



Australian Government



**NHFIC**

National Housing Finance  
and Investment Corporation



# State of the Nation's Housing 2022–23



## Acknowledgements

NHFIC would like to thank the authors for their contributions and insights, as without them the State of the Nation's Housing 2022–23 could not have been compiled. Special thanks to NHFIC's expert panel who provided feedback on the report, and representatives from peak industry bodies and developers for participating in our industry roundtables and giving us an on the ground assessment of housing markets.

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First published December 2020

Published in Australia by The National Housing Finance and Investment Corporation.

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## About NHFIC Research

Established in January 2020, NHFIC's research function conducts comprehensive research into housing demand, supply and affordability in Australia. NHFIC research was established to inform engagement and interest in relevant housing topics and encourage better housing outcomes, through better connected conversation between government, research and industry.

NHFIC's research program is supported by an expert panel of academics, industry and public policy professionals. NHFIC also engages closely with a broad range of stakeholders across the housing sector to identify problems with a view to undertaking practical and relevant research, and elevating and popularising key housing issues, which helps inform the public policy debate.

## About the State of the Nation's Housing

State of the Nation's Housing is NHFIC's flagship report, and provides an annual snapshot of housing demand and supply across the country, with a view to identifying supply shortfalls that could over time exacerbate affordability problems. State of the Nation's Housing is complemented by NHFIC's core ongoing research program which aims to contribute applied and practically focused research.

## Acknowledgement of Country

NHFIC acknowledges the Traditional Owners of Country throughout Australia and recognises their continuing connection to land, waters, community and culture. We pay our respects to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.





# In memory

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This report is dedicated to Judith Yates AM, who passed away last year (1943–2022).

Judy was considered one of Australia's preeminent housing economists with her work having been recognised domestically and internationally. Judy's work spanned four decades and provided invaluable analysis and insights in interpreting and explaining the changing nature of the housing market in Australia. Importantly her work also looked at the social dimensions of housing, including the distributional impact of housing policies on different groups in Australian society, such as the young, and lower-income households. Significantly for NHFIC, Judy was a keen supporter of the work of the former National Housing Supply Council (of which she was a member) and through her kindness and generosity of spirit was always happy to share her knowledge. Judy's research on housing bond financing (along with her colleagues Julie Lawson, Vivienne Milligan and Carrie Hamilton) provided foundational evidence for the establishment of NHFIC's housing bond program, which is designed to support more cost-effective financing of affordable housing by community housing organisations. She was much loved by her colleagues and friends and we are all grateful for her dedication to and passion for housing issues.



# Foreword

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## Australia's housing markets have been through an extraordinary period, impacted by COVID-19 related lockdowns, low population growth and record amounts of monetary and fiscal stimulus.

Housing markets are now at an inflection point. At a time of returning migration, they are contending with a perfect storm of high inflation and interest rates, slowing supply and record low vacancy rates.

High inflation has prompted the Reserve Bank of Australia (RBA) to raise the cash rate from 0.1% in January 2022 to above 3% with more increases expected, which is adversely impacting the outlook for supply. At the same time, the reopening of international borders is expected to lead to a rapid recovery in net overseas migration and new household formation. The short to medium term is likely to be dominated by a cyclical downturn in new supply, at a time of strong population growth. This is likely to see household formation outpace new supply for several years, with adverse flow on effects for affordability.

The sharp increase in mortgage rates associated with the tightening in monetary policy contributed to a decline in dwelling prices over the year to January, particularly in Sydney and Melbourne. Other cities, such as Adelaide, Perth, and Darwin, continued to see price increases. That said, the effects of interest rates will likely be felt in these markets over the coming period.

The increase in inflation also impacted the residential construction industry in 2021 and 2022, with strong demand and tight supply in most materials. Material prices rose by 17% in 2021–22 – the fastest pace of growth since 1975.

Record amounts of construction were occurring in mid-2022. Construction activity could have been even stronger but weather delays in 2021 and 2022, and materials and labour shortages, meant that around 20,000 detached dwellings and 8,000 multi-density dwellings were approved, but not built. Most of the detached dwelling projects are likely to be built. But multi-density projects may be cancelled or postponed for several years. Lead indicators now show that a cyclical downturn is underway. NHFIC's industry liaison suggests the availability of serviceable land and the increased time for development approvals is also inhibiting the timely delivery of new supply.

Returning migration at a time of low vacancy rates is likely to result in upward pressure on rents. Net migration into the regions was strong during COVID-19. But this appears to be easing, with rent growth now falling. In parallel, rents are picking up strongly in the cities that receive the bulk of overseas workers and international students, such as Sydney and Melbourne.

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Lower population growth would have normally been expected to lead to slower rates of household formation during the pandemic. But, over the course of 2021 and 2022, lockdowns and work from home arrangements meant there was a premium on space and vacancy rates plummeted sharply to record lows. The extent to which household sizes change in line with long-run trends introduces uncertainty as to how new household formation will affect Australia's rental markets.

The outlook for affordability will remain challenging, but mixed. Substantial pressure on rental affordability is likely across many cities in the short term as immigration increases. The decline in dwelling prices is improving entry points for first home buyers seeking to buy their first home. But rising interest rates are significantly reducing borrowing capacity and mortgage serviceability. For many, the balance of these forces may mean worsening affordability.

Given the rental stress in the lower end of the private market, this report includes extensive analysis on social and affordable housing. To better understand the demand and supply of social and affordable housing across the country, this year's report incorporates a new chapter on the state of housing needs. This chapter assesses the aggregate need for social and affordable housing across the country.

I would like to thank the NHFIC research team and our advisors, along with the many people that have provided feedback and input into the report.

We hope the report assists housing market stakeholders in delivering better housing outcomes for all Australians.



**Nathan Dal Bon**  
Chief Executive Officer  
National Housing Finance and Investment Corporation



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# Executive summary

## KEY POINTS

**The opening of Australia's borders in early 2022 has led to a much stronger than anticipated recovery in population growth. The Centre for Population expects net overseas migration to be 268,000 higher across 2021–22, 2022–23 and 2023–24.**

- Based on revised Centre for Population data, net overseas migration (NOM) is expected to recover to pre-pandemic levels of around 235,000 in 2022–23 (up from 180,000). This follows a much larger-than-expected recovery in 2021–22, where NOM was 150,000 (up from an anticipated decline of 41,000).
- Given more recent ABS data suggests that NOM increased by around 304,000 over the year to September 2022, NOM for 2022–23 is likely to be higher than 2022 Centre for Population estimates.
- Vacancy rates fell sharply to record lows during 2021 and 2022, putting strong upward pressure on rents. The recovery in NOM is likely to keep upward pressure on rents for some time (especially in Sydney and Melbourne).

**In housing markets across Australia, rental demand is strong as migration returns. In parallel, property prices have declined steeply as, from May 2022, interest rates rose at their fastest pace in more than 2 decades.**

- Following the RBA's successive interest rate hikes, first home buyer activity has fallen below their peaks but first home buyer participation as a proportion of all owner occupiers has started to recover across most states. This is to be expected. During tightening cycles, the market share of first home buyer loans tends to increase as prices fall and affordability improves.
- Building material cost inflation remains strong but is easing for some products. Builders report that skills shortages are enabling subcontractors to demand wage premiums. Most multi-density builders have struggled with cost inflation, which has undermined fixed price construction contracts.



**Net overseas migration**

**268,000 higher**

THAN EXPECTED FROM  
2022–23 TO 2024–25





**NHFIC anticipates supply additions (net of demolitions) to be 148,500 in 2022–23 and then fall to around 127,500 in 2024–25, owing to higher interest rates and lower prices. Beyond 2025–26, a recovery is expected during a period of stronger underlying demand.**

- The earlier than expected increase in interest rates relative to the former RBA guidance used in *State of the Nation's Housing 2021–22* report has impacted the outlook for new supply. Over the 3 years to 2024–25, NHFIC expects an average of 138,100 net new additions to be added to Australia's housing stock. This is well below the 180,000 average each year forecast in last year's report for the same period.
- In 2022–23, NHFIC expects detached dwelling net additions to remain elevated at 89,400, with multi-density net additions at 59,100. By 2024–25, both housing groups are expected to fall to 74,200 and 53,300 respectively.
- Consistent with the *State of the Nation's Housing 2021–22* report NHFIC expects shortages of multi-density dwellings for rent over the next several years. Net additions of apartments and medium density dwellings are forecast to be around 57,000 a year (on average) over the five years to 2026–27, around 40% below the levels during the latter part of the 2010s.
- A larger amount of subsidised housing is likely to emerge on the back of the Government's Housing Australia Future Fund, which will increase the pipeline of social and affordable dwellings at a time of weaker market activity.

**NHFIC expects around 1.8 million households (1.7 million occupied and 116,000 vacant e.g., second properties) to form from 2023 to 2033. This will take total occupied households and vacant properties to 12.6 million (up from 10.7 million), with the strongest growth expected in 'lone person' households.**

- New household formation is estimated to have been 132,400 in 2021–22, 72,000 higher than envisaged in last year's report owing the stronger recovery in population growth. NHFIC expects around 139,200 households to form in 2022–23, although this is likely to be an underestimate given recent population data. Household formation is expected to rise to 176,400 in 2024–25, before averaging around 171,000 each year over the rest of the projection period to 2033.
- Additional household types most likely to form over the projection period are 'lone person' households (563,600) and 'couple family with children' households (533,300). This will take the number of 'lone person' households to 3.2 million in 2033, compared with 3.4 million 'couple family with children' households.
- The household formation model assumes that household size returns to its long-term trend over the projection period. However, if preferences for more space and associated smaller household sizes endure for longer than expected, household formation could be stronger than anticipated.
- Despite the stronger recovery in NOM, household formation is expected to be lower for much of the projection period from 2022–23 than that envisaged in the *State of the Nation's Housing 2021–22* report due to significant revisions to the age and geographic distribution of the estimated resident population undertaken by the ABS and reflected in recent population projections.



**138,100**  
net new additions  
a year (on average)

OVER THE 3 YEARS  
TO 2024–25



**1.8 million**  
households

EXPECTED TO FORM  
FROM 2023 TO 2033



**563,600**  
lone person  
households

EXPECTED FROM  
2023 TO 2033



**-106,300 dwellings**

**gap between supply and household formation**

OVER THE FIVE YEARS TO 2027



**62,300**

**shortfall of apartments and medium density dwellings**

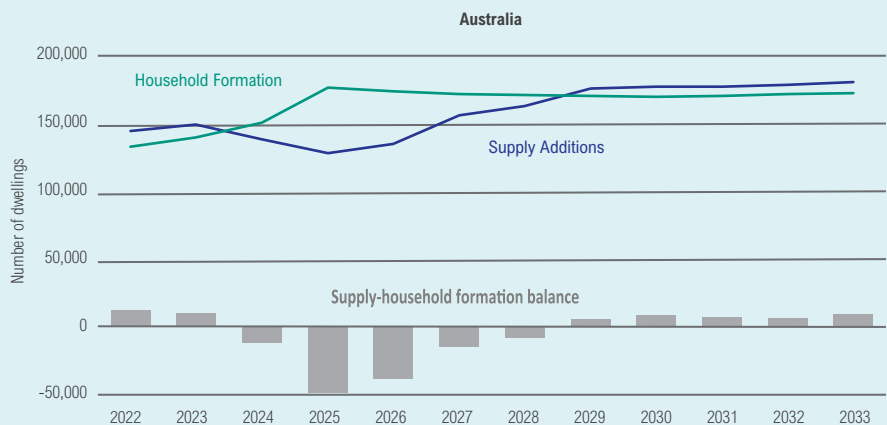
EXPECTED OVER FIVE YEARS TO 2027

**KEY POINTS (continued)**

**NHFIC expects the cumulative gap between new household formation and new supply will be around -106,300 dwellings over the five years from 2023 to 2027.**

- The gap between supply and household formation has widened over the next few years since the State of the Nation’s Housing 2021–22 report due to a significant deterioration in the supply outlook (-124,400 over 2023 to 2025) owing to higher than expected interest rates and difficult supply conditions, offset to some extent by moderately softer household formation (-41,000 over 2023 to 2025).
- From 2023 to 2033 (cumulatively), the gap between new household formation and anticipated new supply is expected to be -79,300 dwellings, a deterioration since the State of the Nation’s Housing 2021–22 report.
- NHFIC continues to anticipate a shortfall of apartments and medium density dwellings over the coming years. Additions in this segment are expected to be 62,300 below new household formation cumulatively over the five years to 2027, and 81,200 below new household formation over the entire projection period.
- The details of the Government’s Housing Accord which has an emphasis on increasing housing supply are subject to final negotiations and agreement and therefore have not been explicitly accounted for in NHFIC’s supply projections. Once implemented, the Accord may help to increase supply and offset some of the imbalances.

**Annual change in supply-household formation balance**



Source: Macropian, NHFIC

**A range of factors are negatively impacting new housing supply. These include availability of serviced land, higher costs of construction (finance and inputs), long lead times for delivering new supply and ongoing community opposition to new development.**

- NHFIC's industry liaison indicates the supply of fully serviced land in Vic and Qld is limited. In NSW, legislative changes are reported to have made the approval process longer and more complex.
- Industry also reports that approvals for new construction remain challenging, with ongoing community pushback against development. Strong local opposition to new housing developments continues to be cited as a major inhibitor of new supply.
- Build to rent provides opportunities for institutional investors to invest in rental housing. But the time taken for development approvals in NSW has extended over the past couple of years. Industry noted that the planning pathways for these projects in NSW is at least 12 months, more than double the time in Qld and Vic.

**Affordability for renters has worsened due to returning migration at a time of record low vacancy rates. The impact from higher mortgage rates is adversely affecting first home buyer affordability through reduced borrowing capacity.**

- Advertised rents rose strongly at double digit rates across most areas during 2022, although rent inflation which accounts for rental prices across the entire market – not just new properties being tenanted – has been more subdued. Annual rent inflation (through to December 2022) ranged from around 2% in Vic to 6-8% in QLD and WA.
- The anticipated supply - household formation imbalance of -106,300 over the next five years – if realised – would be expected to adversely affect affordability, all other things equal.
- Between the 2016 and 2021 Censuses, price to income ratios for first home buyers increased the most across regional Tasmania (37%), Greater Hobart (33%) and regional Vic (33%). Over the same period, price to income ratios increased by just 10% in Melbourne, 8% in Brisbane, and declined in regional SA (-2%) and Greater Perth (-2%).
- NHFIC has undertaken analysis looking at how deposit hurdles rates (that is, the average deposit as a percentage of income) for first home buyers have been affected during periods of changing interest rates. During previous interest rate tightening cycles, Sydney's average deposit hurdle rates for first home buyers increased by around 8% on average (-10% so far for the current cycle), compared with 26% during easing cycles. The average cost of a deposit for first home buyers in Sydney has nearly doubled from 60% to 110% since the early 1990s.

**Price to income ratios increased**

▲ 37%

rest of Tas

▲ 33%

for regional Vic

BETWEEN 2016 AND 2021






377,600

**households  
currently in need**

## KEY POINTS (continued)

**NHFIC estimates that, conservatively, 377,600 households are currently in housing need: 331,100 households in rental stress; and 46,500 households experiencing homelessness.**

- In this scenario, rental stress is defined as those households in the lowest (poorest) income quintile paying more than 30% of their income in rent.
- By household type, 'lone person' households and 'lone parent' households had the highest proportion of low-income private rental households in this situation (at 94.9% and 97.8% respectively). As a percentage of population, NT has the highest levels of housing need, representing 10.3% of households or 7,300 households) followed by NSW (representing 4.6% of households or 132,600 households).
- Under a hierarchy approach ranging from extreme to less extreme, NHFIC estimates Australia's housing need to be between 208,200 households and 577,400 households. The actual figure depends on different measures of rental stress and includes ABS estimates of homelessness.



# State of the housing market



State of the Nation's Housing 2022–23

# State of the housing market

UP TO  
20%  
growth



in advertised rental prices in capital cities over 2022

Driven by increased demand and lower rental stock

OVER  
30%  
growth



in the cost of some building materials at the end of Q4

Cost inflation and skills shortages have increased pressure on most multidwelling builders' margins

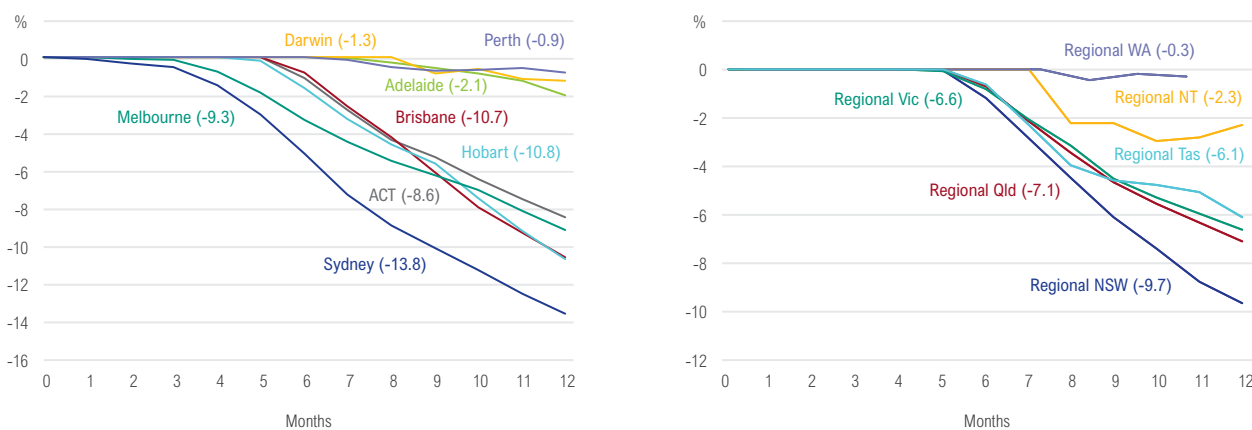
## KEY POINTS

- Property prices across Australia peaked in early 2022 before declining on the back of increases in interest rates. The biggest price falls for both detached housing and other dwellings were in Sydney, Melbourne and Hobart.
- Capital cities generally experienced bigger price declines than state regional areas. Property prices in regional areas of WA, SA and NT are still higher than they were 12 months ago. Although price growth has slowed.
- Auction clearance rates in Sydney and Melbourne were weak during 2022, averaging around 60% as buyer demand eased. In most states, first home buyers are now slowly returning to the market as prices decline. First home buyer participation in every state and territory is around long-run averages.
- In 2022, vacancy rates in rental markets declined to record lows, partly driven by the sale of rentals to owner-occupiers. Increased household formation and the return of overseas migration also increased demand in the rental market. In parallel, advertised rental prices in capital cities rose strongly, ending 10–20% higher over the year. The tight rental market is attracting investors, with investor credit growth increasing.
- Lead indicators of construction activity, such as building approvals and housing commencements, fell after HomeBuilder ended in 2021. Approvals bounced back slightly from mid-2022 to pre-pandemic levels, rising most in Vic and NSW. Growth in approvals for detached housing generally outpaced approvals for multi-density dwellings. Although, in NSW, multi-density dwelling approvals rose strongly over the year.
- Building material cost inflation remains strong on the back of high levels of construction activity. But price growth in some materials, such as timber and steel, has started to ease. Industry constraints in labour and materials, as well as inclement weather, have delayed completions.

## Prices and rents

National property price growth declined steeply as interest rates rose at their fastest pace in more than 2 decades from May 2022. Sydney and Melbourne were the first cities to record price falls. The largest price falls from their peaks (to January 2023) were recorded in Sydney (-13.8%), Brisbane (-10.7%), Hobart (-10.8%) and Melbourne (-9.3%). Dwelling prices in Adelaide, Perth and Darwin remain relatively unchanged. In general, prices declined slightly more in capital cities than in regional areas.

Figure 1.0: Home value change since peak\*



\*Indicates dwelling hedonic index. The axis represents months of 2022. Source: CoreLogic, NHFC.

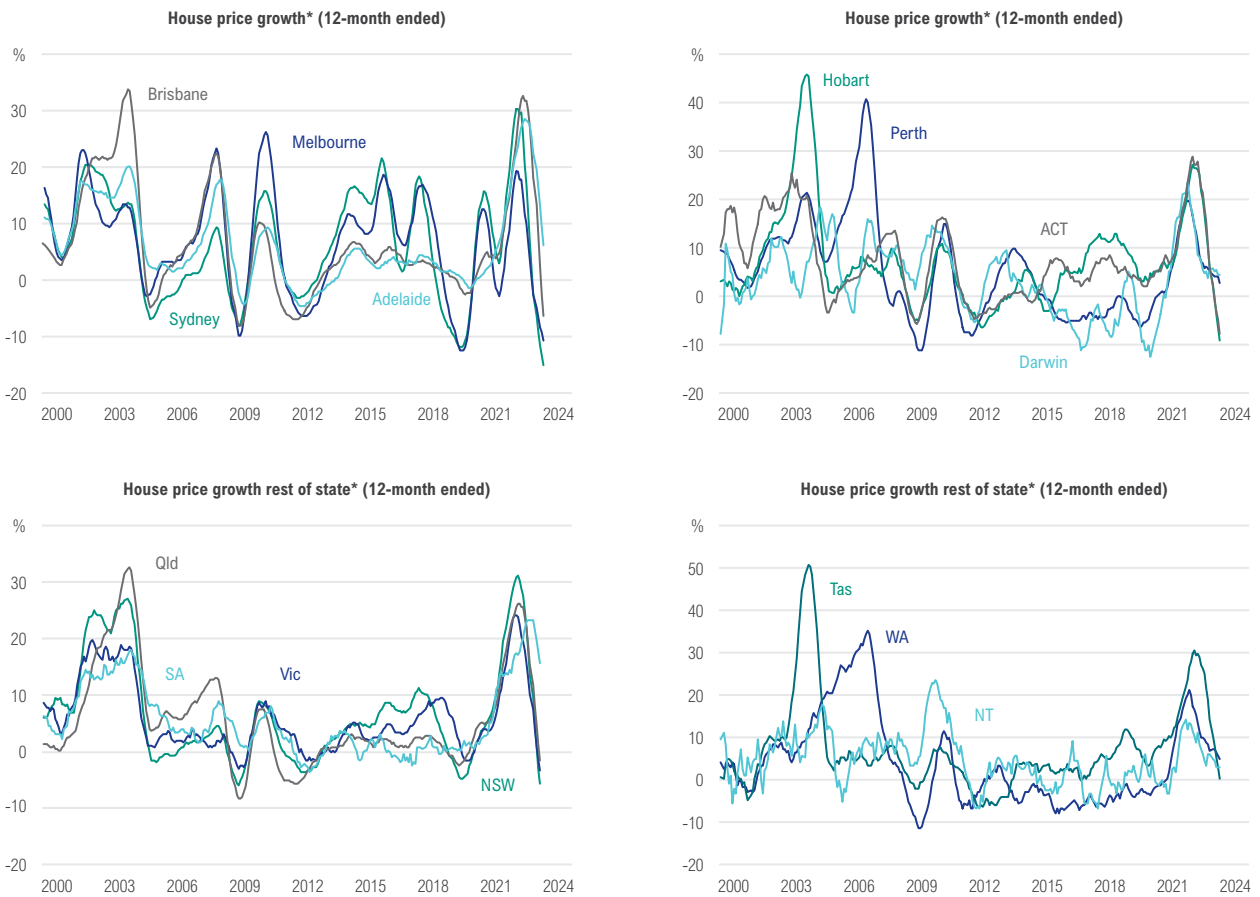
### Detached housing market

In the detached market, in the 12 months to January 2023, average capital city price growth dropped to -4% after peaking at 23% in the last quarter of 2021.

Sydney and Melbourne were most impacted, with house prices falling around 15% and 11% respectively over the 12 months to January 2023. House price growth was still relatively strong in Adelaide (6%) followed by Darwin (5%) and Perth (3%).

Detached house price growth in regional NSW, Vic, Qld, SA, WA and Tas outpaced growth in capital city areas of these states. The strongest regional price increase was in regional SA (16%), followed by regional WA (5%) and regional NT (3%).

Figure 1.1: House price growth (12-month ended)



\*Indicates Hedonic Index  
Source: CoreLogic, NHFIC.

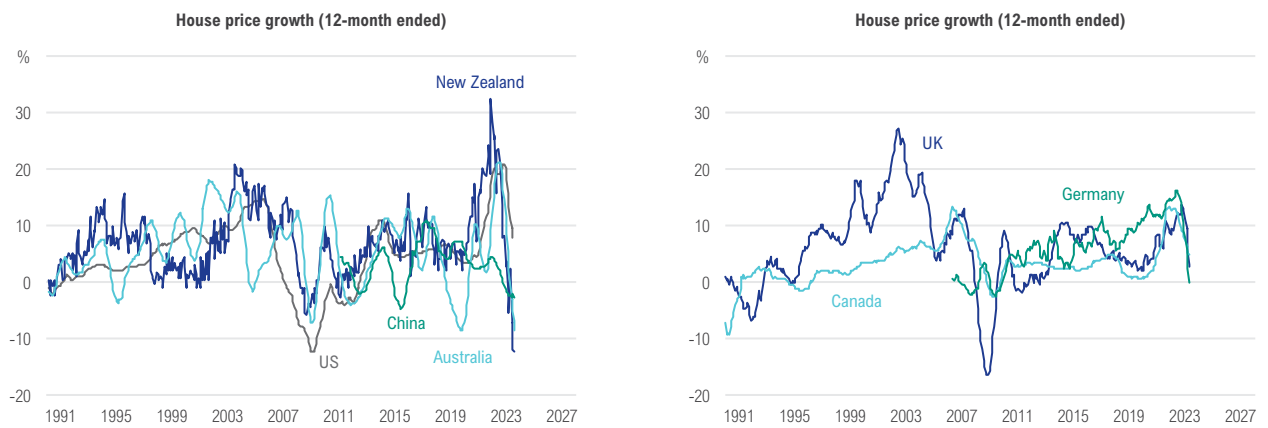


## International comparisons of house price growth

Australia was not the only country experiencing a property market slowdown during 2022. That year, house prices in Australia declined 9% as the cash rate increased by 300 bps. New Zealand house prices similarly fell 8% over the year as the cash rate increased by 350 basis points.

Property prices in China continued their slump. They fell 3% over the year as a result of a government crackdown on excessive borrowing by developers and a COVID-19-induced economic slowdown. Growth also slowed in Germany (-1%) and Canada (+4%), US (+8%) and UK (+2%).

