-high
\$1000-\$1199	\$1117-\$1339	Y9	Moderate-high
\$1200-\$1499	\$1340-\$1674	Y10	High
\$1500-\$1999	\$1675-\$2233	Y11	High
\$2000+	\$2234+	Y12	High

1.4. Data imputation

In the data employed in this study, issues arose for a number of reasons. In the first place, census data on critical variables such as household income and rent tend to have fairly high proportions of observations for which data are missing or, in the case of household income, are only partially stated. A further problem occurred with the 2001 Census because income was collected as a categorical variable with the same categories employed in 2001 as in the 1996 Census. Consequently, adjustments were needed to ensure that real income remained unchanged in the categories employed. A brief indication of the procedures employed is given below. More detail is provided in Appendix A.

1.4.1. *Missing values*

All observations for which data were missing have had values imputed. The rationale for imputation is outlined in Wulff and Yates (2001) and the imputation process employed in this present study generally follows the same procedures as the earlier study. For this study, however, because the imputation was undertaken by the ABS before the data requested were extracted from the census file, it was possible to refine the process of imputation employed for missing or partially stated household income.

For Australia, approximately 2 per cent of private rental dwellings in 2001 required that rent paid be imputed. Broadly, observations for which rents paid were missing had data assigned on the basis of an equivalent 'donor' population for whom full information was available. Missing rental values were assigned on the basis of dwelling structure (4 types) and size (4 levels) and on location (a metro, non-metro breakdown within each state) and on the basis of three categories of household income (low; low to moderate; or above average). This calculation was undertaken after missing household income was imputed. For the supplementary rent data collected for 1996, cost constraints meant it was not possible to employ these detailed imputation procedures and the 1.8 per cent of cases for which rent was not stated were imputed on a pro-rata basis within each LGA.

In 2001, there were approximately 11 per cent of households for whom income needed to be imputed. Of these, 8 per cent had incomes partially stated. Only 3 per cent had no income information provided. ABS analysis of the non-response rate to the income question (Summerfield and Tobin 2003) suggests that, at the person level, non-response arises primarily from those not in the labour force (such as students or unemployed, a high proportion of whom were aged 15-24). Many of these are presumed to regard the question as not applicable to them. Whilst such incomes are likely to be at the low end of the personal income distribution, they contribute to the 8 per cent of cases where household income is only partially stated and it does not follow that households containing at least one individual who did not respond to the income question are necessarily at the low end of the household income distribution.

Household income was imputed from donor populations categorised into 1,440 sub-populations on the basis of location, age of household reference person, household type and employment status. The census data had no missing observations for location, age of reference person and household type.² Within each of these sub-populations, data were further partitioned three ways with cases where income and employment data were reported for all household members forming a 'donor' category, and those where income was partially or completely not stated and all other households forming two 'recipient' categories. Each record in the recipient population was randomly assigned a donor record's household income so long as it was at least as great as the partial income. Specific details of the imputation process are provided in Appendix A.

² Non-classifiable households have been excluded from the data.

For 1996, cost constraints meant that the imputation process was not repeated and cruder methods were employed to impute missing income data for the 1996 summary income data collected at the LGA level. For the 1996 data, those cases where income was partially stated or not stated have been allocated pro-rata on the basis of the underlying income distribution within each LGA for which data were missing. For the 1996 data on private renters, 6.5 per cent of renting households had income partially stated and 1.7 per cent had no income data provided. All 8.2 per cent of cases have been treated as if they were randomly missing within the LGA in which they lived. As indicated, there is reasonable evidence to suggest missing income data are not random but that they are associated with multiple income households. Pro-rata allocation, therefore, is likely to have the effect that the proportion of higher income households is under-stated for the 1996 data and the proportion of lower income households is over-stated.

1.4.2. *Re-categorisation of income ranges*

In order to generate new income categories equivalent in real terms to those employed in the 1996 Census, further manipulation of the data was needed. This was achieved by recalculating household income from the individual incomes that contribute to it, assigning a point value to each household income and then reassigning household income to the newly defined real equivalent income categories for 2001.

A point estimate was initially assigned to all individuals who stated their income. The median individual income for each income range was used to construct a distribution for individual income within each census range. Half the population of individuals in each range was assigned a point estimate uniformly distributed between the lower bound of the range and the median and half was assigned a point estimate uniformly distributed between the median and the upper bound of the range. Household income was re-estimated by summing these point estimates for individuals, with the sum constrained so that the contribution of each household to the original ABS range was not inconsistent with the new 12 level range for household income.

These point estimates of household income were then used to classify income into the new income categories. This reclassification was used to generate a 12 category income variable for which summary data were obtained at an LGA level. The more aggregated income variable in the detailed data matrix (which consists of 5 categories) is a subset of this broader range. Again, a more detailed description of the procedures employed and a rationale for the need for this more sophisticated approach to reclassification than would arise by use of median incomes within each category are provided in Appendix A.

1.5. Summary

This Positioning Paper has two primary objectives. First, it aims to provide an overview of the adjustments made to the 2001 Census data to ensure that results can be reported on a consistent real terms basis with results obtained from the 1996 Census. Secondly, it aims to report initial results from the data that are consistent with those to be employed in the Final Report but which have been collected at a more disaggregated level for the two key variables (rent and household income) that will form the basis of the forthcoming report. This enables a sensitivity analysis to be undertaken to determine the extent to which the results to be presented in the Final Report are sensitive to the categories employed in that report. This chapter and the information provided in Appendix A addresses the first of these aims. The following chapters address the second.

2. PRIVATE RENTAL: A NATIONAL OVERVIEW

In 2001, there were 6.7 million households living in private dwellings in Australia who fell within the scope of this study³. The dominance of home ownership is apparent: 40.0 per cent of households owned their dwelling outright; 27.6 per cent were purchasing their dwelling and; 5.3 per cent lived in social housing (Table 2-1). Another 6.5 per cent did not state their tenure or occupied their dwelling rent free. The private rental market accounted for 19.7 per cent of all occupied private dwellings.

Table 2-1: Occupied private dwellings in Australia by nature of occupancy, 2001

Tenure	Number	%
Outright owner	2,757,000	40.9
Owner purchaser	1,861,000	27.6
Private renter	1,328,000	19.7
Social renter	358,000	5.3
Tenure not stated	441,000	6.5
All households in scope	6,745,000	100.0

Source: Special Matrix Tabulation, 2001 Census

The focus of this study is on the 1,328,000 dwellings that make up nearly 20 per cent of the housing stock that is in the private rental sector and on the households who occupy this stock.

2.1. Australia's stock of private rental housing

In 2001, there were some 1.328 million private rental dwellings in Australia. Of these, just over 25 per cent rented for less than \$134 per week, 50 per cent rented for less than \$167 per week (encompassing the low and low-moderate rent segments of the private rental market) and nearly 80 per cent rented for less than \$234 per week. The distribution of rental dwellings in 2001 by rent segment is shown in Table 2-2 below.

Table 2-2: Private rental dwellings in Australia, 2001

Rent segment		\$2001	Private rental dwelling stock, 2001		Cumulative stock, 2001	
				%		%
R1	Low	\$1-\$67	26,000	2	26,000	2
R2	Low	\$68-\$100	128,000	10	154,000	12
R3	Low-moderate	\$101-\$134	199,000	15	353,000	27
R4	Low-moderate	\$135-\$167	313,000	24	666,000	50
R5	Moderate	\$168-\$201	265,000	20	931,000	70
R6	Moderate	\$202-\$234	110,000	8	1,041,000	78
R7	Moderate	\$235-\$268	86,000	6	1,127,000	85
R8	Moderate-high	\$269-\$335	96,000	7	1,224,000	92
R9	Moderate-high	\$336-\$402	49,000	4	1,273,000	96
R10	High	\$403-\$502	26,000	2	1,299,000	98
R11	High	\$503-\$670	13,000	1	1,312,000	99
R12	High	\$671+	16,000	1	1,328,000	100
			1,328,000	100	1,328,000	100

Source: ABS Summary Rent Tabulation, 2001 Census

³ This is the count of households within the scope of this study. Just over 327,000 visitor only or not classifiable households are excluded. The count of households used in this study, therefore, under-reports the dwelling stock by 0.5 per cent. Visitor only and not classifiable households have been excluded because there is no or only limited available on their socio-economic and demographic characteristics and no basis on which this information can be imputed other than by applying a scale factor to the results reported.

2.2. Changes in rental stock between 1996 and 2001

This outcome represents a marked change from the structure of the private rental market in 1996. Table 2-3 provides the equivalent data for 1996 based on rent categories that are constant in real terms and derived from a consistently defined population within the private rental market. In 1996, just under 60 per cent rented in the low and low-moderate rent segments (compared with 50 per cent in 2001).

Table 2-3: Private rental dwellings in Australia, 1996

Rent segment		\$1996	Private rental dwelling stock, 1996		Cumulative stock, 1996	
				%		%
R1	Low	\$1-\$60	37,000	3	37,000	3
R2	Low	\$61-\$90	116,000	9	153,000	12
R3	Low-moderate	\$91-\$120	242,000	20	395,000	32
R4	Low-moderate	\$121-\$150	333,000	27	727,000	59
R5	Moderate	\$151-\$180	228,000	18	955,000	77
R6	Moderate	\$181-\$210	109,000	9	1,064,000	86
R7	Moderate	\$211-\$240	57,000	5	1,121,000	91
R8	Moderate-high	\$241-\$300	64,000	5	1,186,000	96
R9	Moderate-high	\$301-\$360	22,000	2	1,208,000	98
R10	High	\$361-\$450	14,000	1	1,222,000	99
R11	High	\$451-\$600	7,000	1	1,229,000	100
R12	High	\$601+	5,000	0	1,234,000	100
			1,234,000	100	1,234,000	100

Source: ABS Summary Rent Tabulation, 1996 Census

Between 1996 and 2001, the private rental stock grew by 7.6 per cent at a time when the total number of Australian households increased by 7.4 per cent⁴. However, as shown in Table 2.4, this growth in the private rental stock occurred in the top quintile of the rent distribution (that is, above R6 rent levels on a cumulative basis).

Table 2-4: Growth in private rental stock in Australia, 1996-2001

Rent segment		\$1996	\$2001	Stock		Cumulative stock	
				Change in dwellings	Growth 1996-2001	Change in dwellings	Growth 1996-2001
					%		%
R1	Low	\$1-\$60	\$1-\$67	-11,000	-30	-11,000	-30
R2	Low	\$61-\$90	\$68-\$100	12,000	11	1,000	1
R3	Low-moderate	\$91-\$120	\$101-\$134	-43,000	-18	-42,000	-11
R4	Low-moderate	\$121-\$150	\$135-\$167	-20,000	-6	-61,000	-8
R5	Moderate	\$151-\$180	\$168-\$201	37,000	16	-24,000	-2
R6	Moderate	\$181-\$210	\$202-\$234	1,000	1	-23,000	-2
R7	Moderate	\$211-\$240	\$235-\$268	29,000	50	6,000	1
R8	Moderate-high	\$241-\$300	\$269-\$335	32,000	49	38,000	3
R9	Moderate-high	\$301-\$360	\$336-\$402	27,000	118	65,000	5
R10	High	\$361-\$450	\$403-\$502	12,000	87	77,000	6
R11	High	\$451-\$600	\$503-\$670	6,000	85	83,000	7
R12	High	\$601+	\$671+	11,000	222	94,000	8
				94,000	7.6	94,000	7.6

Source: ABS Summary Rent Tabulations, 1996 and 2001 Censuses

⁴ Based on change in number of households from BCP Table B27, 1996 and BCP Table 32, 2001, both excluding visitor only and non-classifiable households.

Despite an overall growth in the private rental stock, the number of dwellings for rent below the moderate-high rent and high rent segments declined in absolute numbers.

This trend, over just a 5 year period, extends the trend identified for the 10 years to 1996 where observed declines were restricted to just the low rent stock. During that period (1986 and 1996), the stock in all higher rent segments (including low-moderate and moderate) increased (Wulff and Yates 2001).

By 2001, however, the number of rental dwellings with weekly rents below \$167 (R4, the bottom half of the rental market encompassing the low and low-moderate rent stock) experienced an absolute loss of 61,000 dwellings (Table 2.4).

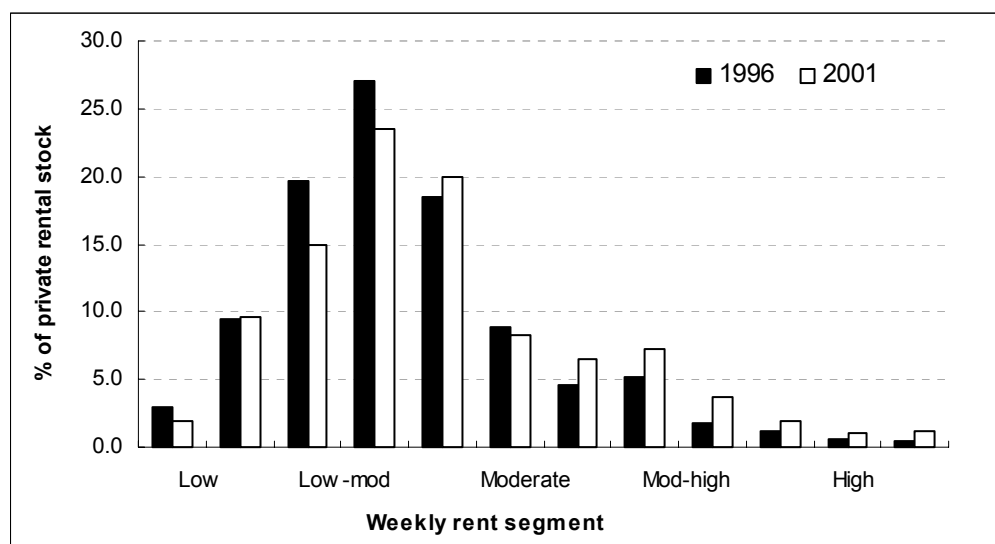
Absolute declines occurred between 1996 and 2001 amongst stock that rented for less than \$234 per week (R6) in 2001. In 1996, dwellings with a rental value of up to and including this R6-moderate level represented 86 per cent of the total private rental stock. By 2001, dwellings with the equivalent rental value represented only 78 per cent of the total private rental stock.

In other words, between 1996 and 2001, on an Australia wide level there was an absolute decline in the total number of dwellings that rented in the bottom four fifths of the rent distribution.

Conversely, there was an absolute increase in the total number of dwellings only for those that rented in the top quintile of rental values (above \$234 per week in \$2001).⁵ Table 2.4 records this systematic decline in the size of the rental stock with rents at or below \$234 per week (and the bottom four quintiles in 2001) and the disproportionate increase in the stock that rents for values above this level. Of particular note is the rapid growth of stock that rents in the top segment, representing weekly rents in excess of \$670 per week, albeit from a relatively low base.

Figure 2-1 illustrates the changing distribution of the rental stock between 1996 and 2001⁶. Figure 2.2 highlights the cumulative impact of the loss of low rent stock and clearly illustrates the growth in the rental stock at the top end of the private rental market.

Figure 2-1: Distribution of private rental stock: Australia, 1996 and 2001

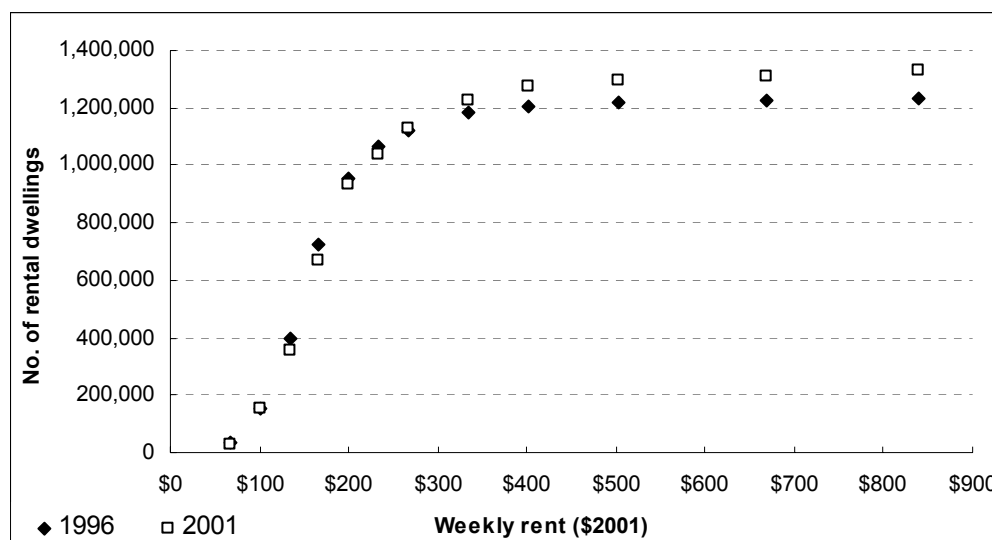


Source: ABS Summary Rent Tabulations, 1996 and 2001 Censuses

⁵ In the Yates and Wulff report (Yates and Wulff, 2000), dwellings with values of \$200 or more per week (in \$1996) were described as high rent dwellings and represented just 18 per cent of the private rental stock.

⁶ This figure is derived from the data in Table 2-2. Rent categories are broader at the very low and high rent levels than they are for intermediate rent levels. Income data in the following section are similarly represented.

Figure 2-2: Cumulative distribution of private rental stock: Australia, 1996 and 2001



Source: ABS Summary Rent Tabulations, 1996 and 2001 Censuses

2.3. Household income of private renters in 2001

The impact of market rents on affordability depends primarily on the income distribution of households in the private rental market. Table 2-5 provides income distribution data for households in the private rental sector, defined so that the rent boundaries are 30 per cent of the corresponding household income boundaries. The results show that, in 2001, the median income of households in the private rental market was moderate (somewhere between \$670 and \$781 per week), with just over a quarter of households on incomes below \$447 per week (that is, in the bottom three income categories) and with 20 per cent of households on incomes above \$1339 per week (that is, in the top three income categories).

Table 2-5: Distribution of income of households in private rental in Australia, 2001

Household		Cumulative households,				
Income class		\$2001	Households, 2001		2001	
				%	%	
Y1	Low	\$0-\$222	92,000	7	92,000	7
Y2	Low	\$223-\$334	121,000	9	212,000	16
Y3	Low-moderate	\$335-\$446	136,000	10	349,000	26
Y4	Low-moderate	\$447-\$557	133,000	10	482,000	36
Y5	Moderate	\$558-\$669	110,000	8	592,000	45
Y6	Moderate	\$670-\$781	109,000	8	701,000	53
Y7	Moderate	\$782-\$892	94,000	7	795,000	60
Y8	Moderate-high	\$893-\$1116	150,000	11	945,000	71
Y9	Moderate-high	\$1117-\$1339	118,000	9	1,063,000	80
Y10	High	\$1340-\$1674	107,000	8	1,170,000	88
Y11	High	\$1675-\$2233	123,000	9	1,293,000	97
Y12	High	\$2234+	35,000	3	1,328,000	100
			1,328,000	100	1,328,000	100

Source: ABS Summary Household Income Tabulation, 2001 Census

As discussed, comparisons with the equivalent outcomes in 1996 (Table 2-6) can only be approximate because the data for 2001 have had the 8 per cent of cases where there were missing values imputed through different procedures than applied to the 1996 data. This is likely to have had the effect of over-stating the proportion of households in private rental with low incomes and understating those with higher incomes in 1996. The data, however, are derived from the same population for 1996 as for 2001 and the income categories are unchanged in real terms.

