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FINAL REPORT NO. 416

Affordable private rental supply and demand: short-term disruption (2016–2021) and longer-term structural change (1996–2021)

Authored by

Margaret Reynolds, Swinburne University of Technology
Sharon Parkinson, Swinburne University of Technology
Jacqueline De Vries, University of Tasmania
Kath Hulse, Swinburne University of Technology

Publication Date February 2024
DOI 10.18408/ahuri5128501

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Authors

Margaret Reynolds, Swinburne University of Technology
Sharon Parkinson, Swinburne University of Technology
Jacqueline De Vries, University of Tasmania
Kath Hulse, Swinburne University of Technology

ISBN

978-1-922498-84-7

Key words

private rental sector; affordable rental; available rental; affordable housing; rental supply shortage; affordability; low-income households; rental dwellings; household income; informal renting; individual rental arrangements; non-mainstream rental; metropolitan, non-metropolitan; regions

Series

AHURI Final Report

Number

416

ISSN

1834-7223

Publisher

Australian Housing and Urban Research Institute Limited
Melbourne, Australia

DOI

10.18408/ahuri5128501

Format

PDF, online only

URL

https://www.ahuri.edu.au/research/final-reports/416

Recommended citation

Reynolds, M., Parkinson, S., De Vries, J and Hulse, K. (2024) *Affordable private rental supply and demand: short-term disruption (2016–2021) and longer-term structural change (1996–2021),* AHURI Final Report No. 416, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/416, doi: 10.18408/ahuri5128501.

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Acknowledgements

This material was produced with funding from the Australian Government and state and territory governments. AHURI Limited gratefully acknowledges the financial and other support it has received from these governments, without which this work would not have been possible.

AHURI Limited also gratefully acknowledges the contributions, both financial and in-kind, of its university research partners who have helped make the completion of this material possible.

The authors would like to thank Paul Murrin of the Australian Bureau of Statistics for compiling the complex customised data files required for this research and the two previous projects.

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Contents

List of tables

List of figures

Acronyms and abbreviations used in this report

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHA	Australian Housing Aspirations (survey)
AHURI	Australian Housing and Urban Research Institute
ASGC	Australian Standard Geographical Classification
ASGS	Australian Statistical Geography Standard
CPI	Consumer Price Index (Australia)
CRA	Commonwealth Rent Assistance
GCCSA	Greater Capital City Statistical Area (ABS spatial unit)
HILDA	Household, Income and Labour Dynamics in Australia Survey
NHFIC	National Housing Finance and Investment Corporation
NRAS	National Rental Affordability Scheme
NSW	New South Wales
NT	Northern Territory
PRS	private rental sector
Q1/Q2	quintile 1 or quintile 2
QLD	Queensland
RBA	Reserve Bank of Australia
RQ	research question
SA	South Australia
SIH	Survey of Income and Housing (ABS)
TAS	Tasmania
US	United States of America
VIC	Victoria
WA	Western Australia

Glossary

A list of definitions for terms commonly used by AHURI is available on the AHURI website ahuri.edu.au/glossary.

Key terms used in this report

Private rental	Housing in which the household pays rent to a real estate agent or private landlord (related or not) who does not live in the property. Rent-free properties are excluded.
Q1 households	Quintile 1 households: those households with incomes in the lowest 20 per cent of the national, gross (unequivalised) household income distribution. These are also referred to as 'very low' income households.
Q2 households	Quintile 2 households: those households with incomes in the lowest 21–40 per cent segment of the national, gross (unequivalised) household income distribution. These are also referred to as 'low-income' households.
Lower income households	In Chapters 4–6, lower-income households are those in the lowest 40 per cent of the national, gross (unequivalised) household income distribution (Q1 and Q2 households combined). In Chapter 3, however, where results are based on analysis of real income segments rather than quintile groups, 'lower' refers more generally to the lowest four of the 12 segments.
Affordable private rental sector (PRS) dwellings	Dwellings that have a weekly private rent of no more than 30 per cent of gross weekly household income, applicable to lower-income households.
Shortage/surplus of affordable dwellings	Compares the number of Q1 or Q2 PRS households with the number of dwellings affordable to them using the 30 per cent measure described above. The estimate is calculated by subtracting the number of Q1 or Q2 PRS households from the total number of affordable PRS properties. An outright shortage is when the number of affordable dwellings is less than the number of households that require them: that is, affordable supply does not meet demand. When supply is greater than demand, a surplus of affordable dwellings exists.
Shortage of affordable and available dwellings	This measure takes the shortage or surplus value from the previous calculation and subtracts the number of higher-income households in the affordable stock. An *outright shortage* worsens when affordable stock is unavailable because it is occupied by households that can afford to pay more. A *surplus* of affordable stock can become a *shortage of affordable and available stock* when the affordable stock is occupied by higher-income households, thus making it unavailable to Q1 or Q2 households. Note: Q1 households in PRS stock affordable for Q2 households also reduces availability for Q2 households.
Income unit	'One person or a group of related persons within a household, whose command over income is assumed to be shared. Income sharing is assumed to take place within married (registered or de facto) couples, and between parents and dependent children' (ABS 2022g).
Intercensal	The period of time between Australian Censuses (conducted every five years).

Executive summary

Key points

- This report provides a unique point-in-time analysis of how the global health crisis of COVID-19 and policy and population responses temporarily altered the long-run structural trajectory of the private rental sector (PRS) in Australia.
- The COVID period saw private sector rents decreasing and vacancies increasing to mid-2021, but this had no effect on the acute shortage of rental properties affordable to households with very low incomes (quintile 1 or Q1).
- The shortage of affordable private rental homes for Q1 households in 2021 increased to 255,000 (up from 212,000 in 2016). This shortage deteriorated further to 348,000 dwellings that were affordable and available for Q1 households once utilisation of the stock by higher-income households was factored in (up from 305,000 dwellings in 2016).
- Responses to the COVID-19 pandemic resulted in a substantial increase, nationally, in stock affordable to households with Q2 and above incomes (2016–21), resulting in a very large surplus of 787,000 affordable dwellings for Q2 renter households in 2021 (an increase from 491,000 dwellings in 2016).
- Q2 households faced a problem of availability rather than supply, as even a surplus of this size became a shortage of 152,000 affordable and available dwellings in 2021 once occupation of the affordable stock by higher (and some very low) income households was factored in (down from the 2016 estimate of 173,000 dwellings).

- **Eighty-two per cent of Q1 PRS households nationally were paying unaffordable rents in 2021 (much the same as in 2016) compared to 27 per cent of Q2 households (down from 36% in 2016). Affordability outcomes were worse in metropolitan areas with 90 per cent of Q1 households and 32 per cent of Q2 households paying unaffordable rents in 2021.**

- **Some very low-income earners pay rent informally to family members or an unrelated cohabitating person. Even prior to COVID (2019–20), around half of Q1 income units were in this situation. Single people or single-headed households, particularly those more marginally attached to labour markets, and across all age groups, have experienced the greatest 'retreat' from the independent mainstream PRS.**

- **Since mid-2021 (after the 2021 Census), there has been a remarkable change in the PRS with rapidly increasing rents, very low vacancy rates and high levels of demand from migrants and additional households as the country rebounds from the COVID years.**

The study

This Final Report presents results from the latest in a series of projects that have analysed comparable, customised data from the ABS Census of Population and Housing to examine changes in the supply of, and demand for, affordable and available private rental housing for lower-income households over six, five-yearly Census collections (1996–2021). The first project in the series was conducted in response to policy discussions in the mid-1990s concerning a rising level of demand from low- and middle-income households in Australia's PRS that was driven by a decrease in public housing funding and an increase in the difficulty of accessing home ownership (Wulff and Yates 2001). The policy issue underlying the first project of this series is still, unfortunately, critically relevant for Australian housing policy today: namely, to what extent can the PRS affordably accommodate lower-income households?

This series provides a unique opportunity to examine changes over both short-term intercensal periods (e.g., 2016–21) and the long term (e.g., 1996–2021), based on findings derived from the full series. As there are now 25 years of data and analyses from this series, it is possible to identify changes that appear to be cyclical and relatively short term, and others that appear to be structural and longer term.

For the current report, the short term was strongly influenced by population and regulatory reactions to, and the policies and programs associated with, responses to the COVID-19 pandemic of 2020–21, all relevant at the time of Census data collection in August 2021. From shortly after the Census to the present, the post-pandemic policy context has grappled with a rental affordability and supply crisis across not only urban but also regional locations – a situation not encountered in recent history.

Conceptually, the research approach assumes that housing can be assigned to households based on affordability to identify shortages or surpluses of rental units that are affordable to lower-income households (i.e., households with incomes in the lowest 40 per cent of the national gross household income distribution). The approach then measures whether lower-income households occupy rental dwellings that are:

1. *affordable*, based on a weekly rent of no more than 30 per cent of gross household income and
2. *available*, referring to the extent to which the affordable dwellings are occupied by lower-income households (rather than households with higher incomes).

Finally, the affordability outcomes for lower-income households are determined by identifying the extent to which the shortage of affordable stock impacts the proportions of lower-income households paying unaffordable rents. All estimates are calculated nationally, for aggregated metropolitan and non-metropolitan areas, individual state/territory capital cities and sub-city areas, and for 21 regional centres. 'Lower-income' PRS households are divided into two groups: quintile 1 (Q1), comprised of households with incomes in the lowest 20 per cent of all national incomes; and quintile 2 (Q2), households with incomes in the lowest 21–40 per cent of national incomes. Estimates for each group are presented separately. For the first time, this project includes an exploratory method for investigating individual rental arrangements *outside* of the mainstream private rental sector using four waves of the ABS Survey of Income and Housing (SIH). This analysis extends the existing household analysis to one that examines the rental arrangements of individuals and income units *within* the household and thus identifies potential hidden demand from people who are not currently living in the PRS.

This project has two aims:

- To update a data series that has, since the 1996 Census, provided careful and comparable analysis about the extent to which the PRS provides affordable housing for lower-income households (Q1 and Q2 households) every five years.
- To enhance the series by examining the links between changing household formation and mainstream PRS access among lower-income households (Q1 and Q2) and individuals through an in-depth, temporal analysis of the ABS Survey of Income and Housing (SIH).

Key findings

COVID-19 impacts

The COVID-19 pandemic delivered an 'unprecedented shock' to the Australian PRS (Evans, Rosewall et al. 2020). The rental market was impacted on multiple fronts including: a decrease in demand due to changes in migration and domestic mobility; a stable supply that increased in some locations due to investor actions; rent decreases; and vacancy rate increases, at least in the short term. These factors impact the findings derived from analysis of 2021 Census data and constrain our understanding of long-term and structural changes.

Change in size and structure of the private rental sector: rents

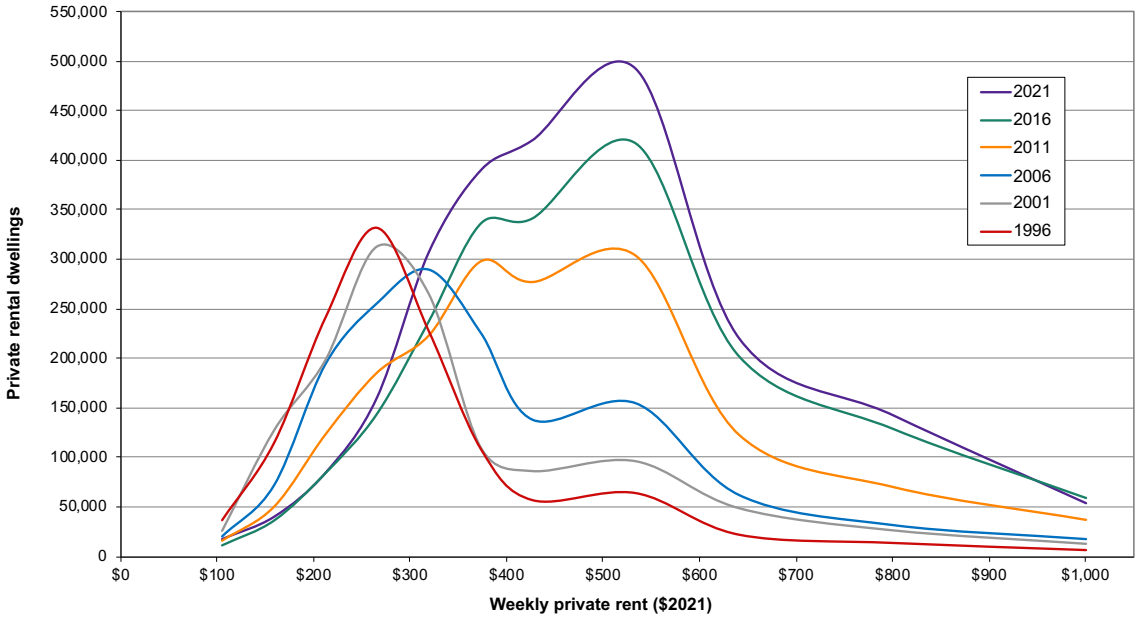
In 2021, the Australian PRS housed more than 2.363 million households, a 17 per cent increase of nearly 340,000 households since the 2016 Census.

This series has shown that growth in the PRS has been greater than total household growth in each intercensal period since 1996. PRS households have, therefore, increased their share of all households over this time: from 20 per cent in 1996 to just over 25 per cent in 2021. Private renter households have grown at a faster rate than home purchaser households at each intercensal period since 2006.

Longer-term structural changes and short-term cyclical changes in the distribution of real private rents nationally over 25 years are shown in Figure ES1.

- Intercensal growth was again concentrated at mid-market levels in 2016–21, continuing a trend first established in 2011 as a major change, and continuing in 2016–21 as a structural shift to a concentration of rents at mid-to-higher levels.
- This intercensal period also saw a small increase in the number of dwellings at the lowest end of the market, likely a short-term event, impacted by COVID-19 market conditions at Census time.
- Even with a small increase, these low-rent dwellings comprised only 13 per cent of the PRS stock in 2021: a segment of the market that comprised 59 per cent of the PRS stock in 1996 and half of the stock in 2001.

Figure ES1: Distributions of private rental dwellings by weekly rent paid, Australia, 1996, 2001, 2006, 2011, 2016 and 2021



Note: Derived from 12 rent categories established for the 1996–2001 analysis, and which have been updated to 2021 dollars enabling real changes in the profile of rents paid to be evident.

Data source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Cite as: Reynolds, M., Parkinson, S., De Vries, J and Hulse, K. (2024) Affordable private rental supply and demand: short-term disruption (2016–21) and longer-term structural change (1996–2021), AHURI Final Report No. 416, Australian Housing and Urban Research Institute Limited, Melbourne: Figure 8.

Change in size and structure of the private rental sector: household incomes

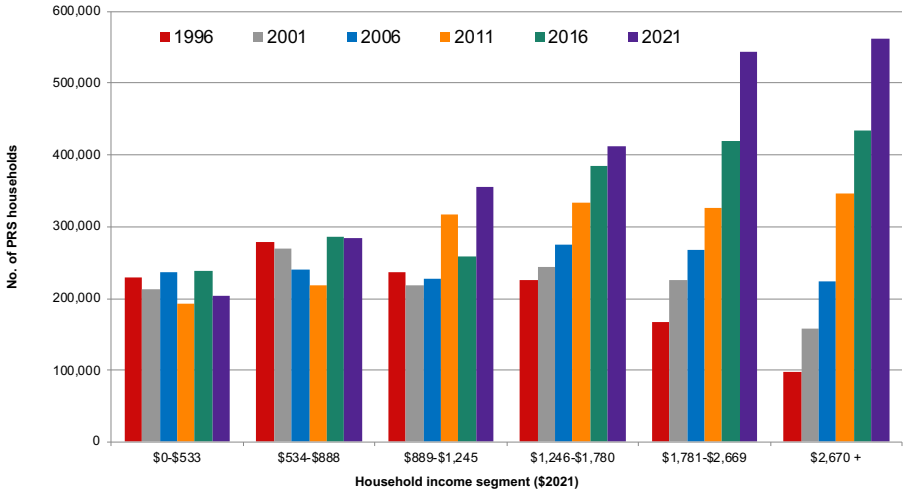
First, the most obvious long-term shift in the national distribution of PRS household incomes has been the growth of households with incomes at mid to high levels ($1,246 a week and above, or $65,000 and above per annum, $2021) (Figure ES2).

- In 1996, these households (with 1996 equivalent incomes) comprised 40 per cent of all PRS households; in 2021, they comprised 64 per cent.
- Households with incomes in the top segment shown in Figure ES2 (around $140,000 p.a. and above, $2021), made up only 8 per cent of PRS households in 1996 but nearly one-quarter in 2021.

Second, there has been a consistent *volume* of lower-income (in real terms) households in the PRS since 1996 (with incomes up to $888 per week, or $46,000 p.a., $2021) (Figure ES2).

- Due to the rapid growth of PRS households with higher incomes, households in these income segments have comprised a declining share of all PRS households over the long term: from 41 per cent in 1996 to 21 per cent in 2021.
- Their numbers, however, have remained relatively consistent over the 1996–2021 period, averaging around 480,000 households.

Figure ES2: Distributions of private renter household incomes, Australia, 1996–2021



Note: Based on 12 household income segments (real $) that have been aggregated into six categories to enable easier communication of the main trends. These are not quantiles of any description (e.g., quintiles or quartiles). See Table A5 in Appendix 2 (Panel A) for underlying numbers.

Data source: ABS customised matrices derived from the Australian Census of Population and Housing 1996–2021.Cite as: Reynolds, M., Parkinson, S., De Vries, J and Hulse, K. (2024) Affordable private rental supply and demand: short-term disruption (2016-2021) and longer-term structural change (1996–2021), AHURI Final Report No. 416, Australian Housing and Urban Research Institute Limited, Melbourne: Figure 9.

Shortages of affordable and available private rental supply for lower-income households

Evident again in 2021 was the very low number of PRS dwellings affordable for very low-income (Q1) households (also documented in 2006–16). Importantly, the low and negative rent inflation patterns experienced at the time of the 2021 Census did not improve levels of supply or affordability for Q1 households between 2016 and 2021.

- Nationally, in 2021, Q1 PRS households faced an outright shortage of 255,000 affordable dwellings (up from 212,000 in 2016).
- The 2021 national shortage of affordable and available dwellings increased to 348,000 dwellings, from 305,000 dwellings in 2016.
- In 2021, 82 per cent of Q1 PRS households paid unaffordable rents (nationally) and 90 per cent in the aggregated capital cities (compared with 70% in non-metropolitan regions). These rates have changed little nationally and in the cities since 2006 and are the highest recorded in the series for the non-metropolitan region.

There was a substantial and unanticipated increase in the number of dwellings affordable to Q2 (and above) households in 2016–21, likely influenced by market responses to the COVID-19 pandemic in 2020 and 2021.

- Due to this unusual rise in stock affordable for Q2 households, a very large surplus of 787,000 affordable dwellings was recorded for Q2 renter households nationally in 2021.
- However, even a surplus of this size became a shortage of 152,000 affordable and available dwellings once occupation of the affordable stock by higher (and some very low Q1) income households was factored in.
- In 2021, 27 per cent of Q2 renter households nationally were paying unaffordable rents (36% in metropolitan areas): an improvement on 2016 rates (36% and 46%, respectively).

Changing rental demand in mainstream and non-mainstream rental arrangements

Findings drawn from analyses of the ABS SIH suggest that the full extent of the affordability crisis experienced by the lowest-income renters is likely to be undercounted at the household level.

- Single person occupancy within the independent mainstream rental sector has declined across all age groups between 2007–08 and 2019–20, but especially among those aged 15–34 years and 55–64 years. The share of single persons who work part-time, who are unemployed or who are not in the labour force has declined in the mainstream rental sector.
- In 2019–20, around half (49.7%) of Q1 individual income units paid rent outside the independent or group mainstream sector, either to another family member or with/to an unrelated cohabitating person. Around half of Q1 individual income units still paid unaffordable rents when cohabitating with others either informally or in a mainstream shared rental arrangement.
- Individual renters that are Australian born (19.8%), aged 15–24 years (45%), male (18%) and unemployed (30%) are more likely to be paying rent to a family member they live with.
- People paying rent to a family member they live with (15%) or cohabitating (19%) are more than twice as likely to be living in crowded conditions requiring one or more additional bedrooms based on the Canadian occupancy standard compared with people renting independently in the mainstream (6.5%).
- Only 20 per cent of all Q1 income units and 22 per cent of Q1 single persons renting independently in the mainstream sector were paying affordable rent compared to around 68 per cent paying rent to families.

Policy development options

This long-term analysis of affordable rental supply reveals the cumulative impact of market failure: relying on a private market to support the essential and basic need for housing for an ever-growing share of the population, including people in later life, is ultimately socially and economically unsustainable.

Drawing on the same methodology used since 1996 enables the disruption of longer-term structural trends of the past two decades to be understood in the context of profoundly divergent market dynamics and policy settings. What we learn from this long-term analysis is that it took nothing less than a global health and economic crisis to temporarily increase affordable supply to levels needed for Q2 households, but this did not extend to delivering affordable housing for the lowest (Q1) income households.

In normal times, without substantial policy interventions like those used during the COVID-19 pandemic, lower-income households cannot compete with households that have greater capacity to choose rentals across the price spectrum. For the lowest-income (Q1) renters, there is simply no affordable supply to choose from. While there has been policy development to increase affordable supply in the PRS since the last report in this series, it is difficult to see how the private market will deliver dwellings that are affordable for Q1 households and, importantly, keep this accommodation affordable over time.

In the short term:

- There is an immediate and urgent need for affordable and available (not occupied by higher-income groups) rental housing for Q1 households: that is, housing with rent that costs up to $225 per week ($2021). Only some form of social housing can, and will, do this.
- There is an urgent need for supply solutions to accommodate the diversity of single Q1 (and some Q2) households across the life course, notably younger households who are also affected by increased precarity in the labour market, and families with children (mainly sole parent families), and those in pre-retirement and retirement stages of life. Most will not be able to afford any type of private rental on their own and face the highest risk of homelessness.
- While general policy settings must work for the increasingly diverse group of households in the PRS, additional and targeted policy development is not only required to address the large numbers of Q1 and, increasingly, Q2 households paying rents in excess of 30 per cent of household income, but also those who are unable to gain entry or form their own rental household due to affordability constraints. This includes responding to issues of crowding among informal rental households.

- For Q2 households, a key issue is not only supply but also the availability of affordable stock that is rented by higher-income households who do not want to pay excessive rents and who want to save or redirect wealth building through other channels. Policy development for Q2 private renter households should include a broader range of measures in addition to affordable housing models such as those financed with funds raised through the National Housing Finance and Investment Corporation (NHFIC) and build-to-rent properties where these can be brought to market at rents affordable to Q2 households. Supply of affordable housing near to jobs and for key workers in inner-, middle-suburban and regional locations, especially Sydney, also needs improvement.
- The lack of supply of private rental dwellings (including those occupied by short-stay rentals) in regional areas as well as smaller urban centres of Tasmania (TAS), northern New South Wales (NSW) and Queensland (QLD) must be urgently addressed through targeted investment in affordable rental housing. At a more local level, further regulation to restrict the timing and use of short-stay rentals, as well as promoting the use and redevelopment of purpose-built tourist accommodation that does not reduce residential stock, is required.

In the longer term:

- The market and current policy settings are insufficient to tackle the scale of the institutional challenge ahead, including addressing the way in which housing is taxed and incentivised through the financialisation of housing as an asset class.
- Policy thinking to effect long-term change in the housing system is required, akin to responding to the challenges of climate change. To achieve long-term and transformative change, it is important to set clear goals for the PRS as part of the broader housing system for the longer term.
    - What would a good housing system look like and what is the role of the PRS within that system?
    - What transition pathways are required to achieve these goals?
    - What targets could be set to achieve these changes within specified time frames?
    - What governance arrangements would be most effective in achieving these targets (across various portfolios and levels of government)?

Foreword

This project is the sixth in a series of reports, the first of which was published in 2001 by Maryann Wulff and Judith Yates.[1] This pioneering work has been the foundation for a further five projects, including the current project. We want to recognise the continued involvement and support for this series of reports over a period of almost 20 years of our friend and colleague Judith (Judy) who sadly passed away in 2022.

The title of the first report published in 2001 was *Low rent housing in Australia 1986 to 1996: how has it changed, who does it work for and who does it fail?* It examined changes in affordable private rental housing supply for the intercensal period 1986–96. The authors clearly articulated the policy context that stimulated the analysis:

> *The study is important because of the increasing reliance on the private rental market in Australia and, particularly, because of the increasing reliance on this market for lower income households. It is important because, over the past decade, housing assistance policies have been predicated on a belief that the private rental market is a more appropriate tenure than social housing because of a perception that it offers increased housing choice and flexibility for lower income households. (Wulff and Yates 2001: Executive summary)*

The findings of the analysis for the period 1986–96 highlighted the inadequate supply of affordable private rental housing for low- to moderate-income households under these policy settings:

> *The results of this study suggest that the private rental market, whilst it has increased the choice of those on higher incomes, has limited the options available to lower income households. It is suggested that a more interventionist approach is needed to ensure that adequate and affordable rental housing is available for households on low or low to moderate incomes. Demand side assistance, such as rent assistance, reduces the burden of high housing costs. The results of this study suggest that income assistance, of itself, is not enough. Manifestly, it has not ensured affordable housing is available for lower income households. Supply side intervention is needed to protect existing low rent stock, to increase the low rent stock available and, while supply constraints remain, to ensure that the low rent stock that is available is made available to low income households. (Wulff and Yates 2001: Executive summary)*

1 The 2001 report was authored by Maryann Wulff and Judith Yates with Terry Burke. It was funded by the then Australian Housing Research Fund.

The findings of the first report (2001) were remarkably prescient. In the 2000s, policy settings have continued to rely on the private rental sector to house lower-income households,[2] but the cumulative evidence from four subsequent reports funded by the Australian Housing and Urban Housing Institute (AHURI) has found that, while private rental supply continues to outpace household growth and may provide for a growing number of middle-higher-income renters, it is unable to generate sufficient affordable rental housing for lower-income households (see Hulse, Reynolds et al. 2015; 2019a).

This report, the sixth in the series, again funded by AHURI, updates the analysis for changes in the short term, namely, the intercensal period 2016–21, as well as the longer term. The analysis of the short term considers the unusual circumstances of the COVID-19 pandemic, which had many implications for the private rental sector due to previously unimaginable government interventions as well as the actions of private renters and private landlords as they sought to adapt to these new circumstances. The analysis of the longer term highlights the importance of identifying and recognising longer-term structural changes in the private rental sector.

2 Lower income refers to households in the lowest- and second-lowest quintile of all Australian household incomes (Q1 and Q2, respectively).

1. The research

- This report analyses changes in the supply of private rental housing affordable and available to lower-income households (Q1 and Q2 households) over the short term (2016–21) and the longer term (1996–2021).
- The research is situated within two distinct policy contexts: short-term interventions due to the COVID-19 pandemic of 2020–21 and the longer-term policy context.
- It draws on recent literature that highlights some major trends in the private rental sector (PRS) in Australia and selected similar countries, including financialisation, investment, technological developments and market segmentation.
- The report presents the conceptual basis for the methodology that analyses change in the short (2016–21) and the longer term (1996–2021), using a comparable and robust method based on customised data from the ABS Census.
- An exploratory method for investigating private renters outside of the mainstream PRS using the ABS Survey of Income and Housing (SIH) is also presented.

1.1 Introduction

Over the last 35 years, the PRS has come to play a critical role in housing Australians, yet there is accumulating evidence that the sector does not provide an adequate supply of affordable rental dwellings for lower-income and vulnerable households (recent examples include Hulse, Reynolds et al. 2019a; NHFIC 2020; 2023; Productivity Commission 2019; Rowley, Brierty et al. 2023). While renter households are increasingly diverse in terms of incomes and socio-demographic characteristics, the cumulative evidence from research overwhelmingly highlights the lack of affordable supply for lower-income and vulnerable households who must pay unaffordable rents or face living in a range of inadequate housing arrangements (van den Nouwelant, Troy et al. 2022a; 2022b). Importantly, research has highlighted a link between a lack of affordable private rental housing and inadequate and insecure housing arrangements and the homelessness experienced by families and individuals (Commissioner for Residential Tenancies Victoria 2020; NHFIC 2023; Parkinson, Batterham et al 2019; Productivity Commission 2022).

This is the sixth in a series of projects to undertake an in-depth analysis of affordable private rental supply across the national population over five-year (intercensal) periods using customised, comparable Census data. The previous reports in the series from the five prior projects and Census reference years are:

- 1986–96: Wulff and Yates (with Burke 2001)
- 1996–2001: Yates, Wulff et al. (2004a; 2004b)
- 2001–06: Wulff, Dharmalingam et al. (2009); Wulff, Reynolds et al. (2011)
- 2006–11: Hulse, Reynolds et al. (2014; 2015)
- 2011–16: Hulse, Reynolds et al. (2019a)

The research in this series has also enabled identification of changes beyond intercensal periods, highlighting both continuity and change in the PRS (see Hulse, Reynolds et al. 2015; 2019a). Prior to the 2021 Census – a Census in which the PRS was still affected by the short-term effects of the COVID-19 pandemic – this series had shown growth in the PRS that was substantially greater than household growth; restructuring of the sector through greater demand from middle- and higher-income households; and an increasing concentration of supply of dwellings with mid-market rents, unaffordable for households with low incomes (Hulse, Reynolds et al. 2015; 2019a; Hulse and Yates 2017). The series had also highlighted the effects of market sorting such that rental dwellings that are notionally affordable to lower-income households are occupied by those on middle-higher incomes, making them unavailable for rent to lower-income households. All reports in the series have provided estimates of shortages of affordable and available private rental housing for lower-income households at a national, metropolitan and regional level. Recent reports have also provided more in-depth spatial analysis, available from analysis of Census data, to highlight a distinct spatial dimension to PRS restructuring with increased rent levels in inner and middle suburbs of capital cities and more affordable rentals in outer suburbs and large regional centres (Hulse, Reynolds et al. 2019a).

This series of projects focuses on the mainstream PRS: that is, households paying rent to real estate agents or private landlords not resident in the rented dwelling. However, the PRS has been fragmenting for population groups, particularly among those with low incomes, with different formal and informal pathways of access and tenancy management emerging (Hulse, Parkinson et al. 2018; Parkinson, Hulse et al. 2022; Parkinson, James et al. 2018). An expanded assessment of shortages of affordable and available rental housing could include lower-income people squeezed out of the PRS into marginal housing, such as residential caravan parks (Buckle, Gurran et al. 2020; Goodman, Nelson et al. 2013) and homelessness (see van den Nouwelant, Troy et al. 2022a for one approach). There is also evidence that some lower-income people are being squeezed out of the mainstream rental sector and delaying forming independent households, for example by living in the parental home longer and paying rent. For Census purposes, these are 'hidden households' and counted as part of a homeowner or rental household according to the circumstances of the parents (Stone, Rowley et al. 2020). This develops the traditional conception of marginal temporary 'board' to a potentially more enduring feature of renting among 'generation rent' (McKee, Moore et al. 2017), not adequately counted in dwelling/household analysis. This report extends this work through an exploratory analysis of a sample survey data set, the ABS Survey of Income and Housing (SIH).

The research addresses a critical issue for Australian housing policy: namely, to what extent is the PRS able to accommodate lower-income households, taking into account affordability and availability of accommodation for these households due to changes in demand and supply? Lower-income households in this research are defined as those households with incomes in the lowest 40 per cent of the national gross household income distribution. They are divided into 'very low' income households (the lowest quintile or 'Q1') and 'low' income households (the second-lowest-income quintile or 'Q2'). The research has two aims:

- to update a data series that has, since the 1996 Census, provided careful and comparable analysis every five years about the extent to which the PRS provides affordable housing for lower-income households (Q1 and Q2 households)
- to enhance the series by examining the links between changing household formation and mainstream PRS access among lower-income households (Q1 and Q2) and individuals through an in-depth, temporal analysis of the ABS SIH.

These aims are addressed through three research questions:

- RQ1: How has the supply of affordable and available private rental housing changed for Q1 and Q2 households nationally, for metropolitan/non-metropolitan areas, capital cities, selected regional centres and balance of state areas, in 2016–21?
- RQ2: What are the characteristics of Q1 and Q2 households living in affordable and unaffordable private rental housing in 2021 and how do they compare with 2016 and before?
- RQ3: To what extent are lower-income individuals (Q1 and Q2) not accessing the mainstream PRS? Which groups are most impacted?

1.2 Policy context: short and longer term

The context for this research comprises short-term policies and programs associated with responses to the COVID-19 pandemic of 2020–21, which were highly relevant at the time of data collection for the 2021 Census in August 2021; and the longer-term policy context, which, in 2023 (at the time of writing), presents as a 'housing crisis' or 'rental crisis' that has attracted extensive media attention and public policy debate. The 2023 context is one in which the supply of private rental accommodation, including, but not only, homes that are affordable for lower-income households, has dominated debates in a way not seen in recent history.

1.2.1 Short term: policy context in the COVID-19 era (2020–21)

The COVID-19 pandemic began to affect Australia, as other countries, in February 2020. The federal government closed Australia's borders to all foreign nationals returning from China on 1 February 2020 and more generally on 20 March 2020, except for returning citizens and permanent residents, all of whom were required to enter quarantine for 14 days after arrival. This, together with domestic lockdowns that severely limited mobility, resulted in a dramatic fall in demand for private rental, exacerbated by renters moving out of private rental for financial reasons and/or in a bid to manage health risks. Rents fell and vacancy rates increased, with some offset due to Australians returning from overseas. Increases in supply through transfer of short-term rentals into the mainstream rental market due to bans on domestic and international tourism added to these trends (Evans, Rosewall et al. 2020).

These demand and supply factors affected some housing markets more than others: for example, private rental accommodation near tertiary education institutions had high vacancy rates while rental properties in regional towns near capital cities were in increasingly short supply due to the movement of some city residents to these areas (NHFIC 2022a). It was not until November 2021 that the staged reopening of Australia's borders began. Severe curtailment of economic activity associated with border closures and domestic lockdowns to manage public health risks had a disproportionate effect on those with a precarious position in the labour market. These included lower-income private renters, many of them aged 35 and under, who had higher rates of casual, fixed-term employment and underemployment (Baker, Bentley et al. 2020; Evans, Rosewall et al. 2020; NHFIC 2020).

Emergency responses to the COVID-19 pandemic involved different levels of government in Australia's federal system. The policy context of the pandemic years (2020–21) relevant to the PRS included not only border closures but also two other main components: sustaining household incomes and emergency measures to regulate the rental sector to prevent evictions.

Sustaining incomes was primarily a matter for the federal government through two measures:

- JobKeeper payments to businesses and eligible not-for-profits. Introduced on 30 March 2020, the payments were intended to be passed on in wages/salaries to employees. They were progressively phased out until they ceased on 28 March 2021.
- The JobSeeker Coronavirus Supplement of an extra $550 per fortnight was paid for an initial six-month period commencing 27 April 2020. It was extended to 31 March 2021 and was no longer in effect at Census time in August 2021 (Services Australia 2021 Coronavirus Supplement). The supplement was replaced in some circumstances by a short-term disaster relief payment.[3]
- Some states/territories also had supplementary rental assistance/relief programs such as VIC, NSW and QLD.

Initially, policy on rent regulation was coordinated through a newly formed National Cabinet comprising the federal government and states/territories, although specific legislation to implement agreed changes was a state/territory matter.

- In the initial policy response to COVID in March/April 2020, National Cabinet agreed on a coordinated approach involving moratoria on rent increases and evictions. These were unprecedented, albeit temporary, interventions in the private rental market (for six months in the first instance) and were implemented by the states (Mason, Moran et al. 2020). States were also encouraged to provide temporary land tax relief for landlords and landlords were encouraged to negotiate with tenants to reduce or defer some rent payments until tenants' situations improved (Hulse 2023).

3 However, due to the lockdowns in place in Sydney and other places in NSW and in Melbourne mid-2021, a COVID Disaster Payment was introduced with three different rates based on the number of hours of work lost by an eligible recipient and whether or not they were receiving an income support payment. The disaster payments were progressively phased out from 29 September 2021 as key vaccination rate benchmarks were achieved.

- These regulations were temporary and were phased out and removed at different times by the states/territories. Across Australia, rents (all rents) decreased when measured in an annualised basis from April 2020 to April 2021 before starting to rise again on this measure by August 2021 (ABS 2023a).

The policy context that supported emergency interventions on this scale was unique in Australia in peacetime but unravelled quite quickly once the threat of the public health emergency began to fade (Baker, Daniel et al. 2022). Overall, it appears that the income support interventions were more effective in enabling people to remain housed compared with direct interventions into the PRS (eviction and rent increase moratoria) (Leishman, Aminpour et al. 2022).

1.2.2 Long term: policy context before and after the COVID-19 emergency measures

The longer-term policy context of the 2000s is one of increasing concern about the problems faced by households in accessing and remaining in affordable housing, both for rent and for purchase. This is of particular concern to lower-income households and, increasingly, also to those on moderate incomes. Key debates have focused on *affordability* issues, namely deposit requirements and mortgage repayments for purchasers as well as private rent levels; and *supply* issues, specifically lack of affordable supply for lower and moderate-income households.

In many respects, the problems of 2023 regarding private rental are not new (Baker, Daniel et al. 2022) but have been many years in the making, as documented in prior projects in this series: from Wulff and Yates (2001) to Hulse, Reynolds et al. (2019a). Policies to address longstanding issues with renting are divided between levels of government: Australian, state/territory and local. They include taxation (such as 'negative gearing' and the discount on nominal capital gains tax for rental investors, taxation of institutional investors in rental housing and state-based stamp duty/land taxes), income support (such as the Australian Government's Commonwealth Rent Assistance (CRA) scheme), planning (with effects on the type and location of new dwellings) and regulation of residential tenancies (at the state/territory level). Broader policies such as migration (which contributes to the number of additional households seeking rental housing) also affect demand for rental housing.

Policy interventions to address these problems are often contested and policy makers are often concerned about unintended consequences on the broader housing market. In the post-COVID-19 era there is much debate about policy interventions that will assist households that are struggling, particularly renters, without deterring the households that provide about 80 per cent of PRS supply (see also Hulse, Reynolds et al. 2019b). There are also vocal interest groups opposed to, or promoting, changes across different policy areas that have an impact on the housing system, including the PRS.

The current policy context can be summarised as: i) attempts to introduce policy architecture across different layers of government to include the for-profit and not-for-profit housing sectors; ii) demand support measures, particularly for renters; iii) improving supply through facilitating access to a larger pool of finance for providers of social and affordable rental housing; and iv) addressing longstanding planning and regulatory issues. As of 2023, the policy context has increasingly focused on iii) and iv), which revolve around lack of affordable private rental supply.

1.3 Existing research

There is an accumulating body of research internationally on the growth of the PRS in a wide variety of countries (see Martin, Hulse et al. 2018), including the United Kingdom (Bailey 2020), Ireland and Spain (Byrne 2020), the Netherlands (Aalbers, Hochstenbachb et al. 2021), Canada (Canada Mortgage and Housing Corporation [CMHC] 2023) and the United States (US) (Joint Center for Housing Studies [JCHS] 2022). While this trend has been evident since the early 2000s, it increased after the global financial crisis of 2008–09 (Forrest and Hirayama 2015; Kemp 2015) and has continued apace since, notwithstanding some temporary effects of the COVID-19 pandemic (2020–21).

Below are some of the key themes in recent international literature on PRS growth and change, illustrated by selected examples of research that are relevant to the Australian context.

An increase in the number and percentage of higher-income renters

In the US, for example, it is estimated that, while the share of renter households increased from 20 to 25 per cent in the decade 2009–19, 70 per cent of that growth was from higher-income households (JCHS 2022: 4–5, Figure 4). This appears to be predominantly a phenomenon in large cities, such as Amsterdam, Berlin, London, New York and Sydney, due, in part, to groups of single professionals with higher household incomes sharing housing to reduce their own housing costs (Duta, Ronald et al. 2021) or dual income households.

Substantial numbers of lower-income households dependent on the PRS

Research by government organisations and universities in Australia has used different methodologies[4] but reached essentially the same conclusion about the existence of a lack of affordable supply for lower-income households (recent examples include NHFIC 2020; 2022b; 2023; Productivity Commission 2019; Rowley, Brierty et al. 2023; van den Nouwelant, Troy et al. 2022a; 2022b).

Households on single incomes face continuing problems in accessing affordable, and sustaining, rental housing including those living alone (younger people and older women) and single parents with children (Productivity Commission 2019). In the US, there have been ongoing affordability problems for renters on very low and low incomes in 2019 (JCHS 2022: 3–4 and Figure 3). The consequences of unaffordable rents are illustrated in a recent review of research evidence in Scotland that found that renters end up having to pay highly unaffordable rents in comparison to their income, live in poor quality properties and/or move to cheaper locations (Soaita, Simcock et al. 2022). The situation is similar in England where a direct link has been made between lower-income private renting and poverty (Bailey 2020).

Larger-scale investors entering the PRS

Small-scale investors and households have traditionally supplied most of the growth in the PRS (Martin, Hulse et al. 2018; Ronald and Kadi 2018). While there has been continuing investment by these smaller investors in Australia, as elsewhere, there is also a keen interest in larger-scale institutional and corporate investment in rental housing (Nethercote 2020), including the role of private sector intermediaries in opening up global rental housing market financialisation into new places, notably large cities (Brill and Őzugul 2021; Goulding, Leaver et al. 2023; Nethercote 2023). This type of investment is more developed in the US where there has been a longer history of institutional investment and a consequent increase in 'multi-family dwellings', namely multi-unit apartment buildings, although single family dwellings still comprised a third of US rental stock in 2019 (JCHS 2022: 5–6). In the UK, build-to-rent has been increasingly taking over from build to sell in some large cities (Goulding, Leaver et al. 2023).

4 *State of the nation's housing 2022–23* (NHFIC 2023: 96, Table 6.1) includes a table that outlines some recent methodologies that have been used to assess 'housing need', including reference to this series as a 'demographic model' compared to econometric models.

The PRS is an increasingly financialised sector

Investment in the PRS, including acquisitions, change of use, trades and disposals of property portfolios, has been associated with the growing financialisation of housing more generally (Aalbers, Hochstenbachb et al. 2021; Fields 2018). Indeed, the literature on financialisation indicates that private equity funds, real estate investment trusts, housing investment funds and other non-bank financial institutions are increasingly interested in rental housing, particularly in large cities (Aalbers 2016; 2017; Fields and Uffer 2016). Where this has occurred, such as in the US, there have been concerns about displacement of lower-income renter households and re-targeting to those on higher incomes including share households (Fields and Uffer 2016). Increasingly, financialisation in the context of more limited state activity in funding and providing social housing has been seen as exacerbating inequalities in housing outcomes between higher and lower-income households, as in metropolitan areas of Canada (Zhu, Yuan et al. 2021).

The stock of affordable rentals for lower-income households is at best stagnant and at worst shrinking

In the US, this has been attributed to rising rents, tenure conversions and losses to disrepair, with the number of units renting for less than $600 decreasing by 3.9 million between 2011 and 2019, a reduction from 32 per cent of rental dwellings to 22 per cent (JCHS 2022: 5–6). In Canada, while rental supply has increased, in most rental markets, for the bottom 20 per cent of income earners, the affordable share of the rental market is much less than 20 per cent of PRS stock (CMHC 2023). In Australia, prior projects in this series have documented the growing shortage of lower rental dwellings (Hulse, Reynolds et al. 2019a). Among the reasons for lack of supply in this segment it appears that filtering of housing from home ownership is not occurring as low-quality stock is demolished and rebuilt often at higher density (Nygaard, van den Nouwelant et al. 2022).

Digital technology enables greater fluidity in private rental housing demand and supply

So-called 'Proptech'[5] has an important role in market matching, curating shared households and providing information to prospective and current investors (Fields and Rogers 2021; Wijburg, Aalbers et al. 2018). Investors can obtain up-to-date information from major property portals that enables them to invest quickly and in unfamiliar areas. They can also quickly obtain information on current asking rents, which may influence their rent-setting decisions (Fields 2022; Sadowski 2020). Proptech can fundamentally alter the relationships between landlords and tenants (Fields 2022; Wainwright 2023) and enables movement of properties into the short-term letting market (Crommelin, Troy et al. 2018).