Figure 1.2: International house price growth (12-month ended)



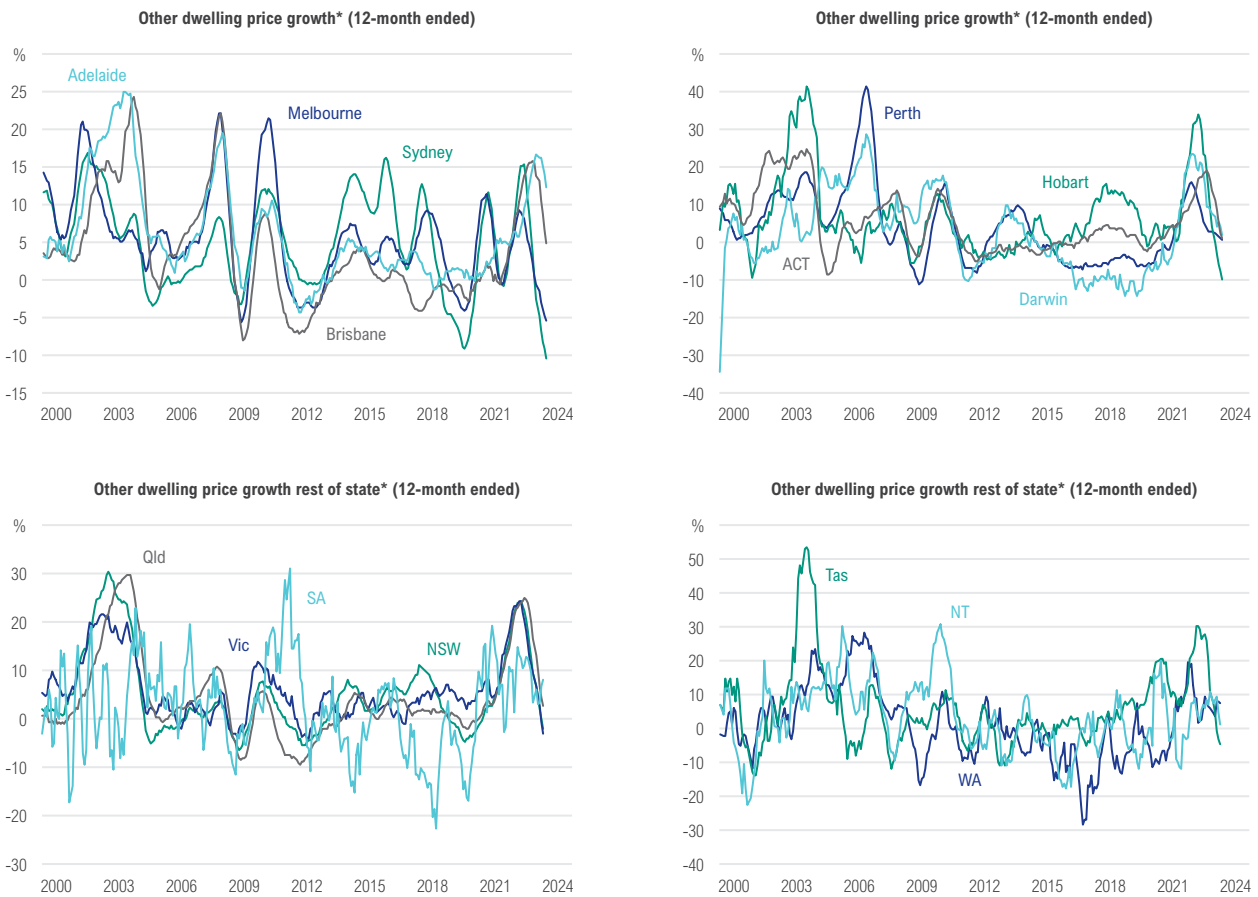
Source: Refinitiv, CoreLogic, NHFIC.

### Other dwelling market

Other dwelling (such as apartments and townhouses)<sup>1</sup> price growth also slowed significantly on the back of interest rate rises. Other dwelling prices in Sydney and Melbourne fell 10% and 5% respectively over the 12 months to January 2023. The capital city with the strongest price growth was Adelaide (12%), followed by Brisbane (5%) and Darwin (2%). Price growth in regional areas was led by SA (8%), WA (7%) and Qld (3%).

Other dwelling prices grew mostly in line with detached dwelling prices in each capital city and regional area, except for regional SA and the ACT. In regional SA, price growth for detached dwellings (16%) outpaced other dwelling price growth (8%). In the ACT, detached house prices declined by 8% while other dwellings in the ACT rose by 1%.

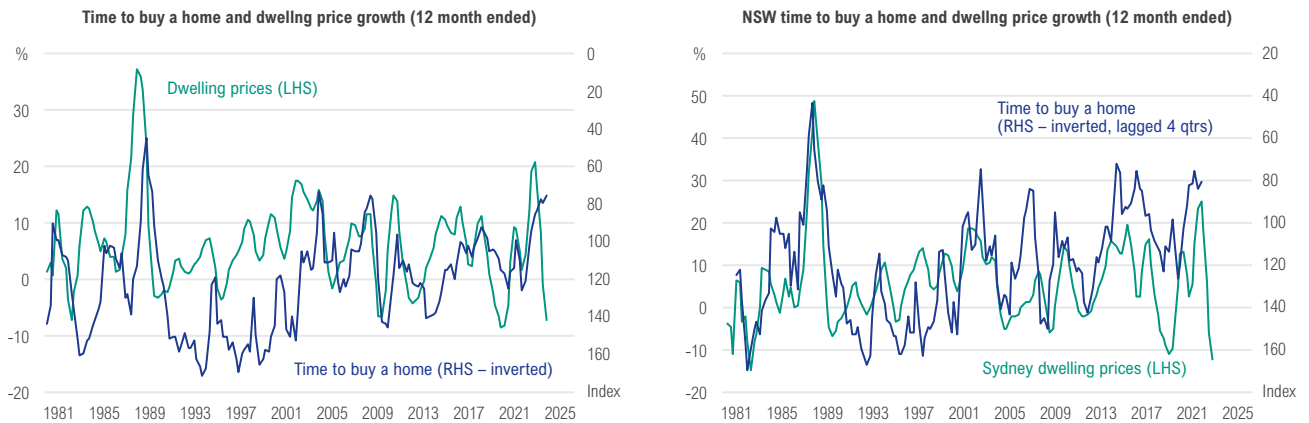
Figure 1.3: Other dwelling price growth (12-month ended)



\*Indicates Hedonic Index, Source: CoreLogic, NHFIC

1 'Other dwelling' refers to properties on a strata title where the title holders own a shared claim to common land that multiple properties may reside on. This includes apartments, villas and townhouses.

Figure 1.4: Time to buy a home and dwelling price growth (4-quarter ended)



Source: Westpac Survey, CoreLogic Home Property Value Index – 5 capital city aggregate

### Buyer sentiment

Across Australia, buyer sentiment (measured by Westpac's 'time to buy a home' survey) fell from late 2020 to levels seen during the GFC, as dwelling prices soared. With dwelling price growth slowing in 2022, buyer sentiment is expected to turn around. That said, serviceability and lending constraints have also tightened, which has weakened buyer demand.

In NSW, buyer sentiment bottomed in mid-2021 to levels last seen during 2014–2017, when unit prices and apartment construction were booming. Sentiment has since increased slightly following falls in dwelling prices.

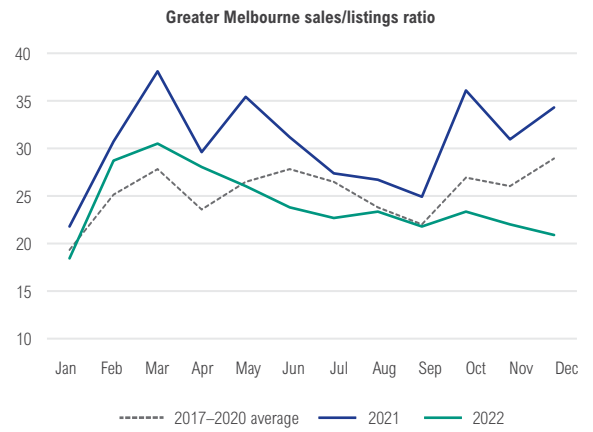
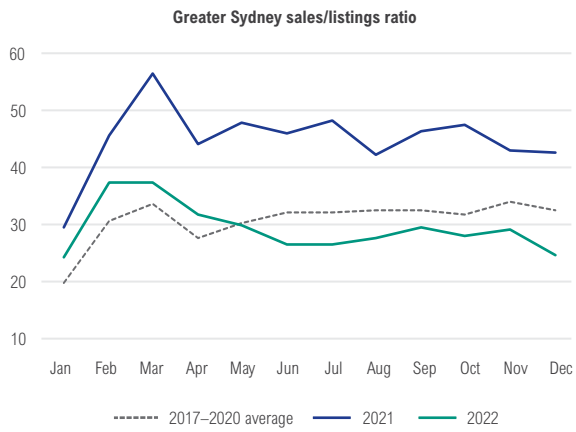
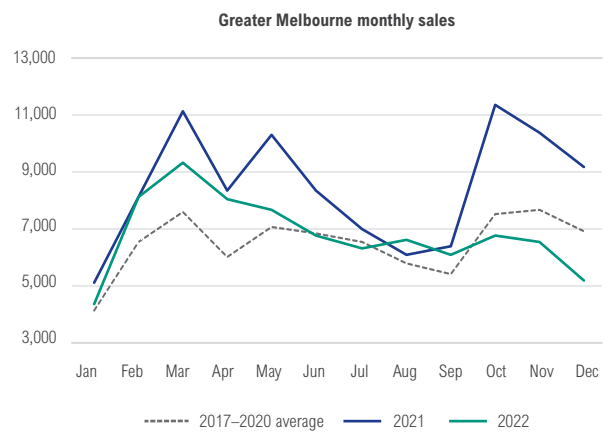
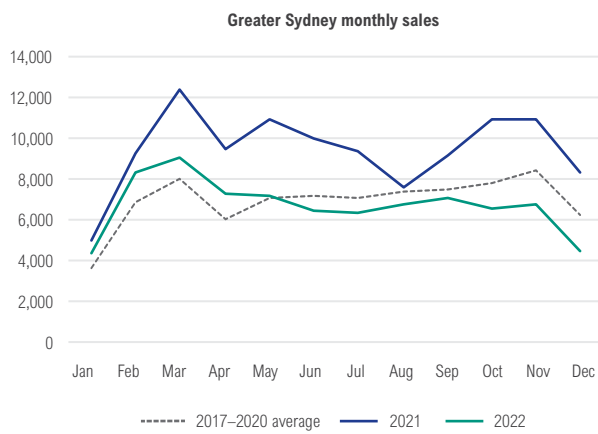
## Property listings and sales

Tighter lending restrictions and higher interest rates have dampened sales activity. Having started in line with the previous year, the number of sales in Sydney and Melbourne fell to below the 4-year average. Total listings were high in recent months, particularly for Melbourne, as vendors struggled to find buyers. Signs of weakening demand include sales as a proportion of total listings falling to below the previous 4-year average.

Figure 1.5: Property listings



Figure 1.5: Property listings (continued)



Source: CoreLogic, NHFIC

In 2022, more listings and weaker buyer demand kept Sydney auction clearance rates weak at an average of around 60%. Auction clearance rates for most of 2022 remained below those of the past 3 years, as prospective property buyers reacted to tightening financial constraints.

Auction clearance rates were similar in Melbourne. They averaged 61% in 2022 and ended the year below those of the past 3 years.

**Figure 1.6: Auction clearance rates in Sydney and Melbourne**



Source: CoreLogic, NHFIC.

## Rental markets

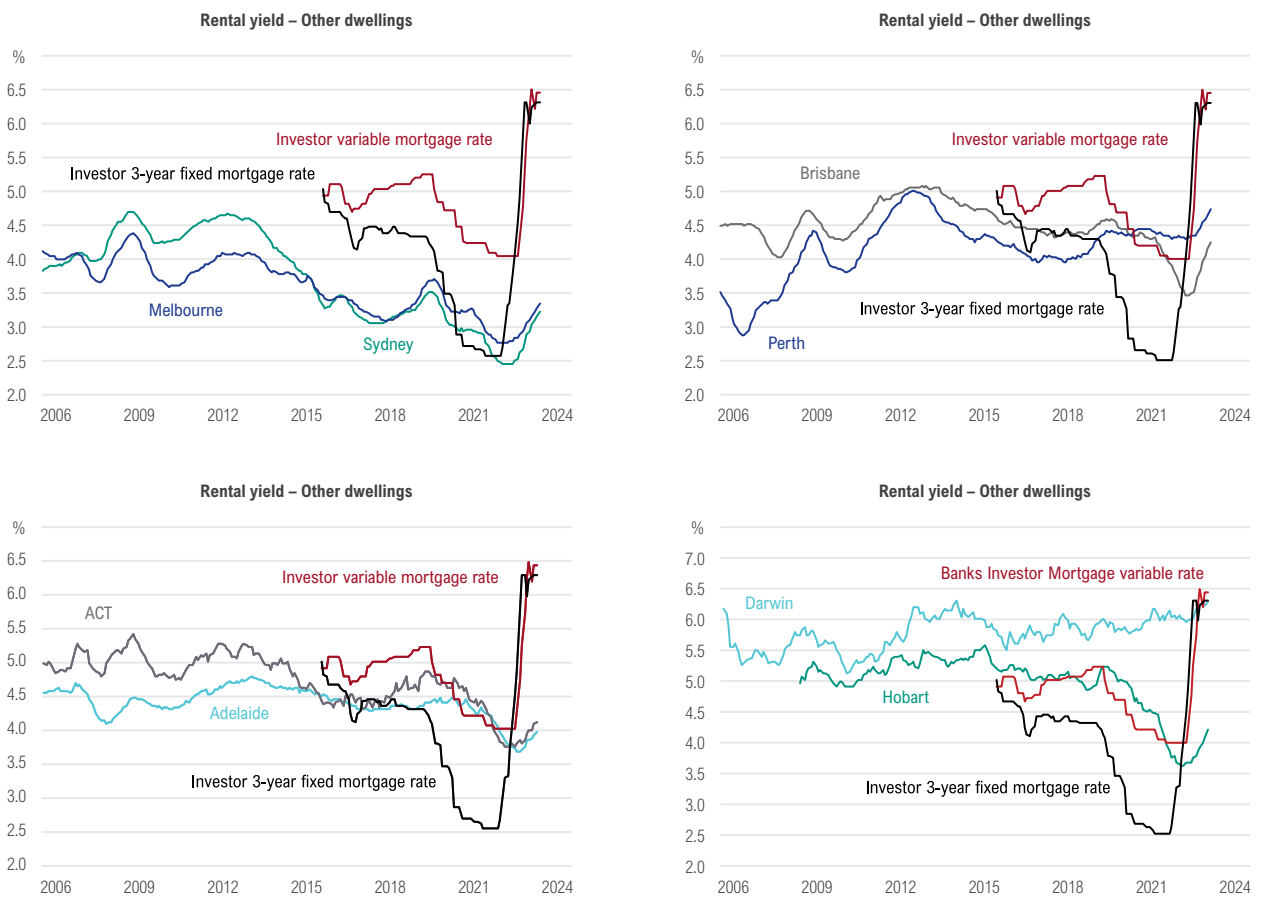
This section focuses on other dwellings rather than detached dwellings because the rental market for these properties tends to be larger.

Rental yields on other dwellings were at record lows in 2021 as price growth outstripped growth in rents. Since then, yields have increased on the back of downward pressure on prices and strong rent rises.

Following successive interest rate hikes, growth in the mortgage rate has dramatically outpaced growth in rental yields. Despite this, investors are staying in the housing market, attracted by the prospect of future capital gains, an additional income stream and attractive tax settings.

The spread between the rental yield and investor variable mortgage rate is larger in Sydney and Melbourne than in the other capital cities. Latest data shows the variable mortgage rate is, on average, 3.3ppts greater than rental yields in those cities. Darwin has the most attractive rental yield (6.3%), which is in line with the variable mortgage rate, followed by Perth (4.8%), Brisbane (4.3%) and the ACT (4.1%).

Figure 1.7: Other dwelling gross rental yield and investor mortgage rates

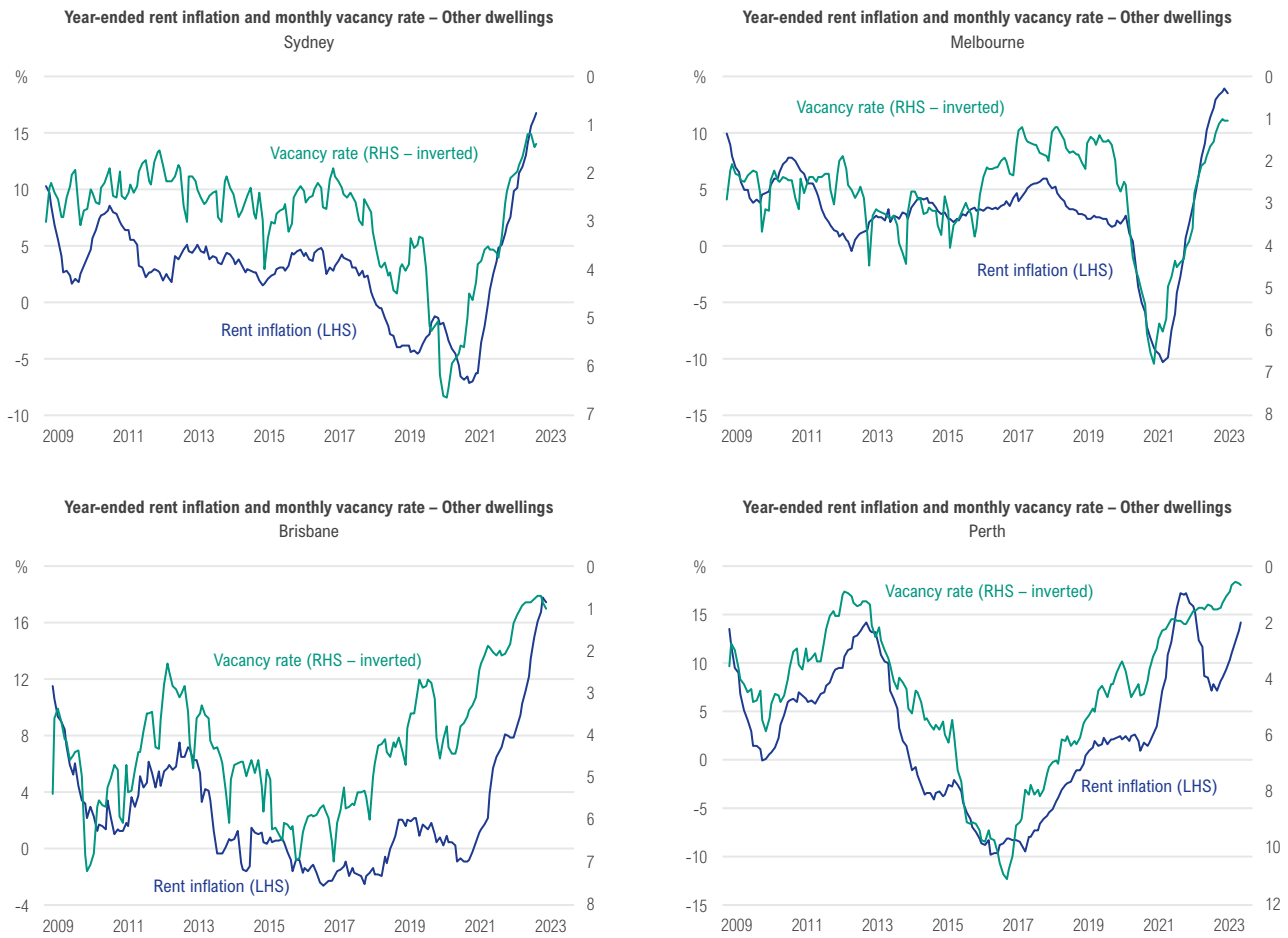


Source: CoreLogic, NHFIC, RBA.

### Vacancy rates

In 2022, vacancy rates in other dwelling rental markets declined. Vacancy rates in almost all capital cities are close to 1%. They ticked upwards slightly at the start of 2023 after hitting record lows in November 2022. The largest vacancy rate falls over the past 12 months were recorded in Melbourne (-2.5% pts), Sydney (-1.9% pts), Brisbane (-0.9% pts) and Darwin (-0.9%).

Figure 1.8: Other dwelling advertised rental growth (12-month ended) and vacancy rates

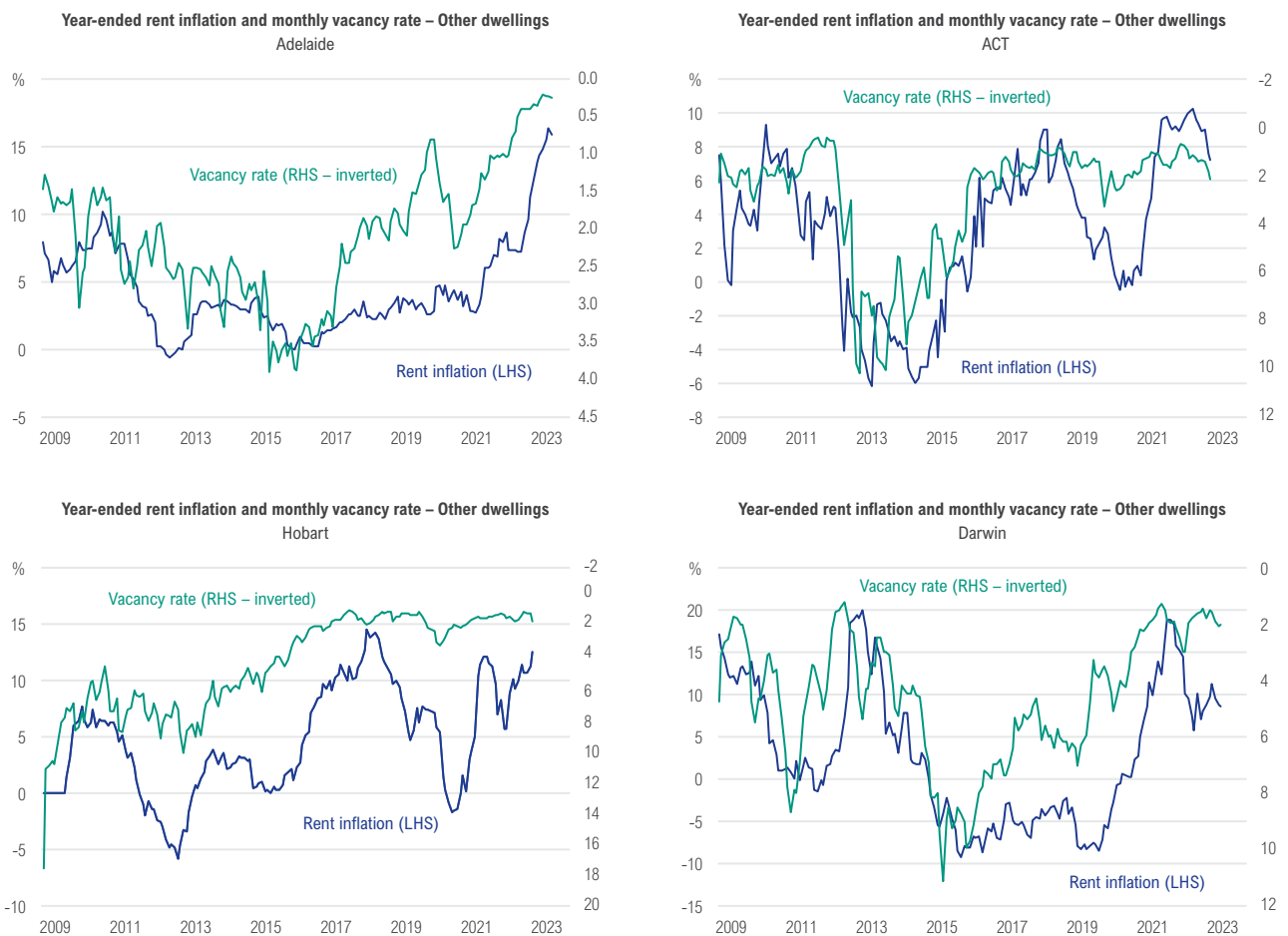


Source: CoreLogic, NHFIC. (The vacancy rates published by CoreLogic use a different methodology to those published by the Real Estate Institute of Australia (REIA). The CoreLogic vacancy rate is more a measure of the time properties are vacant whereas the REIA data reports the proportion of rental property that is vacant. A shortcoming of the REIA data is that it is not reported by dwelling type. Most available datasets show a decline in vacancy rates, with CoreLogic showing they are falling further than what other datasets suggest.



Advertised other dwelling rental prices in capital cities rose strongly over the past 12 months. The fastest growth rates were in Brisbane (18%), Sydney (17%), Adelaide (16%) and Perth (14%). Advertised rents in Perth, Hobart, Darwin and the ACT all grew by around 10% over the year.

Figure 1.9: Other dwelling rental growth (12-month ended) and vacancy rates



Source: CoreLogic, NHFC.

### Sydney and Melbourne rental markets

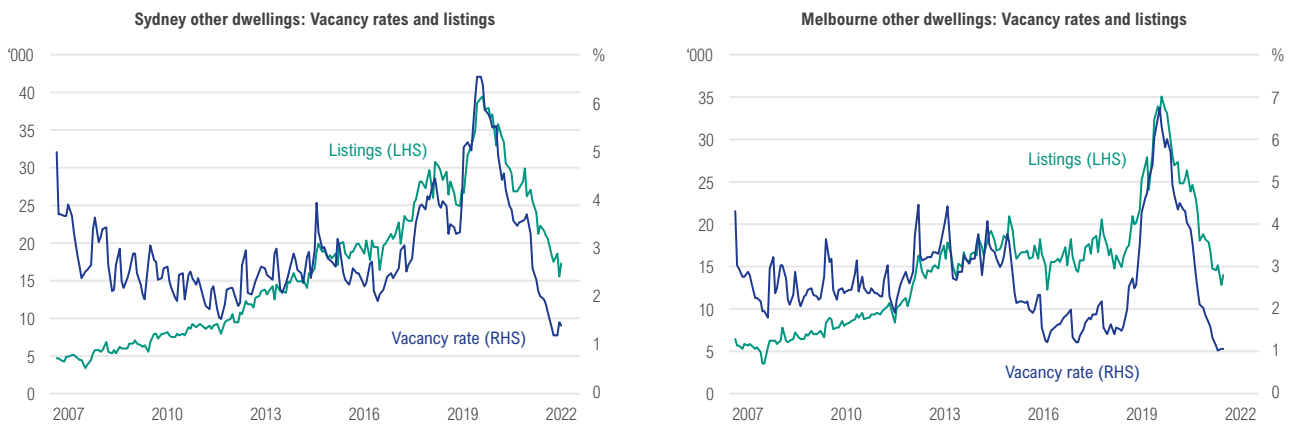
In 2022, rental listings in Sydney and Melbourne decreased, driving further falls in vacancy rates. Many of these properties were likely sold to owner-occupiers. Increased household formation, as well as the return of overseas migration, also increased demand in the rental market.

The number of rental listings in Sydney peaked in mid-2020, at almost 40,000 listings. This has since fallen by 56% to levels only seen 5 years ago. Over the same period, the vacancy rate decreased from 5% to lower than pre-pandemic levels of almost 1%.

In Melbourne, the number of rental listings peaked at the start of 2021 as the vacancy rate reached around 7%. Since then, listings have fallen by 60%, alongside falls in the vacancy rate to pre-pandemic levels.

In the short to medium term, NHFIC expects the rental market to remain tight. Low vacancy rates mean existing tenants will face rising rents as their rental agreements come up for renewal.

Figure 1.10: Sydney and Melbourne other dwellings: Rental listings and vacancy rate

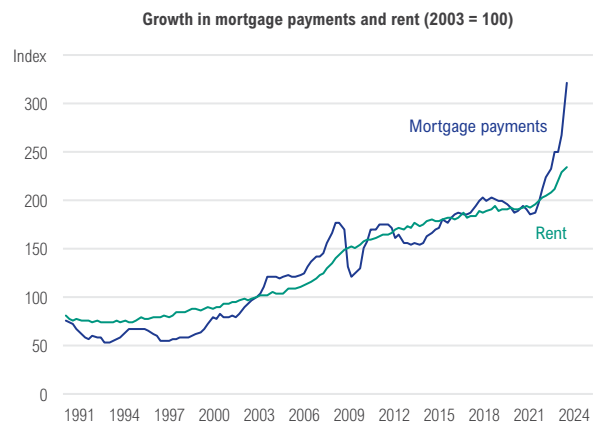


Source: CoreLogic

Figure 1.11 shows the long-term relationship between the growth in rents and the growth in mortgage payments. This suggests that the cost of housing increases at the same rate, regardless of whether a property is owner-occupied or rented. Over the long term, household formation and other factors, such as growth in construction and maintenance costs, increase the cost of housing. Given new supply is closely linked to price growth and interest rates, short-term growth in the supply of properties available for rent is unlikely.