Table 2-6: Distribution of income of households in private rental in Australia, 1996

Household income class		\$1996	Households, 1996		Cumulative households, 1996	
				%		%
Y1	Low	\$0-\$199	110,000	8	110,000	8
Y2	Low	\$200-\$299	119,000	9	228,000	17
Y3	Low-moderate	\$300-\$399	140,000	11	368,000	28
Y4	Low-moderate	\$400-\$499	139,000	10	508,000	38
Y5	Moderate	\$500-\$599	124,000	9	631,000	48
Y6	Moderate	\$600-699	114,000	9	745,000	56
Y7	Moderate	\$700-\$799	87,000	7	832,000	63
Y8	Moderate-high	\$800-\$999	138,000	10	971,000	73
Y9	Moderate-high	\$1000-\$1199	96,000	7	1,066,000	80
Y10	High	\$1200-\$1499	71,000	5	1,137,000	86
Y11	High	\$1500-\$1999	51,000	4	1,188,000	89
Y12	High	\$2000+	46,000	3	1,234,000	93
			1,234,000	93	1,234,000	93

Source: ABS Summary Household Income Tabulation, 1996 Census

This notwithstanding, several observations can be drawn from the data in Table 2-5 and Table 2-6. Although estimates of the extent of the decline in the numbers of households in the two lowest income categories may be affected by the imputation procedures used for 1996, the data suggest that there has been a considerable improvement in the income status of households in the lowest income brackets. This observation is supported by a more detailed analysis of income distribution changes undertaken for the population as a whole and for different sub-groups within the population by AMP-NATSEM (2002), Siminski and Norris (2003) and Bray (2003). NATSEM, for example, showed that mean taxable income grew from 1994-95 to 1998-99 by 18.6 per cent with increases in taxable income of between 16-19 per cent fairly evenly spread across all but the top 20 per cent of tax payers (whose incomes increased by 21-25 per cent). Siminski and Norris showed that average weekly equivalised⁷ gross household income increased by 16.3 per cent from 1996 to 2001, with increases ranging from 17.1 per cent in the major cities to 13.3 per cent in outer regional areas. Bray used census data from 1986 to 2001 to show that regionally defined mean equivalised gross incomes (that is, based on location rather than on households) increased significantly more in real terms between 1996 and 2001 than in earlier inter-censal periods. He also suggested that, for 1996 to 2001, this increase occurred across the income spectrum, in marked contrast with changes in earlier periods.

Table 2-7 shows a persistent decline in the number of low income households and an offsetting increase in the number of high income households, particularly in those with incomes above \$1,000 per week or more. By 2001, the median household income of households in the private rental market was slightly higher than in 1996.

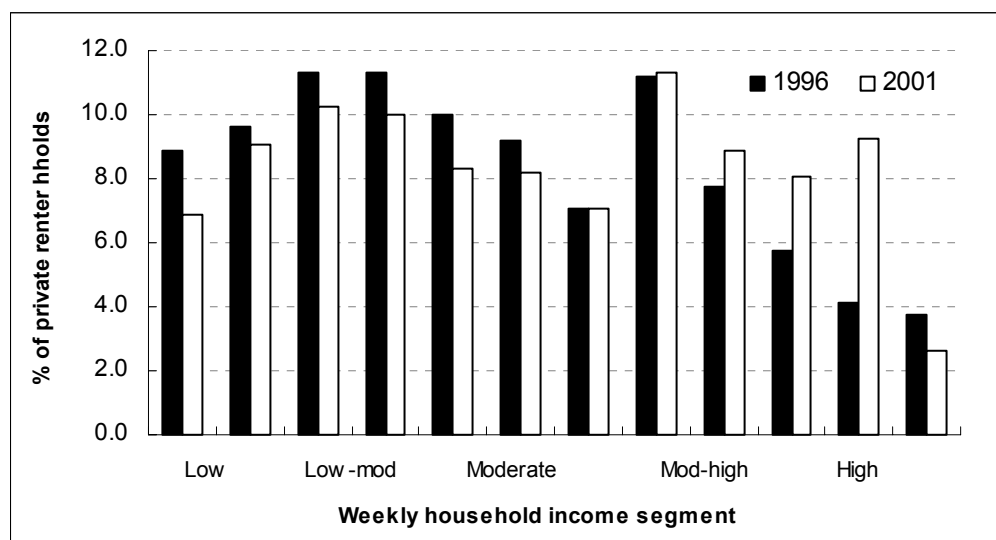
⁷ That is, adjusted for household size and composition.

Table 2-7: Growth in households in private rental in Australia, 1996-2001

Household income class		\$1996	\$2001	Households		Cumulative households	
				Change in households	Growth 1996-2001	Change in households	Growth 1996-2001
					%		%
Y1	Low	\$0-\$199	\$0-\$222	-18,000	-17	-18,000	-17
Y2	Low	\$200-\$299	\$223-\$334	2,000	2	-16,000	-7
Y3	Low-moderate	\$300-\$399	\$335-\$446	-4,000	-3	-20,000	-5
Y4	Low-moderate	\$400-\$499	\$447-\$557	-6,000	-4	-26,000	-5
Y5	Moderate	\$500-\$599	\$558-\$669	-13,000	-11	-39,000	-6
Y6	Moderate	\$600-\$699	\$670-\$781	-5,000	-4	-44,000	-6
Y7	Moderate	\$700-\$799	\$782-\$892	7,000	8	-38,000	-5
Y8	Moderate-high	\$800-\$999	\$893-\$1116	12,000	8	-26,000	-3
Y9	Moderate-high	\$1000-\$1199	\$1117-\$1339	22,000	23	-4,000	0
Y10	High	\$1200-\$1499	\$1340-\$1674	37,000	52	33,000	3
Y11	High	\$1500-\$1999	\$1675-\$2233	72,000	143	105,000	9
Y12	High	\$2000+	\$2234+	-11,000	-24	94,000	8
				94,000	7.6	94,000	7.6

Source: ABS Summary Household Income Tabulations, 1996 and 2001 Censuses

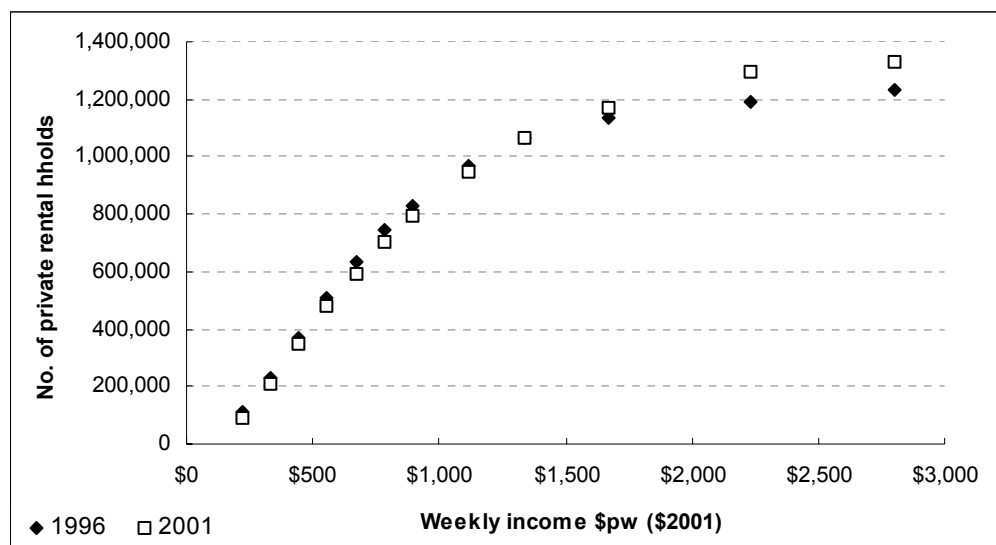
The improvement in the income distribution of households in the private rental market between 1996 and 2001 can be seen in Figure 2-3, which illustrates the data presented in Table 2-5 and Table 2-6 and highlights the decline in the proportion of low income households and the increase in the proportion of households with moderate to high and high levels of household income.⁸ Figure 2-4 shows the cumulative impact of these changes.

Figure 2-3: Income distribution of private rental households: Australia 1996 and 2001

Source: ABS Summary Household Income Tabulations, 1996 and 2001 Censuses

⁸ The apparent increase in the proportion of households with moderate to high and high incomes reflects a change in categorical boundaries from a \$100 range up to moderate income levels to a \$200 or more range above this. This does not change the observations reported in the text.

Figure 2-4: Cumulative income distribution of private rental households: Australia 1996 and 2001



Source: ABS Summary Household Income Tabulations, 1996 and 2001 Censuses

The data for 2001 (Table 2-5) also show that only 36 per cent of households have incomes in the low and low to moderate range (Y1-Y4), yet 50 per cent of dwellings in Australia (Table 2-2) rented in the low and low to moderate rent segments (R1-R4). This suggests that, as long as the low rent dwellings that exist are appropriately located, adequate in size to meet the housing needs of lower income households, and, importantly, available (that is, not occupied by higher income households) then in 2001, the supply of low rent dwellings was more than sufficient for the 36 per cent of low income households. These latter issues will be the main focus of the Final Report.

The next section estimates the shortage or surplus of dwellings for all private renter households and compares the situation in 2001 with that in 1996.

2.4. Aggregate estimates of shortage

Table 2-8 shows Australia-wide estimates of the shortage of affordable rental stock in 2001. Despite the improved household incomes of the 16 per cent of private renters in the lowest two income categories, the decline in the numbers of affordable rental properties led to a 2001 nation-wide shortage of 59,000 rental dwellings. These households are on incomes below benefit levels for all household types other than single persons.

The Final Report will analyse the actual characteristics of low-income households and the dwellings in which they reside. This next step may modify the shortage estimate given here because it will take into account whether households actually reside in affordable dwellings, whether the dwellings are adequate and, moreover, whether they are in the locations where low income renter households live. This question will be examined using the more complex ABS special matrix and will form the basis of the Final Report.

Table 2-8: Shortage of affordable rental stock: Australia, 2001

H'hold income class	\$2001	Rent segment	\$2001		Cumulative Cumulative		Shortage
					Private rental stock	No. of h'holds	
Y1	\$0-\$222	R1	\$1-\$67	Low	26,000	92,000	-66,000
Y2	\$223-\$334	R2	\$68-\$100	Low	154,000	212,000	-59,000
Y3	\$335-\$446	R3	\$101-\$134	Low-moderate	353,000	349,000	4,000
Y4	\$447-\$557	R4	\$135-\$167	Low-moderate	666,000	482,000	184,000
Y5	\$558-\$669	R5	\$168-\$201	Moderate	931,000	592,000	339,000
Y6	\$670-\$781	R6	\$202-\$234	Moderate	1,041,000	701,000	340,000
Y7	\$782-\$892	R7	\$235-\$268	Moderate	1,127,000	795,000	333,000
Y8	\$893-\$1116	R8	\$269-\$335	Moderate-high	1,224,000	945,000	279,000
Y9	\$1117-\$1339	R9	\$336-\$402	Moderate-high	1,273,000	1,063,000	210,000
Y10	\$1340-\$1674	R10	\$403-\$502	High	1,299,000	1,170,000	129,000
Y11	\$1675-\$2233	R11	\$503-\$670	High	1,312,000	1,293,000	19,000
Y12	\$2234+	R12	\$671+	High	1,328,000	1,328,000	0
					1,328,000	1,328,000	0

Source: ABS Summary Rent Tabulation, 2001 Census

The results in compared with those in Table 2-9 show that the outcome for low-income households in 2001 had improved over the situation in 1996. Table 2.9 shows that, in 1996, there was an overall shortage of 76,000 dwellings affordable for low-income households, compared with a shortage of 59,000 in 2001 (Table 2.8).⁹

Table 2-9: Shortage of affordable rental stock: Australia, 1996

H'hold income class	\$1996	Rent segment	\$1996		Cumulative Cumulative		Shortage
					Private rental stock	No. of h'holds	
Y1	\$0-\$199	R1	\$1-\$60	Low	37,000	110,000	-73,000
Y2	\$200-\$299	R2	\$61-\$90	Low	153,000	228,000	-76,000
Y3	\$300-\$399	R3	\$91-\$120	Low-moderate	395,000	368,000	26,000
Y4	\$400-\$499	R4	\$121-\$150	Low-moderate	727,000	508,000	219,000
Y5	\$500-\$599	R5	\$151-\$180	Moderate	955,000	631,000	324,000
Y6	\$600-\$699	R6	\$181-\$210	Moderate	1,064,000	745,000	319,000
Y7	\$700-\$799	R7	\$211-\$240	Moderate	1,121,000	832,000	289,000
Y8	\$800-\$999	R8	\$241-\$300	Moderate-high	1,186,000	971,000	215,000
Y9	\$1000-\$1199	R9	\$301-\$360	Moderate-high	1,208,000	1,066,000	142,000
Y10	\$1200-\$1499	R10	\$361-\$450	High	1,222,000	1,137,000	85,000
Y11	\$1500-\$1999	R11	\$451-\$600	High	1,229,000	1,188,000	41,000
Y12	\$2000+	R12	\$601+	High	1,234,000	1,234,000	0
					1,234,000	1,234,000	0

Source: ABS Summary Rent Tabulation, 1996 Census

⁹ Yates and Wulff (2000) presented an estimate of an Australian wide shortage of 50,000 dwellings for households with 1996 incomes below \$300. The higher estimate presented here for 1996 arises because data constraints in the earlier report meant that the rent cut-off was set at 33 per cent of income for these very low income households (and 30 per cent of income for higher income households). In the summary data used in this report, however, it is consistently defined as 30 per cent of income, so that the relevant 1996 rent boundary is below \$90 in \$1996 rather than below \$100.

3. PRIVATE RENTAL: A SPATIALLY DISAGGREGATED OVERVIEW

Of the 1.328 million private rental dwellings in Australia in 2001, just under two thirds (66 per cent) were in the metropolitan regions and just over one third (34 per cent) in non-metropolitan areas. These proportions are unchanged from 1996. This chapter repeats the national level analysis presented in Chapter 2 at a more spatially disaggregated level.

3.1. Metropolitan and Non-metropolitan data

Table 3.1 presents the distribution of rents paid for a metropolitan and non-metropolitan level of disaggregation. Not unexpectedly, the incidence of lower valued rental stock is far greater in non-metropolitan Australia than the capital cities. Seventy-two per cent of dwellings in non-metropolitan Australia are being rented at low and low to moderate rents compared with only 39 per cent of dwellings in metropolitan regions. Conversely, whilst 20 per cent of the dwelling stock in metropolitan regions had rents in the moderate-high to high range, only 4 per cent of rental stock in non-metropolitan regions had such high rental values.

Table 3-1: Distribution of rents paid: metropolitan and non-metropolitan regions, 2001

Rent segment		\$2001	Stock, 2001				Cumulative stock, 2001			
			Metro	Non-metro	Metro	Non-metro	Metro	Non-metro	Metro	Non-metro
					%	%			%	%
R1	Low	\$1-\$67	8,000	18,000	1	4	8,000	18,000	1	4
R2	Low	\$68-\$100	49,000	79,000	6	17	57,000	97,000	7	21
R3	Low-mod	\$101-\$134	94,000	105,000	11	23	151,000	202,000	17	44
R4	Low-mod	\$135-\$167	187,000	126,000	21	28	338,000	328,000	39	72
R5	Moderate	\$168-\$201	191,000	74,000	22	16	529,000	402,000	61	89
R6	Moderate	\$202-\$234	89,000	21,000	10	5	618,000	423,000	71	93
R7	Moderate	\$235-\$268	73,000	14,000	8	3	691,000	437,000	79	96
R8	Mod-high	\$269-\$335	88,000	9,000	10	2	778,000	445,000	89	98
R9	Mod-high	\$336-\$402	46,000	3,000	5	1	824,000	448,000	94	99
R10	High	\$403-\$502	25,000	1,000	3	0	849,000	449,000	97	99
R11	High	\$503-\$670	12,000	1,000	1	0	862,000	450,000	99	99
R12	High	\$671+	13,000	4,000	1	1	874,000	454,000	100	100
			874,000	454,000	100	100	874,000	454,000	100	100

Source: ABS Summary Rent Tabulation, 2001 Census

Table 3.2 presents the distribution of rents in 1996 and the growth in the rental stock in the different segments between 1996 and 2001. At an Australia wide level, there was an absolute decline in the total number of rental dwellings with rents at or below \$235 per week (the R6 category in Table 2-4). From Table 3.2 it can be seen that, at a broad national level, this decline is almost solely a metropolitan phenomenon. Declines in non-metropolitan regions are observed only for the extremely low valued rental stock. Within metropolitan regions, however, the number of rental dwellings declined in each rent segment through to the moderate-high rent range. By 2001, in metropolitan regions there were 691,000 dwellings renting for less than the moderate to high level of \$269 per week (<R8). In 1996 there were 713,000 such dwellings. In other words, in metropolitan regions, declines in the private rental stock extended right through to moderate to high value stock.