The private rental market is fragmenting

The private rental sector is fragmented, with thousands of individual landlords, investors and their agents (Leishman, Aminpour et al. 2022) as well as an increasingly diverse population of renters. The growing shortage of affordable dwellings at the bottom end of the market has led to a concurrent increase in renting by the room in both short and long stays, as well as the emergence of niche or corporate rental providers of privately managed rental room accommodation, including housing the sizeable growth in international student numbers prior to the pandemic (Parkinson, James et al. 2018; Parkinson, Liu et al. 2022).

5 A 'Proptech' according to the Proptech Association of Australia is *'any business that delivers a technology solution to the property, real estate or construction industry. This includes solving problems in the design stage, ownership, property management, building management, buying, selling, renting, financing or insuring. Businesses may be B2C or B2B facing'*. See: https://proptechassociation.com.au/membership/#FAQs.

The COVID-19 pandemic disrupted the PRS market temporarily

In Australia, as elsewhere, the COVID-19 pandemic resulted in some major, albeit largely temporary, changes in the PRS. The extent of disruption depended on the policies deployed to combat COVID-19 and the type of support provided to private renters and landlords. In Australia, demand for the PRS fell, particularly in major city apartment markets occupied by international students and short-stay tourist rentals (Evans, Rosewall et al. 2020; Verdouw, Yanotti et al. 2020; 2021). In contrast, demand increased in regional areas, which attracted households from large cities – initially to minimise health risks but, more fundamentally, to find more affordable and adequate housing than in large capital cities (NHFIC 2022a). In the Australian context, a 2022 review (Baker, Daniel et al. 2022) found that, while the emergency policy interventions outlined in Section 1.2.1 of this chapter provided support to vulnerable private renters in 2020–21, the post-pandemic surge in house prices and rents meant that ongoing support was required as the problems that predated the pandemic re-emerged 'on steroids', including rapidly increasing house prices and rents, low vacancy rates and issues such as retaliatory evictions, displacement and lack of tenant rights. It has also been argued that regulators were 'reluctant' during the pandemic to make fundamental shifts in these areas (Martin, Sisson et al. 2021).

In sum, the pace of technological, economic, and social change in the PRS is rapid, with research highlighting issues of pandemic-crisis-induced, and long-term structural, changes impacting upon affordable rental supply. Many of these changes are in response to new market opportunities and technologies that have growing implications for how housing is accessed and managed at the low end of the sector. In contrast, institutional regulatory and policy settings have often changed very little and are lagging in their response to pressures in the sector.

1.4 Research methods

This Final Report presents the findings of the latest in a series of projects that have analysed comparable, customised data from the ABS Census of Population and Housing to examine changes in the supply of, and demand for, affordable and available private rental housing for lower-income households at five-year intervals from 1996 to 2021 (i.e., six Census collections). This provides a unique opportunity to examine changes in affordable and available private rental supply through repeated cross-sectional analysis over more than 20 years.

1.4.1 Analysing change in the PRS using Census data

There are many advantages in using Census data to analyse changes in private rental supply and demand over time: for example, a very high response rate; the ability to examine results at fine spatial scales; the inclusion of *all* rents paid at a point in time, rather than only those paid at the beginning of a tenancy; and the inclusion of the socioeconomic characteristics (e.g., household income) of PRS households. All this information is collected at each Census in a largely consistent manner.

The response rate for the Census is very high: for all occupied private dwellings, the response rate for the five-yearly Census is typically more than 95 per cent.[6] Sample surveys (with smaller but representative populations) provide some of the same information, often at more frequent intervals, notably the ABS SIH (which is also repeated, cross-sectional) and the Household, Income and Labour Dynamics in Australia (HILDA) longitudinal data set. Only the Census, however, enables detailed disaggregation by a variety of geographic units, enabling not only a national and state/territory overview, but also more nuanced analyses of a variety of smaller spatial units, including broad subregions of major capital cities and larger regional centres.

6 The dwelling response rates for the last three Census periods are 96.1 per cent in 2021, 95.1 per cent in 2016 and 95.6 per cent in 2011. This is more appropriate for analysing rental supply than the person response rate, which also includes non-private dwellings and includes some imputation, although this too has a high response rate (95.8% in 2021, 94.8% in 2016 and 96.3% in 2011) (ABS 2022f).

1.4.2 Census weekly dwelling rents

The Census records *all* private rents being paid on Census night, ranging from households that have just started a tenancy to those that have rented the same dwelling for many years. These data differ from commercial sources of rent data, commonly derived from advertised rents, those amounts that will be paid by incoming tenants (also known as 'entry rents'), or data based on the lodgement of rental bonds, which provide the rent paid at the *beginning* of a tenancy but do not record rent increases throughout the tenancy. Rental data from such sources are commonly accessed and analysed via commercial entities, with output widely used in media and policy arenas. The National Housing Finance and Investment Corporation (NHFIC), for example, presented results on various measures of rental market change in its 2021–22 'State of the Nation's Housing' report that were derived from entry rent data sourced from CoreLogic[7] (NHFIC 2022a). More recently, however, NHFIC has also documented the different growth rates evident when advertised/entry rents are compared with those paid by *all* tenants in the rental sector, the latter derived from data sourced from the ABS quarterly (or, more recently, monthly) Consumer Price Index (CPI) series (NHFIC 2023: 80).

Advertised rents are an important indicator of rental market activity: they give a timely picture of entry price, with a minimal lag time. As there is considerable churn in private rental properties (Martin, Hulse et al. 2022), these data identify what price points are being asked of new (or change-over) tenants in the current market. In the 12 months leading to March 2023, for example, it is estimated that advertised capital city rents rose 13 per cent and advertised regional rents increased by 9 per cent, but the average of what all renters paid was only up by 4.8 per cent (Hanmer and Marquardt 2023; Lieu 2023; Martin 2023).[8] It should be noted that the average rents sourced from the ABS quarterly CPI series include social rentals as well as private rentals and that increases in entry rents (whether reported quarterly or monthly) are expected to flow through into all rentals with a time lag (Hanmer and Marquardt 2023).

This project has a different purpose. It examines rents paid in the whole of the private rental market at a point in time along with, most importantly for this research method, the characteristics of the private renter households, including the key attribute of household income.

1.4.3 Household incomes and affordable rentals

The calculation of shortages of affordable dwellings in the Australian PRS requires knowledge of not only rent paid but also the incomes of the households renting the properties. In the Australian Census, income is collected on a 'person' basis and in ranges rather than specific dollar amounts (the 2021 Census income question is included in Appendix 2, Figure A1). *Household income* is not collected directly but is derived post-Census from personal incomes summed to the household level (after a category median dollar amount is allocated to each member of the household aged 15 years and over) (ABS 2021a). There is a relatively high non-response rate in the Census household income data: in 2021, 6.9 per cent of private dwellings had a 'partially stated' or 'not stated' income. The same figure was over 11 per cent for the 2001 and 2006 Censuses. To account for these missing income values, an imputation method was developed by the late Dr Judith Yates in conjunction with the ABS for the first project in this series.[9] The method imputes values for all 'not stated' cases, including missing incomes and, importantly, converts the *categorical* household income data to individual household income *point* estimates. Two sets of new, user-defined income ranges, along with their corresponding affordable rent ranges, are defined from the national distribution of these point estimates:

7 CoreLogic is an independent commercial firm that provides property data and analytics.

8 The figure for all rents is derived from the Consumer Price Index (CPI), which measures the prices being paid by households for the goods and services that they consume during a particular measurement period (e.g., month or quarter). In the case of rents, the CPI measures the current 'price' being paid by all types of households that include new and existing renters who are renting privately or from the government (ABS 2023a).

9 An outline of this methodology is included in Appendix 1 and shows the steps that the ABS follow for the imputation of missing values in the income data and other variables.

1. **Twelve weekly household income and corresponding affordable rent categories:** originally defined for analysis of 1996 and 2001 data and then used in subsequent projects. These categories are updated to $2021 by the ABS All groups CPI. The upper value of the 12 affordable rent categories corresponds with 30 per cent of the upper value of the household income category. These 12 segments are used to provide a more nuanced account of real change – that is, taking inflation out of the picture – in the rent and household income distributions in the PRS with results presented in Chapter 3. The dollar values for these categories are included in Table A1, Appendix 1, for all years analysed in this series of reports.
2. **National gross household income quintiles (all households regardless of tenure) and corresponding affordable rent categories:** quintiles allow 'lower-income' households, those with incomes in quintile 1 (Q1) and quintile 2 (Q2), to be identified and analysed on a consistent basis across Censuses. This is not possible when 'very low' and 'low' are defined using real dollar values. Household income quintiles also allow the 30/40 affordability measure to be applied and results compared across Censuses: that is, affordable dwellings are those that rent for no more than 30 per cent of gross household income for those households in the bottom 40 per cent of the national household income distribution. The private rent categories correspond to 30 per cent of the upper value of the household income quintile range. The household income quintiles, and corresponding affordable rent categories, are used for the analysis of shortages and surpluses in affordable and available private rental housing supply in Chapters 4 and 5.

The household income quintiles and corresponding affordable rent ranges for 2021 using this method are shown in Table 1 (and for all projects in Appendix 1, Table A2).

Table 1: Gross unequivalised household income quintiles and corresponding affordable rent categories, Australia, 2021

	Gross household income segment $2021		Affordable private rent segment $2021	
	Weekly	Annual		Weekly
Quintile 1 (Q1)	$0–$750	$39,000 or less	Rent 1 (R1)	$1–$225
Quintile 2 (Q2)	$750–$1,382	$39,001–$71,864	Rent 2 (R2)	$226–$415
Quintile 3 (Q3)	$1,383–$2,232	$71,865–$118,664	Rent 3 (R3)	$416–$670
Quintile 4 (Q4)	$2,233–$3,332	$118,665–$173,264	Rent 4 (R4)	$671–$1,000
Quintile 5 (Q5)	$3,333 & above	$173,265 & above	Rent 5 (R5)	$1,001 & above

Note 1: Household income refers to gross, unequivalised – that is, not adjusted for household size or composition – income ranges (weekly) that represent the sum of the individual incomes reported by all household members aged 15 years and over.

Note 2: The affordable rent segments were defined by calculating 30 per cent of the upper value of the income quintile range – for example, $750 x 0.3 = $225.

Source: Categories calculated by the ABS, using the method defined by the authors, using imputed unit record data (held by the ABS).

In the September quarter 2021 (that closest to Census night), Q1 household incomes included those on the following statutory incomes: single allowees (such as JobSeeker), single age and disability pensioners, couple allowees (JobSeeker) and single parents with one child (parenting payment). Q2 household incomes, for those on statutory incomes, included couple plus one child allowees, couple age and disability pensioners, couple with two or three children and single parents with two or more children (Melbourne Institute for Applied Economic and Social Research 2022: Table 4). In addition, Q1 and Q2 includes some very low– and low-income earners (market wages).

1.4.4 Affordable and available rental housing

Conceptually, the project assumes that housing can be assigned to households on the basis of affordability to identify shortages or surpluses of rental units that are affordable to Q1 and Q2 households. We then assess whether affordable units are *available* to lower-income households or occupied by middle- and higher-income households. And, finally, we provide analysis of affordability outcomes of shortages – that is, Q1 and Q2 households living in affordable and unaffordable (and *severely* unaffordable in some cases) private rental housing. This provides three key indicators that enable assessment of change 2016–21 and, where relevant, over longer periods. These indicators are:

- shortage/surplus of affordable dwellings
- shortage of affordable *and* available dwellings
- the percentage of lower-income households paying unaffordable/affordable rents.

These indicators are used to update past analyses of rental housing that is affordable and, affordable and available, to Q1 and Q2 households, as well as affordability outcomes at some 88 spatial units (national, state, metropolitan and non-metropolitan, broad zones of major capital cities and for 21 regional centres). As there are now 25 years of data and analysis from this series of projects, we explore some of the key changes in the last intercensal period (2016–21), and identify from the period covered by this series of projects (1996–2021), those changes that appear to be cyclical and relatively short term and those that appear to be structural and longer term. Detailed appendices are provided for readers who want to follow the Census series over time at different spatial levels.

1.4.5 COVID-19 disruptions: data considerations

In addition to changing investor, rental and population disruptions caused by COVID-19, the unique conditions in which the Census was undertaken are also considered in interpreting short-term (COVID-19 accelerated) and long-run structural changes documented in the Hulse, Reynolds et al. (2019a) report (based on the 2016 Census). A key consideration is the high private dwelling response rate (96.1%) and the lowest recorded net undercount rate for an Australian Census (0.7%). The ABS suggests that the increased response rate from 2016 (95.1%) is likely due to the flexibility in the window of time for completing the Census form. The ABS also notes that the impact of COVID-19 lockdowns and various border restrictions meant there were simply more people at home at Census time in 2021 (ABS 2022f). As well as restricted movement between jurisdictions, this also includes in and out of Australia as a whole. These data collection/recording considerations, along with the unique market and population conditions at Census time 2021, are referred to where relevant throughout this report. The very large increase in enumerated households for 2016–21, for example, is discussed at the beginning of Chapter 3.

1.4.6 Analysis of the Survey of Income and Housing (SIH)

There is increasing recognition that the PRS can also be more broadly defined to include niche markets such as purpose-built student accommodation and mainstream buy-to-rent accommodation as well as more informal arrangements such as rooming/boarding houses in multiple occupation and short-stay rentals (Pawson, Milligan et al. 2020: 180–182 and Table 6.1). The changing structure of the rental sector has also meant that existing household measures of housing affordability stress conceal more widespread affordability problems, for example, for individuals forming group households to manage high rents, including informal room rental leasing arrangements facilitated by online housing platforms (Parkinson, James et al. 2018).

In this report, for the first time, an analysis of 'individual' (person-level) rental arrangements is undertaken across four waves of the SIH collected between 2007–08 and 2019–20 building upon Parkinson, Hulse et al. (2022). This analysis identifies who an individual 'income unit' is paying rent to across different households and dwellings. Five types of mainstream and non-mainstream renting arrangements among individual income units were identified including:

- mainstream independent: an independent income unit paying rent to a private real estate agent or private landlord
- mainstream group cohabitating: an income unit living in a group household paying rent to a real estate agent or landlord
- non-mainstream unrelated cohabitating: an income unit paying rent to an unrelated person living in owner-occupied, social rental or private rental subletting arrangements
- internal family cohabitating: an income unit paying rent to a family member that they live with
- external family independent/group: an income unit paying rent to a family member who owns a separate dwelling.

These rental arrangements were identified from combining variables in the SIH relating to relationships within the household and household type, whether rent is being paid by an individual in the household, who the individual is paying rent to and tenure of the dwelling. Income thresholds for Q1 to Q5 are derived based on the income units reported income with negative and zero income removed. Affordable rent is defined as paying 30 per cent or below of income unit income on individual rental payments.

1.5 Structure of this report

The remainder of this report is structured as follows:

- Chapter 2 provides a brief market and policy context for the project and enables key background for situating the findings of the analysis.
- Chapter 3 provides a national review of changes in the size and structure of the private rental sector over the short (2016–21) and longer term (1996–2021).
- Chapter 4 provides estimates of the shortages of affordable and available private rental housing for Q1 and Q2 households nationally and for metropolitan and non-metropolitan areas.
- Chapter 5 provides a more detailed spatial analysis examining changes in affordable private rental supply for Q1 and Q2 households in capital cities, within capital cities and in larger regional towns.
- Chapter 6 presents a brief profile of households who are living in affordable and unaffordable private rental housing and a new analysis of individual income units paying rent in the informal rental sector, drawing on exploratory analysis of the ABS SIH.
- Chapter 7 presents policy development options based on the analysis in previous chapters.

The report also includes substantial appendices. Appendix 1 provides detail on the construction of the customised data sets by the ABS, including the steps taken in the imputation of missing values and household income categories. Appendix 2 provides the detailed counts and percentages that are referred to in the body of the report and that form the basis of the tables/figures presented there. Appendix 2 also includes tables and figures, updated to 2021, that have appeared in previous reports in this series.

2. Private rental sector: market and policy context

- This report provides a unique point-in-time analysis into how the global health crisis of COVID-19 and policy responses temporarily altered the long-run structural trajectory of the private rental sector (PRS).
- Government policies in response to the public health pandemic (lockdowns and temporary income and housing moratoria and relief packages) along with the behavioural responses of renters and landlords affected PRS supply and demand in significant ways. Initially, demand for the PRS reduced, rents decreased and vacancy rates increased. Landlords were faced with lower rents and increased vacancies due to lower demand.
- Mid-2021, when the Census was conducted, now appears to have been a tipping point between COVID and post-COVID conditions. From this time, investors started to return to the PRS bolstered by very low interest rates, increasing supply. Rents began to increase again and vacancy rates began to decline. The end of domestic lockdowns and staged reopening of Australia's borders from November 2021 added further demand pressures.
- The COVID and post-COVID period shows that the PRS, as the most flexible part of the housing system, had to absorb significant disruption, but it did not bounce back better. The COVID recovery period ended with an inflationary impact on rents, exacerbating significant and now persistent cost of living pressures and extending the rental crisis beyond lower-income households again.
- The disruption to the PRS caused by the COVID-19 pandemic should be seen in the context of a lightly regulated PRS in which rental stress and security were acknowledged problems prior to the pandemic.

This chapter sets out the context for understanding the changing policy and market dynamics likely to have impacted affordable rental supply at the time of the 2021 Census and beyond. The chapter explores the intersection between long-run structural and shorter-term COVID-19 disruptions that impacted the PRS and thus our interpretation of the Census and SIH analyses. Unlike previous projects in this series, where an original analysis of market factors was derived from various data sets, this chapter draws on authoritative recent reviews of COVID-19 interventions and rental market changes, including those commissioned by the ABS (e.g., Hanmer and Marquardt 2023), the Productivity Commission (2019; 2022), the Reserve Bank of Australia (e.g., Ellis 2022; Evans, Rosewall et al. 2020) and the National Housing and Finance Investment Corporation (NHFIC 2022a; 2022b; 2023), all of which have analysed established data sets, as well as research commissioned by AHURI.[10] Since migration is so critical to demand for private rental (see Hulse, Reynolds et al. 2019a), this is supplemented by an analysis of data on the level and composition of population growth in the years leading to the 2021 Census (e.g., net overseas migration).

2.1 The COVID-19 disruption

It is not possible to understand changes in affordable supply in private rental markets in 2016–21 without consideration of the disruption caused by the COVID-19 pandemic, including the effects of policies outlined in the previous chapter relating to border closures and domestic lockdowns as well as emergency measures to support households and the economy. These should be seen in the context of a lightly regulated PRS in which rental stress and security were acknowledged problems prior to the pandemic. Some of the key elements of the disruption were as follows.

Effects on renters in insecure jobs: private renters were particularly affected by COVID-19 due to their younger age profile and more precarious position within the labour market, including higher rates of casual, fixed-term employment and underemployment (Campbell, Parkinson et al. 2014). There were also consequences for temporary Australian residents, most notably international students who were without work and did not qualify for government assistance (Evans, Rosewall et al. 2020).

Movement of renters adapting to COVID-19: an initial exodus from key segments of the PRS, including inner-city areas, locations near to tertiary education institutions and the short-stay tourist sector, were among the first signs of emerging stress. Growing numbers, especially of younger adults, also sought to adjust their living arrangements by moving to regional centres, to their parental home or forming new households (Australian Institute of Family Studies 2023; Evans, Rosewall et al. 2020; NHFIC 2022a).

Rental providers were faced with higher vacancy rates: despite benefiting from record low interest rates, rental providers found difficulty in letting some properties and had to offer rent reductions in order to attract new tenants to keep an income stream to cover costs (see Figure 3). There were particular problems with properties that had housed international students or were seen as less attractive due to COVID-19 restrictions, such as large apartment buildings (NHFIC 2022a).

The impacts of the COVID-19 pandemic on the Australian housing market, and specifically on the PRS, have been closely monitored and captured in extensive research to date. This research suggests that the government interventions were effective in mitigating some of the worst consequences of the pandemic, particularly via income support (Baker, Daniel et al. 2022). However, the relative lack of effectiveness of the private rental support changes after temporary eviction and ban on rent increases were less effective (Martin 2021). The COVID-19 pandemic not only generated new challenges within the PRS that required immediate policy responses (Leishman, Aminpour et al. 2022; Leishman, Ong et al. 2020; Horne, Willand et al. 2020), but also highlighted and amplified the many inequities in affordability and security that were entrenched prior to the pandemic (Baker, Bentley et al. 2020; Baker, Daniel et al. 2022; Rogers and Jacobs 2020; Verdouw, Yanotti et al. 2020).

10 The AHURI COVID-19 Research Hub can be accessed here: https://www.ahuri.edu.au/covid-19.

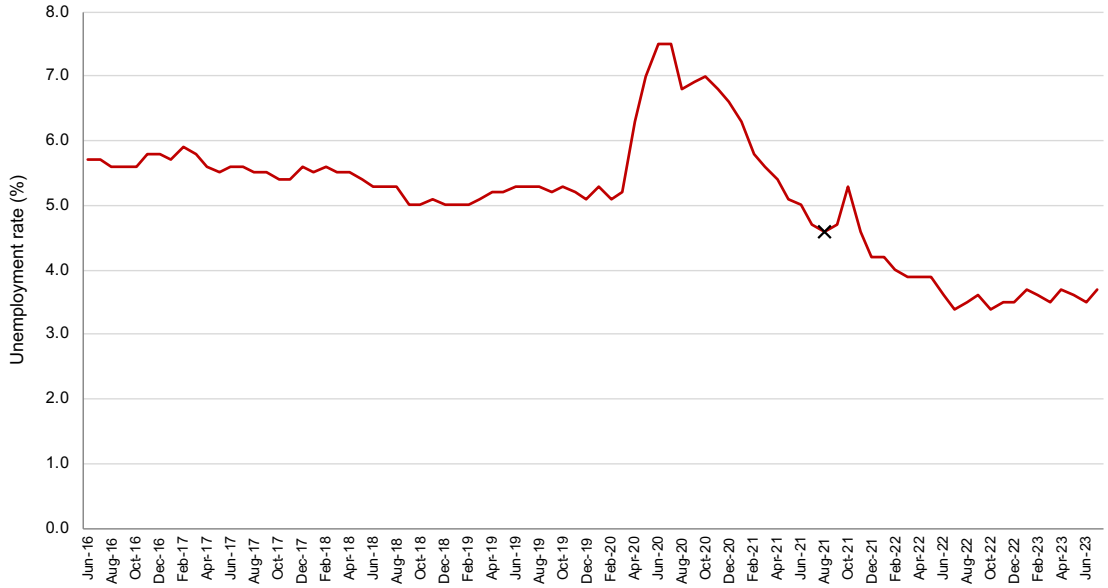
2.2 Market context 2016–21

2.2.1 Economic context

The pandemic ended a long period of growth in the Australian economy, although growth had been relatively sluggish for several years prior to the March 2020 onset of COVID-19. In the June quarter 2020, as much economic activity ceased or was severely limited due to widespread lockdowns, GDP fell by 7 per cent before rebounding strongly in the September quarter 2020 as economic activity restarted in much of the nation. There was a further quarter of negative growth, although less severe, in the September quarter 2021 (ABS 2022a) reflecting further lockdowns in Sydney and Melbourne that were in place at the time of the August 2021 Census collection.

Unemployment initially rose due to the immediate effects of the pandemic – from 5.1 per cent in February 2020 before COVID-19, to a peak of 7.5 per cent in June and July 2020. By the time of the Census in 2021, unemployment had fallen to 4.6 per cent before reaching a low of 3.4 per cent in the middle of 2022 and increasing slightly to 3.7 per cent in July 2023 (Figure 1).

Figure 1: National unemployment rate (ABS monthly Labour Force Survey), 2016–23



NB: The cross marks the point of the August 2021 Census.

Source: ABS (2023b).

Efforts to stimulate the economy during this period had inflationary effects on the housing market. The RBA cash rate was reduced to near zero, which, along with national and state/territory policies to encourage home ownership and sustain the residential construction industry, led to increased borrowing that ultimately fed through into inflation in housing prices and rents. In addition, household savings increased during 2021, some of which ultimately flowed into the housing market. In the year to the December quarter 2021, housing prices increased by an astounding 23.7 per cent (weighted average of eight capital cities), with above average increases in Hobart, Canberra, Brisbane and Sydney (ABS 2022b).[11] Strictly comparative data are not available after that time.

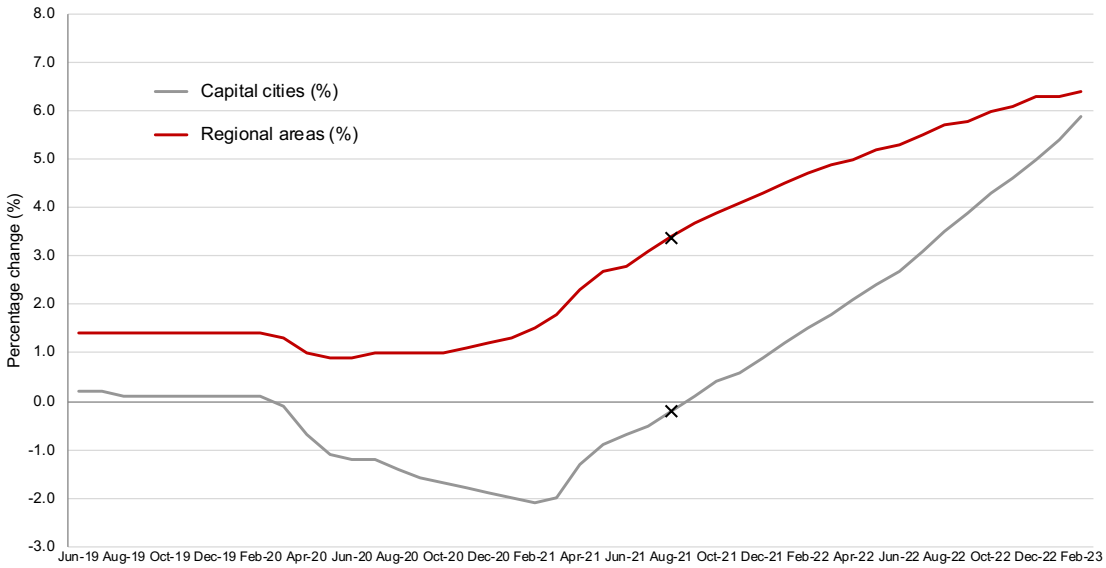
11 The one-year increase in housing prices in 2021 was Hobart (29.8%), Canberra (28.8%), Brisbane (27.8%) and Sydney (26.7%). Other capitals had smaller although still substantial percentage increases.

2.2.2 Rents and rental investment

The rate of increase in (all) rents had been low in 2019 but went into negative territory in April 2020 where it remained for almost a year. In August 2021, at the time of the 2021 Census, rents had stopped decreasing and they began to increase modestly for the remainder of 2021. There was a spatial element to rent changes. Some households moved to regional areas and other states, notably Queensland, reducing demand in Sydney and Melbourne but increasing rental demand in arrival areas. In the year to August 2021, rents in regional areas increased by 3.8 per cent but in capital cities they declined slightly (–0.2%) over the same period (Hanmer and Marquardt 2023) (and see Figure 2 below). Disruptions to short-stay rentals such as 'Airbnbs' increased private rental supply (Buckle and Phibbs 2021; Thackway and Pettit 2021), further depressing rents (Evans, Rosewall et al. 2020).

In 2022, after the pandemic, rents began to increase substantially, leading to what is often termed a 'rent crisis' in 2023, as migration and mobility returned to pre-COVID levels, placing additional demand pressure on the PRS. Advertised rents for new tenancies began to increase at a greater rate than rents for ongoing tenancies in a way they had not done in the previous 15 years when rent increases were relatively consistent over new and continuing tenancies (Hanmer and Marquardt 2023: 2, Figure 2). It could be hypothesised that landlords took the opportunity to recover from low rates of increases prior to COVID-19 and rent freezes in 2020 mainly through raising rents when rental dwellings were vacated.

Figure 2: Annual rent inflation (%), capital cities and regional areas, Australia

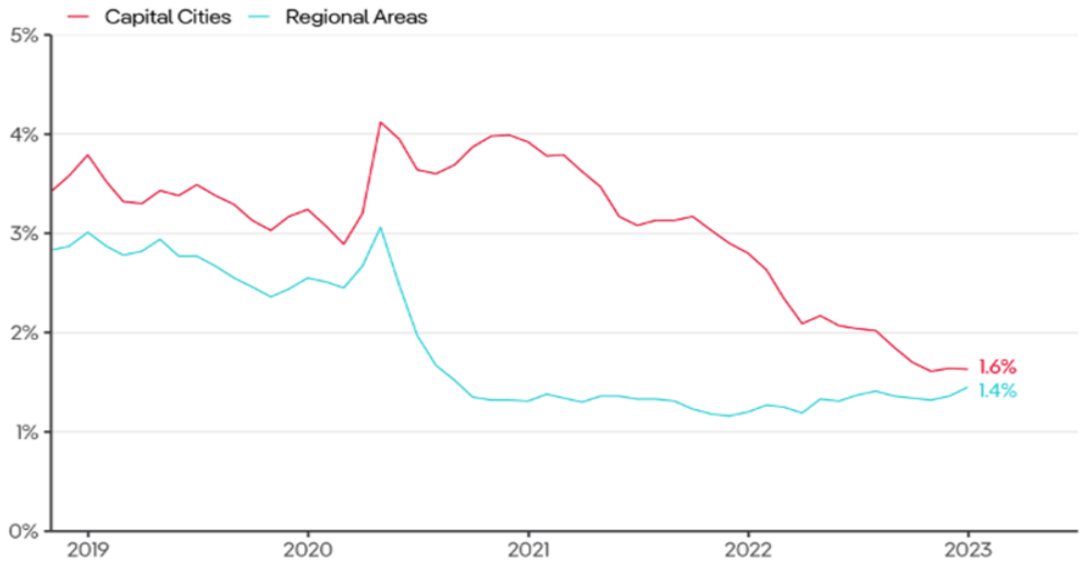


NB: Crosses mark the point of the August 2021 Census.

Source: Hanmer and Marquardt (2023), derived from ABS Monthly Consumer Price Index Indicator, percentage change from corresponding month of previous year.

After the initial period of the pandemic and moratoria on rent increases and evictions, vacancy rates increased sharply, particularly in the apartment-dominated markets of inner-city Sydney and Melbourne, whereas vacancy rates in Brisbane and some of the smaller state capitals fell sharply because of additional demand from incomers from other states. Later in 2021, and subsequently, vacancy rates fell to pre-COVID levels (Figure 3), which has been attributed largely to rental properties being withdrawn from the market, including a large number *'likely sold to owner occupiers'* (NHFIC 2022a: 9) as well as the return of international students and permanent migrants discussed below.

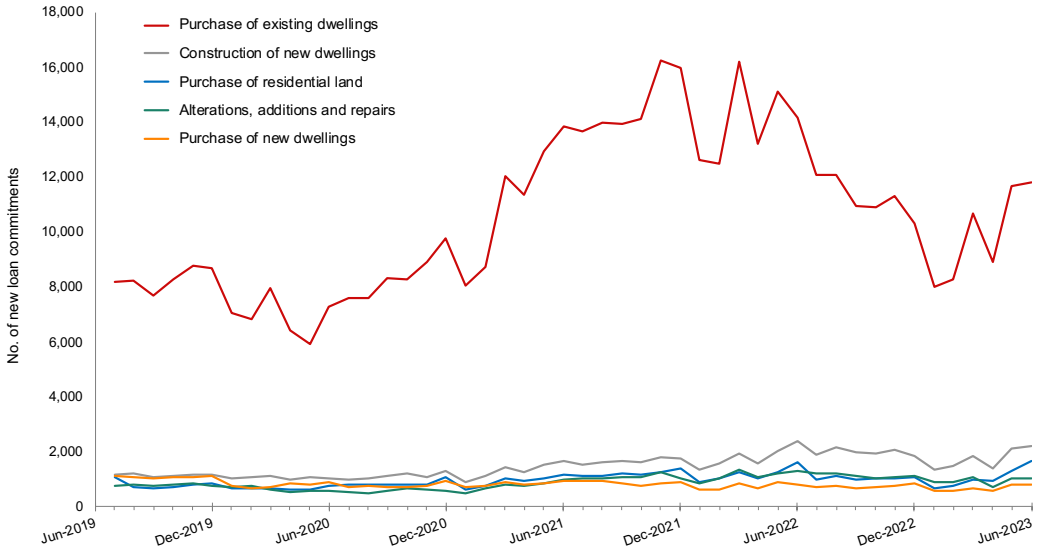
Figure 3: National vacancy rates, 2019–23



Source: Ryan (2023).

Historically low interest rates led to increased borrowing for investment in the rental market from the beginning of 2021 (see Figure 4). The volume of lending to households for investment housing dipped initially (March–May 2020) but rebounded from June 2020 largely due to record low interest rates as a response to the economic recession brought on by COVID-19 measures (Hulse 2023). At the time of the Census, such investment for the purchase of established dwellings had already begun to rise, placing additional inflationary pressure on housing prices.

Figure 4: Housing finance (household sector), investors by purpose, Australia, July 2019 to June 2023



Source: ABS (2023c: Table 13).

2.3 Understanding demand factors

2.3.1 Demographic shifts in household formation

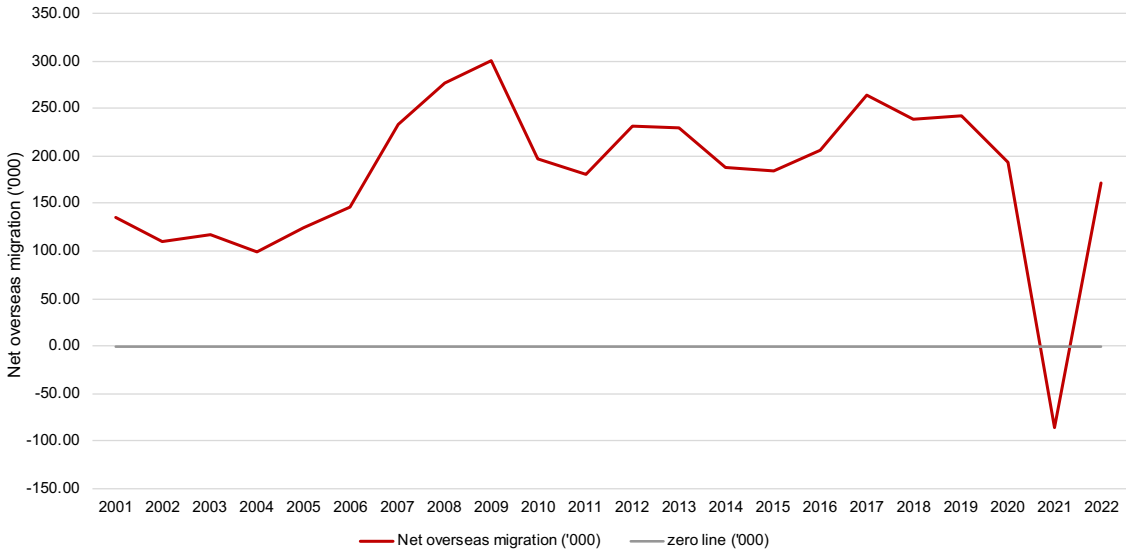
At the time of the 2021 Census, the average household size had decreased from 2.6 persons in 2011 and 2016 to 2.5 persons.[12] The number of households between 2016 and 2021 grew by 987,000 (see Section 3.2, Table 2). While the proportion of one parent families remained the same at 11 per cent in the 2011, 2016 and 2021 Censuses, the proportion of lone person households grew from 24 per cent (in both 2011 and 2016) to 26 per cent in 2021 – an increase of 347,200 households (or 17%) since 2016.[13] These changes should be seen in the context of significant long-term demographic shifts in household formation, including a decrease in younger lone person and one parent households, and a concurrent increase in multi-family living, moderate-to-severe crowding and remaining within the parental home for extended periods (see Chapter 6). Many of these demographic shifts have been linked to declining affordability in both the rental and home ownership markets (Nelson 1994; Parkinson, Batterham et al. 2019; Parkinson, Rowley et al. 2019; Wood, Cigdem-Bayram et al. 2017; Yates 2016). It appears that the initial movement of single persons to live with families during the early phases of health restrictions and lockdowns was followed by new household formations of single person dwellings by the time of the Census. Growth in lone person households could also be attributed to the breakup of existing shared households among international students as housemates returned home or formed a separate household in response to temporary rises in vacancies and lower entry rents, particularly in inner urban areas of Melbourne and Sydney. The return of expats and international students also influenced new household formation at the time of the Census collection (see next section and NHFIC 2022a and 2023 for household formation discussion).

2.3.2 Population change (national)

Net overseas migration was the driver of Australia's population growth from 2006 to 2020; however, in the year ending June 2021, there was a net loss of 85,800 people in overseas migration (ABS 2022c). This flattened the annual national growth rate in the year ending September 2021 to 0.3 per cent (down from 1.7% in September 2016), with the total estimated resident population recorded as 25,750,198 (ABS 2022d). By December 2022, the annual growth rate had increased to 1.9 per cent, the highest since December 2008 (at 2.2%) (ABS 2023d), with net overseas migration starting to bounce back to pre-pandemic levels (Figure 5).

12 Derived from ABS *Time Series Profile analysis*, see ABS (2021b).
13 Ibid.

Figure 5: Net overseas migration, Australia, 2001–22



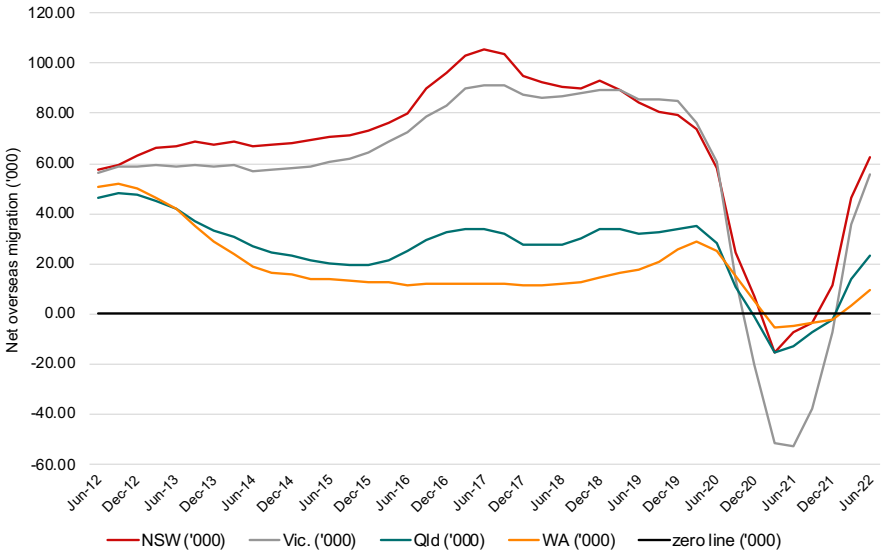
Source: ABS (2022c).

International students have played a major part in boosting Australia's migration; therefore, international border closures had a significant impact on net overseas migration. This is supported by the tracking of student visa arrivals with only 2,590 temporary student visa arrivals in 2020–21 compared with 593,100 in 2015–16 (ABS 2022e). By 2021–22, international student arrivals started to pick up with an increase of 135,500 people (ABS 2022c).

2.3.3 Population change: spatial variation

As net overseas migration stalled due to the pandemic, Victoria plunged the furthest with a net loss of 51,700 in March 2021, followed by a further loss of 53,000 in June 2021 (ABS 2022c).

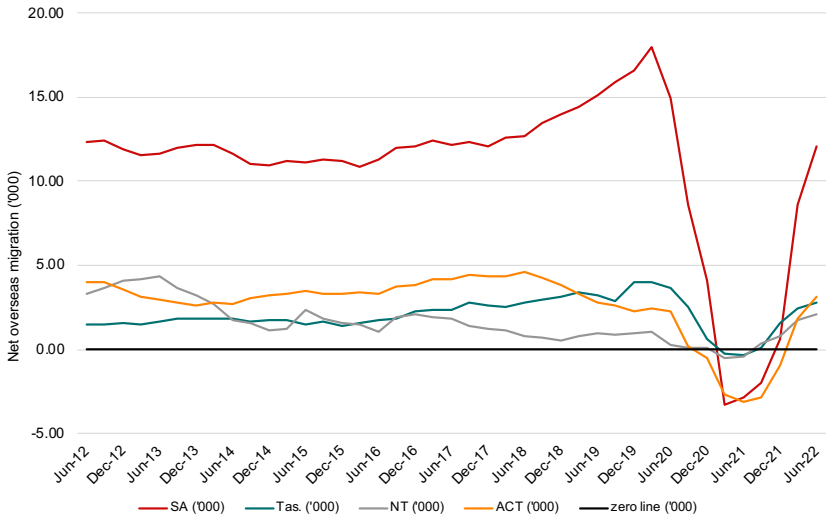
Figure 6: Net overseas migration, larger states, June 2012 to June 2022



Source: ABS (2022c).

Of the smaller jurisdictions, South Australia took the biggest hit in the loss of net overseas migration, diving from 18,000 in March 2020 to −3,260 in March 2021 (ABS 2022c). The NT and ACT were already seeing a decline prior to the pandemic.

Figure 7: Net overseas migration, smaller states and territories, June 2012 to June 2022



Source: ABS (2022c).

These changes were amplified by pandemic-induced domestic population movements. In 2021–22, there were *'strong movements of people from major cities to outer metropolitan and regional areas, putting pressure on local housing markets'* attributed to COVID-19 (NHFIC 2022a: 4). The Regional Australia Institute in partnership with the Commonwealth Bank has been tracking movement into the regions through the People Movers Index. A strong regional trend had started well prior to COVID-19 and, while there has been increased movement to the regions during the last two years, the latest data are showing people trickling back to the cities with the trend now returning to pre-COVID levels (Regional Australia Institute 2023).

It is important to understand these changes in demand for private rental as they are key drivers of changes in rents and vacancy rates within urban and regional housing markets that are presented later in this report.

2.4 The COVID-19 emergency and beyond: policy implications

It is clear from the discussion in this chapter that the COVID-19 emergency affected the Australian PRS in many ways: demand decreased due to changes in migration and domestic mobility; supply proved fairly stable or increased; rents decreased; and vacancy rates increased, at least in the short term. These factors impact the findings from any analysis of 2021 Census data and constrain our understanding of long-term and structural changes.

One could argue that the speed at which the PRS changed exposes its role as the most flexible part of the Australian housing system compared to home ownership and social rental but only under unprecedented conditions. The question after COVID-19 relates to the equity implications of using the PRS as a 'safety valve' in this way and whether this is the 'new normal' in terms of changed patterns of dwelling demand and supply (Rowley, Brierty et al. 2023).

As we move into the post-COVID era, the policy debate has evolved in response to the current 'rent crisis'. A further question is whether this policy framework has the tools to address some of the underlying issues with private rental supply that have been consistently highlighted in this series of projects.

3. Changes in the size and structure of the private rental sector: national level

- **The national growth rate of private rental sector (PRS) households outpaced that of total households in each intercensal period between 1996 and 2021.**
- **In the latest intercensal period (2016–21), the PRS grew by nearly 340,000 dwellings, and the 2.363 million households renting in the private sector in 2021 made up just over 25 per cent of all households.**
- **National PRS growth was concentrated in dwellings renting from around $300–$530 per week ($2021), continuing a trend first established in 2011 as a major change, reinforcing the structural shift to a market concentration of dwellings renting at mid-to-higher levels.**
- **Market, government and population responses to COVID-19 at Census time in 2021 were reflected in a very small increase (2016–21) in PRS dwellings at the lowest end of the distribution and only minor increases at the top, pausing longer-term trends.**
- **Since 1996, there has been a consistent volume of privately renting lower-income households (with incomes up to $46,000 p.a., $2021). This income segment has not experienced the significant increases obvious in higher-income segments, but neither have the numbers declined, averaging around 480,000 households per Census since 1996.**

3.1 Introduction

The chapter begins with an overview of the changing tenure structure of Australian households, five yearly, from 1996 to 2021. This long-term view of change in all household tenures provides context for understanding change in the PRS – just one component of the total housing sector. The long-term structural changes in (all) rents paid in the PRS are then examined, along with analysis of how the incomes of households in the PRS have changed from 1996 to 2021. These changes in the rent and income profiles of PRS households are derived from the analysis of 12 income and corresponding affordable rent categories, allowing real change in the distributions to be compared over the 25-year period. The dollar ranges of these categories are shown in Appendix 1, Table A1.