Mortgage payments increased strongly from mid-2020 on the back of the property price growth. From early 2022, mortgage payments surged in line with interest rate rises. Rents also increased in response to the tight rental market, albeit at a slower rate.

Figure 1.11: Growth in mortgage payments and rent

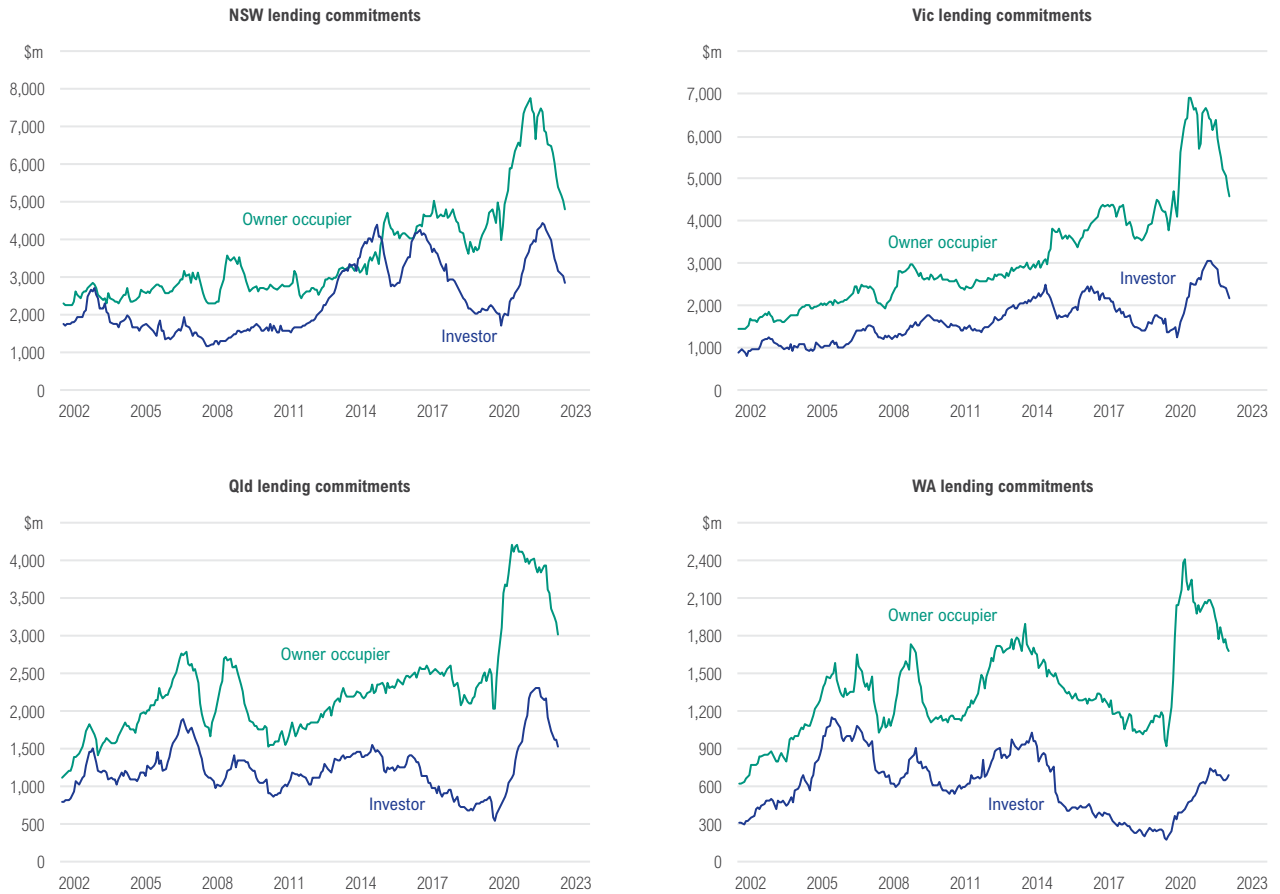


Source: REIA, RBA, NHFIC. Mortgage payments are calculated using median house prices of the capital cities. Rent is the median rent in each capital city for a 3-bedroom house. Each capital city median price and rent is weighted by respective state final demand. Mortgage payments are calculated on the median price using the banks' standard variable mortgage rate.

## Finance and credit

In most states, the value of new owner occupier lending commitments has declined in recent months. The largest falls since the start of 2022 were in ACT (-33%), Vic (-29%), NSW (-26%) and Qld (-23%).

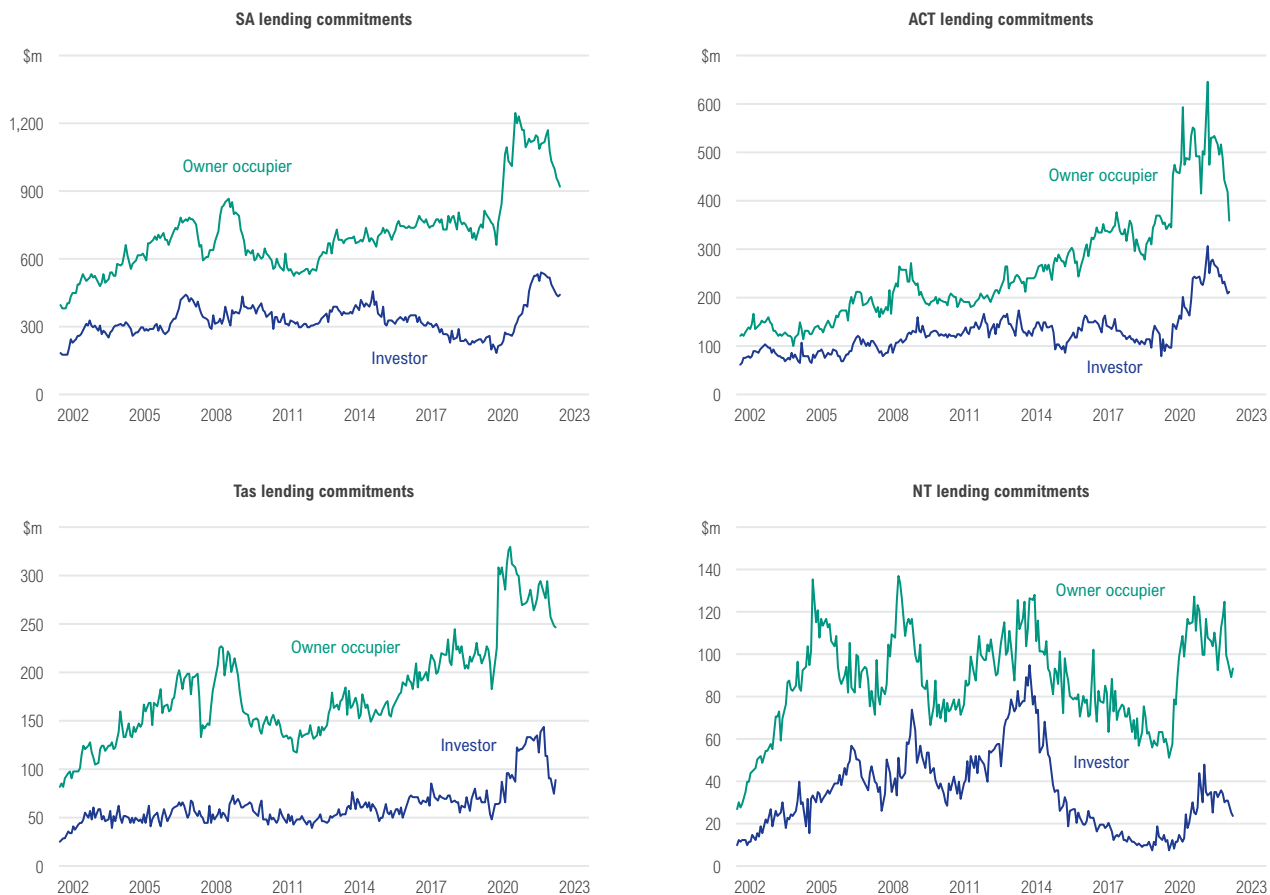
Figure 1.12: Lending commitments by state and borrower type



Source: ABS Cat 5601.0

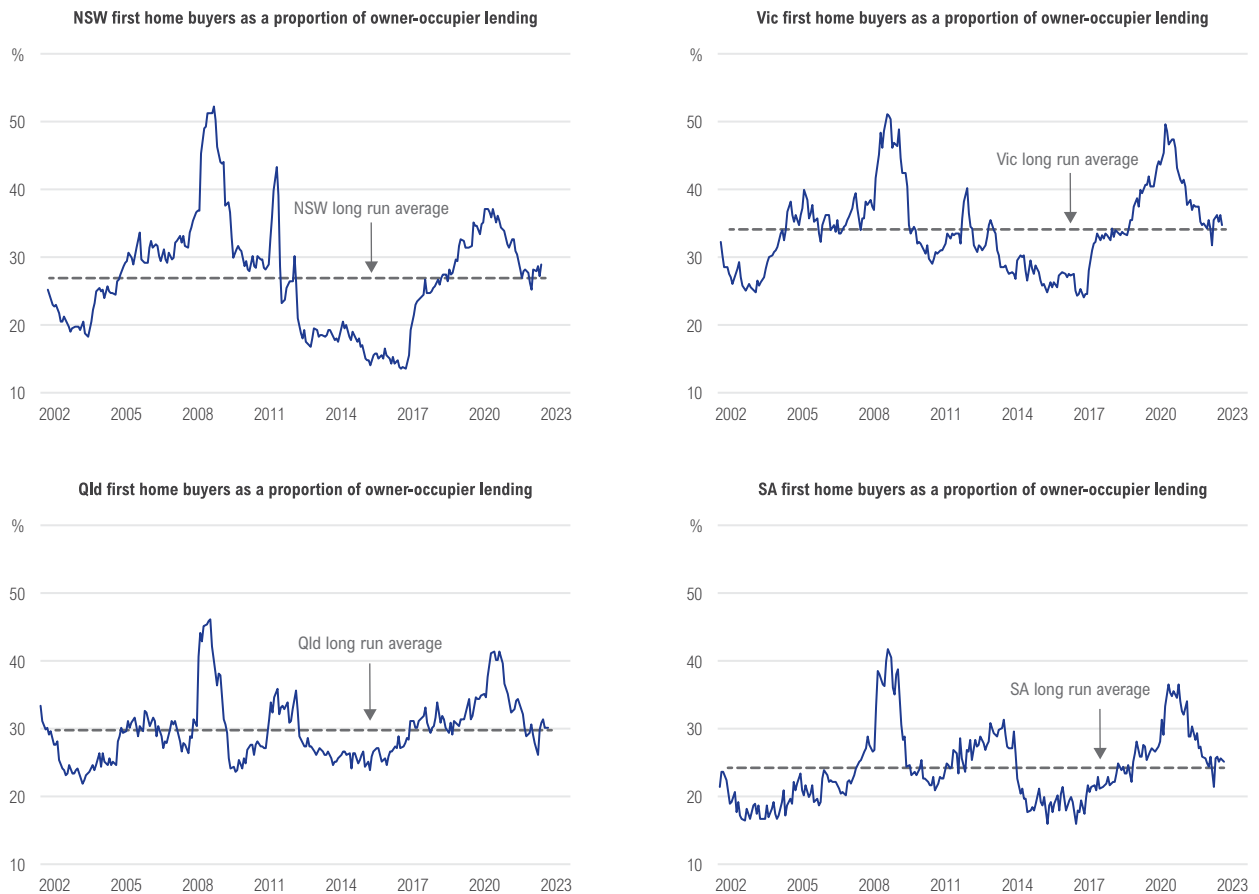
Since the start of 2022, the decline in the value of investor lending commitments was even greater than that in owner occupier lending commitments in NSW, Qld, Tas and NT. The value of investor lending commitments decreased by around 30% in NSW, Vic, Qld, Tas and NT.

**Figure 1.13: Lending commitments by state and borrower type**



Source: ABS Cat 5601.0

Figure 1.14: First home buyers as a proportion of total owner-occupier lending



Source: ABS Cat 5601.0

Home lending has been easing since mid-2021, initially due to the intersection of:

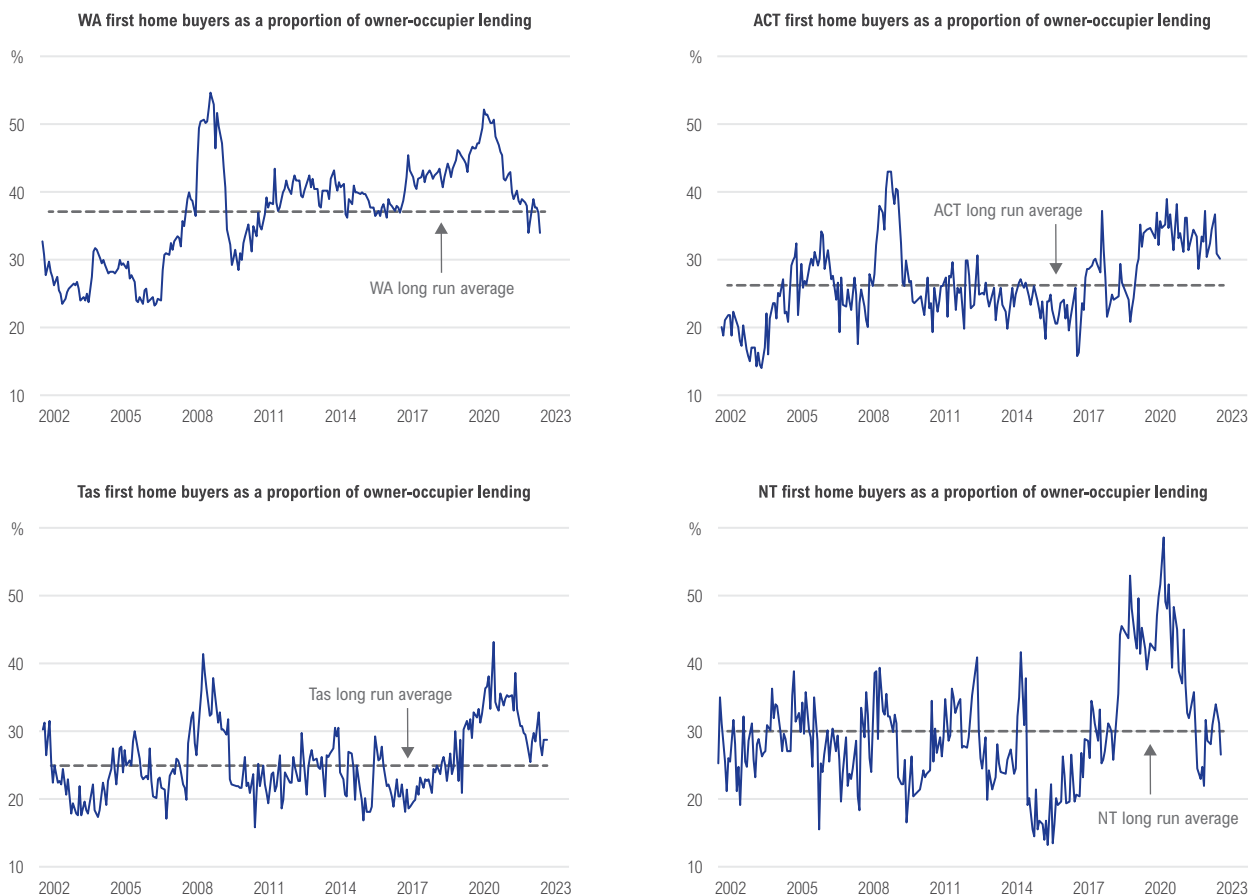
- a slowdown in first home buyer demand
- property prices peaking
- state government fiscal stimulus being removed in many markets.

In many states, first home buyer participation fell to long-run averages over the past two decades.

Following the RBA's successive interest rate hikes from May 2022, first home buyer participation has started to recover across the states. During tightening cycles, the market share of first home buyer loans tends to increase as affordability improves.

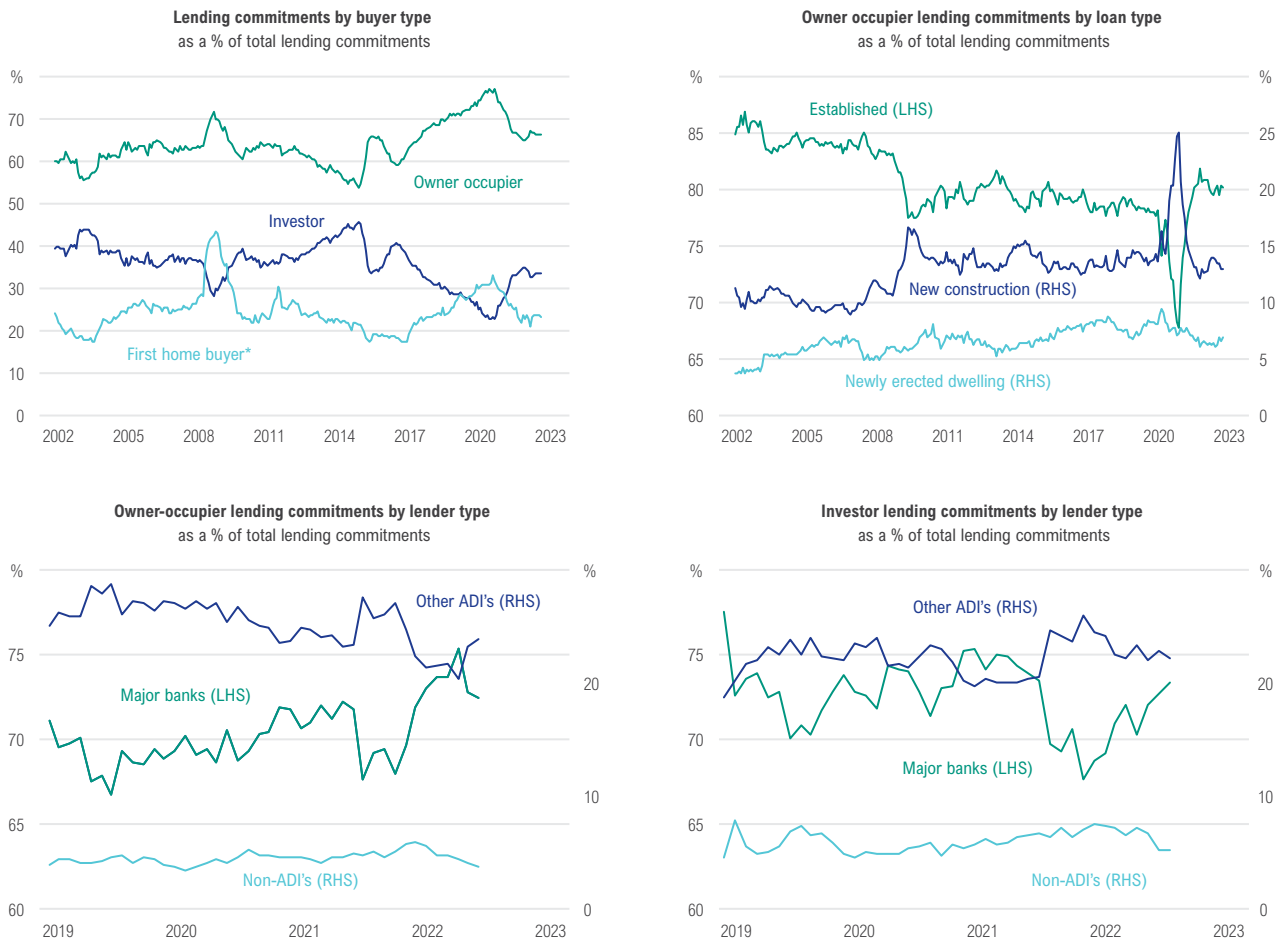
At the end of 2022, the percentage of first home buyers borrowing compared with their long-run average was highest in the ACT and Tas. Looking at the past 2 years, the ACT's downturn in first home buyer participation was mild compared with other states and territories.

**Figure 1.15: First home buyers as a proportion of total owner-occupier lending**



Source: ABS Cat 5601.0

Figure 1.16: Household lending commitments



Source: ABS, NHFC.

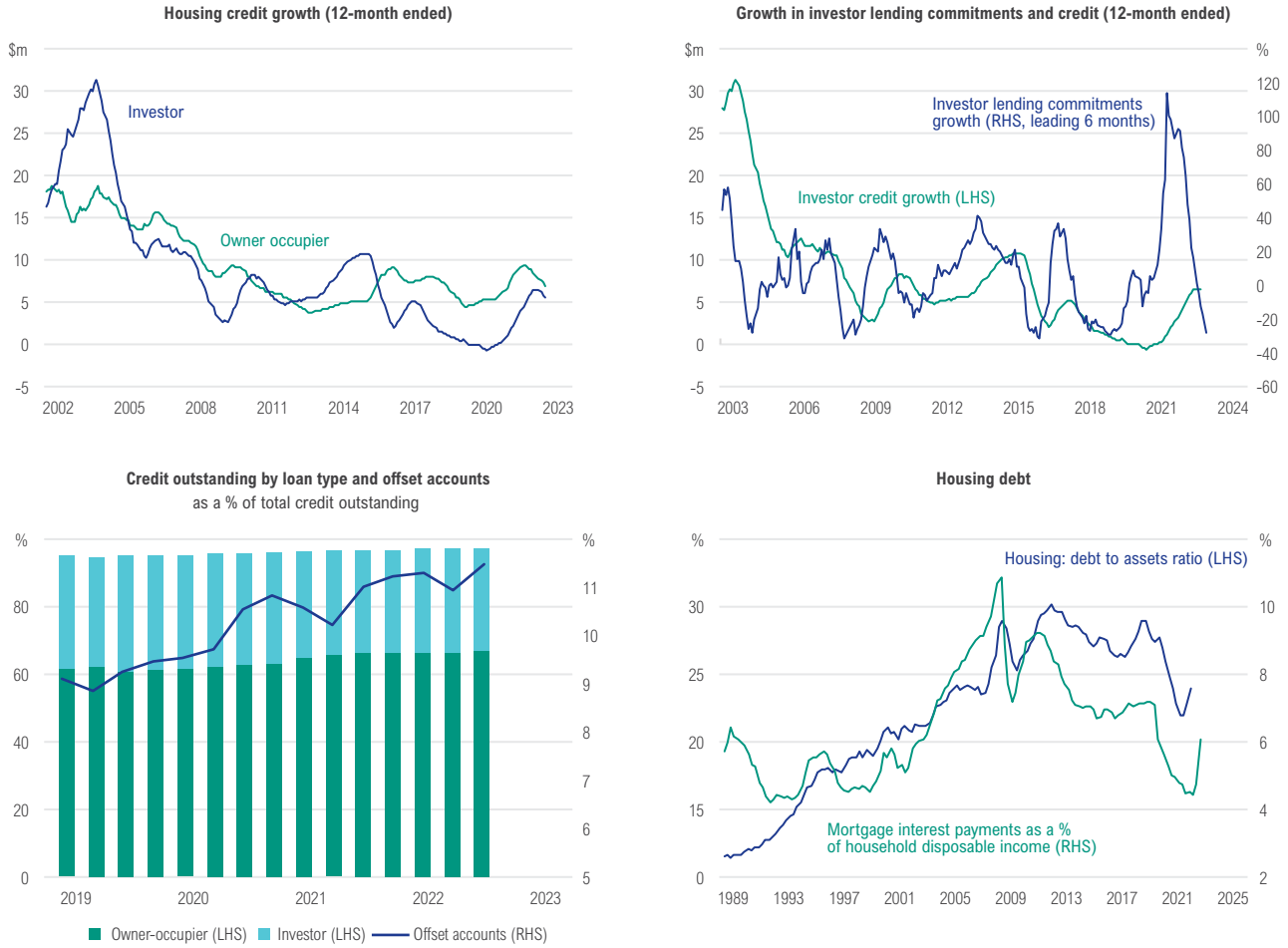
In the latter half of 2022, investor and first home buyer lending commitments rose. The preference for purchasing established dwellings remained high, following the withdrawal of HomeBuilder in 2021.

In 2022, around 72% of owner-occupier loans and 73% of investor loans originated from the major banks. For the big 4, this represented a decreased share of owner-occupier loans, who turned to other authorised deposit-taking institutions, and an increased share of investors.

Investor credit growth increased during 2022, attracted by positive rental market fundamentals. Although investor lending commitments growth slowed significantly, this level remains higher than during the early stages of the pandemic in 2020. If the rental market continues to remain tight, investor credit growth should continue to rise.

In 2021, low mortgage rates reduced debt servicing costs as a share of household income. Households were also supported by low unemployment, government assistance payments and high levels of savings – as shown by strong growth in offset account balances. Rising mortgage rates have increased debt servicing costs. But payments as a percentage of household disposable income still remain lower than 2017 levels.

**Figure 1.17: Credit growth and housing debt**



Source: RBA, ABS, NHFIC.



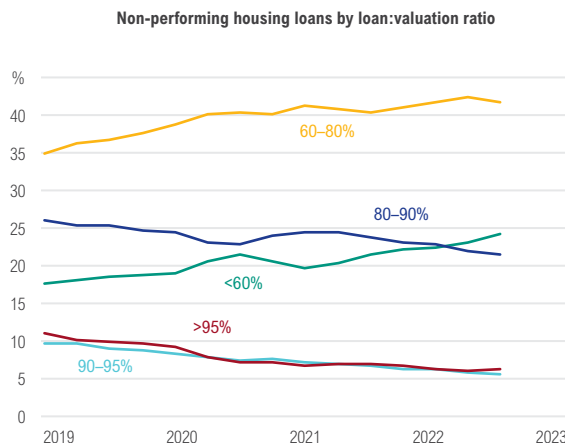
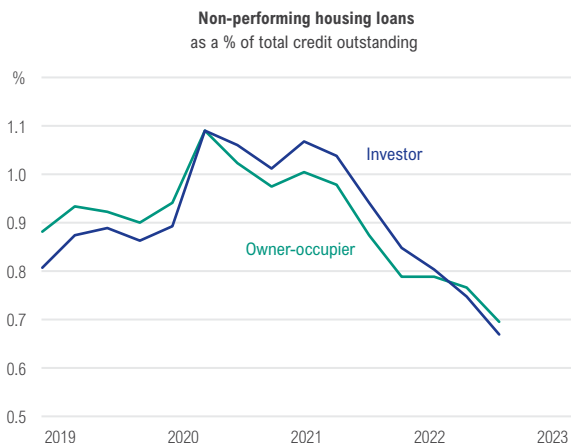
### Banks and the supply of credit

From mid-2022, non-performing loans for investors fell below non-performing loans for owner-occupiers as a share of total credit outstanding. This was probably due to tight rental market conditions offsetting the impact of rising mortgage rates. Non-performing loans for owner-occupiers also fell. That said, the share of non-performing housing loans with

Loan-to-Value Ratios (LVRs) of less than 60% and between 60–80% has increased as mortgage payments have grown.

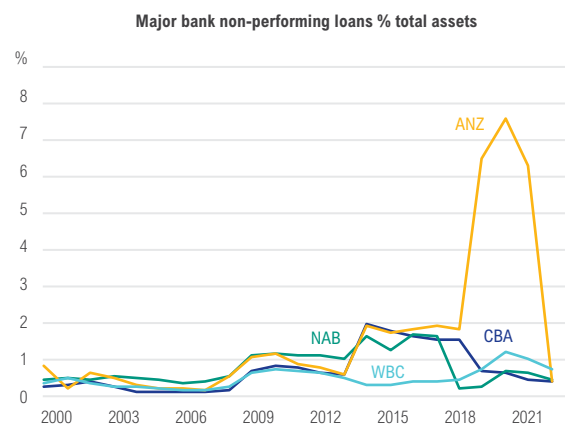
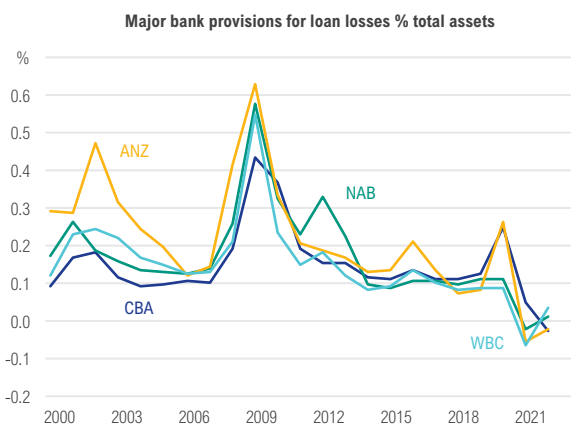
With the exception of CBA, provisions for loan losses ticked upwards for the major banks, following a strong decline during previous years. However, in their full-year 2022 financial statements, the major banks all reported a fall in non-performing loans as a percentage of total assets.