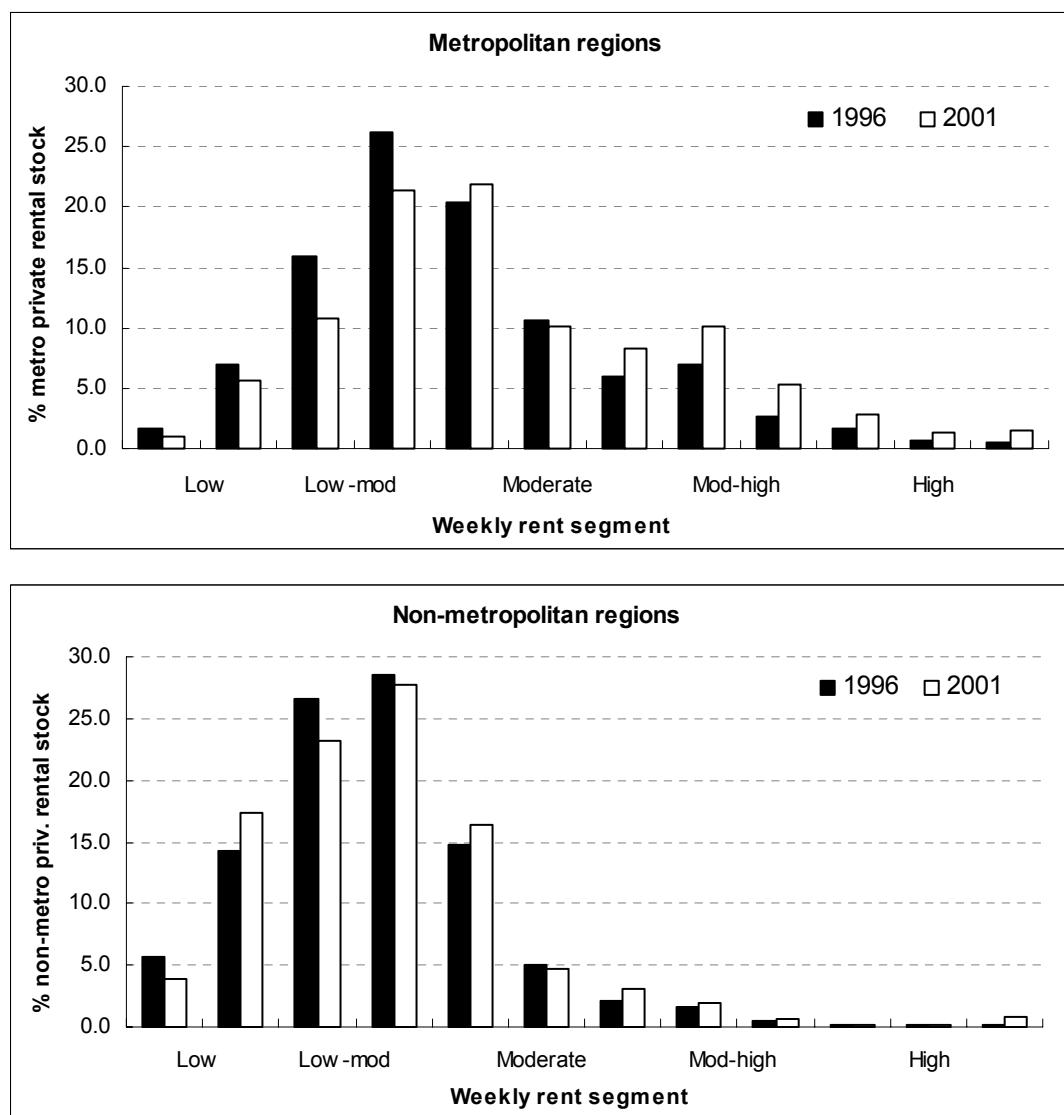
Table 3-2: Distribution of rents paid: metropolitan and non-metropolitan regions, 1996 and growth 1996-2001

			Stock, 1996		Growth, 1996-2001		Cumulative stock, 1996		Growth, 1996-2001	
Rent segment			\$1996							
				Metro	Non-metro	Metro	Non-metro	Metro	Non-metro	
						%	%			%
R1	Low	\$1-\$60		13,000	24,000	-37	-27	13,000	24,000	-37
R2	Low	\$61-\$90		56,000	60,000	-12	32	68,000	84,000	-17
R3	Low-mod	\$91-\$120		130,000	112,000	-28	-6	198,000	196,000	-24
R4	Low-mod	\$121-\$150		213,000	120,000	-12	5	411,000	316,000	-18
R5	Moderate	\$151-\$180		166,000	62,000	15	20	577,000	378,000	-8
R6	Moderate	\$181-\$210		87,000	21,000	2	-4	664,000	400,000	-7
R7	Moderate	\$211-\$240		49,000	9,000	50	55	713,000	408,000	-3
R8	Mod-high	\$241-\$300		57,000	7,000	53	18	770,000	416,000	1
R9	Mod-high	\$301-\$360		21,000	2,000	121	73	791,000	417,000	4
R10	High	\$361-\$450		13,000	1,000	91	34	804,000	418,000	6
R11	High	\$451-\$600		6,000	1,000	89	36	810,000	419,000	6
R12	High	\$601+		4,000	1,000	217	241	814,000	420,000	7
				814,000	420,000	7.4	8.0	814,000	420,000	7.4

Source: ABS Summary Rent Tabulations, 1996 and 2001 Censuses

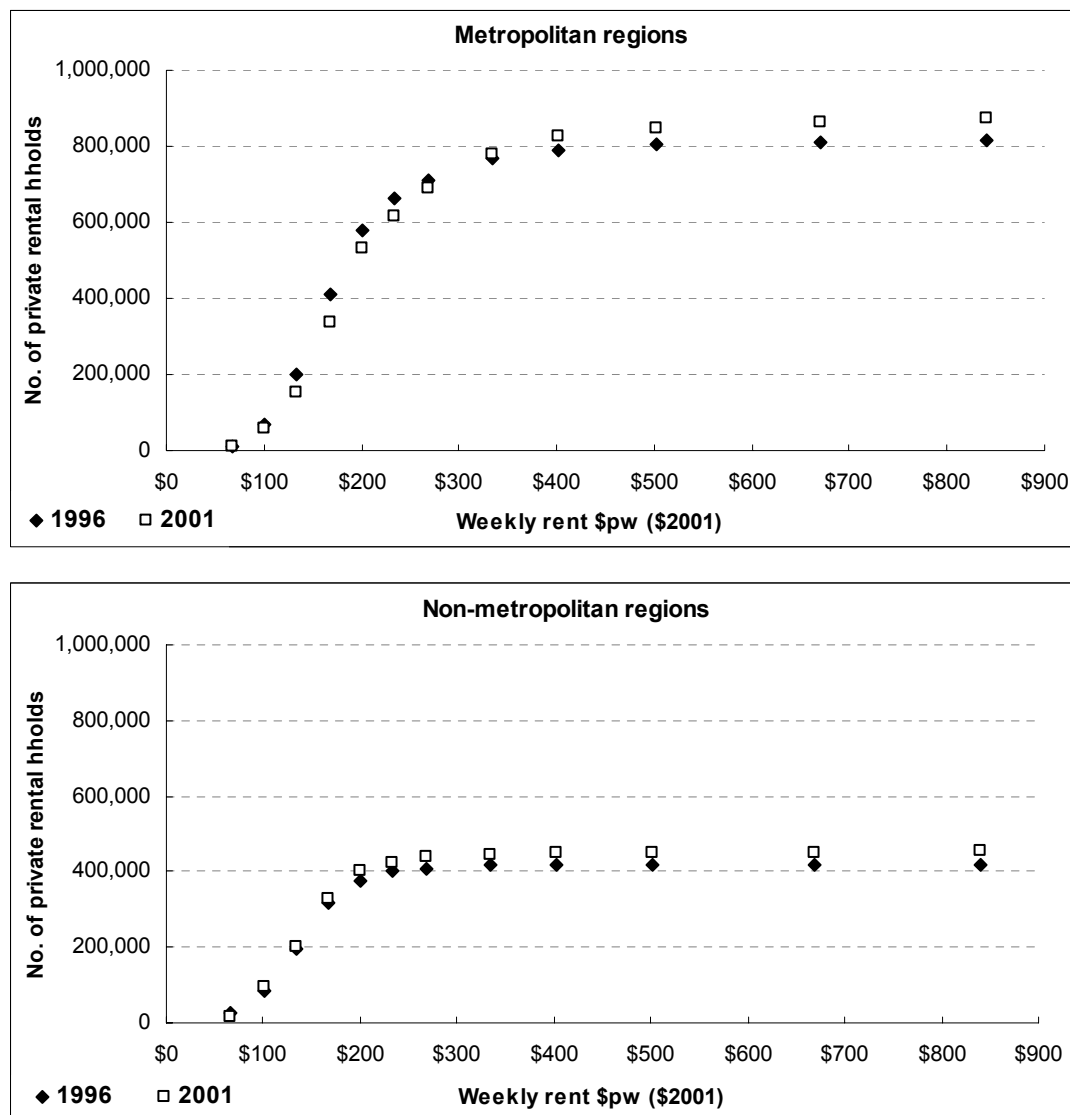
Figure 3-1 illustrates the changes in the distribution of the rental stock in metropolitan and non-metropolitan regions between 1996 and 2001. Figure 3-2 shows the cumulative effect of these changes.

Figure 3-1: Distribution private rental stock: metro and non-metro regions 1996 and 2001



Source: ABS Summary Ret Tabulations, 1996 and 2001 Censuses

Figure 3-2: Cumulative private rental stock: metro and non-metro regions 1996 and 2001



Source: ABS Summary Rent Tabulations, 1996 and 2001 Censuses

As at the national level, the impact these changes have on the capacity of renter households to find affordable housing depends in part on their capacity to pay. Table 3.3 provides income distribution data at a metropolitan and non-metropolitan level for 2001. The results presented in Table 3.3 continue to show a disparity of incomes in 2001 of those in private rental in metropolitan and non-metropolitan regions. More than 50 per cent of renter households in metropolitan regions had incomes above \$782 per week. By contrast, in non-metropolitan regions, almost 50 per cent of households had incomes below \$558 per week in 2001.

Table 3-3: Distribution of income of households in private rent: metropolitan and non-metropolitan regions, 2001

Household income class			Households, 2001				Cumulative households, 2001			
			\$2001	Metro	Non-metro	Metro	Non-metro	Metro	Non-metro	Metro
					%	%			%	%
Y1	Low	\$0-\$222	54,000	38,000	6	8	54,000	38,000	6	8
Y2	Low	\$223-\$334	65,000	56,000	7	12	118,000	94,000	14	21
Y3	Low-mod	\$335-\$446	76,000	61,000	9	13	194,000	155,000	22	34
Y4	Low-mod	\$447-\$557	78,000	55,000	9	12	272,000	210,000	31	46
Y5	Moderate	\$558-\$669	69,000	41,000	8	9	341,000	251,000	39	55
Y6	Moderate	\$670-\$781	69,000	40,000	8	9	410,000	291,000	47	64
Y7	Moderate	\$782-\$892	62,000	32,000	7	7	472,000	323,000	54	71
Y8	Mod-high	\$893-\$1116	103,000	48,000	12	11	574,000	371,000	66	82
Y9	Mod-high	\$1117-\$1339	85,000	33,000	10	7	660,000	403,000	76	89
Y10	High	\$1340-\$1674	82,000	25,000	9	6	741,000	429,000	85	94
Y11	High	\$1675-\$2233	103,000	20,000	12	4	844,000	449,000	97	99
Y12	High	\$2234+	30,000	5,000	3	1	874,000	453,000	100	100
			874,000	454,000	100	100	874,000	454,000	100	100

Source: ABS Summary Household Income Tabulation, 2001 Census

Table 3.4 indicates the equivalent income distribution data for 1996 and shows how these distributions of income amongst private renter households changed between 1996 and 2001. The data indicate that, whilst there has been a general decline in the number of private renters with low household incomes, this trend is far more pronounced in metropolitan than it is in non-metropolitan regions.

Table 3-4: Distribution of income of households in private rent: metropolitan and non-metropolitan regions, 1996 and growth 1996-2001

			Households, 1996		Growth, 1996-2001		Cumulative households, 1996		Growth, 1996-2001	
Household income class		\$1996	Metro	Non- metro	Metro	Non- metro	Metro	Non- metro	Metro	Non- metro
					%	%			%	%
Y1	Low	\$0-\$199	65,000	44,000	-18	-14	65,000	44,000	-18	-14
Y2	Low	\$200-\$299	68,000	51,000	-4	10	133,000	95,000	-11	-1
Y3	Low-mod	\$300-\$399	81,000	59,000	-6	2	214,000	155,000	-9	0
Y4	Low-mod	\$400-\$499	85,000	54,000	-8	2	299,000	209,000	-9	1
Y5	Moderate	\$500-\$599	79,000	44,000	-13	-7	378,000	253,000	-10	-1
Y6	Moderate	\$600-699	74,000	39,000	-7	1	453,000	292,000	-9	-1
Y7	Moderate	\$700-\$799	60,000	28,000	4	16	512,000	320,000	-8	1
Y8	Mod-high	\$800-\$999	96,000	42,000	6	13	609,000	362,000	-6	2
Y9	Mod-high	\$1000-\$1199	71,000	24,000	20	34	680,000	386,000	-3	4
Y10	High	\$1200-\$1499	54,000	17,000	52	52	734,000	403,000	1	6
Y11	High	\$1500-\$1999	41,000	10,000	150	111	775,000	413,000	9	9
Y12	High	\$2000+	39,000	7,000	-23	-35	814,000	420,000	7	8
			814,000	420,000	7.4	8.0	814,000	420,000	7.4	8.0

Source: ABS Summary Household Income Tabulations, 1996 and 2001 Censuses

The final two results for this section show the combined impact of the rent structure and household income distribution in metropolitan and non-metropolitan regions on estimates of shortage in those regions.

The next two tables (Table 3-5 and Table 3-6) present a metropolitan/non-metropolitan disaggregation of the national overview results. Despite a general improvement in the incomes of private renter households in metropolitan regions, the impact of the greater loss of low value rental dwellings in these regions has resulted in estimates of shortage that affect households with incomes further up the income scale than suggested by the national data. The national data showed that in 2001, households with incomes in the first two income groups (Y1-Y2, with incomes up to \$335 per week) face an overall shortage of affordable dwellings. The metropolitan data shows that shortages affect households with incomes in the first three income groups (Y1-Y3, with incomes up to \$446 per week). For metropolitan renter households, therefore, the outcome is worse in 2001 than it was in 1996. In non-metropolitan regions, though, the 2001 shortage of affordable housing was at a similar level to 1996.

Table 3-5: Shortage of affordable rental stock: metropolitan and non-metropolitan regions, 2001

			Metropolitan regions			Non-metropolitan regions		
			Cumulative		Shortage	Cumulative		Shortage
			Stock	Households		Stock	Households	
Y1	R1	Low	8,000	54,000	-45,000	18,000	38,000	-20,000
Y2	R2	Low	57,000	118,000	-61,000	97,000	94,000	3,000
Y3	R3	Low-mod	151,000	194,000	-43,000	202,000	155,000	47,000
Y4	R4	Low-mod	338,000	272,000	66,000	328,000	210,000	118,000
Y5	R5	Moderate	529,000	341,000	188,000	402,000	251,000	151,000
Y6	R6	Moderate	618,000	410,000	208,000	423,000	291,000	132,000
Y7	R7	Moderate	691,000	472,000	219,000	437,000	323,000	114,000
Y8	R8	Mod-high	778,000	574,000	204,000	445,000	371,000	75,000
Y9	R9	Mod-high	824,000	660,000	165,000	448,000	403,000	45,000
Y10	R10	High	849,000	741,000	108,000	449,000	429,000	21,000
Y11	R11	High	862,000	844,000	18,000	450,000	449,000	1,000
Y12	R12	High	874,000	874,000	0	454,000	453,000	0
			874,000	874,000	0	454,000	454,000	0

Source: ABS Summary Rent Tabulation, 2001 Census

Table 3-6: Shortage of affordable rental stock: metropolitan and non-metropolitan regions, 1996

			Metropolitan regions			Non-metropolitan regions		
			Cumulative		Shortage	Cumulative		Shortage
			Stock	Households		Stock	Households	
Y1	R1	Low	13,000	65,000	-53,000	24,000	44,000	-20,000
Y2	R2	Low	68,000	133,000	-65,000	84,000	95,000	-11,000
Y3	R3	Low-mod	198,000	214,000	-15,000	196,000	155,000	42,000
Y4	R4	Low-mod	411,000	299,000	112,000	316,000	209,000	107,000
Y5	R5	Moderate	577,000	378,000	199,000	378,000	253,000	125,000
Y6	R6	Moderate	664,000	453,000	211,000	400,000	292,000	107,000
Y7	R7	Moderate	713,000	512,000	200,000	408,000	320,000	88,000
Y8	R8	Mod-high	770,000	609,000	161,000	416,000	362,000	54,000
Y9	R9	Mod-high	791,000	680,000	111,000	417,000	386,000	31,000
Y10	R10	High	804,000	734,000	70,000	418,000	403,000	15,000
Y11	R11	High	810,000	775,000	35,000	419,000	413,000	6,000
Y12	R12	High	814,000	814,000	0	420,000	420,000	0
			814,000	814,000	0	420,000	420,000	0

Source: ABS Summary Rent Tabulation, 1996 Census

For 2001, Table 3.5 reports an estimated shortfall of 61,000 dwellings in metropolitan regions for households with incomes up to \$334 per week in 2001 (Y2) and a still large shortfall of 43,000 dwellings for households with incomes up to \$446 per week (Y3). Whilst the Y1 and Y2 income categories are likely to consist primarily of single person households, the Y3 category covers many sole parent households with one or two children. Such households are likely to have greater housing needs than are single person households. It is therefore not obvious that the 194,000 dwellings that are affordable for these households will be adequate, even if they were available. For households with Y3 level incomes in 2001 (that is, incomes up to \$447 per week), the estimated shortfall of 43,000 affordable dwellings in metropolitan regions was almost 30,000 more than the equivalent shortfall in 1996.

In non-metropolitan regions, however, shortages exist only for households with very low incomes of up to \$222 per week in 2001 (Y1). Such households are likely to be single persons on benefit levels of income. For these households, the question of adequacy of the low rent stock that is available is unlikely to arise, at least in terms of the size of the stock. Because there has been a decline in the number of households on this level of income, this shortfall remains unchanged from that estimated in 1996 despite the loss of low rent stock. Over the same period, however, the growth in the rental stock affordable to households with incomes up to \$334 per week (Y2) has resulted in a reversal of the 1996 shortage of stock affordable for households in this income range. Table 3.6 provides the 1996 data equivalent to the 2001 data presented in Table 3.5.

3.2. State data

Table 3-7 below further disaggregates the rent and income distributions for the metropolitan and non-metropolitan regions within each State in 2001. Table 3.8 gives estimates of the way in which the shortages are distributed across the States. Table 3.9 provides a consistent basis for comparing the outcomes in 2001 with those for 1996 and Table 3.10 provides the underlying rent and income distribution data for 1996 that is used to generate these estimates.

Table 3.8 shows that the 43,000 shortage of affordable dwellings in metropolitan regions for low-moderate income households (with incomes below \$447 per week in 2001) arises primarily from the pressures in the three largest capital cities. The greatest shortage is in Sydney (with a shortage of 36,000 dwellings) with smaller shortages in Melbourne (with a shortage of 9,000 dwellings) and Brisbane (with a shortage of 4,000 dwellings). In all of these cases the shortage of this lower rent stock is more severe in 2001 than it was for equivalent rent and income levels in 1996. This can be seen from the data in Table 3.9.

In Sydney the absolute shortfall in affordable dwellings extends through to moderate-income households (with incomes below \$558 per week) with a still significant shortfall of 27,000 dwellings. This represents more than double the shortfall of 12,000 dwellings that were deemed affordable for households on equivalent incomes in 1996. By 2001, dwellings with rental values less than \$168 per week (deemed affordable for the 25 per cent of households with income below \$558 per week) accounted for just 15 per cent of the total private rental stock in Sydney.

Table 3.8 also shows that, while metropolitan shortages of stock with rents below the \$135 per week (R3) in 2001 across Australia largely reflect pressures in Sydney, Melbourne and Brisbane, there are also shortages of rental dwellings with rents below \$100 per week (R2) in 2001 in both Adelaide and Perth.

Appendix B provides a further spatial disaggregation of these estimated shortages by presenting data at an LGA or SRS (Statistical Region Sector) level within each State.