3.2 National tenure 1996–2021

Long-term changes in the tenure structure of Australian households, presented at five-year intervals since 1996, are shown in Table 2. Over this 25-year period, the share of outright owner and, to a much smaller degree, the share of social rental households has declined, balanced by an increasing share of purchaser and private renter households. In 2021, the 2.363 million households renting in the private sector made up just over 25 per cent of all households[14] – a share similar to that of purchaser households in 1996. In each of the intercensal periods leading to 2021 shown in the bottom panel of Table 2, PRS households have the highest rate of growth and, in the 10 years to 2021, the highest growth in volume, with 628,000 more PRS households in 2021 than in 2011. In each of the intercensal periods between 1996 and 2021, the rate of growth in PRS households outpaced growth in total households.

Of note in Table 2 is the large increase in the *total* number of households in the period 2016–21 (987,000 households) compared with earlier intercensal periods. Five-yearly intercensal changes (1996–2001 to 2016–21) in volume and percentage growth are summarised in Table 3 and show that changes in the most recent intercensal period are at odds with earlier time periods. For example, the additional 987,000 households (2016–21) were spread relatively evenly across the three largest tenure groups, compared with all other intercensal periods where growth was concentrated in purchaser and private rental tenures. Also of note is the sharp percentage increase in owner and purchaser households between 2016 and 2021 compared with earlier periods; however, for PRS households, the increase was in line with the previous intercensal period at 17 per cent (although possibly lower than expected).

The possible causes of the unusually large growth in total households and tenures between 2016 and 2021 are undoubtedly linked to the regulatory and household level responses to the COVID-19 pandemic that were captured at Census time (many of which have been outlined in earlier chapters). As per NHFIC (2022b):

> *During the first year of the pandemic many property owners, particularly in Sydney and Melbourne, could not lease their investment property with the closure of borders to international students and other visa holders. However, house prices were rising strongly due to the aggressive cuts in interest rates and fiscal stimulus. These 2 factors likely led many property owners to sell their investment properties to owner-occupiers such as first home buyers, with the net result being a decline in properties listed for rent. (NHFIC 2022b:1)*

Rowley, Brierty et al. (2023) also documented the increase in investors selling their properties to 'cash-in' on price rises seen during 2020–21, pushed up by pandemic-induced, increased demand. From a data collection perspective, the very large increase in total households is likely due to:

14 In this series of reports, 'private renter households' have been consistently defined to include rented dwellings with a landlord type of real estate agent or person not in the dwelling and exclude households paying $0 rent. The reported proportion of all Australian households in the PRS can differ between different published sources. The RBA, for example, included an additional two landlord types – 'other' landlord and 'landlord type not stated' – in their definition of 'private rental' (see Hanmer and Marquardt (2023) for example), therefore producing a higher proportion of households in the PRS (pers. comm.). The unrounded percentage for 'private renter households in Table 2 is 25.47 and thus is rounded down to 25 per cent.

- More people being counted 'at home' at Census time (ABS 2022f) and thus more private dwellings being enumerated as 'occupied' (and contributing to total household counts) rather than 'unoccupied' (by definition, no household can be enumerated in an unoccupied dwelling): with border closures and lockdowns, population movement was restricted and fewer people would have been away from home on holiday (domestic or overseas) or for work where they would have been enumerated in non-private dwellings on Census night (e.g., hotels/apartments that are not included in the occupied private dwelling count).
- Patterns of household formation at the time of the Census that were influenced by COVID-19 regulations/restrictions and personal responses to the health risks of the virus: the 2021 Census recorded a 1–2 percentage point increase compared with 2016 (and 2011) in the number of lone person households (ABS Time Series Profile analysis,[15] see also Section 2.3.1) as larger households disbanded during the pandemic (AHURI 2022). Atypical household formation patterns at the time of the 2021 Census have also been recognised by NHFIC (2023), which stated:

  > *New household formation is highly sensitive to average household size. The premium put on space during the pandemic helped reduce average household size and supported more household formation than otherwise would have been the case during a period of low population growth. (NHFIC 2023: 40)*

- Short-term holiday rental accommodation being offered in the long-term rental market (or for sale): not only could this change how a dwelling is enumerated at Census time (from a non-private to a private dwelling), but also it would increase the likelihood of the dwelling being occupied (rather than unoccupied in a holiday location in winter) and being counted in the mainstream private rental market (or ownership sector). Similarly, second homes (holiday homes) could have had a household living in them as households separated due to health concerns.

The above points suggest that more existing dwellings were 'occupied' at Census time rather than 'unoccupied', thus contributing to the overall increase in households. In Census data, however, each *household* equates to one occupied private *dwelling* (by definition), and thus an increase in households translates to an increase in occupied dwellings. Some of these 'extra' dwellings are accounted for by more people being 'at home' at Census time – an otherwise unoccupied dwelling was occupied. Newly built stock also contributes to extra dwellings over the intercensal period. The newly formed households generated by the pandemic were also enumerated in private dwellings, and an analysis of intercensal change in unoccupied dwellings indicates the use of this stock may have altered between Censuses. Appendix 3 includes a brief discussion and empirical analysis of the considerable differences in unoccupied dwellings from 2011 and 2016 to 2021.

15 See 'Time Series Profile', ABS (2021b).

Table 2: Occupied private dwellings by tenure type, Australia, Census years 1996–21

	Tenure					
	Outright owner	Purchaser	Private renter	Social renter	Other tenure/ tenure NS*	Total
1996						
No. of households	2,612,000	1,617,000	1,234,000	359,000	459,000	6,280,000
% of households	42	26	20	6	7	100%
2001						
No. of households	2,757,000	1,861,000	1,328,000	358,000	441,000	6,745,000
% of households	41	28	20	5	7	100%
2006						
No. of households	2,431,000	2,436,000	1,470,000	352,000	456,000	7,145,000
% of households	34	34	21	5	6	100%
2011						
No. of households	2,488,000	2,709,000	1,735,000	363,000	465,000	7,760,000
% of households	32	35	22	5	6	100%
2016						
No. of households	2,566,000	2,855,000	2,023,000	348,000	493,000	8,286,000
% of households	31	34	24	4	6	100%
2021						
No. of households	2,871,000	3,242,000	2,363,000	348,000	449,000	9,273,000
% of households	31	35	25	4	5	100%
	5-year intercensal change					
2016–21						
No. of households	306,000	387,000	339,000	-1,000	-44,000	987,000
% change	12	14	17	-0	-9	12%
	10-year intercensal change					
2011–21						
No. of households	383,000	533,000	628,000	-16,000	-16,000	1,513,000
% change	15	20	36	-4	-3	19%
	20-year intercensal change					
2001–21						
No. of households	114,000	1,381,000	1,035,000	-10,000	8,000	2,528,000
% change	4	74	78	-3	2	37%

**NS = not stated. Other tenure/tenure NS includes 'being occupied under a life-tenure scheme', 'rented–other landlord type', 'rented–landlord type not stated' (including those with rent not stated), all renters paying zero rent (regardless of landlord type); 'other tenure type' and 'tenure type not stated'.*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Table 3: Five-year intercensal change in households by tenure, 1996–2001 to 2016–21, Australia

	Outright owner	Purchaser	Private renter	Social renter	Other tenure/ tenure NS*	Total h'holds
Intercensal change 1996–2001						
Number of households	146,000	244,000	94,000	–1,000	–18,000	465,000
% growth/ decline	6	15	8	–0	–4	7%
Intercensal change 2001–06						
Number of households	–327,000	575,000	142,000	–5,000	14,000	399,000
% growth/ decline	–12	31	11	–2	3	6%
Intercensal change 2006–11						
Number of households	57,000	274,000	264,000	11,000	9,000	616,000
% growth/ decline	2	11	18	3	2	9%
Intercensal change 2011–16						
Number of households	78,000	146,000	289,000	–15,000	29,000	526,000
% growth/ decline	3	5	17	–4	6	7%
Intercensal change 2016–21						
Number of households	306,000	387,000	339,000	–1,000	–44,000	987,000
% growth/ decline	12	14	17	–0	–9	12%

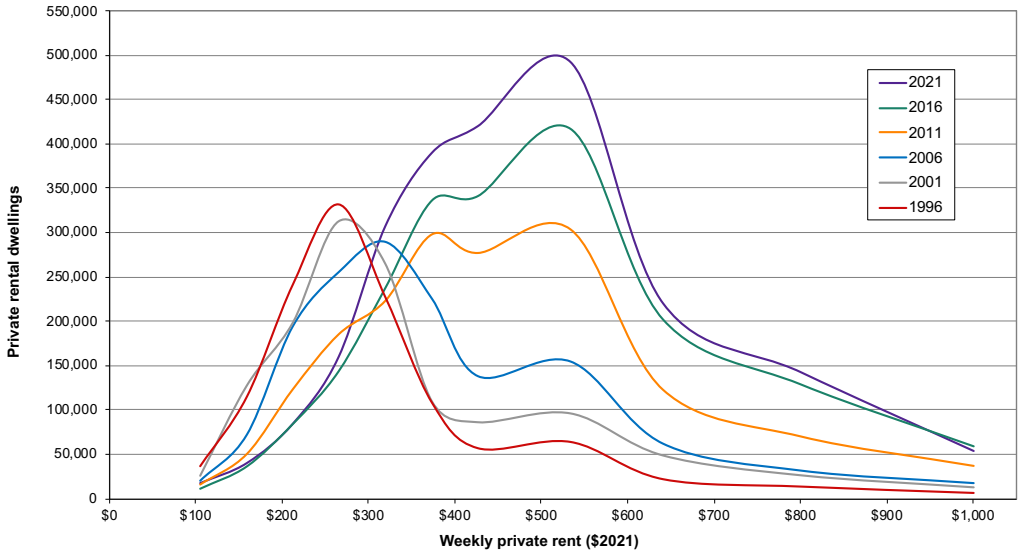
**NS = not stated. Other tenure/tenure NS includes 'being occupied under a life-tenure scheme', 'rented–other landlord type', 'rented–landlord type not stated' (including those with rent not stated), all renters paying zero rent (regardless of landlord type); 'other tenure type' and 'tenure type not stated'.*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

3.3 Private rental sector: structure of rents

The national distribution of real private rents by Census year, 1996–2021 is charted in Figure 8. Derived from Census data, the rents included in the graph reflect all weekly private rents paid at Census time, rather than only advertised rents on a given date. The graph shows the long-term structural and shorter-term cyclical changes in the distribution over 25 years. The numbers underlying this chart are included in Table A4, Panel A, in Appendix 2.

Figure 8: Distributions of private rental dwellings by weekly rent paid, Australia, 1996, 2001, 2006, 2011, 2016 and 2021



Note: Derived from 12 rent categories established for the 1996–2001 analysis that have been updated to 2021 dollars enabling real changes in the profile of rents paid to be evident.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

The 2016–21 period saw the PRS grow by nearly 340,000 dwellings (Table 2). Figure 8 shows:

- This growth was concentrated in rents ranging from around $300 to $530 per week, continuing a trend first established in 2011 as a major change, and continuing in 2016–21 as a structural shift to a concentration of rents at mid-to-higher levels.
- In 2021, volumes of low-rent dwellings (up to $266/week, $2021) were similar to those in 2016 – a deviation from earlier trends where numbers of these low-rent dwellings had declined Census-on-Census since 1996 (see Table A4, Panel C, Appendix 2). In fact, the 2016–21 period is the only intercensal period in which there was a (small) increase in the number of dwellings in the bottom four rent segments as defined in the projects in this series. This is very likely a short-term occurrence, shaped by COVID-19 conditions at the time of the Census (Figure 2 in Chapter 2 illustrates the low and declining rents of 2019 to mid-2021, before modest increases around Census time in August 2021, and the rapid growth from early 2022 onwards).
- Even with a small increase, however, these low-rent dwellings comprised only 13 per cent of the PRS stock in 2021: a segment of the market that comprised 59 per cent of the PRS stock in 1996 and half of the stock in 2001 (Table A4, Panel B, Appendix 2).

- At the high end of the rent distribution ($600/week and over), stock increases were smaller compared with earlier intercensal periods, a further reflection of the pandemic-induced, weak rent inflation around the 2020–21 period shown in Figure 2 (Chapter 2).[16]

3.4 Private rental sector: structure of household incomes

Are dwellings at the low end of this distribution still needed to house private renters affordably? Does a reduction of stock at the lower end matter? These questions can be answered by examining the household incomes of private renters: if the income of households in the PRS has risen along with rents, then the loss of lower rent dwellings in the PRS is not of great concern.

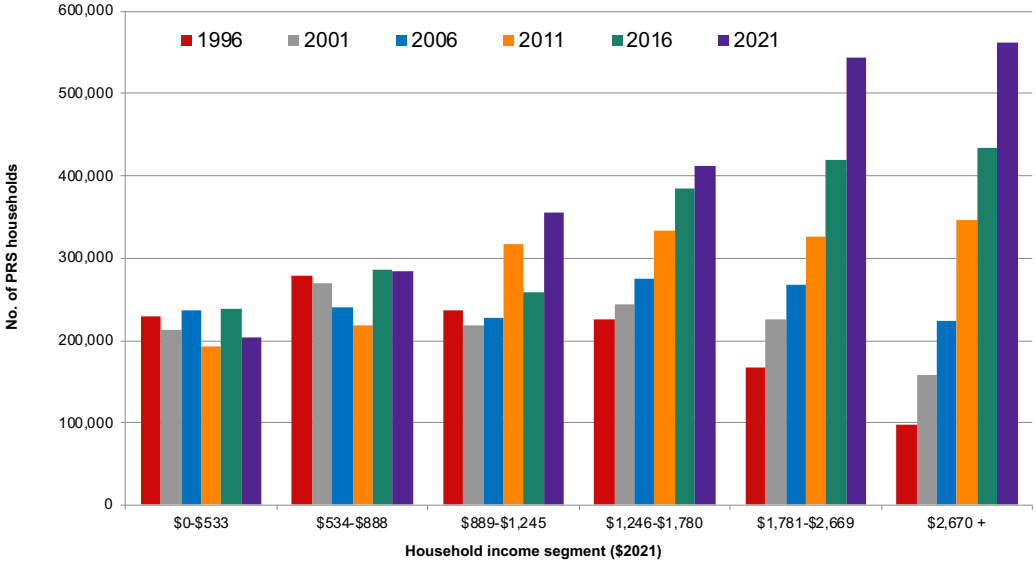
The changing household income structure of the Australian PRS is shown in Figure 9. The most obvious shift is the growth in the number of households with higher incomes, particularly from 2011 onwards when, year-on-year, the number of households increased in the top three income groups. In 1996 and 2001, the income segment $534–$888 ($2021) included the highest number of PRS households and, as the income segments rose, the number of households declined. This pattern was reversed by 2021, when the greatest number of PRS households was found in the highest income category ($2,670 and over, $2021), and as the income ranges declined, so too did the number of households.

Nonetheless, Figure 9 highlights a consistent *volume* of lower-income households in the PRS since 1996: households with incomes up to $888 per week or $46,000 per annum ($2021, bottom four income categories combined into two in Figure 9). These households now make up a smaller share of the PRS (21 per cent in 2021 compared with 41 per cent in 1996) due to the substantial increase in the numbers of mid- to high-income households described above. However, their numbers have remained relatively consistent over the 1996–2021 period, averaging around 480,000 households (ranging between the smallest amount of 411,000 in 2011, to a peak of 524,000 in 2016). These income categories have not experienced the increases that are obvious in the higher-income segments but, importantly, neither have the number of households declined.[17] There is some preliminary evidence to support the assertion that this lack of growth at the bottom end of the PRS household income distribution stems from households being 'locked out' or unable to afford rents in the mainstream rental sector and, therefore, being unable to form an independent renting household. Chapter 6 of this report examines this issue in more detail.

16 The cumulative numbers of real rents paid by weekly rent segment in the PRS (1996–2021) are shown in Figure A2, Appendix 2 (and tabulated in Table A4, Panel B). Evident is the slightly higher number of lower rent dwellings in the lowest four categories in 2021 compared with 2016, and the overall growth in the PRS is shown by comparing the end points of each line.

17 The cumulative distributions of PRS household incomes (1996–2021) are shown in Figure A3, Appendix 2 (and tabulated in Table A5, Panel B). Evident in Figure A3 is the bunching of incomes at the lower end of the distribution, reflecting the similar volumes of households with lower incomes at each Census.

Figure 9: Distributions of private renter household incomes, Australia, 1996–2021



Note: Based on 12 household income segments (real $) that have been aggregated into six categories to enable easier communication of the main trends. These are not quantiles of any description (e.g., quintiles or quartiles). See Table A5 in Appendix 2 (Panel A) for underlying numbers.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996–2021.

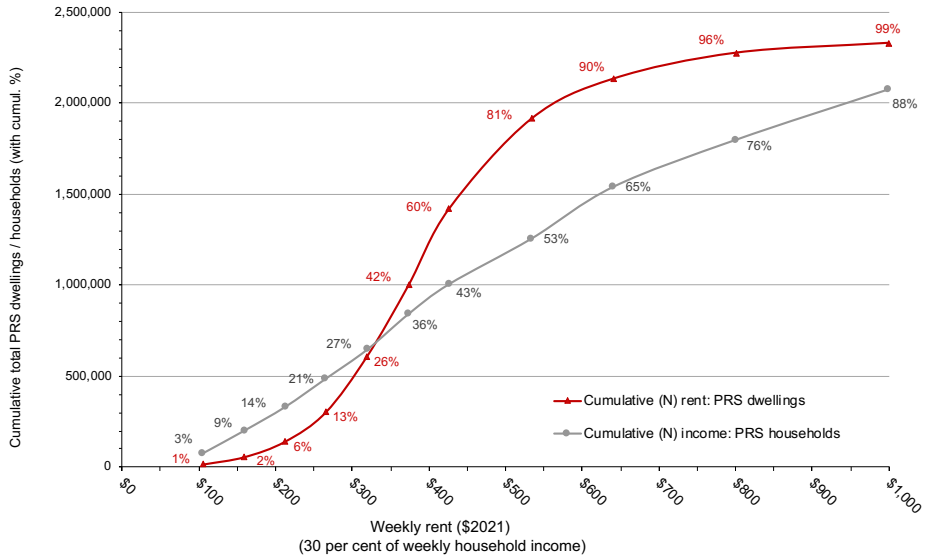
3.4.1 Weekly rent and household income distribution comparison

Figure 10 brings together the rent and income distributions examined separately above. Charting the 2021 cumulative distributions of household incomes and associated affordable weekly rent categories in the national PRS illustrates how and where the two diverge, revealing the degree of mismatch between them. Have changes in incomes kept pace with changes in rents? The figure shows, for example:

- that 21 per cent of PRS households (488,000) had incomes up to $888 per week (within the lowest four income groups). Nationally, for these PRS households, only 13 per cent of the stock was affordable in 2021. The point at which the lines cross is approximately where the supply of affordable dwellings matches the demand (based on household income).

For reference, the equivalent chart for Sydney is included in Figure A4, Appendix 2. Sydney had proportionately fewer low-rent dwellings and thus the point at which the two cumulative distributions cross is higher up the rent/income scale. In Sydney, 15 per cent of households had incomes up to $888 per week but only 4 per cent of the PRS stock was affordable to them in 2021.

Figure 10: Cumulative distributions of weekly rents and private renter household incomes by rent/income segment, Australia, 2021



Source: ABS customised matrix (12 real income and corresponding affordable rent categories) derived from the Australian Census of Population and Housing 2021.

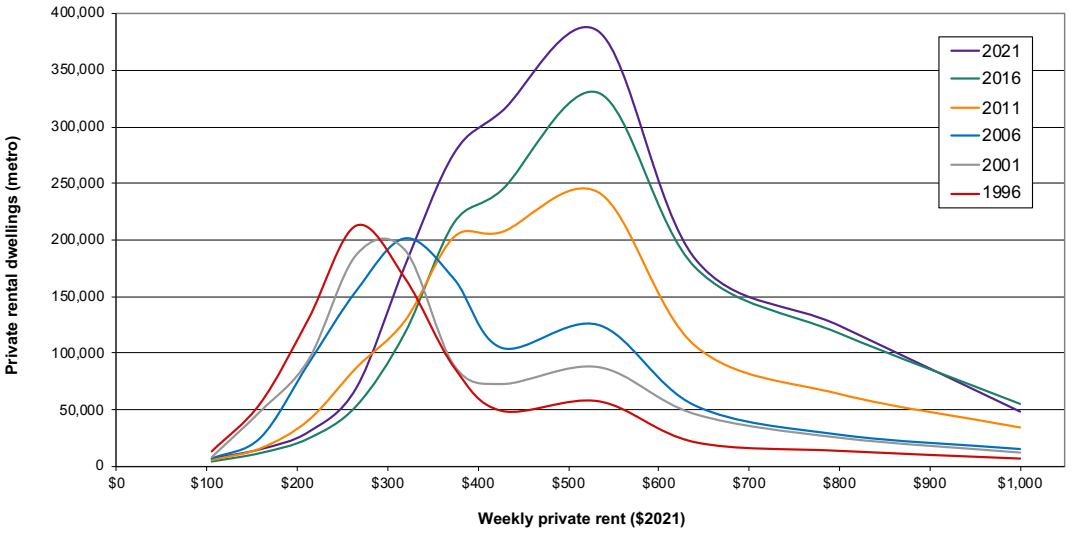
3.5 Private rental sector: structure of rents, metropolitan and non-metropolitan regions

Figure 11 (graphs A and B) are included here to illustrate how the PRS rent structures differ between aggregated capital city areas (metropolitan) and rest of state regions (non-metropolitan).

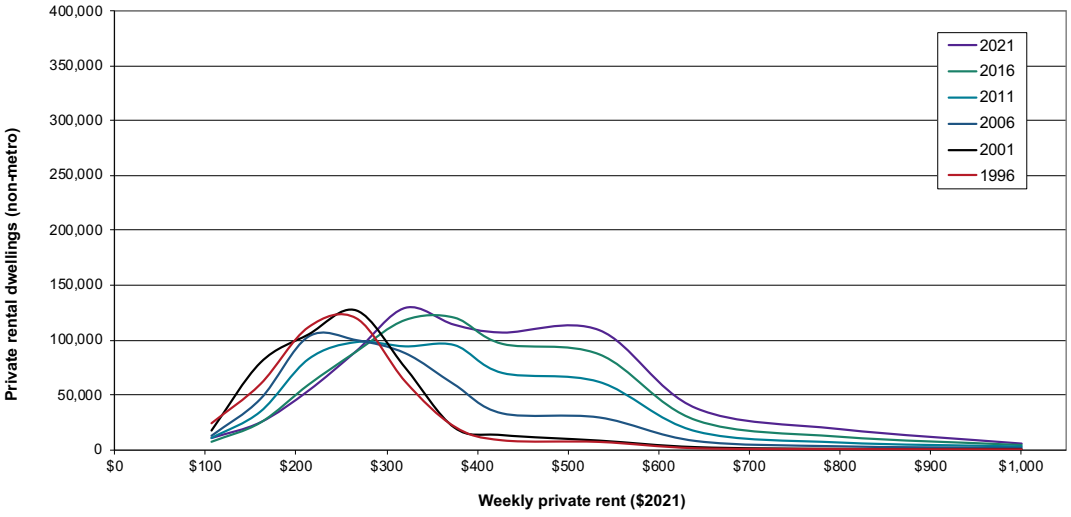
- The metropolitan distributions of PRS rents shown in Figure 11, Graph A, are very similar to the national distribution shown in Figure 8 above. This is not surprising because, in 2021, 70 per cent of the national stock of privately rented dwellings was located within capital cities – a slightly greater proportion than the share of all households in Australia (at 65%).
- In metropolitan areas, the 2011 structural shift in rents from lower to mid-higher levels is clear, along with a small increase (2016–21) in the number of PRS dwellings with rents in the lowest four rent segments. At the national level, these rent segments comprised 13 per cent of PRS dwellings in 2021; however, in the aggregated capital cities, they comprised only 7 per cent, down from half of all PRS dwellings in 1996 (not shown). Growth in the highest rent segments was minimal in metropolitan areas in 2016–21.
- The smaller volume of PRS dwellings in non-metropolitan regions is clear in Graph B. Although not as pronounced as in the metropolitan areas, PRS rents in the non-metropolitan regions also changed structurally around 2011, with more dwellings in the mid-range segments.
- In non-metropolitan regions, the total number of dwellings in the lowest four rent segments changed little in the 2016–21 intercensal period (at 180,000), thus not experiencing the small increase that occurred in the metropolitan areas. In non-metropolitan regions in 2021, these rent segments comprised 25 per cent of all PRS dwellings, a much higher share than in the aggregated capital city areas. But like the metropolitan areas, this share has declined over time, from 75 per cent in 1996 and 72 per cent in 2001, to 25 per cent in 2021 (not shown).
- In non-metropolitan regions, there has been consistent, moderate growth in dwellings in the higher priced PRS rent segments, even between 2016 and 2021 when this growth was more subdued in metropolitan areas.

Figure 11: Distributions of private rental dwellings by weekly rent paid, metropolitan (A) and non-metropolitan (B) areas, 1996, 2001, 2006, 2011, 2016 and 2021

A Metropolitan



B Non-metropolitan



Note: Derived from 12 rent categories established for the 1996–2001 analysis, and which have been updated to 2021 dollars enabling real changes in the profile of rents paid to be evident.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

3.6 Policy development implications

Long-term analysis of Australia's household tenure structure shows that the private rental sector has continued to grow relative to other tenures, with 628,000 more households renting privately in 2021 than a decade earlier. In terms of rents, however, growth was again concentrated at mid-market levels: these are not affordable for lower-income households. Although mid- to high-income households now comprise a larger proportion of the PRS, numbers of lower-income households are relatively stable across Census years, and a supply of dwellings affordable to these households is still required.

Nationally, however, there was essentially no change in the number of dwellings affordable for these households between 2016 and 2021, and although this COVID-19-induced 'stagnation' halted an otherwise continual decline in low-rent dwellings since 1996, that segment of the rental market, with rents to $266 in 2021, comprised only 13 per cent (or 7% in metropolitan areas) of all PRS stock. This is far below what is required nationally to house the corresponding 21 per cent of lower-income PRS households (with incomes to $888/week) that need them if they are to be housed affordably (or 18% of households in metropolitan areas). Importantly, this is prior to establishing whether they were actually ***available*** to such households and not occupied by households with higher incomes.

- The private market continued to fail to supply enough rental properties that are affordable to households with low incomes.
- Unfortunately, the policy challenge has little changed since that stated in the previous project in this series: policy settings must be developed that can *produce* stock affordable for households on the lowest incomes, and, importantly, *maintain* the affordability of this stock. The urgency noted by Hulse, Reynolds et al. (2019a) was not diminished by the findings of the current work, and post-pandemic market conditions have only amplified the issue.

4. Shortage estimates of affordable and available private rental dwellings: national, metropolitan and non-metropolitan

- Evident again in 2021 were the very low levels of PRS supply affordable for Q1 households that have been documented for 2006–16. Low and negative rent inflation at the time of the Census did not improve levels of supply for Q1 PRS households.
- Between 2016 and 2021, there was a substantial increase in stock affordable to Q2 (and above) households, concentrated in metropolitan areas, and with the growth likely influenced by market responses to the COVID-19 pandemic.
- Nationally, in 2021, Q1 PRS households faced an outright shortage of 255,000 affordable dwellings (up from 212,000 in 2016).
- This outright shortage increased to 348,000 dwellings that were affordable and available for Q1 households once utilisation of the stock by higher-income households (Q2 and above) was factored in. The equivalent 2016 estimate was 305,000 dwellings.
- In 2021, nationally, 82 per cent of Q1 PRS households paid unaffordable rents. Comparable rates are documented for Q1 households nationally, and at 90 per cent in metropolitan areas, since 2006.
- Due to the unusual rise in 2016–21 in PRS stock affordable for Q2 households, a very large surplus of 787,000 affordable dwellings was recorded for Q2 renter households nationally in 2021.

- **However, even a surplus of this size became a shortage of 152,000 affordable and available dwellings once occupation of the affordable stock by higher (and some very low) income households was factored in.**
- **In 2021, 27 per cent of Q2 renter households nationally were paying unaffordable rents (36% in metropolitan areas), an improvement on 2016 rates (36% and 46%, respectively).**

4.1 Introduction

This chapter responds directly to RQ1: How has the supply of affordable and available private rental housing changed for Q1 and Q2 households? In this chapter, estimates of shortages of affordable, and affordable *and* available, private rental dwellings for lower-income households are provided. Rather than the 12 real income and rent categories analysed in Chapter 3, the results in this chapter are derived from analysis of private renter households grouped by their national-level, income quintile (regardless of tenure) and corresponding affordable rent segment. This approach allows 'lower-income' households (Q1 and Q2) to be identified and analysed consistently *across* Censuses which is not possible when 'very low' and 'low' are defined using real dollar values. Supply shortages are estimated at the national level and for metropolitan and non-metropolitan areas. The chapter concludes by presenting the affordability outcomes for lower-income PRS households, thus viewing the issue from a demand perspective.

Before the shortage/surplus estimates are quantified and presented in this chapter, the overall supply of dwellings affordable for each household income quintile, and the incomes of the households occupying each of the affordable rent segments, are presented. The results illustrate the extent to which dwellings in the affordable rent segments were occupied by households with higher (or lower) incomes.

4.1.1 Income of households occupying private rental dwellings: market matching

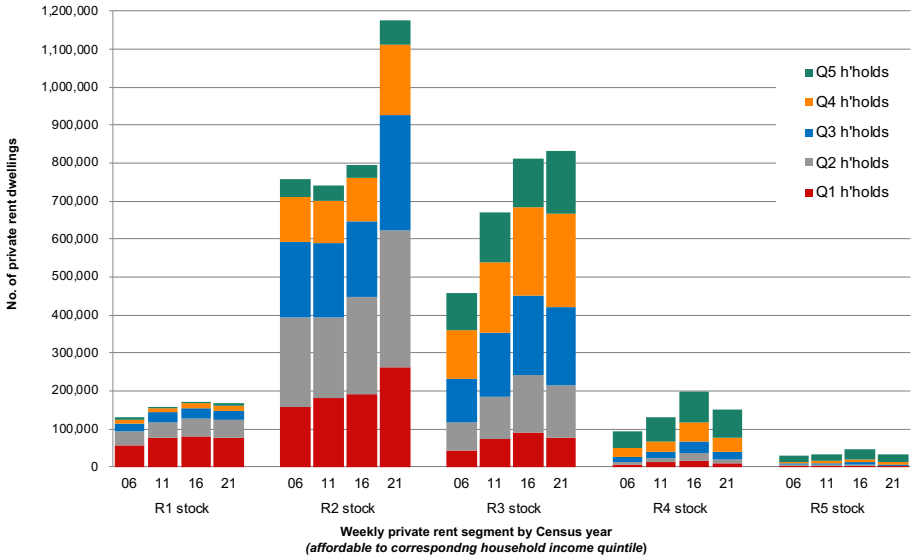
The numbers of PRS dwellings in each of the rent categories (R1–R5) that are affordable for households in the associated income quintiles (Q1–Q5) are shown in Figure 12 (2006–21). Importantly, the incomes of the households that resided in these rent segments is also presented.[18]

First, a distinct picture of PRS supply is shown in Figure 12, specifically:

- very low levels of stock affordable for Q1 PRS households across all four Census years, 2006–21 (R1)
- a steady concentration of stock at the R2 level (affordable for Q2 households) but with a substantial increase between 2016 and 2021 (discussed below)
- growth in R3 stock in 2006–16 but flattening in 2021
- low levels of R4 stock but the growth seen in 2006–16 dropping off in 2021
- low levels of the most expensive stock (R5) in all Census years.

18 The 2021 dollar values for the rent/income ranges are included in Chapter 1, Table 1. At each Census, both the rent values and the household income quintile values change. Table A2, Appendix 1, documents these values for all years analysed in the projects in this series, 1986–2021.

Figure 12: Income of households (by quintile) occupying private rental stock affordable to Q1–Q5 households, Australia, 2006–21*



**The 2001 data in this series of reports were not obtained at the household income quintile level. Rather, the five income groups in 2001 were derived by inflating the 1996 household income quintiles with the All groups CPI, thus they are not strictly comparable with analysis based on quintiles and are not included here.*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

Second, Figure 12 shows that each rent segment was not occupied solely by households with incomes that correspond to a 30 per cent affordability level. Such 'market matching' is not to be expected, with households understandably looking to pay as little rent as possible for a suitable dwelling in terms of household requirements and location. Appendix 2, Figure A5, provides the percentage distributions of incomes within each rent segment in 2006–21, nationally and for metropolitan and non-metropolitan regions.

Figure 12 above also reveals that:

- Just less than half of the (very small amount) of R1 stock was occupied by Q1 households – that is, those households for which all other rent segments are unaffordable. This situation has held for the R1 stock nationally since 2006.
- Occupancy in the R2 stock has changed little since 2016 (and prior) with just below one-third occupied by Q2 households and a further 22 per cent of the stock occupied by R1 households because they cannot access R1 dwellings. In 2021, the remaining 47 per cent of the R2 stock was occupied by households with higher incomes (R3 and above).
- The higher rent segments (R3–R5) were occupied largely by households with higher incomes (Q3 and above) but a quarter of the R3 stock in 2021, for example, was occupied by households with lower-incomes and thus paying unaffordable rents.

Comparable charts for metropolitan and non-metropolitan areas are included in Appendix 2, Figure A6. The main findings illustrated by this spatial disaggregation of the data are that the unanticipated growth in R2 stock was largely a metropolitan phenomenon. R2 stock in non-metropolitan regions grew Census-on-Census but the change in 2016–21, though slightly greater than in previous intercensal periods, was not close to the magnitude of that which occurred in metropolitan regions (69% growth in metropolitan and 20% growth in non-metropolitan).[19] Further, non-metropolitan regions consistently held a greater number, and thus share, of national R1 dwellings over the 2006–21 period.

4.1.2 Exceptional increase in R2 stock

A prominent feature in Figure 12 is the exceptional and unexpected growth in the number of R2 dwellings between 2016 and 2021 – dwellings with rents between $226 and $415 ($2021). It is highly likely that this growth is attributable to the market disruptions caused by the COVID-19 pandemic, many of which have already been discussed in Chapters 1 and 2. In sum, these disruptions (some of which were short-lived but had a lag effect to the time of the Census) included falling rents, falling demand, increased vacancy rates, increased supply due to property investor transfers, rent negotiations between tenants and landlords, and a moratoria on rent rises and evictions (see Chapters 1 and 2 for more detail). The low (and negative) rental inflation in 2019–20 (Figure 2, Chapter 2), with rents only starting to increase at the beginning of 2021, could have produced a 'bunching' of rentals at this relatively broad price point ($226–$415).[20] The shortage estimates in the following section illustrate what happens to rental affordability levels when there is an influx of affordable supply.

Finally, Figure 13 (derived from Figure 12) presents, individually, household demand and affordable dwellings for lower-income households (Q1 and Q2). The chart illustrates the very different supply issues faced by Q1 and Q2 households in the Australian private rental market. For the 425,000 Q1 households renting privately in 2021, there was an outright lack of affordable stock (more households than dwellings): a situation that has existed since at least 2006, as shown here. Further, Figure 13 shows that, even as the number of Q1 households increased Census-on-Census, the small number of affordable dwellings remained largely the same. For the 560,000 Q2 PRS households, on the other hand, there was a *surplus* of affordable stock in 2021, and since 2006, suggesting that, 'in theory', Q2 households should not experience rental affordability problems. But even in this segment of the PRS, the amount of stock affordable for Q2 households did not keep pace with increases in Q2 households, that is until, of course, 2021 when factors relating to the COVID-19 pandemic impacted PRS supply in this segment. However, the more recent rental inflation data shown in Figure 2 in Chapter 2 suggest that the significant supply of stock affordable to Q2 households recorded at the 2021 Census may have already diminished, and will be shown to be a short-term, COVID-19-induced anomaly.

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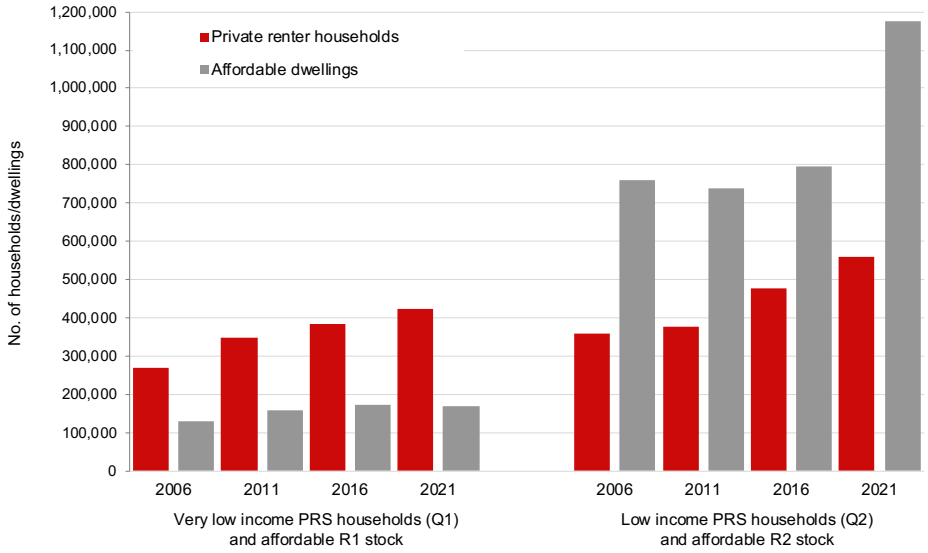
19 Between 2016 and 2021, the number of PRS households in metropolitan areas grew by 21 per cent and in non-metropolitan areas by 9 per cent.

20 A further data-based reason for the unusual growth in R2 dwellings is that the R2 rent segment in 2021 ($226–$415) had four major rent peaks: $250, $300, $350 and $400 – the latter being the amount that the highest number (mode) of PRS households paid in 2021 (tested using ABS TableBuilder). In 2016, the R2 rent segment ($203–$355) had three major rent peaks ($250, $300 and $350). If the $400 rent peak was included in R3 rather than R2 in 2021, then nearly 100,000 PRS dwellings would be removed from R2 and included in R3. Even with this adjustment, however, the increase in R2 stock is still exceptional and unexpected were it not for the pandemic.

Figure 13: Number of lower-income private renter households (Q1 and Q2) compared with number of affordable dwellings, Australia, 2006, 2011, 2016 and 2021



Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

The shortage estimates of affordable and available PRS dwellings for Q1 and Q2 households are presented next. The analysis quantifies how occupation of this stock by households with higher (and lower) incomes impacts apparent surpluses and worsens an outright lack of affordable supply.

4.2 Shortage estimates of affordable and available private rental dwellings: national, metropolitan and non-metropolitan regions

Due to the different PRS affordability circumstances of Q1 and Q2 households shown above, the following tables provide separate shortage estimates for very low-income (Q1) households and low-income (Q2) households at the national, metropolitan and non-metropolitan levels from 2006 and updated for 2021.

4.2.1 Shortage estimates for very low-income (Q1) PRS households

Table 4 (A) shows that even the low and negative rent inflation pattern evident at the time of the 2021 Census (see Figure 2) did not improve levels of supply or affordability for Q1 households between 2016 and 2021. Specifically:

- The outright shortage of affordable dwellings for Q1 households increased by 43,000 dwellings: from 212,000 in 2016 to 255,000 in 2021.
- Of this national shortage, 75 per cent was in metropolitan regions where there was an outright shortage of 191,000 dwellings affordable for Q1 households.
- In non-metropolitan regions, the shortage of affordable stock for Q1 households also increased, to 64,000 dwellings (2016–21). This rise of 18,000 dwellings was much larger than the previous intercensal period (2011–16) in which the shortage of affordable R1 dwellings increased by only 2,000 dwellings in non-metropolitan regions.

Figure 12 above was included to illustrate the importance of examining not only the volumes of affordable rental dwellings compared to the number of lower-income households, but also the incomes of the households that occupy this affordable stock. When higher-income households occupy the only stock that Q1 households can afford, then these dwellings are no longer available to very low-income households. Consequently, when *availability* is considered, Table 4 (A, middle panel) shows that:

- In 2021, nationally, the already significant outright shortage of 255,000 dwellings increased to a shortage of 348,000 dwellings that were affordable *and* available for Q1 households. This is an increase on the 305,000 affordable and available dwellings in 2016.
- In metropolitan areas in 2021, the outright shortage of 191,000 affordable dwellings for Q1 PRS households increased to a shortage of 229,000 affordable *and* available dwellings when the occupancy of the R1 stock by higher-income households was taken into account (an increase from the 2016 figure of 197,000 dwellings).
- In non-metropolitan areas in 2021, the shortage of affordable and available dwellings was 119,000, up from 108,000 in 2016.

The final panel of Table 4 (A) shows the affordability outcomes for Q1 PRS households in 2006–21. In sum, PRS affordability for Q1 households worsened in the short term (2016–21) but this dire affordability situation for very low-income PRS households has not appeared 'overnight'. In 2021, the proportion of Q1 households paying unaffordable rents was the highest of the last four Censuses at 82 per cent nationally. But the proportions of Q1 households paying unaffordable rents have hovered at around 80 per cent nationally, and 90 per cent in metropolitan areas, since at least 2006. Even in non-metropolitan regions, since 2006, around two-thirds or more of Q1 private renter households were paying unaffordable rents, with the proportion increasing from 66 per cent to the highest level of 70 per cent in the last intercensal period, 2016–21 (the largest increase of the intercensal periods shown here). Section 5.7 in Chapter 5 documents how this substantial shift in the non-metropolitan region has played out in selected regional cities and centres.

Table 4: (A and B) Estimates of shortage or surplus of affordable, and affordable and available, stock and affordability outcomes for Q1 (A) and Q2 (B) private renter households, Australia, metropolitan and non-metropolitan regions, 2006, 2011, 2016 and 2021

A Q1 private renter households

	Shortage/surplus of affordable stock				Shortage of affordable *and* available stock				Total number of Q1 households and % of these paying unaffordable rents			
	2006	2011	2016	2021	2006	2011	2016	2021	2006	2011	2016	2021
Australia	−138,000	−187,000	−212,000	−255,000	−211,000	−271,000	−305,000	−348,000	268,000	347,000	384,000	425,000
									79%	78%	80%	82%
Metro regions	−107,000	−143,000	−165,000	−191,000	−134,000	−171,000	−197,000	−229,000	155,000	195,000	221,000	255,000
									87%	88%	89%	90%
Non-metro regions	−31,000	−44,000	−46,000	−64,000	−76,000	−100,000	−108,000	−119,000	113,000	152,000	163,000	169,000
									68%	66%	66%	70%

B Q2 private renter households

	Shortage/surplus of affordable stock				Shortage of affordable *and* available stock				Total number of Q2 households and % of these paying unaffordable rents			
	2006	2011	2016	2021	2006	2011	2016	2021	2006	2011	2016	2021
Australia	528,000	521,000	491,000	787,000	−87,000	−122,000	−173,000	−152,000	360,000	378,000	476,000	560,000
									24%	32%	36%	27%
Metro regions	303,000	255,000	216,000	467,000	−63,000	−94,000	−136,000	−117,000	220,000	228,000	296,000	368,000
									29%	41%	46%	32%
Non-metro regions	224,000	266,000	275,000	320,000	−24,000	−28,000	−37,000	−35,000	141,000	150,000	180,000	192,000
									17%	19%	20%	18%

Note: Table A6 and Table A7 in Appendix 2 show the steps required to calculate the above 2021 Q1 and Q2 shortage figures.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

4.2.2 Shortage estimates for low-income (Q2) PRS households

As shown in Figure 13, Q2 households faced a different issue in the private rental sector: one of *availability* of affordable dwellings, rather than outright supply. Table 4 (B) presents the surplus and shortage estimates of affordable and available supply for Q2 PRS households. Affordable supply for Q2 households includes both R1 and R2 dwellings as both segments are affordable for Q2 households. The 2021 results are clearly impacted by the unusual volume of R2 stock in that year, the likely reasons for which were presented in Section 4.1.2. Table 4 (B, first panel) shows:

- The surplus of affordable stock for Q2 PRS households declined in 2006–16, both nationally and in metropolitan areas, but not regionally where the surplus increased Census-on-Census (2006–16). However, the large increase in stock renting at $226–$415 per week in 2021 (R2, seen in Figure 12) halted this trend, resulting in the largest surplus of stock affordable to Q2 PRS households in the four Census years at the national, metropolitan and non-metropolitan levels.
- The surplus in metropolitan regions more than doubled between 2016 and 2021 to 467,000 dwellings. This was not reflected in non-metropolitan regions where the surplus of stock affordable to Q2 households increased by only 16 per cent (2016-2021), to 320,000 dwellings.