Figure 1.18: Authorised deposit-taking institutions non-performing loans



Source: APRA, NHFIC.

Figure 1.19: Authorised deposit-taking institutions provisioning for loan losses

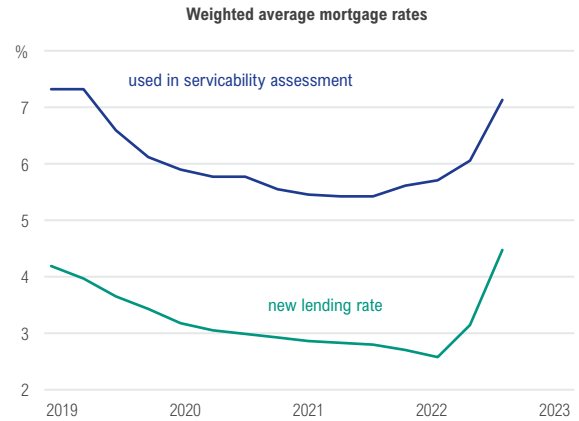
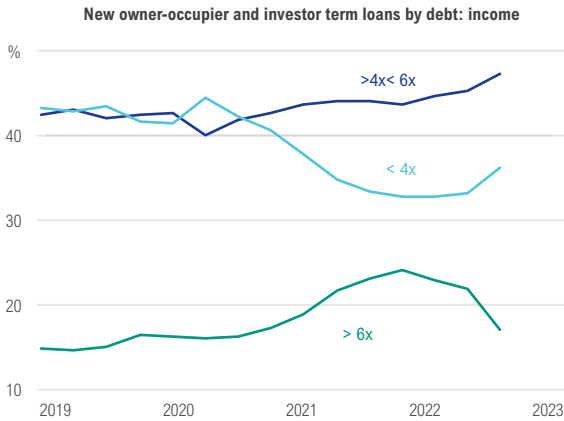


Source: Refinitiv, NHFIC.

Over 2022, weighted average mortgage rates used in serviceability assessments increased as lending constraints tightened. The proportion of loans greater than 6 times the applicant's income declined; the proportion of loans up to 6 times the applicant's income rose.

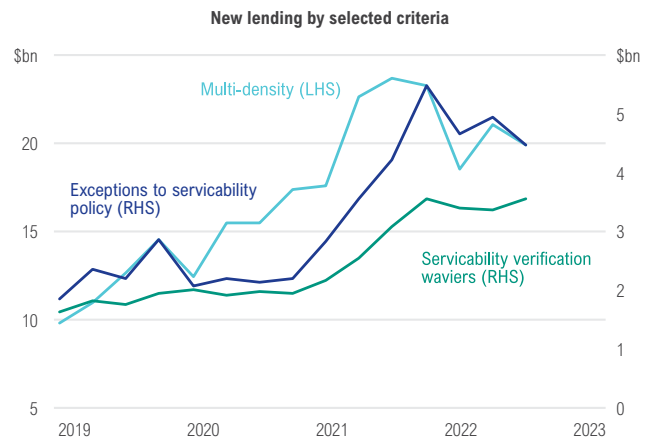
Lending for interest-only loans to owner-occupiers rose slightly during 2022. But investors continued to be the main borrowers of interest-only loans. Exceptions to the serviceability policy generally declined in 2022 as lending rates tightened.

Figure 1.20: New lending ratios



Source: APRA, NHFIC.

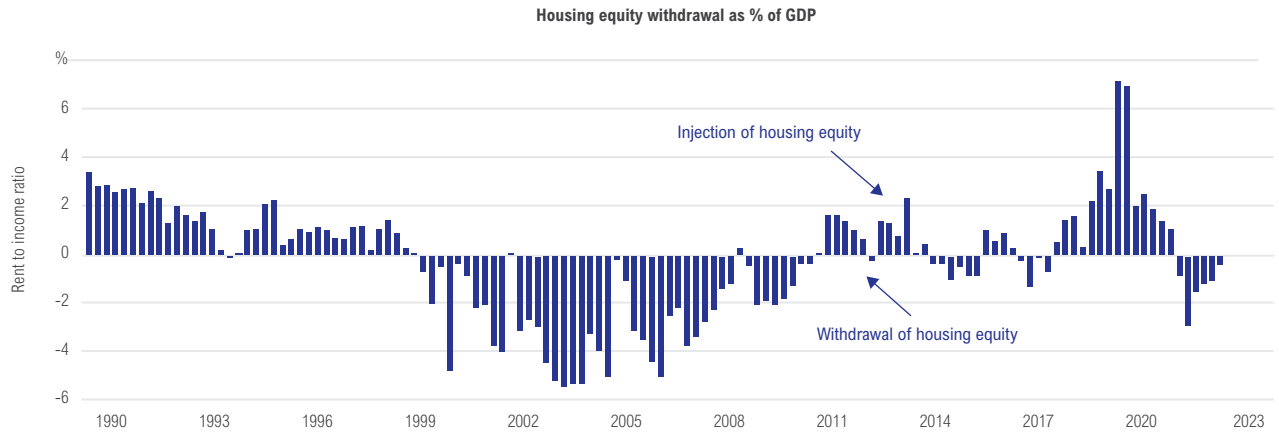
Figure 1.21: New lending by selected loan type



Source: APRA, NHFIC.

Household equity withdrawal was strong in 2021 as households unlocked equity in their properties following strong price growth. Household equity withdrawal has continued in recent months. But the rate of withdrawal has been slowing as price growth weakens.

Figure 1.22: Housing equity withdrawal\*



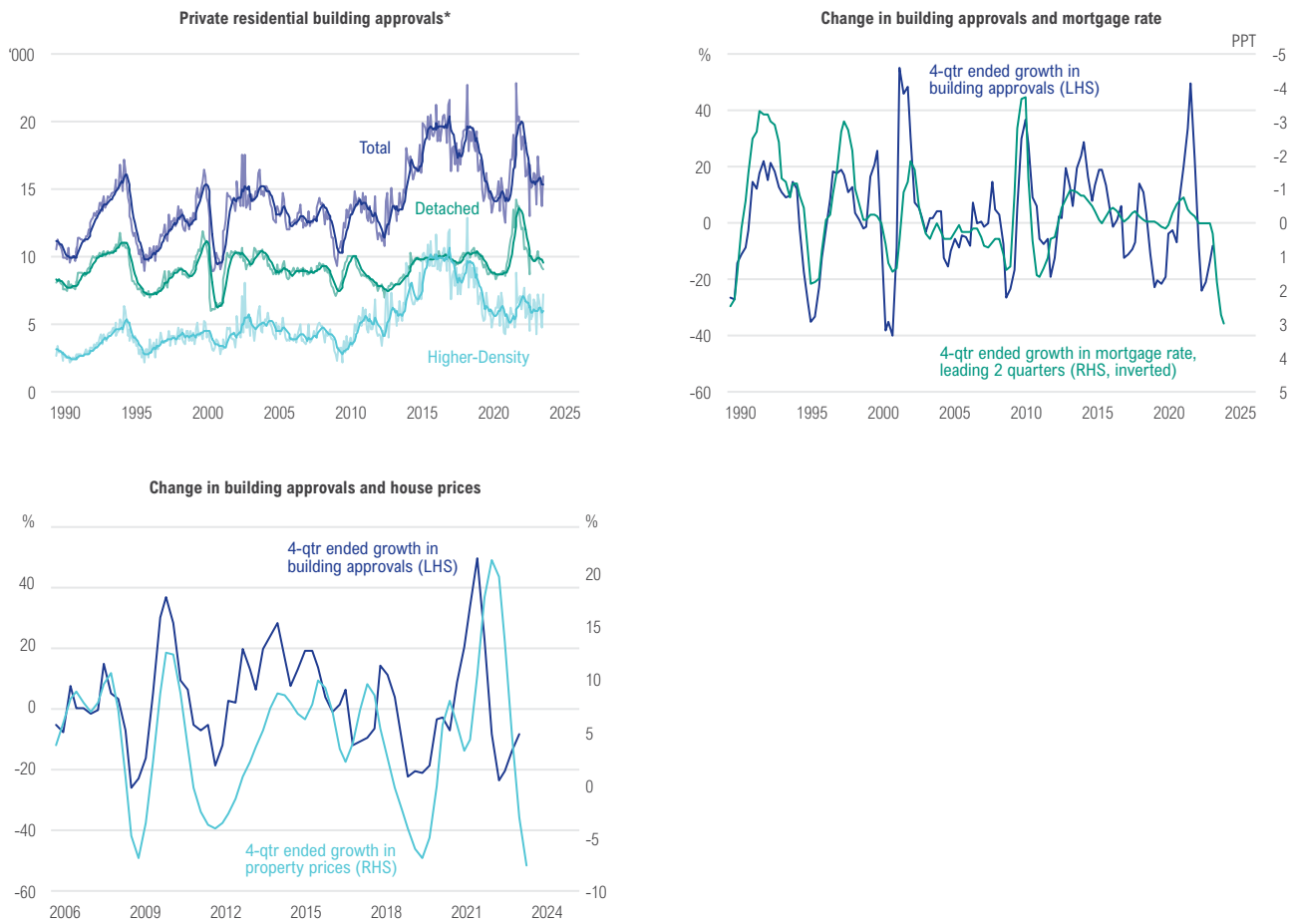
Source: ABS, RBA, NHFC.

\*Housing equity withdrawal is the change in housing credit less nominal dwelling investment, divided by nominal GDP. A break occurs in July 2019, the June quarter 2019 and December quarter 2019 observations are averaged.

## Construction activity

Approvals fell after the HomeBuilder scheme ended in 2021. But they have bounced back slightly, despite increases in the mortgage rate and declines in dwelling price growth during 2022. Approvals for detached houses remains relatively high; approvals for higher-density dwellings are closer to long-run averages. Given the strong demand in the rental market, NHFIC expects shortages of multi-density dwellings for rent over the next few years.

Figure 1.23: Building approvals, interest rates and house prices

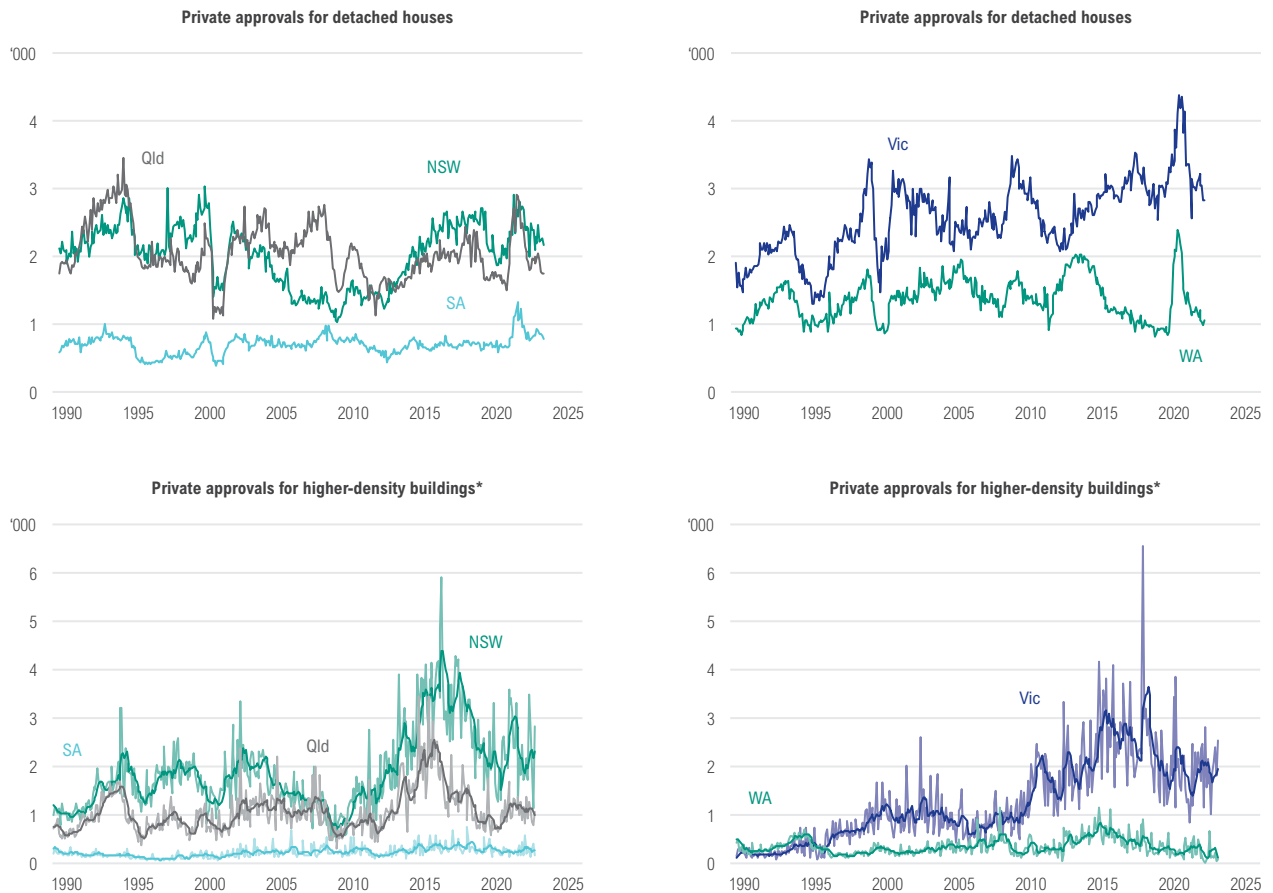


\*Smoothed trend lines indicate 6-month moving average  
Source: ABS, CoreLogic.

The decline in approvals for detached houses since 2021 was most notable in WA (-6%). Since bottoming out at the start of 2022, detached house approvals recovered most in Vic (11%) and NSW (8%).

Building approval growth in multi-density (ie apartments and medium density) buildings was generally weaker than approvals for detached homes. The exception was NSW where approval for multi-density dwellings increased 25% over the past 12 months, although they remain well down on levels seen in the 2010s.

**Figure 1.24: Private residential building approvals**

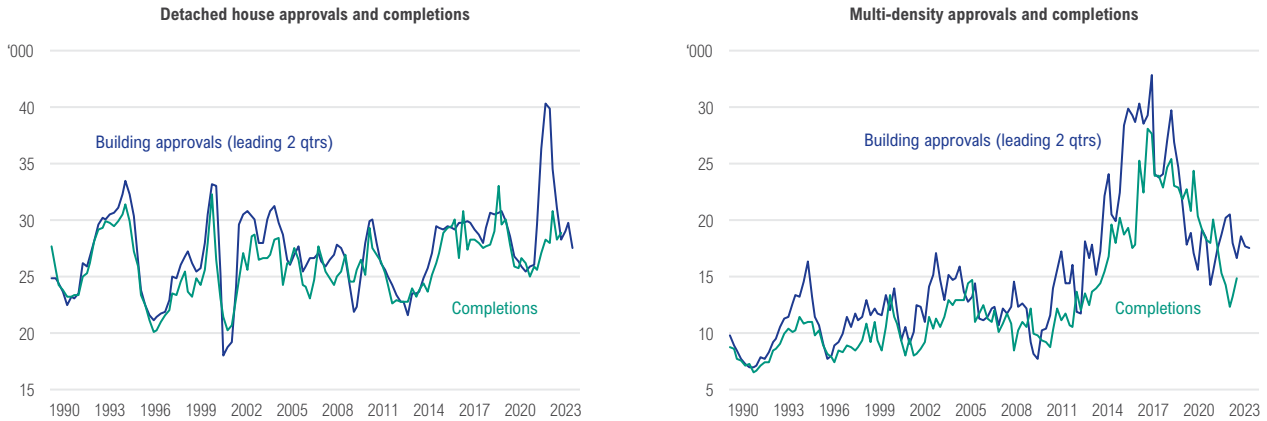


\*Trend lines are calculated using a 6-month moving average  
 Source: ABS Cat 8731.0, ABS 5206.0, NHFIC.

Detached house completions rose in the first half of 2022, following the spike in approvals driven by HomeBuilder. Although approvals greatly outpaced completions. In line with a decline in approvals, multi-density completions also fell, but are now starting to recover.

Construction delays in the current cycle are driven by industry constraints in labour and materials. Inclement weather also played a role in delaying construction, particularly in the eastern coastal cities.

Figure 1.25: Building approvals and completions

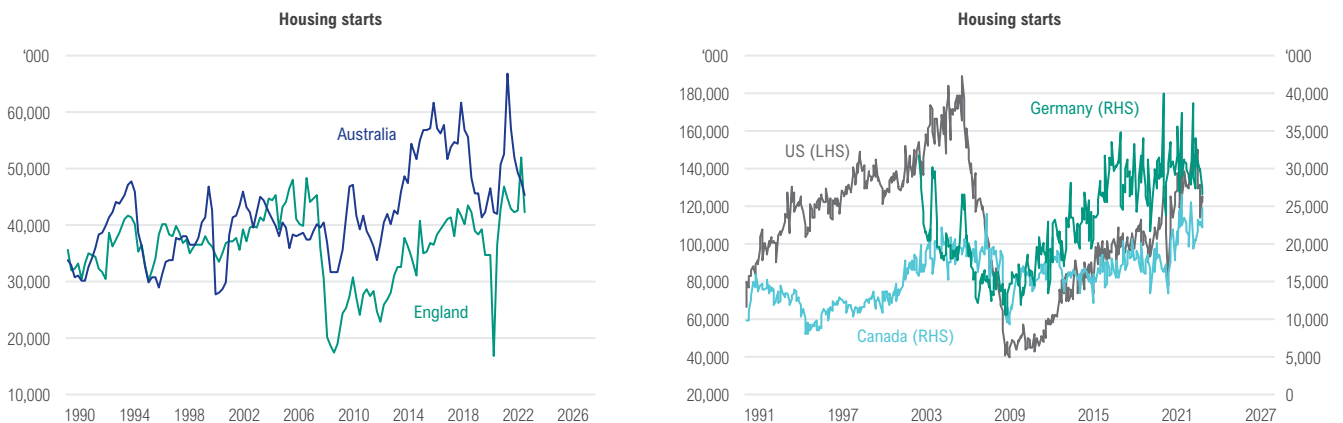


Source: ABS Cat 8752.0, ABS Cat 8731.0

International construction indicators

Australia’s housing commencements have declined from their mid-2021 peak. Higher materials, labour and borrowing costs means developers are finding it more difficult to demonstrate project feasibility. In contrast, internationally, housing commencements are high. They have increased in Canada and remain at high levels in the US, Germany and Canada.

Figure 1.26: International housing commencements



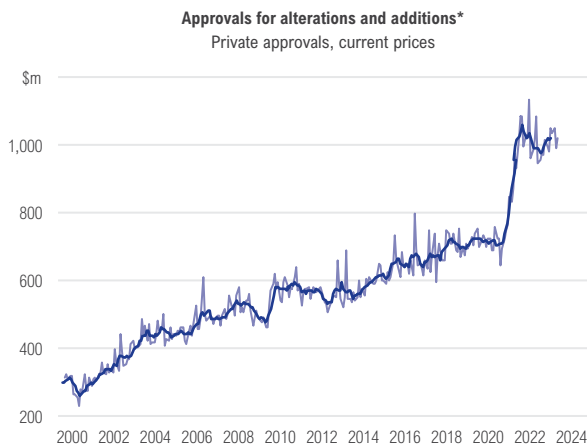
Source: Refinitiv, NHFIC.

## Renovation activity

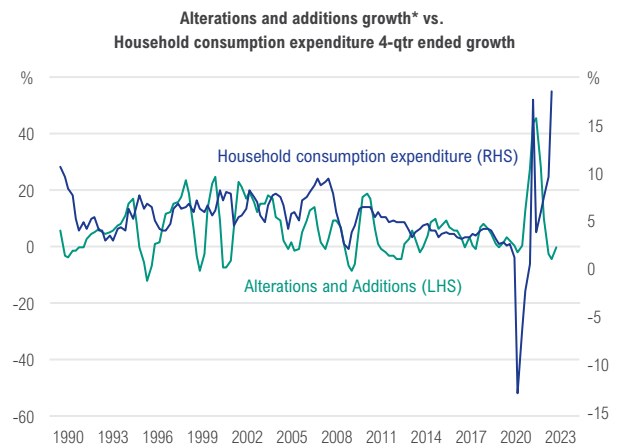
The alterations and additions market has been resilient to the end of HomeBuilder. While spending on alterations and additions has declined, approvals for alterations and additions remain high.

Household expenditure on goods is strong. Growth in home renovation spending has dropped.

Figure 1.27: Alterations and additions



\*Trend line is calculated using a 6-month moving average  
Source: ABS Cat 8752.0, ABS Cat 8731.0



\*4-qtr growth derived from 6-month moving average



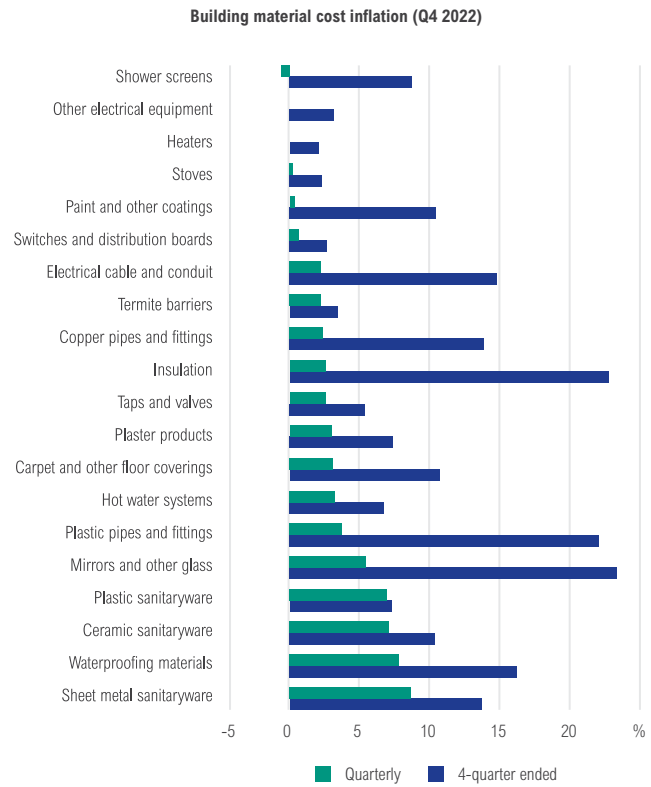
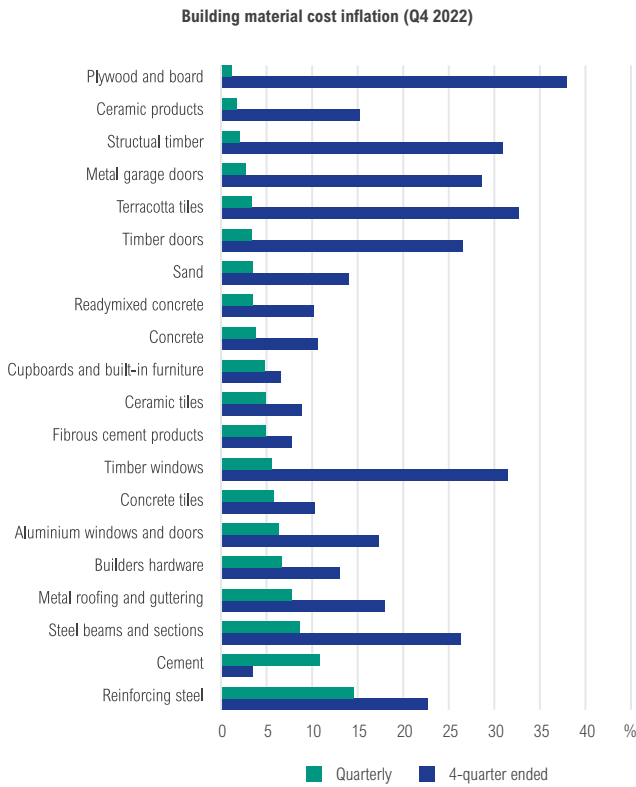
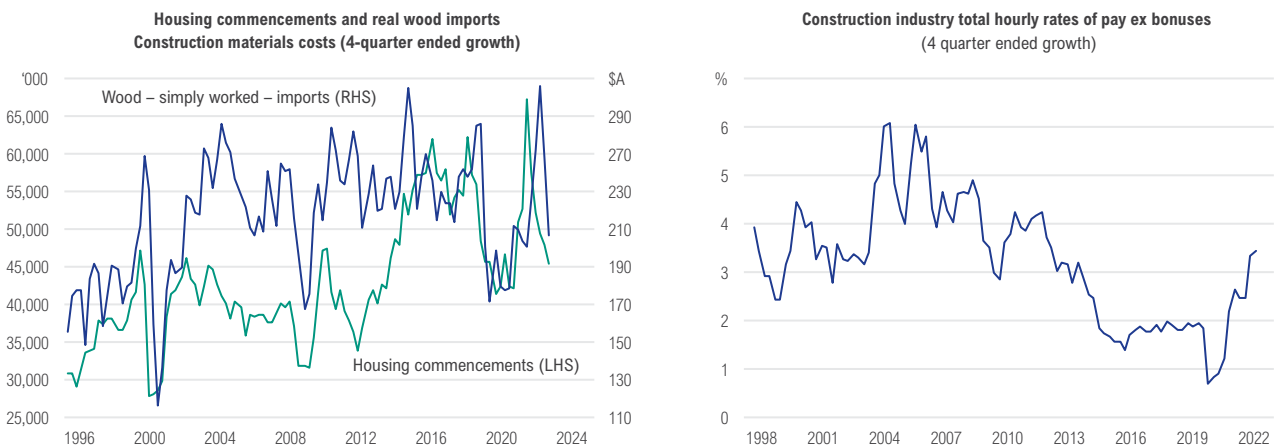
Given the strong demand in the rental market, NHFIC expects shortages of multi-density dwellings for rent over the next few years.

## Supply-side constraints in the construction industry

Building material cost inflation remains strong but is starting to ease for some products. For example, wood import prices declined 28% from their peak in the first quarter of 2022 as housing commencements fell by a third from mid-2021. Wage growth has risen, increasing 3.4% over the year. Builders report that skills shortages are enabling subcontractors to demand wage premiums.

The cost of plyboard, terracotta tiles, structural timber and timber windows had the greatest 4 quarter-ended growth of more than 30% in 2022. The cost of reinforcing steel and cement rose more than 10% over the December 2022 quarter.