Table 3-7: Distribution of rent paid and income of households in metropolitan and non-metropolitan regions by State: 2001

Cumulative rents

		NSW		Vic		Qld		SA		WA		Tas		NT		ACT	
	\$2001	Sydney	Rest of NSW	Melb	Rest of Vic	Bris	Rest of Qld	Adelaide	Rest of SA	Perth	Rest of WA	Hobart	Rest of Tas	Darwin	Rest of NT	All	Australia
R1	\$1-\$67	1,000	6,000	2,000	4,000	1,000	4,000	1,000	2,000	1,000	1,000	0	1,000	0	0	0	26,000
R2	\$68-\$100	7,000	33,000	13,000	20,000	11,000	25,000	10,000	7,000	11,000	6,000	3,000	6,000	0	0	1,000	154,000
R3	\$101-\$134	17,000	66,000	40,000	40,000	31,000	58,000	24,000	13,000	29,000	13,000	7,000	12,000	1,000	1,000	2,000	353,000
R4	\$135-\$167	48,000	112,000	95,000	59,000	71,000	104,000	46,000	16,000	60,000	21,000	11,000	14,000	2,000	1,000	5,000	666,000
R5	\$168-\$201	109,000	141,000	148,000	65,000	110,000	138,000	58,000	17,000	77,000	25,000	12,000	15,000	4,000	2,000	11,000	931,000
R6	\$202-\$234	150,000	148,000	170,000	66,000	123,000	149,000	61,000	17,000	82,000	25,000	12,000	15,000	5,000	2,000	14,000	1,041,000
R7	\$235-\$268	189,000	153,000	187,000	67,000	131,000	156,000	63,000	18,000	86,000	26,000	12,000	15,000	6,000	2,000	17,000	1,127,000
R8	\$269-\$335	245,000	155,000	206,000	68,000	137,000	161,000	65,000	18,000	88,000	27,000	13,000	15,000	7,000	3,000	19,000	1,224,000
R9	\$336-\$402	278,000	156,000	214,000	68,000	138,000	162,000	65,000	18,000	90,000	27,000	13,000	15,000	8,000	3,000	19,000	1,273,000
R10	\$403-\$502	296,000	156,000	218,000	68,000	139,000	163,000	66,000	18,000	90,000	27,000	13,000	15,000	8,000	3,000	19,000	1,299,000
R11	\$503-\$670	305,000	157,000	221,000	68,000	140,000	163,000	66,000	18,000	90,000	27,000	13,000	15,000	8,000	3,000	20,000	1,312,000
R12	\$671+	312,000	158,000	224,000	69,000	140,000	164,000	66,000	18,000	91,000	27,000	13,000	15,000	8,000	3,000	20,000	1,328,000
	Total	312,000	158,000	224,000	69,000	140,000	164,000	66,000	18,000	91,000	27,000	13,000	15,000	8,000	3,000	20,000	1,328,000

Cumulative incomes

		NSW		Vic		Qld		SA		WA		Tas		NT		ACT	
		Rest of NSW		Rest of Vic		Rest of Qld		Rest of SA		Rest of WA		Rest of Tas		Rest of NT			
	\$2001	Sydney	Melb	Bris	Adelaide	Perth	Hobart	Darwin	All	Australia							
Y1	\$0-\$222	15,000	14,000	14,000	6,000	9,000	12,000	5,000	2,000	8,000	2,000	1,000	2,000	0	0	1,000	92,000
Y2	\$223-\$334	31,000	35,000	31,000	15,000	21,000	30,000	13,000	4,000	17,000	5,000	3,000	4,000	1,000	0	1,000	212,000
Y3	\$335-\$446	52,000	57,000	49,000	25,000	35,000	51,000	21,000	7,000	27,000	8,000	5,000	7,000	1,000	0	2,000	349,000
Y4	\$447-\$557	75,000	76,000	69,000	33,000	50,000	71,000	29,000	9,000	37,000	11,000	6,000	9,000	2,000	1,000	3,000	482,000
Y5	\$558-\$669	96,000	91,000	87,000	39,000	63,000	86,000	35,000	11,000	45,000	13,000	7,000	10,000	2,000	1,000	5,000	592,000
Y6	\$670-\$781	119,000	104,000	104,000	45,000	75,000	101,000	41,000	12,000	53,000	16,000	9,000	11,000	3,000	1,000	6,000	701,000
Y7	\$782-\$892	140,000	115,000	120,000	50,000	86,000	114,000	45,000	13,000	59,000	18,000	9,000	12,000	4,000	1,000	8,000	795,000
Y8	\$893-\$1116	177,000	131,000	146,000	57,000	103,000	132,000	53,000	15,000	69,000	21,000	11,000	13,000	5,000	2,000	11,000	945,000
Y9	\$1117-\$1339	210,000	142,000	168,000	62,000	116,000	145,000	58,000	16,000	76,000	23,000	12,000	14,000	6,000	2,000	13,000	1,063,000
Y10	\$1340-\$1674	245,000	150,000	190,000	65,000	128,000	154,000	62,000	17,000	83,000	25,000	12,000	15,000	7,000	2,000	16,000	1,170,000
Y11	\$1675-\$2233	295,000	156,000	217,000	68,000	138,000	162,000	65,000	18,000	90,000	27,000	13,000	15,000	7,000	3,000	19,000	1,293,000
Y12	\$2234+	312,000	158,000	224,000	69,000	140,000	164,000	66,000	18,000	91,000	27,000	13,000	15,000	8,000	3,000	20,000	1,328,000
	Total	312,000	158,000	224,000	69,000	140,000	164,000	66,000	18,000	91,000	27,000	13,000	15,000	8,000	3,000	20,000	1,328,000

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table 3-8: Shortage of affordable rental housing in metropolitan and non-metropolitan regions by State, 2001

		NSW		Vic		Qld		SA		WA		Tas		NT		ACT	
	\$2001	Sydney	Rest of NSW	Melb	Rest of Vic	Bris	Rest of Qld	Adelaide	Rest of SA	Perth	Rest of WA	Hobart	Rest of Tas	Darwin	Rest of NT	All	Australia
Y1	\$0-\$222	-14,000	-9,000	-12,000	-3,000	-8,000	-8,000	-4,000	0	-6,000	-1,000	-1,000	0	0	0	-1,000	-66,000
Y2	\$223-\$334	-24,000	-3,000	-17,000	5,000	-10,000	-6,000	-3,000	3,000	-6,000	1,000	0	2,000	0	0	-1,000	-59,000
Y3	\$335-\$446	-36,000	9,000	-9,000	15,000	-4,000	7,000	3,000	6,000	2,000	5,000	2,000	5,000	0	0	0	4,000
Y4	\$447-\$557	-27,000	36,000	26,000	26,000	21,000	33,000	17,000	7,000	23,000	10,000	4,000	6,000	1,000	1,000	2,000	184,000
Y5	\$558-\$669	13,000	51,000	61,000	26,000	47,000	51,000	23,000	7,000	32,000	11,000	4,000	5,000	2,000	1,000	7,000	339,000
Y6	\$670-\$781	31,000	44,000	66,000	21,000	47,000	47,000	20,000	5,000	29,000	10,000	4,000	4,000	2,000	1,000	8,000	340,000
Y7	\$782-\$892	49,000	38,000	67,000	17,000	45,000	42,000	18,000	4,000	27,000	9,000	3,000	3,000	3,000	1,000	9,000	333,000
Y8	\$893-\$1116	68,000	24,000	59,000	11,000	33,000	29,000	12,000	2,000	20,000	6,000	2,000	2,000	3,000	1,000	8,000	279,000
Y9	\$1117-\$1339	68,000	14,000	46,000	6,000	22,000	17,000	8,000	1,000	13,000	4,000	1,000	1,000	2,000	1,000	6,000	210,000
Y10	\$1340-\$1674	52,000	7,000	28,000	3,000	11,000	8,000	4,000	1,000	7,000	2,000	1,000	0	1,000	0	4,000	129,000
Y11	\$1675-\$2233	10,000	0	4,000	0	2,000	1,000	0	0	1,000	0	0	0	0	0	1,000	19,000
Y12	\$2234+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table 3-9: Shortage of affordable rental housing in metropolitan and non-metropolitan regions by State, 1996

		NSW		Vic		Qld		SA		WA		Tas		NT		ACT	
	\$1996	Sydney	Rest of NSW	Melb	Rest of Vic	Bris	Rest of Qld	Adelaide	Rest of SA	Perth	Rest of WA	Hobart	Rest of Tas	Darwin	Rest of NT	All	Australia
Y1	\$0-\$199	-15,000	-9,000	-15,000	-3,000	-8,000	-7,000	-5,000	0	-7,000	0	-1,000	-1,000	0	0	-1,000	-73,000
Y2	\$200-\$299	-28,000	-7,000	-17,000	1,000	-10,000	-9,000	-2,000	1,000	-6,000	1,000	0	0	0	0	-1,000	-76,000
Y3	\$300-\$399	-33,000	8,000	7,000	14,000	-2,000	4,000	5,000	5,000	8,000	6,000	1,000	4,000	0	0	-1,000	26,000
Y4	\$400-\$499	-12,000	33,000	51,000	25,000	20,000	27,000	18,000	8,000	29,000	9,000	4,000	5,000	0	1,000	2,000	219,000
Y5	\$500-\$599	26,000	45,000	70,000	22,000	38,000	39,000	20,000	6,000	31,000	8,000	4,000	4,000	1,000	1,000	8,000	324,000
Y6	\$600-\$699	49,000	39,000	66,000	16,000	38,000	37,000	17,000	5,000	28,000	7,000	3,000	3,000	2,000	1,000	9,000	319,000
Y7	\$700-\$799	58,000	31,000	59,000	13,000	33,000	31,000	14,000	3,000	23,000	6,000	3,000	2,000	2,000	1,000	9,000	289,000
Y8	\$800-\$999	61,000	19,000	43,000	7,000	22,000	20,000	9,000	2,000	16,000	4,000	2,000	1,000	2,000	1,000	7,000	215,000
Y9	\$1000-\$1199	47,000	11,000	28,000	4,000	14,000	12,000	5,000	1,000	10,000	3,000	1,000	1,000	2,000	1,000	5,000	142,000
Y10	\$1200-\$1499	33,000	5,000	17,000	2,000	7,000	6,000	3,000	0	6,000	2,000	0	0	1,000	0	3,000	85,000
Y11	\$1500-\$1999	18,000	2,000	8,000	1,000	3,000	2,000	1,000	0	3,000	1,000	0	0	0	0	1,000	41,000
Y12	\$2000+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: ABS Summary Rent and Household Income Tabulations, 1996 Census

Table 3-10: Distribution of rent paid and income of households in metropolitan and non-metropolitan regions by State: 1996

Cumulative rents

		NSW		Vic		Qld		SA		WA		Tas		NT		ACT	
	\$1996	Sydney	Rest of NSW	Melb	Rest of Vic	Bris	Rest of Qld	Adelaide	Rest of SA	Perth	Rest of WA	Hobart	Rest of Tas	Darwin	Rest of NT	All	Australia
R1	\$1-\$60	3,000	8,000	4,000	5,000	2,000	5,000	2,000	2,000	2,000	2,000	1,000	1,000	0	0	0	37,000
R2	\$61-\$90	9,000	29,000	21,000	19,000	11,000	20,000	11,000	7,000	13,000	5,000	2,000	4,000	0	0	1,000	153,000
R3	\$91-\$120	28,000	66,000	67,000	41,000	31,000	52,000	25,000	13,000	37,000	13,000	6,000	10,000	1,000	1,000	3,000	395,000
R4	\$121-\$150	76,000	110,000	135,000	60,000	67,000	93,000	45,000	19,000	68,000	19,000	10,000	13,000	2,000	1,000	7,000	727,000
R5	\$151-\$180	141,000	138,000	175,000	64,000	99,000	121,000	53,000	20,000	79,000	21,000	11,000	14,000	3,000	1,000	14,000	955,000
R6	\$181-\$210	190,000	145,000	191,000	65,000	110,000	132,000	56,000	20,000	83,000	22,000	12,000	14,000	4,000	2,000	18,000	1,064,000
R7	\$211-\$240	221,000	148,000	199,000	66,000	115,000	137,000	57,000	20,000	85,000	22,000	12,000	14,000	5,000	2,000	19,000	1,121,000
R8	\$241-\$300	261,000	149,000	208,000	66,000	118,000	141,000	58,000	20,000	87,000	23,000	12,000	14,000	6,000	2,000	20,000	1,186,000
R9	\$301-\$360	276,000	150,000	211,000	66,000	119,000	142,000	58,000	20,000	87,000	23,000	12,000	14,000	6,000	2,000	21,000	1,208,000
R10	\$361-\$450	286,000	150,000	213,000	66,000	119,000	143,000	58,000	20,000	88,000	23,000	12,000	14,000	7,000	2,000	21,000	1,222,000
R11	\$451-\$600	291,000	150,000	214,000	66,000	119,000	143,000	58,000	20,000	88,000	23,000	12,000	14,000	7,000	2,000	21,000	1,229,000
R12	\$601+	293,000	150,000	216,000	66,000	120,000	143,000	58,000	20,000	88,000	23,000	12,000	14,000	7,000	2,000	21,000	1,234,000
	Total	293,000	150,000	216,000	66,000	120,000	143,000	58,000	20,000	88,000	23,000	12,000	14,000	7,000	2,000	21,000	1,234,000

Cumulative incomes

		NSW		Vic		Qld		SA		WA		Tas		NT		ACT	
	\$1996	Sydney	Rest of NSW	Melb	Rest of Vic	Bris	Rest of Qld	Adelaide	Rest of SA	Perth	Rest of WA	Hobart	Rest of Tas	Darwin	Rest of NT	All	Australia
Y1	\$0-\$199	18,000	17,000	19,000	8,000	10,000	13,000	7,000	2,000	9,000	2,000	1,000	2,000	0	0	1,000	110,000
Y2	\$200-\$299	37,000	36,000	38,000	17,000	21,000	29,000	13,000	5,000	18,000	4,000	3,000	4,000	1,000	0	2,000	229,000
Y3	\$300-\$399	62,000	57,000	60,000	27,000	34,000	48,000	20,000	8,000	29,000	7,000	4,000	6,000	1,000	0	3,000	369,000
Y4	\$400-\$499	88,000	77,000	84,000	36,000	48,000	66,000	28,000	11,000	39,000	10,000	6,000	8,000	2,000	0	5,000	508,000
Y5	\$500-\$599	115,000	93,000	105,000	43,000	61,000	82,000	34,000	13,000	48,000	12,000	7,000	10,000	2,000	1,000	7,000	631,000
Y6	\$600-699	141,000	106,000	125,000	49,000	72,000	96,000	39,000	15,000	56,000	14,000	8,000	11,000	3,000	1,000	9,000	745,000
Y7	\$700-\$799	163,000	116,000	140,000	53,000	81,000	106,000	43,000	17,000	62,000	16,000	9,000	12,000	3,000	1,000	10,000	832,000
Y8	\$800-\$999	200,000	131,000	165,000	59,000	96,000	121,000	49,000	18,000	71,000	19,000	10,000	13,000	4,000	1,000	13,000	971,000
Y9	\$1000-\$1199	229,000	139,000	183,000	62,000	105,000	130,000	53,000	19,000	77,000	20,000	11,000	13,000	5,000	2,000	16,000	1,066,000
Y10	\$1200-\$1499	253,000	145,000	196,000	65,000	112,000	137,000	55,000	20,000	82,000	22,000	12,000	14,000	6,000	2,000	18,000	1,137,000
Y11	\$1500-\$1999	272,000	148,000	206,000	66,000	117,000	140,000	57,000	20,000	85,000	23,000	12,000	14,000	6,000	2,000	20,000	1,188,000
Y12	\$2000+	293,000	150,000	216,000	66,000	120,000	143,000	58,000	20,000	88,000	23,000	12,000	14,000	7,000	2,000	21,000	1,234,000
	Total	293,000	150,000	216,000	66,000	120,000	143,000	58,000	20,000	88,000	23,000	12,000	14,000	7,000	2,000	21,000	1,234,000

Source: ABS Summary Rent and Household Income Tabulation, 1996 Census

4. CONCLUSIONS

This Positioning Paper has used data from the 2001 Census to provide an overview of both dwellings and households in the private rental market. These data have been defined to be consistent with data from the 1996 Census so that the changes between 1996 and 2001 can be compared. As such, it provides an update of a similar study of the supply side of the private rental market and estimates of shortage of affordable rental dwellings for lower income households that was undertaken on Census data for 1986 and 1996 and reported in Yates and Wulff (2000) and Wulff and Yates (2001).

The analysis of census data for 1986 and 1996 showed there was a significant decline in the low rent stock at a time when there was a significant increase in the number of low-income households. This resulted in a national shortage of approximately 50,000 dwellings affordable for low-income households.

This update from 1996 to 2001 has shown that the pattern of loss of low rent stock has continued, with absolute declines in the number of rental dwellings with rents up to \$234 per week in 2001. In other words, despite a 7.6 per cent increase in the number of rental dwellings in Australia in the 5 years between 1996 and 2001, there were fewer dwellings that rented for less than \$234 per week in 2001 than rented for the real equivalent of this in 1996. This rent level has been defined as a moderate rent in this report, but 78 per cent of rental dwellings in Australia rented for less than \$234 per week in 2001 and 90 per cent of rental dwellings in Australia rented for less than the equivalent amount in 1996.

This decline in the number of rental dwellings that make up the vast bulk of the private rental stock occurred at a time when there was a considerable improvement in the income circumstances of private renter households, with a consequent improvement in their ability to pay. This improvement was more pronounced in metropolitan than in non-metropolitan regions. One potential explanation of the declining numbers of lower rent dwellings over the period could be that it has resulted from the upward pressure arising from the higher incomes of private renters. This explanation is consistent with the relatively greater improvement in incomes in metropolitan regions and the relatively greater loss of lower rent stock.

Despite the continued loss in lower rent dwellings from 1996 to 2001, the turn around in the income circumstances of private renters over this period has resulted in an overall shortage of affordable rental dwellings at a national level in 2001 which is a marginal improvement on that which existed in 1996. For the data reported in this Positioning Paper, in 2001 there is an absolute shortage of dwellings affordable for low-income households (with incomes less than \$335 per week) of 59,000. The result for 1996 using comparable rent and income levels and consistent definitions was 76,000. The data used in this report do not allow for an assessment of whether the dwellings that are affordable are available to lower income households. Nor do they allow for an assessment of whether the dwellings that are available are appropriate. The analysis of the more comprehensive special matrix tabulation to be undertaken for the Final Report will provide the information needed to determine the answer to these issues. Only once this analysis is available, will it be possible to draw out policy implications of the dynamic changes in the private rental market in Australia. In the interim, however, the results do confirm earlier conclusions that the greatest pressures are in the metropolitan regions. However, they also suggest that changes in household incomes have not been uniformly spread across all regions of Australia and raise the possibility that access to affordable housing may be one factor that contributes to this.

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APPENDIX A: VALUE ADDED CENSUS DATA

A.1. Overview

The first stage of this project was to create a value-added census unit record file. This formed the basis of the matrix tabulation on which the results presented in this Positioning Paper and in the Final Report are based. This Appendix reports on the procedures employed to convert the reported census data into the value added file used in this project.

The value-added census file consisted of one record for each private occupied dwelling, with non-missing values for all the following household characteristics:

- region
- age of household reference person
- household income
- household rent
- tenure of household
- household type (family, lone person etc etc).
- dwelling type
- number of bedrooms
- number of employed household members

In order to create this file the following key tasks were undertaken:

- All reported household income ranges in the 2001 Census were converted into a point estimate of household income, so that new income ranges based on real equivalents of the ranges employed in the 1996 Census could be created. The point estimates created for reporting households were subsequently used to "donate" information to the households with unreported household income. Details are provided in the following sub-section.
- Missing data were imputed. Missing data may be either item non-response (some but not all characteristics were reported by the household) or full non-response (no contact was made with the household). Item non-response of household income demanded the greatest attention. Details are provided in sub-section 3.

A.2. Income re-categorisation for 2001 value-added census file

Income data in the 2001 Census were collected in ranges that were unchanged in dollar terms from those employed in the 1996 Census. This meant that some adjustments were required to convert the income ranges employed in 1996 to their real equivalent for 2001.

Table 1-2 in the main text indicates the ranges for 2001 that are equivalent in real terms to the 1996 ranges. This table refers to household income. The Census, however, does not collect income data at a household level; it collects data on individual incomes within a number of categories (which are equivalent to the 1996 data in the table below for incomes over \$200 per week but finer for incomes below \$200 per week). Census data for household income are derived from individual income data by assigning to each individual in the household the median income within their stated categorical range and then adding these for all individuals in the household (ABS 2001). Median incomes for persons, in turn, are derived from relevant data from the 1999/2000 Survey of Income and Housing Costs (SIHC).