Even with the substantial increase in 2021 gross surplus, after occupation by households with higher (and lower) incomes is considered, a shortage of affordable and *available* dwellings for Q2 households remained in 2021, but not to the same extent as in 2016 (Table 4 (B) middle panel).

- In 2021, nationally, the shortage of affordable and available PRS stock for Q2 households was 152,000 dwellings: 21,000 fewer dwellings compared to 2016.
- In metropolitan regions, where most of the shortage is located, the shortage of affordable and available PRS dwellings for Q2 households was 117,000, a decrease of 19,000 dwellings compared to 2016.
- In non-metropolitan regions, this shortage was 35,000 dwellings in 2021, only a marginal improvement of 2,000 dwellings compared to 2016.

With reduced shortages, the proportion of Q2 households paying unaffordable rents also declined in 2016–21. The final panel in Table 4 (B) shows that, nationally, 27 per cent of Q2 households were paying unaffordable rents, a significant improvement since 2016 when the comparable figure was 36 per cent. Affordability for Q2 PRS households was worse in metropolitan areas where 32 per cent of households were living in unaffordable rental dwellings, although this, again, was an improvement compared with 2016 when the comparable figure was 46 per cent. In non-metropolitan areas, this proportion declined in 2016–21 but only by two percentage points to 18 per cent.[21]

In sum, the results presented here provide evidence of how an increased supply of affordable housing, in this case only for Q2 households, improves affordability outcomes for lower-income renter households. The affordability outcomes for lower-income PRS households are examined in more detail in below.

4.2.3 Affordability outcomes for lower-income PRS households

The final section in this chapter presents findings on the extent and severity of unaffordable housing outcomes for lower-income households renting privately. The results represent a 'demand' or household perspective, to complement the supply (dwelling) focus taken in the previous sections. Selected characteristics of lower-income PRS households by affordability outcome are shown in Chapter 6.

For the Census years 2006–21, Table 5 shows, at the national, metropolitan and non-metropolitan levels, the numbers and proportions of Q1 and Q2 PRS households that paid:

21 Figure A7 and Figure A8, Appendix 2, chart the key national figures in the shortage estimates (2006–21) for Q1 and Q2 households.

- affordable rent (less than 30% of household income)
- unaffordable rent (approximately 30–50% of household income)
- and severely unaffordable rent (over 50% of household income).

Specifically, for Q1 PRS households:

- Since 2006, at the national level, the highest proportion of Q1 households paying affordable rent was 22 per cent (in 2011). In 2021, only 18 per cent of the lowest-income households paid an affordable rent: 77,000 out of 425,000 households.
- Nationally, severe rental affordability worsened for Q1 households from 2006 to 2016, when the proportion of Q1 households paying a severely unaffordable rent increased from 19 to 29 per cent. This figure declined to 21 per cent in 2021, when 87,000 of the lowest-income PRS households paid more than 50 per cent of household income in rent. This reduction in Q1 households paying severely unaffordable rent might reflect the unusual rental market conditions (including lower rents) brought about by the COVID-19 pandemic. Nonetheless, there were still 261,000 Q1 households paying between 30 and 50 per cent of household income on rent in 2021 – the highest number in the four Census years.
- In metropolitan areas, only a very small proportion of Q1 households paid affordable rent in any of the four Census years: declining from 13 per cent in 2006 (21,000 households) to 10 per cent in 2021 (26,000 households).
- In metropolitan areas there was also a decrease in Q1 PRS households that paid severely unaffordable rents in 2021: 27 per cent compared to 41 per cent in 2016, and 36 per cent in 2011. This shift, however, resulted in a much greater proportion of Q1 households paying unaffordable rent, from 48 per cent in 2016 to 63 per cent in 2021 (160,000 households).
- In non-metropolitan regions in 2021, the total number of Q1 PRS households was 169,000, an increase of only about 6,000 households over the 2016–21 period. Of the 2021 total, 30 per cent paid affordable rents (51,000 households) compared with 34 per cent in 2016 (55,000 households).
- In 2021, the percentage of Q1 households paying severely unaffordable rents in non-metropolitan areas slightly decreased (at 11% down from 14% in 2016). Paying unaffordable rent increased from 53 per cent in 2016 to 59 per cent in 2021.

For Q2 PRS households, Table 5 shows:

- Nationally, private rental affordability improved for Q2 households in 2021, with 73 per cent (408,000 households) paying affordable rents (compared with 64% in 2016). Again, the 2021 results will reflect the market circumstances driven by the COVID-19 pandemic, including the unusually large increase in 'R2' rental stock (2016–21, see Figure 12 in Chapter 4). Not surprisingly, an increase in affordable stock results in more low-income households paying affordable rents.
- Affordability improved proportionally for both metropolitan and non-metropolitan regions in 2021. In metropolitan regions, 28 per cent of Q2 households were paying unaffordable rents (105,000 households), down from 39 per cent in 2016. While in non-metropolitan regions, the proportion of Q2 households paying unaffordable rents remained relatively stable at 17 per cent in 2021 (33,000 households) compared to 19 per cent in 2016, such regions did not experience the same level of improvement in rental affordability outcomes as the metropolitan areas.
- At each geographic level, there were very low proportions of Q2 households paying severely unaffordable rent, with proportions in 2021 the lowest of the four Census years.

Table 5: Affordability outcomes for Q1 and Q2 PRS households: Australia, metropolitan and non-metropolitan regions, 2006, 2011, 2016 and 2021[22]

Q1 private renter households	2006		2011		2016		2021	
	No.	%	No.	%	No.	%	No.	%
Australia								
Affordable rent	57,000	21	76,000	22	79,000	20	77,000	18
Unaffordable rent	159,000	59	181,000	52	192,000	50	261,000	61
Severely unaffordable rent	51,000	19	90,000	26	113,000	29	87,000	21
Total	**268,000**	**100**	**347,000**	**100**	**384,000**	**100**	**425,000**	**100**
Metropolitan								
Affordable rent	21,000	13	24,000	12	24,000	11	26,000	10
Unaffordable rent	94,000	61	101,000	52	106,000	48	160,000	63
Severely unaffordable rent	40,000	26	70,000	36	91,000	41	69,000	27
Total	**155,000**	**100**	**195,000**	**100**	**221,000**	**100**	**255,000**	**100**
Non-metropolitan								
Affordable rent	36,000	32	52,000	34	55,000	34	51,000	30
Unaffordable rent	65,000	58	81,000	53	86,000	53	100,000	59
Severely unaffordable rent	11,000	10	19,000	13	22,000	14	18,000	11
Total	113,000	100	152,000	100	163,000	100	169,000	100

22 Table A8, Appendix 2, holds the equivalent data on affordability outcomes at the capital city and sub-city level for 2021. The 2016 table is included in Hulse, Reynolds et al. (2019a: Table 11).

Table 5 continued: Affordability outcomes for Q1 and Q2 PRS households: Australia, metropolitan and non-metropolitan regions, 2006, 2011, 2016 and 2021[22]

Q2 private renter households	2006		2011		2016		2021	
	No.	%	No.	%	No.	%	No.	%
Australia								
Affordable rent	273,000	76	256,000	68	304,000	64	408,000	73
Unaffordable rent	76,000	21	109,000	29	150,000	32	138,000	25
Severely unaffordable rent	10,000	3	13,000	4	22,000	5	14,000	2
Total	360,000	100	378,000	100	476,000	100	560,000	100
Metropolitan								
Affordable rent	156,000	71	133,000	59	160,000	54	252,000	68
Unaffordable rent	55,000	25	83,000	36	116,000	39	105,000	28
Severely unaffordable rent	9,000	4	11,000	5	20,000	7	12,000	3
Total	220,000	100	228,000	100	296,000	100	368,000	100
Non-metropolitan								
Affordable rent	117,000	83	122,000	81	144,000	80	157,000	82
Unaffordable rent	22,000	15	26,000	17	34,000	19	33,000	17
Severely unaffordable rent	2,000	1	2,000	1	2,000	1	2,000	1
Total	141,000	100	150,000	100	180,000	100	192,000	100

Notes: totals may not sum exactly due to rounding. Unaffordable rent for Q1 is paying R2 rents; severely unaffordable represents paying R3–R5 rent. For Q2 households, the R3 rent segment is unaffordable and R4–R5 rent segments are severely unaffordable.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

4.3 Policy development implications

Q1 and Q2 households face very different private rental market situations: very low-income households face an outright lack of affordable supply, a shortage that is then made worse by higher-income households residing in the scant supply of dwellings that are affordable to this group. In 2021, very low-income households (Q1) required dwellings available for rent at or below $225 per week: dwellings at this price point made up only 7 per cent of private rental market supply at the 2021 Census – dwellings that are needed to house affordably the Q1 households that made up 18 per cent of households in the PRS.

The dire affordability situation for very low-income PRS households has not appeared overnight, with the high proportion of Q1 households paying unaffordable rents changing little since at least 2006.

Q2 households face mainly a problem of availability, rather than supply, in the PRS. The substantial increase in stock affordable for this group was reflected in significantly improved affordability outcomes in 2021 compared with 2016. Unfortunately, the tightening of rental market conditions since the Census suggests this improvement might be short-lived.

Policy development and responses must reflect these very different market situations of Q1 and Q2 renters. As noted in Chapter 3, policy settings must *supply* low-rent stock, *maintain* the stock at rent levels affordable for lower-income households and, importantly, make it *available* to lower-income households.

- There is an immediate need for rental stock that is affordable and available for Q1 households: that is, renting for up to $225 per week ($2021). The private market has consistently failed to supply enough stock at levels affordable for Q1 households; therefore, some form of social housing is required.
- Policy development options for Q2 households need to focus on improving the availability of affordable PRS housing – that is, dwellings with rents up to $415 (in $2021). This will require a broad range of measures involving current programs, such as increasing rates of CRA, and devising new affordable housing models, further discussion of which is included in Chapter 7.

5. Spatial variability in affordable and available private rental supply

- Across all capital cities, city subregions and regional centres there were outright shortages of affordable private rental sector (PRS) dwellings for Q1 households in 2021 (and in all areas since 2006).
- There was some variability across capital cities in terms of whether these worsened or improved in the short term: in Sydney, Melbourne, Brisbane and Hobart outright shortages worsened in 2016–21, but Adelaide and Perth experienced a small improvement in outright shortages for Q1 PRS households (by the greatest magnitude in Perth).
- Availability intensified these outright shortages in 2021 resulting in very high proportions of Q1 households paying unaffordable rents in the capital cities: 93 per cent in Sydney, 90 per cent in both Melbourne and Brisbane, and over 80 per cent in all other capital cities, with a notable 9 percentage point increase in Hobart between 2016 and 2021.
- For Q2 households, the exceptional growth in R2 stock (2016–21), largely a metropolitan phenomenon, was reflected in substantial increases in surpluses of affordable stock, with only Hobart experiencing a decline in this surplus.
- In 2021, shortages of affordable and available supply for Q2 households were lower than in 2016 in all capital cities apart from Hobart (the only city where affordability outcomes for Q2 PRS households worsened in 2016–21).
- In all regional centres in 2021, there was an outright shortage of affordable stock for Q1 PRS households; in two-thirds of the centres, these shortages worsened in 2016–21.

- **Affordable supply for Q2 households in regional centres increased in 2016–21 and affordability outcomes improved but not at the same magnitude as experienced in metropolitan areas.**

5.1 Introduction

The spatial disaggregation of the national data into metropolitan and non-metropolitan areas in the previous chapters confirms that the private rental sector operates differently across locations and the supply of affordable dwellings varies spatially as well. This chapter presents analysis of the supply of affordable and available dwellings for Q1 and Q2 PRS households at the capital city, sub-city and regional city levels (also responding to RQ1).

5.2 Real PRS rent distributions in capital cities

First, to exemplify how the operation of the PRS varies between places, the distributions of real weekly private rents in Australia's three largest capital cities are presented (1996–2021) in charts comparable to the national distribution shown in Figure 8. The similarities and differences between the PRS rent structures, and how these have changed over time, in Sydney, Melbourne and Brisbane are displayed in Figure 14 (Graphs A–C). The numbers and percentages behind the graphs are tabulated in Appendix 2, Table A9.

A comparison of the three rent distributions reveals not only the expected difference in volume of PRS dwellings between the cities but also a difference in the spread of rents across the segments. Most prominent is the peak of rental dwellings in Sydney around the $500 per week level ($2021). In 2021, around 45 per cent of all PRS supply in Sydney rented between $428 and $641 per week. This continues the concentration of rental dwellings in those segments that appeared in 2011 (though in equivalent $2011) as the profile of Sydney rents shifted from one that included a supply affordable to households on lower-incomes, to a supply dominated by rents affordable to households with middle and higher incomes.

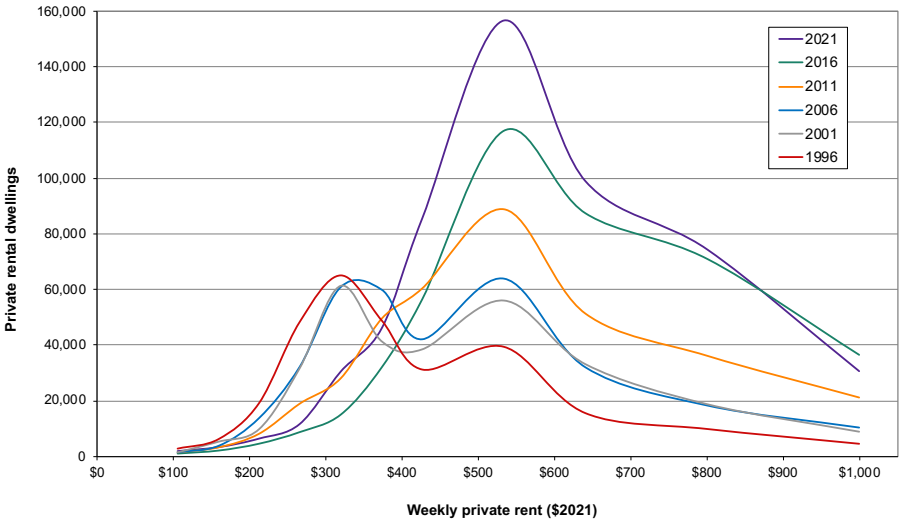
What is surprising, however, is the small increase in stock at the lower end of the Sydney distribution in 2016–21, around the $300 per week point. This is not seen in the Melbourne rent distribution but appears to a smaller extent in the Brisbane distribution. Again, this is likely a COVID-19 'anomaly', reflecting market and population conditions at the 2021 Census, conditions that have changed rapidly post-pandemic.

Melbourne's long-term PRS rent profile is similar to that seen nationally in Figure 8 (Chapter 3) and, as with Sydney, underwent a noticeable shift towards higher rents in 2011 at the expense of stock affordable to lower-income households. There was little change in 2016–21 in the number of dwellings at both the low and high ends of the distribution, with PRS growth almost entirely concentrated in stock renting between $321 and $534 per week.

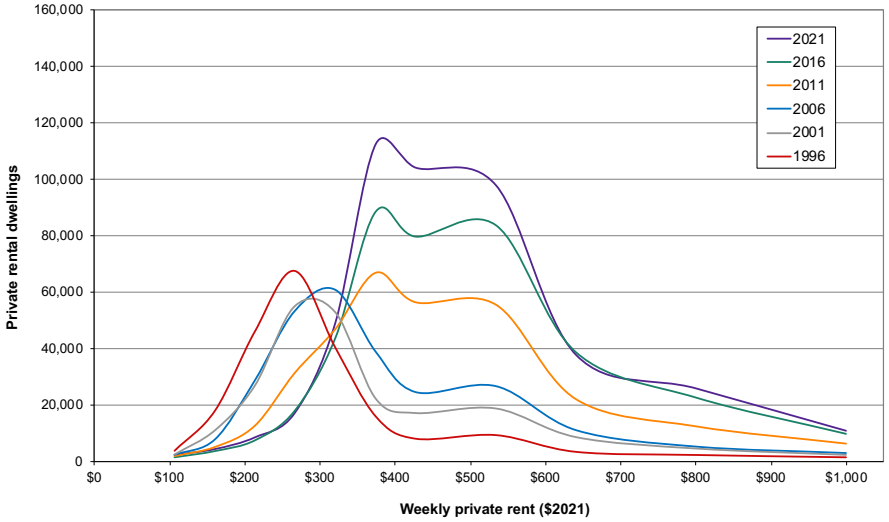
Even with smaller volumes of PRS dwellings in Brisbane, a loss of low-rent stock between 2006 and 2011 is still evident. The increases in higher end stock seen from 2006 to 2016 did not continue to 2021, with numbers of dwellings in these segments almost identical to those recorded at the 2016 Census. Growth in PRS stock in Brisbane in 2016–21 was concentrated in the $267–$427 per week segments and, thus, included a small increase in stock affordable for households with lower-incomes (but not the 'lowest' incomes). Again, however, market condition changes post-COVID will likely mean such dwellings are no longer available at an affordable level.

Figure 14: (A–C) Distributions of private rental dwellings by weekly rent paid, Sydney, Melbourne and Brisbane, 1996, 2001, 2006, 2011, 2016 and 2021

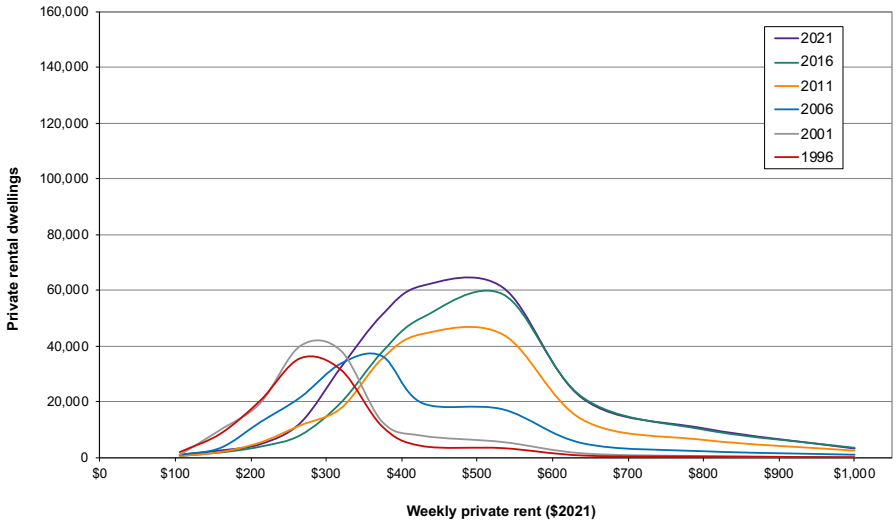
A Sydney



B Melbourne



C Brisbane



Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

5.3 Shortage estimates for Q1 PRS households in capital cities

The shortage estimates of affordable, and affordable *and* available, PRS stock for Q1 households in Australia's state and territory capital cities are presented in Table 6.[23]

- There were outright shortages of affordable PRS dwellings for Q1 households across all cities in 2021 (as there have been in all cities since 2006).
- In the three largest capitals (Sydney, Melbourne and Brisbane), these outright shortages increased in 2016–21, but in Adelaide and Perth, the outright shortage declined (by the greatest magnitude in Perth).

Of course, all the outright shortages worsen when availability is considered, with substantial increases 2016–21 in the shortage of affordable and available PRS stock for Q1 households in the three largest cities, Sydney, Melbourne and Brisbane. In the other cities, these shortages were relatively stable between 2016 and 2021, though with a small decline in Adelaide.

The affordability outcomes for Q1 PRS households were severe in all cities but particularly in Sydney where there was effectively no improvement from 2006 to 2021. In 2021, 93 per cent of Q1 PRS households in Sydney were paying unaffordable rents. Q1 PRS households in Melbourne were in a similar position, experiencing acute affordability issues since 2006 and ending up in only a marginally better position than those in Sydney by 2021. The affordability situation for Q1 PRS households in Brisbane mirrored that of Melbourne. In all other capital cities in 2021, the proportion of Q1 PRS households paying unaffordable rents was more than 80 per cent with a notable 9 percentage point increase in Hobart between 2016 and 2021 but a decline in Perth.

23 Table A6, Appendix 2 (Chapter 4 section), shows the steps required to calculate the 2021 Q1 shortage figures for the capital cities.

Table 6: Shortage of affordable and available stock for Q1 private renter households, state/territory capital cities, 2006, 2011, 2016, 2021

	Shortage/surplus of affordable stock				Shortage of affordable and available stock				Proportion (%) of very low-income (Q1) households paying unaffordable rents			
Q1	2006	2011	2016	2021	2006	2011	2016	2021	2006	2011	2016	2021
Sydney	−40,400	−47,000	−49,700	−64,700	−44,500	−52,600	−56,000	−72,200	93	92	92	93
Melbourne	−31,700	−43,200	−52,600	−61,300	−40,200	−51,800	−62,800	−71,600	87	88	90	90
Brisbane	−15,400	−22,500	−24,900	−31,600	−19,100	−26,300	−29,600	−37,200	87	89	89	90
Adelaide	−7,800	−12,000	−16,800	−15,400	−11,900	−16,300	−21,100	−20,200	79	80	84	83
Perth	−9,900	−14,700	−16,700	−13,200	−15,300	−18,600	−20,700	−20,500	79	87	89	85
Hobart	−1,000	−2,000	−2,500	−2,800	−2,100	−3,000	−3,700	−3,700	68	71	72	81
Darwin^	−300	−500	−400	−400	−600	−700	−700	−900	81	86	88	84
Canberra^	−800	−1,300	−2,000	−1,900	−1,200	−1,700	−2,700	−2,600	89	90	90	89

^Low counts in these cities: caution should be exercised when interpreting these figures. Table A6 in Appendix 2 includes the count of Q1 households for each capital city for 2021.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

5.4 Shortage estimates for Q2 PRS households in capital cities

The shortage estimates of affordable, and affordable and available, PRS stock for Q2 households in Australia's capital cities in 2006–21 are presented in Table 7.[24] The impact of the exceptional growth in R2 stock (2016–21), noted in Chapter 4 as largely a metropolitan phenomenon, is reflected here in the substantial increases in surpluses of affordable stock (R1 + R2) for Q2 PRS households between 2016 and 2021, with Hobart the only capital city to experience a decline in the surplus of dwellings affordable to Q2 households (2016–21). Table 7 also shows that:

- In 2021, the outright shortage of affordable private rental stock for Q2 PRS households recorded in Sydney in 2016 (the first time in this series of reports that an outright shortage of dwellings affordable to Q2 households was identified anywhere) was reversed, when a surplus of 57,500 dwellings was recorded.
- In 2021, Melbourne again had the largest surplus of affordable stock across the capital cities, nearly twice that of Brisbane and three times that of Sydney.
- For all cities other than Hobart and Sydney (marginally), the 2021 surpluses were the largest over the four Censuses.

24 Table A7, Appendix 2 (Chapter 4 section), shows the steps required to calculate the 2021 Q2 shortage figures for the capital cities.

The middle panel in Table 7 shows that, when occupation of this affordable stock by higher (and some lower) income households is factored in, the surpluses recorded in all cities became shortages. These shortages, however, were smaller than in 2016 in all cities other than Hobart, Darwin and Canberra (though based on small counts in the last two cities).

- In 2021, Sydney had the biggest shortage of affordable and available dwellings for Q2 PRS households (58,300). This figure is only a relatively small improvement, of approximately 1,700 dwellings, on the 2016 estimate considering the increase of R2 PRS dwellings between 2016 and 2021.
- In Melbourne, availability reversed a surplus of 173,000 dwellings, resulting in a shortage of nearly 26,000 PRS dwellings affordable for Q2 households.

Evident in the last panel of Table 7 is that the increased volume of R2 dwellings in 2021, not surprisingly, improved affordability outcomes for Q2 PRS households in all cities apart from Hobart (and only marginally in Canberra).

- In Sydney, Q2 households paying unaffordable rents peaked at 71 per cent in 2016, but the comparable figure in 2021 was 53 per cent.
- Rates also declined substantially between 2016 and 2021 in Melbourne and Brisbane (from 36% to 24% in Melbourne and a greater decline in Brisbane, from 41% to 24%).
- Perth experienced the biggest improvement of affordability outcomes in 2016–21: in 2021, only 17 per cent of Q2 households were paying unaffordable rents compared with 47 per cent in 2016.
- In Hobart, however, rates of Q2 households paying unaffordable rents were low between 2006 and 2016 (around 15%) but jumped in 2021 to 27 per cent: a figure higher than Melbourne and Brisbane in 2021.

Table 7: Shortage of affordable and available stock for Q2 private renter households, state/territory capital cities, 2006, 2011, 2016 and 2021

	Shortage/surplus of affordable stock				Shortage of affordable and available stock				Proportion (%) of low-income (Q2) households paying unaffordable rents			
Q2	2006	2011	2016	2021	2006	2011	2016	2021	2006	2011	2016	2021
Sydney	57,800	35,800	-5,900	57,500	-30,300	-40,500	-60,000	-58,300	44	55	71	53
Melbourne	103,600	101,800	96,900	173,200	-13,000	-20,400	-34,300	-25,900	22	32	36	24
Brisbane	45,000	37,100	41,200	89,300	-11,200	-15,900	-20,500	-15,600	31	43	41	24
Adelaide	35,100	41,700	41,900	56,000	-2,500	-3,500	-5,300	-3,900	12	16	18	13
Perth	51,200	28,500	29,100	74,500	-3,700	-10,500	-11,100	-6,900	14	43	47	17
Hobart	6,200	7,500	8,300	7,600	-600	-600	-800	-1,400	15	16	14	27
Darwin	2400	900	1,700	5,400	-500	-900	-700	-700	31	59	59	28
Canberra	2000	1,300	2,500	3,200	-1,700	-2,100	-3,300	-3,800	60	70	58	59

Table A7 in Appendix 2 includes the count of Q2 households for each capital city for 2021.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

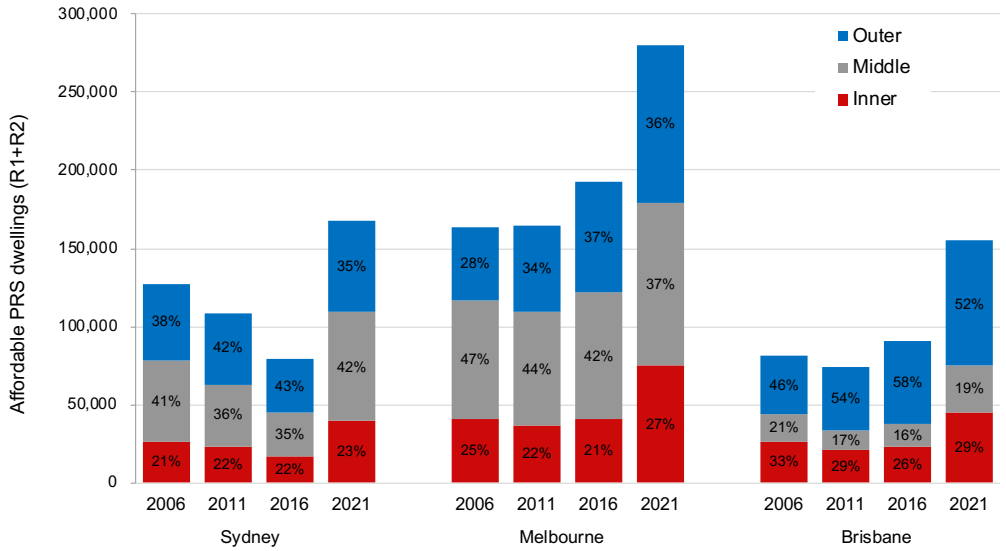
5.5 Affordable PRS supply in capital city subregions

5.5.1 Where is the affordable stock and how has the distribution changed?

The spatial distribution of affordable PRS supply in Australia's three largest cities via an inner, middle and outer grouping is shown in Figure 15.[25] Due to the meagre supply of R1 stock in *any* capital city, in *any* year,[26] the R1 dwellings have been added to the R2 stock in Figure 15, rather than graphed separately, thus showing stock that is affordable to Q2 households. Again, the influx of R2 stock in 2021 is apparent in each city.

25 See Table A3, Appendix 1, for a description of the spatial units included in the inner, middle and outer areas.
26 The number of R1 PRS dwellings in these capital cities ranged from a minimum of 7,100 in Brisbane in 2011 to a maximum 18,000 in Melbourne in 2021.

Figure 15: Spatial distribution of affordable (R1 + R2) private rental dwellings, inner, middle and outer regions of selected capital cities, 2006–21



Note: Refers only to affordable supply, without taking availability into account.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

- In Sydney, a clear Census-on-Census decline in stock affordable to Q2 households ended in 2021. The share of this stock remained smallest in the inner region but grew in the middle suburbs. Sydney had a higher number of dwellings affordable for Q2 households in 2021 than did Brisbane (not so in 2016).
- In 2021, the shares and volumes of affordable stock in the inner regions of Melbourne and Brisbane grew in comparison with 2016.
- At least in Sydney and Melbourne, the higher volumes of affordable stock in the inner areas likely reflect the greater declines in rent due to rent negotiations and vacant properties with lower numbers of international students.
- Of the three capitals, Brisbane consistently had the greatest share of affordable PRS dwellings in the inner area at each Census (2006–21).

5.6 Shortage estimates in capital city subregions

The private rental market varies within cities as well as between cities and Figure 16 and Figure 17 present shortage estimates for Q1 households and Q2 households of affordable and available rental dwellings at the sub-city level for five Australian capital cities from 2011 to 2021.[27]

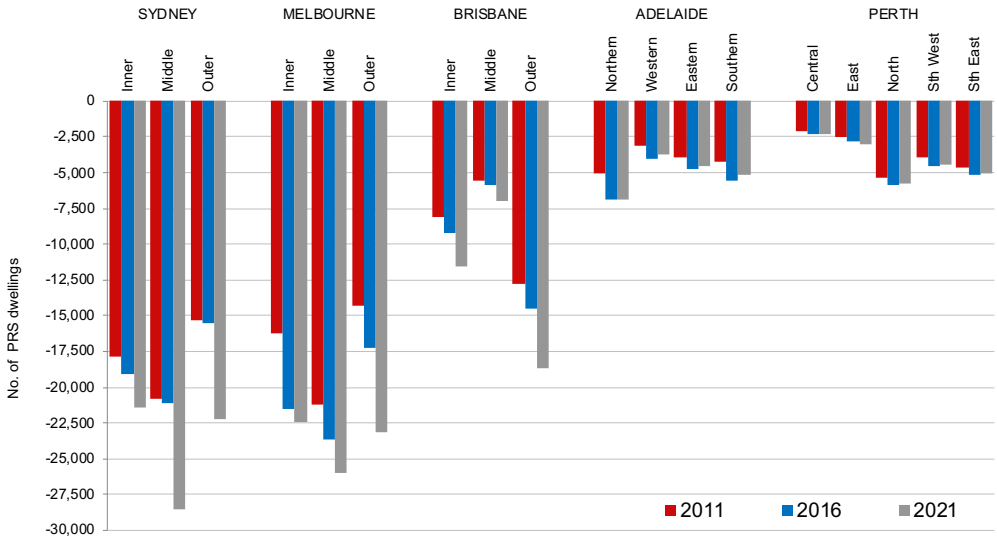
In each of the subregions in Sydney, Melbourne and Brisbane, Figure 16 shows that, for Q1 households:

- Shortages increased Census-on-Census from 2011 to 2021, with notably large increases in the middle and outer regions of Sydney in 2016–21, and the outer regions of Melbourne and Brisbane over the same period.

27 Note that we follow ABS Statistical Subdivisions (SSDs) from 2006, which do not enable aggregation to inner, middle and outer subregions in Perth and Adelaide. Numbers are insufficient in Hobart, Canberra and Darwin to do this sub-city analysis. Table A6 and Table A7, Appendix 2, tabulate the Q1 and Q2 results for 2021 (see Chapter 4 section). Table A10 and Table A11 tabulate all estimates for capital city subregions from 2006 to 2021 for Q1 and Q2, respectively.

- The outer regions of Sydney and Melbourne held higher volumes of shortages than the inner areas in 2021, a change from a decade earlier when shortages were higher in the inner regions (compared with the outer).
- In Adelaide and Perth, changes in the shortage of affordable and available dwellings for Q1 PRS households were not as substantial as those in the larger capitals, and there was only marginal change across the city subregions from 2016 to 2021.
- Affordability outcomes for Q1 PRS households in 2021 either stayed at their acute levels of 2016 and prior, or they worsened for each sub-city region of Australia's three largest capital cities (see Table A10, Appendix 2).

Figure 16: Shortage of affordable and available dwellings for Q1 private renter households, subregions, five capital cities, 2011, 2016 and 2021

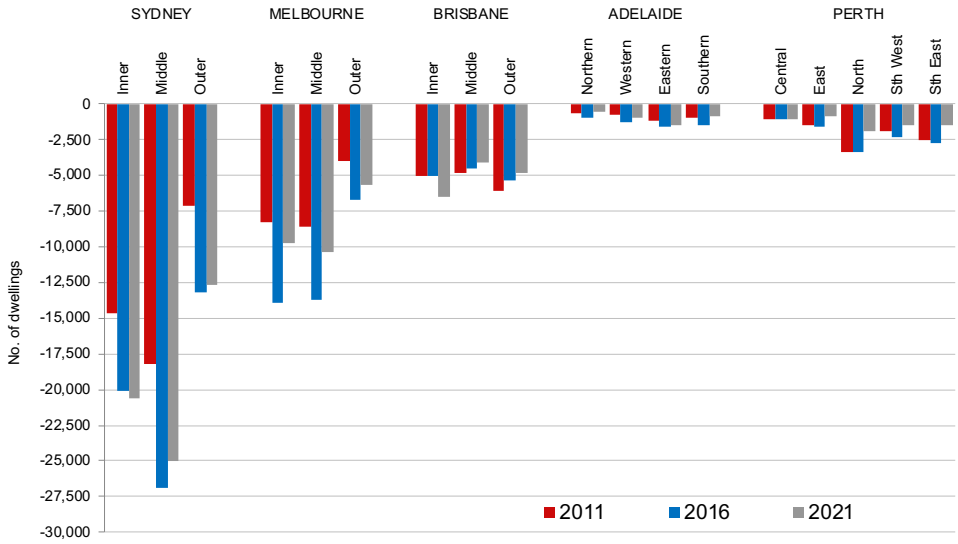


Source: ABS customised matrices derived from the Australian Census of Population and Housing 2011, 2016 and 2021.

For Q2 households, Figure 17 shows that:

- The extensive increase in the volume of R2 dwellings in 2021 halted the large shortage increases seen in 2011–16 in the subregions of, in particular, Sydney and Melbourne, but did not result in smaller shortages across all the subregions.
- There was a decline in 2016–21 in the shortage estimates in all the subregions of the three largest cities, except for the inner areas of Sydney and Brisbane where there were slight increases.
- Numerically, the shortages in the sub-city areas of Adelaide and Perth were smaller and thus changes were reflected as such. There were notable declines, however, in the shortages of affordable and available PRS dwellings for Q2 households in four of the five subregions in Perth (2016–21).

Figure 17: Shortage of affordable and available dwellings for Q2 private renter households, subregions of five capital cities, 2011, 2016 and 2021

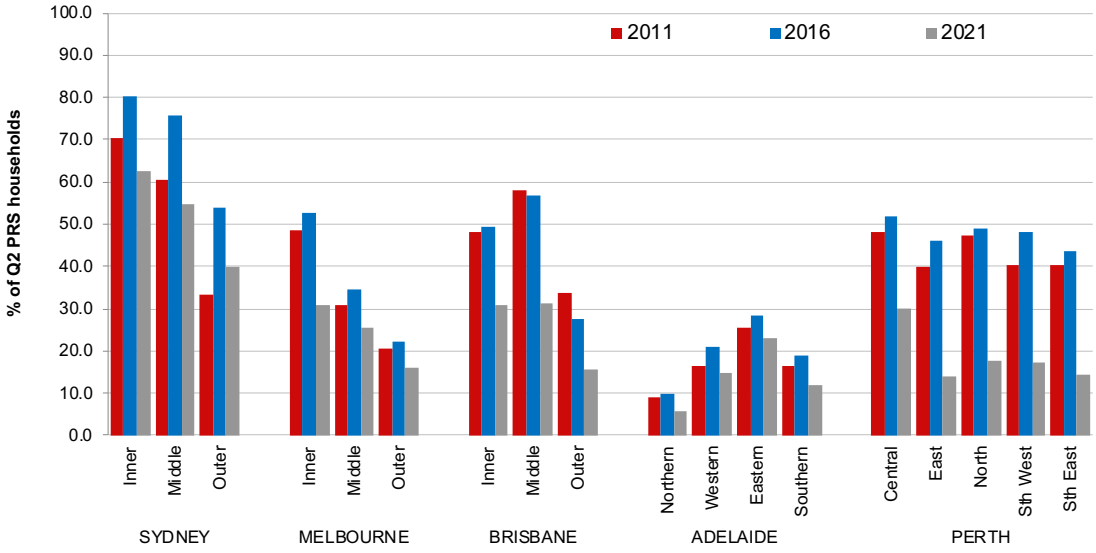


Source: ABS customised matrices derived from the Australian Census of Population and Housing 2011, 2016 and 2021.

Finally, Figure 18 presents the affordability outcomes for Q2 PRS households over the decade 2011–21 in capital city subregions. The equivalent chart for Q1 households is included in Appendix 2, Figure A9; however, there is little variation across the subregions due to uniformly high rates of paying unaffordable rents (more than 80 per cent of Q1 households in nearly all subregions across all years).

- The flow-on effect of the boost in R2 stock is evident in the capital city subregions in Figure 18, with smaller proportions of Q2 households paying unaffordable rents in 2021 compared with 10 years earlier. Only in outer Sydney in 2021 was a greater proportion of Q2 households paying unaffordable rents than in 2011 (40% compared with 34%).
- In all subregions in all cities, the proportions of Q2 PRS households paying unaffordable rents declined between 2016 and 2021 (with particularly large declines in all Perth subregions).
- In Sydney and Melbourne, Q2 PRS households in the inner regions consistently experienced the highest proportions paying unaffordable rents over the three Censuses (compared with middle and outer regions). In Brisbane, the middle region was consistently the worst; in Adelaide, it was the Eastern region; and in Perth, the Central region had the highest proportion of Q2 households paying unaffordable PRS rents compared with the other subregions.
- In Sydney and Melbourne, as distance from the CBD increases, proportions of Q2 households paying unaffordable rents declines.

Figure 18: Proportion (%) of Q2 households paying unaffordable rents by capital city sub-region, 2011, 2006 and 2021



Source: ABS customised matrices derived from the Australian Census of Population and Housing 2011, 2016 and 2021.

5.7 Shortage estimates in regional centres

The unusual increase in R2 stock in 2021 is shown in Figure A6, Appendix 2, to be concentrated in metropolitan regions, but not exclusively contained there. This section examines how shortage estimates changed between 2011 and 2021 in selected regional cities and towns.

First, the shortage estimates for Q1 PRS households living in selected regional cities and towns for 2011, 2016 and 2021 are presented in Table 8.

- There was an outright shortage of affordable stock for Q1 PRS households in all 21 regional centres in 2021. Even in regional centres, therefore, shortages are due to an outright lack of affordably priced stock for Q1 households, and while availability exacerbates the problem, it is not the primary cause underlying the estimates for Q1 households.
- In two-thirds of these regional centres, outright shortages of affordable stock worsened between 2016 and 2021; in a further three, there was nil or very little change in 2021 to the shortage estimates recorded for 2016 (Sunshine Coast, Tweed Valley and Rockhampton); and in only four did the outright shortages decrease between 2016 and 2021 (Cairns and Townsville in Queensland, and Mandurah and Bunbury in Western Australia).
- These outright shortages were made worse in all centres when occupation by higher-income households was factored in. The proportions of Q1 PRS households paying unaffordable rents also increased in 2016–21 in all regional centres in NSW, with significant rises in Coffs Harbour and Shoalhaven; Geelong, Ballarat and Bendigo in VIC; Gold Coast and Sunshine Coast in QLD where very high rates continued in 2021; and Launceston (TAS), where 63 per cent of Q1 PRS households paid unaffordable rents in 2021 compared with 55 per cent in 2016.
- Two regional centres in WA are notable for a decline in the proportion of Q1 renters in unaffordable dwellings: Mandurah and Bunbury where these proportions declined by 8 and 6 percentage points, respectively.

Table 8: Shortage of affordable and available stock for Q1 private renter households, selected regional cities and towns, 2011, 2016 and 2021

Q1	Shortage/surplus of affordable stock			Shortage of affordable and available stock			% of Q1 households paying unaffordable rents		
	2011	2016	2021	2011	2016	2021	2011	2016	2021
NSW									
Newcastle	−4,800	−5,800	−7,400	−6,700	−7,600	−8,800	76	81	84
Wollongong	−2,900	−3,300	−3,800	−3,800	−3,900	−4,300	77	84	88
Coffs Harbour	−1,300	−1,200	−1,600	−1,700	−1,500	−1,900	77	79	87
Shoalhaven	−1,000	−1,100	−1,500	−1,500	−1,500	−1,800	70	76	83
Tweed Valley	-1,600	-1,400	-1,400	-1,800	-1,600	-1,600	82	84	87
Wagga Wagga	0	200	−300	−1,000	−1,000	−1,300	54	52	57
Albury-Wodonga*	100	100	−500	−1,400	−1,600	−2,000	48	49	55
VIC									
Geelong	−1,300	−1,800	−2,600	−2,300	−2,900	−3,500	67	73	78
Ballarat	−500	−800	−1,500	−1,400	−1,700	−2,300	59	64	72
Bendigo	−500	−800	−1,200	−1,200	−1,600	−1,900	63	70	74
QLD									
Gold Coast	−11,100	−10,600	−11,100	−11,800	−11,600	−12,200	94	92	93
Sunshine Coast	−5,400	−4,800	−4,800	−5,900	−5,500	−5,500	89	89	90
Toowoomba	−1,200	−1,600	−2,000	−2,200	−2,500	−3,000	68	76	76
Cairns	−2,100	−1,900	−2,200	−3,000	−2,900	−2,900	77	74	78
Townsville	−1,900	−2,300	−1,800	−2,500	−3,200	−3,000	85	80	75
Bundaberg	−1,100	−1,300	−1,100	−1,600	−1,800	−1,600	73	75	72
Mackay	−600	−500	−800	−1,000	−1,500	−1,500	84	68	76
Rockhampton	−900	−1,000	−900	−1,500	−1,800	−1,800	74	73	71
WA									
Mandurah	−1,400	−1,600	−1,300	−1,700	−1,800	−1,800	85	87	79
Bunbury	−700	−1,000	−600	−1,200	−1,400	−1,100	82	83	77
TAS									
Launceston	−700	−800	−900	−1,600	−1,800	−1,900	59	55	63

*NB: 2006 estimates are excluded here because not all regional centres were analysed in that year. *Wodonga included here in NSW due to close economic links with neighbouring, larger Albury that is located over the state border (Murray River) in NSW.*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2011, 2016 and 2021.

The shortage estimates of affordable, and affordable and available, PRS stock for Q2 households in the selected regional centres are shown in Table 9 for 2001, 2016 and 2021. Were there substantial increases in Q2 surpluses and improved affordability outcomes for lower-income renter households akin to those seen in metropolitan regions?

- In all regional centres across the three Census years included in Table 9, there was a surplus of PRS stock affordable for Q2 households.
- In seven of the regional centres, shortages of affordable and available supply have been relatively low in each Census year, leading to consistently low rates of Q2 households paying unaffordable rents: Wagga Wagga and Albury-Wodonga in NSW (Victoria per Wodonga), Ballarat and Bendigo in VIC, Toowoomba and Bundaberg in QLD and Launceston in TAS.
- In the larger NSW regional cities of Newcastle and Wollongong, the shortages of available stock affordable for Q2 PRS households remained relatively stable between 2016 and 2021 (after significant increases in 2011–16), resulting in a small reduction in the proportion of Q2 households paying unaffordable rents: from 35 to 31 per cent in Newcastle and from 46 to 44 per cent in Wollongong. These changes are far from the magnitude of change seen for Q2 households in Sydney (Table 7).
- In a possible reflection of pandemic demand, five centres in QLD experienced a decline or little change in overall surpluses of stock affordable to Q2 households. On the Gold Coast and Sunshine Coast, numerical shortages of available supply worsened in 2016–21 (unlike in Brisbane) but the proportion of Q2 households paying unaffordable rents improved marginally on the Gold Coast. In 2021, on both the Gold Coast and the Sunshine Coast, around half of all Q2 households paid unaffordable rents. Again, these changes are not of the same magnitude as that seen in the QLD state capital city of Brisbane (Table 7).