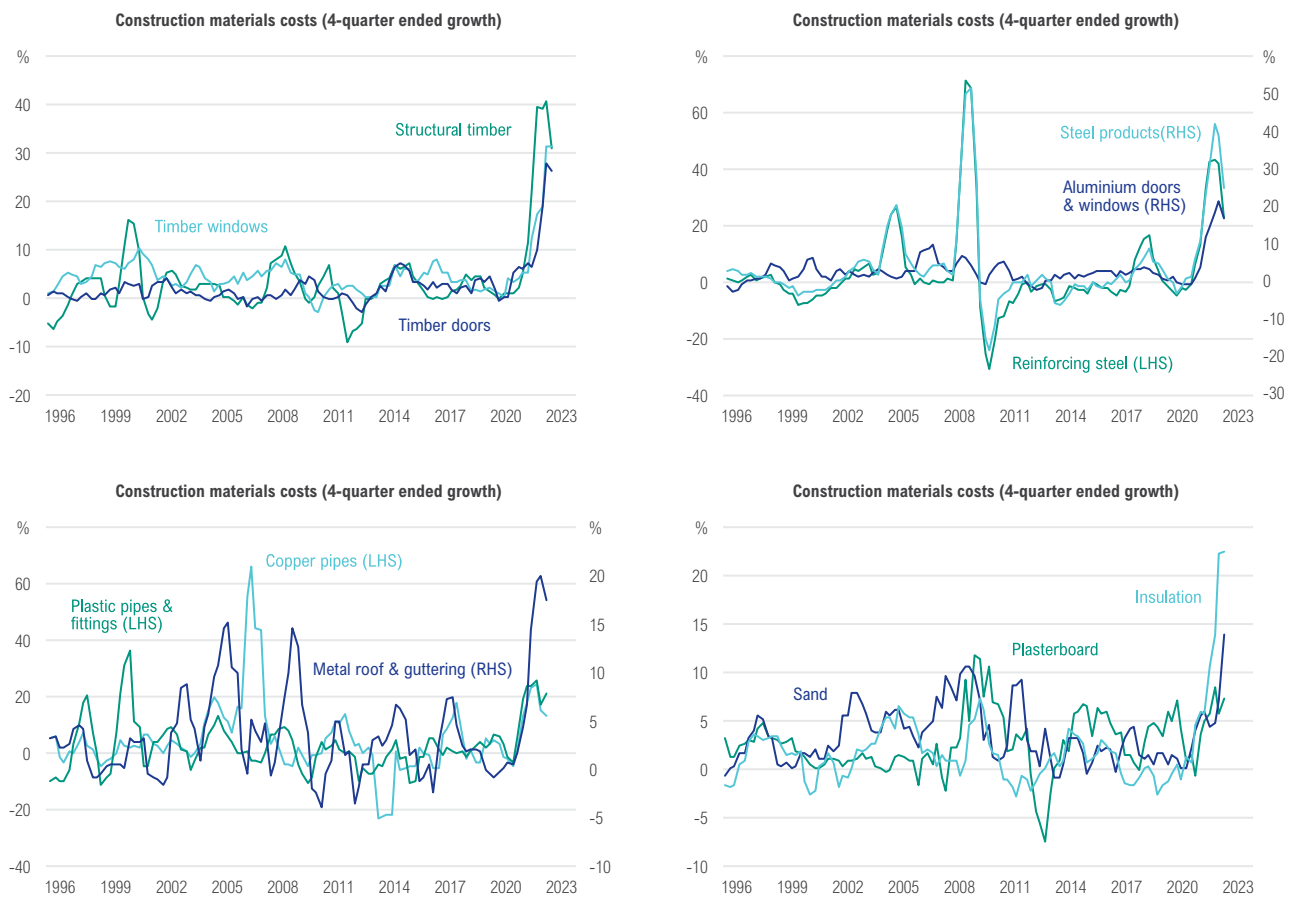
Figure 1.28: Construction material imports and wages growth (4 quarter-ended growth)



Source: ABS Cat 53020 and ABS Cat 87520



Figure 1.29: Construction material costs (4-quarter ended growth)\*

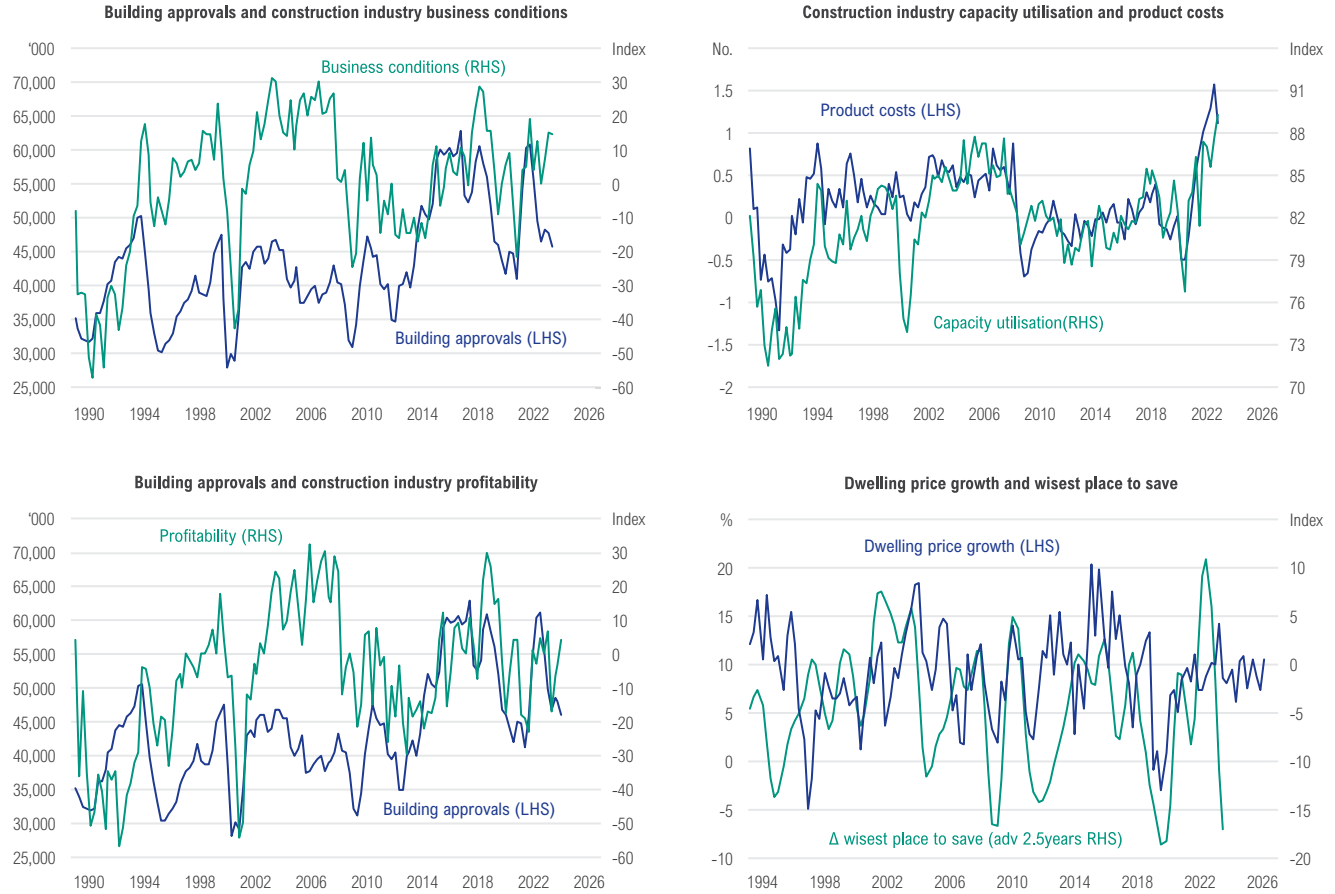


\*Weighted average of 6 capital cities.  
Source: ABS Cat 64270.0.

Cost inflation is easing for many building supply materials, such as timber and steel products, copper pipes, and metal roof and guttering. But it remains at historically high levels on the back of pandemic-related disruptions to supply chains and high demand.

Most multi-dwelling builders have struggled with cost inflation undermining fixed-price construction contracts. If product costs and labour shortages persist, margins are likely to tighten even further. However, business conditions for detached dwelling builders are favourable.

Figure 1.30: Housing sentiment



Source: Refinitiv, CoreLogic, NHFIC.



# State of household formation



State of the Nation's Housing 2022–23

# State of household formation



1.8million

**new households  
by 2033**



116,000

**vacant properties  
by 2033**

## KEY POINTS

- Around 1.8 million households are expected to form over the period 2023 to 2033, on the back of a recovery in population growth and NOM with household demand for occupied dwellings (1.7 million) and vacant dwellings (116,000) (e.g., second properties) expected to grow from 10.7 million to around 12.6 million by 2033.
- By household type, NHFIC expects the strongest growth in households over the projection period to be in 'lone person' households (an additional 563,600 to 2033), followed by 'couple family with children' households (an additional 533,300 to 2033).
- NHFIC expects new household formation for detached dwellings to average around 90,000 per annum households from 2023 to 2025. This will occur at a time when the supply of new detached dwellings coming into the market is likely to weaken. Returning migrants will push new household formation in the multi-density segment (e.g., apartments) to around 65,000 by 2024 and gradually rise to nearly 80,000 by 2033.
- 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. This contributed to vacancy rates falling to their lowest levels since 2006. These COVID-19 related behaviours are expected to unwind over time, but this remains highly uncertain.
- NHFIC sensitivity analysis shows dwelling take-up increased during the pandemic. At the onset, average household size jumped and supported additional household demand of 238,500 dwellings. But then, from mid-2021 household size fell by around 0.08 persons per household, resulting in increased take up of around 341,500 dwellings. This effect is most pronounced in the rental market where it has reduced available rental dwellings.

## Introduction

This chapter sets out household formation projections from 2023 to 2033. The projections reflect Australia's changed population growth forecasts since *State of the Nation's Housing 2021–22*.

This chapter also explores the factors contributing to rates of household formation (sometimes referred to as household demand or underlying demand) in Australia. It particularly focuses on new insights provided by the 2021 Census and other significant new data sources released over the past 12 months.

NHFIC expects around 1.8 million new households to form across Australia from 2023 to 2033. This follows a much stronger recovery in household demand in 2022 (132,400 versus 60,000 expected last year) owing to Centre for Population revisions. The total number of households are expected to rise from 10.7 million in 2022 to 12.6 million in 2033. In the east coast states, most of it will be due to returning migration, particularly international students.

COVID-19 caused unprecedented disruption to population growth, which had a large negative impact on new household formation. However, this has been offset to some degree by pandemic-related behavioural changes. These include:

- lower occupancy rates
- a premium on space and smaller household size
- low interest rates
- increased employment flexibility and work from home arrangements.

As NOM returns to pre-pandemic levels, population growth and associated household formation is expected to continue to rise quickly over the next few years. However, the coming period will be one of adjustment. NHFIC assumes average household size will gradually return to longer term trends as the impacts of the pandemic wane. But this remains highly uncertain.

Regardless, during a phase of strongly rising population growth, Australia's pipeline of new housing must be adequately planned for and delivered. The assumption should be that household formation rates will eventually settle again at high levels.



## Factors affecting new household formation

In general, population growth and household size have the largest impacts on the rate of net household formation. Demographic change, while limited in its short-term impact, can have a significant effect in the long term. Conversely, economic factors, such as employment conditions and rental affordability, are primarily short-term drivers. Cultural factors, economic development and labour market dynamics can also influence Australia's number of households.

### Population

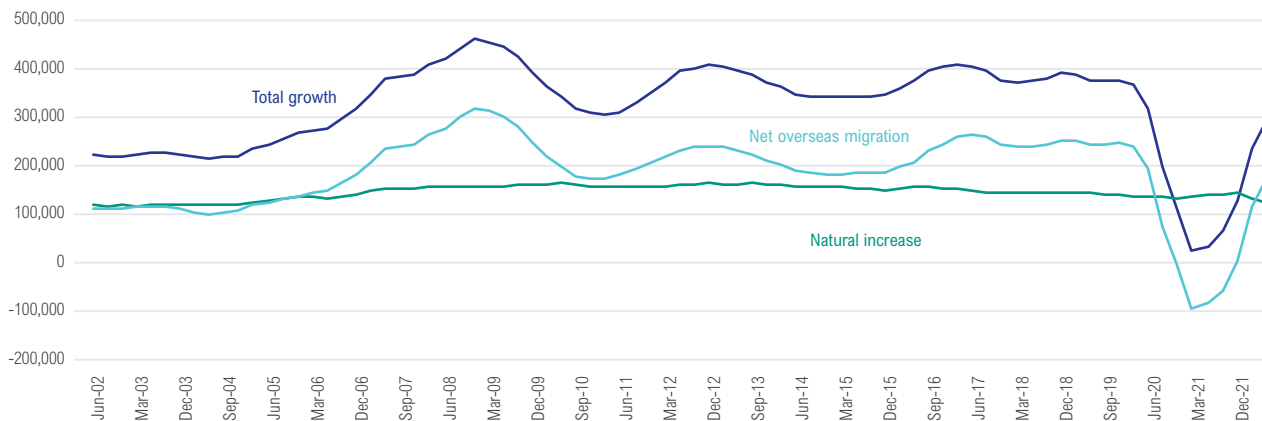
Population growth has rebounded much more quickly than was expected a year ago. Previous growth estimates were for 0.3% in 2021–22 and 1.2% in 2022–23. In fact, Australia's annual population grew by 1.1% in 2021–22 and is now expected to reach 1.4% in 2022–23.<sup>2</sup> These figures are still lower than pre-pandemic levels, when average annual growth was 1.6% from 2008–09 to 2018–19.<sup>3</sup>

Centre for Population estimates suggest that population growth will remain below this level in the period to 2032–33. This assumes a steady state of NOM (235,000) and a declining fertility rate.

Australia's population growth comprises NOM (migration arrivals minus migration departures) and natural increase (births minus deaths). Before the pandemic, the major source of population growth was overseas arrivals, which totalled 506,800 in 2019–20. This figure fell to 145,900 in 2020–21, before starting to pick up again at the end of December 2021 and March 2022. As international students and tourists began to return, overseas arrivals totalled 395,000 in 2021–22. Overseas departures peaked at the start of the pandemic but broadly stabilised since then. As a result of these factors, in 2021–22, NOM totalled 171,000. This was still below pre-pandemic levels, but much higher than expected in the previous year.

The Centre for Population predicts NOM of 235,000 from 2022–23 onwards (to 2032–33). This stronger than anticipated increase is expected to add around 268,000 to population growth from 2022 to 2025 relative to State of the Nation's Housing 2021–22.

Figure 2.1: Key components of population growth (actuals)



Source: ABS, NHFIC

Table 2.1: NOM – 2021 versus 2022 assumptions

|                | 2021–22 report | 2022–23 report | Change         |
|----------------|----------------|----------------|----------------|
| <b>2021–22</b> | -41,000        | 150,000        | 191,000        |
| <b>2022–23</b> | 180,000        | 235,000        | 55,000         |
| <b>2023–24</b> | 213,000        | 235,000        | 22,000         |
| <b>2024–25</b> | 235,000        | 235,000        | -              |
| <b>Total</b>   | <b>587,000</b> | <b>855,000</b> | <b>268,000</b> |

Source: NHFIC, Centre for Population

<sup>2</sup> Centre for Population, 2022 Statement

<sup>3</sup> ABS, National, State and Territory Population, June 2022.

With overseas arrivals plummeting in 2020, natural increases became the most significant source of Australia’s population growth. But household formation is not strongly influenced by natural increase. There is a significant lag between the birth and the child forming a new household. Also, only lone person deaths reduce the total number of households.

However, with NOM now picking up, NHFIC expects population growth to add considerably to new household formation over the projection period.

The biggest impact of a decline in NOM during the pandemic was on population growth in capital cities. Greater work flexibility during the pandemic encouraged people to search out larger and more affordable dwellings with extra space in regional areas. As a result, metropolitan areas experienced a net outflow of 80,000 overseas migrants in 2020–21, compared with 4,000 in regional areas.<sup>4</sup>

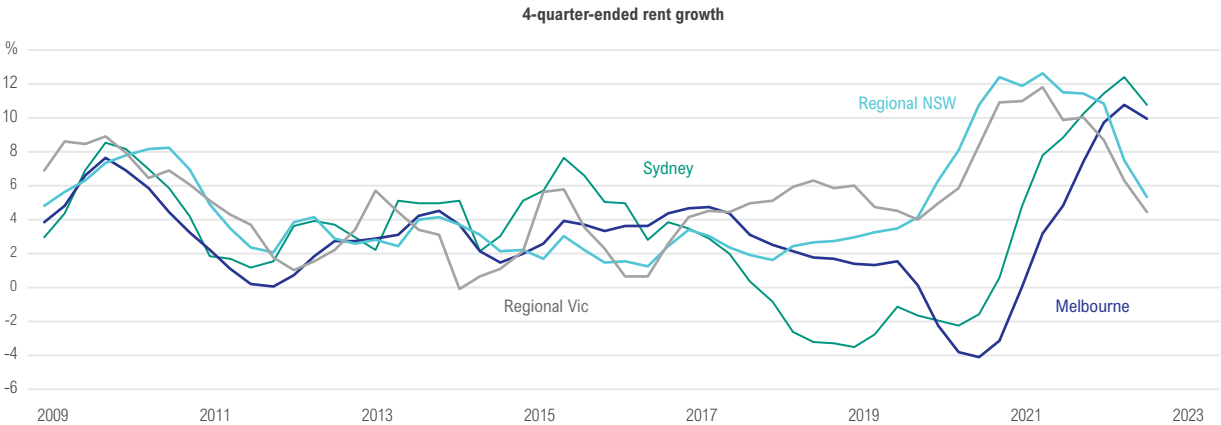
But this trend is now starting to slow. The most recent Regional Movers Index (December 2022) shows that net migration to the regions is 48.7% lower than a year earlier.

As the flow of overseas arrivals increase, many of them will likely prefer to settle in capital cities, increasing household formation in those areas. The Centre of Population projects that net internal migration to regional areas is expected to drop to 23,000 in 2023–24, ‘driven by increased moves from regional areas to capital cities as pre-pandemic trends of young people moving for education and employment resume’.

In last year’s report, NHFIC cited historical analyses of other shocks to urban systems. This work suggested that pandemic-led changes in behaviour are likely to be temporary. Over time, behaviours are likely to revert to pre-shock trends.

Recent rents data is instructive in this regard. It shows that, during 2022, demand for housing in regional locations, began to soften after a period of record growth. Conversely, rents in Sydney and Melbourne are now growing strongly; rent growth in Sydney and Melbourne is now outpacing demand in regional areas. This suggests that the premium of living in large cities close to employment centres may be returning.

Figure 2.2: Rents in Sydney and Melbourne versus rest of state



Source: Corelogic, NHFIC

4 Centre for Population, 2023 Statement.

Table 2.2: Key components of population growth (actuals, %)

|             | Family households              |                             |                   |              | Other                  |                  | Total        |
|-------------|--------------------------------|-----------------------------|-------------------|--------------|------------------------|------------------|--------------|
|             | Couple family with no children | Couple family with children | One parent family | Other family | Lone person households | Group households |              |
| <b>2011</b> | 26.7                           | 32.4                        | 11.2              | 1.3          | 24.3                   | 4.1              | <b>100.0</b> |
| <b>2016</b> | 26.5                           | 32.4                        | 11.1              | 1.2          | 24.4                   | 4.3              | <b>100.0</b> |
| <b>2021</b> | 26.8                           | <b>31.4</b>                 | 11.1              | 1.2          | <b>25.6</b>            | <b>3.9</b>       | <b>100.0</b> |

Source: ABS, 2021 Census of Population and Housing, Time Series Profile.

## Demographics and living arrangements

The median age of Australia is increasing.<sup>5</sup> This trend, which accelerated during COVID-19, affected both new household formation and the types of dwelling in demand.<sup>6</sup> Older households, particularly females, are more likely to live in smaller, 'lone person' households than other age groups.<sup>7</sup>

Other longer-term demographic trends are also affecting new household formation, including:

- people forming households later in life, partly a consequence of housing affordability challenges
- women having children later in life.

In 2016, 46% of people aged 25–29 were living as a husband/wife/partner in a 'couple family with children' or a 'couple family without children'. This compares with 51.6% in 2001.<sup>8</sup>

## Housing preferences and household size

Household formation is particularly sensitive to dwelling occupancy, which changed during the pandemic. Smaller household sizes, for a given level of population, results in more dwellings required to house the population.

The 2021 Census showed that household size fell during the pandemic – a trend that continued during 2022.<sup>9</sup> According to the Census, this was due to:

- strong declines in larger group households and couple families with older children/dependents
- a noticeable increase in 'lone person' households.

The apparently small decline in average household size, from 2.57 persons per household in 2016 to 2.53 in 2021, substantially increased underlying demand for housing. Very minor shifts in household size can have large impacts on underlying housing demand (see Sensitivity analysis).

A premium on space and smaller household size is likely to have been one factor contributing to very tight conditions in Australia's rental markets. Following border closures in early 2020, Australia experienced century low population growth. As fewer households were forming, vacancy rates spiked. With the borders shut, vacancy rates could have reasonably been expected to remain elevated (all other things being equal). Instead, the national vacancy rate fell to its lowest level in more than 15 years. This suggests the new household formation lost to lower population growth was outweighed by other factors, including preferences for smaller household size and, possibly, some latent household formation.<sup>10</sup>

5 ABS, Historical Population, 2016 and ABS, National State and Territory Population, June 2022, Population by Age and Sex, National, Table 3.

6 Centre for Population, Population Statement 2022.

7 ABS, Household and Family Projections, 2016–2041.

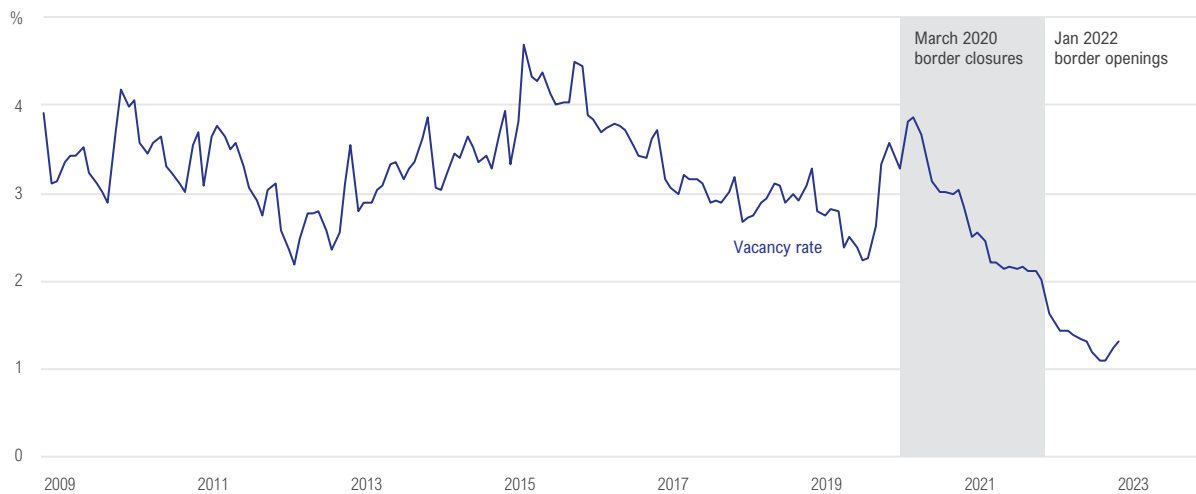
8 ABS, Household and Family Projections, 2016–2041.

9 See November 2022 RBA Statement on Monetary Policy

10 See Household Formation chapter in 2021–22 State of Nation's Housing report for further discussion on latent household formation.



Figure 2.3: Vacancy rates and border closures (Australia)



Source: Corelogic, NHFC

Whether these behaviours and preferences will continue is uncertain. But they will have considerable implications for new household formation. If preferences for smaller household sizes last for longer than expected, Australia's rates of household formation could be higher than envisaged (see Sensitivity analysis).

### Economic variables and affordability

Household formation projections based purely on population and demographics can under-estimate housing demand. Other metrics to take into account include higher average incomes, unemployment rates and other economic factors. This is why NHFC's projections of household formation incorporate impacts from economic variables.

Other economic variables, such as rents, can also affect housing affordability and the rate of household formation. Rents reflect underlying demand for housing. If rents are falling, the purchasing power of incomes for housing increases. This allows more people to live on their own, decreasing average household size and rates of household formation. Conversely, if rents are rising, fewer people can form new households. Given rents and housing affordability are also a function of housing supply, increasing housing supply can put downward pressure on housing costs.

The recent Budget predicted low unemployment and stronger income growth, suggesting new household formation is likely. However, strongly rising rents and affordability constraints may delay some new households forming in the short term.

## Forecast methodology

### Definitions

This report uses the ABS definitions of dwelling type as the basis for its analysis (Table 2.3). To support comparison with the supply estimates, the Medium and Apartment categories from the following table were rolled into a single figure.

**Table 2.3: Household formation categories**

| Housing Category | ABS Structure Dwelling Types   |
|------------------|--|
| <b>Detached</b>  | Separate house   |
| <b>Medium</b>    | Semi-detached, row or terrace house, townhouse etc. with one storey        |
|                  | Semi-detached, row or terrace house, townhouse etc. with 2 or more storeys |
|                  | Flat or apartment in a 1- or 2-storey block                                |
|                  | Flat or apartment attached to a house                                      |
| <b>Apartment</b> | Flat or apartment in a 3-storey block                                      |
|                  | Flat or apartment in a 4- or more-storey block                             |

Source: NHFIC, ABS. Non-private dwellings and other residential buildings have been excluded from the analysis. Non-private dwelling types include hotels, staff quarters, hospitals, hostels, nursing homes, certain types of welfare accommodation (i.e., group homes) and prisons. Other residential dwellings include caravans, houseboats and dwellings attached to commercial buildings.

Estimates for each housing type were prepared at the national and state level, along with each state and the NT, for both major cities and rest of state areas. Capital city forecasts were also produced, with Canberra and the ACT grouped together.

### Household formation model

The household formation forecasts are based on estimating the total number of households by type for each year of the projections and for each geographic area, to accommodate resident demographics. Like population forecasts, they are estimated as of 30 June each year.

#### Methodology for projecting new household formation

- Population projections are based on data provided by the Centre for Population and are consistent with the population figures in the 2022 Population Statement.
- These projections allocate the forecast population by 5-year age group into family and household living arrangements. This allocation is based on Census data up to and including the 2021 Census. Forward estimates are based on the ratios identified in the ABS Household and Family Projections, Australia 2016 to 2041 Series I ratios for future living arrangements (which is based on living arrangements fixed to the 2016 Census ratios).
- From the Census data, the ABS provides estimates of propensity for each of the age cohorts in the resident population to form, or belong to, a family or non-family household, and to live in a private or non-private dwelling. These living arrangements are applied at the state, capital city and regional level to the changing population size and age profile to estimate the number of households each year.
- The number of households by type includes estimates for family households, such as couples with children, couples without children, sole parents and other family households. The number of group households and 'lone person' households is also estimated. The changing trends in the preferences of different household types are applied to provide estimates of trends in demand by dwelling type.
- Finally, the number of dwellings demanded is estimated for each state, capital city and regional area, including by type of dwelling, and aggregated to the national level over the projection period.

Importantly, the model takes into account far more than population forecasts. It considers:

- Changes due to the ageing population, changing average number of children per family household and other compositional changes in living arrangements.
- The impact that economic factors can have on people's living conditions including the effect of changes to incomes, rents and unemployment.
- An allowance for vacant and unoccupied dwellings due to dwellings that are temporarily vacant, holiday homes, permanently vacant (including abandoned) and used by temporary visitors rather than residents.

The household formation projections are adjusted by drawing on empirical assessments of how key macroeconomic variables – unemployment, income and rents – affect living arrangements and demand for dwellings.

State of the Nation's Housing 2021–22 was based on the 2021/22 Mid-year Economic and Fiscal outlook estimates. The 2022–23 assumptions are based on the October 2022 Budget.