In 2001, when household incomes from the 2001 Census were presented in more or less the same categories as individual incomes, the ABS concluded that this median value imputation was the most appropriate of a number of approaches experimented with (see ABS 2002b). However, when the categories to be employed for household income differ from those used for the underlying data, some attempt needs to be made to determine how observations are to be allocated across category boundaries. For the value added data set created for this project, the simple median value imputation process was deemed inappropriate (on advice from ABS), given the desire to convert the 1996 categories to their 2001 real equivalents. This is because it results in a bunching of data for single income households, with individual incomes in any given 1996 range all being assigned to the one 2001 range even though each 2001 range actually cuts across two 1996 ranges as a result of the inflation over the period. All single income households in \$300-\$399 in 2001, for example, would have been assigned a value of \$349 which would place them in the Y3 category in 2001 even though a number of them (those with incomes from \$300 to \$334 in 2001) had unchanged real incomes from 1996 and should have remain categorised in the Y2 group.

For this reason, the value added data set for this project relies on a more sophisticated procedure that removes this lumpiness whilst maintaining the aggregate characteristics of the data. The procedure employed relies upon randomly assigning person level data a specific value within the categorical range.

This procedure employed the same starting point as the median value imputation approach employed in the 2001 Census data. The median value for individual incomes in each census income range, derived from relevant SIHC data, was used to construct a distribution for individual incomes within each census income category. Half the population of individuals in each income range was assigned a point estimate uniformly distributed between the lower bound of the range and the median and half was assigned a point estimate uniformly distributed between the median and the upper bound of the range. Household income was re-estimated by summing these point estimates for individual households, with the sum constrained so that the contribution of each household to the original ABS range was not inconsistent with the new 12 level range for household income.¹⁰

These point estimates of household income were then used to classify income into the new income categories. This reclassification was used to generate a 12 category income variable for which summary data was obtained at an LGA level. The more aggregated income variable (which consists of 5 categories) in the detailed data matrix, to be used in the Final Report for this project, is a subset of the broader range reported on in this Positioning Paper.

A.3. Imputation for 2001 value-added Census File

A.3.1. Overall Imputation Strategy

1. Impute for Bedrooms and Dwelling Structure, which are required to impute RENT
2. Impute for Employed, required to impute INCOME
3. Impute for partially and fully not stated household income, required to impute RENT
4. Impute for RENT

¹⁰ Ideally, this procedure might be more refined by using more disaggregated data such as household type or age to generate a more realistic distribution than the uniform distribution above and below individual median incomes employed here. However, it must be recognized that the survey data used to benchmark the Census data consists of only 13,000 households and is subject to sampling error. When split over 16 income categories, there is not a lot of scope for further refinement. In both the Census data and the value added data employed in this project, household income is only a (reasonably accurate) estimate.

A.3.2. Imputing Bedrooms & Dwelling Structure

Observations for which number of bedrooms was missing were assigned the modal value of the derived classification of bedrooms, conditional on the dwelling structure (4 levels). Conversely when imputing for dwelling structure, the mode conditional on the number of bedrooms (4 levels, with 0-1 bedrooms combined) was employed. Where both bedrooms and structure were missing, the "grand mode" (at state level) of each variable was applied independently.

A.3.3. Imputing Number Employed in household

As for household income, if any one or more members of the household had employment status not stated, then the employment status for the household was unknown. The following procedure was employed to impute the employment status of each individual:

- Within each state, the population of individuals who stated their employment status was divided into sub-populations by LGA, by sex and by age. The probability of status "employed" was calculated for each of those sub-populations.
- Each of the individuals with unstated employment status was then assigned an employment status according the probabilities of the responding population.

A.3.4. Imputing Household Income

The population was first partitioned into 180 sub-populations for each of the 8 states (that is, 1,440 sub-populations in all). The sub-populations for each state consisted of:

- Region - 2 levels (StatDiv=05 and StatDiv=other).
- Age of household reference person - 5 levels.
- Household composition - 6 levels.
- Number employed in household - 3 levels.

Each of these 1,440 sub-population was then further partitioned into:

1. A donor population of households where all (relevant) members of the household reported their income and their employment status. The census file has no invalid or not stated values for any of region, age of reference person, or household type (since unclassifiable households have been excluded).
2. ii. An imputed (or recipient) population of households, for which household income was either partially or completely unstated. This recipient population may include households for which an employment status was imputed as above.

As indicated in sub-section 2 above, a point estimate for income was assigned to all individuals who stated an income. These point estimates were then summed for each household. Where one or more household members did not state income, the sum was considered partial income (consistent with reported census data) and these observations were excluded from the donor population and included in the recipient population. The donor population thus consisted only of households where all members stated their income. The imputed or recipient population contained a measure of partial household income (which was zero if all individual incomes were not stated).

Within each of the 1,440 sub-populations, each record in the recipient population was then randomly assigned a donor record's household income, so long as it was at least as great as the partial income. Typically there were a small number of households with partially stated incomes, for which no donor could be found. These were later randomly allocated to an income range that was equal or greater than its partial income, using observed likelihoods at the state level.

Where there was no information on individual incomes within the household, each record in the recipient population was randomly assigned a donor record's household income from within the matching 1,440 sub-populations.

A.3.5. Imputing Rent

The "in-scope" households for the rent imputation are privately rented households *excluding* not classifiable households and *excluding* visitor-only households.

Observations where rent was missing had rent imputed conditional upon region (2 levels per state), dwelling structure (4 levels), bedrooms (4 levels), and income (3 levels). The levels of (weekly) household income were: \$0-<\$334, \$334-<\$892, \$892+

As for income, the in-scope households were partitioned (within each sub-population) into the "donor population" (where both rent and income were fully stated), the imputed or recipient population (all those where rent was not stated), and the remainder. The rent from one record of the donor population was then randomly assigned to each record in the recipient population (within each sub-population).

APPENDIX B: LGA DATA

The following set of tables provides estimates of shortage at an LGA level (SRS for Brisbane). These estimates are based on the same procedure as followed in the earlier part of the report, with cumulative income data on households in the private rental market being subtracted from the cumulative rental stock that is affordable for all households up to and including each income category.

The first two tables reported in this section, Table B.1 and Table B.2, provide an indication of the pressure points at an LGA level. The State and region to which each LGA belongs can be determined by the code in the first column, which indicates the metropolitan "0" or non-metropolitan "1" region within each State.

Table B.1 is ranked according to the LGAs with the largest absolute shortage of properties renting for less than \$135 per week (R3) in 2001. The outcomes in this table, however, are affected by the size of private rental sector in each LGA as well as by the shortage. Despite this scale dependence, the results do show where the greatest pressures are in terms of stock shortages. At the below \$135 per week level, absolute shortages in the Gold Coast, which is the LGA with the greatest shortage of affordable rental housing, are nearly 3 times those in Canterbury which is the LGA with the second greatest shortage.

Table B.2 is ranked according to the shortage of stock as a proportion of the total private rental stock in the LGA, with the shortage of properties renting for less than \$135 per week (R3) taken as the basis for ranking. As indicated in Chapter 2, just over 25 per cent of Australia's private rental dwellings are rented for less than \$135 per week in 2001. On a 30 per cent of gross household income benchmark, these dwelling are the only ones that are affordable for the 39 per cent of households in the private rental market who had incomes below \$447 per week in 2001. This measure does not guarantee that the stock is adequate for different household types. It also does not guarantee that those who cannot afford to pay more occupy the affordable stock that does exist.

The LGA level results in these Tables show that there is considerable spatial variation in the extent to which shortages are distributed across the country and also highlight the State based results presented in Table 3.8. Of the top 20 LGAs listed as having the highest shortages of stock renting for less than \$135 per week (when expressed as a percentage of total stock in the LGA), all but 3 are in the Sydney metropolitan region. The 3 exceptions, which are in the top 5 LGAs, are all in the SE Queensland - northern NSW region.

In general, but not in all cases, for cases where there is a severe shortage of stock below this benchmark, shortages increase up to this rent level and thereafter tend to become less severe. The columns to the right and left of this estimate can be used to determine the extent to which the ranking is affected by the choice of benchmark.

Detailed tables for each LGA classified by the metropolitan and non-metropolitan regions within each State are provided in Tables B.3 to Table B.13. In these tables, data have been reported only for the first 8 of the 12 rent and income categories outlined above. This is because no shortages are recorded in any LGA at rent levels above R8 or above rents of \$268 per week (those levels deemed affordable for households with incomes of at least \$893 per week). Data for the Brisbane metropolitan area are provided at the SRS (Statistical Region Sector) level, rather than the LGA level.

The final column in these tables gives the total private rental stock in each LGA. Data have been rounded to the nearest 100 to provide finer distinctions between the different LGAs than is available from the more aggregate data presented above.

Table B 1: LGAs with highest absolute shortages of stock less than \$135 per week, 2001

	LGA	R1 Y1	R2 Y2	R3 Y3	R4 Y4	R5 Y5	R6 Y6	R7 Y7	R8 Y8	Total
41 Gold Coast (C)	33460	-2,700	-5,500	-7,100	-1,300	7,900	9,600	10,400	7,800	42,600
20 Canterbury (C)	11550	-800	-1,600	-2,500	-400	2,100	2,300	2,700	2,500	12,000
20 Blacktown (C)	10750	-400	-1,000	-1,800	-1,000	3,000	4,800	5,200	4,200	13,300
20 Randwick (C)	16550	-800	-1,300	-1,700	-2,100	-2,100	-1,800	-600	2,700	15,100
20 Parramatta (C)	16250	-600	-1,000	-1,600	-1,300	1,100	2,300	3,400	3,900	12,000
20 South Sydney (C)	17070	-800	-1,200	-1,600	-1,500	-600	-400	100	2,200	15,900
20 Wyong (A)	18550	-600	-1,200	-1,600	-100	2,300	2,400	2,300	1,500	9,600
20 Fairfield (C)	12850	-700	-1,400	-1,400	200	2,100	2,900	3,000	2,100	10,200
20 Gosford (C)	13100	-500	-1,000	-1,400	-800	1,800	2,800	3,100	2,500	10,600
41 Maroochy (S)	34900	-700	-1,300	-1,300	900	2,900	2,900	2,700	1,700	11,800
20 Liverpool (C)	14900	-400	-800	-1,200	-200	1,200	2,300	2,800	2,400	8,600
30 Melbourne (C)	24600	-800	-1,100	-1,200	-1,000	-400	0	600	1,900	9,300
20 Bankstown (C)	10350	-300	-600	-1,100	-1,500	-300	1,000	2,400	2,400	7,900
20 Marrickville (A)	15200	-500	-900	-1,100	-600	1,000	1,400	1,700	2,400	10,600
20 Rockdale (C)	16650	-300	-700	-1,100	-1,300	-300	700	1,500	2,200	7,800
20 Ryde (C)	16700	-500	-800	-1,100	-1,000	400	1,200	1,800	2,600	9,100
20 Sutherland Shire (A)	17150	-300	-600	-1,100	-1,100	-100	1,000	2,500	3,800	11,700
40 Southern Outer	3083	-600	-900	-1,100	200	4,100	4,600	4,300	3,300	11,200
20 Auburn (A)	10200	-300	-600	-1,000	-600	400	800	1,200	1,100	4,700
20 Campbelltown (C)	11500	-300	-600	-1,000	100	2,900	3,000	2,800	1,900	7,000
20 Penrith (C)	16350	-400	-800	-1,000	-200	2,600	3,800	3,800	2,900	10,200
40 Western Inner	3045	-700	-1,000	-1,000	-400	1,400	1,800	2,200	2,200	8,100
41 Caloundra (C)	32130	-300	-800	-1,000	300	1,600	1,500	1,300	800	6,200
20 Holroyd (C)	13950	-300	-500	-900	-600	700	2,000	2,900	2,500	7,400
20 Waverley (A)	18050	-300	-600	-900	-1,200	-1,100	-1,100	-600	1,300	9,600
21 Lake Macquarie (C)	14650	-600	-900	-900	1,400	3,200	3,000	2,500	1,700	9,700
21 Newcastle (C)	15900	-1,000	-1,300	-900	2,000	3,900	3,600	3,100	2,100	12,700
30 Boroondara (C)	21110	-600	-900	-900	-100	2,000	2,900	3,500	4,100	12,500
30 Monash (C)	24970	-500	-700	-900	100	2,400	3,300	3,700	3,200	9,200
30 Stonnington (C)	26350	-600	-1,000	-900	400	2,200	2,900	3,500	3,800	12,700
40 Redland Shire	3124	-300	-600	-900	300	2,400	2,600	2,500	1,700	7,300
20 Warringah (A)	18000	-200	-500	-800	-1,100	-900	-600	300	1,600	10,000
21 Tweed (A)	17550	-500	-900	-800	400	1,300	1,200	1,100	700	6,200
40 Northern Outer	3081	-500	-700	-800	1,300	4,500	4,900	4,500	3,200	12,000
20 Ashfield (A)	10150	-300	-500	-700	-700	300	900	1,400	1,500	5,300
20 Hurstville (C)	14150	-300	-500	-700	-700	200	500	1,100	1,600	5,300
20 Sydney (C)	17200	-400	-600	-700	-900	-1,000	-1,100	-1,100	-600	5,300
21 Byron (A)	11350	-200	-500	-700	-600	0	100	300	300	2,900
30 Port Phillip (C)	25900	-800	-1,300	-700	900	2,800	3,400	4,000	4,500	15,800
41 Noosa (S)	35750	-300	-500	-700	-200	800	800	800	500	4,000
60 Joondalup (C)	54170	-300	-500	-700	800	2,400	2,500	2,300	1,900	6,300
20 Blue Mountains (C)	10900	-200	-400	-600	-200	900	1,200	1,200	900	4,100
20 Hornsby (A)	14000	-300	-400	-600	-800	-700	-300	500	2,000	7,600
20 Leichhardt (A)	14800	-300	-600	-600	-500	100	200	300	1,200	9,400
20 North Sydney (A)	15950	-300	-500	-600	-800	-700	-400	300	2,200	12,200
30 Casey (C)	21610	-300	-500	-600	1,400	3,000	2,800	2,500	1,700	6,800
30 Whitehorse (C)	26980	-400	-600	-600	400	2,400	3,000	3,200	2,800	8,300
40 Caboolture Shire Part	3161	-500	-900	-600	1,800	2,700	2,300	1,800	1,000	7,800
20 Burwood (A)	11300	-300	-400	-500	-500	-300	-200	100	500	2,900
20 Kogarah (A)	14450	-200	-300	-500	-600	-200	300	800	1,200	3,900
20 Willoughby (C)	18250	-300	-400	-500	-600	-700	-800	-600	600	6,100
20 Woollahra (A)	18500	-200	-400	-500	-600	-500	-500	-400	400	6,900
30 Banyule (C)	20660	-200	-400	-500	400	1,900	2,300	2,300	1,800	5,800
30 Hume (C)	23270	-200	-400	-500	400	1,800	1,700	1,400	1,000	4,300
30 Whittlesea (C)	27070	-200	-400	-500	600	2,000	1,900	1,600	1,100	4,600
40 City Core	3041	-1,100	-1,000	-500	700	2,100	2,700	3,500	3,700	13,700
40 Pine Rivers Shire	3162	-200	-400	-500	1,100	2,500	2,300	2,100	1,400	5,900

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B 2: LGAs with highest percentage of shortages of stock less than \$135 per week, 2001

	LGA	R1 Y1	R2 Y2	R3 Y3	R4 Y4	R5 Y5	R6 Y6	R7 Y7
21 Byron (A)	11350	-8	-16	-24	-20	0	4	10
20 Canterbury (C)	11550	-7	-13	-21	-3	18	19	22
20 Auburn (A)	10200	-7	-12	-21	-13	8	17	25
41 Noosa (S)	35750	-6	-13	-18	-4	20	21	19
41 Gold Coast (C)	33460	-6	-13	-17	-3	18	22	24
20 Wyong (A)	18550	-7	-13	-16	-2	24	25	24
20 Burwood (A)	11300	-9	-13	-16	-17	-11	-7	2
20 Strathfield (A)	17100	-8	-11	-16	-21	-8	-1	4
41 Caloundra (C)	32130	-5	-13	-16	4	26	24	21
20 Blue Mountains (C)	10900	-5	-10	-15	-5	21	29	31
20 Bankstown (C)	10350	-4	-8	-14	-18	-4	13	30
20 Hurstville (C)	14150	-5	-9	-14	-14	4	10	20
20 Fairfield (C)	12850	-7	-14	-14	2	20	28	29
20 Botany Bay (C)	11100	-4	-7	-14	-18	-3	18	22
20 Campbelltown (C)	11500	-4	-9	-14	1	41	43	40
20 Ashfield (A)	10150	-5	-10	-14	-13	5	17	27
20 Liverpool (C)	14900	-4	-9	-14	-3	13	26	32
20 Gosford (C)	13100	-4	-9	-14	-8	17	26	29
20 Rockdale (C)	16650	-4	-8	-14	-17	-3	9	19
20 Blacktown (C)	10750	-3	-7	-13	-7	23	36	39
20 Sydney (C)	17200	-8	-11	-13	-17	-19	-21	-21
30 Melbourne (C)	24600	-9	-12	-13	-11	-4	0	6
20 Parramatta (C)	16250	-5	-8	-13	-11	9	20	28
21 Tweed (A)	17550	-8	-15	-13	6	21	19	17
20 Kogarah (A)	14450	-5	-8	-13	-16	-6	7	21
40 Western Inner	3045	-9	-12	-13	-5	17	23	27
30 Hume (C)	23270	-4	-9	-13	11	41	39	33
21 Ballina (A)	10250	-7	-14	-12	3	23	23	22
20 Ryde (C)	16700	-5	-8	-12	-11	4	13	19
40 Redland Shire	3124	-4	-8	-12	4	32	36	34
20 Holroyd (C)	13950	-4	-7	-12	-8	10	27	39
20 Hawkesbury (C)	13800	-3	-7	-12	-2	27	35	35
20 Randwick (C)	16550	-6	-9	-11	-14	-14	-12	-4
40 Beaudesert Shire Part A	3123	-4	-8	-11	1	30	32	30
41 Maroochy (S)	34900	-6	-11	-11	8	25	25	23
30 Whittlesea (C)	27070	-4	-8	-11	12	43	41	35
60 Joondalup (C)	54170	-4	-8	-11	13	38	39	37
20 Marrickville (A)	15200	-5	-8	-11	-5	9	13	16
20 Penrith (C)	16350	-4	-8	-10	-2	26	38	38
20 South Sydney (C)	17070	-5	-8	-10	-9	-4	-2	1
30 Monash (C)	24970	-5	-8	-10	1	26	36	40
21 Kiama (A)	14400	-4	-6	-10	1	21	28	33
20 Waverley (A)	18050	-4	-6	-10	-13	-12	-11	-6
21 Hastings (A)	13750	-7	-11	-10	6	23	23	21
40 Southern Outer	3083	-5	-8	-9	2	36	41	39
20 Wollondilly (A)	18400	-3	-6	-9	2	33	34	30
20 Sutherland Shire (A)	17150	-3	-5	-9	-9	-1	8	21
30 Manningham (C)	24210	-4	-7	-9	-6	12	25	32
20 Camden (A)	11450	-3	-5	-9	-8	8	28	38
30 Casey (C)	21610	-4	-8	-9	20	44	42	37
60 Nedlands (C)	56580	-6	-7	-9	-4	7	13	20
21 Lake Macquarie (C)	14650	-6	-9	-9	14	33	31	26
20 Willoughby (C)	18250	-5	-7	-9	-11	-12	-13	-9
50 Tea Tree Gully (C)	47700	-3	-6	-9	24	45	39	34
20 Hornsby (A)	14000	-4	-6	-8	-10	-9	-3	7
20 Warringah (A)	18000	-2	-5	-8	-11	-9	-6	3
80 Palmerston (C)	72800	-3	-5	-8	7	32	44	46