Table 9: Shortage of affordable and available stock for Q2 private renter households, selected regional cities and towns, 2011, 2016 and 2021

Q2	Shortage/surplus of affordable stock			Shortage of affordable and available stock			% of Q2 households paying unaffordable rents		
	2011	2016	2021	2011	2016	2021	2011	2016	2021
NSW									
Newcastle	15,800	11,500	15,900	−2,100	−4,200	−4,200	22	35	31
Wollongong	7,100	3,700	4,900	−1,400	−2,500	−2,800	29	46	44
Coffs Harbour	2,900	2,200	2,500	−500	−700	−700	24	31	32
Shoalhaven	3,500	3,000	3,300	−200	−500	−500	10	21	24
Tweed Valley	1,900	1,600	1,300	−900	−900	−1,000	40	42	47
Wagga Wagga	3,600	4,000	5,100	−200	−200	−200	9	11	7
Albury-Wodonga*	6,200	6,400	7,900	−100	−300	−200	5	7	6
VIC									
Geelong	7,300	7,700	10,400	−400	−700	−700	11	13	13
Ballarat	5,000	5,600	7,400	−100	−200	−200	5	6	5
Bendigo	4,500	4,900	6,200	−100	−200	−100	5	5	5
QLD									
Gold Coast	6,700	10,100	9,900	−8,000	−7,600	−9,400	55	53	49
Sunshine Coast	5,100	5,500	4,400	−3,500	−3,400	−4,400	47	49	50
Toowoomba	7,300	8,400	10,200	−300	−400	−300	9	11	6
Cairns	7,700	7,900	7,200	−700	−800	−800	18	21	17
Townsville	5,500	10,100	11,600	−1,100	−600	−400	31	15	7
Bundaberg	4,300	5,100	5,200	−100	−100	−100	6	5	3
Mackay	2,200	6,200	4,900	−600	−200	−400	42	11	14
Rockhampton	4,700	6,100	6,000	−300	−200	−200	14	10	7
WA									
Mandurah	3,600	3,100	4,700	−300	−400	−200	18	26	7
Bunbury	3,600	3,300	4,600	−200	−300	−100	15	19	6
TAS									
Launceston	5,100	5,400	6,100	−100	−100	−200	5	5	6

*NB: 2006 estimates are excluded here because not all regional centres were analysed in that year. *Wodonga included here in NSW due to close economic links with neighbouring, larger Albury that is located over the state border (Murray River) in NSW.*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2011, 2016 and 2021.

5.8 Policy development implications

This chapter has examined affordable supply and shortage estimates at numerous spatial scales: from capital cities and their subregions to large and medium-sized regional centres. It has shown some diversity in how the PRS operates in different locations and some similarities.

- Q1 households had very poor affordability outcomes across all the locations analysed in this chapter – including in regional centres, those adjacent to capital cities and more distant. In all the regional centres in NSW, affordability outcomes for Q1 renters worsened over the 2011–21 decade. Analysis in this chapter shows that there is an immediate need for rental stock that is affordable and available for Q1 households across not only metropolitan areas but also in regional centres.
- For Q2 households, affordability improved in the short term, particularly in Perth, but outcomes are more spatially varied than for Q1 PRS households. The non-metropolitan regions, for example, did not experience the same level of improvement in rental affordability for Q2 households that was seen in metropolitan areas, likely reflecting short-term market disruptions caused by the pandemic.

Regional areas have not been a central focus of this series as affordability issues have shown to be more intense in the capital cities (particularly in the inner suburbs of Sydney and Melbourne). However, the COVID-19 pandemic has disrupted the operations of the PRS in not only the capital cities but also significantly in the towns and centres in regional Australia. Although there is now evidence that pandemic-induced migration flows are normalising, at least in the medium term it will be necessary to monitor rental market conditions across regional *and* metropolitan areas. New opportunities for working from home and household preferences for regional living could continue to impact regional rental markets even if at lower levels.

The policy development implications included in Chapter 4 reflecting the analysis of broad national trends are also relevant here but with a spatial focus, shifting from a concentration on metropolitan areas to one that more closely monitors and analyses changes in affordable supply in regional areas as well. Again, the different market situations of Q1 and Q2 renters must be considered and, across all locations, an immediate increase in the supply of affordable homes for Q1 households is required; access to affordable homes for Q2 households also needs to improve.

6. Changing rental demand characteristics

- In 2021, Q1 private renter households were predominantly single persons (59%) and a further 20.5 per cent were single parent families. One-quarter were aged 65 years and over.
- Of the Q1 households paying severely unaffordable rent, 37 per cent were younger households, aged under 35 years; compared to all Q1 PRS households, single parent families, couple families with children, group households and migrants were all more likely to be paying severely unaffordable rents.
- Q2 PRS households included a greater proportion of prime working aged (25–54 years) persons, with the dominant household types being younger persons living alone (23.1%), single parent families (21.3%) and couples with children (15.4%).
- Among Q2 households paying unaffordable rent, one parent families (24%), couples with children (20.7%), group households (12.0%) and migrants arriving before 2016 were most likely to pay unaffordable rents.
- Analysis of the ABS SIH identified five different individual mainstream and non-mainstream rental arrangements and revealed distinct segments forming at the low end of the private rental sector between 2007–08 and 2019–20.
- In 2019–20, around half (49.7%) of Q1 individual income units paid rent outside the independent or group mainstream sector, either to another family member or with/to an unrelated cohabitating person.

- **Single person occupancy within the independent mainstream rental sector has declined across all age groups between 2007–08 and 2019–20, but especially among those aged 15–34 years and 55–64 years. The share of single persons who work part-time, who are unemployed or who are not in the labour force has declined in the mainstream rental sector.**

- **Only 20 per cent of all Q1 income units and 22 per cent of Q1 single persons renting independently in the mainstream sector were paying affordable rent, compared to around 68 per cent paying rent to families. Around half of Q1 income units still pay unaffordable rents when cohabitating with others, either informally or in a mainstream shared rental arrangement.**

6.1 Introduction

The Census collection enables detailed insights into the types of households that are occupying and paying affordable or unaffordable rents in the mainstream private rental sector – that is, households that are paying rent for an independent dwelling either to a real estate agent or private landlord not residing in the dwelling. Time series tenure analysis over the past two decades has revealed that the number of households counted as private renters continues to grow relative to other tenure types (see Table 2, Chapter 3). However, this household growth in the PRS does not capture other forms of renting among individuals, including individuals paying rent to families or within other cohabitating arrangements among unrelated persons.

Integrating an analysis of dwelling rentals with more 'diffuse' individual rental arrangements, including those mixed within owner occupied or social rental tenures, captures a large and often overlooked part of renting, one that performs a significant role in the broader rental economy and in housing adults with low to moderate incomes (Parkinson, Hulse et al. 2022). Individuals paying rent outside the mainstream sector may do so for a range of reasons, but affordability is likely to be a key consideration among those with lower incomes. Hence, affordability analysis based on counts of households or dwellings alone is likely to underestimate the full extent of shortages in affordable private rental supply.

Extending the focus to both household and individual rental arrangements is also important in the context of tenure disruptions across the life course and to capture the changing demographic profile of renters. The extent to which renter cohorts occupy different segments or niches of the private rental sector follows longer-term structural and population change and will be based on potential affordability trade-offs. For instance, delayed exits or returning to live in the family home for extended periods will increase the share of people paying rent to families at different stages of the life-course. Growth in immigration, on the other hand, particularly among international students, can increase demand for rooms or shared rentals in the PRS, while growth in families and couples renting will increase demand for mainstream or independent rental dwellings (Arundel and Ronald 2016; Druta, Limpens et al. 2019; Easthope and Liu 2016; Morris 2013; Parkinson, James et al. 2018; 2021).

Prior to the COVID-19 pandemic, growth in the international student rental market increased demand for more affordable room rentals that are often characterised by informal and subletting arrangements that are likely to be under counted in household enumerations (Parkinson, Liu et al. 2022). The return of international and domestic students, low vacancy rates and rising rents will see increased demand for room rentals in response to a limited supply of affordable and available dwellings for the lowest-income groups (Hulse, Reynolds et al. 2019a). While employment participation following COVID-19 remains high, the growth of part-time relative to full-time employment, whether from permanent, fixed-term or casual contracts, contributes to the persistence of ongoing long-term affordability problems and constrains opportunities to move out of the PRS over time, shaping decisions to form independent households, remain within the family home or cohabitate with others (Parkinson, Rowley et al. 2019).

Given the growing diversity and fragmentation within the PRS, this chapter draws both on Census data and introduces a new analysis of the ABS SIH to examine formal and informal rental arrangements. Specifically, this chapter addresses RQ2 and RQ3, which ask:

- What are the characteristics of Q1 and Q2 households living in affordable and unaffordable private rental housing in 2021 and how do they compare with 2016?
- To what extent are lower-income individuals (Q1 and Q2) not accessing the mainstream PRS? Which groups are most impacted?

6.2 Lower-income private renter households in 2021

First, the socio-demographic profile of all PRS households is compared with all Australian households (Table 10). In 2021 (and equivalent for 2016 in Table A14 in Appendix 2), the table shows that:

- Compared to all households, PRS households are younger and more likely to be single adults. They are, however, equally likely to have children (38% of private renter and 41% of all households), with more single parent households (15% versus 10%) but fewer couple families.
- There are more private renter group households (12% compared to 6.5% of all households).
- Private renter migrant households are more likely to have arrived in Australia less than five years ago (10% compared to 3% of all households).

In Table 10, the characteristics of lower-income (Q1 and Q2) PRS households are also compared, along with the characteristics of higher-income PRS households and all households:

- Q1 private renter households (with incomes less than $750 gross per week) in 2021 were predominately single headed (80%), comprised of either lone persons (59%) or one parent families (21%). As a group, they had the lowest proportion of couple families with children compared to other quintiles but the same proportion of single parents (21%) as Q2 households and low shares living as a couple (with or without children) or as a group household.
- Q1 renters had an over-representation of people aged over 65 (24.6%) compared with all renting households within the age group (8.6%). Renters aged 55–64 years were also slightly over-represented among Q1 renters at 10 per cent for all renters in this age group. The age and family profile of Q1 renting households has largely remained consistent (2016–21).
- Most Q1 private renter households (69.7%) had no members in the labour force or relied on a single-earning, part-time income. Among Q1s with employed members there was an over-representation of single-earning 'key workers 2', which include individuals working in retail, in hospitality, as personal carers or aides, as cleaners and as drivers. This employment household composition has remained relatively consistent in the intercensal years between 2016 and 2021.

- Q2 private renter households, with an income range of $750–$1,382 per week, had a greater share of households of prime working age (25–54 years) (68%) compared to Q1 households (at 50%), and a smaller share with a reference person aged 55 years plus (23% compared to 39%). There were more couple households (30%) and more families with children (37%). Over a third of Q2 households (36%) lived alone across younger and midlife age groups, with only 4 per cent in the older age group. Not surprisingly, Q2 households had a higher share within paid employment compared with Q1 households; however, most household income was still based on a single income with only 6.6 per cent of households having dual earning members. Single-earning key workers are over-represented among Q2 households. This employment household composition has remained relatively consistent between 2016 and 2021.

Table 10: (A and B) Demographic (A) and household employment characteristics (B) of PRS households by household income quintile and all households, Australia, 2021

A Socio-demographic characteristics

	Private renter households					All households
	Q1	Q2	Q3	Q4+Q5	Total	
Total No.**	398,000	529,000	525,000	773,000	2,225,000	8,989,000
	%	%	%	%	%	%
Age (years)^						
15–24	10.6	9.7	10.8	6.4	9.0	3.2
25–34	19.0	28.1	34.9	37.0	31.2	15.7
35–44	16.6	22.6	24.1	29.1	24.1	18.8
45–54	14.7	16.9	16.0	17.7	16.6	18.5
55–64	14.4	12.2	9.4	7.9	10.5	17.2
65+	24.6	10.5	4.8	1.8	8.6	26.5
Total %	100.0	100.0	100.0	100.0	100.0	100.0
Household type*						
Younger couple, no children	2.8	7.3	19.2	25.8	15.7	7.7
Midlife couple, no children	1.9	3.1	4.3	4.7	3.7	8.0
Older couple, no children	3.8	3.7	1.8	0.6	2.2	11.1
Couple families with children	6.8	15.4	27.9	35.2	23.7	30.5
Single parent families	20.5	21.3	14.4	7.1	14.6	10.1
Group household/other	4.8	9.2	14.5	15.9	12.0	6.5
Younger person living alone	20.4	23.1	11.7	6.7	14.2	6.9
Midlife person living alone	19.1	13.1	5.6	3.6	9.1	8.2
Older person living alone	19.8	3.7	0.7	0.3	4.7	11.0
Total %	**100**	**100**	**100**	**100**	**100**	**100**
Period of arrival						
Before 2016	25.5	25.9	26.6	28.7	27.0	29.1
2016 or after	7.6	7.2	10.4	12.9	10.0	3.3
Born in Australia (or not stated)	66.8	66.8	63.0	58.4	63.0	67.6
Total %	**100**	**100**	**100**	**100**	**100**	**100**

Table 10 continued: (A and B) Demographic (A) and household employment characteristics (B) of PRS households by household income quintile and all households, Australia, 2021

B Household employment characteristics

	Private renter households					
	Q1	Q2	Q3	Q4+Q5	Total	All h'holds
Total No.**	398,000	529,000	525,000	773,000	2,225,000	8,989,000
	%	%	%	%	%	%
Household employment						
Dual employed	1.1	6.6	31.3	51.4	69.2	31.2
One empld: no unemployed	16.6	42.6	35.8	29.2	15.7	28.0
One empld: with unemployed	0.4	1.50	1.9	1.7	1.2	1.3
Nil empld: not in labour force	69.7	36.0	17.9	7.1	3.8	27.6
Nil empld: with unemployed	4.6	1.7	0.8	0.4	0.2	1.6
All others	7.6	11.5	12.3	10.1	9.9	10.3
Total %	**100**	**100**	**100**	**100**	**100**	**100**
Household key workers						
Dual employed	5.1	12.5	44.9	62.2	80.4	51.3
Single earning not KW	54.4	60.7	39.6	28.4	16.7	34.9
Single earning KW1#	3.1	6.1	7.4	6.2	1.8	5.1
Single earning KW2+	37.4	20.8	8.1	3.2	1.1	8.8
Total %	**100**	**100**	**100**	**100**	**100**	**100**

*Table notes: ^Age of household reference person; *'Younger' is household reference person <45 years; 'midlife' is aged 45–64 years; 'older' is aged 65 years or more; numbers may not sum exactly due to rounding. KW = key worker; #KW1 = key workers with occupations including nurses, teachers, paramedics and police officers. +KW2 = key workers with occupations including sales assistants, café workers, personal carers or aides, cleaners and drivers.*

***The information in this table was derived from the 'Expanded file', different to that from the which the shortage analyses were derived. There is a 3.5 per cent undercount of all Australian households in this file and thus some totals will not match those in the shortage analysis. See Appendix 1 for details.*

Source: Customised ABS matrices based on Australian Census of Population and Housing data, 2021.

6.3 Which lower-income households were in unaffordable private rental housing in 2021?

In Chapter 4, Table 5 showed that while the overall proportion of Q1 households paying *unaffordable* rents increased from 50 per cent in 2016 to 63 per cent by 2021, the share paying severely unaffordable rents fell 8 percentage points to 21 per cent over the five-year period. Q2 households, on the other hand, experienced a drop in those paying unaffordable rents from 32 per cent in 2016 to 25 per cent in 2021 (and severely unaffordable rents from 5% to 2% over the same period).

The types of households paying unaffordable and severely unaffordable rents has remained relatively stable in the intercensal period between 2016 and 2021. Table 11 shows that, in 2021, among the Q1 households paying severely unaffordable rents, there was a disproportionate share of younger households aged 18–24 years (15.2%) and 35–44 years (21.5%); households with children, including one parent (25.1%) and couple parent families (14.1%); group households (10.5%); and recently arrived migrants (15.3%). A similar pattern is evident for Q2 households, with an over-representation of one parent (24%) and couple parent (20.7%) families with children, group households (12.0%) and migrants arriving before 2016 (32%) paying unaffordable rents relative to other household and demographic groups. The comparable table for 2016 is included in Appendix 2, Table A15.

Table 11: Rental affordability by selected characteristics of lower-income PRS households, Australia, 2021

Characteristics	Q1 PRS households				Q2 PRS households		
	Paying afford. rent	Paying unafford. rent	Paying severely unafford. rent	Total	Paying afford. rent	Paying unafford. rent	Total
	%	%	%	%	%	%	%
Total No.**	72,000	251,000	75,000	398,000	391,000	138,000	529,000
Total %	18.0	63.1	18.9	100.0	73.9	26.1	100.0
Age (years)^							
15–24	8.2	9.9	15.2	10.6	9.8	9.5	9.7
25–34	12.4	20.1	21.7	19.0	28.7	26.7	28.1
35–44	10.3	17.0	21.5	16.6	21.6	25.5	22.6
45–54	13.8	14.5	16.2	14.7	16.2	18.8	16.9
55–64	19.0	14.3	10.6	14.4	12.6	11.0	12.2
65+	36.2	24.2	14.7	24.6	11.1	8.6	10.5
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Household type*							
Couple families, no children	5.0	8.6	11.8	8.6	14.0	14.3	14.1
Couple families with children	0.9	6.3	14.1	6.8	13.6	20.7	15.4
Single parent families	7.7	22.7	25.1	20.5	20.4	24.0	21.3
Group household/other	2.0	3.9	10.5	4.8	8.2	12.0	9.2
Younger person living alone	23.1	20.2	18.5	20.4	25.3	17.1	23.1
Midlife person living alone	28.9	18.8	10.7	19.1	14.4	9.3	13.1
Older person living alone	32.4	19.3	9.3	19.8	4.1	2.6	3.7
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Period of arrival							
Before 2016	18.2	25.5	32.6	25.5	23.8	32.0	25.9
2016 or after	3.3	6.6	15.3	7.6	6.9	8.2	7.2
Born in Australia (or NS)	78.5	67.9	52.2	66.8	69.4	59.7	66.8
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Household employment							
Dual employed	0.2	0.8	1.4	0.8	6.4	7.7	6.8
One empld: no unemployed	23.8	30.4	27.1	28.6	60.5	53.0	58.5
One empld: with unemployed	0.2	0.7	0.9	0.7	2.4	2.8	2.5
Nil empld: not in labour force	61.9	51.2	43.4	51.6	16.6	16.7	16.6
Nil empld: with unemployed	8.7	8.8	9.0	8.8	2.5	2.8	2.6
All others	5.1	8.0	18.2	9.6	11.6	17.0	13.1
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**

*Table notes: ^Age of household reference person; *'Younger' is household reference person <45 years; 'midlife' is aged 45–64 years; 'older' is aged 65 years or more; numbers may not sum exactly due to rounding. There is only one category for Q2 households 'paying unaffordable rents', which includes the relatively small percentage paying severely unaffordable rents. **The information in this table was derived from the 'Expanded file', different to that from the which the shortage analyses were derived. There is a 3.5 per cent undercount of all Australian households in this file and thus some totals will not match those in the shortage analysis. See Appendix 1 for details.*

Source: ABS customised matrix derived from Australian Census of Population and Housing data, 2021.

6.4 What is the profile of individual renters in and outside the mainstream private rental sector?

In Chapter 3 it was identified that the share of lower-income households had not increased at the same pace as the growth of moderate- or higher-income renter households. There is some preliminary evidence to support the assertion that the slower growth at the bottom end of the PRS household income distribution stems from lower-income households being 'locked out' of the mainstream rental sector: being unable to afford rents in the mainstream rental sector, such renters are unable to form independent renting households. Research undertaken by Parkinson, James et al. (2018) and Hulse, Parkinson et al. (2018) revealed how the PRS has been fragmenting for population groups, particularly among those with low incomes, according to different formal and informal pathways of access and tenancy management.

This theme was further explored drawing on the Australian Housing Aspirations (AHA) survey, which found that a large share of individuals living within the family home reported paying market rents to their parents (Parkinson, Hulse et al. 2022). A focus on the interrelation between informal and formal markets extends the traditional conception of the PRS from one of a marginal temporary 'board' to a potentially more enduring feature of renting among 'generation rent' (McKee, Moore et al. 2017).

This section expands upon emerging informal–formal rental research by using the ABS SIH to examine individuals: i) occupying an independent or cohabitating mainstream rental arrangement, such as paying rent to private real estate agents and external private landlords; and ii) non-mainstream renting, such as paying rent to families or to an owner-occupier or social renter or subletting, typically considered to be outside the mainstream PRS. Within this broader rental market framework, an individual renter can be renting informally while living in an owner-occupied, social rental, or a 'mainstream' private rental dwelling. Their 'landlord' can be a family member they live with, or a family member who owns the dwelling but resides externally. The 'landlord' can be an unrelated person with whom they cohabitate or pay sublet rent to. The five private rental arrangement types are defined as:

- Mainstream independent: an independent income unit paying rent to a private real estate agent or private landlord.
- Mainstream group cohabitating: an income unit living in a group household paying rent to a real estate agent or landlord.
- Non-mainstream unrelated cohabitating: an income unit paying rent to an unrelated person living with them in owner-occupied, social rental or private rental subletting arrangements.
- Internal family cohabitating: an income unit paying rent to a family member that they live with.
- External family independent/group: an income unit paying rent to a family member who owns a separate dwelling.

Compared to Census data, the SIH provides detailed insights into these more diffuse rental arrangements of individuals and income units *within* a household and reveals potential affordable rental shortages beyond household rental counts. A person-level or income unit analysis can also reveal changes in types of rental arrangements within households over time and the extent to which lower-income individuals, especially single persons, are more likely to be occupying affordable rental arrangements outside of forming their own independent renting household.

One of the changes in living arrangements we expected to find in the survey data was a shift in household composition over time, with younger cohorts remaining in the family home (see Appendix 2, Table A16, Table A17 and Table A18). This analysis revealed that, in 2019–20, those in the 18–24 and 25–29 year age cohorts were more likely than in 2002–03 to be living at home as dependent students (full-time students) or as non-dependent children (or even with relatives or others in a family household). In 2002–03, 57.2 per cent of 18–24 year olds, and 16.7 per cent of 25–29 year olds, lived with a parent. This compares with 64.6 per cent of 18–24 years and 21.4 per cent of 25–29 years in 2019–20. These changes are largely at the expense of more independent types of living arrangements, such as group living or living alone.

While rent paid by non-dependent children[28] is recorded in the SIH, dependent children (up to 25 years if studying full-time) are not asked if they pay rent. In this section we use income units reporting that they pay rent within households as the unit of analysis. This includes the separate income unit of non-dependent children and unrelated persons in the household but excludes dependent or children in full-time study where rental payments cannot be identified. An income unit assumes the pooling of income such as for couples. Unrelated persons and non-dependent children within the household are assigned their own income unit.

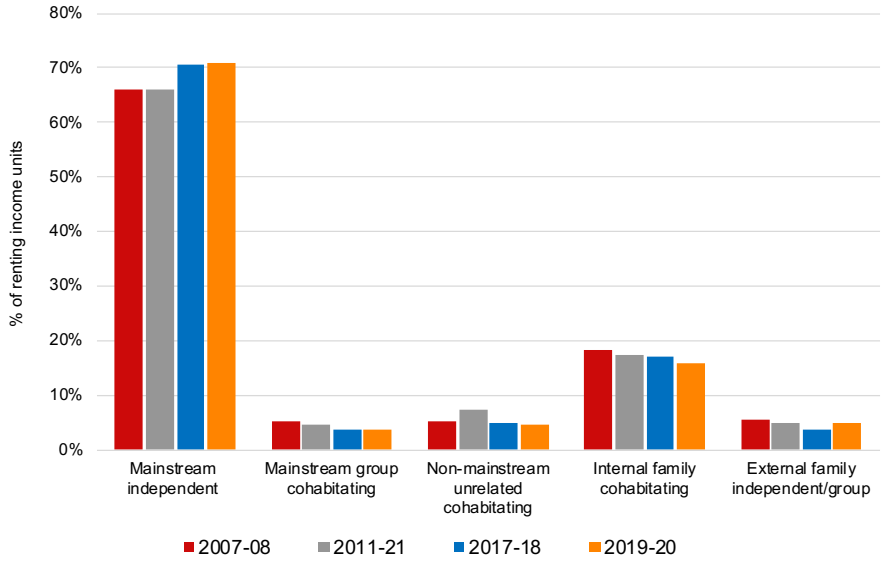
Figure 19 shows the changing distribution of income units across rental arrangements between 2007-08 to 2019-20. Across the total income unit rental population, most growth has occurred in the mainstream rental sector, which is characterised by formal arrangements with either a real estate agent or private, non-related landlord governed by a standard lease agreement. For instance, as shown in Figure 19, by 2019–20:

- Around three-quarters (74.5%) of income unit renters were occupying the mainstream rental sector, predominantly as independent households (71%), with a further 3.6 per cent in shared mainstream group private rentals, either via a real estate or private landlord (typically governed by a standard lease).
- The remaining one-quarter were paying rent to family members or living in a cohabitating or sublet arrangement paying rent to an unrelated person either in an owner-occupied or other type of rental dwelling.

This trend is broadly consistent with overall dwelling growth in the PRS at the higher-income end of the market and the changing profile of renters during that period, including increased migration and the tendency for renters to remain in the PRS beyond other life transitions, such as starting a family where an independent dwelling is typically preferred (Stone, Rowley et al. 2020).

28 Non-dependent children are all those aged 15 years and over who do not have a spouse or offspring of their own in the household, have a parent in the household and are not full-time students aged 15–24 years. Dependent children are persons aged 15–24 years who are full-time students, have a parent in the household and do not have a partner or child of their own in the household (and all persons aged under 15 years).

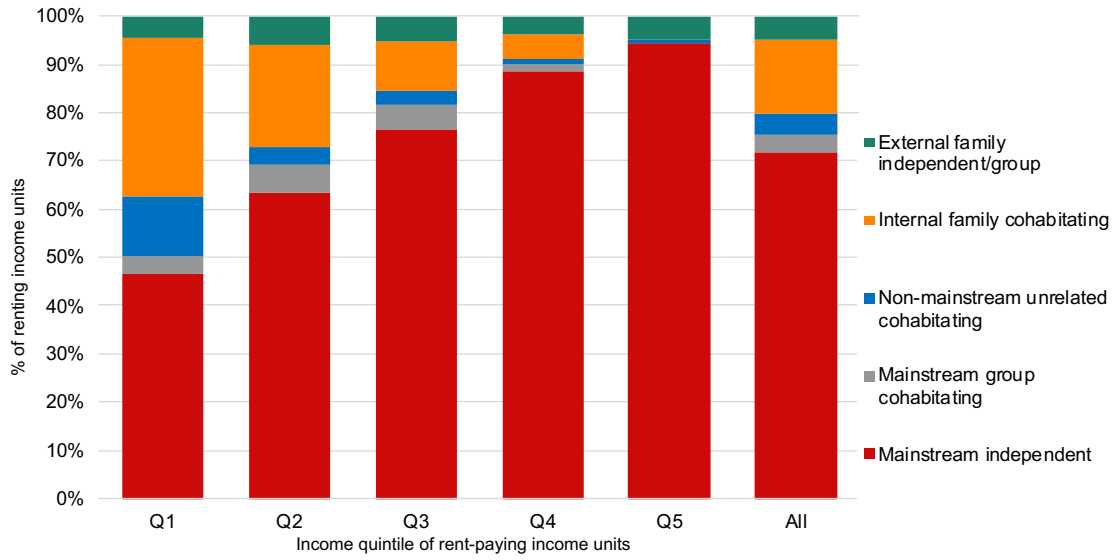
Figure 19: Figure 19: Mainstream and non-mainstream private rental arrangements, all renting income units, 2007–08 to 2019–20



Source: ABS Survey of Income and Housing, basic unit record file, multiple years, 2007–08 to 2019–20.

- Not all groups are entering or remaining in the mainstream rental sector equally, suggesting a continued trend towards fragmentation within different rental segments or cohort groups that we would expect to be experiencing affordability constraints over time. These include lower-income single, young, mid- and later-life Australians (see Appendix 2, Table A19 and Table A20 for detailed profiles of non-mainstream renters).
- The prevalence of independent mainstream renting increases with income, whereby nearly all higher earning income units rent independently in the mainstream sector. In contrast, and as shown in Figure 20, in 2019–20 around half (49.7%) of Q1 income units paid rent outside the independent or group mainstream sector, either to another family member or with/to an unrelated cohabitating person. The most common form of non-mainstream renting among Q1 income units is paying rent to family members that the renter lives with. Just under a third of lower-income Q2 (30.8%) units were paying rent outside the mainstream sector.

Figure 20: Mainstream and non-mainstream private rental arrangements by income quintiles, all renting income units, 2019–20



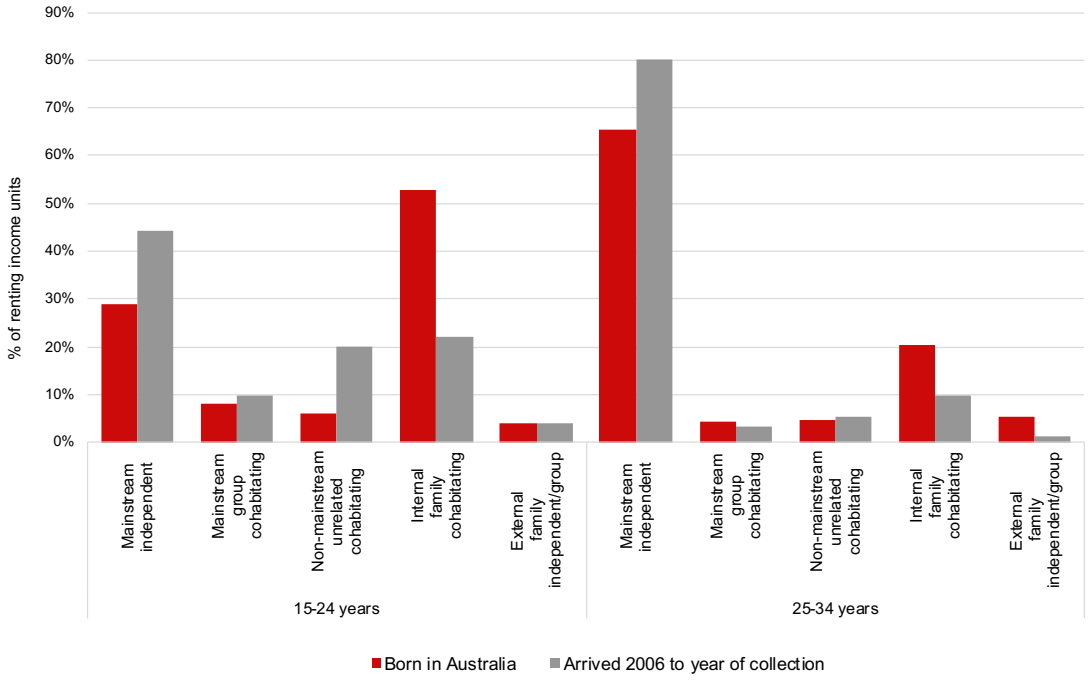
Source: ABS Survey of Income and Housing, basic unit record file, 2019–20.

The following descriptive demographics are tabulated in Table A19 and Table A20 in Appendix 2.

- In terms of age, the largest share of all income unit renters was aged between 25 and 44 years (57.3%) and, as a group, they were over-represented in the mainstream rental sector. Among those aged 35–44 years, 85 per cent were renting independently in a mainstream rental, and 71 per cent of those aged 25–34 years rented independently. This compares to a third (33.1%) of people aged 15–24 years renting independently, with the largest share of that younger cohort paying rent to a family member they live with (44.5%). Renting independently in the mainstream rental sector declines in later life, (73% of those aged over 65 years), with subsequent increases in the share paying rent to a family member they live with (12%) or living in a family owned external dwelling (12%). This older cohort comprised only 7.8 per cent of the renting income units in 2019-20.
- Seventy-three per cent of employed income units rented independently in the mainstream sector compared with 57 per cent of unemployed income units and 69 per cent of those not in the labour force. Females were more likely to rent independently in the mainstream sector compared with males (75% versus 67%); and married (88.6%) compared with not married (48.8%). Those born outside of Australia compared with Australian-born, those not-studying compared to studying, and those not in crowded housing were more likely to reside in independent mainstream rental.
- Individual renters that are Australian born (19.8%), aged 15–24 years (45%), male (18%) and unemployed (30%) are more likely to be paying rent to a family member they live with. People paying rent to a family member they live with (15%) or cohabitating (19%) are more than twice as likely to be living in crowded conditions requiring one or more additional bedrooms based on the Canadian occupancy standard compared with people renting independently in the mainstream (6.5%). More than half (58%) of people paying rent to a family member they live with were occupying a purchased or owned dwelling. A further 41 per cent were paying rent to a family member in a private rented dwelling.

The type of non-mainstream rental occupied by young adults is also strongly shaped by country of birth. Figure 21 compares the type of rental arrangement for young people aged 15–34 years who were born in Australia versus those who were born overseas and arrived in the latest period in the collection (year of arrival 2006). The chart shows that young people born in Australia are more likely to be paying rent to a family member they live with, particularly those aged 15–24 years (52.8%). Young people aged 15–24 years born overseas are more likely to be renting independently compared with their Australian-born counterparts; however, significant shares also pay rent to an unrelated person (20.1%) and live within a mainstream group household (9.6%).

Figure 21: Mainstream and non-mainstream private rental arrangements by Australian born and not Australian born, year of arrival, renting income units aged 15-34 years, 2019–20

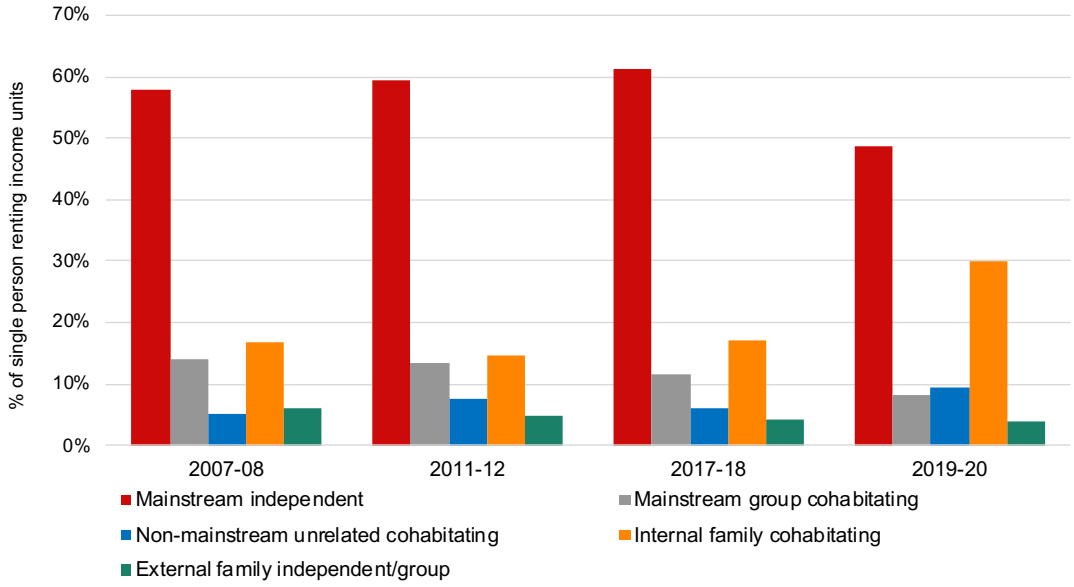


Source: ABS Survey of Income and Housing, basic unit record file, 2019–20.

- Single persons and single-headed households have, over time, been most vulnerable to being 'locked out' of the independent mainstream rental sector and, thus, to experiences of homelessness and housing insecurity. Individuals reliant on a single income may be less able to absorb unexpected changes or crises without a second income to fall back on. As shown in Figure 22, the share of single persons or single-headed households counted as renting independently within the mainstream fell sharply between 2017–18 (61.2%) and 2019–20 (48.8%), with subsequent increases in paying rent to families and unrelated persons. It is unclear to what extent the COVID-19 pandemic impacted occupancy arrangements of single persons during the time of data collection;[29] however, it is likely that some of these changes in household formation, including the large number of children moving back to live in the parental or family home, took place before dwelling rents fell and rental relief packages were introduced. This move would have enabled many low-income single renters to avoid the more adverse impact of losses to individual incomes and to benefit from the support of family during social distancing restrictions.

29 The 2019–20 SIH collected information from a sample of 15,011 households over the period July 2019–June 2020.

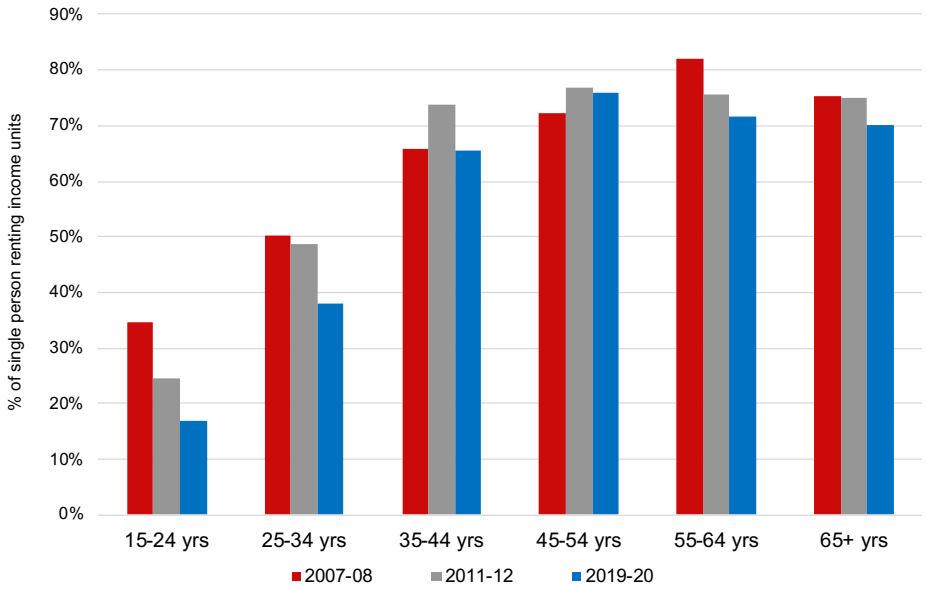
Figure 22: Mainstream and non-mainstream private rental arrangements, *single* person renting income units, 2007–08 to 2019–20



Source: ABS Survey of Income and Housing, basic unit record file, multiple years, 2007–08 to 2019–20.

While single person occupancy within the independent mainstream rental sector has declined across all age groups (Figure 23), it is most notable among young adults aged 15–34 years and among single persons approaching retirement age of 55–64 years.

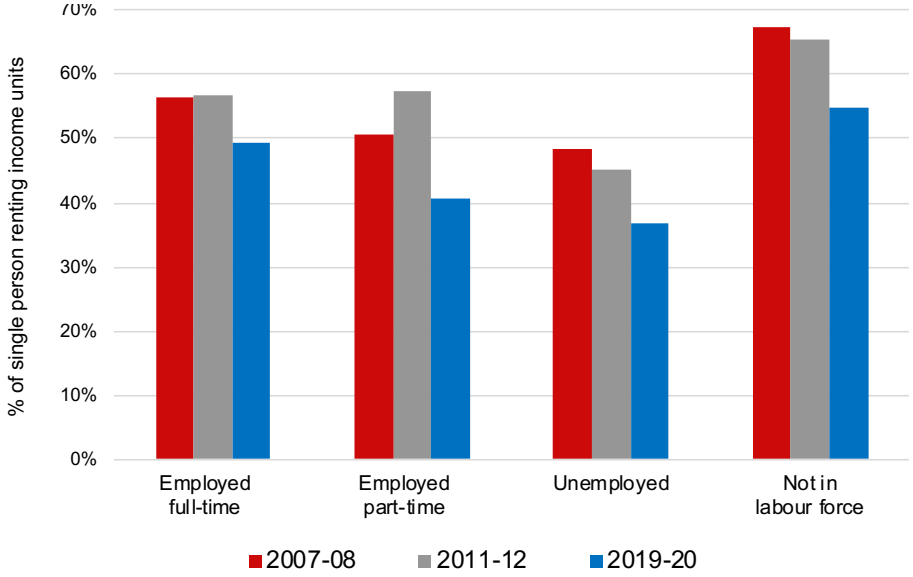
Figure 23: Mainstream independent renting by age groups, single person renting income units, 2007–08 to 2019–20



Source: ABS Survey of Income and Housing, basic unit record file, multiple years, 2007–08 to 2019–20.

The decline of single-headed households renting in the mainstream rental sector is also apparent for all labour market groups, whether they be working full-time, part-time, unemployed or out of the labour force. However, the greatest fall over time, as shown in Figure 24, is among people working part-time, many of whom may potentially be underemployed, and among people experiencing unemployment or who are not in the labour force.

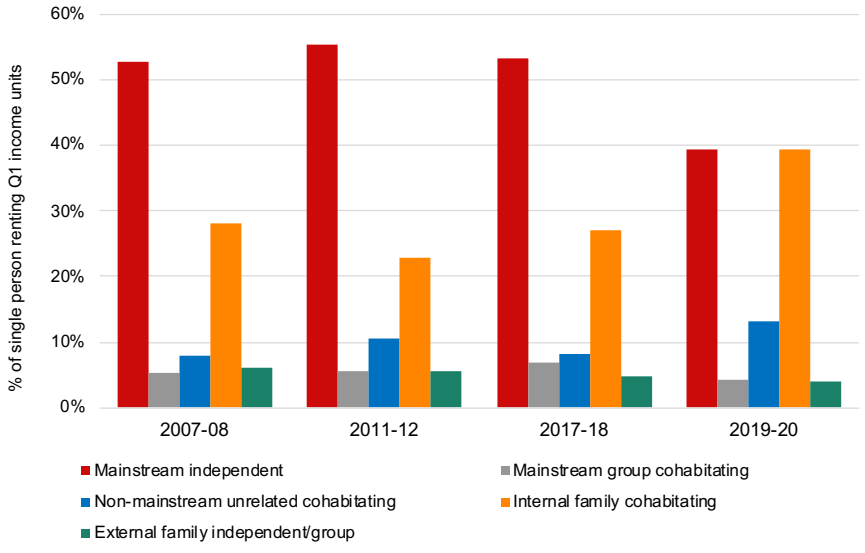
Figure 24: Mainstream independent renting by labour market status, single person renting income units, 2007–08 to 2019–20



Source: ABS Survey of Income and Housing, basic unit record file, multiple years, 2007–08 to 2019–20.

Exploring the affordability side in more detail, Figure 25 reveals a sharp drop in independent mainstream renting among Q1 individuals, from 53.3 per cent in 2017–18 to 39.4 per cent in 2019–20, with most moving into a family or cohabitating informally with an unrelated person

Figure 25: Mainstream and non-mainstream private rental arrangements, single person renting Q1 income units, 2007–08 to 2019–20



Source: ABS Survey of Income and Housing, basic unit record file, multiple years, 2007–08 to 2019–20.

While COVID-19 had an undeniable impact on single rental household formation, the declining trend in independent mainstream renting among single-headed households was well established prior to 2020. The uneven impact among different single cohorts may well indicate a growing reliance or preference for more affordable rental options that can accommodate the income insecurity associated with life transitions such school-to-work, pre-retirement or changing household formation preferences. Nonetheless, the lack of affordable and suitable rental options when living alone is likely to be implicated in these complex housing dynamics over time, contributing to a more enduring structural change of who can afford to rent independently without a second income to rely on.

What difference does paying rent across different segments of the private rental sector make when living on a low income?