- **Unemployment** – The unemployment rates for 2022 and 2023 are lower but 2024 is marginally higher. Beyond 2024 the same 4.25% unemployment is assumed. In the short term (2022, 2023) low unemployment has a positive impact on demand.
- **Real incomes** – real wage growth for 2022 and 2023 was revised down substantially from 0.5% growth to -3.5% and -2% respectively. This translates to lower real incomes, which is a substantial negative for demand.
- **Real rents** – the real growth for 2022 and 2023 has been revised up substantially reflecting stronger than anticipated rental growth, which is negative for household formation in those 2 years. Rents are expected to remain high until 2025, detracting from new demand.

Our model assumes that household size returns to its long-term trend by 2033. But actual household formation and impacts on demand and housing markets will be very sensitive to this assumption. Accordingly, this chapter provides a sensitivity analysis, showing the effect of volatility in household sizes on underlying demand in the short term.



Rents are expected to remain high until 2025, detracting from new demand

## Household formation projections

Australia's faster population growth recovery after borders reopened is driving strong new household formation. New household formation is estimated to have been 132,000 in 2021–22, 72,000 higher than envisaged. New household formation is expected to be 139,200 in 2022–23 and 150,400 in 2023–24. NHFIC expects household formation to rise to around 176,400 and settle at around 171,000 through to the end of the decade.

Household formation in the detached segment is expected to be around 80,000 in 2023, then rise back to be around 103,000 by 2025. The multi-density segment is expected to strengthen to 59,000 in 2023 then by 2025 expected to reach around 74,000 and remain there for the rest of the projection period. Despite the stronger recovery in NOM, household formation is expected to be lower for much of the projection period than that envisaged in the State of the Nation's Housing 2021–22 report due to significant revisions to the age and geographic distribution of the estimated resident population undertaken by the ABS.

**Table 2.4: New household formation**

|                          | 2021–22        | 2022–23        | 2023–24        | 2024–25        | 2025–26        | 2026–27        |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 2021–22 forecasts        | 60,400         | 158,600        | 144,700        | 166,600        | 181,500        | na             |
| <b>2022–23 forecasts</b> | <b>132,400</b> | <b>139,200</b> | <b>150,400</b> | <b>176,400</b> | <b>173,700</b> | <b>171,100</b> |

Source: Macroplan, NHFIC. (e) net estimate using actual completions less estimated demolitions.

**Table 2.5: Expected household formation by dwelling type**

|                               | 2021–22        | 2022–23        | 2023–24        | 2024–25        | 2025–26        | 2026–27        |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Detached                      | 75,500         | 80,200         | 85,600         | 102,900        | 99,400         | 96,700         |
| Medium density and apartments | 56,900         | 59,000         | 64,900         | 73,500         | 74,300         | 74,400         |
| <b>Total</b>                  | <b>132,400</b> | <b>139,200</b> | <b>150,400</b> | <b>176,400</b> | <b>173,700</b> | <b>171,100</b> |

Source: Macroplan, NHFIC. (e) estimate NB: Numbers may not add due to rounding.

Household formation for detached dwellings is expected to be affected by higher interest rates which is likely to dampen the demand for and supply of dwellings until 2023–24.

The household formation projections also include a breakdown of dwellings by household and family group. This shows that, of the more than 1.8 million new households NHFIC expects to form over the next decade, the strongest growth will be from 'lone person' households. An additional 563,600 'lone person' households will be created from 2023 to 2033.

## Sensitivity analysis

This household formation model uses household sizes from the:

- Census for the years up to and including 2021
- Household and Family Projections, Australia 2016 to 2041 Series I ratios for the long-term outlook.

This data includes a degree of smoothing, which is important. Estimates of household size from the ABS monthly Labour Force Survey show that the average household size can be quite volatile, particularly at times of economic or social uncertainty. Immediately after the GFC, the average household size across Australia increased by around 0.06 persons over a period of around 18 months. This effectively suppressed household demand by around 350,000 dwellings below what it would have otherwise been during that period.

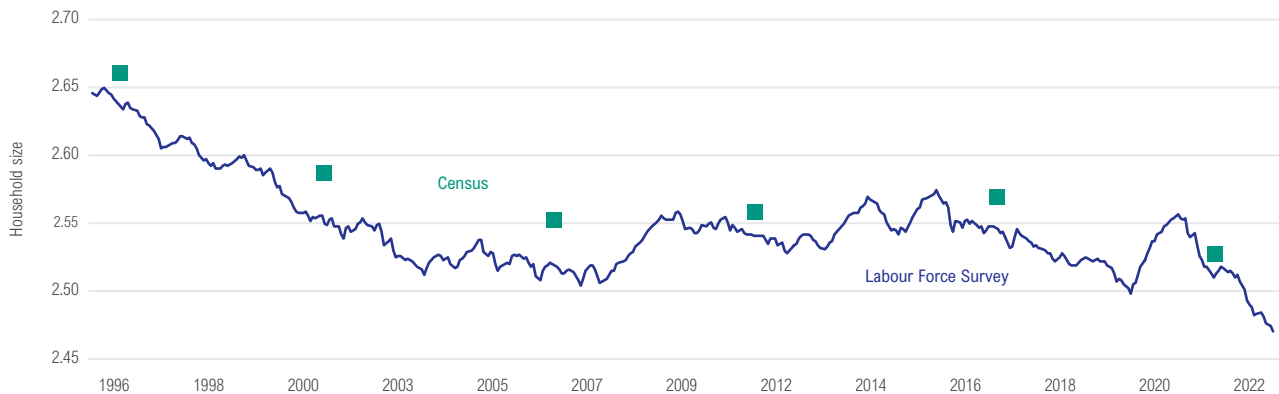
The Labour Force Survey data shows that, in March 2020 to mid-2021, household size increased by a similar amount as it had during the GFC (about 0.06 persons per household). This initial rise during the pandemic suppressed the total number of households, and hence demand, by about 238,500 dwellings. Much of this effect was reflected in the spiking rental market vacancy rate.

From mid-2021, household size fell by around 0.08 persons per household, increasing take up to around 341,500 dwellings. In net terms, the change in household size from the beginning of COVID-19 to the end of 2022 increased demand by 103,000 dwellings. This effect is most pronounced in the rental market, where it has reduced the number of available rental dwellings.

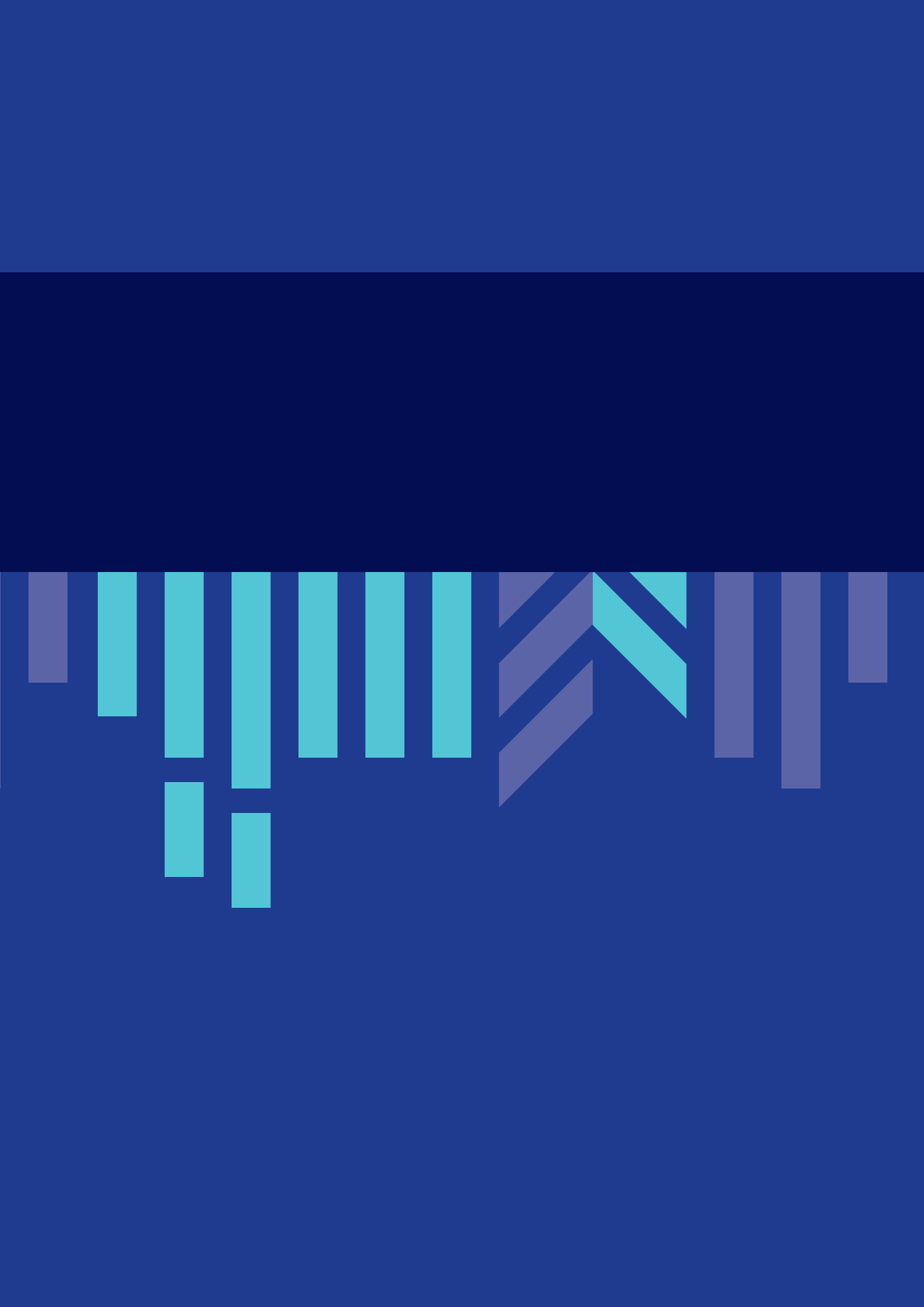
The increase in NOM, particularly the return of international students at the beginning of calendar 2023, will put additional pressure on the rental market in the short term. Given the rental market constraints, the only ways to resolve housing shortages in the short term are through:

- an increase in group households
- more people living in non-private dwellings, such as purpose-built student accommodation, hotels and hostels.

Figure 2.4 Average household size – Census and Labour Force Survey estimates



Source: ABS, Macroplan, NHFIC

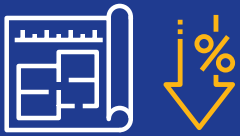




# State of supply



# State of supply



127,500  
decline in  
additions

EXPECTED IN 2024–25



28,000  
dwelling  
projects

WERE DELAYED IN 2022

## KEY POINTS

- Construction activity has been at record levels, but is expected to weaken, with an increase of 148,500 net dwellings expected in 2022–23. With higher interest rates and declining dwelling prices, net additions are likely to decline to 127,500 in 2024–25.
- In 2022–23, NHFIC expects detached dwelling net additions to be 89,400 and multi-density net additions to be 59,100. During the pandemic, detached dwelling completions benefitted from rising prices, low interest rates and Federal Government stimulus. Detached dwelling net completions are forecast to decline to 74,200 by 2024–25; multi-density dwelling net completions are forecast to decline to 49,700 in 2025–26.
- Construction activity was at a record high in mid-2022, with around 244,000 dwellings under construction. Strong demand coupled along with tight supply of both labour and materials, COVID-19 restrictions and bad weather have put significant pressure on the construction industry. Around 20,000 detached dwelling projects and 8,000 multi-density projects were delayed in 2022. Most of the detached dwelling projects are likely to be built. But multi-density projects may be shelved.
- Industry liaison confirms what the data is showing in terms of cost pressures and project delays. However, some prices, such as structural timber and reinforcing steel, have fallen. In NSW, infrastructure construction activity is at a high level. Along with demand for multi-density dwellings, this has contributed to shortages of formwork timber and form workers.
- Greenfield land availability in the eastern states remains tight. But industry liaison suggests more sites are available in the urban fringe. Weather delays have been most acute in NSW, which is also where the planning approval process is most complex. Newly introduced legislation in that state has significantly delayed the approval process for multi-density dwellings.
- Build to rent provides opportunities for institutional investors to invest in affordable housing. But the time taken for development approvals in NSW has extended over the past couple of years. Industry reports the planning pathways for these projects in NSW is at least 12 months. Whereas in Qld and Vic, the same planning pathway is 4–6 months.
- A larger pipeline of subsidised housing construction will likely emerge on the back of the Government's Housing Australia Future Fund and Housing Accord, which will support the delivery of 40,000 social and affordable dwellings over 5 years.



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## Introduction

# Economic conditions have turned since early 2022. Conditions are now less favourable for new residential construction, primarily due to higher interest rates.

In mid-2022, a record 244,000 dwellings were under construction, thanks to low interest rates and pandemic stimulus measures. However, strong domestic demand coupled with inflationary pressures meant interest rates began rising earlier than last year's report expected. By early 2023, the target cash rate had risen from its pandemic low of 0.1% to 3.6%. Dwelling prices had declined by 7% since the peak in May 2022.

Throughout 2022, the cost of building materials rose by 14%. However, by the start of 2023, demand had eased due to tighter monetary policy. Global supply chains had also become less constrained.

By late 2022, building approvals had fallen by around 40% since their peak in March 2021.

- Detached dwelling approvals fell by 36%.
- Multi-density dwellings approvals fell by 49%, despite tight supply in the rental market.

Multi-density prices fell by only 5% since their peak in April 2022, compared with detached dwelling prices, which fell by 8%.

In *State of the Nation's Housing 2021–22*, NHFIC projected the downturn in the lead indicators of construction activity to begin in 2024, when interest rates were expected to rise. However, the surprise rise in inflation and interest rates in 2022 means this downturn has now been bought forward. Around 148,500 net new dwellings (that is, new supply less demolitions) are forecast to be added to the housing stock in 2023. In 2024, NHFIC expects 138,200 net new dwellings to be added compared with 181,000 in last year's report. A larger than usual government-subsidised housing construction pipeline will add more social and affordable dwellings to the pipeline over the medium term.

This year's report includes input from a wide range of construction industry participants in Qld, NSW and Vic. These stakeholders reported that weather events and COVID-19 restrictions caused significant delays and disruptions in the first half of calendar 2022. In the second half of that year, rising construction costs and higher interest rates caused many projects to be put on hold.

The price of some materials, such as structural timber and reinforcing steel have fallen, but cost pressures remain broad. In NSW, where many infrastructure projects are under construction, formwork timber and labour are struggling to meet demand. Contractors have been trying to expand escalation clauses in building contracts to share the risk of cost increases between the client and the builder. However, margins are generally under downward pressure.

Industry liaison also suggests that the supply of fully serviced land in Vic and Qld is limited, particularly for greenfield sites. In the urban fringe, site availability is less of an issue. In NSW, the government is bringing land to market. But the approval process has lengthened and become more complex due to new requirements for designers and builders of Class 2 dwellings<sup>11</sup>. Developers in the multi-density market are being affected by difficult trading conditions for builders. Cost mispricing by these builders, due to weather and supply chain impediments, have disrupted projects.

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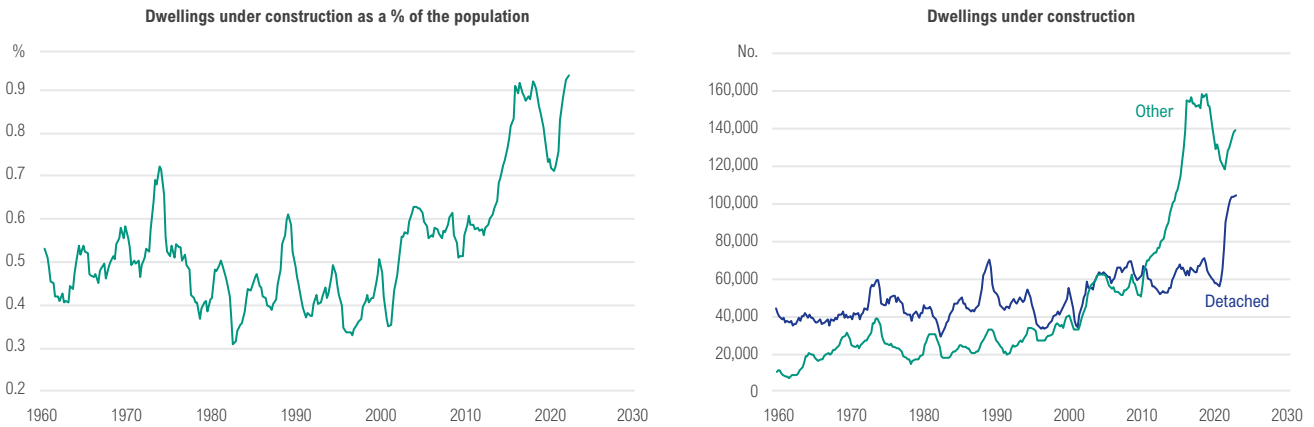
11 Class 2 buildings are multi-unit residential buildings where people live above or below each other

## The current cycle

Due to pandemic stimulus, the number of dwellings under construction in mid-2022 was at a record high – both as a share of the population and in absolute terms for detached dwellings (Figure 3.1). In absolute terms, other dwellings rebounded from 120,000 to around 140,000. The number of other dwellings under construction remains well above that of detached dwellings – itself at a record high.

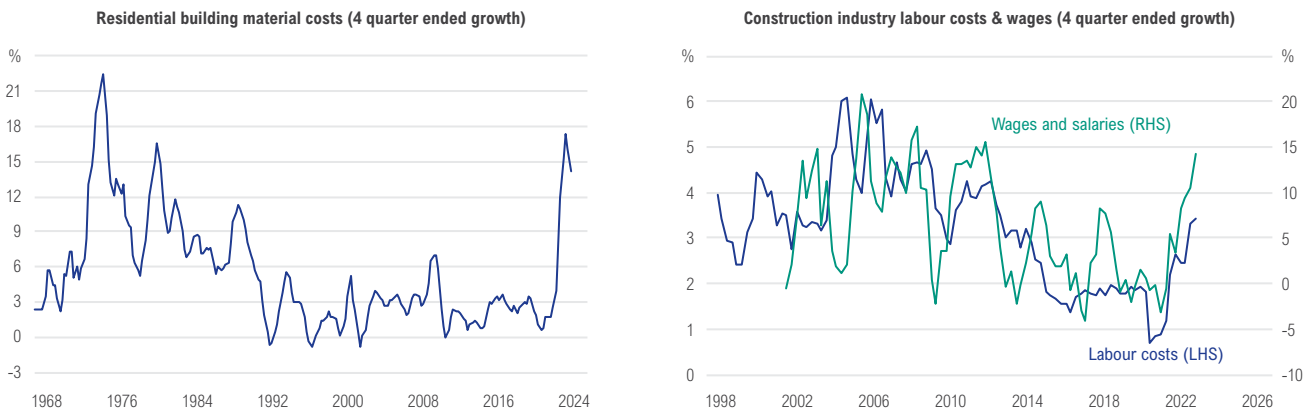
The high level of construction activity is increasing the demand for labour and materials. The cost of construction materials is rising at its fastest pace since the early 1970s (Figure 3.2 – LHS). However, labour costs are rising at a more modest pace. Wages and salaries increased by 15% over the past 4 quarters. Narrower measures, such as wage price index, increased at around 3.4%.

Figure 3.1: Dwellings approved but not yet commenced



Source: ABS Other dwellings are multi-density dwellings.

Figure 3.2: Residential construction costs

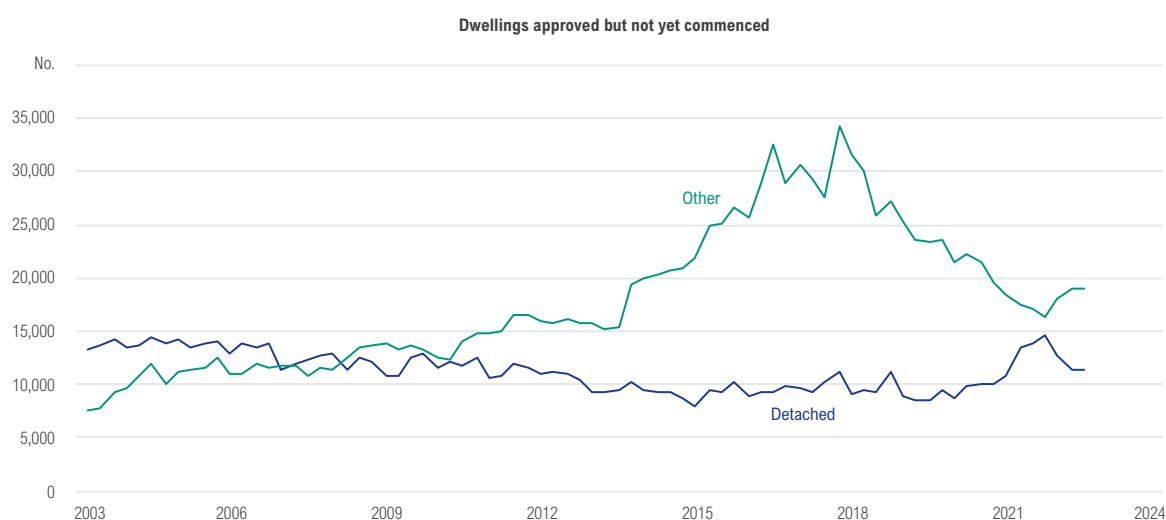


Source: ABS

Despite construction activity being at record levels, approval, construction and completion delays remain at normal levels. Other dwellings not yet commenced are around 57% of their peak during the 2017 to 2018 period. Detached dwellings not yet commenced peaked at the end of 2021. But this level of activity did not exceed that of the 2003 to 2005 period (Figure 3.3).

Weather has been a factor in delaying construction, particularly in the large east coast capital cities. In Sydney, average daily rainfall was exceeded in 8 months of 2022. Similarly, Brisbane (7 months) and Melbourne (8 months) also had an unusually large number of days in each month where rainfall exceeded this benchmark.

Figure 3.3: Dwellings approved but not yet commenced



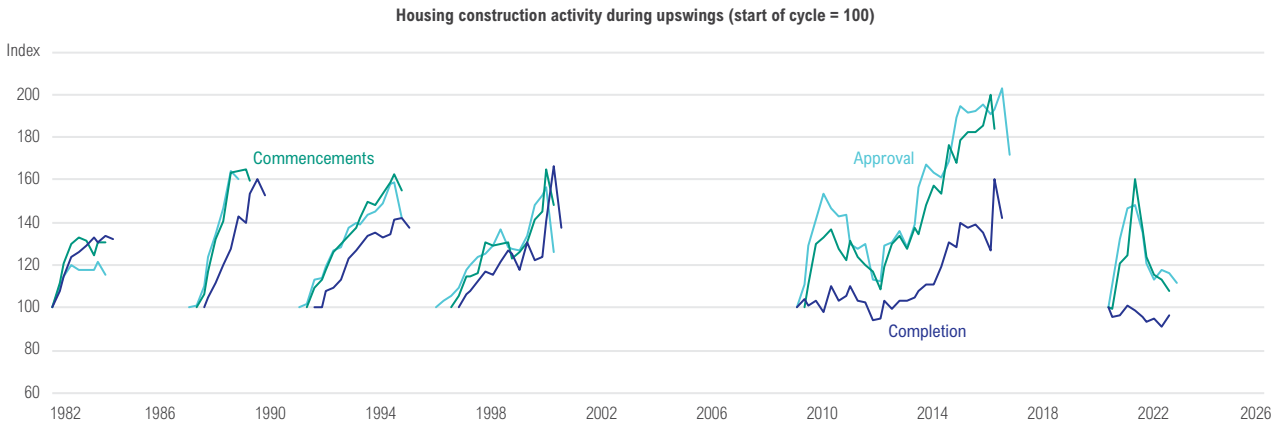
Source: ABS Cat 87520, NHFC. Other dwellings are multi-density dwellings

Table 3.1: Mean number of days of rain  $\geq$  average

|                       | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Months $>$ Ave |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|
| <b>Sydney Ave*</b>    | 4.9 | 4.9 | 5.8 | 5.0 | 4.7 | 5.9 | 3.8 | 3.1 | 3.2 | 3.9 | 5.0 | 4.1 | 8/12           |
| <b>2022</b>           | 7   | 13  | 16  | 9   | 11  | 1   | 15  | 4   | 8   | 8   | 2   | 3   |                |
| <b>Melbourne Ave*</b> | 2.3 | 1.8 | 2.3 | 2.7 | 3.2 | 2.7 | 2.7 | 3.5 | 3.0 | 3.2 | 3.4 | 2.9 | 8/12           |
| <b>2022</b>           | 3   | 0   | 2   | 4   | 2   | 3   | 3   | 5   | 3   | 8   | 5   | 3   |                |
| <b>Brisbane Ave*</b>  | 5.7 | 5.6 | 4.7 | 3.6 | 3.8 | 2.6 | 2.1 | 2.0 | 1.9 | 3.8 | 4.2 | 5.3 | 7/12           |
| <b>2022</b>           | 8   | 11  | 6   | 2   | 10  | 1   | 4   | 2   | 6   | 4   | 4   | 4   |                |

Source: Australian Bureau of Meteorology \* Long term average calculated from 1965.

Figure 3.4: Cyclical upswings in construction activity (start of cycle = 100)



Source: ABS Cat 87520, NHFIC

Another way of looking at the time between the different stages of development is to look at past cycles. The 4 cycles during the 1980s and 1990s showed a reasonably synchronised response between approval and completion.

During the 2009–2016 cycle, both detached and multi-dwelling projects experienced construction delays. In the current cycle, multi-dwelling completions declined in line with approvals before the start of the pandemic and the end of the apartment boom in previous years. In contrast, detached dwelling completions slowly picked up during 2021.

## Factors affecting supply

Australia's short-medium term construction activity is driven by its strong quantitative relationship with interest rates and changes in dwelling prices. Developers bringing new stock onto the market will only do so if they are confident they can secure sales and meet their internal rate of return hurdle. Confidence is higher when prices are rising.

In the short term, financial conditions, and developer confidence will determine new supply coming onto the market. Over the longer term, impediments include land availability and planning restrictions affect supply. These factors can all combine to create periods of excess or insufficient supply that can persist for several years.

Over the long term, movements in household formation tend to anchor the number of dwellings constructed. The construction industry is unlikely to build more dwellings than demanded by population growth and occupancy preferences. However, developers do not seek a balance between household formation and supply. Projects simply will not proceed if they do not meet return hurdles.

## Industry liaison

In compiling this report, NHFIC has consulted extensively with builders and developers. These contributors made the following points about the delays and cost increases affecting their projects – and other impediments to project development. Some of the key findings of this liaison are outlined below.

### Delays

- Weather has caused significant delays in NSW. One builder reported that a project starting at the end of the first quarter in 2021 had seen 180 days where work was not possible due to weather (mostly rain, but also wind). Between July and September 2021, the same project lost 5 weeks due to COVID-19 isolation rules.
- Builders are making an allowance of 40% on new projects to account for unexpected delays; normally this would be 20%.
- Poor quality building materials are arriving on site. In many instances, reinforcing bars have been cut to incorrect lengths or the wrong bar sizes have been delivered. Metal door frames have a long lead time, which means they are often delivered late.

### Costs

- Cost pressures are beginning to ease for some building materials. The cost of steel reinforcement increased significantly during 2021, but it is now back to 2019/2020 levels. However, in many cases, costs are exceeding those of quantity surveyor estimates by between 10% and 15%.
- Labour costs have increased significantly since early 2021, especially for steel fixers (300%) and form workers (50%). Formwork timber is also in short supply.
- For trades required on residential, commercial and infrastructure projects such as form workers, labour availability has been exceptionally limited, particularly in NSW.
- Glazing and façade materials are in short supply. The cost of installation, or the labour component of the finished product has also risen.
- Fit out costs have also increased significantly, particularly plasterboard, timber studs, insulation and joinery. Cold-formed steel prices have increased significantly, and delivery lead times are very long. Joinery price increases are being driven mostly by increasing labour costs.