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B 3: Shortage of affordable rental housing in Sydney LGAs, 2001

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
Ashfield (A)	10150	-300	-500	-700	-700	300	900	1,400	1,500	5,300
Auburn (A)	10200	-300	-600	-1,000	-600	400	800	1,200	1,100	4,700
Bankstown (C)	10350	-300	-600	-1,100	-1,500	-300	1,000	2,400	2,400	7,900
Baulkham Hills (A)	10500	-100	-100	-200	-300	-300	-400	-200	1,200	4,700
Blacktown (C)	10750	-400	-1,000	-1,800	-1,000	3,000	4,800	5,200	4,200	13,300
Blue Mountains (C)	10900	-200	-400	-600	-200	900	1,200	1,200	900	4,100
Botany Bay (C)	11100	-100	-200	-400	-600	-100	600	700	700	3,100
Burwood (A)	11300	-300	-400	-500	-500	-300	-200	100	500	2,900
Camden (A)	11450	-100	-100	-200	-200	200	600	800	800	2,100
Campbelltown (C)	11500	-300	-600	-1,000	100	2,900	3,000	2,800	1,900	7,000
Canterbury (C)	11550	-800	-1,600	-2,500	-400	2,100	2,300	2,700	2,500	12,000
Concord (A)	11900	-100	-100	-100	-200	-100	0	0	500	1,900
Drummoyne (A)	12550	-100	-100	-200	-200	-200	-200	100	800	3,500
Fairfield (C)	12850	-700	-1,400	-1,400	200	2,100	2,900	3,000	2,100	10,200
Gosford (C)	13100	-500	-1,000	-1,400	-800	1,800	2,800	3,100	2,500	10,600
Hawkesbury (C)	13800	-100	-200	-400	-100	900	1,200	1,100	800	3,200
Holroyd (C)	13950	-300	-500	-900	-600	700	2,000	2,900	2,500	7,400
Hornsby (A)	14000	-300	-400	-600	-800	-700	-300	500	2,000	7,600
Hunter's Hill (A)	14100	0	0	0	0	0	0	0	100	600
Hurstville (C)	14150	-300	-500	-700	-700	200	500	1,100	1,600	5,300
Kogarah (A)	14450	-200	-300	-500	-600	-200	300	800	1,200	3,900
Ku-ring-gai (A)	14500	-100	-200	-200	-300	-300	-300	-200	100	3,400
Lane Cove (A)	14700	-100	-100	-200	-300	-200	-100	400	900	3,100
Leichhardt (A)	14800	-300	-600	-600	-500	100	200	300	1,200	9,400
Liverpool (C)	14900	-400	-800	-1,200	-200	1,200	2,300	2,800	2,400	8,600
Manly (A)	15150	-100	-200	-300	-400	-300	-300	-100	600	4,400
Marrickville (A)	15200	-500	-900	-1,100	-600	1,000	1,400	1,700	2,400	10,600
Mosman (A)	15350	-100	-100	-200	-300	-300	-200	100	600	3,500
North Sydney (A)	15950	-300	-500	-600	-800	-700	-400	300	2,200	12,200
Parramatta (C)	16250	-600	-1,000	-1,600	-1,300	1,100	2,300	3,400	3,900	12,000
Penrith (C)	16350	-400	-800	-1,000	-200	2,600	3,800	3,800	2,900	10,200
Pittwater (A)	16370	-100	-100	-200	-300	-200	-300	-200	100	3,200
Randwick (C)	16550	-800	-1,300	-1,700	-2,100	-2,100	-1,800	-600	2,700	15,100
Rockdale (C)	16650	-300	-700	-1,100	-1,300	-300	700	1,500	2,200	7,800
Ryde (C)	16700	-500	-800	-1,100	-1,000	400	1,200	1,800	2,600	9,100
South Sydney (C)	17070	-800	-1,200	-1,600	-1,500	-600	-400	100	2,200	15,900
Strathfield (A)	17100	-200	-200	-400	-500	-200	0	100	300	2,200
Sutherland Shire (A)	17150	-300	-600	-1,100	-1,100	-100	1,000	2,500	3,800	11,700
Sydney (C)	17200	-400	-600	-700	-900	-1,000	-1,100	-1,100	-600	5,300
Warringah (A)	18000	-200	-500	-800	-1,100	-900	-600	300	1,600	10,000
Waverley (A)	18050	-300	-600	-900	-1,200	-1,100	-1,100	-600	1,300	9,600
Willoughby (C)	18250	-300	-400	-500	-600	-700	-800	-600	600	6,100
Wollondilly (A)	18400	0	-100	-100	0	400	500	400	300	1,300
Woollahra (A)	18500	-200	-400	-500	-600	-500	-500	-400	400	6,900
Wyong (A)	18550	-600	-1,200	-1,600	-100	2,300	2,400	2,300	1,500	9,600

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B 4: Shortage of affordable rental housing in non-metropolitan NSW LGAs, 2001

	LGA	R1 Y1	R2 Y2	R3 Y3	R4 Y4	R5 Y5	R6 Y6	R7 Y7	R8 Y8	Total
21 Albury (C)	10050	-300	300	500	1,300	1,400	1,200	900	600	3,900
21 Armidale Dumaresq (A)	10110	-200	-100	100	600	800	700	600	400	2,200
21 Ballina (A)	10250	-200	-400	-400	100	700	800	700	500	3,200
21 Balranald (A)	10300	0	0	100	100	100	0	0	0	100
21 Barraba (A)	10400	0	100	0	0	0	0	0	0	100
21 Bathurst (C)	10450	-200	-100	0	500	900	800	700	400	2,300
21 Bega Valley (A)	10550	-100	0	300	700	700	500	400	300	2,000
21 Bellingen (A)	10600	-100	-100	0	100	200	200	100	100	900
21 Berrigan (A)	10650	0	100	200	200	200	100	100	100	500
21 Bingara (A)	10700	0	100	100	0	0	0	0	0	100
21 Bland (A)	10800	0	100	200	100	100	100	0	0	300
21 Blayney (A)	10850	0	0	100	200	100	100	100	100	300
21 Bogan (A)	10950	0	0	100	100	0	0	0	0	200
21 Bombala (A)	11000	0	0	100	0	0	0	0	0	100
21 Boorowa (A)	11050	0	0	100	0	0	0	0	0	100
21 Bourke (A)	11150	0	0	100	100	100	100	0	0	100
21 Brewarrina (A)	11200	0	0	0	0	0	0	0	0	0
21 Broken Hill (C)	11250	-100	200	300	300	300	200	200	100	900
21 Byron (A)	11350	-200	-500	-700	-600	0	100	300	300	2,900
21 Cabonne (A)	11400	0	100	200	200	200	100	100	100	500
21 Carrathool (A)	11600	0	0	100	100	100	100	100	0	100
21 Central Darling (A)	11700	0	0	0	0	0	0	0	0	100
21 Cessnock (C)	11720	-200	-100	200	700	700	600	400	300	2,300
21 Cobar (A)	11750	0	100	200	200	200	200	100	100	300
21 Coffs Harbour (C)	11800	-400	-500	-200	700	1,500	1,300	1,100	600	5,300
21 Conargo (A)	11850	0	0	0	0	0	0	0	0	0
21 Coolah (A)	11950	0	100	100	100	100	0	0	0	200
21 Coolamon (A)	12000	0	100	100	100	100	0	0	0	100
21 Cooma-Monaro (A)	12050	0	100	200	200	200	200	100	100	600
21 Coonabarabran (A)	12100	0	100	100	100	100	100	0	0	300
21 Coonamble (A)	12150	0	100	100	100	100	100	100	0	200
21 Cootamundra (A)	12200	0	100	200	200	100	100	100	0	400
21 Copmanhurst (A)	12250	0	0	0	0	0	0	0	0	200
21 Corowa (A)	12300	0	0	200	300	200	200	100	100	500
21 Cowra (A)	12350	0	100	200	300	300	200	200	100	700
21 Crookwell (A)	12400	0	0	100	100	0	0	0	0	100
21 Culcairn (A)	12450	0	0	100	0	0	0	0	0	100
21 Deniliquin (A)	12500	0	100	200	300	200	200	200	100	600
21 Dubbo (C)	12600	-100	100	300	800	1,200	1,100	900	600	2,700
21 Dungog (A)	12700	0	0	100	100	100	100	100	0	400
21 Eurobodalla (A)	12750	-200	-100	100	600	600	500	400	200	2,300
21 Evans (A)	12800	0	0	100	100	100	0	0	0	200
21 Forbes (A)	12900	0	100	100	200	200	200	100	100	600
21 Gilgandra (A)	12950	0	100	100	100	100	100	0	0	200
21 Glen Innes (A)	13000	0	100	200	100	100	100	100	0	400
21 Gloucester (A)	13050	0	0	100	100	100	100	100	0	300
21 Goulburn (C)	13150	-100	0	200	600	600	500	400	300	1,500
21 Grafton (C)	13200	-100	0	100	500	500	400	300	200	1,400
21 Greater Lithgow (C)	13300	-100	0	200	400	400	300	200	100	1,100
21 Greater Taree (C)	13350	-200	-100	300	900	900	600	500	300	3,000
21 Great Lakes (A)	13400	-200	-200	-100	300	600	500	400	200	2,300
21 Griffith (C)	13450	0	0	200	400	900	800	700	500	2,000
21 Gundagai (A)	13500	0	100	100	100	100	100	0	0	200
21 Gunnedah (A)	13550	0	100	200	300	300	200	200	100	700
21 Gunning (A)	13600	0	0	0	0	0	0	0	0	100
21 Guyra (A)	13650	0	100	100	100	100	0	0	0	200

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	LGA	R1 Y1	R2 Y2	R3 Y3	R4 Y4	R5 Y5	R6 Y6	R7 Y7	R8 Y8	Total
21 Harden (A)	13700	0	100	100	100	100	0	0	0	200
21 Hastings (A)	13750	-300	-500	-400	300	1,100	1,000	900	600	4,600
21 Hay (A)	13850	0	0	100	100	100	100	100	0	200
21 Holbrook (A)	13900	0	100	100	100	100	0	0	0	100
21 Hume (A)	14050	0	0	100	100	100	100	100	0	200
21 Inverell (A)	14200	0	100	200	400	300	200	200	100	900
21 Jerilderie (A)	14250	0	0	100	0	0	0	0	0	100
21 Junee (A)	14300	0	100	100	100	100	100	100	0	200
21 Kempsey (A)	14350	-100	0	200	500	500	300	200	100	1,700
21 Kiama (A)	14400	0	-100	-100	0	200	300	400	300	1,100
21 Kyogle (A)	14550	0	100	200	200	100	100	100	0	500
21 Lachlan (A)	14600	0	100	100	100	100	100	100	0	300
21 Lake Macquarie (C)	14650	-600	-900	-900	1,400	3,200	3,000	2,500	1,700	9,700
21 Leeton (A)	14750	0	100	100	300	400	300	300	200	700
21 Lismore (C)	14850	-300	-400	-100	900	1,000	800	500	300	3,700
21 Lockhart (A)	14950	0	0	0	0	0	0	0	0	100
21 Maclean (A)	15000	-100	-200	0	300	300	300	200	100	1,200
21 Maitland (C)	15050	-200	-200	-100	900	1,200	1,000	900	500	3,200
21 Manilla (A)	15100	0	0	100	100	0	0	0	0	200
21 Merriwa (A)	15250	0	100	100	0	0	0	0	0	100
21 Moree Plains (A)	15300	0	100	300	400	500	400	400	300	1,000
21 Mudgee (A)	15400	-100	0	100	300	400	300	300	200	1,100
21 Mulwaree (A)	15450	0	100	100	100	100	100	100	0	200
21 Murray (A)	15500	0	0	0	100	100	100	100	100	400
21 Murrumbidgee (A)	15550	0	0	0	100	100	100	0	0	200
21 Murrurundi (A)	15600	0	0	100	0	0	0	0	0	100
21 Muswellbrook (A)	15650	0	100	200	500	500	500	400	300	1,100
21 Nambucca (A)	15700	-100	-100	0	300	300	200	200	100	1,300
21 Narrabri (A)	15750	0	200	300	300	300	300	200	100	900
21 Narrandera (A)	15800	0	100	100	200	100	100	100	100	400
21 Narromine (A)	15850	0	100	100	200	100	100	100	100	400
21 Newcastle (C)	15900	-1,000	-1,300	-900	2,000	3,900	3,600	3,100	2,100	12,700
21 Nundle (A)	16000	0	0	0	0	0	0	0	0	100
21 Oberon (A)	16100	0	0	100	100	100	100	100	0	300
21 Orange (C)	16150	-100	-100	100	700	1,100	1,100	900	700	2,600
21 Parkes (A)	16200	0	100	300	400	400	300	200	200	900
21 Parry (A)	16300	0	100	100	200	200	100	100	100	500
21 Port Stephens (A)	16400	-200	-400	-300	600	1,100	1,100	900	500	3,700
21 Pristine Waters (A)	16420	0	0	100	200	100	100	100	0	500
21 Queanbeyan (C)	16450	-100	500	700	900	1,200	1,000	900	600	2,900
21 Quirindi (A)	16500	0	100	100	100	100	100	0	0	300
21 Richmond Valley (A)	16610	-100	0	300	500	400	300	200	100	1,500
21 Rylstone (A)	16750	0	0	100	100	100	0	0	0	200

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		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
21 Scone (A)	16800	0	100	200	300	300	200	200	100	700
21 Severn (A)	16850	0	0	0	0	0	0	0	0	100
21 Shellharbour (C)	16900	-200	-300	-200	100	1,000	1,000	800	600	3,000
21 Shoalhaven (C)	16950	-300	-300	0	1,200	1,600	1,300	1,100	600	4,900
21 Singleton (A)	17000	0	0	100	400	600	500	500	400	1,100
21 Snowy River (A)	17050	0	0	0	100	100	100	100	100	400
21 Tallaganda (A)	17250	0	0	100	100	100	0	0	0	200
21 Tamworth (C)	17300	-200	-100	300	900	1,200	1,000	800	500	3,000
21 Temora (A)	17350	0	100	100	100	100	100	0	0	300
21 Tenterfield (A)	17400	0	100	100	100	100	100	0	0	300
21 Tumbarumba (A)	17450	0	100	100	100	100	100	0	0	200
21 Tumut (A)	17500	0	100	200	300	300	200	200	100	600
21 Tweed (A)	17550	-500	-900	-800	400	1,300	1,200	1,100	700	6,200
21 Uralla (A)	17650	0	0	100	100	100	100	100	0	300
21 Urana (A)	17700	0	0	0	0	0	0	0	0	100
21 Wagga Wagga (C)	17750	-300	100	400	1,300	1,700	1,500	1,200	800	4,000
21 Wakool (A)	17800	0	100	100	100	100	100	0	0	200
21 Walcha (A)	17850	0	0	100	100	0	0	0	0	100
21 Walgett (A)	17900	0	100	100	100	100	100	100	100	300
21 Warren (A)	17950	0	0	100	100	100	100	0	0	200
21 Weddin (A)	18100	0	100	100	100	0	0	0	0	100
21 Wellington (A)	18150	0	100	100	100	100	100	100	0	500
21 Wentworth (A)	18200	0	100	100	200	100	100	100	0	300
21 Windouran (A)	18300	0	0	0	0	0	0	0	0	0
21 Wingecarribee (A)	18350	-100	-100	-100	300	700	600	600	400	2,300
21 Wollongong (C)	18450	-900	-1,100	-300	1,300	3,100	3,300	3,400	2,500	11,900
21 Yallaroi (A)	18600	0	100	100	100	0	0	0	0	100
21 Yarrawlumla (A)	18650	0	0	0	100	100	100	100	100	300
21 Yass (A)	18700	0	100	100	200	200	200	100	100	500
21 Young (A)	18750	0	100	200	300	300	200	200	100	700
21 Unincorporated NSW	19399	0	0	0	0	0	0	0	0	0

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B 5: Shortage of affordable rental housing in Melbourne LGAs, 2001

	LGA	R1 Y1	R2 Y2	R3 Y3	R4 Y4	R5 Y5	R6 Y6	R7 Y7	R8 Y8	Total
30 Banyule (C)	20660	-200	-400	-500	400	1,900	2,300	2,300	1,800	5,800
30 Bayside (C)	20910	-200	-300	-300	-100	400	700	1,000	1,300	4,900
30 Boroondara (C)	21110	-600	-900	-900	-100	2,000	2,900	3,500	4,100	12,500
30 Brimbank (C)	21180	-500	-400	-200	1,500	2,300	2,100	1,800	1,200	6,500
30 Cardinia (S)	21450	0	0	0	600	800	700	600	400	1,800
30 Casey (C)	21610	-300	-500	-600	1,400	3,000	2,800	2,500	1,700	6,800
30 Darebin (C)	21890	-800	-1,100	-100	1,800	3,500	3,600	3,400	2,700	11,700
30 Frankston (C)	22170	-400	-600	-200	1,800	2,700	2,400	2,000	1,300	6,700
30 Glen Eira (C)	22310	-700	-1,300	-400	1,000	2,500	3,000	3,300	3,200	11,700
30 Greater Dandenong (C)	22670	-700	-800	600	3,300	3,600	3,000	2,400	1,400	9,000
30 Hobsons Bay (C)	23110	-200	-300	-100	900	2,000	1,900	1,800	1,500	5,200
30 Hume (C)	23270	-200	-400	-500	400	1,800	1,700	1,400	1,000	4,300
30 Kingston (C)	23430	-500	-800	0	1,500	3,000	3,100	3,000	2,300	9,000
30 Knox (C)	23670	-100	-300	-300	500	2,000	2,200	2,000	1,500	5,200
30 Manningham (C)	24210	-200	-300	-400	-300	500	1,100	1,400	1,400	4,200
30 Maribyrnong (C)	24330	-500	-300	500	1,300	1,900	1,800	1,700	1,200	5,700
30 Maroondah (C)	24410	-200	-400	-400	1,100	2,400	2,300	2,100	1,400	5,500
30 Melbourne (C)	24600	-800	-1,100	-1,200	-1,000	-400	0	600	1,900	9,300
30 Melton (S)	24650	-100	-100	-100	600	700	600	500	400	1,700
30 Monash (C)	24970	-500	-700	-900	100	2,400	3,300	3,700	3,200	9,200
30 Moonee Valley (C)	25060	-300	-500	100	1,200	2,300	2,700	2,900	2,600	7,600
30 Moreland (C)	25250	-700	-1,100	-200	1,900	3,600	3,700	3,700	3,100	12,100
30 Mornington Peninsula (S)	25340	-300	-500	100	1,500	2,100	1,900	1,700	1,200	6,400
30 Nillumbik (S)	25710	0	0	0	0	200	300	400	400	1,300
30 Port Phillip (C)	25900	-800	-1,300	-700	900	2,800	3,400	4,000	4,500	15,800
30 Stonnington (C)	26350	-600	-1,000	-900	400	2,200	2,900	3,500	3,800	12,700
30 Whitehorse (C)	26980	-400	-600	-600	400	2,400	3,000	3,200	2,800	8,300
30 Whittlesea (C)	27070	-200	-400	-500	600	2,000	1,900	1,600	1,100	4,600
30 Wyndham (C)	27260	-200	-300	-200	800	1,600	1,500	1,300	900	3,600
30 Yarra (C)	27350	-400	-600	-200	400	1,000	1,400	2,100	3,300	10,000
30 Yarra Ranges (S)	27450	-200	-300	-100	1,000	1,800	1,600	1,400	900	4,900