- Table 12 compares the mean (median) incomes and rents for single-person income units paying rent across mainstream and non-mainstream rental arrangements. As shown, the closer the amount of income is to the bottom of the Q1 threshold the more likely an individual is to be renting outside of the independent mainstream rental sector. This suggests that these renters are likely to be making an affordability trade-off when provided with the option of paying significantly lower rents.
- The average difference in rent paid for a 'room' within an internal family dwelling ($118.40) compared with cohabitating with an unrelated person ($174.40) is slightly less. When given the choice, paying rent to families appears to be a more affordable option. The average weekly rent of $321.30 for an independent mainstream rental dwelling typically corresponds with a higher average income of $1,252 – an amount that would tip those at the lower end of the Q1 threshold, such as people in receipt of JobSeeker or Austudy/Abstudy, or in casual and/or part-time entry-level or minimum wage employment, into severe affordability stress.

Table 12: Mainstream and non-mainstream private rental arrangements, mean (median) income and rent: *single*-person renting income units, 2019–20

Rental arrangement		Income $	Rent $
Mainstream independent	Mean	1,252.4	321.3
	Median	1,039.3	310.0
Mainstream group cohabitating	Mean	1,233.0	209.8
	Median	1,157.0	200.0
Non-mainstream unrelated cohabitating	Mean	865.0	174.4
	Median	572.0	150.0
Internal family cohabitating	Mean	813.7	118.4
	Median	700.0	100.0
External family independent/group	Mean	1,014.7	234.7
	Median	912.0	225.0
All renters	Mean	1,079.9	234.2
	Median	900.0	200.0

Source: ABS Survey of Income and Housing, basic unit record file, 2019–20.

income, Q1 renter income units that rent independently in mainstream dwellings are required to take on large rental payments relative to their income. As shown in Table 13, only 20.5 per cent of all income units and 22.8 per cent of Q1 single persons renting independently in the mainstream sector were paying affordable rent. This compares to around 68 per cent paying rent to families. Around half of Q1 renters are still paying unaffordable rents when cohabitating with others either informally or in a mainstream shared rental arrangement.

Table 13: Percentage of mainstream and non-mainstream private renters paying affordable rent: *single* person, low-income renting income units, 2019–20

Paying affordable rent	Q1	Single Q1	Single Q2
Mainstream independent	20.5%	22.8%	49.2%
Mainstream group cohabitating	52.0%	52.0%	85.9%
Non-mainstream unrelated cohabitating	46.5%	46.5%	83.3%
Internal family cohabitating	67.6%	67.6%	95.0%
External family independent/group	51.4%	46.3%	71.4%
Total	43.2%	45.3%	70.0%

Source: ABS Survey of Income and Housing, basic unit record file, 2019–20.

6.5 Policy development implications

Low-income renting households are disproportionately comprised of single person or single-earning households at both ends of the life course (both younger and older compared with other households) and rely on either statutory or part-time earnings. The profile of non-mainstream or informal renters is also typically young, single, poor and less secure in their employment, suggesting significant affordability constraints to occupying the independent mainstream rental sector. The marginalisation of the lowest-income individuals and households in the private rental sector appears to have increased over time.

The findings here suggest that the full extent of the affordability crisis experienced by the lowest-income renters is likely to be under-enumerated at the household level. Single people or single-headed households, particularly those more marginally attached to labour markets, with lower-incomes across all age groups, have experienced the greatest 'retreat' from the independent mainstream rental sector. This group most closely resembles the profile of lower-income households that have been declining over time as a proportional share of all rented dwellings.

The informal rental sector is relatively large and is performing a significant role in housing the lowest-income renters. Many living within these informal arrangements still pay unaffordable rents despite the potential discounts or cost trade-offs against mainstream rental. The notable decline of single renters in the mainstream rental sector indicates the increased necessity of a dual income to not only access home ownership but also to afford to pay rent. This trend also reflects a potential lack of suitable stock affordable for single persons who may not want to occupy a single bedroom dwelling as well as the limited affordable options for single-headed families requiring more than one room. The extent to which this trend continues over time needs monitoring.

While general policy settings must work for the increasingly diverse group of households in the PRS, additional and targeted policy development are not only required to address the large numbers of Q1, and increasingly Q2, households paying rents in excess of 30 per cent of household income, but also those who are unable to gain entry or form their own rental household due to affordability constraints. This includes responding to issues of crowding among informal rental households.

7. Policy development options

This report provides a unique opportunity to understand the population-wide impact of the COVID-19 pandemic crisis and policy interventions on the supply of affordable private rental dwellings at the time of 2021 Australian Census. Drawing on the same methodology used since 1996 enables the disruption of longer-term structural trends of the past two decades to be understood in the context of profoundly divergent market dynamics and policy settings. What we learn from this long-term analysis is that it took nothing less than a global health and economic crisis to temporarily increase the supply of affordable homes to levels needed for Q2 households. By contrast, the crisis had limited impact on the delivery of affordable housing for households with the lowest (Q1) incomes.

Private rental markets have quickly rebounded to an even more dire situation for lower-income renters only two years on from the 2021 Census, reinforcing the sentiment from Lennartz and Ronald (2016) that changing investment practices and wealth building strategies associated with financialisation means that longer-term affordability dynamics will be unlikely to revert to some former stasis, but rather reflect a more enduring systemic transformation in the equality of housing opportunities. In normal times, without substantial policy interventions like those used during COVID-19, lower-income households cannot compete with renters that have greater capacity to choose rentals across the price spectrum. And for the lowest-income renters, there is no affordable supply to choose from.

There has been policy development in this area. The 2023 federal budget increased the rate of CRA paid to those on statutory incomes and family tax benefits to address 'cost of living' pressures; however, it appears demand-based measures are not a central plank of current policy thinking. Since our last report, there have been significant policy gains to improve the coordination of responses across different levels of government focused on directly increasing affordable housing supply. The National Housing Accord (Australian Government 2022), for example, offers *'an initial, aspirational national target of delivering a total of one million new, well located homes over 5 years from 2024'*, and attempts to coordinate efforts to improve affordable supply with commitments from the Australian and state/territory governments and undertakings from the Australian Local Government Association and representatives from the superannuation industry, and the residential development, building and construction industry (Australian Government 2022: 1).

Additional national initiatives via the National Housing and Finance Investment Corporation (NHFIC), established in 2018, aim to provide lower-cost debt finance to not-for-profit housing providers and more institutional investment in affordable rental housing, particularly 'build-to-rent'. The proposed Housing Australia Future Fund will provide financing of A$10 billion, with the returns to be invested in social and affordable housing. The Australian Government estimates that the fund will generate $500 million a year to go to new social housing (20,000 units) and 10,000 affordable homes for key workers. An additional A$2 billion *Social Housing Accelerator* payment to state and territory governments announced in June 2023 by the Australian Government is expected to deliver thousands of additional social housing dwellings across Australia, with all funding to be committed by states and territories within two years ending 30 June 2025.

The Australian Government has also proposed a 10-year National Housing and Homelessness Plan that would give more certainty to those providing social housing and homelessness services. On the planning front, the (resurrected) National Housing Supply and Affordability Council, with bipartisan support, is intended to monitor and advise on measures to improve housing supply, although many of the interventions are a matter for the states/territories under Australia's federal system of governance. Similarly, there have been calls for a national agenda to reform regulation of residential tenancies (Martin, Hulse et al. 2022), notwithstanding that this is primarily a state/territory matter.

National Cabinet met in August 2023 to consider the 'housing crisis' (both for home purchasers and renters), focusing on the lack of affordable supply and state-based regulation of planning and residential tenancies. Key measures announced included increasing by 200,000 the targets for new homes to 1.2 million over the five years from 2024; A$3 billion for the New Home Bonus to incentivise states/territories who achieve more than their new home targets in this period; and a National Planning Reform Blueprint to improve planning, zoning and land releases to generate new housing supply. The only specific part of the agreement for renters was a Better Deal for Renters, which covers harmonisation of state/territory residential tenancies legislation in three areas: removal of 'no grounds' evictions, rent increases at a maximum once every 12 months and minimum standards (Prime Minister of Australia 2023). The idea of rent caps was canvassed prior to the meeting, and in individual states/territories, but was not part of the package, with most jurisdictions opposing this idea on the grounds that it would reduce not increase supply.[30]

While the increased focus on affordable rental supply is welcome, current initiatives rely on market processes, which this series of projects has identified will not extend far enough to increase the supply needed for households on very low (Q1) incomes (of which there were 425,000 in 2021). It is difficult to see how the private market will bring properties onto the market that are affordable for Q1 households and, importantly, keep such properties affordable over time. To have any substantial impact, there is an immediate and urgent need for rental housing that is affordable and available (not occupied by higher-income groups) for Q1 households: that is, renting for up to $225 per week ($2021). Only some form of social housing can, and will, do this.

There is also an urgent need for supply solutions to accommodate for the diversity of single Q1 (and some Q2) households across the life course, notably younger households who are also affected by increased precarity in the labour market, and families with children (mainly sole parent families), and those in pre-retirement and retirement stages of life. Most will not be able to afford any type of private rental on their own and face the highest risk of homelessness.

While general policy settings must work for the increasingly diverse group of households in the PRS, additional and targeted policy development are not only required to address the large numbers of Q1, and increasingly Q2, households paying rents in excess of 30 per cent of household income, but also those who are unable to gain entry or form their own rental household due to affordability constraints. This includes responding to issues of crowding among informal rental households.

For Q2 households, a key issue is not only supply but also the availability of affordable stock that is rented by higher-income households who do not want to pay excessive rents; such people want the opportunity to save or redirect wealth building through other channels. Policy development for Q2 private renter households could include a broader range of measures, including increased rates of CRA and new affordable housing models, such as those financed with funds raised through the NHFIC and build-to-rent properties where these can be brought to market at rents affordable to Q2 households. It is also important that policy development focuses on improving the supply of affordable housing near to jobs and for key workers in inner- and middle-suburban and regional locations, especially Sydney.

30 With the exception of the ACT, which already has a system for regulating rent increases.

The lack of supply of private rental dwellings (including those occupied by short-stay renters) in regional areas as well as smaller urban centres of Tasmania, northern NSW and Queensland must be urgently addressed through targeted investment in affordable rental housing, such as revised and improved NRAS-type models. Further regulation to restrict the times and use of short-stay rentals is needed alongside promotion of the use and redevelopment of purpose-built tourist accommodation that does not reduce residential stock.

The value of this series of projects has been in identifying long-term structural change in the rental sector and the ever-worsening situation facing lower-income households who pay rents that they cannot afford or are squeezed out of the formal rental sector into more informal arrangements. This long-term analysis of affordable rental supply reveals the cumulative impact of market failure: the very essence of relying on a private market to support the essential and basic need for housing for an ever-growing share of the population, including people in later life, is ultimately socially and economically unsustainable. The cumulative evidence from this series of projects supports this view and others have reached the same conclusion, with one recent study concluding that *'the private rental market is broken'* (Rowley, Brierty et al. 2023: 80). In the longer term, the market will not fix widening intergenerational inequities that prevent long-term renting households from exiting the rental market and attaining home ownership at one end, and stop many of the lowest-income individuals from being able enter the rental market at the other.

Addressing this population-wide, systemic mismatch requires more substantial institutional reform than a series of incremental changes (i.e., CRA, build-to-rent initiatives, interest rates changes, short-term rent freezes, measures to manage short-term lets, and adding to supply through federal/state agreements) will be able to achieve. Although these remain much needed and important interim mechanisms for alleviating affordability pressures, we argue that they are insufficient to tackle the scale of the institutional challenge ahead, including addressing the way in which housing is taxed and incentivised through the financialisation of housing as an asset class.

In meeting the needs of subsequent generations, transitions policy thinking to effect long-term change in the housing system is required, akin to responding to the challenges of climate change. To achieve long-term and transformative change, it is important to set clear goals for the private rental sector as part of the broader housing system for the longer term. What would a good housing system look like and what is the role of the private rental sector within that system? What transition pathways are required to achieve these goals? What targets could be set to achieve these changes within specified time frames? What governance arrangements would be most effective in achieving these targets (across various portfolios and levels of government)?

7.1 Key questions answered by the research

By continuing the data series analysis that commenced in 1996, this research seeks to understand long-term changes in the supply of, and demand for, affordable private rental dwellings among lower-income households across Australian cities and regions. It addresses the broader policy question: to what extent can the private rental sector affordably accommodate lower-income (Q1 and Q2) households? In this latest report, the analysis extends to understanding the links between changing household formation and mainstream PRS access among lower-income households (Q1 and Q2) and individuals through an in-depth, temporal analysis of the ABS SIH. Table 14 summarises the key findings of this report.

Table 14: Summary of key findings by project research question

Research question 1
How has the supply of affordable and available private rental housing changed for Q1 and Q2 households?
Key findings
• National PRS growth was concentrated in dwellings renting from around $300–$530 per week ($2021), continuing a trend first established in 2011 as a major change, and continuing a decade later, reinforcing the structural shift to a market concentration of dwellings renting at mid to higher levels. • Evident again in 2021 were the very low levels of supply of affordable PRS dwellings for Q1 households that have been documented from 2006 to 2016. • Between 2016 and 2021, there was a substantial increase in stock affordable to Q2 (and above) households, concentrated in metropolitan areas, and with the growth likely influenced by market responses to the COVID-19 pandemic. • Nationally, in 2021, Q1 PRS households faced an outright shortage of 255,000 affordable dwellings (up from 212,000 in 2016); this outright shortage increased to 348,000 dwellings that were affordable and available for Q1 households once utilisation of the stock by higher-income households (Q2 and above) was factored in. • In 2021, nationally, 82 per cent of Q1 PRS households paid unaffordable rents. Comparable rates are documented for Q1 households nationally, and at 90 per cent in metropolitan areas, since 2006. • Due to an unusual rise between 2016 and 2021 in PRS stock affordable for Q2 households, a very large surplus of 787,000 affordable dwellings was recorded for Q2 renter households nationally in 2021; however, even a surplus of this size became a shortage of 152,000 affordable and available dwellings once occupation of the affordable stock by higher (and some very low) income households was factored in. • In 2021, 27 per cent of Q2 renter households nationally were paying unaffordable rents (36% in metropolitan areas), an improvement on 2016 rates (36% and 46%, respectively).
Research question 2
What are the characteristics of Q1 and Q2 households living in affordable and unaffordable private rental housing in 2021 and how do they compare with 2016?
Key findings
• Lower-income renting households are disproportionately comprised of single person households at both ends of the life course (i.e. younger and older compared with other households) and rely on either statutory or part-time earnings. • In 2021, Q1 private renter households were predominantly single persons (59%) while a quarter were aged 65 years and over. • Q1 younger households aged 15–24 years (15.2%) and 35–44 years (21.5%) with children, including one- (25.1%) and couple parent families (14.1%), group households (10.5%) and recently arrived migrants (15.3%), were most likely to be paying severely unaffordable rents. • Q2 private rental households include a greater proportion of prime working aged (25–54 years), couple households (37%) and more singles/couples with children (30%). Among Q2 households, one parent (24%) and couple parent (20.7%) families with children, group households (12.0%) and migrants arriving before 2016 (32%) were most likely to be paying unaffordable rents.

Research question 3

To what extent are lower-income individuals (Q1 and Q2) not accessing the mainstream PRS? Which groups are most impacted?

Key findings

- Based on the SIH, in 2019–20, around half (49.7%) of Q1 individual income units paid rent outside the independent or group mainstream sector, either to another family member or with/to an unrelated cohabitating person. Around half of Q1 income units still paid unaffordable rents when cohabitating with others either informally or in a mainstream shared rental arrangement.
- The profile of non-mainstream or informal renters is also typically younger, single, poorer and less secure in their employment, suggesting significant affordability constraints to occupying the independent mainstream rental sector. Individual renters that are Australian born (19.8%), aged 15–24 years (45%), male (18%) and unemployed (30%) are more likely to be paying rent to a family member they live with.
- People paying rent to a family member they live with (15%) or cohabitating (19%) are more than twice as likely to be living in crowded conditions requiring one or more additional bedrooms based on the Canadian occupancy standard compared with people renting independently in the mainstream (6.5%).
- Single person occupancy within independent mainstream rental sector has declined across all age groups between 2007–08 and 2019–20, but especially among those aged 15–34 years and 55–64 years. The share of single persons who work part-time, who are unemployed or who are not in the labour force has declined in the mainstream rental sector. Only 20 per cent of all Q1 income units and 22 per cent of Q1 single persons renting independently in the mainstream sector were paying affordable rent compared to around 68 per cent paying rent to families.

7.2 Final remarks

The problem of insufficient supply of affordable rental housing for lower-income households has been many years in the making. In the Foreword to this report, we cited the conclusions of the first study in this series published in 2001. Covering the period 1986–96, it highlighted the need to protect existing low-rent stock, increase that stock and ensure that it was available to lower-income households (Wulff and Yates 2001: Executive summary). Subsequent reports over the following 20 years have shown that the situation has been getting worse.

Continuing to monitor the long-term supply of affordable rental across the whole population at a point in time is vital to understanding long-term structural change and how this interacts with economic, health and social disruptions captured on Census night. This series has covered the changes that followed the global financial crisis and the more recent COVID-19 pandemic, focusing on policy responses impacting affordable rental supply.

Over the long-run, and through crisis periods, this series has shown how the rental sector, as the most flexible part of the housing system, is relied upon to 'absorb the shocks' at any given time and, somehow, with minimal design and intervention, to revert back and continue to respond to the growing diversity of needs and interests among tenants and investors. Following the recovery from each crisis, the sector has deteriorated, not improved, for lower-income households.

In the decade 2011–21, the rate of growth of private rental households outpaced that of purchasers and we can expect this to continue. This structural shift clearly signals:

1. that the extent of the broader affordability crisis is reverberating across the whole housing system
2. that the pillars of welfare that rely on the security of home ownership cannot be shifted to the rental sector.

The important question to consider next is this: how long can something that was conceived as a transitory and flexible sector of the housing system – something for people on their way to something else – provide the necessary conditions, security and affordability for the growing numbers of people across all demographics, cities and regions that now rely on it as their permanent home?

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ABS – see Australian Bureau of Statistics

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Appendix 1: Additional details on methodology and data file structures

This appendix provides further information about the structure of the Census files analysed in the research. This methodology is consistent with that used in the previous project (Hulse, Reynolds et al. 2019a: Appendix 1), with the overall approach being consistent with all projects in the series. The documentation here is largely taken from the previous report but adjusted to align with the different research questions for 2021 and the inclusion of further detail as required. The separate documentation of the imputation approach undertaken by the ABS included below was updated in 2022 by the ABS for this project.

The 2021 Census data for this project were obtained in five separate files, all used to address RQs 1 and 2, with RQ3 addressed with ABS SIH data files as described in Chapter 1. The following is a summary of these customised files including the results that were derived from each:

- **Control file (all households):** shortage results at the national, metro/non-metro and capital city scales are derived from this file. This file includes only three variables: household income quintile, tenure/rent category and 16 spatial units (capital city and rest of state balances only). This reduction in variables and spatial units (compared to the 'standard' expanded file used in this series), significantly reduced the number of small cells in the resulting data file and, subsequently, also significantly reduced the impact of the removal of the additivity process (see Hulse, Reynolds et al. 2019a: 92 for detailed information concerning this issue).
- **Expanded file (all households):** used for the socio-demographic analysis of Q1 and Q2 private renter households. There is a 3.5 per cent undercount of all Australian households in this file compared with the control file (due to the additivity issue described in Hulse, Reynolds et al. 2019a, Appendix 1). The variables in the expanded file include: household tenure (nine categories, including five private rental categories by affordable weekly rent segment); gross weekly household income quintiles (five categories, see Table A2 for dollar ranges for the income quintiles and corresponding affordable private rent categories for 1986–2021); household/family type by number of persons usually resident (10 categories); age of household reference person (six categories); dwelling structure by number of bedrooms (11 categories); number of employed persons in household (three categories); and year of arrival of overseas born, household reference person (three categories). There are only 20 spatial units in this file due to the expanded number of socio-demographic variables and categories.
- **Summary file (PRS households only):** includes the 12 household income and corresponding affordable rent segments of only PRS households, along with cut-points/categories for the 2021 household income quintiles and corresponding affordable rent categories (a total of 16 income/rent categories). There are 88 spatial units in this file, enabling analyses of real rents and incomes, and the 2021 shortage analyses at the sub-city and regional centre scales (the latter based on quintiles). Table A1 lists the dollar ranges of the 12 weekly gross household income and 12 weekly rent segments for the Census years (1996, 2001, 2006, 2011, 2016 and 2021) used in this (and previous) reports.

- **Labour force status of households:** partners in couple and lone parents in one family households, and lone persons across 12 expanded categories to reflect a jobs-rich to jobs-poor continuum. See Hulse, Reynolds et al. (2019a: 94) for detailed information about the conceptual basis of this file. Variables for 88 spatial units include household tenure (nine categories, including five private rental categories by affordable weekly rent segment); gross weekly household income quintiles (five categories); age of household reference person (three categories).
- **Key worker status of households:** partners in couple and lone parents in one family households, and lone persons across 13 expanded categories by individuals within households employed in two definitions of key worker: KW1 (mainly public sector essential occupations) and KW2 (other essential city support services). See Hulse, Reynolds et al. (2019a: 94) for detailed information about the conceptual basis for this file. Variables for 88 spatial units include household tenure (nine categories, including five private rental categories by affordable weekly rent segment); gross weekly household income quintiles (five categories); age of household reference person (three categories).

Table A1: Nominal (gross) weekly household income categories and nominal weekly dwelling private rent categories, 1996–2021

		$1996 per week	$2001 per week	$2006 per week	$2011 per week	$2016 per week	$2021 per week
Weekly household income segment	1	$0–$199	$0–$222	$0–$256	$0–$307	$0–$324	$0–$354
	2	$200–$299	$223–$334	$257–$385	$308–$462	$325–$487	$355–$533
	3	$300–$399	$335–$446	$386–$514	$463–$617	$488–$650	$534–$711
	4	$400–$499	$447–$557	$515–$642	$618–$770	$651–$812	$712–$888
	5	$500–$599	$558–$669	$643–$771	$771–$925	$813–$975	$889–$1,067
	6	$600–$699	$670–$781	$772–$900	$926–$1,074*	$976–$1,138	$1,068–$1,245
	7	$700–$799	$782–$892	$901–$1,028	$1,075–$1,234	$1,139–$1,300	$1,246–$1,422
	8	$800–$999	$893–$1,116	$1,029–$1,287	$1,235–$1,544	$1,301–$1,627	$1,423–$1,780
	9	$1,000–$1,199	$1,117–$1,339	$1,288–$1,544	$1,545–$1,853	$1,628–$1,952	$1,781–$2,135
	10	$1,200–$1,499	$1,340–$1,674	$1,545–$1,930	$1,854–$2,316	$1,953–$2,440	$2,136–$2,669
	11	$1,500–$1,999	$1,675–$2,233	$1,931–$2,575	$2,317–$3,090	$2,441–$3,255	$2,670–$3,561
	12	$2,000+	$2,234+	$2,576+	$3,091+	$3,256+	$3,562 +
Weekly private rent segment	1	$1–$60	$1–$67	$1–$77	$1–$92	$1–$97	$1–$106
	2	$61–$90	$68–$100	$78–$115	$93–$139	$98–$146	$107–$160
	3	$91–$120	$101–$134	$116–$155	$140–$185	$147–$195	$161–$213
	4	$121–$150	$135–$167	$156–$192	$186–$231	$196–$244	$214–$266
	5	$151–$180	$168–$201	$193–$232	$232–$278	$245–$293	$267–$320
	6	$181–$210	$202–$234	$233–$270	$279–$322	$294–$341	$321–$374
	7	$211–$240	$235–$268	$271–$309	$323–$370	$342–$390	$375–$427
	8	$241–$300	$269–$335	$310–$386	$371–$463	$391–$488	$428–$534
	9	$301–$360	$336–$402	$387–$464	$464–$556	$489–$586	$535–$641
	10	$361–$450	$403–$502	$465–$579	$557–$695	$587–$732	$642–$801
	11	$451–$600	$503–$670	$580–$773	$696–$927	$733–$977	$802–$1,068
	12	$601+	$671+	$774+	$928+	$978+	$1,069+

**The top of the sixth 2011 household income category ($1,074) is slightly less than the CPI-adjusted value ($1,080) to correspond with the nationwide Q2 value. The upper values of the weekly private rent segments correspond with 30 per cent of the upper boundary of the gross household income segments.*

Source: Categories defined by the authors, initially for the 2001-based project (including 1996 values), with the household income segments subsequently increased by the ABS All groups CPI for each Census year.

Table A2: Gross unequivalised household income quintiles/categories and corresponding affordable private rent categories for all projects, 1986–2021

		Gross household income segment		Affordable private rent segment	
		Weekly	Annual		Weekly
$2021	Quintile 1 (Q1)	$0–$750	$39,000 or less	Rent 1 (R1)	$1–$225
	Quintile 2 (Q2)	$750–$1,382	$39,001–$71,864	Rent 2 (R2)	$226–$415
	Quintile 3 (Q3)	$1,383–$2,232	$71,865–$118,664	Rent 3 (R3)	$416–$670
	Quintile 4 (Q4)	$2,233–$3,332	$118,665–$173,264	Rent 4 (R4)	$671–$1,000
	Quintile 5 (Q5)	$3,333 & above	$173,265 & above	Rent 5 (R5)	$1,001 & above
$2016	Quintile 1 (Q1)	$0–$673	$34,996 or less	Rent 1 (R1)	$1–$202
	Quintile 2 (Q2)	$674–$1,182	$34,997–$61,464	Rent 2 (R2)	$203–$355
	Quintile 3 (Q3)	$1,183–$1,867	$61,465–$97,084	Rent 3 (R3)	$356–$560
	Quintile 4 (Q4)	$1,868–$2,879	$97,085–$149,708	Rent 4 (R4)	$561–$864
	Quintile 5 (Q5)	$2,880 & above	$149,709 & above	Rent 5 (R5)	$865 & above
$2011	Quintile 1 (Q1)	$0–$584	$30,500 or less	Rent 1 (R1)	$1–$175
	Quintile 2 (Q2)	$585–$1,074	$30,501–$56,000	Rent 2 (R2)	$176–$322
	Quintile 3 (Q3)	$1,075–$1,748	$56,001–$91,000	Rent 3 (R3)	$323–$524
	Quintile 4 (Q4)	$1,749–$2,727	$91,001–$142,000	Rent 4 (R4)	$525–$818
	Quintile 5 (Q5)	$2,728 & above	$142,001 & above	Rent 5 (R5)	$819 & above
$2006	Quintile 1 (Q1)	$0–$422	$22,000 or less	Rent 1 (R1)	$1–$126
	Quintile 2 (Q2)	$423–$809	$22,001–$42,000	Rent 2 (R2)	$127–$242
	Quintile 3 (Q3)	$810–$1,287	$42,001–$67,000	Rent 3 (R3)	$243–$386
	Quintile 4 (Q4)	$1,288–$1,977	$67,001–$103,000	Rent 4 (R4)	$387–$593
	Quintile 5 (Q5)	$1,978 & above	$103,001 & above	Rent 5 (R5)	$594 & above
$2001	Low	$0–$334	$17,370 or less	Low	$1–$111
	Low–moderate	$335–$557	$17,371–$29,000	Low–moderate	$112–$166
	Moderate	$558–$892	$29,001–$46,400	Moderate–high	$167–$222
	Moderate–high	$893–$1,339	$46,401–$69,600	High	$223 & above
	High	$1,340 & above	$69,601 & above		
$1996	Quintile 1 (Q1)	$0–$299	$15,550 or less	Low	$1–$99
	Quintile 2 (Q2)	$300–$499	$15,551–$25,950	Low–moderate	$100–$149
	Quintile 3 (Q3)	$500–$799	$25,951–$41,550	Moderate–high	$150–$199
	Quintile 4 (Q4)	$800–$1,199	$41,551–$62,350	High	$200 & above
	Quintile 5 (Q5)	$1,200 & above	$62,351 & above		

		Gross household income segment		Affordable private rent segment	
		Weekly	Annual		Weekly
$1986	Low	$0–$172	$9,000 or less	Low	$1–$60
	Low–moderate	$173–$287	$9,001–$15,000	Low–moderate	$61–$95
	Moderate	$288–$498	$15,001–$26,000	Moderate–high	$96–$125
	Moderate–high	$499–$766	$26,001–$40,000	High	$126 & above
	High	$767 & above	$40,001 & above		

The first project in this series analysed change between 1986 and 1996: 'the household income categories for 1996 were based on approximate household income quintiles as reported in the 1994 Household Expenditure Survey (scaled to $1996 via a CPI adjustment). The income categories for 1986 were chosen to correspond as closely as possible in real value to those for 1996' (Wulff and Yates 2001: 6). The 2001 income segments were defined by an All groups CPI increase of 1996 quintiles and thus are not 'quintiles' for 2001. From the 2006 project onwards, household income data were obtained by national-level quintile (and real dollar values for the analysis of overall PRS market change).

NB: 'rent-free' dwellings have always been excluded from the analysis.

Imputation methodology: ABS (2021 data version)

The following documents the imputation of missing values process undertaken by the ABS to generate the summary and expanded files used in this research.

0 Overall imputation strategy

Impute for Bedrooms (BEDROOM) and Dwelling Structure (STRD), which are required:

- to derive DWEL
- to impute RENT (done in step 4)

Impute for Employed (EMPL), which is required:

- to impute INCOME (done in step 3)

Impute for partially and fully not stated household income, which is required:

- to impute RENT

Impute for RENT, which is required:

- to derive TENU

1 Imputing for bedrooms and dwelling structure

We assign the mode of the BEDROOM variable (4 levels), conditional on the dwelling structure (4 levels). Conversely when imputing for dwelling structure we apply the mode conditional on BEDROOM – the number of bedrooms (4 levels, with zero to one bedrooms combined). Where both BEDROOM and STRD are missing, the 'grand mode' (at state level) of each variable is applied independently.

1A Imputing for tenure type

We assign the mode of the TENURE TYPE variable (3 levels), conditional on combination of the STRD dwelling structure variable and BEDROOM number of bedrooms in dwelling variable (10 levels). These levels are 'Separate house' with four or more bedrooms, three bedrooms, two bedrooms, zero or one bedroom; 'Attached dwelling' (semi-detached, terrace, townhouse) with three or more bedrooms, two bedrooms, zero or one bedroom; 'Flat, unit or apartment' with three or more bedrooms, two bedrooms, zero or one bedroom. If either of STRD Structure of Dwelling or BEDROOM Number of bedrooms in dwelling is missing but another variable is present, tenure type is allocated to mode of each level of variable for which data is available.

Where both BEDROOM and STRD are missing, the 'grand mode' (at state level) of each variable is applied independently.

2 Imputing for 'number employed in household'

As for household income, if any one (or more) members of the household had 'not stated' employment status, then the household status was unknown. This was solved by imputing for the employment status of each individual.

2.1 Within each state, the population of individuals who stated their employment status was divided into sub-populations by region (Greater Capital City Statistical Area, Remainder of State/Territory) by sex and by five-year age groups (up to 65) and by relationship in household. The probability of status 'employed' was calculated for each of those sub-populations.

2.2 Each of the individuals with unstated employment status was then assigned a value of 'employed' or 'not employed', with the probability of being 'employed' for the relevant sub-population. In this way, the proportion of individuals with unstated employment status, who were assigned to a status of 'employed' was the same (on average) as the proportion for the corresponding sub-population of individuals whose employment status was reported.

3 Imputing for household income

3.1 We first partitioned the population into 60 sub-populations for each of the eight states. The sub-populations consisted of:

- region, 2 levels: Greater Capital City Statistical Area, and Remainder of State and Territory
- age of household reference person, 5 levels: 15–24 years, 25–39 years, 40–54 years, 55–64 years and 65 years and over
- HHOLD variable, a derivation based on the composition of the household, 6 levels: household with primary family couple family with no children, household with primary family couple family with children, household with primary family one-parent family, household with primary family other family, lone-person household and group household.

2 * 5 * 6 = 60 sub-populations per state – total of 480 sub-populations nationally.

3.2 Within each sub-population we then further partition into:

3 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 HHOLD (since we have already excluded unclassifiable households).

4 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 per Section 2 above.

5 All other households not identified in 1 or 2 above.

3.3 A point estimate for income was assigned to all individuals who stated an income. The 2019–20 SIH was used to identify the median income point of the personal income ranges stated in the Census. The median individual income for each income range was used to construct a distribution for individual income within each range. Half the population (on average) was assigned a point estimate uniformly distributed between the low point of the range and the median, while half the population was assigned a point estimate uniformly distributed between the median and the upper point of the range. This method was applied upon the stipulations of the client.

3.4 The point estimates were then summed for each household. Where one or more household members did not state income, the sum was considered partial income. A lower and upper bound for the sum of the point estimates was applied, to ensure that the contribution of each household to the original ABS income range could not be inconsistent with the new range for household income (i.e., a household with income $0–$249 could not have a new range of $386–$422, for example).

3.5 The donor population, therefore, 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).

3.6 Within each of the 60 state/territory 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.

Through the methods applied above, a point estimate of income has now been assigned to every household. From this national distribution, two sets of income ranges can be calculated: national household income quintiles and the 12 household income categories equivalent in real terms to those employed in the previous project.

4 Imputing for rent

4.1 The 'in-scope' households for the rent imputation are privately rented households (TEND=4 and LLDD=10,31,32) excluding not classifiable households and excluding visitor-only households.

4.2 We impute for rent conditional upon: region (2 levels per state – the same as for imputing income); dwelling structure (4 levels, separate house, semi-detached etc., flat/unit/apartment, and other dwelling); bedrooms (4 levels, zero–one, two, three, four+); and income (3 levels, less than $889, $889–$1780, $1781+). The income levels are based on grouping the 12 real income categories (1–4, 5–8, 9–12) so that imputed rent program is not dependent on completion of imputed household income program.

4.3 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).

5 Imputing for year of arrival of household reference person

5.1 All household reference persons who stated year of arrival were stratified by region (GCCSA, Remainder of State/Territory), age in single years, country of birth and year of arrival.

5.2 Median year of arrival was determined for each combination of region, age and country of birth. Each household reference person who did not state year of arrival was allocated a median year of arrival based on their combination of region, age and country of birth. If both year of arrival and country of birth were 'not stated', then median year of arrival for combination of region and age only was allocated.

Spatial units analysed in this series of reports

The spatial units analysed in this series of reports are based primarily on the previous version of the ABS's geographical framework: the Australian Standard Geographical Classification (ASGC). This is because the early reports in this series were undertaken before the current Australian Statistical Geography Standard (ASGS) was established for the 2011 Census. Additional regional centres were introduced into the analysis in 2011 and these are defined by the ASGS Statistical Area boundaries (listed below). The ABS use a concordance of SA1s to align to the old spatial units.

Table A3: Spatial units used to define geographic regions in this series of reports

Area	Spatial unit/boundary definition
Capital cities	2006 Statistical Divisions
Metro	All eight state/territory capital cities (including the entire ACT)
Non-metro	Everything outside the state/territory capital cities and the ACT
Capital city subregions	
Sydney	
Inner	2006 Statistical Subdivisions: Inner Sydney, Eastern Suburbs, Inner Western Sydney, Lower Northern Sydney
Middle	2006 Statistical Subdivisions: St George-Sutherland, Canterbury-Bankstown, Central Western Sydney, Blacktown, Central Northern Sydney, Northern Beaches
Outer	2006 Statistical Subdivisions: Fairfield-Liverpool, Outer South Western Sydney, Outer Western Sydney, Gosford-Wyong
Melbourne	
Inner	2006 Statistical Subdivisions: Inner Melbourne, Boroondara City, Southern Melbourne
Middle	2006 Statistical Subdivisions: Western Melbourne, Moreland City, Northern Middle Melbourne, Eastern Middle Melbourne, Eastern Outer Melbourne, Greater Dandenong City
Outer	2006 Statistical Subdivisions: Melton-Wyndham, Hume City, Northern Outer Melbourne, Yarra Ranges Shire Part A, South Eastern Outer Melbourne, Frankston City, Mornington Peninsula Shire
Brisbane	
Inner	2006 Statistical Region Sectors: City Core Brisbane, Northern Inner Brisbane, Eastern Inner Brisbane, Southern Inner Brisbane, Western Inner Brisbane
Middle	2006 Statistical Region Sectors: Northern Outer Brisbane, Eastern Outer Brisbane, Southern Outer Brisbane, Western Outer Brisbane
Outer	2006 Statistical Region Sectors: Logan City, Beaudesert Shire Part A, Redland Shire, Caboolture Shire, Pine Rivers Shire, Redcliffe City, Ipswich City
Adelaide	2006 Statistical Subdivisions: Northern Adelaide, Western Adelaide, Eastern Adelaide, Southern Adelaide
Perth	2006 Statistical Subdivisions: Central Metropolitan, East Metropolitan, North Metropolitan, South West Metropolitan, South East Metropolitan
Regional centres	
New South Wales	
Newcastle	2006 Statistical Subdivision (SSD)
Wollongong	2006 Statistical Subdivision (SSD)
Albury	2016 Statistical Area 3 (SA3)
Coffs Harbour	2016 Statistical Area 3 (SA3)
Shoalhaven	2016 Statistical Area 3 (SA3)
Tweed Valley	2016 Statistical Area 3 (SA3)
Wagga Wagga	2016 Statistical Area 3 (SA3)

Victoria	
Greater Geelong City Pt A	2006 Statistical Subdivision (SSD)
Ballarat	2016 Statistical Area 3 (SA3)
Bendigo	2016 Statistical Area 3 (SA3)
Wodonga (Alpine)	2016 Statistical Area 3 (SA3)
Queensland	
Gold Coast	2006 Statistical Division (SD)
Sunshine Coast	2006 Statistical Division (SD)
Townsville City Part A combined with Thuringowa City Part A	2006 Statistical Subdivision (SSD)
Cairns City Part A	2006 Statistical Subdivision (SSD)
Bundaberg	2016 Statistical Area 3 (SA3)
Mackay	2016 Statistical Area 3 (SA3)
Rockhampton	2016 Statistical Area 3 (SA3)
Toowoomba	2016 Statistical Area 3 (SA3)
Western Australia	
Mandurah	2016 Statistical Area 3 (SA3)
Bunbury	2016 Statistical Area 3 (SA3)
Tasmania	
Greater Launceston	2006 Statistical Division (SD)
Rest of state balance	All areas outside the state capital city, plus areas outside any listed regional centre

Appendix 2 Supporting analysis: data insights and trends, 1996–2021

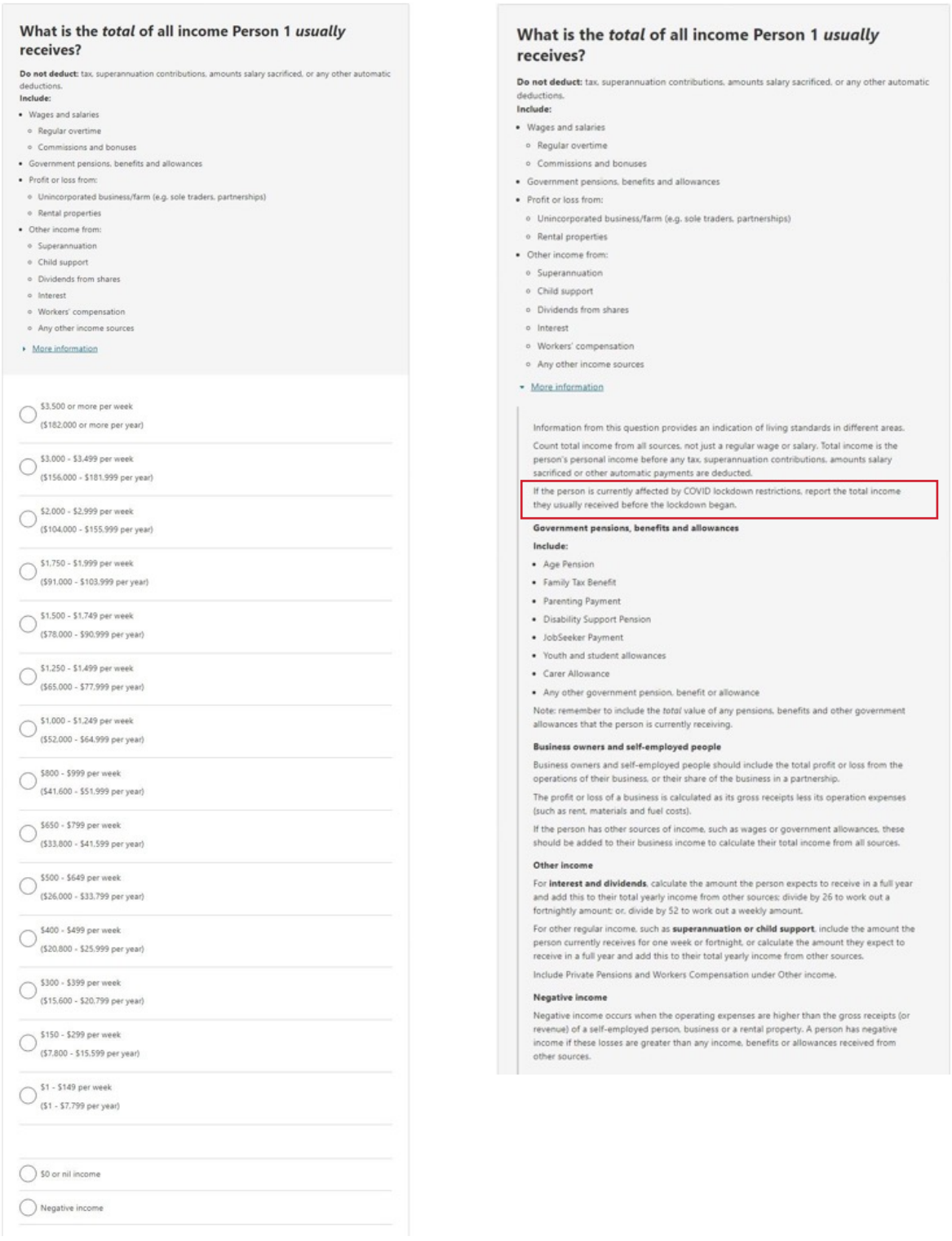
The purpose of this appendix is:

1. to provide the detailed counts and percentages that are referred to in the body of the report and that form the basis of the tables/figures presented in the body of the report
2. to continue the set of results presented in the five previous reports in this series.

The content is ordered by chapter. A comparable appendix for 2016 results is included as Appendix 2 in Hulse, Reynolds et al. (2019a).

Chapter 1 – supporting information

Figure A1: Personal income question*, 2021 ABS Census (online version)



What is the *total* of all income Person 1 *usually* receives?

Do not deduct: tax, superannuation contributions, amounts salary sacrificed, or any other automatic deductions.
Include:

- Wages and salaries
  - Regular overtime
  - Commissions and bonuses
- Government pensions, benefits and allowances
- Profit or loss from:
  - Unincorporated business/farm (e.g. sole traders, partnerships)
  - Rental properties
- Other income from:
  - Superannuation
  - Child support
  - Dividends from shares
  - Interest
  - Workers' compensation
  - Any other income sources

More information

- $3,500 or more per week ($182,000 or more per year)
- $3,000 - $3,499 per week ($156,000 - $181,999 per year)
- $2,000 - $2,999 per week ($104,000 - $155,999 per year)
- $1,750 - $1,999 per week ($91,000 - $103,999 per year)
- $1,500 - $1,749 per week ($78,000 - $90,999 per year)
- $1,250 - $1,499 per week ($65,000 - $77,999 per year)
- $1,000 - $1,249 per week ($52,000 - $64,999 per year)
- $800 - $999 per week ($41,600 - $51,999 per year)
- $650 - $799 per week ($33,800 - $41,599 per year)
- $500 - $649 per week ($26,000 - $33,799 per year)
- $400 - $499 per week ($20,800 - $25,999 per year)
- $300 - $399 per week ($15,600 - $20,799 per year)
- $150 - $299 per week ($7,800 - $15,599 per year)
- $1 - $149 per week ($1 - $7,799 per year)
- $0 or nil income
- Negative income

What is the *total* of all income Person 1 *usually* receives?

Do not deduct: tax, superannuation contributions, amounts salary sacrificed, or any other automatic deductions.
Include:

- Wages and salaries
  - Regular overtime
  - Commissions and bonuses
- Government pensions, benefits and allowances
- Profit or loss from:
  - Unincorporated business/farm (e.g. sole traders, partnerships)
  - Rental properties
- Other income from:
  - Superannuation
  - Child support
  - Dividends from shares
  - Interest
  - Workers' compensation
  - Any other income sources

More information

Information from this question provides an indication of living standards in different areas.