- Lifts were in short supply earlier in 2022, due to a lack of transformers and transformer parts. But availability is now improving.
- Concrete was previously in short supply. But prices have now fallen back to where they were around the September quarter 2021. As in most building materials markets, the concrete industry lacks competition.
- Building margins, particularly in multi-density construction, are very tight. Although some contactors have been able to manage this by including escalation clauses into contracts.

### Impediments to project development

- High land prices make it difficult for private sector investors to achieve return targets. But rising interest rates have meant that, in NSW, land prices have fallen by around 10%. This is helping a little.
- Some NSW councils do not support new development. As a result, the time taken for development approvals has extended over the past couple of years. In NSW, the planning pathway is at least 12 months for build to rent projects. In Qld and Vic, the same planning pathway is 4–6 months. The internal rate of return is important on these projects and delays for approval mean build to rent is more suited outside NSW.
- Obtaining a construction certificate in NSW has become more difficult due to the changes in regulations surrounding Class 2 buildings. All designers (architects, engineers) must now be registered to work on these (multi-density) buildings. However, authorities have not clarified what 'providing approved design drawings' means.
- Obtaining scale in affordable housing is difficult for institutional investors, who have limited room to invest in regional affordable housing projects. In the capital cities, height and land density limits mean some affordable housing projects are not viable.
- A large number of approved projects in NSW have been placed on hold because the return is no longer attractive. Rising construction costs are squeezing margins for developers; higher interest rates are reducing the amount of capital buyers can borrow.
- Sales are still occurring, despite higher interest rates. But finance has become more challenging, mainly because pre-sales are taking longer to achieve. Around 75% of a proposed development needs to be sold before construction finance is approved.
- Developers are looking at changing their business models and there has been international interest in affordable housing.

## Land availability

Land availability can constrain new residential property development, both on the urban fringe and in the urban infill. When it comes to monitoring land development, the state planning agencies publish some data. But it is reasonably limited. In 2022, the ABS published Land and Housing Supply Indicators. However, a release date has yet to be set for an updated publication. NHFIC recommends this data continues to be collected and published regularly.

The ABS Land and Housing Supply Indicators show experimental counts of land parcels and dwelling approvals by planning zone and land area. The data shows a large proportion of dwelling approvals in Sydney, Perth and Hobart are on land zoned for residential use. Other cities, such as Melbourne and Brisbane, have more dwelling approvals on

Masterplan and mixed use zoned land. Darwin, Canberra, Queanbeyan and Hobart have a reasonably large percentage of dwelling approvals in the “Other” zoning category.

The ABS data is useful but does not provide information on the future supply of land by characteristics. All stakeholders in land supply would benefit from understanding:

- the degree of servicing
- whether or not land is subdivided
- what amount of land in greenfield areas has been rezoned residential.

State governments provide the following details of future land supply.

**Table 3.2: New dwelling approvals by zoning**

| City                  | Residential (%) | Transition/ Masterplan (%) | Mixed use/ Centre (%) | Other (%) |
|-----------------------|-----------------|----------------------------|-----------------------|-----------|
| Sydney                | 80.2            | 0.2                        | 13.3                  | 6.3       |
| Melbourne             | 56.9            | 27.3                       | 8.3                   | 7.5       |
| Brisbane              | 61.7            | 23.1                       | 10.7                  | 4.4       |
| Adelaide              | 76.1            | 15.6                       | 6.6                   | 1.7       |
| Perth                 | 41.5            | 41.7                       | 9.1                   | 7.7       |
| Hobart                | 75.9            | 0                          | 4.1                   | 19.9      |
| Darwin                | 51.5            | 0                          | 0                     | 48.5      |
| Canberra — Queanbeyan | 50.4            | 0.0                        | 8.8                   | 40.8      |

Source: ABS Land and Housing Supply Indicators. Transition/ Masterplan is zoning that facilitates a managed transition between land uses, often according to a corresponding structure or masterplan for the area. Mixed use/ Centre provides land for a range of complementary uses, typically at higher density in central locations. Other includes land for primary production, business/ commercial where the land is for low impact use.

### Regional Qld

The Queensland Government publishes quarterly data on land supply. The latest data shows the state has around 85,000 hectares of greenfield and brownfield land available for residential development – most in the Wide Bay region (Table 3.3). SE Qld also has relatively large areas of land for residential development.

However, development data on its own does not indicate the number of dwellings that could be produced. For example, the yield on land in SE Qld is more than twice that of the second largest high yield region (N Qld), mainly due to smaller lot sizes.

Greenfield development goes through several stages after rezoning. Once lots are approved, developers seek approval to connect utilities with existing networks. In SE Qld, the number of approvals for utility connection is around 90% of lots approved for subdivision. This suggests that connections are nearly keeping up with lot development approval (Figure 3.5 – LHS). This good rate of utility connectivity has been maintained in this region for the past 4 years.

**Table 3.3: Qld regional broadacre land supply and yield (June 2022)**

| Region                     | Land area (hectares) | Estimated yield (dwellings) | Yield per hectare (dwellings/ hectare) |
|----------------------------|----------------------|-----------------------------|--|
| SE Qld                     | 29,437               | 402,555                     | 13.7                                   |
| Toowoomba & Darling Downs  | 5,859                | 10,491                      | 1.8                                    |
| Wide Bay                   | 30,772               | 60,315                      | 2.0                                    |
| Central Qld                | 3,977                | 21,815                      | 5.5                                    |
| Mackay, Isaac & Whitsunday | 5,108                | 30,733                      | 6.0                                    |
| Far N Qld                  | 6,084                | 35,322                      | 5.8                                    |
| N Qld                      | 6,887                | 46,519                      | 6.8                                    |
| <b>Qld</b>                 | <b>84,871</b>        | <b>607,750</b>              | <b>7.2</b>                             |

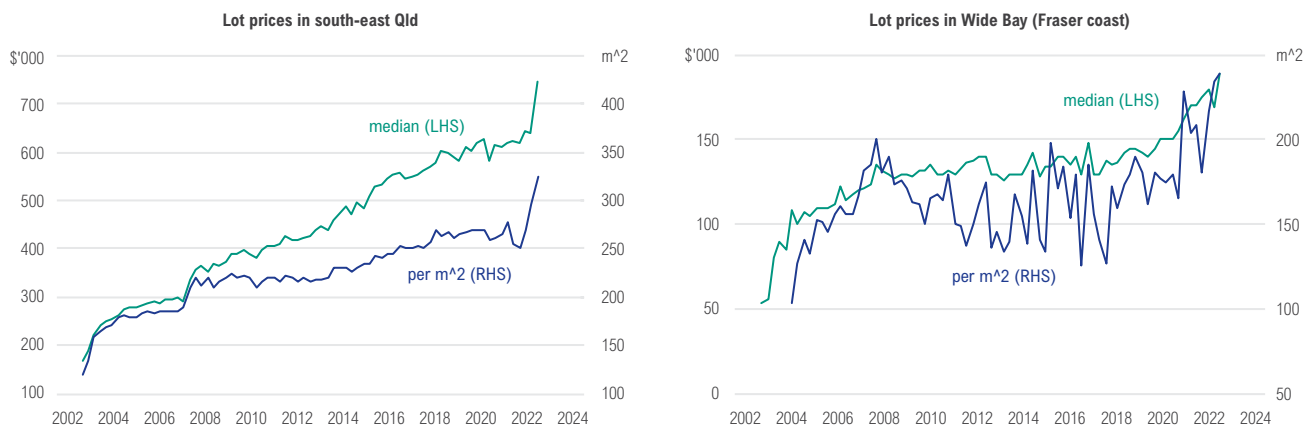
Source: Qld Government Statistician

**Figure 3.5: Qld lots approved for utility connection as a ratio of total lots approved for development**



Source: Qld government statistician

Figure 3.6: Regional Qld land prices



Source: Qld government statistician

In smaller regions, the relationship between approval for connection and approval for subdivision is more volatile: the number of approvals for connection can be nearly 12 times the number of approvals (Figure 3.5 – RHS). A large positive ratio could be due to previously approved projects receiving approval for connection. However, it could also simply reflect fewer projects being approved for development. The Central Qld region has the lowest connectivity as a ratio of lots approved for development.

The strong demand for property in 2021 and the first half of 2022 has increased land prices, particularly in SE Qld. Land prices per square metre increased from \$250 in the September quarter 2021 to almost \$350 in Q2 2022, a rise of 41%. Land price growth has also been strong in regional areas of Qld, such as the Fraser coast, which posted a 32% increase over this period.



## Metropolitan Sydney

The NSW Department of Planning, Industry and Environment estimates rezoned and released land in Greater Sydney will support the development of 118,484 and 141,990 dwellings respectively (Table 3.4).

Land further down the development pipeline is significantly less than the potential land supply. Only 9,524 lots are approved and waiting for sale and dwelling construction. However, an estimated 14,895 lots are one step back in the development process at subdivision approval.

Land sales in Sydney are now back to 2018 levels. However, longer determination times for both residential and subdivision development applications are putting a brake on supply. On average, subdivision approvals now take 130 days and residential dwelling development approvals take 65.

**Table 3.4: Greater Sydney potential greenfield lots (2022)**

| Region       | Released       | Rezoned        |
|--------------|----------------|----------------|
| North west   | 84,161         | 73,461         |
| South west   | 57,829         | 45,023         |
| <b>Total</b> | <b>141,990</b> | <b>118,484</b> |

Source: NSW Department of Planning, Industry and Environment–Sydney Greenfield Monitor.  
<https://www.planning.nsw.gov.au/Research-and-Demography/Metropolitan-Housing-Monitors/Sydney-Greenfield-Monitor>

**Table 3.5: Greater Sydney greenfield land supply (Lots, December 2021)**

| Region                 | Subdivision assessment | Subdivision approved | Lot approved (vacant) |
|------------------------|------------------------|----------------------|-----------------------|
| Wilton                 | 278                    | 710                  | 101                   |
| South-west             | 3,348                  | 4,491                | 3,455                 |
| North-west             | 1,795                  | 6,501                | 4,055                 |
| Macarthur              | 1,044                  | 438                  | 322                   |
| Council Led Greenfield | 672                    | 2,755                | 1,591                 |
| <b>Total</b>           | <b>7,156</b>           | <b>14,895</b>        | <b>9,524</b>          |

Source: NSW Department of Planning, Industry and Environment Greater Sydney Urban Development Dashboard

**Figure 3.7: Average determination time and land sales, NSW and Greater Sydney**



Source: NSW Department of Planning, Industry and Environment

## Metropolitan Melbourne

The Victorian Department of Environment, Land, Water and Planning reports 320,096 englobo lots are either zoned or unzoned in 2021 – a number that has been steadily declining since 2013.

**Table 3.6: Zoned and unzoned residential land, Greater Melbourne**

| Year | Broadacre lots unzoned englobo* | Broadacre lots zoned englobo | Total   |
|------|---------------------------------|------------------------------|---------|
| 2013 | 154,031                         | 266,777                      | 420,808 |
| 2014 | na                              | na                           | na      |
| 2015 | 154,438                         | 202,589                      | 357,027 |
| 2016 | 145,764                         | 207,834                      | 353,598 |
| 2017 | 129,845                         | 206,530                      | 336,375 |
| 2018 | 128,086                         | 249,606                      | 377,692 |
| 2019 | 133,244                         | 234,993                      | 368,237 |
| 2020 | 125,450                         | 226,991                      | 352,441 |
| 2021 | 122,027                         | 198,069                      | 320,096 |

Source: Vic Department of Environment, Land, Water and Planning. Land is either zoned or unzoned undeveloped, unserviced and zoned to be subdivided.

\*Englobo land is a large parcel of land that can be subdivided into several (at least 6) lots.

## Supply forecast methodology

### Definitions

This report uses the ABS definitions of dwelling type as the basis for its analysis, as detailed in Table 3.7.

**Table 3.7: Dwelling supply categories**

| Dwelling type        | ABS Structure Dwelling Types   |
|----------------------|--|
| <b>Detached</b>      | Separate house   |
| <b>Multi-density</b> | Semi-detached, row or terrace house, townhouse etc. with one storey        |
|                      | Semi-detached, row or terrace house, townhouse etc. with 2 or more storeys |
|                      | Flat or apartment in a 1- or 2-storey block                                |
|                      | Flat or apartment attached to a house                                      |
|                      | Flat or apartment in a 3-storey block                                      |
|                      | Flat or apartment in a 4- or more-storey block                             |

Source: ABS. Non-private dwellings and other residential buildings have been excluded from the analysis. Non-private dwelling types include hotels, staff quarters, hospitals, hostels, nursing homes, certain types of welfare accommodation (i.e., group homes) and prisons. Other residential dwellings include caravans, houseboats and dwellings attached to commercial buildings.

Estimates for each housing type are then prepared at the national and state/territory level. Capital city forecasts are also produced, but Canberra and ACT are grouped together. Rest of state forecasts are the state forecasts minus the capital city forecasts.

### 2023–26

The forecast for 2023 is calculated using building approvals data for 2022, with adjustments for weather or other disruptions. A top-down approach is then used to forecast dwelling completions for both detached and multi-density dwellings at the national level over the following 3 years.

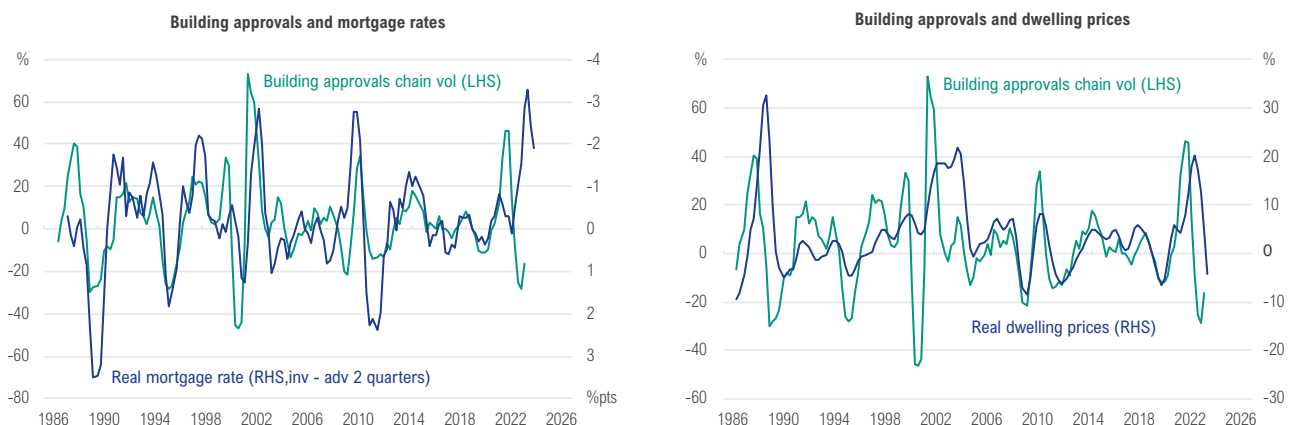
The model uses the well-recognised relationship between macroeconomic variables, including house prices, mortgage rates, household disposable income and construction activity. This approach reflects more certainty about the short-term macroeconomic backdrop.

Figure 3.8 shows the tight relationship between building approvals and both dwelling prices and interest rates.

The model can then be used to estimate the relevant equations in the RBA's Australian housing market model for both detached and multi-density dwellings as follows (see Appendix).<sup>12</sup>

- Estimate the equation for chain volume building approvals for each dwelling type.
- Convert the chain volume estimate of building approvals into a building approvals number by estimating dwelling quality.
- Estimate the equation for dwelling commencements by each dwelling type.
- Estimate the equation for dwelling completions for each dwelling type.

**Figure 3.8: Dwelling completions, house prices and interest rates**



Source: ABS, RBA, NHFC. House prices are the ABS established median house price. The mortgage rate is the average banks' standard variable mortgage rate.

12 Trent Saunders and Peter Tulip, "A Model of the Australian Housing Market", RDP 2019-1, 2019.

Estimates for demolitions by dwelling type over the 4-year forecast period were made using the ABS data on demolition approvals.

The number of demolitions is calculated as a percentage of building approvals using historical data back to 2003. Building approvals, rather than completions, are used as the denominator in the calculation. This is because the ratio is less volatile than calculating demolitions as a percentage of completions.

Where the last observation is not the average since 2003, the percentages are projected out. In other words, by the end of the entire 10-year forecast period, they are back generally around average.

This method is used for calculations at the national and capital city levels. Rest of state demolitions can be calculated from the difference between the state/territory and capital city data. The ratios are cross-checked, so the:

- state percentages add up at the national level,
- capital city and rest of state/territory percentages add up at the state level.

The estimates for net completions were calculated as gross completions less demolitions.

The forecasts of dwelling completions are based on the following macroeconomic assumptions:

- Growth in nominal household disposable income was 6.3% at the end of 2021–22. This reflects strong growth in employee compensation (6.8%) and the gradual phasing out of COVID-19 restrictions. In 2022–23, higher interest rates and weaker economic growth are expected to slow growth in nominal disposable income. More modest growth of 5% is expected at the end of 2023, with 4% in 2023–24 and 3.5% in 2024–25 and 2025–26.
- To project mortgage rates, NHFIC uses financial market expectations of the RBA's target cash rate, assuming the spread to remain unchanged. The mortgage rate increased from 3.59% at the end of 2020–21 to 3.78% at the end of 2021–22. Future mortgage rate projections are:
  - End of 2022–23 – 7.16%
  - End of 2023–24 – 7.16%
  - End of 2024–25 – 5.66%
  - End of 2025–26 – 5.66%

- Dwelling price growth is relatively consistent with interest rate projections. Dwelling price growth (4 quarter-ended) was 15% at the end of 2021–22. At the end of 2022–23, price growth is projected to be -15% and then to -5% by the end of 2023–24. By the end of 2024–25, price growth is projected to turnaround and be 5% at the end of that year. Price growth is then projected to remain at 5% in 2025–26 on the assumption that the mortgage rate remains at 5.66%.

Short-term projections for completions produced by the model are adjusted for the latest building approvals data.

Saunders and Tulip found that 83% of detached dwellings and 61% of medium-density and apartments are completed one year after approval (Table 3.8). A further 12% of detached dwellings and 24% of other dwellings are completed over the longer term. Overall, on average, 95% of detached dwellings that have building approval are completed. By comparison, 85% of medium-density and apartments are completed.

**Table 3.8: Building approvals: Percentage completed**

|                       | Detached | Medium-density and apartments |
|-----------------------|----------|-------------------------------|
| 1 year after approval | 83       | 61                            |
| Longer term           | 95       | 85                            |

Source: RBA.

## 2027 to 2033

The projections between 2027 and 2033 begin at the forecast at the end of 2026. The aim is to gradually bring new supply back to the forecast rate of household formation for each dwelling type by the end of the forecast period. This adjustment is made assuming that supply will respond to stronger household demand and be consistent with household formation over the long term.

As discussed in the State of household formation chapter, other factors may have affected new household formation. COVID-19 may have encouraged a change in preference to smaller households – a phenomenon that may be temporary. If so, NHFIC's estimates of household formation may be understated. Equally, more households may have decided to invest in a second home, increasing the stock of vacant dwellings.

## State, capital city and rest of state forecasts

A model using macroeconomic variables for short to medium-term forecasting works well at the aggregate level. But it is less reliable at the state, capital city and rest of state levels. Instead, forecasts for each building type at the macro level have been used to distribute the supply around the states, capital cities and regions.

The data shows that regional construction activity is less cyclical than in the capital cities. The exception is Qld, where the major markets of the Gold Coast and Sunshine Coast are comparable to capital cities. This implies that regional Qld and Brisbane growth rates might both experience similar magnitudes of cycles. The same may be true in Tas, where Launceston and the other northern towns are similar in size to Hobart. The major regional markets of NSW, such as Newcastle and Wollongong, have a larger cycle, similar to Sydney. But other regions in NSW experience less cyclicity.

The regions also have a larger share of detached dwellings – a dwelling type that tends to be less cyclical than medium-density and apartments. Medium-density and apartments typically have a larger share of investors. Construction activity for this dwelling type therefore depends on a larger number of factors, such as conditions in the rental market, price expectations and developer credit availability.

Another issue is the large increase in construction activity in the regions close to capital cities during the pandemic. This may reverse as the pandemic ends and people migrate back to the cities. At this point, regional areas will have less household formation and relatively less construction activity.

## Supply projections

### 2023

The forecasts for 2023 were calculated by applying the conversion rates to the 2022 building approvals data along with any other special adjustments.

Estimates suggest that 20,000 detached dwellings and 8,000 multi-density dwellings were approved in 2021, but not completed in 2022. These numbers are unusually high and probably reflect delays caused by weather and supply chain issues. The forecasts below assume that 70% of these dwellings will be completed in 2023 in addition to completions implied by the 2022 building approvals data.

### 2024–2026

Our top-down forecasts show completions will start to decline in 2024 and continue into 2026 (Table 3.9). This downturn is earlier than last year's forecasts, due to unexpected inflationary pressures and higher interest rates.

Net completions are now expected to peak at 148,500 in 2022–23, compared with last year's forecast of 194,100. ABS building approvals data implies around a net 162,200 additional dwellings will be constructed in 2023. This has been increased to account for projects that will ultimately be built but have been delayed by weather or other capacity constraints. The forecast in 2025–26 is similar to that forecast last year.

**Table 3.9: Net additions to the Australian housing market**

| Forecast year  | 2021–22(e) | 2022–23 | 2023–24 | 2024–25 | 2025–26 | 2026–27 |
|----------------|------------|---------|---------|---------|---------|---------|
| <b>2020–21</b> | 159,800    | 120,700 | 128,300 | 148,300 | na      | na      |
| <b>2021–22</b> | 175,700    | 194,100 | 181,300 | 163,200 | 134,100 | na      |
| <b>2022–23</b> | 143,800    | 148,500 | 138,200 | 127,500 | 134,600 | 155,700 |

Source: NHFIC (e) net estimate using actual completions less approved demolitions.

## Sensitivities

The base case projections are subject to risk from unforeseen movements in interest rates, dwelling prices and household disposable income growth. NHFIC addresses these risks by using 2 additional scenarios for both interest rates and house prices around the base case over the forecast period. Interest rates and dwelling prices have the closest relationship to building approvals and completions than the other variables in the model.

The downturn in multi-density dwelling completions is not as large as seen in detached dwellings due to the higher starting point in detached dwellings. Building approvals in 2020–21 and 2021–22 provide a good guide on gross completions in 2022–23. Around 89,400 net detached dwellings are expected to be added to the market in 2022–23 compared with last year's estimate of 119,300 (Table 3.11).

Net multi-density completions are expected to be 59,100 in 2022–23. This is based on building approvals in 2021–22 and accounting for lost work days due to weather and other supply constraints. In 2023–24, detached dwelling completions are expected to be 80,500. This is significantly below both last year's estimate (101,700) and below the 2022–23 level (89,400).

Multi-density rental markets are tight in most jurisdictions, providing some support from the downward pressure on prices exerted by higher interest rates. Upward pressure on rents is likely to continue over the next couple years as migrants and international students return to in Australia.

Population growth and new household formation feeds into the long-term demand outlook, with consequences for the medium-density and apartment market. Net additions to the medium-density and apartment market are expected to be 30% lower than pre-pandemic recession levels in 2025–26. Eventually, a very modest recovery will still leave them 14% below this benchmark in 2030–31.

The outlook over the next 5 years should also be put into a long-term context. Estimates suggest that, at the peak of the apartment boom in 2017, a net 103,100 medium-density dwellings were added to the housing stock. This compares with 83,600 in 2019–20, just after the beginning of the COVID-19 recession. In other words, net additions to the medium-density and apartment market were already 16% below their peak as the recession began.

**Table 3.10: Gross dwelling completions: sensitivity to interest rate and dwelling prices**


| Scenario                      | 2022 (act) | 2023    | 2024    | 2025    | 2026    |
|-------------------------------|------------|---------|---------|---------|---------|
| <b>Scenario 1</b>             |            |         |         |         |         |
| Mortgage rate                 | 3.78       | 6.91    | 5.66    | 4.66    | 4.66    |
| Dwelling price growth         | 15         | -10     | 5       | 10      | 10      |
| Dwelling completions          | 169,500    | 171,100 | 145,400 | 147,400 | 175,100 |
| <b>Scenario 2 (Base case)</b> |            |         |         |         |         |
| Mortgage rate (%)             | 3.78       | 7.16    | 7.16    | 5.66    | 5.66    |
| Dwelling price growth (%)     | 15         | -15     | -5      | 5       | 5       |
| Dwelling completions          | 169,500    | 173,400 | 156,600 | 144,000 | 152,300 |
| <b>Scenario 3</b>             |            |         |         |         |         |
| Mortgage rate                 | 3.78       | 8.16    | 7.16    | 5.66    | 5.66    |
| Dwelling price growth         | 15         | -20     | 5       | 5       | 5       |
| Dwelling completions          | 169,500    | 171,700 | 147,800 | 144,600 | 155,000 |

Source: NHFIC

**Table 3.11: Net additions to the Australian housing market by dwelling type**

| Dwelling type        | 2021–22 (e)    | 2022–23        | 2023–24        | 2024–25        | 2025–26        | 2026–27        |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Detached</b>      | 87,400         | 89,400         | 80,500         | 74,200         | 84,900         | 91,800         |
| <b>Multi-density</b> | 56,400         | 59,100         | 57,700         | 53,300         | 49,700         | 64,000         |
| <b>Total</b>         | <b>143,800</b> | <b>148,500</b> | <b>138,200</b> | <b>127,500</b> | <b>134,600</b> | <b>155,700</b> |

Source: NHFIC. (e) net estimate using actual completions less approved demolitions. Totals may not add up due to rounding.



# State of housing supply-household formation balance



State of the Nation's Housing 2022-23

# State of housing supply – household formation balance



-106,300

**shortfall of net supply expected**

OVER NEXT FIVE YEARS



-62,300

**shortfall of apartments and medium density dwellings**

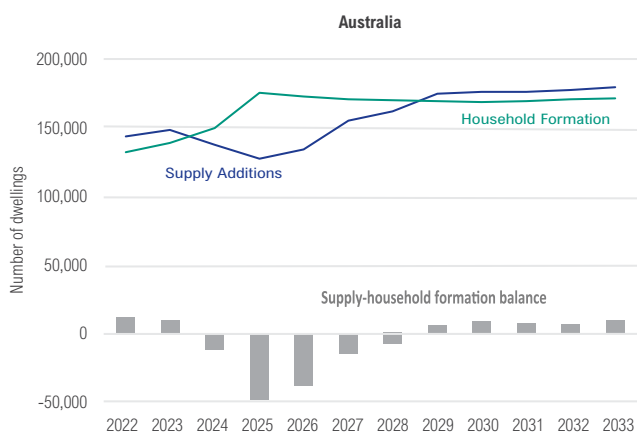
OVER NEXT FIVE YEARS

## KEY POINTS

- This chapter provides graphical breakdowns of supply-household formation balances for all major cities geographical areas (supply-household formation balances for rest of state areas can be found in the Appendix). The data can provide critical evidence as to whether future housing supply will be adequate to meet future need.
- The graphs and tables below indicate current or emerging imbalances between the flow of supply and household demand in particular locations. Prolonged imbalances or construction shortfalls may affect housing affordability.
- Australia's household formation is expected to strengthen and track back to pre-pandemic levels by 2025. At the same time, the supply pipeline is expected to weaken. NHFIC expects the supply-household formation balance to be a cumulative -106,300 balance over the next 5 years (Figure 4.1).
- The shortfall of supply at the national level is mostly in apartments and medium density dwellings (Figure 4.2). The balance of supply versus household demand in this segment is expected to be -62,300 over the 5 years to 2027.
- In all states and territories, macroeconomic conditions and cost pressures are acting as a detractor to supply across most areas (Figure 4.3, Figure 4.4). This is occurring when migration (including net interstate migration) is driving higher household demand. However, each market has its own demand and supply characteristics.
- Over the longer term, NHFIC expects new supply to respond to stronger sustained household demand in line with previous housing cycles.