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B 6: Shortage of affordable rental housing in non-metropolitan Victoria LGAs, 2001

	LGA	R1 Y1	R2 Y2	R3 Y3	R4 Y4	R5 Y5	R6 Y6	R7 Y7	R8 Y8	Total
31 Alpine (S)	20110	0	100	200	300	200	200	100	100	700
31 Ararat (RC)	20260	0	100	300	200	200	100	100	100	500
31 Ballarat (C)	20570	-400	0	600	1,800	1,900	1,600	1,300	800	5,400
31 Bass Coast (S)	20740	-100	100	400	500	400	300	300	200	1,400
31 Baw Baw (S)	20830	0	200	500	700	700	500	400	300	1,700
31 Buloke (S)	21270	100	100	100	100	100	100	0	0	200
31 Campaspe (S)	21370	0	200	400	700	700	600	500	300	1,700
31 Central Goldfields (S)	21670	0	100	200	200	100	100	100	0	600
31 Colac-Otway (S)	21750	0	200	400	500	400	300	200	100	900
31 Corangamite (S)	21830	0	300	300	300	200	200	100	100	700
31 Delatite (S)	21950	0	100	300	500	400	300	300	200	1,100
31 East Gippsland (S)	22110	-100	200	600	800	700	500	400	200	2,100
31 Gannawarra (S)	22250	0	200	300	300	200	200	100	100	500
31 Glenelg (S)	22410	0	300	400	400	400	300	300	200	1,000
31 Golden Plains (S)	22490	0	0	100	100	100	100	100	0	300
31 Greater Bendigo (C)	22620	-300	-100	700	2,000	2,100	1,700	1,300	800	5,500
31 Greater Geelong (C)	22750	-700	-200	1,100	3,800	4,300	3,500	2,900	2,000	11,300
31 Greater Shepparton (C)	22830	-200	0	300	1,100	1,400	1,200	1,000	600	3,600
31 Hepburn (S)	22910	0	0	100	200	200	100	100	100	600
31 Hindmarsh (S)	22980	0	100	100	100	100	0	0	0	200
31 Horsham (RC)	23190	0	100	300	500	400	300	200	200	1,100
31 Indigo (S)	23350	0	0	200	300	300	200	200	100	600
31 Latrobe (C)	23810	-100	600	1,300	1,300	1,100	900	700	400	3,500
31 Loddon (S)	23940	0	100	100	100	100	100	0	0	300
31 Macedon Ranges (S)	24130	0	0	100	400	400	400	400	300	1,200
31 Mildura (RC)	24780	-100	100	500	1,000	1,300	1,000	800	500	3,100
31 Mitchell (S)	24850	0	0	200	400	400	300	300	200	1,100
31 Moira (S)	24900	-100	100	400	600	500	400	300	200	1,300
31 Moorabool (S)	25150	0	0	100	300	300	300	200	100	800
31 Mount Alexander (S)	25430	-100	-100	200	300	200	200	100	100	800
31 Moyne (S)	25490	0	200	200	300	200	200	100	100	600
31 Murrindindi (S)	25620	0	100	200	200	200	100	100	100	600
31 Northern Grampians (S)	25810	0	100	300	300	200	200	100	100	600
31 Pyrenees (S)	25990	0	100	100	100	100	0	0	0	200
31 Queenscliffe (B)	26080	0	0	0	100	100	100	100	0	200
31 South Gippsland (S)	26170	0	200	400	400	400	300	200	100	1,000
31 Southern Grampians (S)	26260	0	200	400	300	300	200	200	100	700
31 Strathbogie (S)	26430	0	100	200	200	100	100	100	0	400
31 Surf Coast (S)	26490	0	0	0	300	400	400	400	300	1,100
31 Swan Hill (RC)	26610	0	100	300	500	500	400	300	200	1,200
31 Towong (S)	26670	0	100	100	100	100	100	100	0	300
31 Wangaratta (RC)	26700	-100	0	400	600	600	500	400	200	1,500
31 Warrnambool (C)	26730	-100	0	300	700	800	700	600	300	1,900
31 Wellington (S)	26810	-100	300	700	700	700	600	500	300	2,000
31 West Wimmera (S)	26890	0	100	100	100	100	0	0	0	100
31 Wodonga (RC)	27170	-100	-100	100	800	1,000	800	700	500	2,200
31 Yarriambiack (S)	27630	100	100	100	100	100	100	0	0	200

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B 7: Shortage of affordable rental housing in Brisbane SRSs, 2001

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	SRS	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
40 City Core	3041	-1,100	-1,000	-500	700	2,100	2,700	3,500	3,700	13,700
40 Northern Inner	3042	-800	-700	400	2,700	4,900	5,000	4,800	3,700	14,300
40 Eastern Inner	3043	-400	-600	-200	900	3,000	3,600	3,700	3,000	9,500
40 Southern Inner	3044	-400	-500	100	1,300	2,500	2,600	2,400	1,800	7,000
40 Western Inner	3045	-700	-1,000	-1,000	-400	1,400	1,800	2,200	2,200	8,100
40 Northern Outer	3081	-500	-700	-800	1,300	4,500	4,900	4,500	3,200	12,000
40 Eastern Outer	3082	-200	-300	-300	200	1,800	1,800	1,700	1,200	4,600
40 Southern Outer	3083	-600	-900	-1,100	200	4,100	4,600	4,300	3,300	11,200
40 Western Outer	3084	-200	-300	-300	500	2,500	2,800	2,800	2,200	7,100
40 Logan City	3121	-700	-800	-200	4,600	5,700	4,800	3,900	2,500	14,000
40 Gold Coast City Part A	3122	-200	-300	300	1,300	1,600	1,400	1,100	600	4,400
40 Beaudesert Shire Part A	3123	0	-100	-100	0	200	300	200	200	800
40 Redland Shire	3124	-300	-600	-900	300	2,400	2,600	2,500	1,700	7,300
40 Caboolture Shire Part A	3161	-500	-900	-600	1,800	2,700	2,300	1,800	1,000	7,800
40 Pine Rivers Shire	3162	-200	-400	-500	1,100	2,500	2,300	2,100	1,400	5,900
40 Redcliffe City	3163	-400	-400	0	1,300	1,500	1,200	1,000	600	4,900
40 Ipswich City (Part in BSC	3164	-400	-400	1,400	3,400	3,400	2,700	2,100	1,200	7,900

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B. 8: Shortage of affordable rental housing in non-metropolitan Queensland LGAs, 2001

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
41 Aramac (S)	30150	0	0	0	0	0	0	0	0	0
41 Atherton (S)	30200	0	0	200	400	300	300	200	100	900
41 Aurukun (S)	30250	0	0	0	0	0	0	0	0	0
41 Balonne (S)	30300	0	100	100	100	100	100	100	100	200
41 Banana (S)	30350	0	200	300	300	400	300	300	200	700
41 Barcaldine (S)	30400	0	0	0	0	0	0	0	0	100
41 Barcoo (S)	30450	0	0	0	0	0	0	0	0	0
41 Bauhinia (S)	30500	0	0	100	0	0	0	0	0	100
41 Beaudesert (S)	30550	-100	0	100	300	500	400	300	200	1,500
41 Belyando (S)	30600	0	100	200	200	200	200	200	100	300
41 Bendemere (S)	30650	0	0	0	0	0	0	0	0	0
41 Biggenden (S)	30700	0	0	0	0	0	0	0	0	100
41 Blackall (S)	30750	0	0	100	0	0	0	0	0	100
41 Boonah (S)	30800	0	100	200	200	100	100	100	0	400
41 Booringa (S)	30850	0	0	0	0	0	0	0	0	100
41 Boulia (S)	30900	0	0	0	0	0	0	0	0	0
41 Bowen (S)	30950	0	100	300	400	400	300	300	200	900
41 Broadsound (S)	31700	0	100	100	100	100	100	100	0	100
41 Bulloo (S)	31750	0	0	0	0	0	0	0	0	0
41 Bundaberg (C)	31810	-300	-100	700	1,500	1,300	900	700	400	4,100
41 Bungil (S)	31850	0	0	0	0	0	0	0	0	100
41 Burdekin (S)	31900	0	200	500	500	500	400	300	200	1,200
41 Burke (S)	31950	0	0	0	0	0	0	0	0	0
41 Burnett (S)	31980	-100	0	200	500	500	400	300	200	1,400
41 Caboolture (S)	32000	0	0	0	0	100	100	0	0	300
41 Cairns (C)	32060	-700	-600	800	2,800	4,800	4,500	4,100	2,900	13,200
41 Calliope (S)	32100	0	0	100	300	500	500	400	300	900
41 Caloundra (C)	32130	-300	-800	-1,000	300	1,600	1,500	1,300	800	6,200
41 Cambooya (S)	32150	0	0	0	100	100	100	100	0	200
41 Cardwell (S)	32200	0	100	200	400	400	300	200	100	800
41 Carpentaria (S)	32250	0	0	0	0	0	0	0	0	100
41 Charters Towers (C)	32300	0	100	200	300	300	300	200	200	600
41 Chinchilla (S)	32350	0	100	200	200	100	100	100	0	400
41 Clifton (S)	32400	0	0	100	100	0	0	0	0	100
41 Cloncurry (S)	32450	0	0	0	100	100	100	100	100	100
41 Cook (S)	32500	0	0	100	100	100	100	100	100	300
41 Cooloolo (S)	32530	-100	0	600	900	700	600	400	200	2,400
41 Crow's Nest (S)	32550	0	0	100	100	100	100	100	100	300
41 Croydon (S)	32600	0	0	0	0	0	0	0	0	0
41 Dalby (T)	32650	0	0	300	400	400	300	200	100	800
41 Dalrymple (S)	32700	0	0	0	100	100	0	0	0	100
41 Diamantina (S)	32750	0	0	0	0	0	0	0	0	0
41 Douglas (S)	32800	0	0	100	200	300	400	400	300	1,200
41 Duinga (S)	32850	0	100	100	200	200	200	100	100	300
41 Eacham (S)	32900	0	0	100	100	100	100	100	100	400
41 Eidsvold (S)	32950	0	0	0	0	0	0	0	0	0
41 Emerald (S)	33000	0	100	200	400	600	600	500	400	1,100
41 Esk (S)	33050	0	0	200	300	200	200	100	100	800
41 Etheridge (S)	33100	0	0	0	0	0	0	0	0	0
41 Fitzroy (S)	33150	0	0	100	200	200	100	100	100	500
41 Flinders (S)	33200	0	0	0	0	0	0	0	0	100
41 Gatton (S)	33250	0	0	200	400	300	300	200	100	900
41 Gayndah (S)	33300	0	100	100	100	100	100	100	0	200
41 Gladstone (C)	33350	-100	0	400	1,100	1,200	1,100	900	600	2,300
41 Gold Coast (C)	33460	-2,700	-5,500	-7,100	-1,300	7,900	9,600	10,400	7,800	42,600
41 Goondiwindi (T)	33600	0	0	100	200	300	200	200	100	500
41 Herberton (S)	33700	0	100	100	100	100	100	0	0	300
41 Hervey Bay (C)	33750	-300	-300	200	1,100	1,100	800	600	300	3,700
41 Hinchinbrook (S)	33800	0	200	400	400	300	200	200	100	800

...contd./

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
41 Ilfracombe (S)	33850	0	0	0	0	0	0	0	0	0
41 Inglewood (S)	33900	0	100	100	100	100	0	0	0	200
41 Ipswich (C)	33960	0	0	100	300	200	200	100	100	600
41 Isis (S)	34000	0	0	100	100	100	0	0	0	300
41 Isisford (S)	34050	0	0	0	0	0	0	0	0	0
41 Jericho (S)	34100	0	0	0	0	0	0	0	0	0
41 Johnstone (S)	34150	-100	300	500	700	600	500	400	200	1,700
41 Jondaryan (S)	34200	0	0	200	300	300	200	200	100	600
41 Kilcoy (S)	34250	0	0	100	100	100	100	0	0	200
41 Kilkivan (S)	34300	0	100	100	100	0	0	0	0	200
41 Kingaroy (S)	34350	0	100	300	400	400	300	200	100	900
41 Kolan (S)	34400	0	0	100	100	0	0	0	0	200
41 Laidley (S)	34450	-100	0	200	300	200	200	100	100	800
41 Livingstone (S)	34550	-100	-100	100	600	600	500	400	300	1,700
41 Longreach (S)	34700	0	0	100	100	100	100	100	100	200
41 Mackay (C)	34760	-300	-200	500	1,900	2,700	2,300	1,900	1,300	6,300
41 McKinlay (S)	34800	0	0	0	0	0	0	0	0	0
41 Mareeba (S)	34850	0	100	200	400	400	300	200	100	1,100
41 Maroochy (S)	34900	-700	-1,300	-1,300	900	2,900	2,900	2,700	1,700	11,800
41 Maryborough (C)	34950	-100	100	600	700	600	400	300	200	1,800
41 Millmerran (S)	35000	0	100	100	100	100	100	100	100	200
41 Mirani (S)	35050	0	100	100	100	100	100	100	0	200
41 Miriam Vale (S)	35100	0	0	0	100	100	0	0	0	200
41 Monto (S)	35150	0	100	100	100	100	0	0	0	100
41 Mount Isa (C)	35300	0	100	300	500	700	800	800	600	1,500
41 Mount Morgan (S)	35350	0	100	100	0	0	0	0	0	200
41 Mundubbera (S)	35450	0	100	100	100	100	0	0	0	200
41 Murgon (S)	35500	0	100	100	100	100	100	100	0	200
41 Murilla (S)	35550	0	100	100	100	0	0	0	0	100
41 Murweh (S)	35600	0	100	100	100	100	100	100	0	200
41 Nanango (S)	35650	0	0	200	200	100	100	100	0	500
41 Nebo (S)	35700	0	100	100	100	100	100	100	100	100
41 Noosa (S)	35750	-300	-500	-700	-200	800	800	800	500	4,000
41 Paroo (S)	35800	0	0	0	0	0	0	0	0	100
41 Peak Downs (S)	35850	0	0	0	0	0	0	0	0	100
41 Perry (S)	35900	0	0	0	0	0	0	0	0	0
41 Pittsworth (S)	36050	0	0	100	100	100	100	100	100	300
41 Quilpie (S)	36150	0	0	0	0	0	0	0	0	100
41 Richmond (S)	36300	0	0	0	0	0	0	0	0	0
41 Rockhampton (C)	36350	-300	100	1,200	2,200	2,200	1,800	1,400	900	5,200
41 Roma (T)	36400	0	100	200	300	300	200	200	100	500
41 Rosalie (S)	36450	0	100	100	200	100	100	100	0	400
41 Sarina (S)	36550	0	0	100	300	300	200	200	100	600
41 Stanthorpe (S)	36600	0	100	300	300	200	100	100	100	700
41 Tambo (S)	36650	0	0	0	0	0	0	0	0	0
41 Tara (S)	36700	0	100	100	100	0	0	0	0	100
41 Taroom (S)	36750	0	100	0	0	0	0	0	0	100
41 Thuringowa (C)	36800	-100	-200	-100	500	1,200	1,200	1,100	700	3,000
41 Tiaro (S)	36850	0	0	100	100	0	0	0	0	200
41 Toowoomba (C)	36900	-500	-300	900	3,000	3,400	2,800	2,300	1,400	8,700
41 Torres (S)	36950	0	0	0	0	0	0	0	0	100
41 Townsville (C)	37000	-600	-600	500	2,300	3,500	3,200	2,900	2,100	9,400
41 Waggamba (S)	37100	0	0	0	0	0	0	0	0	100
41 Wambo (S)	37150	0	100	100	100	100	0	0	0	200
41 Warroo (S)	37200	0	0	0	0	0	0	0	0	0
41 Warwick (S)	37260	-100	200	500	600	500	400	300	100	1,500
41 Whitsunday (S)	37330	-100	0	100	300	500	500	500	300	1,500
41 Winton (S)	37400	0	0	0	0	0	0	0	0	0
41 Wondai (S)	37450	0	100	100	100	100	100	0	0	200
41 Woocoo (S)	37500	0	0	0	0	0	0	0	0	100

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B. 9: Shortage of affordable rental housing in Adelaide LGAs, 2001

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
50 Adelaide (C)	40070	-100	-200	-100	100	500	600	600	600	2,100
50 Adelaide Hills (DC)	40120	0	0	0	300	400	400	300	200	1,300
50 Burnside (C)	40700	-200	-200	100	500	800	700	800	700	2,800
50 Campbelltown (C)	40910	-200	-200	-100	700	1,100	1,000	800	500	2,900
50 Charles Sturt (C)	41060	-400	-100	400	1,700	2,400	2,100	1,800	1,200	6,700
50 Gawler (M)	42030	-100	-100	0	400	400	300	200	100	1,000
50 Holdfast Bay (C)	42600	-200	-200	200	700	1,100	1,000	900	700	3,400
50 Marion (C)	44060	-200	-200	0	900	1,600	1,400	1,200	800	4,000
50 Mitcham (C)	44340	-200	-100	100	600	1,000	1,000	900	700	3,200
50 Norwood Payneham St F	45290	-300	-200	400	900	1,200	1,200	1,200	1,000	3,900
50 Onkaparinga (C)	45340	-400	-600	-400	2,000	2,300	1,900	1,500	900	6,300
50 Playford (C)	45680	-200	-300	300	1,000	900	600	500	200	3,000
50 Port Adelaide Enfield (C)	45890	-500	0	600	1,700	2,000	1,700	1,400	900	6,100
50 Prospect (C)	46510	-100	-100	100	400	600	600	500	400	1,800
50 Salisbury (C)	47140	-300	-300	100	1,800	1,800	1,400	1,100	700	4,800
50 Tea Tree Gully (C)	47700	-100	-200	-300	800	1,600	1,400	1,200	800	3,600
50 Unley (C)	47980	-200	-100	300	700	1,000	1,100	1,100	900	3,500
50 Walkerville (M)	48260	0	0	0	100	100	100	100	100	400
50 West Torrens (C)	48410	-500	100	700	1,400	1,800	1,600	1,400	900	5,400

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B. 10: Shortage of affordable rental housing in non-metropolitan South Australian LGAs, 2001