Count total income from all sources, not just a regular wage or salary. Total income is the person's personal income before any tax, superannuation contributions, amounts salary sacrificed or other automatic payments are deducted.

If the person is currently affected by COVID lockdown restrictions, report the total income they usually received before the lockdown began.

Government pensions, benefits and allowances

Include:

- Age Pension
- Family Tax Benefit
- Parenting Payment
- Disability Support Pension
- JobSeeker Payment
- Youth and student allowances
- Carer Allowance
- Any other government pension, benefit or allowance

Note: remember to include the *total* value of any pensions, benefits and other government allowances that the person is currently receiving.

Business owners and self-employed people

Business owners and self-employed people should include the total profit or loss from the operations of their business, or their share of the business in a partnership.

The profit or loss of a business is calculated as its gross receipts less its operation expenses (such as rent, materials and fuel costs).

If the person has other sources of income, such as wages or government allowances, these should be added to their business income to calculate their total income from all sources.

Other income

For **interest and dividends**, calculate the amount the person expects to receive in a full year and add this to their total yearly income from other sources; divide by 26 to work out a fortnightly amount; or, divide by 52 to work out a weekly amount.

For other regular income, such as **superannuation or child support**, include the amount the person currently receives for one week or fortnight, or calculate the amount they expect to receive in a full year and add this to their total yearly income from other sources.

Include Private Pensions and Workers Compensation under Other income.

Negative income

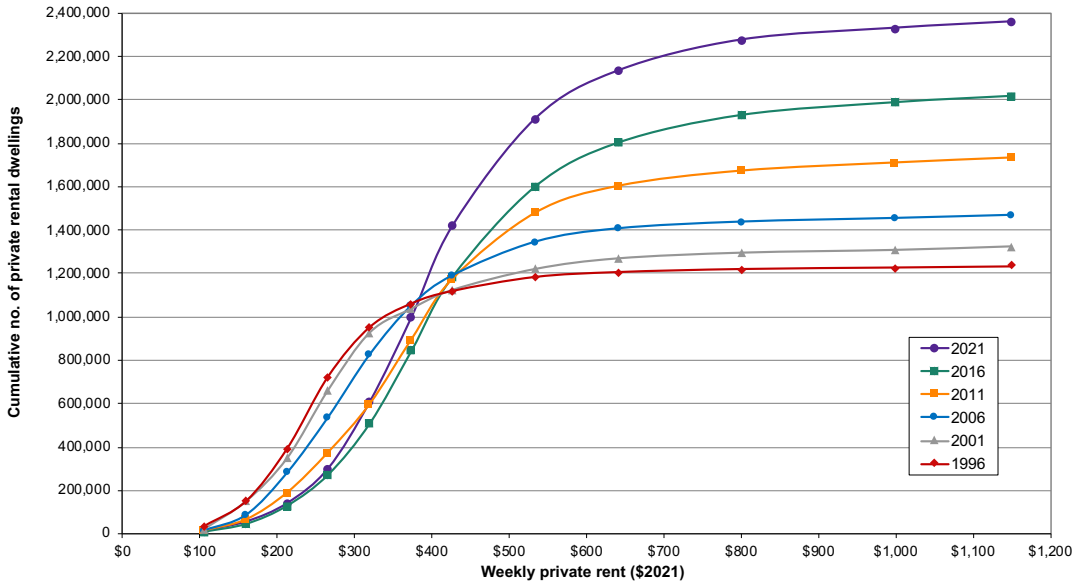
Negative income occurs when the operating expenses are higher than the gross receipts (or revenue) of a self-employed person, business or a rental property. A person has negative income if these losses are greater than any income, benefits or allowances received from other sources.

**Personal incomes are summed to create total household income.*

Source: ABS (2021c).

Chapter 3 – supporting analysis

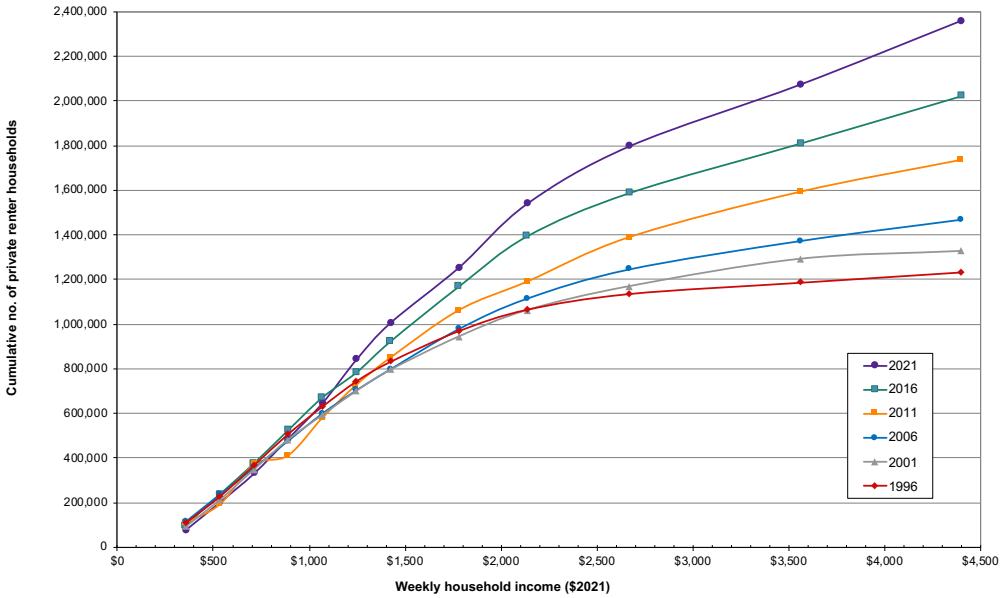
Figure A2: Cumulative distributions of private rental stock, Australia, 1996–2021



Note: Derived from 12 rent categories established for the 1996–2001 analysis, and which have been updated to 2021 dollars enabling real changes in the profile of rents paid to be evident. Table A4 in Appendix 2 holds the cumulative numbers behind this graph.

Source: ABS customised matrices derived from the Australian Census of Population and Housing, 1996–2021.

Figure A3: Cumulative distributions of PRS household incomes, Australia, 1996–2021



Note: Derived from 12 income categories established for the 1996–2001 analysis, and which have been updated to 2021 dollars enabling real changes in the profile of PRS household incomes to be evident. Table A5 in Appendix 2 holds the cumulative numbers behind this graph.

Source: ABS customised matrices derived from the Australian Census of Population and Housing, 1996–2021.

Table A4: (panels A–C) Distribution of private rental dwellings (stock) by weekly rent segment, Australia: 1996, 2001, 2006, 2011, 2016 and 2021

Panel A: Number of PRS dwellings per rent segment

Weekly rent segment ($2021)	1996		2001		2006		2011		2016		2021	
	Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$1–$106	37,000	3	26,000	2	19,000	1	16,000	1	11,000	1	18,000	1
$107–$160	116,000	9	128,000	10	72,000	5	51,000	3	36,000	2	41,000	2
$161–$213	242,000	20	199,000	15	194,000	13	124,000	7	84,000	4	85,000	4
$214–$266	333,000	27	313,000	24	255,000	17	186,000	11	143,000	7	160,000	7
$267–$320	228,000	18	265,000	20	289,000	20	224,000	13	237,000	12	308,000	13
$321–$374	109,000	9	110,000	8	225,000	15	299,000	17	336,000	17	391,000	17
$375–$427	57,000	5	86,000	6	138,000	9	278,000	16	341,000	17	421,000	18
$428–$534	64,000	5	96,000	7	154,000	11	304,000	18	416,000	21	493,000	21
$535–$641	22,000	2	49,000	4	61,000	4	123,000	7	202,000	10	221,000	9
$642–$801	14,000	1	26,000	2	31,000	2	70,000	4	128,000	6	143,000	6
$802–$1,068	7,000	1	13,000	1	17,000	1	37,000	2	59,000	3	54,000	2
$1,069+	5,000	0	16,000	1	14,000	1	23,000	1	29,000	1	29,000	1
Total	*1,234,000*	*100*	*1,328,000*	*100*	*1,470,000*	*100*	*1,735,000*	*100*	*2,022,000*	*100*	*2,362,000*	*100*

Note: weekly rent segments equate to 30 per cent of the household income segments in Table A5. Twelve rent categories were established for the 1996–2001 analysis and have been updated to 2021 dollars enabling real changes in the profile of rents paid to be evident.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Panel B: Cumulative number of PRS dwellings by rent segment

Weekly rent segment ($2021)	1996		2001		2006		2011		2016		2021	
	Cumulative dwellings by segment		Cumulative dwellings by segment		Cumulative dwellings by segment		Cumulative dwellings by segment		Cumulative dwellings by segment		Cumulative dwellings by segment	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$1–$106	37,000	3	26,000	2	19,000	1	16,000	1	11,000	1	18,000	1
$107–$160	153,000	12	154,000	12	91,000	6	67,000	4	47,000	2	58,000	2
$161–$213	395,000	32	353,000	27	285,000	19	191,000	11	131,000	6	143,000	6
$214–$266	727,000	59	666,000	50	540,000	37	377,000	22	274,000	14	303,000	13
$267–$320	955,000	77	931,000	70	830,000	56	600,000	35	511,000	25	611,000	26
$321–$374	1,064,000	86	1,041,000	78	1,055,000	72	899,000	52	847,000	42	1,002,000	42
$375–$427	1,121,000	91	1,127,000	85	1,192,000	81	1,177,000	68	1,188,000	59	1,422,000	60
$428–$534	1,186,000	96	1,224,000	92	1,347,000	92	1,481,000	85	1,604,000	79	1,915,000	81
$535–$641	1,208,000	98	1,273,000	96	1,408,000	96	1,604,000	93	1,806,000	89	2,136,000	90
$642–$801	1,222,000	99	1,299,000	98	1,439,000	98	1,674,000	97	1,934,000	96	2,278,000	96
$802–$1,068	1,229,000	100	1,312,000	99	1,456,000	99	1,712,000	99	1,992,000	99	2,332,000	99
$1,069+	1,234,000	100	1,328,000	100	1,470,000	100	1,735,000	100	2,022,000	100	2,362,000	100
Total	*1,234,000*	*100*	*1,328,000*	*100*	*1,470,000*	*100*	*1,735,000*	*100*	*2,022,000*	*100*	*2,362,000*	*100*

Note: weekly rent segments equate to 30 per cent of the household income segments in Table A5. Twelve rent categories were established for the 1996–2001 analysis and have been updated to 2021 dollars enabling real changes in the profile of rents paid to be evident.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Panel C: Intercensal change in number of PRS dwellings by rent segment, number (N) and cumulative number (Cumul. N)

Weekly rent segment ($2021)	1996–01	2001–06	2006–11	2011–16	2016–21	1996–01	2001–06	2006–11	2011–16	2016–21
	N	N	N	N	N	Cumul. N	Cumul. N	Cumul. N	Cumul. N	Cumul. N
$1–$106	–11,000	–6,000	–3,000	–5,000	7,000	–11,000	–6,000	–3,000	–5,000	7,000
$107–$160	12,000	–56,000	–21,000	–15,000	4,000	1,000	–63,000	–24,000	–20,000	11,000
$161–$213	–43,000	–5,000	–70,000	–40,000	1,000	–42,000	–68,000	–94,000	–60,000	12,000
$214–$266	–19,000	–58,000	–69,000	–43,000	17,000	–61,000	–126,000	–163,000	–103,000	29,000
$267–$320	37,000	24,000	–66,000	13,000	71,000	–24,000	–102,000	–229,000	–89,000	100,000
$321–$374	1,000	115,000	74,000	37,000	55,000	–23,000	14,000	–156,000	–52,000	155,000
$375–$427	29,000	51,000	140,000	63,000	80,000	6,000	65,000	–16,000	11,000	235,000
$428–$534	32,000	58,000	150,000	112,000	76,000	38,000	123,000	134,000	123,000	311,000
$535–$641	26,000	13,000	62,000	78,000	19,000	65,000	136,000	196,000	202,000	330,000
$642–$801	12,000	5,000	40,000	58,000	14,000	77,000	140,000	235,000	259,000	345,000
$802–$1,068	6,000	4,000	21,000	21,000	–5,000	83,000	144,000	256,000	281,000	340,000
$1,069+	11,000	–2,000	9,000	6,000	0	94,000	142,000	265,000	287,000	340,000
Total	94,000	142,000	265,000	287,000	340,000	94,000	142,000	265,000	287,000	340,000

Note: weekly rent segments equate to 30 per cent of the household income segments in Table A5. Twelve rent categories were established for the 1996–2001 analysis and have been updated to 2021 dollars enabling real changes in the profile of rents paid to be evident. 'Cumul. N' = cumulative number.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Table A5: (panels A–C) Distribution of weekly incomes of households in the private rental market, Australia, 1996, 2001, 2006, 2011, 2016 and 2021

Panel A: Number of PRS households per income segment

Weekly household income segment ($2021)	1996		2001		2006		2011		2016		2021	
	Households per segment		Households per segment		Households per segment		Households per segment		Households per segment		Households per segment	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$0–$354	110,000	9	92,000	7	114,000	8	109,000	6	98,000	5	79,000	3
$355–$533	119,000	10	121,000	9	123,000	8	84,000	5	140,000	7	124,000	5
$534–$711	140,000	11	136,000	10	119,000	8	178,000	10	139,000	7	129,000	5
$712–$888	139,000	11	133,000	10	121,000	8	40,000	2	147,000	7	155,000	7
$889–$1067	124,000	10	110,000	8	122,000	8	168,000	10	147,000	7	160,000	7
$1068–$1245	114,000	9	109,000	8	105,000	7	148,000	9	112,000	6	196,000	8
$1246–$1422	87,000	7	94,000	7	94,000	6	121,000	7	139,000	7	164,000	7
$1423–$1780	138,000	11	150,000	11	181,000	12	213,000	12	247,000	12	249,000	11
$1781–$2135	96,000	8	118,000	9	136,000	9	127,000	7	225,000	11	285,000	12
$2136–$2669	71,000	6	107,000	8	131,000	9	199,000	11	194,000	10	258,000	11
$2670–$3561	51,000	4	123,000	9	127,000	9	203,000	12	222,000	11	277,000	12
$3562+	46,000	4	35,000	3	96,000	7	143,000	8	212,000	11	286,000	12
Total	*1,234,000*	*100*	*1,328,000*	*100*	*1,470,000*	*100*	*1,735,000*	*100*	*2,022,000*	*100*	*2,362,000*	*100*

Note: corresponding affordable rent segments are shown in Table A4.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Panel B: Cumulative number of PRS households by income segment

Weekly household income segment ($2021)	1996		2001		2006		2011		2016		2021	
	Cumulative households per segment		Cumulative households per segment		Cumulative households per segment		Cumulative households per segment		Cumulative households per segment		Cumulative households per segment	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$0–$354	110,000	9	92,000	7	114,000	8	109,000	6	98,000	5	79,000	3
$355–$533	229,000	19	212,000	16	237,000	16	193,000	11	238,000	12	203,000	9
$534–$711	369,000	30	349,000	26	356,000	24	371,000	21	377,000	19	333,000	14
$712–$888	508,000	41	482,000	36	477,000	32	411,000	24	524,000	26	488,000	21
$889–$1067	631,000	51	592,000	45	600,000	41	580,000	33	671,000	33	647,000	27
$1068–$1245	745,000	60	701,000	53	704,000	48	728,000	42	783,000	39	843,000	36
$1246–$1422	832,000	67	795,000	60	798,000	54	849,000	49	922,000	46	1,007,000	43
$1423–$1780	971,000	79	945,000	71	979,000	67	1,062,000	61	1,168,000	58	1,256,000	53
$1781–$2135	1,066,000	86	1,063,000	80	1,115,000	76	1,189,000	69	1,393,000	69	1,541,000	65
$2136–$2669	1,137,000	92	1,170,000	88	1,247,000	85	1,389,000	80	1,587,000	79	1,799,000	76
$2670–$3561	1,188,000	96	1,293,000	97	1,374,000	93	1,592,000	92	1,809,000	89	2,076,000	88
$3562+	1,234,000	100	1,328,000	100	1,470,000	100	1,735,000	100	2,022,000	100	2,362,000	100
Total	*1,234,000*	*100*	*1,328,000*	*100*	*1,470,000*	*100*	*1,735,000*	*100*	*2,022,000*	*100*	*2,362,000*	*100*

Note: corresponding affordable rent segments are shown in Table A4.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

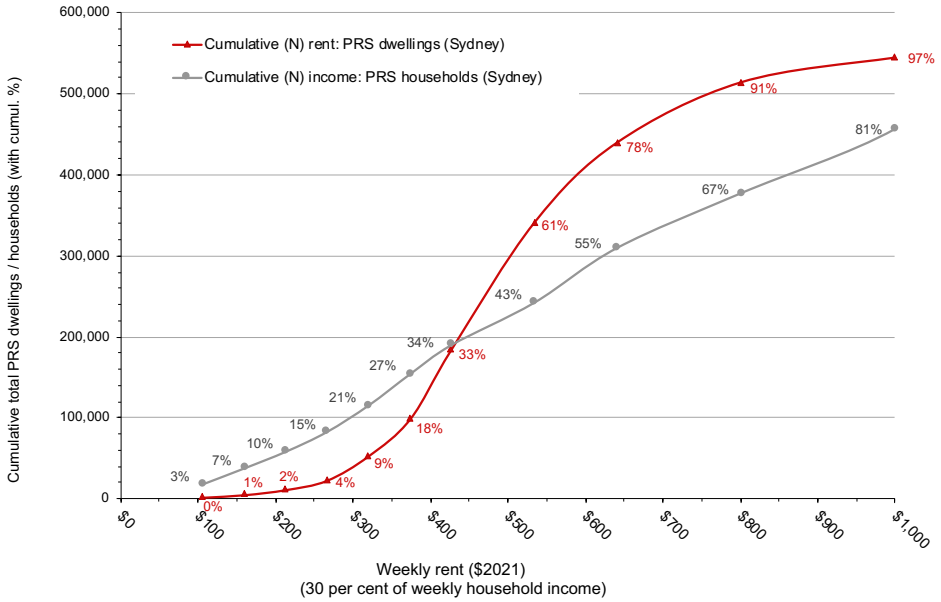
Panel C: Intercensal change in number of PRS households by income segment, number (N) and cumulative number (Cumul. N)

Weekly household income segment ($2021)	1996–01	2001–06	2006–11	2011–16	2016–21	1996–01	2001–06	2006–11	2011–16	2016–21
	N	N	N	N	N	Cumul. N	Cumul. N	Cumul. N	Cumul. N	Cumul. N
$0–$354	–18,000	23,000	–5,000	–11,000	–19,000	–18,000	23,000	–5,000	–11,000	–19,000
$355–$533	2,000	2,000	–39,000	56,000	–15,000	–16,000	25,000	–44,000	44,000	–34,000
$534–$711	–4,000	–17,000	59,000	–39,000	–9,000	–20,000	7,000	15,000	6,000	–44,000
$712–$888	–6,000	–12,000	–81,000	107,000	8,000	–26,000	–5,000	–66,000	112,000	–36,000
$889–$1067	–13,000	12,000	46,000	–21,000	13,000	–39,000	8,000	–20,000	91,000	–24,000
$1068–$1245	–5,000	–4,000	44,000	–36,000	83,000	–44,000	4,000	24,000	55,000	60,000
$1246–$1422	7,000	0	27,000	18,000	26,000	–38,000	4,000	51,000	73,000	85,000
$1423–$1780	12,000	31,000	32,000	34,000	2,000	–26,000	35,000	83,000	106,000	87,000
$1781–$2135	22,000	18,000	–9,000	97,000	60,000	–4,000	53,000	74,000	204,000	148,000
$2136–$2669	37,000	24,000	68,000	–5,000	64,000	33,000	77,000	142,000	198,000	212,000
$2670–$3561	72,000	5,000	76,000	19,000	55,000	105,000	81,000	218,000	217,000	267,000
$3562+	–11,000	61,000	47,000	70,000	74,000	94,000	142,000	265,000	287,000	340,000
Total	*94,000*	*142,000*	*265,000*	*287,000*	*340,000*	*94,000*	*142,000*	*265,000*	*287,000*	*340,000*

'Cumul. N' = cumulative number.

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Figure A4: Cumulative distributions of weekly rents and private renter household incomes by rent/income segment, Sydney, 2021

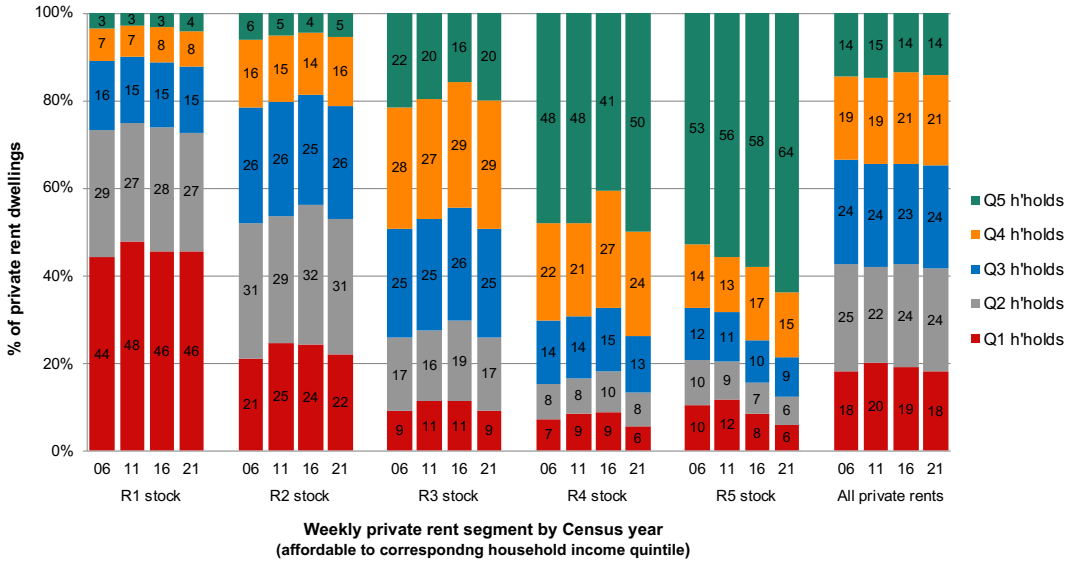


Source: ABS customised matrix (12 real income and corresponding affordable rent categories) derived from the Australian Census of Population and Housing 2021.

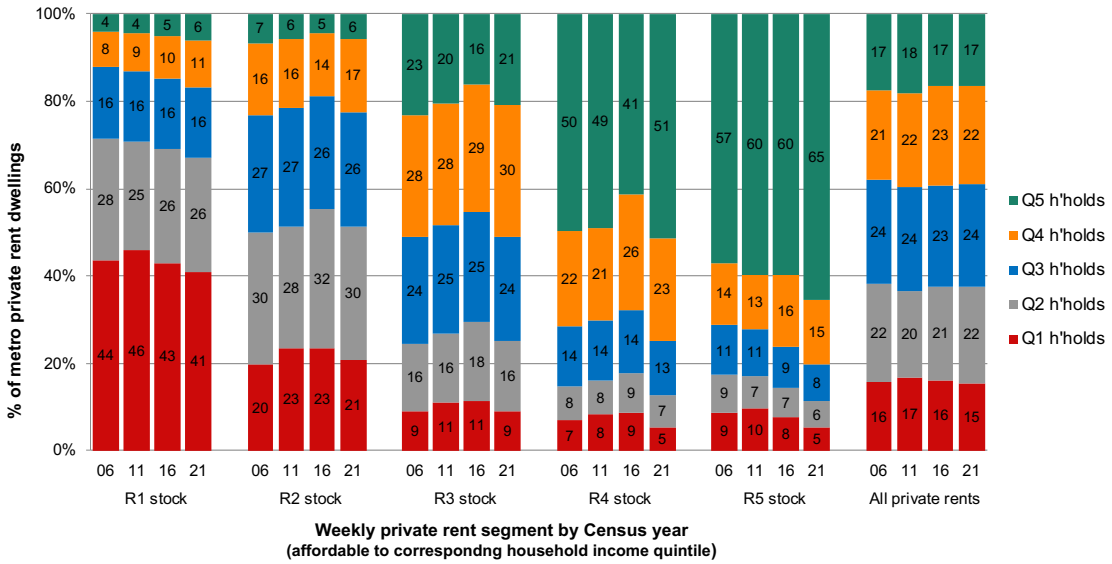
Chapter 4 – supporting analysis

Figure A5 (A–C): Income of households (quintile) occupying private rental stock affordable to Q1–Q5 households (% share), Australia (A), metropolitan (B) and non-metropolitan (C) regions, 2006, 2011, 2016 and 2021

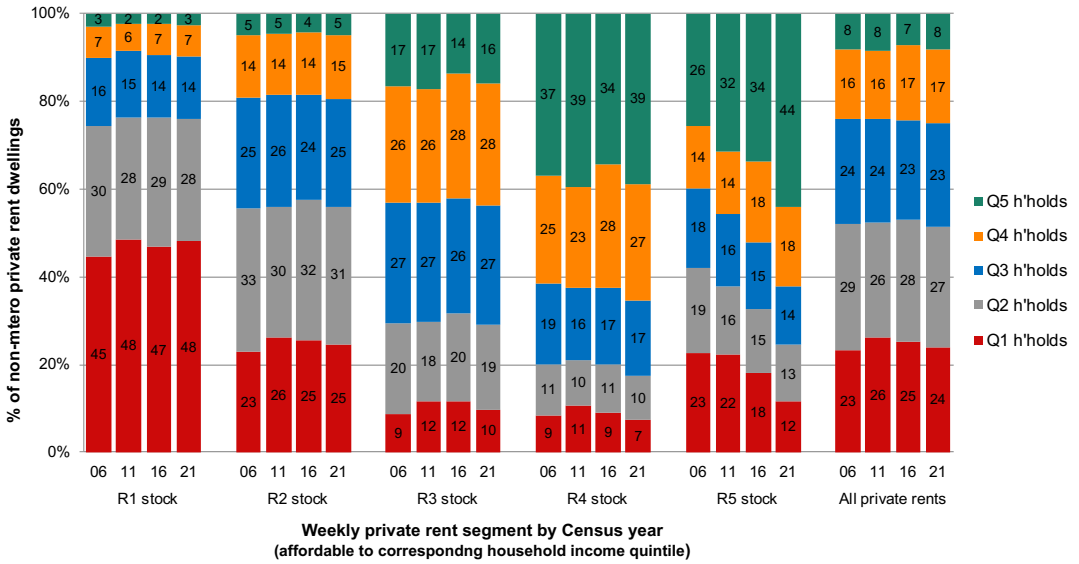
A National



B Metropolitan



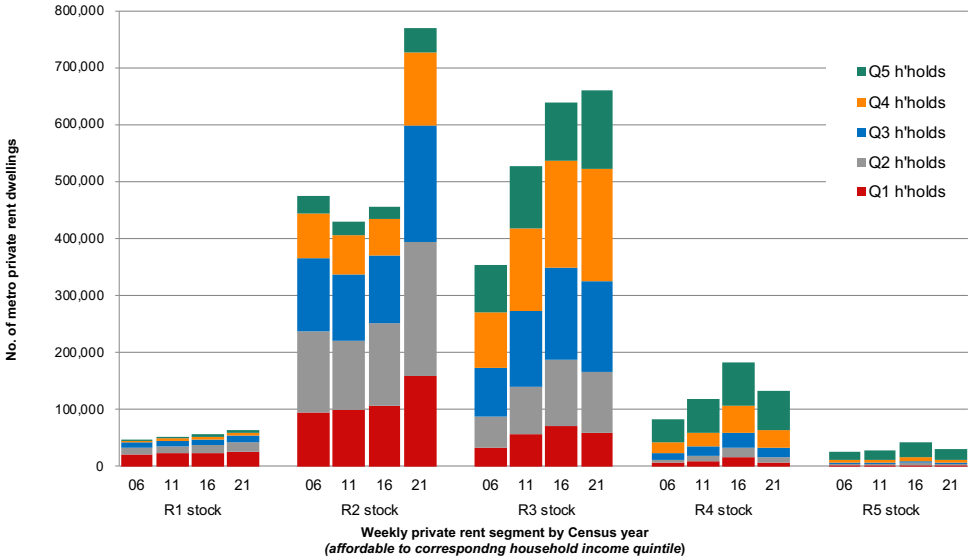
C Non-metropolitan



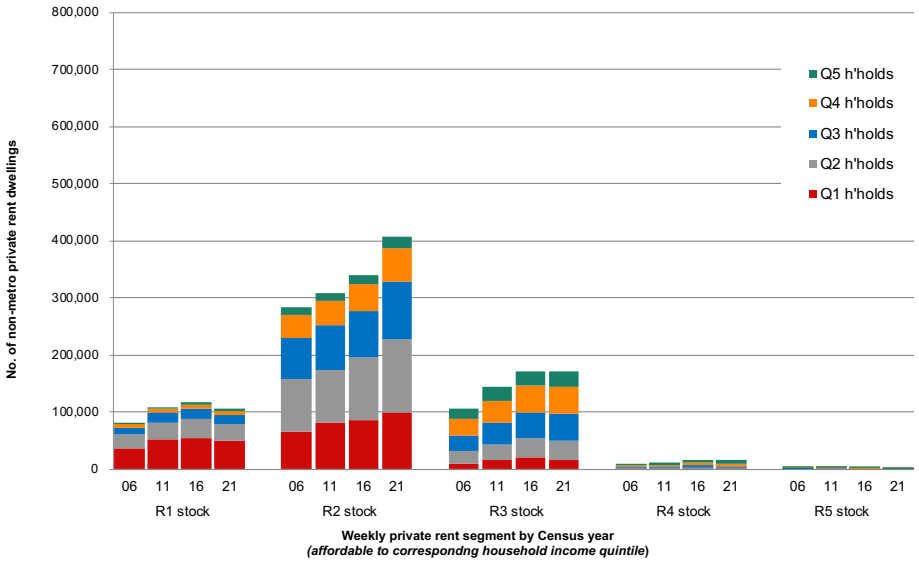
Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

Figure A6 (A and B): Income of households (quintile) occupying private rental stock affordable to Q1 to Q5 households, metropolitan (A) and non-metropolitan (B) areas, 2006–21

A Metropolitan areas



B Non-metropolitan areas



Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

Table A6: Shortage of affordable and available stock for Q1 PRS households, 2021, Australia, metro/non-metro regions, capital cities and selected capital city subregions

	Very low (Q1) income h'holds	Potentially affordable dwellings (R1)	Shortage or surplus of affordable stock	Higher-income h'hlds in the potentially affordable stock	Affordable dwellings actually available	Shortage of affordable and available stock	Q1 h'holds paying unaffordable rent (%)
			(= 2 - 1)		(= 2 - 4)	(= 3 - 4)	(=6/1 x 100)
Column	***1***	***2***	***3***	***4***	***5***	***6***	***7***
Australia	425,000	169,000	−255,000	93,000	77,000	−348,000	**82**
Metropolitan regions	255,000	64,000	−191,000	38,000	26,000	−229,000	**90**
Non-metro regions	169,000	105,000	−64,000	55,000	51,000	−119,000	**70**
Capital cities							
Sydney	77,600	12,900	−64,700	7,500	5,400	−72,200	**93**
Melbourne	79,200	18,000	−61,300	10,300	7,700	−71,600	**90**
Brisbane	41,400	9,900	−31,600	5,600	4,300	−37,200	**90**
Adelaide	24,300	8,900	−15,400	4,800	4,100	−20,200	**83**
Perth	24,200	11,000	−13,200	7,400	3,600	−20,500	**85**
Hobart	4,600	1,700	−2,800	900	800	−3,700	**81**
Darwin^	1,100	800	−400	600	200	−900	**84**
ACT	3,000	1,100	−1,900	800	300	−2,600	**89**
Capital city subregions							
Sydney							
Inner	22,800	3,700	−19,100	2,300	1,400	−21,400	**94**
Middle	30,500	5,200	−25,300	3,200	2,000	−28,500	**93**
Outer	24,100	3,900	−20,300	2,000	1,900	−22,200	**92**
Melbourne							
Inner	24,700	5,300	−19,400	3,000	2,300	−22,400	**91**
Middle	29,400	7,800	−21,600	4,500	3,300	−26,000	**89**
Outer	25,300	4,800	−20,400	2,700	2,100	−23,200	**92**
Brisbane							
Inner	13,000	3,500	−9,500	2,100	1,400	−11,600	**89**
Middle	7,800	2,300	−5,500	1,400	800	−6,900	**89**
Outer	20,600	4,000	−16,600	2,100	2,000	−18,700	**90**

	Very low (Q1) income h'holds	Potentially affordable dwellings (R1)	Shortage or surplus of affordable stock	Higher-income h'hlds in the potentially affordable stock	Affordable dwellings actually available	Shortage of affordable and available stock	Q1 h'holds paying unaffordable rent (%)
Adelaide							
Northern	8,400	3,200	–5,300	1,600	1,500	–6,900	**82**
Western	4,600	2,100	–2,500	1,200	900	–3,700	**81**
Eastern	5,300	1,700	–3,500	1,000	700	–4,500	**86**
Southern	6,100	2,000	–4,100	1,000	900	–5,200	**85**
Perth							
Central	2,700	1,200	–1,500	800	400	–2,300	**85**
East	3,600	1,700	–1,900	1,100	600	–3,000	**83**
North	6,600	2,600	–4,000	1,800	800	–5,800	**88**
South West	5,200	2,300	–2,900	1,500	800	–4,400	**85**
South East	6,000	3,200	–2,900	2,200	1,000	–5,100	**84**

Notes: ^Low counts in Darwin: caution should be exercised when interpreting these figures; figures may not sum exactly due to rounding; data were sourced from two separate ABS matrices and, therefore, due to standard ABS confidentialisation processes, some inner, middle and outer counts do not sum exactly to their capital city total.

Source: ABS customised matrix derived from the Australian Census of Population and Housing 2021.

Table A7: Shortage of affordable and available stock for Q2 PRS households, 2021, Australia, metro/non-metro regions, capital cities and selected capital city subregions

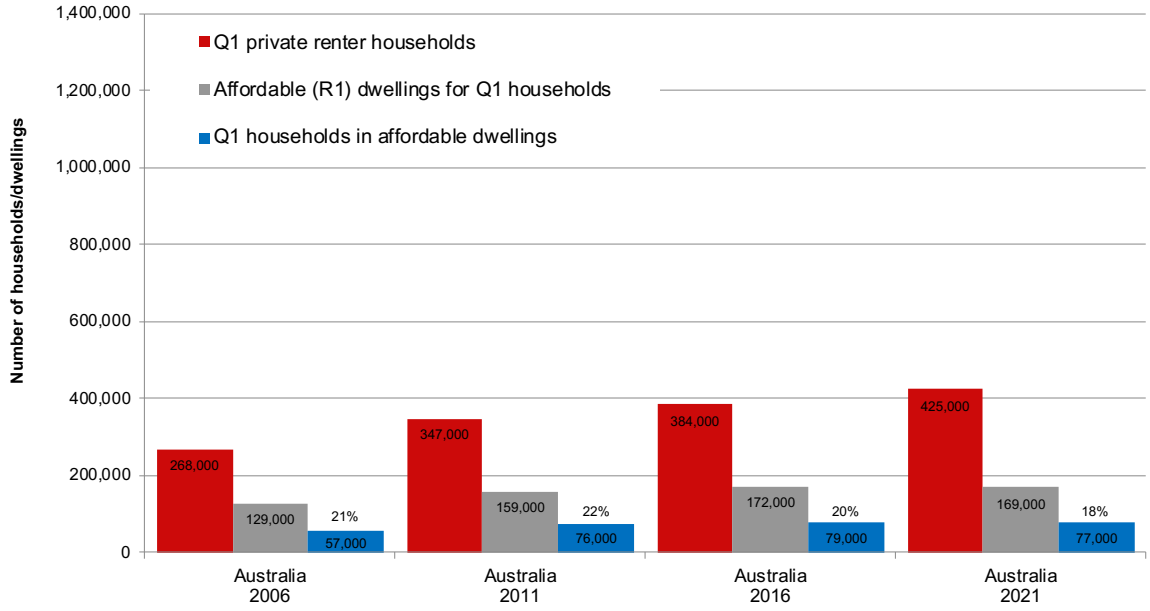
	Low (Q2) income h'holds	Potentially affordable dwellings (R1+R2)	Shortage or surplus of affordable stock	Other income h'hlds in the potentially affordable stock	Affordable dwellings actually available	Shortage of affordable and available stock	Q2 h'holds paying unaffordable rent (%)
			(= 2 - 1)		(= 2 - 4)	(= 3 - 4)	(=6/1 x 100)
Column	***1***	***2***	***3***	***4***	***5***	***6***	***7***
Australia	560,000	1,347,000	787,000	939,000	408,000	−152,000	**27**
Metropolitan regions	368,000	835,000	467,000	583,000	252,000	−117,000	**32**
Non-metro regions	192,000	512,000	320,000	355,000	157,000	−35,000	**18**
Capital cities							
Sydney	110,500	167,900	57,400	115,700	52,200	−58,300	**53**
Melbourne	107,300	280,500	173,200	199,000	81,600	−25,800	**24**
Brisbane	65,500	154,800	89,300	104,800	50,000	−15,500	**24**
Adelaide	30,600	86,700	56,100	60,000	26,700	−3,900	**13**
Perth	39,800	114,400	74,600	81,400	32,900	−6,800	**17**
Hobart	5,200	12,800	7,600	9,000	3,800	−1,400	**27**
Darwin^	2,600	8,000	5,400	6,200	1,900	−700	**28**
ACT	6,600	9,700	3,200	7,000	2,700	−3,900	**59**
Capital city subregions							
Sydney							
Inner	33,100	39,300	6,200	26,900	12,400	−20,700	**62**
Middle	45,700	69,700	24,000	49,000	20,700	−25,000	**55**
Outer	31,800	58,900	27,100	39,800	19,100	−12,700	**40**
Melbourne							
Inner	31,900	74,800	42,900	52,700	22,100	−9,800	**31**
Middle	40,400	104,300	63,900	74,300	30,100	−10,400	**26**
Outer	35,000	101,400	66,400	72,000	29,300	−5,600	**16**
Brisbane							
Inner	20,900	45,300	24,300	30,800	14,500	−6,500	**31**
Middle	13,200	29,600	16,400	20,500	9,100	−4,100	**31**
Outer	31,300	79,900	48,600	53,500	26,400	−4,900	**15**

	Low (Q2) income h'holds	Potentially affordable dwellings (R1+R2)	Shortage or surplus of affordable stock	Other income h'hlds in the potentially affordable stock	Affordable dwellings actually available	Shortage of affordable and available stock	Q2 h'holds paying unaffordable rent (%)
Adelaide							
Northern	10,200	30,800	20,500	21,100	9,600	-600	**6**
Western	6,200	17,700	11,400	12,300	5,300	-900	**15**
Eastern	6,400	16,700	10,300	11,700	4,900	-1,500	**23**
Southern	7,700	21,600	13,900	14,800	6,800	-900	**12**
Perth							
Central	3,800	10,500	6,800	7,900	2,600	-1,100	**30**
East	6,000	17,300	11,300	12,100	5,200	-800	**14**
North	11,100	32,000	20,900	22,800	9,200	-1,900	**17**
South West	8,400	23,100	14,700	16,200	7,000	-1,500	**17**
South East	10,400	31,400	21,000	22,400	9,000	-1,500	**14**

Notes: ^Low counts in Darwin: caution should be exercised when interpreting these figures; figures may not sum exactly due to rounding; data were sourced from two separate ABS matrices and, therefore, due to standard ABS confidentialisation processes, some inner, middle and outer counts do not sum exactly to their capital city total.

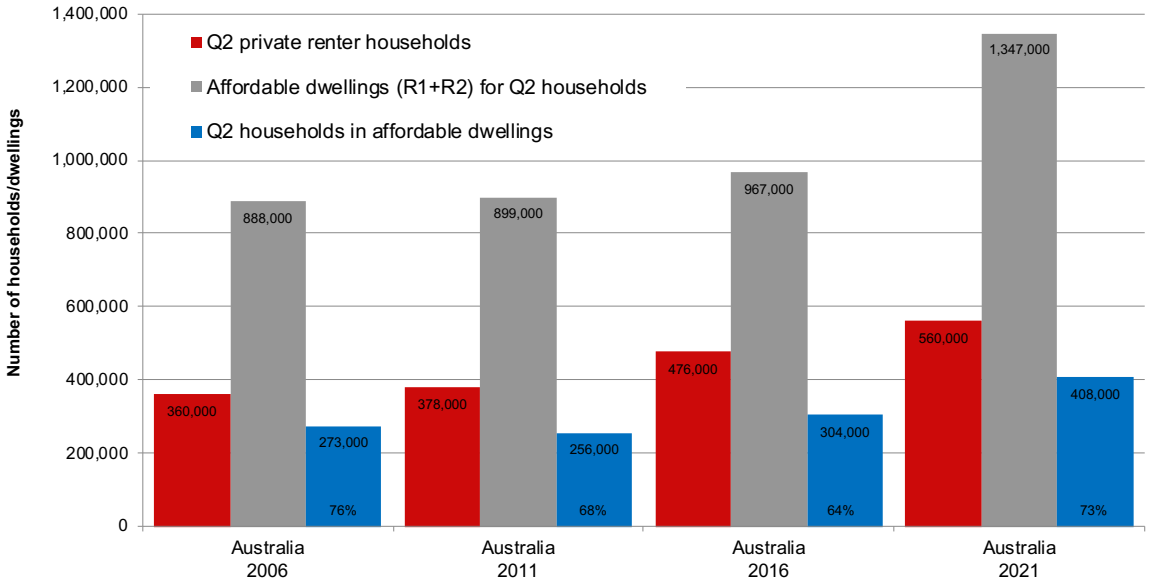
Source: ABS customised matrix derived from the Australian Census of Population and Housing 2021.

Figure A7: Shortage and availability for Q1 PRS households, Australia, 2006, 2011, 2016 and 2021



Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

Figure A8: Shortage and availability for Q2 PRS households, Australia, 2006, 2011, 2016 and 2021



Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

Table A8: Affordability outcomes for Q1 and Q2 PRS households by major capital cities and capital city subregions, 2021

Capital city sub-region	Q1 private renter households					Q2 private renter households			
	Paying afford. rent	Paying unafford. rent	Paying severely unafford. Rent	Q1 total		Paying afford. rent	Paying unafford. rent	Q2 total	
	%	%	%	%	No.	%	%	%	No.
Sydney									
Inner	6.2	34.0	59.7	100	23,000	37.6	62.4	100	33,000
Middle	6.6	45.3	48.1	100	31,000	45.4	54.6	100	46,000
Outer	7.9	63.2	28.9	100	24,000	60.0	40.0	100	32,000
Sydney total	6.9	47.5	45.5	100	77,000	47.2	52.8	100	111,000
Melbourne									
Inner	9.2	61.3	29.6	100	25,000	69.3	30.7	100	32,000
Middle	11.3	66.8	21.9	100	29,000	74.4	25.6	100	40,000
Outer	8.3	78.9	12.8	100	25,000	83.9	16.1	100	35,000
Melbourne total	9.7	68.9	21.4	100	79,000	76.0	24.0	100	107,000
Brisbane									
Inner	10.8	60.7	28.5	100	13,000	69.1	30.9	100	21,000
Middle	10.8	64.3	24.9	100	8,000	68.8	31.2	100	13,000
Outer	9.6	80.2	10.2	100	21,000	84.5	15.5	100	31,000
Brisbane total	10.2	71.1	18.7	100	41,000	76.4	23.6	100	65,000
Adelaide									
Northern	18.4	77.8	3.9	100	8,000	94.1	5.9	100	10,000
Western	18.8	71	10.2	100	5,000	85.2	14.8	100	6,000
Eastern	14.2	62.9	22.9	100	5,000	77.0	23.0	100	6,000
Southern	15.5	76.1	8.4	100	6,000	88.3	11.7	100	8,000
Adelaide total	16.8	72.9	10.3	100	24,000	87.3	12.7	100	31,000
Perth									
Central	14.8	56.1	29.1	100	3,000	70.1	29.9	100	4,000
East	16.7	72.6	10.8	100	4,000	86.1	13.9	100	6,000
North	12.4	72.7	14.9	100	7,000	82.5	17.5	100	11,000
South West	15.5	70.3	14.2	100	5,000	82.7	17.3	100	8,000
South East	16.2	70.7	13.1	100	6,000	85.8	14.2	100	10,000
Perth total	14.9	69.8	15.3	100	24,000	82.8	17.2	100	40,000
Hobart total	18.7	63.3	18.0	100	5,000	72.9	27.1	100	5,000
Darwin total^	15.7	57.5	26.8	100	1,000	72	28.0	100	3,000
Canberra total^	10.4	37.2	52.4	100	3,000	41.2	58.8	100	7,000

Notes: ^ Low counts in these cities: caution should be exercised when interpreting these figures. Totals may not sum exactly due to rounding. Unaffordable rent for Q1 is paying R2 rents; severely unaffordable represents paying R3–R5 rent. For Q2 households, the R3 rent segment is unaffordable and R4–R5 rent segments are severely unaffordable.