	LGA	R1 Y1	R2 Y2	R3 Y3	R4 Y4	R5 Y5	R6 Y6	R7 Y7	R8 Y8	Total
51 Alexandrina (DC)	40220	0	0	100	300	300	200	100	100	900
51 Barossa (DC)	40310	0	0	200	400	400	300	300	200	900
51 Barunga West (DC)	40430	0	0	100	0	0	0	0	0	100
51 Berri and Barmera (DC)	40520	0	100	300	400	300	200	200	100	700
51 Ceduna (DC)	41010	0	100	100	100	100	0	0	0	100
51 Clare and Gilbert Valleys	41140	0	100	200	200	200	100	100	0	400
51 Cleve (DC)	41190	0	0	0	0	0	0	0	0	0
51 Coober Pedy (DC)	41330	0	0	100	100	100	0	0	0	100
51 Copper Coast (DC)	41560	0	0	200	200	100	100	100	0	500
51 Elliston (DC)	41750	0	0	0	0	0	0	0	0	0
51 Flinders Ranges (DC)	41830	0	0	0	0	0	0	0	0	100
51 Franklin Harbor (DC)	41960	0	0	0	0	0	0	0	0	0
51 Goyder (DC)	42110	0	100	100	100	0	0	0	0	200
51 Grant (DC)	42250	0	0	100	100	100	100	0	0	200
51 Kangaroo Island (DC)	42750	0	100	100	100	100	0	0	0	200
51 Karoonda East Murray (DC)	43080	0	0	0	0	0	0	0	0	0
51 Kimba (DC)	43220	0	0	0	0	0	0	0	0	0
51 Lacepede (DC)	43360	0	0	100	0	0	0	0	0	100
51 Le Hunte (DC)	43570	0	0	0	0	0	0	0	0	100
51 Light (DC)	43650	0	0	100	100	100	100	100	0	300
51 Lower Eyre Peninsula (DC)	43710	0	100	100	100	100	0	0	0	200
51 Loxton Waikerie (DC)	43790	0	100	300	300	200	200	200	100	600
51 Mallala (DC)	43920	0	0	0	100	100	100	0	0	200
51 Mid Murray (DC)	44210	0	100	100	100	100	100	0	0	300
51 Mount Barker (DC)	44550	0	-100	0	400	400	400	300	200	1,100
51 Mount Gambier (C)	44620	-100	200	300	600	600	500	400	200	1,400
51 Mount Remarkable (DC)	44830	0	100	0	0	0	0	0	0	100
51 Murray Bridge (RC)	45040	0	100	300	400	300	200	200	100	900
51 Naracoorte and Lucindale (DC)	45090	0	100	200	200	200	200	100	100	400
51 Northern Areas (DC)	45120	0	100	100	100	100	0	0	0	200
51 Orroroo/Carrieton (DC)	45400	0	0	0	0	0	0	0	0	0
51 Peterborough (DC)	45540	0	0	0	0	0	0	0	0	100
51 Port Augusta (C)	46090	0	100	300	300	200	200	100	100	500
51 Port Lincoln (C)	46300	0	0	200	400	400	300	300	200	900
51 Port Pirie City and Districts	46450	0	100	300	300	200	200	100	100	700
51 Renmark Paringa (DC)	46670	0	100	200	300	200	200	100	100	600
51 Robe (DC)	46860	0	0	0	0	0	0	0	0	100
51 Roxby Downs (M)	46970	0	0	100	100	200	200	200	100	300
51 Southern Mallee (DC)	47290	0	100	100	0	0	0	0	0	100
51 Streaky Bay (DC)	47490	0	0	0	0	0	0	0	0	100
51 Tatiara (DC)	47630	0	100	200	200	200	100	100	100	300
51 The Coorong (DC)	47800	0	100	200	100	100	100	100	0	300
51 Tumby Bay (DC)	47910	0	0	100	0	0	0	0	0	100
51 Victor Harbor (DC)	48050	0	-100	100	200	200	200	100	100	700
51 Wakefield (DC)	48130	0	100	100	100	100	100	0	0	300
51 Wattle Range (DC)	48340	0	200	300	200	200	200	100	100	500
51 Whyalla (C)	48540	0	200	400	400	400	300	200	200	900
51 Yankalilla (DC)	48750	0	0	100	100	100	0	0	0	200
51 Yorke Peninsula (DC)	48830	0	200	200	200	100	100	100	0	500
51 Unincorporated SA	49399	0	0	0	0	0	0	0	0	100

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B. 11: Shortage of affordable rental housing in non-metropolitan Perth LGAs, 2001

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
60 Armadale (C)	50210	-100	-200	400	900	800	600	500	300	2,300
60 Bassendean (T)	50350	0	-100	100	300	300	300	200	100	900
60 Bayswater (C)	50420	-500	-100	500	1,900	2,000	1,700	1,400	900	5,300
60 Belmont (C)	50490	-200	-200	200	1,000	1,200	1,000	800	500	2,700
60 Cambridge (T)	51310	-100	0	0	200	400	400	500	500	1,700
60 Canning (C)	51330	-300	-300	-100	1,400	2,000	1,800	1,600	1,100	4,800
60 Claremont (T)	51750	-100	-100	0	100	200	200	200	200	800
60 Cockburn (C)	51820	-200	-200	0	900	1,200	1,100	900	600	3,200
60 Cottesloe (T)	52170	0	0	0	0	100	100	200	200	800
60 East Fremantle (T)	53150	0	0	0	100	100	200	200	100	500
60 Fremantle (C)	53430	-200	-200	-100	200	600	600	700	500	2,400
60 Gosnells (C)	53780	-200	-300	300	1,300	1,400	1,200	900	600	3,500
60 Joondalup (C)	54170	-300	-500	-700	800	2,400	2,500	2,300	1,900	6,300
60 Kalamunda (S)	54200	-100	-100	-100	600	700	600	500	400	1,800
60 Kwinana (T)	54830	-100	-100	200	300	300	200	200	100	900
60 Melville (C)	55320	-300	-500	-400	700	1,700	1,900	1,900	1,600	5,500
60 Mosman Park (T)	55740	-100	0	100	100	100	100	100	100	1,000
60 Mundaring (S)	56090	-100	-100	100	300	400	400	300	200	1,100
60 Nedlands (C)	56580	-100	-100	-100	0	100	100	200	300	1,000
60 Peppermint Grove (S)	56930	0	0	0	0	0	0	0	0	100
60 Perth (C)	57080	-200	-100	0	0	200	200	300	300	1,400
60 Rockingham (C)	57490	-300	-300	300	1,500	1,600	1,300	1,000	600	4,300
60 Serpentine-Jarrahdale (S)	57700	0	0	0	100	100	100	100	100	300
60 South Perth (C)	57840	-300	-400	-100	900	1,700	1,700	1,700	1,300	4,800
60 Stirling (C)	57910	-1,300	-1,100	1,100	4,900	6,300	5,600	4,900	3,400	16,800
60 Subiaco (C)	57980	-300	-200	100	300	600	700	800	700	2,700
60 Swan (C)	58050	-200	-300	100	1,100	1,400	1,200	1,000	600	3,500
60 Victoria Park (T)	58510	-400	-300	200	1,200	1,600	1,400	1,300	800	4,000
60 Vincent (T)	58570	-300	-100	100	500	1,100	1,200	1,300	1,000	3,600
60 Wanneroo (C)	58760	-200	-300	-200	900	1,100	1,000	900	500	3,000

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B. 12: Shortage of affordable rental housing in non-metropolitan Western Australian LGAs, 2001

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
61 Albany (C)	50080	-100	-100	200	800	800	700	600	400	2,000
61 Ashburton (S)	50250	0	0	0	100	100	100	100	100	200
61 Augusta-Margaret River	50280	0	0	0	200	300	300	300	200	800
61 Beverley (S)	50560	0	0	0	0	0	0	0	0	0
61 Boddington (S)	50630	0	0	0	0	0	0	0	0	100
61 Boyup Brook (S)	50770	0	0	0	0	0	0	0	0	100
61 Bridgetown-Greenbushes	50840	0	0	100	100	100	100	100	0	200
61 Brookton (S)	50910	0	0	0	0	0	0	0	0	0
61 Broome (S)	50980	0	0	0	100	100	100	200	200	700
61 Broomehill (S)	51050	0	0	0	0	0	0	0	0	0
61 Bruce Rock (S)	51120	0	0	0	0	0	0	0	0	0
61 Bunbury (C)	51190	-100	-200	100	900	1,100	900	800	500	2,500
61 Busselton (S)	51260	-100	-100	-100	500	800	700	500	300	1,700
61 Capel (S)	51400	0	0	0	100	100	100	100	100	200
61 Carnamah (S)	51470	0	0	0	0	0	0	0	0	0
61 Carnarvon (S)	51540	0	0	100	100	100	100	100	100	300
61 Chapman Valley (S)	51610	0	0	0	0	0	0	0	0	0
61 Chittering (S)	51680	0	0	0	0	0	0	0	0	100
61 Collie (S)	51890	0	100	100	100	100	100	100	0	300
61 Coolgardie (S)	51960	0	100	200	200	200	200	200	200	300
61 Coorow (S)	52030	0	0	0	0	0	0	0	0	100
61 Corrigin (S)	52100	0	0	0	0	0	0	0	0	0
61 Cranbrook (S)	52240	0	0	0	0	0	0	0	0	0
61 Cuballing (S)	52310	0	0	0	0	0	0	0	0	0
61 Cue (S)	52380	0	0	0	0	0	0	0	0	0
61 Cunderdin (S)	52450	0	0	0	0	0	0	0	0	0
61 Dalwallinu (S)	52520	0	0	0	0	0	0	0	0	0
61 Dandaragan (S)	52590	0	0	0	100	100	100	0	0	100
61 Dardanup (S)	52660	0	0	0	200	300	200	200	100	500
61 Denmark (S)	52730	0	0	0	100	100	100	0	0	300
61 Derby-West Kimberley (S)	52800	0	0	0	0	100	100	0	0	100
61 Donnybrook-Balingup (S)	52870	0	0	100	100	100	100	0	0	200
61 Dowerin (S)	52940	0	0	0	0	0	0	0	0	0
61 Dumbleyung (S)	53010	0	0	0	0	0	0	0	0	0
61 Dundas (S)	53080	0	0	0	0	0	0	0	0	0
61 East Pilbara (S)	53220	0	0	0	100	100	100	100	100	100
61 Esperance (S)	53290	0	0	100	400	300	300	200	100	800
61 Exmouth (S)	53360	0	0	0	0	100	100	100	100	200
61 Geraldton (C)	53500	-100	100	400	600	600	500	400	200	1,500
61 Gingin (S)	53570	0	0	100	100	100	100	0	0	200
61 Gnowangerup (S)	53640	0	0	0	0	0	0	0	0	0
61 Goomalling (S)	53710	0	0	0	0	0	0	0	0	0
61 Greenough (S)	53850	0	0	100	200	200	200	200	100	500
61 Halls Creek (S)	53920	0	0	0	0	0	0	0	0	0
61 Harvey (S)	53990	-100	0	100	400	500	400	300	200	1,000
61 Irwin (S)	54060	0	0	0	100	100	0	0	0	200
61 Jerramungup (S)	54130	0	0	0	0	0	0	0	0	0
61 Kalgoorlie/Boulder (C)	54280	0	100	300	700	1,100	1,100	1,200	1,000	2,200
61 Katanning (S)	54340	0	100	200	100	100	100	100	0	200
61 Kellerberrin (S)	54410	0	0	0	0	0	0	0	0	0
61 Kent (S)	54480	0	0	0	0	0	0	0	0	0
61 Kojonup (S)	54550	0	100	100	100	100	0	0	0	100
61 Kondinin (S)	54620	0	0	0	0	0	0	0	0	0
61 Koorda (S)	54690	0	0	0	0	0	0	0	0	0
61 Kulin (S)	54760	0	0	0	0	0	0	0	0	0
61 Lake Grace (S)	54900	0	0	0	0	0	0	0	0	100
61 Laverton (S)	54970	0	0	0	0	0	0	0	0	0
61 Leonora (S)	55040	0	0	0	0	0	0	0	0	0

...contd./

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
61 Mandurah (C)	55110	-300	-300	500	1,100	1,100	900	700	500	3,400
61 Manjimup (S)	55180	0	100	200	200	200	100	100	100	500
61 Meekatharra (S)	55250	0	0	0	0	0	0	0	0	0
61 Menzies (S)	55390	0	0	0	0	0	0	0	0	0
61 Merredin (S)	55460	0	100	100	100	100	0	0	0	200
61 Mingenew (S)	55530	0	0	0	0	0	0	0	0	0
61 Moora (S)	55600	0	0	100	100	100	0	0	0	100
61 Morawa (S)	55670	0	0	0	0	0	0	0	0	0
61 Mount Magnet (S)	55810	0	0	0	0	0	0	0	0	0
61 Mount Marshall (S)	55880	0	0	0	0	0	0	0	0	0
61 Mukinbudin (S)	55950	0	0	0	0	0	0	0	0	0
61 Mullewa (S)	56020	0	0	0	0	0	0	0	0	0
61 Murray (S)	56230	0	0	100	200	200	100	100	100	500
61 Nannup (S)	56300	0	0	0	0	0	0	0	0	100
61 Narembeen (S)	56370	0	0	0	0	0	0	0	0	0
61 Narrogin (T)	56440	0	0	100	100	100	100	0	0	200
61 Narrogin (S)	56510	0	0	0	0	0	0	0	0	0
61 Ngaanyatjaraku (S)	56620	0	0	0	0	0	0	0	0	0
61 Northam (T)	56650	0	0	100	100	100	100	100	0	300
61 Northam (S)	56720	0	0	0	100	0	0	0	0	100
61 Northampton (S)	56790	0	0	0	100	100	0	0	0	200
61 Nungarin (S)	56860	0	0	0	0	0	0	0	0	0
61 Perenjori (S)	57000	0	0	0	0	0	0	0	0	0
61 Pingelly (S)	57140	0	0	0	0	0	0	0	0	0
61 Plantagenet (S)	57210	0	100	100	100	100	100	0	0	200
61 Port Hedland (T)	57280	0	0	100	200	300	300	300	400	600
61 Quairading (S)	57350	0	0	0	0	0	0	0	0	0
61 Ravensthorpe (S)	57420	0	0	0	0	0	0	0	0	100
61 Roebourne (S)	57560	0	100	100	200	300	400	400	400	800
61 Sandstone (S)	57630	0	0	0	0	0	0	0	0	0
61 Shark Bay (S)	57770	0	0	0	0	0	0	0	0	100
61 Tambellup (S)	58120	0	0	0	0	0	0	0	0	0
61 Tammin (S)	58190	0	0	0	0	0	0	0	0	0
61 Three Springs (S)	58260	0	0	0	0	0	0	0	0	0
61 Toodyay (S)	58330	0	0	0	0	0	0	0	0	100
61 Trayning (S)	58400	0	0	0	0	0	0	0	0	0
61 Victoria Plains (S)	58540	0	0	0	0	0	0	0	0	0
61 Wagin (S)	58610	0	0	0	0	0	0	0	0	100
61 Wandering (S)	58680	0	0	0	0	0	0	0	0	0
61 Waroona (S)	58820	0	0	100	100	100	100	0	0	200
61 West Arthur (S)	58890	0	0	0	0	0	0	0	0	0
61 Westonia (S)	59030	0	0	0	0	0	0	0	0	0
61 Wickepin (S)	59100	0	0	0	0	0	0	0	0	0
61 Williams (S)	59170	0	0	0	0	0	0	0	0	0
61 Wiluna (S)	59250	0	0	0	0	0	0	0	0	0
61 Wongan-Ballidu (S)	59310	0	0	0	0	0	0	0	0	100
61 Woodanilling (S)	59380	0	0	0	0	0	0	0	0	0
61 Wyalkatchem (S)	59450	0	0	0	0	0	0	0	0	0
61 Wyndham-East Kimberle	59520	0	0	0	100	100	100	100	100	300
61 Yilgarn (S)	59660	0	0	0	0	100	100	100	0	100
61 York (S)	59730	0	0	100	100	0	0	0	0	100

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

Table B. 13: Shortage of affordable rental housing in Tasmanian and Territory LGAs, 2001

		R1	R2	R3	R4	R5	R6	R7	R8	Total
	LGA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	
70 Brighton (M)	60410	0	0	100	100	100	100	0	0	300
70 Clarence (C)	61410	-100	-100	400	800	800	700	600	300	2,100
70 Derwent Valley (M)	61510	0	0	100	100	100	100	0	0	300
70 Glenorchy (C)	62610	-200	0	700	1,100	900	700	500	300	3,000
70 Hobart (C)	62810	-400	200	700	1,500	1,800	1,600	1,500	1,100	5,300
70 Kingborough (M)	63610	0	0	200	500	600	500	400	200	1,300
70 Sorell (M)	64810	0	100	200	200	200	100	100	0	600
71 Break O'Day (M)	60210	0	100	100	100	100	100	0	0	300
71 Burnie (C)	60610	0	200	500	400	400	300	200	100	1,100
71 Central Coast (M)	60810	0	100	400	400	300	200	200	100	1,000
71 Central Highlands (M)	61010	0	100	100	0	0	0	0	0	100
71 Circular Head (M)	61210	0	100	200	200	100	100	100	0	400
71 Devonport (C)	61610	-100	0	500	600	500	300	200	100	1,400
71 Dorset (M)	61810	0	200	200	200	100	100	100	0	400
71 Flinders (M)	62010	0	0	0	0	0	0	0	0	0
71 George Town (M)	62210	0	100	100	100	100	100	0	0	300
71 Glamorgan/Spring Bay (I)	62410	0	100	100	100	100	0	0	0	200
71 Huon Valley (M)	63010	0	100	300	200	200	100	100	0	600
71 Kentish (M)	63210	0	100	100	100	0	0	0	0	200
71 King Island (M)	63410	0	100	100	100	100	100	0	0	100
71 Latrobe (M)	63810	0	0	200	200	100	100	100	0	400
71 Launceston (C)	64010	-300	100	1,200	1,700	1,500	1,200	900	600	4,800
71 Meander Valley (M)	64210	0	100	200	300	300	200	200	100	900
71 Northern Midlands (M)	64610	0	100	200	200	200	100	100	100	500
71 Southern Midlands (M)	65010	0	100	100	100	100	0	0	0	200
71 Tasman (M)	65210	0	0	100	0	0	0	0	0	100
71 Waratah/Wynyard (M)	65410	0	100	300	300	200	100	100	100	700
71 West Coast (M)	65610	0	100	200	200	100	100	100	100	300
71 West Tamar (M)	65810	0	0	200	300	300	300	200	100	900
80 Darwin (C)	71000	-200	-300	-200	400	1,400	1,700	2,000	2,000	5,900
80 Litchfield (S)	72300	0	0	0	100	100	100	200	100	600
80 Palmerston (C)	72800	0	-100	-100	100	400	600	600	500	1,300
81 Alice Springs (T)	70200	0	0	100	300	700	700	900	700	1,900
81 Coomalie (CGC)	70700	0	0	0	0	0	0	0	0	0
81 Jabiru (T)	72000	0	0	0	0	0	0	0	0	0
81 Katherine (T)	72200	0	0	0	100	100	200	200	200	400
81 Tennant Creek (T)	73800	0	0	0	100	100	100	100	0	200
81 Unincorporated NT	79399	0	0	100	100	100	100	100	100	200
90 ACT	89399	-500	-600	-400	1,700	6,600	8,100	8,900	7,900	19,600
100 Other territories	99399	0	0	0	0	0	0	0	0	100

Source: ABS Summary Rent and Household Income Tabulations, 2001 Census

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and Urban Research Institute

Australian Housing and Urban Research Institute
Level 1, 114 Flinders Street, Melbourne Victoria 3000
Phone +61 3 9660 2300 Fax +61 3 9663 5488
Email information@ahuri.edu.au Web www.ahuri.edu.au