Source: ABS customised matrix derived from Australian Census of Population and Housing data, 2016.

Chapter 5 – supporting analysis

Table A9: (panels A–C): Distribution of private rental dwellings by weekly rent segment, Sydney, Melbourne, Brisbane, Census years 1996– 2021

A Sydney

Weekly rent segment ($2021)	1996		2001		2006		2011		2016		2021	
	Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$1–$106	3,000	1	1,000	0	1,000	0	1,000	0	1,000	0	2,000	0
$107–$160	6,000	2	5,000	2	4,000	1	3,000	1	2,000	0	3,000	1
$161–$213	19,000	7	10,000	3	14,000	4	8,000	2	5,000	1	6,000	1
$214–$266	48,000	16	32,000	10	32,000	9	19,000	5	9,000	2	11,000	2
$267–$320	65,000	22	61,000	20	61,000	18	28,000	7	15,000	3	30,000	5
$321–$374	49,000	17	41,000	13	60,000	17	49,000	13	32,000	7	46,000	8
$375–$427	31,000	11	38,000	12	42,000	12	60,000	16	56,000	13	85,000	15
$428–$534	39,000	13	56,000	18	64,000	19	89,000	24	117,000	26	157,000	28
$535–$641	16,000	5	33,000	11	32,000	9	51,000	14	87,000	19	99,000	18
$642–$801	10,000	3	19,000	6	18,000	5	36,000	10	71,000	16	74,000	13
$802–$1,068	5,000	2	9,000	3	10,000	3	21,000	6	36,000	8	30,000	5
$1,069+	2,000	1	7,000	2	6,000	2	10,000	3	18,000	4	18,000	3
Total	*293,000*	*100*	*312,000*	*100*	*345,000*	*100*	*376,000*	*100*	*449,000*	*100*	*562,000*	*100*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

B Melbourne

Weekly rent segment ($2021)	1996		2001		2006		2011		2016		2021	
	Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$1–$106	4,000	1	2,000	1	2,000	1	2,000	1	2,000	0	3,000	1
$107–$160	18,000	6	11,000	5	8,000	3	5,000	2	4,000	1	5,000	1
$161–$213	46,000	16	27,000	12	29,000	11	13,000	4	8,000	2	9,000	2
$214–$266	67,000	23	55,000	25	53,000	20	31,000	10	18,000	4	17,000	4
$267–$320	40,000	14	53,000	24	61,000	23	47,000	15	44,000	11	49,000	10
$321–$374	16,000	5	22,000	10	39,000	15	67,000	21	88,000	22	113,000	24
$375–$427	8,000	3	17,000	8	24,000	9	57,000	18	79,000	20	104,000	22
$428–$534	9,000	3	19,000	8	27,000	10	56,000	17	83,000	21	98,000	20
$535–$641	3,000	1	8,000	4	11,000	4	22,000	7	39,000	10	38,000	8
$642–$801	2,000	1	4,000	2	5,000	2	12,000	4	23,000	6	26,000	5
$802–$1,068	1,000	0	2,000	1	3,000	1	6,000	2	10,000	2	11,000	2
$1,069+	1,000	0	4,000	2	3,000	1	5,000	1	6,000	2	6,000	1
Total	*216,000*	*74*	*224,000*	*100*	*265,000*	*100*	*322,000*	*100*	*403,000*	*100*	*479,000*	*100*

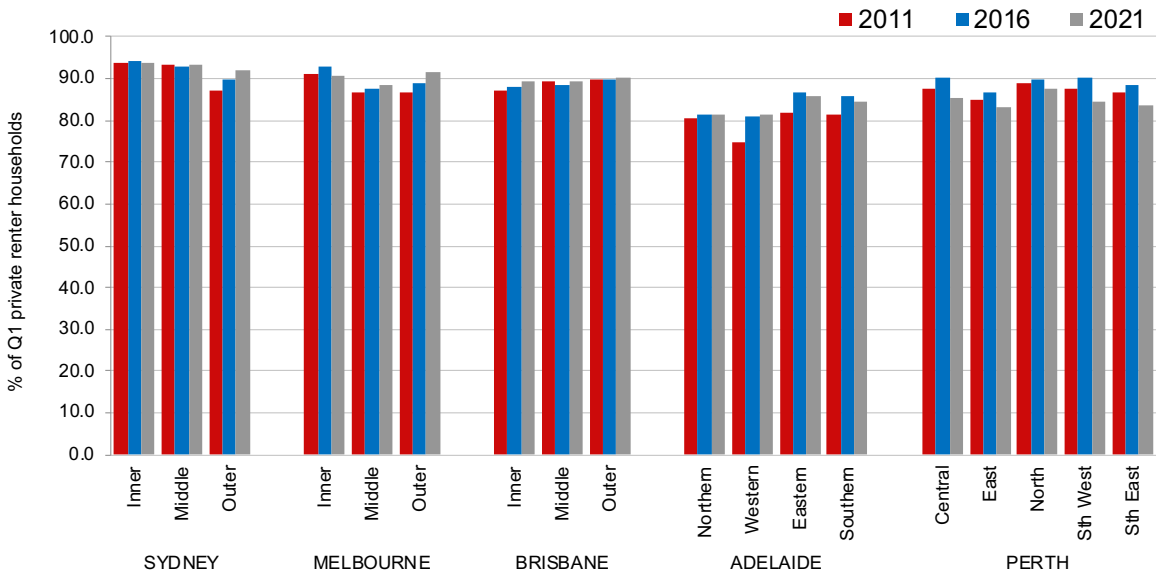
Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

C Brisbane

Weekly rent segment ($2021)	1996		2001		2006		2011		2016		2021	
	Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment		Dwellings per segment	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$1–$106	2,000	2	1,000	1	1,000	1	1,000	0	1,000	0	1,000	0
$107–$160	9,000	7	10,000	7	3,000	2	2,000	1	2,000	1	2,000	1
$161–$213	21,000	17	20,000	14	13,000	8	6,000	3	4,000	2	5,000	2
$214–$266	36,000	30	40,000	29	22,000	14	12,000	6	8,000	4	12,000	5
$267–$320	32,000	26	38,000	27	34,000	22	18,000	10	20,000	9	32,000	12
$321–$374	11,000	9	13,000	9	36,000	24	36,000	19	38,000	17	51,000	19
$375–$427	4,000	4	8,000	6	20,000	13	44,000	24	50,000	23	62,000	23
$428–$534	3,000	3	6,000	4	17,000	11	44,000	24	59,000	27	61,000	23
$535–$641	1,000	1	2,000	1	5,000	3	14,000	7	21,000	10	21,000	8
$642–$801	0	0	1,000	1	2,000	1	6,000	3	10,000	5	10,000	4
$802–$1,068	0	0	0	0	1,000	1	3,000	1	3,000	2	3,000	1
$1,069+	0	0	1,000	1	1,000	0	1,000	1	1,000	1	1,000	0
Total	*120,000*	*100*	*140,000*	*100*	*154,000*	*100*	*187,000*	*100*	*217,000*	*100*	*262,000*	*100*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Figure A9: Affordable and available private rental stock for very low-income (Q1) households: share of households paying unaffordable rents by selected capital city subregion, 2011, 2016 and 2021



Source: ABS customised matrices derived from the Australian Census of Population and Housing 2011, 2016 and 2021.

Table A10: Shortage of affordable and available dwellings for Q1 private renter households, subregions of five capital cities, 2006–21

Q1		Shortage/surplus of affordable stock				Shortage of affordable and available stock				Proportion (%) of Q1 households paying unaffordable rents			
		2006	2011	2016	2021	2006	2011	2016	2021	2006	2011	2016	2021
Sydney	Inner	−13,300	−16,400	−17,300	−19,100	−14,400	−17,900	−19,100	−21,400	**95**	**94**	**94**	**94**
	Middle	−15,900	−18,700	−18,600	−25,300	−17,500	−20,800	−21,100	−28,500	**94**	**93**	**93**	**93**
	Outer	−11,100	−13,300	−13,500	−20,300	−12,600	−15,300	−15,500	−22,200	**90**	**87**	**90**	**92**
Melbourne	Inner	−11,300	−14,300	−19,200	−19,400	−13,200	−16,300	−21,500	−22,400	**90**	**91**	**93**	**91**
	Middle	−12,800	−17,100	−18,900	−21,600	−16,900	−21,200	−23,700	−26,000	**84**	**87**	**87**	**89**
	Outer	−7,700	−11,800	−14,300	−20,400	−9,600	−14,300	−17,300	−23,200	**85**	**87**	**89**	**92**
Brisbane	Inner	−5,200	−6,700	−7,500	−9,500	−6,600	−8,100	−9,200	−11,600	**85**	**87**	**88**	**89**
	Middle	−3,400	−4,600	−4,700	−5,500	−4,100	−5,500	−5,800	−6,900	**89**	**89**	**89**	**89**
	Outer	−7,000	−11,300	−12,700	−16,600	−8,400	−12,700	−14,500	−18,700	**88**	**90**	**90**	**90**
Adelaide	Northern	−2,400	−3,800	−5,500	−5,300	−3,300	−5,000	−6,900	−6,900	**80**	**80**	**82**	**82**
	Western	−1,200	−2,000	−2,900	−2,500	−2,400	−3,100	−4,000	−3,700	**73**	**75**	**81**	**81**
	Eastern	−2,100	−2,900	−3,800	−3,500	−3,000	−3,900	−4,700	−4,500	**81**	**82**	**87**	**86**
	Southern	−2,200	−3,300	−4,500	−4,100	−3,100	−4,300	−5,500	−5,200	**82**	**81**	**86**	**85**
Perth	Central	−1,100	−1,700	−2,000	−1,500	−1,800	−2,100	−2,300	−2,300	**73**	**88**	**90**	**85**
	East	−1,200	−1,800	−2,200	−1,900	−2,100	−2,500	−2,800	−3,000	**75**	**85**	**87**	**83**
	North	−2,900	−4,400	−4,800	−4,000	−4,300	−5,300	−5,800	−5,800	**81**	**89**	**90**	**88**
	Sth East	−2,000	−3,200	−3,800	−2,900	−3,000	−4,000	−4,500	−4,400	**79**	**88**	**90**	**85**
		−2,600	−3,600	−4,000	−2,900	−4,000	−4,700	−5,200	−5,100	**81**	**87**	**88**	**84**

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

Table A11: Shortage of affordable and available dwellings for Q2 private renter households, subregions of five capital cities, 2006–21

Q2		Shortage/surplus of affordable stock				Shortage of affordable and available stock				Proportion (%) of Q2 households paying unaffordable rents			
		2006	2011	2016	2021	2006	2011	2016	2021	2006	2011	2016	2021
Sydney	Inner	6,900	2,600	-7,700	6,200	-12,100	-14,600	-20,100	-20,700	**62**	**70**	**80**	**62**
	Middle	23,100	9,700	-7,700	24,000	-13,100	-18,200	-26,900	-25,000	**46**	**61**	**76**	**55**
	Outer	27,900	24,600	9,300	27,100	-5,100	-7,100	-13,200	-12,700	**25**	**34**	**54**	**40**
Melbourne	Inner	24,000	19,700	14,800	42,900	-6,200	-8,300	-13,900	-9,800	**37**	**49**	**53**	**31**
	Middle	49,400	44,300	41,100	63,900	-5,000	-8,600	-13,700	-10,400	**19**	**31**	**35**	**26**
	Outer	29,900	36,300	41,000	66,400	-1,900	-4,000	-6,700	-5,600	**11**	**21**	**22**	**16**
Brisbane	Inner	15,100	10,700	13,000	24,300	-3,800	-5,100	-5,100	-6,500	**33**	**48**	**49**	**31**
	Middle	8,700	4,400	6,700	16,400	-3,400	-4,800	-4,500	-4,100	**41**	**58**	**57**	**31**
	Outer	21,100	22,000	33,200	48,600	-3,900	-6,100	-5,400	-4,900	**24**	**34**	**28**	**15**
Adelaide	Northern	10,300	14,000	16,000	20,500	-400	-700	-1,000	-600	**7**	**9**	**10**	**6**
	Western	7,700	8,800	8,200	11,400	-500	-800	-1,300	-900	**11**	**16**	**21**	**15**
	Eastern	7,700	8,200	7,200	10,300	-900	-1,200	-1,600	-1,500	**20**	**25**	**28**	**23**
	Southern	9,300	10,600	10,600	13,900	-700	-900	-1,500	-900	**12**	**16**	**19**	**12**
Perth	Central	4,600	2,700	2,800	6,800	-600	-1,100	-1,100	-1,100	**27**	**48**	**52**	**30**
	East	8,000	4,400	4,300	11,300	--400	-1,500	-1,600	-800	**11**	**40**	**46**	**14**
	North	15,000	7,000	7,800	20,900	-1,100	-3,400	-3,300	-1,900	**14**	**47**	**49**	**17**
	Sth East	9,800	6,500	5,700	14,700	-800	-1,900	-2,400	-1,500	**15**	**40**	**48**	**17**
		13,700	7,900	8,400	21,000	-800	-2,600	-2,700	-1,500	**12**	**40**	**44**	**14**

Source: ABS customised matrices derived from the Australian Census of Population and Housing 2006, 2011, 2016 and 2021.

Table A12: Shortage of affordable and available stock for Q1 PRS households, selected regional cities and towns, 2021 (and 2016)

		2021							2016		
		Very low-income (Q1) h'holds	Potentially affordable dwellings (R1)	Shortage or surplus of affordable stock (= 2 - 1)	Higher-income h'hlds in the potentially affordable stock	Affordable dwellings actually available (= 2 - 4)	Shortage of affordable *and* available stock (= 3 - 4)	Q1 h'holds paying unaffordable rent (%) (=6/1 x 100)	Shortage or surplus of affordable stock	Shortage of affordable *and* available stock	Q1 h'holds paying unaffordable rent (%)
	Column	***1***	***2***	***3***	***4***	***5***	***6***	***7***			
NSW	Newcastle	10,600	3,200	−7,400	1,500	1,700	−8,800	**84%**	−5,800	−7,600	**81%**
	Wollongong	5,000	1,200	−3,800	600	600	−4,300	**88%**	−3,300	−3,900	**84%**
	Coffs Harbour	2,100	500	−1,600	200	300	−1,900	**87%**	−1,200	−1,500	**79%**
	Shoalhaven	2,200	700	−1,500	300	400	−1,800	**83%**	−1,100	−1,500	**76%**
	Tweed Valley	1,800	400	−1,400	200	200	−1,600	**87%**	−1,400	−1,600	**84%**
	Wagga Wagga	2,200	2,000	−300	1,000	1,000	−1,300	**57%**	200	−1,000	**52%**
	Albury-Wodonga	3,600	3,100	−500	1,500	1,600	−2,000	**55%**	100	−1,600	**49%**
VIC	Geelong	4,500	1,900	−2,600	900	1,000	−3,500	**78%**	−1,800	−2,900	**73%**
	Ballarat	3,200	1,700	−1,500	800	900	−2,300	**72%**	−800	−1,700	**64%**
	Bendigo	2,600	1,300	−1,200	700	700	−1,900	**74%**	−800	−1,600	**70%**
QLD	Gold Coast	13,200	2,000	−11,100	1,100	1,000	−12,200	**93%**	−10,600	−11,600	**92%**
	Sunshine Coast	6,100	1,200	−4,800	600	600	−5,500	**90%**	−4,800	−5,500	**89%**
	Toowoomba	3,900	2,000	−2,000	1,000	1,000	−3,000	**76%**	−1,600	−2,500	**76%**
	Cairns	3,800	1,500	−2,200	700	800	−2,900	**78%**	−1,900	−2,900	**74%**
	Townsville	4,000	2,200	−1,800	1,200	1,000	−3,000	**75%**	−2,300	−3,200	**80%**
	Bundaberg	2,300	1,200	−1,100	600	600	−1,600	**72%**	−1,300	−1,800	**75%**
	Mackay	1,900	1,200	−800	700	500	−1,500	**76%**	−500	−1,500	**68%**
	Rockhampton	2,500	1,600	−900	800	700	−1,800	**71%**	−1,000	−1,800	**73%**
WA	Mandurah	2,200	900	−1,300	500	500	−1,800	**79%**	−1,600	−1,800	**87%**
	Bunbury	1,400	900	−600	600	300	−1,100	**77%**	−1,000	−1,400	**83%**
TAS	Launceston	3,000	2,100	−900	1,000	1,100	−1,900	**63%**	−800	−1,800	**55%**

Source: ABS customised matrix derived from the Australian Census of Population and Housing 2016 and 2021 (full 2016 table included in Hulse, Reynolds et al. 2019a: Appendix 2).

Table A13: Shortage of affordable and available stock for Q2 PRS households, selected regional cities and towns, 2021 (and 2016)

		2021							2016		
		Very low-income (Q2) h'holds	Potentially affordable dwellings (R1+R2)	Shortage or surplus of affordable stock (= 2 - 1)	Other income h'hlds in the potentially affordable stock	Affordable dwellings actually available (= 2 - 4)	Shortage of affordable *and* available stock (= 3 - 4)	Q2 h'holds paying unaffordable rent (%) (=6/1 x 100)	Shortage or surplus of affordable stock	Shortage of affordable *and* available stock	Q2 h'holds paying unaffordable rent (%)
	Column	***1***	***2***	***3***	***4***	***5***	***6***	***7***			
NSW	Newcastle	13,700	29,500	15,900	20,100	9,500	−4,200	**31%**	11,500	−4,200	**35%**
	Wollongong	6,300	11,100	4,900	7,600	3,500	−2,800	**44%**	3,700	−2,500	**46%**
	Coffs Harbour	2,200	4,800	2,500	3,200	1,500	−700	**32%**	2,200	−700	**31%**
	Shoalhaven	2,200	5,500	3,300	3,800	1,700	−500	**24%**	3,000	−500	**21%**
	Tweed Valley	2,000	3,400	1,300	2,300	1,100	−1,000	**47%**	1,600	−900	**42%**
	Wagga Wagga	2,300	7,500	5,100	5,300	2,200	−200	**7%**	4,000	−200	**11%**
	Albury-Wodonga	3,600	11,400	7,900	8,100	3,400	−200	**6%**	6,400	−300	**7%**
VIC	Geelong	5,400	15,800	10,400	11,100	4,700	−700	13%	7,700	−700	13%
	Ballarat	3,500	10,900	7,400	7,500	3,400	−200	5%	5,600	−200	6%
	Bendigo	2,900	9,000	6,200	6,300	2,700	−100	5%	4,900	−200	5%
QLD	Gold Coast	19,400	29,300	9,900	19,400	10,000	−9,400	49%	10,100	−7,600	53%
	Sunshine Coast	8,900	13,200	4,400	8,800	4,400	−4,400	50%	5,500	−3,400	49%
	Toowoomba	5,200	15,400	10,200	10,500	4,900	−300	6%	8,400	−400	11%
	Cairns	4,900	12,100	7,200	8,000	4,100	−800	17%	7,900	−800	21%
	Townsville	5,600	17,200	11,600	12,000	5,200	−400	7%	10,100	−600	15%
	Bundaberg	2,500	7,700	5,200	5,200	2,500	−100	3%	5,100	−100	5%
	Mackay	2,500	7,400	4,900	5,300	2,100	−400	14%	6,200	−200	11%
	Rockhampton	2,900	8,900	6,000	6,200	2,700	−200	7%	6,100	−200	10%
WA	Mandurah	2,600	7,400	4,700	4,900	2,500	−200	7%	3,100	−400	26%
	Bunbury	2,300	6,800	4,600	4,700	2,100	−100	6%	3,300	−300	19%
TAS	Launceston	3,100	9,200	6,100	6,300	2,900	−200	6%	5,400	−100	5%

Source: ABS customised matrix derived from the Australian Census of Population and Housing 2016 and 2021 (full 2016 table included in Hulse, Reynolds et al 2019a: Appendix 2).

Chapter 6 – supporting analysis

Table A14: Socio-demographic characteristics of PRS households and all households, Australia, 2016

Characteristics		Private renter households					
		Q1	Q2	Q3	Q4+Q5	Total	All h'holds
		%	%	%	%	%	%
	Total N	354,000	443,000	433,000	649,000	1,879,000	7,991,000
Age^							
15–24 yrs.		15	11	11	7	10	4
25–34 yrs.		20	28	35	39	32	16
35–44 yrs.		18	23	25	28	24	19
45–54 yrs.		15	17	17	17	17	20
55–64 yrs.		13	11	9	8	10	17
65+ yrs.		19	10	4	2	7	25
	Total %	100	100	100	100	100	100
Household type*							
Younger couple, no children		4	8	16	26	16	8
Midlife couple, no children		2	3	4	5	4	9
Older couple, no children		2	4	2	1	2	11
Couple families with children		9	17	31	36	25	32
Single parent families		22	22	14	6	15	10
Group household/ other		9	10	14	17	13	7
Younger person living alone		18	19	12	5	12	6
Midlife person living alone		18	12	6	3	9	8
Older person living alone		16	3	1	0	4	10
	Total %	100	100	100	100	100	100
Period of arrival							
Before 2011		23	24	25	27	25	28
2011 or after		12	8	10	14	11	4
Born in Australia (or NS)		65	68	65	60	64	69
	Total %	100	100	100	100	100	100
Dwelling type							
Detached house		49	53	55	51	52	74
Semi-det/row/terr/ town-hse		20	19	18	18	18	12
Flat, unit apartment		31	28	27	31	29	13
Other dwelling		1	1	0	0	1	1
	Total %	100	100	100	100	100	100

*Notes: ^Age of household reference person; *'Younger' is household reference person < 45years; 'midlife' is aged 45–64 years; 'older' is aged 65 years or more; numbers may not sum exactly due to rounding.*

Source: Customised ABS matrix based on Australian Census of Population and Housing data, 2016.

Table A15: Socio-demographic characteristics of PRS households and all households, Australia, 2016

Characteristics	Q1 PRS households				Q2 PRS households		
	Paying afford. rent	Paying unafford. rent	Paying severely unafford. rent	Total	Paying afford. rent	Paying unafford. rent	Total
	%	%	%	%	%	%	%
Total N	72,000	183,000	99,000	354,000	286,000	157,000	443,000
Age^							
15–24 yrs.	10	12	23	15	11	10	11
25–34 yrs.	12	21	24	20	28	29	28
35–44 yrs.	12	18	21	18	21	26	23
45–54 yrs.	16	15	14	15	17	18	17
55–64 yrs.	19	14	9	13	12	9	11
65+ yrs.	31	19	9	19	11	7	10
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Household type*							
Couple families, no children	5	8	11	8	16	15	16
Couple families with children	1	8	16	9	15	22	17
Single parent families	10	26	23	22	22	24	22
Group household/other	4	6	19	9	8	13	10
Younger person living alone	22	17	16	18	21	15	19
Midlife person living alone	30	19	9	18	14	8	12
Older person living alone	29	16	6	16	4	2	3
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Period of arrival							
Before 2011	17	23	28	23	21	31	24
2011 or after	3	8	24	12	6	11	8
Born in Australia (or NS)	79	69	47	65	73	58	68
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Dwelling type and size							
Small detach. hse: 1–2 bdrms	23	13	4	12	12	4	9
Larger detach. hse: 3+ bdrms	28	38	39	36	43	45	44
Small semi-det: 1–2 bdrms	18	15	4	13	14	5	10
Larger semi-det: 3+ bdrms	3	6	11	7	7	12	8
Small flat/unit/apart: 0–1 bdrms	12	11	10	11	9	8	9
Larger flat/unit/apart: 2+ bdrms	15	17	31	20	15	26	19
Other dwelling	2	1	0	1	1	0	1
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**

*Notes: ^Age of household reference person; *'Younger' is household reference person < 45years; 'midlife' is aged 45–64 years; 'older' is aged 65 years or more; numbers may not sum exactly due to rounding. There is only one category for Q2 households 'paying unaffordable rents', which includes the relatively small percentage paying severely unaffordable rents.*

Source: ABS customised matrix derived from Australian Census of Population and Housing data, 2016.

Table A16: Persons by their relationship in their household by age cohort, Australia, 2002–03

Relationship in household	15–17 years		18–24 years		25–29 years		30–34 years		35+ years		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Husband/ wife/partner	3,345	0.4	323,489	17.4	764,479	54.7	1,084,063	71.2	7,082,706	72.4	9,258,082	60.2
Lone parent	1,621	0.2	43,329	2.3	58,029	4.2	98,716	6.5	624,194	6.4	825,889	5.4
Dependent student	687,355	83.6	363,484	19.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,050,840	6.8
Non-dependent child	102,498	12.5	702,674	37.7	233,437	16.7	99,381	6.5	154,544	1.6	1,292,534	8.4
Other related or unrelated person in a family household	22,832	2.8	123,866	6.7	66,495	4.8	32,878	2.2	218,867	2.2	464,939	3.0
Lone person	2,251	0.3	80,566	4.3	145,907	10.4	143,109	9.4	1,555,433	15.9	1,927,265	12.5
All unrelated (group)	2,198	0.3	224,735	12.1	129,716	9.3	64,978	4.3	141,691	1.4	563,318	3.7
Total	**822,100**	**100.0**	**1,862,143**	**100.0**	**1,398,063**	**100.0**	**1,523,126**	**100.0**	**9,777,434**	**100.0**	**15,382,866**	**100.0**

n.a. = not applicable

Source: ABS Survey of Income and Housing, basic unit record file, 2002–03.

Table A17: Persons by their relationship in their household by age cohort, 2019–20

Relationship in household	15–17 years		18–24 years		25–29 years		30–34 years		35+ years		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Husband/ wife/partner	419	0.0	303,941	13.8	991,696	53.4	1,349,548	72.2	9,592,002	71.8	12,237,607	60.7
Lone parent	0.0	0.0	25,239	1.1	47,533	2.6	58,165	3.1	873,978	6.5	1,004,914	5.0
Dependent student	798,886	90.9	671,572	30.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,470,459	7.3
Non-dependent child	60,009	6.8	755,321	34.2	398,527	21.4	151,117	8.1	251,761	1.9	1,616,736	8.0
Other related or unrelated person in a family household	19,470	2.2	185,305	8.4	123,186	6.6	57,837	3.1	329,544	2.5	715,342	3.5
Lone person	0.0	0.0	68,757	3.1	132,455	7.1	162,351	8.7	2,090,936	15.7	2,454,499	12.2
All unrelated (group)	472	0.1	198,168	9.0	165,440	8.9	89,107	4.8	212,569	1.6	665,757	3.3
Total	**879,256**	**100.0**	**2,208,303**	**100.0**	**1,858,838**	**100.0**	**1,868,127**	**100.0**	**13,350,790**	**100.0**	**20,165,314**	**100.0**

n.a. = not applicable

Source: ABS Survey of Income and Housing, basic unit record file, 2019–20.

Table A18: Change in the number and per cent of persons by their relationship in their household by age cohort, 2002–03 to 2019–20

Relationship in household	15–17 years		18–24 years		25–29 years		30–34 years		35+ years		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Husband/ wife/partner	–2,926	–87.5	–19,547	–6.0	227,217	29.7	265,485	24.5	2,509,296	35.4	2,979,526	32.2
Lone parent	–1,621	–100.0	–18,089	–41.7	–10,496	–18.1	–40,551	–41.1	249,784	40.0	179,026	21.7
Dependent student	111,531	16.2	308,088	84.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	419,619	39.9
Non-dependent child	–42,489	–41.5	52,647	7.5	165,090	70.7	51,736	52.1	97,217	62.9	324,202	25.1
Other related or unrelated person in a family household	–3,363	–14.7	61,439	49.6	56,692	85.3	24,959	75.9	110,677	50.6	250,404	53.9
Lone person	–2,251	–100.0	–11,809	–14.7	–13,452	–9.2	19,242	13.4	535,503	34.4	527,234	27.4
All unrelated (group)	–1,726	–78.5	–26,568	–11.8	35,724	27.5	24,129	37.1	70,878	50.0	102,438	18.2
Total	**57,156**	**7.0**	**346,160**	**18.6**	**460,775**	**33.0**	**345,001**	**22.7**	**3,573,356**	**36.5**	**4,782,448**	**31.1**

n.a. = not applicable

Source: ABS Survey of Income and Housing, basic unit record file, 2002–03 and 2019–20.

Table A19: Demographic characteristics across mainstream and non-mainstream private rental arrangements, *all* renting income units, row %, 2019–20

	Mainstream independent %	Mainstream group cohabitating %	Non-mainstream unrelated cohabitating %	Internal family cohabitating %	External family independent/ group %	All %
15–24 years	33.1	8.4	10.1	44.5	4.0	100
25–34 years	70.5	4.0	4.9	16.6	4.1	100
35–44 years	84.6	2.1	2.0	6.2	5.1	100
45–54 years	85.4	2.1	2.5	6.2	3.7	100
55–64 years	79.7	1.8	4.5	7.7	6.3	100
65+ years	72.6	1.5	2.6	11.6	11.6	100
Total (age)	70.9	3.6	4.5	16.0	5.0	100
Male	66.7	4.2	5.2	18.8	5.1	100
Female	75.2	3.0	3.8	13.0	5.0	100
Total (gender)	70.9	3.6	4.5	16.0	5.0	100
Dwelling tenure: owner without a mortgage	0.0	0.0	9.9	90.1	0.0	100
Dwelling tenure: owner with a mortgage	0.0	0.0	15.2	84.8	0.0	100
Dwelling tenure: renter	79.5	4.1	3.4	7.4	5.7	100
Dwelling tenure: other	0.0	0.0	0.0	100.0	0.0	100
Total (tenure of dwelling)	70.9	3.6	4.5	16.0	5.0	100
Married	88.6	0.0	0.7	4.8	5.9	100
Not married	48.8	8.1	9.3	29.8	3.9	100
Total (marital status)	70.9	3.6	4.5	16.0	5.0	100
Employed	72.6	4.3	3.9	14.6	4.6	100
Unemployed	56.9	1.1	8.8	30.0	3.3	100
Not in the labour force	68.6	2.1	5.5	17.1	6.6	100
Total (labour market status)	70.9	3.6	4.5	16.0	5.0	100
1 or more bedrooms needed	53.7	4.7	9.9	28.1	3.6	100
None required/ none spare	68.8	6.5	5.6	15.7	3.3	100

	Mainstream independent %	Mainstream group cohabitating %	Non-mainstream unrelated cohabitating %	Internal family cohabitating %	External family independent/ group %	All %
1 bedroom spare	74.3	2.2	3.5	15.6	4.4	100
2 bedrooms spare	76.4	1.6	2.4	12.2	7.4	100
3 bedrooms spare	67.8	0.0	2.0	12.2	18.0	100
4 or more bedrooms spare	52.1	0.0	18.0	18.5	11.3	100
Total (bedrooms)	70.9	3.6	4.5	16.0	5.0	100
Born in Australia	66.7	3.9	3.8	19.8	5.9	100
Arrived 1995 and before	75.1	1.7	3.5	12.6	7.0	100
Arrived 1996–2005	76.2	3.3	2.2	9.6	8.7	100
Arrived 2006 to year of collection	78.3	3.6	7.0	9.4	1.8	100
Total (Aust'n-born status)	70.8	3.6	4.5	16.0	5.0	100
Full-time study	52.7	9.6	15.1	18.0	4.6	100
Part-time study	65.8	4.4	6.5	19.3	3.9	100
Not studying	73.3	2.9	3.2	15.5	5.1	100
Total (education status)	70.9	3.6	4.5	16.0	5.0	100
Q1 income	46.4	3.9	12.2	33.0	4.5	100
Q2 income	63.4	5.8	3.8	21.2	5.8	100
Q3 income	76.6	4.9	2.9	10.3	5.3	100
Q4 income	88.4	1.6	1.1	5.1	3.8	100
Q5 income	94.3	0.2	0.7	0.0	4.7	100
Total (income groups)	71.7	3.7	4.5	15.3	4.8	100

Source: ABS Survey of Income and Housing, basic unit record file, 2019–20.

Table A20: Demographic characteristics within mainstream and non-mainstream private rental arrangements, all renting income units, column %, 2019–20

	Mainstream independent %	Mainstream group cohabitating %	Non-mainstream unrelated cohabitating %	Internal family cohabitating %	External family independent/ group %	All %
15–24 years	6.9	34.3	33.1	41.1	11.7	14.8
25–34 years	34.5	38.6	37.6	35.9	28.2	34.7
35–44 years	27.0	12.8	10.2	8.7	23.0	22.6
45–54 years	15.1	7.3	6.9	4.9	9.4	12.5
55–64 years	8.6	3.8	7.6	3.7	9.7	7.7
65+ years	7.9	3.2	4.5	5.6	18.1	7.8
Male	47.6	59.6	58.0	59.7	51.3	50.6
Female	52.4	40.4	42.0	40.3	48.7	49.4
Dwelling tenure: owner without a mortgage	0.0	0.0	7.3	18.8	0.0	3.3
Dwelling tenure: owner with a mortgage	0.0	0.0	25.3	39.9	0.0	7.5
Dwelling tenure: renter	100.0	100.0	67.3	41.2	100.0	89.1
Married	69.3	0.0	8.4	16.8	65.1	55.5
Not married	30.7	100.0	91.6	83.2	34.9	44.5
Employed	73.3	84.6	61.5	65.4	65.8	71.5
Unemployed	4.0	1.5	9.8	9.4	3.3	5.0
Not in the labour force	22.7	13.9	28.7	25.1	30.8	23.4
Average hours worked	27.3	30.2	20.1	22.3		26.1
1 or more bedrooms needed	6.5	11.2	18.9	15.2	6.1	8.6
None required/ none spare	31.1	57.9	39.9	31.5	21.2	32.0
1 bedroom spare	39.4	23.1	29.2	36.7	33.0	37.6
2 bedrooms spare	19.5	7.9	9.5	13.8	26.9	18.1
3 bedrooms spare	3.3	0.0	1.5	2.6	12.3	3.4
4 or more bedrooms spare	0.2	0.0	0.9	0.3	0.5	0.2
Born in Australia	57.7	65.4	51.4	75.8	71.5	61.3

	Mainstream independent %	Mainstream group cohabitating %	Non-mainstream unrelated cohabitating %	Internal family cohabitating %	External family independent/ group %	All %
Arrived 1995 and before	7.9	3.6	5.9	5.9	10.3	7.4
Arrived 1996–2005	5.8	5.0	2.6	3.2	9.2	5.4
Arrived 2006 to year of collection	28.7	26.1	40.2	15.2	9.0	25.9
Full-time study	6.9	24.8	31.2	10.5	8.5	9.3
Part-time study	5.7	7.5	8.9	7.4	4.8	6.2
Not studying	87.4	67.7	59.9	82.1	86.7	84.5
Q1 income	13.6	22.2	57.7	45.6	19.4	21.1
Q2 income	19.7	35.1	19.1	30.9	26.4	22.3
Q3 income	26.9	33.6	16.3	17.0	27.4	25.2
Q4 income	23.9	8.4	4.9	6.4	15.2	19.4
Q5 income	15.9	0.7	2.0	0.0	11.6	12.1

Source: ABS Survey of Income and Housing, basic unit record file, 2019–20.

Appendix 3: Unoccupied dwellings

Of note in Table 2 in Chapter 3 is the large increase in the total number of households in the period 2016–21 (987,000 households) compared with earlier intercensal periods. Table A21 summarises the increase in total households in the last five intercensal periods, keeping in mind that there is one household per occupied private dwelling, and thus these counts are the same. An increase in households translates to an increase in private dwellings.

Table A21: Intercensal increases in numbers of households/occupied private dwellings, national, 1996–2001 to 2016–21

Intercensal period	Increase in total number of households*
1996–2001	465,000
2001–2006	399,000
2006–2011	616,000
2011–2016	526,000
2016–2021	987,000

**Number of households is the same as the number of occupied private dwellings, excluding 'visitor-only' and 'other non-classifiable households'.*

Source: ABS customised matrices derived from the Australian Census of Population and Housing 1996, 2001, 2006, 2011, 2016 and 2021.

Assuming that the rate of newly built dwellings was similar between 2016 and 2021 to previous intercensal periods, it is likely that the 'additional' dwellings (households) are largely those that were enumerated differently from the previous Census: essentially, dwellings that were 'unoccupied' in 2016 had a household residing in them in 2021 and were, therefore, enumerated as 'occupied'. Table A22 presents counts and rates of change of dwellings by occupancy type for the last four censuses. It shows almost no growth in unoccupied dwellings (nationally) between 2016 and 2021 (only 3,914 dwellings), a change totally inconsistent with two previous intercensal periods where the numbers of unoccupied dwellings increased by over 100,000 in each period (12.5% and 11.3%, respectively). Table A24 shows that the number of unoccupied dwellings declined in all state metropolitan and non-metropolitan areas, apart from Sydney and Melbourne, between 2016 and 2021, again a change inconsistent with the earlier intercensal period in which there were increased numbers of unoccupied dwellings in all regions. These patterns suggest that, along with more people counted at home, newly formed households may have been occupying stock (regardless of tenure) that had previously been enumerated as 'unoccupied', particularly outside of the capital cities. This includes stock that may have transferred from short-term rental to long-term, or from holiday rental to the ownership sector – all responses to COVID-19 conditions, including the unusual movement of people to, but not from, regional areas.

Table A22: Dwelling types, national counts and change, 2006, 2011, 2016 and 2021

	Census				Intercensal change N			Intercensal change %		
	2006	2011	2016	2021	2006–11	2011–16	2016–21	2006–11	2011–16	2016–21
Occupied private dwellings	7,596,182	8,182,578	8,861,628	9,808,423	586,396	679,050	946,795	7.7	8.3	10.7
Unoccupied private dwellings	830,379	934,474	1,039,900	1,043,814	104,095	105,426	3,914	12.5	11.3	0.4
Non-private dwellings	19,823	22,851	23,197	22,626	3,028	346	–571	15.3	1.5	–2.5
Other*	340	376	283	422	36	–93	139	10.6	–24.7	49.1
Total	8,446,726	9,140,203	9,924,976	10,875,258	693,477	784,773	950,282	8.2	8.6	9.6

**Migratory, off-shore and shipping.*

Source: ABS TableBuilder, counting dwellings, place of enumeration dataset, 2006, 2011, 2016 and 2021.

Table A23: Dwelling type by state metropolitan and non-metropolitan areas^, 2011, 2016 and 2021

	Occupied private dwellings			Unoccupied private dwellings			Non-private dwellings			Other*			Total		
	2011	2016	2021	2011	2016	2021	2011	2016	2021	2011	2016	2021	2011	2016	2021
NSW metro	1,601,520	1,719,673	1,911,652	118,803	136,061	164,629	2,720	2,874	3,017	0	0	0	1,723,042	1,858,599	2,079,281
NSW non-metro	997,667	1,055,181	1,146,605	146,533	148,688	134,893	4,266	4,498	3,970	35	9	34	1,148,508	1,208,388	1,285,514
VIC metro	1,494,669	1,664,540	1,858,792	141,507	167,507	198,696	2,471	2,319	2,837	0	0	0	1,638,629	1,834,352	2,060,312
VIC non-metro	536,560	577,737	648,842	105,242	111,126	99,343	2,281	2,296	2,287	34	5	44	644,111	691,176	750,515
QLD metro	763,024	833,404	950,629	58,030	68,409	66,058	1,121	1,095	1,131	0	0	0	822,158	902,883	1,017,828
QLD non-metro	885,521	958,336	1,047,402	119,884	127,175	126,353	4,302	4,215	3,956	100	52	90	1,009,785	1,089,779	1,177,778
SA metro	491,689	514,741	553,814	41,825	47,407	40,070	757	675	601	0	0	0	534,265	562,824	594,485
SA non-metro	152,207	158,806	169,339	41,954	44,845	43,762	740	796	781	7	0	10	194,919	204,453	213,892
WA metro	659,788	732,348	809,673	66,224	85,728	72,698	884	876	932	0	0	0	726,878	818,950	883,309
WA non-metro	191,609	205,744	220,093	43,096	47,139	45,409	1,584	1,731	1,452	140	155	157	236,438	254,768	267,100
TAS metro	85,333	90,213	98,783	8,860	8,798	7,522	256	236	212	0	0	0	94,452	99,247	106,512
TAS non-metro	114,549	119,402	130,645	23,636	23,332	21,659	497	517	477	13	13	20	138,689	143,264	152,804
NT metro	44,706	49,768	53,503	3,835	5,530	5,025	166	164	153	0	0	3	48,713	55,466	58,684
NT non-metro	27,885	29,478	31,874	4,760	5,184	5,378	513	575	561	47	43	64	33,202	35,272	37,881
ACT total	135,037	150,697	174,972	10,198	12,595	11,988	246	254	187	0	0	0	145,473	163,539	187,156
OT	814	1,560	1,805	87	376	331	47	76	72	0	0	0	941	2,010	2,207
Total	8,182,578	8,861,628	9,808,423	934,474	1,039,900	1,043,814	22,851	23,197	22,626	376	283	422	9,140,203	9,924,976	10,875,258

^Metropolitan areas = state/territory Greater Capital City Statistical Areas (GCCSA) and non-metropolitan = balance of state.

**Migratory, off-shore and shipping. OT = other territories.*

Source: ABS TableBuilder, counting dwellings, place of enumeration dataset, 2011, 2016 and 2021.

Table A24: Change in dwelling types by metropolitan and non-metropolitan areas^, 2011–16 and 2016–21

	Occupied private dwellings		Unoccupied private dwellings		Non-private dwellings		Other*		Total	
	2011–16	2016–21	2011–16	2016–21	2011–16	2016–21	2011–16	2016–21	2011–16	2016–21
	N	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*
NSW metro	118,153	191,979	17,258	28,568	154	143	0	0	135,557	220,682
NSW non-metro	57,514	91,424	2,155	−13,795	232	−528	−26	25	59,880	77,126
Vic metro	169,871	194,252	26,000	31,189	−152	518	0	0	195,723	225,960
VIC non- metro	41,177	71,105	5,884	−11,783	15	−9	−29	39	47,065	59,339
QLD metro	70,380	117,225	10,379	−2,351	−26	36	0	0	80,725	114,945
QLD non- metro	72,815	89,066	7,291	−822	−87	−259	−48	38	79,994	87,999
SA metro	23,052	39,073	5,582	−7,337	−82	−74	0	0	28,559	31,661
SA non- metro	6,599	10,533	2,891	−1,083	56	−15	−7	10	9,534	9,439
WA metro	72,560	77,325	19,504	−13,030	−8	56	0	0	92,072	64,359
WA non- metro	14,135	14,349	4,043	−1,730	147	−279	15	2	18,330	12,332
TAS metro	4,880	8,570	−62	−1,276	−20	−24	0	0	4,795	7,265
TAS non- metro	4,853	11,243	−304	−1,673	20	−40	0	7	4,575	9,540
NT metro	5,062	3,735	1,695	−505	−2	−11	0	3	6,753	3,218
NT non- metro	1,593	2,396	424	194	62	−14	−4	21	2,070	2,609
ACT total	15,660	24,275	2,397	−607	8	−67	0	0	18,066	23,617
OT	746	245	289	−45	29	−4	0	0	1,069	197
Total	**679,050**	**946,795**	**105,426**	**3,914**	**346**	**−571**	**−93**	**139**	**784,773**	**950,282**

^Metropolitan areas = state/territory Greater Capital City Statistical Areas (GCCSA) and non-metropolitan = balance of state.

**Migratory, off-shore and shipping. OT = other territories.*

Source: ABS TableBuilder, counting dwellings, place of enumeration dataset, 2011, 2016 and 2021.

Australian Housing and Urban Research Institute
Level 12, 460 Bourke Street
Melbourne VIC 3000
Australia
+61 3 9660 2300
information@ahuri.edu.au
ahuri.edu.au
twitter.com/AHURI_Research
facebook.com/AHURI.AUS
Australian Housing and Urban Research Institute