**Figure 4.1: Annual change in household formation and supply and supply-household formation balance**



**Table 4.1: Annual change in household formation and supply and supply-household formation balance**

| Year        | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
|-------------|--------------------------------|------------------------------------|------------------------------------|
| <b>2022</b> | 143,800                        | 132,400                            | 11,400                             |
| <b>2023</b> | 148,500                        | 139,200                            | 9,300                              |
| <b>2024</b> | 138,200                        | 150,400                            | -12,200                            |
| <b>2025</b> | 127,500                        | 176,400                            | -48,900                            |
| <b>2026</b> | 134,600                        | 173,700                            | -39,100                            |
| <b>2027</b> | 155,700                        | 171,100                            | -15,400                            |
| <b>2028</b> | 162,400                        | 170,900                            | -8,500                             |
| <b>2029</b> | 175,500                        | 169,900                            | 5,600                              |
| <b>2030</b> | 176,800                        | 169,000                            | 7,800                              |
| <b>2031</b> | 177,100                        | 170,100                            | 7,000                              |
| <b>2032</b> | 177,800                        | 171,500                            | 6,300                              |
| <b>2033</b> | 180,500                        | 171,700                            | 8,800                              |

Figure 4.2: Supply-household formation balance by dwelling type<sup>13\*</sup>

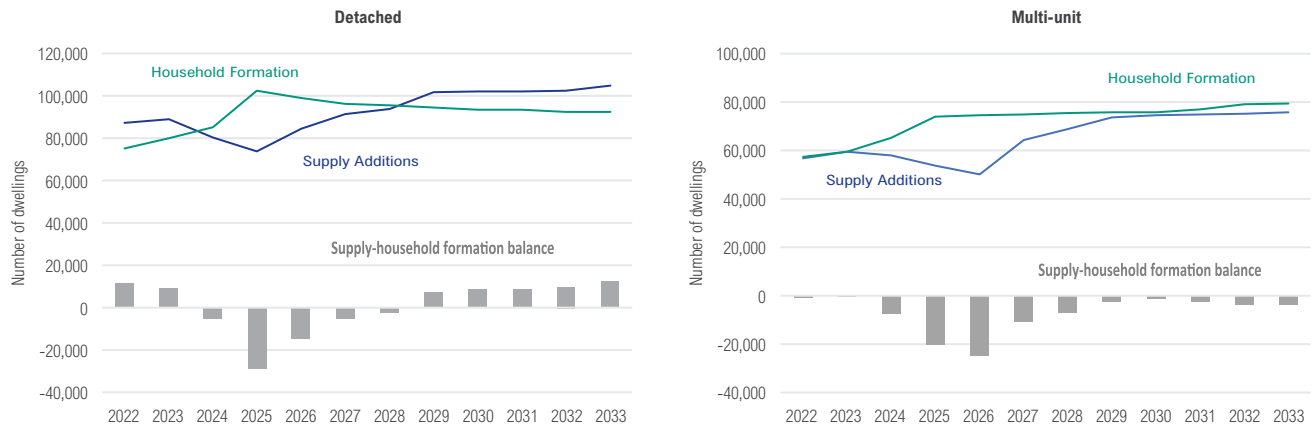


Table 4.2: Supply-household formation balance by dwelling type

| Year | Detached dwellings             |                                    |                                    | Multi-unit dwellings           |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 87,400                         | 75,500                             | 11,900                             | 56,400                         | 56,900                             | -500                               |
| 2023 | 89,400                         | 80,200                             | 9,200                              | 59,100                         | 59,000                             | 100                                |
| 2024 | 80,500                         | 85,600                             | -5,100                             | 57,700                         | 64,900                             | -7,200                             |
| 2025 | 74,200                         | 102,900                            | -28,700                            | 53,300                         | 73,500                             | -20,200                            |
| 2026 | 84,900                         | 99,400                             | -14,500                            | 49,700                         | 74,300                             | -24,600                            |
| 2027 | 91,800                         | 96,700                             | -4,900                             | 64,000                         | 74,400                             | -10,400                            |
| 2028 | 94,000                         | 95,900                             | -1,900                             | 68,500                         | 75,000                             | -6,500                             |
| 2029 | 102,100                        | 94,700                             | 7,400                              | 73,400                         | 75,300                             | -1,900                             |
| 2030 | 102,400                        | 93,600                             | 8,800                              | 74,300                         | 75,500                             | -1,200                             |
| 2031 | 102,400                        | 93,600                             | 8,800                              | 74,600                         | 76,600                             | -2,000                             |
| 2032 | 102,900                        | 92,900                             | 10,000                             | 74,900                         | 78,600                             | -3,700                             |
| 2033 | 105,200                        | 92,700                             | 12,500                             | 75,300                         | 78,900                             | -3,600                             |

13 Multi-unit dwellings include apartments, townhouses, and duplexes. This does not include other dwellings as defined in the 'state of household formation' and 'state of housing supply' chapters (i.e. other residential dwellings including caravans, houseboats and dwellings attached to commercial buildings).

\* While NHFIC does produce projections of detached and multi-unit dwellings at the national level, there would be an expected convergence by households switching from one segment to another if large supply – household formation gaps emerged in one particular segment

**Figure 4.3: Annual change in household formation and supply and supply-household formation balances by city – Sydney, Melbourne, Brisbane and Perth**



Table 4.3: Annual change in household formation and supply and supply-household formation balances by city – Sydney, Melbourne, Brisbane and Perth

| Year | Sydney                         |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 23,400                         | 21,600                             | 1,800                              |
| 2023 | 25,900                         | 18,300                             | 7,600                              |
| 2024 | 24,500                         | 24,100                             | 400                                |
| 2025 | 22,800                         | 30,900                             | -8,100                             |
| 2026 | 22,900                         | 30,700                             | -7,800                             |
| 2027 | 25,100                         | 29,300                             | -4,200                             |
| 2028 | 25,800                         | 29,300                             | -3,500                             |
| 2029 | 27,700                         | 29,000                             | -1,300                             |
| 2030 | 28,100                         | 28,800                             | -700                               |
| 2031 | 27,500                         | 29,000                             | -1,500                             |
| 2032 | 27,500                         | 28,800                             | -1,300                             |
| 2033 | 27,400                         | 28,700                             | -1,300                             |

| Year | Melbourne                      |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 36,000                         | 10,300                             | 25,700                             |
| 2023 | 37,000                         | 28,200                             | 8,800                              |
| 2024 | 33,700                         | 36,400                             | -2,700                             |
| 2025 | 30,600                         | 41,100                             | -10,500                            |
| 2026 | 31,000                         | 41,400                             | -10,400                            |
| 2027 | 30,900                         | 39,900                             | -9,000                             |
| 2028 | 32,700                         | 39,900                             | -7,200                             |
| 2029 | 36,500                         | 39,600                             | -3,100                             |
| 2030 | 36,200                         | 39,400                             | -3,200                             |
| 2031 | 35,900                         | 39,400                             | -3,500                             |
| 2032 | 35,500                         | 41,200                             | -5,700                             |
| 2033 | 35,300                         | 41,100                             | -5,800                             |

| Year | Brisbane                       |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 16,600                         | 21,900                             | -5,300                             |
| 2023 | 17,300                         | 20,400                             | -3,100                             |
| 2024 | 15,900                         | 15,400                             | 500                                |
| 2025 | 14,800                         | 17,300                             | -2,500                             |
| 2026 | 15,800                         | 17,500                             | -1,700                             |
| 2027 | 17,300                         | 17,500                             | -200                               |
| 2028 | 16,900                         | 17,400                             | -500                               |
| 2029 | 17,700                         | 17,200                             | 500                                |
| 2030 | 18,000                         | 16,900                             | 1,100                              |
| 2031 | 18,400                         | 16,900                             | 1,500                              |
| 2032 | 18,700                         | 17,500                             | 1,200                              |
| 2033 | 19,100                         | 17,400                             | 1,700                              |

| Year | Perth                          |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 9,500                          | 16,400                             | -6,900                             |
| 2023 | 9,600                          | 14,500                             | -4,900                             |
| 2024 | 10,900                         | 14,900                             | -4,000                             |
| 2025 | 10,500                         | 15,900                             | -5,400                             |
| 2026 | 11,600                         | 16,100                             | -4,500                             |
| 2027 | 16,500                         | 16,000                             | 500                                |
| 2028 | 17,500                         | 15,900                             | 1,600                              |
| 2029 | 19,200                         | 15,700                             | 3,500                              |
| 2030 | 20,100                         | 15,500                             | 4,600                              |
| 2031 | 20,600                         | 15,600                             | 5,000                              |
| 2032 | 21,000                         | 16,100                             | 4,900                              |
| 2033 | 22,300                         | 16,000                             | 6,300                              |

**Figure 4.4: Annual change in household formation and supply and supply-household formation balances by city – Adelaide, Hobart, Darwin, ACT**



Table 4.4: Annual change in household formation and supply and supply-household formation balances by city – Adelaide, Hobart, Darwin, ACT

| Year | Adelaide                       |                                    |                                    | Year | Hobart                         |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 6,700                          | 11,800                             | -5,100                             | 2022 | 1,500                          | 2,400                              | -900                               |
| 2023 | 6,700                          | 8,600                              | -1,900                             | 2023 | 1,500                          | 2,200                              | -700                               |
| 2024 | 6,200                          | 8,100                              | -1,900                             | 2024 | 1,300                          | 2,100                              | -800                               |
| 2025 | 5,600                          | 8,400                              | -2,800                             | 2025 | 1,200                          | 2,300                              | -1,100                             |
| 2026 | 5,900                          | 8,500                              | -2,600                             | 2026 | 1,400                          | 2,400                              | -1,000                             |
| 2027 | 8,600                          | 8,400                              | 200                                | 2027 | 2,300                          | 2,400                              | -100                               |
| 2028 | 9,000                          | 8,400                              | 600                                | 2028 | 2,500                          | 2,400                              | 100                                |
| 2029 | 8,800                          | 8,300                              | 500                                | 2029 | 2,900                          | 2,400                              | 500                                |
| 2030 | 8,800                          | 8,200                              | 600                                | 2030 | 2,900                          | 2,400                              | 500                                |
| 2031 | 8,800                          | 8,200                              | 600                                | 2031 | 2,900                          | 2,400                              | 500                                |
| 2032 | 8,800                          | 7,500                              | 1,300                              | 2032 | 3,000                          | 2,200                              | 800                                |
| 2033 | 9,000                          | 7,400                              | 1,600                              | 2033 | 3,100                          | 2,100                              | 1,000                              |

| Year | Darwin                         |                                    |                                    | Year | ACT                            |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 400                            | 1,500                              | -1,100                             | 2022 | 4,500                          | 2,900                              | 1,600                              |
| 2023 | 400                            | 900                                | -500                               | 2023 | 4,500                          | 3,400                              | 1,100                              |
| 2024 | 400                            | 900                                | -500                               | 2024 | 4,000                          | 3,700                              | 300                                |
| 2025 | 500                            | 1,000                              | -500                               | 2025 | 3,600                          | 4,600                              | -1,000                             |
| 2026 | 800                            | 900                                | -100                               | 2026 | 3,900                          | 4,300                              | -400                               |
| 2027 | 1,000                          | 900                                | 100                                | 2027 | 4,300                          | 4,300                              | 0                                  |
| 2028 | 1,000                          | 900                                | 100                                | 2028 | 4,400                          | 4,300                              | 100                                |
| 2029 | 1,100                          | 900                                | 200                                | 2029 | 4,500                          | 4,300                              | 200                                |
| 2030 | 1,100                          | 900                                | 200                                | 2030 | 4,400                          | 4,300                              | 100                                |
| 2031 | 1,100                          | 900                                | 200                                | 2031 | 4,200                          | 4,400                              | -200                               |
| 2032 | 1,100                          | 1,000                              | 100                                | 2032 | 4,100                          | 4,200                              | -100                               |
| 2033 | 1,100                          | 1,000                              | 100                                | 2033 | 3,900                          | 4,200                              | -300                               |

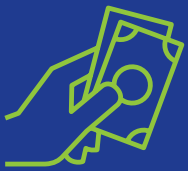


# State of housing affordability



State of the Nation's Housing 2022–23

# State of housing affordability



In NSW and Tas,  
35% of people are  
paying more than

30%  
of their  
income  
on rent

Rents are  
less than

10%  
higher

A stylized orange icon of a house with a percentage sign and an upward-pointing arrow, indicating a price increase.

in more than half  
of Melbourne's LGA  
than pre-pandemic

## KEY POINTS

- Affordability for renters across most major cities and regions deteriorated over 2022. Higher interest rates, a softer than anticipated housing supply outlook, record low vacancy rates and returning migration are now adversely impacting rental affordability.
- Rents grew strongly over the course of 2022 and this has continued into 2023. But growth varied greatly across and within greater city and regional areas. Rent inflation for the entire rental stock grew at a more subdued rate. But the strong growth in advertised rents in many areas will put upward pressure on rent inflation as rental agreements are renewed.
- Affordability for renters in major cities like Sydney and Melbourne that receive the bulk of migrants is likely to worsen over the coming period. Meanwhile, regional housing markets are starting to see pandemic-related migration behaviours unwinding, easing upward rental pressures in those areas.
- Rental affordability has had unusually large spatial characteristics during COVID-19. In Sydney, rents in several outer LGAs have grown more than 30% from early 2020 to January 2023, more than 3 times that of some inner city LGAs. Outcomes in Melbourne have been more subdued. In more than half of Melbourne's LGAs, rents are less than 10% higher than they were pre-pandemic. SE Qld has had the largest rent increases, with all the 12 LGAs experiencing rents 30% higher than in February 2020.
- Affordability for first home buyers deteriorated across many areas between the 2016 and 2021 Censuses, although there were divergent outcomes across different geographies. Affordability for first home buyers in regional Tas (37%) and Greater Hobart (33%), increased at 3-4 times more than in Brisbane (8%), Melbourne (10%) and Sydney (11%).
- Despite deposit hurdles easing on the back of falling prices, mortgage serviceability for potential first home buyers across all income levels has eroded following multiple rate rises in quick succession during 2022 and early 2023. For example, using a 30% of income repayment benchmark, potential first home buyers at the 40th income percentile can afford to service a mortgage for around just 10% of properties, down from 25% in 2021.
- Affordability for potential first home buyers can be highly influenced by macroeconomic cycles. In Sydney, since the 1990s deposit hurdle rates increased by around 8% on average during interest rate tightening cycles (-10% so far this cycle), relative to 26% (on average) during easing cycles. Reflecting an extended period of lower interest rates, and a period when inflation and wages growth was also weak, the percentage of income required for average deposits has nearly doubled over this period from 60% to 110%.



## Introduction

This chapter focuses on the part of the housing continuum that relates to affordability for renters and potential first home buyers. Public and private renters are typically on low to moderate incomes, which means their housing security is more vulnerable to changes in affordability.

Assessing affordability for potential first home buyers is important because these people are typically renting. They are also marginal buyers who face the greatest hurdles getting into the property market. Homelessness, which is the most acute result of unaffordable housing and housing need, is discussed in the Housing Needs chapter.

After a period of strong growth, dwelling prices are now falling following interest rates rises. However, higher mortgage serviceability is increasingly constraining potential first home buyers from getting into the property market. Rental affordability in regional areas and smaller cities deteriorated significant during the pandemic. But now the situation is easing as rent growth falls in these areas. In contrast, rent growth is now picking up strongly in some of the larger cities as net overseas migration returns.

The outlook for affordability for both renters and potential first home buyers will be heavily determined by:

- the pathway of interest rates
- returning migration
- household size preferences after a period of smaller average household size during the pandemic
- new housing supply
- the balance of net new supply and new household formation.

NHFC projections suggest a downturn in new supply is expected and that this will occur at a time stronger new household formation. If this eventuates it will accentuate affordability problems.

## Our research covers the housing continuum

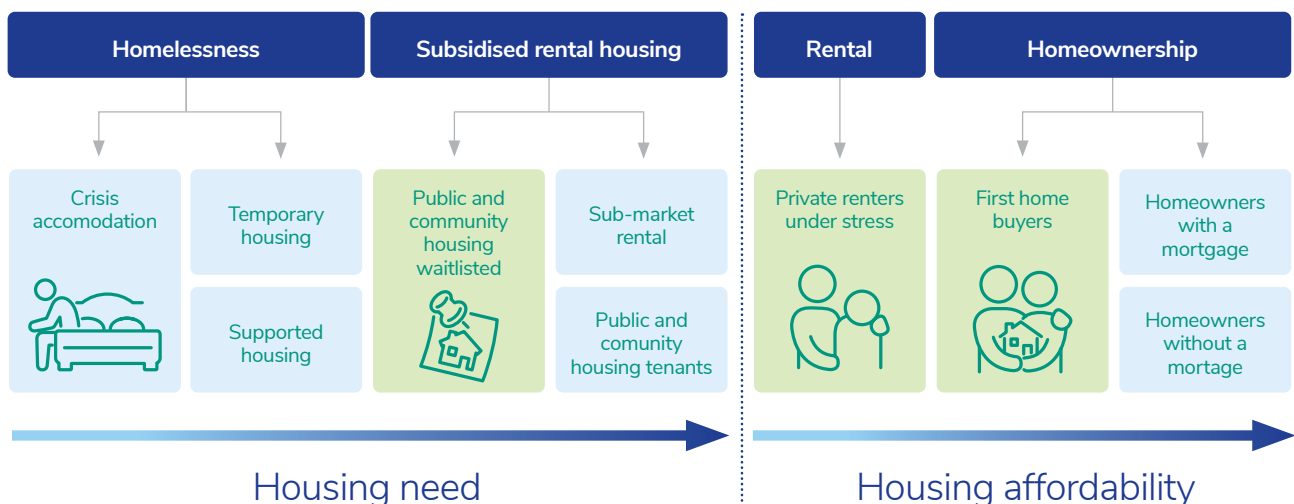
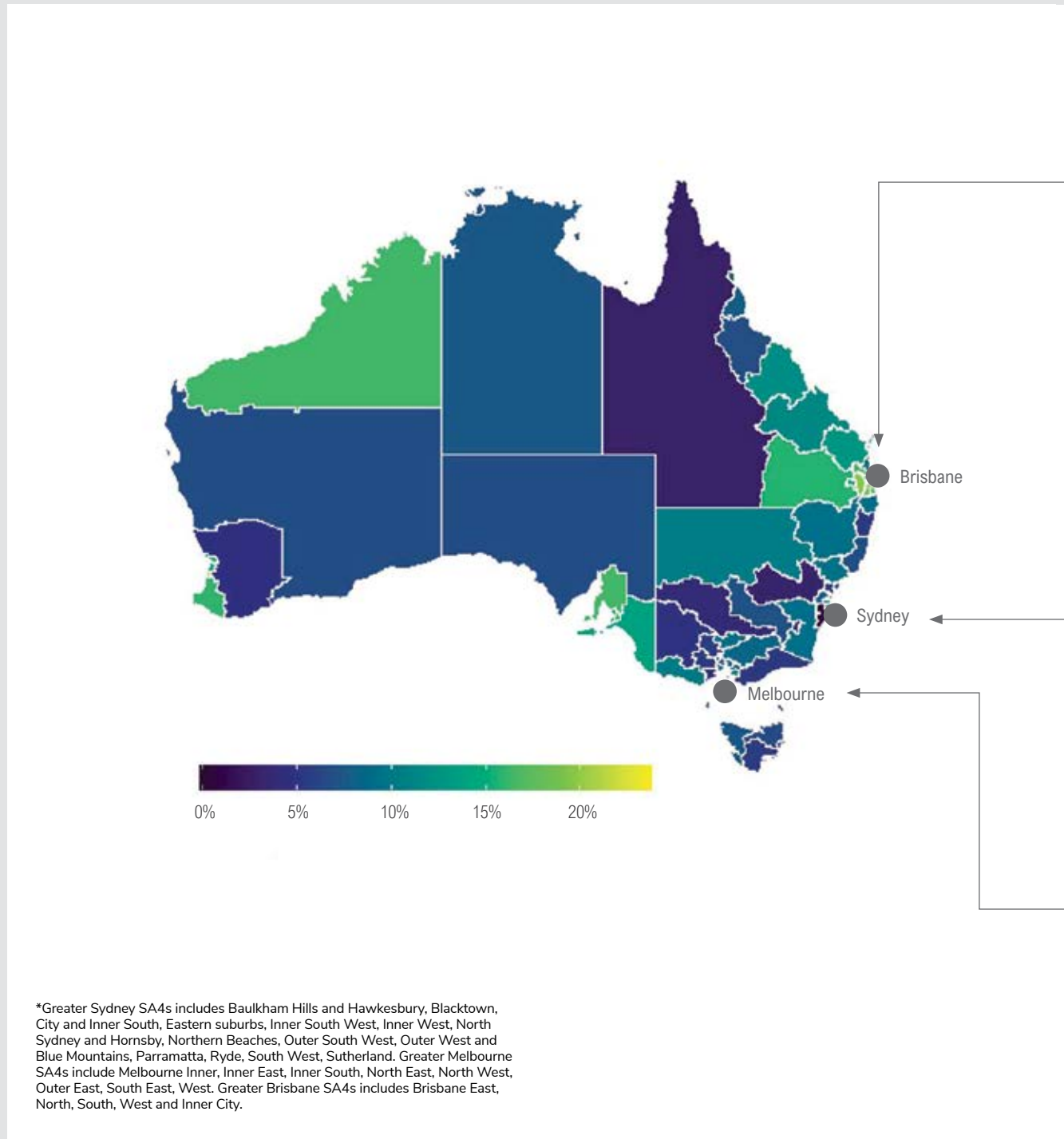


Figure 5.1: Advertised rents across Australia (12-month ended, SA4\*)



Brisbane



Sydney



Melbourne



## Private rental market

House prices are often considered a proxy for housing affordability. But rents are a good reflection of the true cost of housing because they indicate how much it costs to have a place to live. Whereas house prices capture both this value and the value of housing as an investment.<sup>14</sup> Around 26% of households rent from a private landlord, up from 18% a few decades ago. This means the rental market is becoming an increasingly important part of the housing market.

In the last couple of years, acute rental affordability challenges have been building over many housing submarkets. In some areas, vacancy rates have fallen to record lows and rent growth has soared to multi-decade highs. However, affordability outcomes remain specific to local demand and supply dynamics.

In SE Qld, advertised rents are growing strongly, with rents in some areas growing at around 20%. As overseas migration returns and intra-state migration patterns normalise, rent growth in both Sydney and Melbourne has also picked up quickly. Recent data through to January 2023 suggests advertised rents in inner cities are growing at around 20% and 23% respectively.

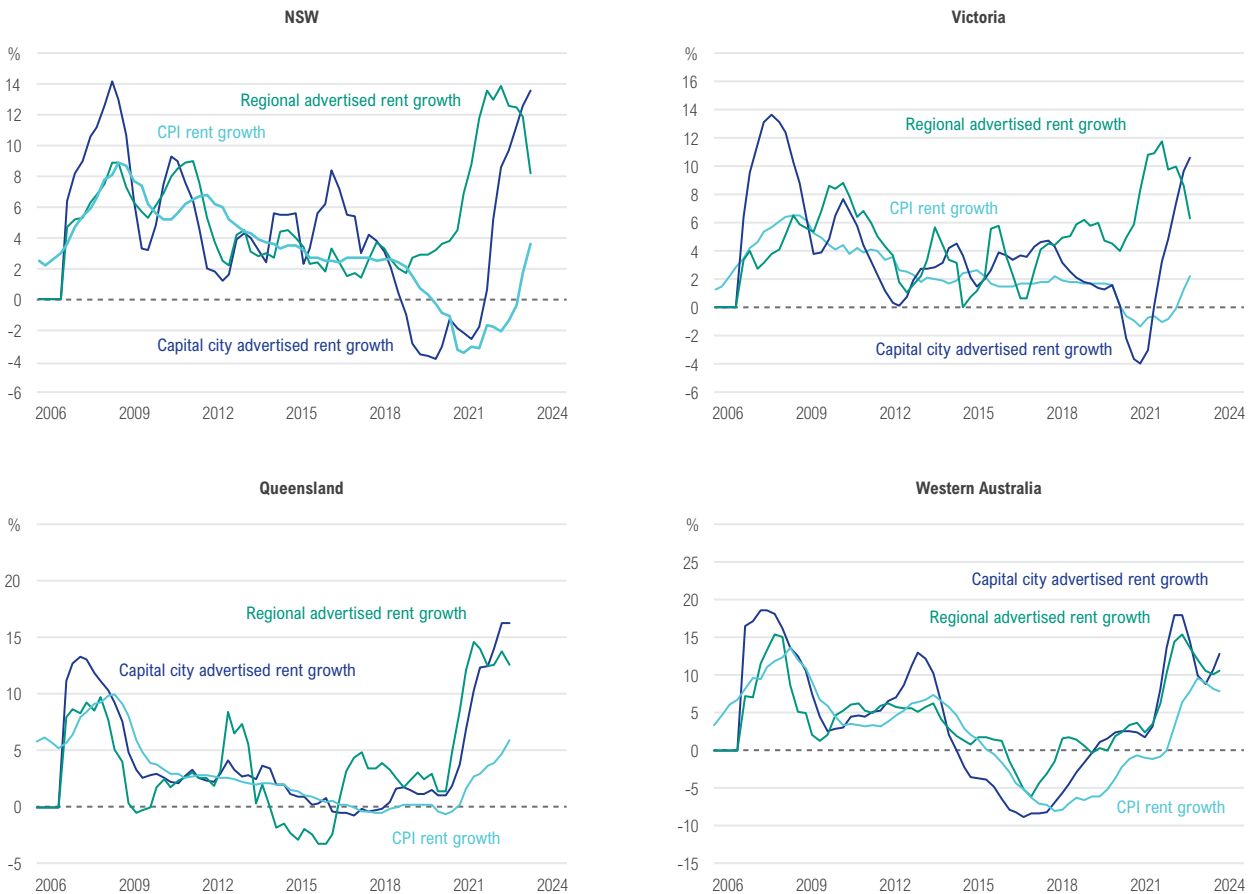
14 Productivity Commission (2022) In need of repair: the National Housing and Homelessness Agreement

### Rent inflation

Rent inflation is typically less volatile because it accounts for rental prices across the entire rental market – not just new properties being tenanted. Most people are on rolling agreements, with only a small amount of the stock advertised for new tenants each year. Rent inflation is now rising in all cities, in some by more than 4%. Across Sydney and Melbourne, rent inflation has been more modest and even negative (on average) over 2020 to 2022. But it is now picking up strongly. As rental agreements are renewed, the strong growth in advertised rents in many areas will put upward pressure on rent inflation.

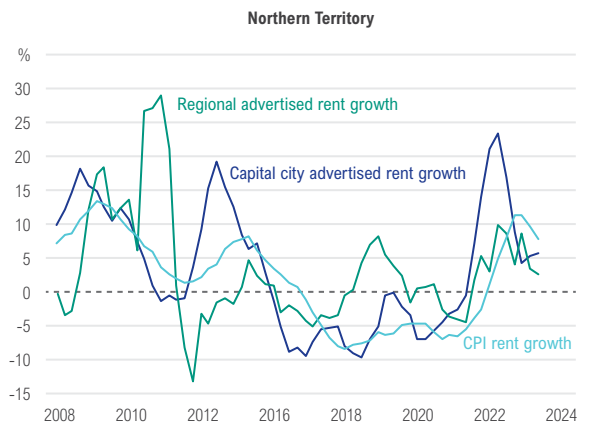
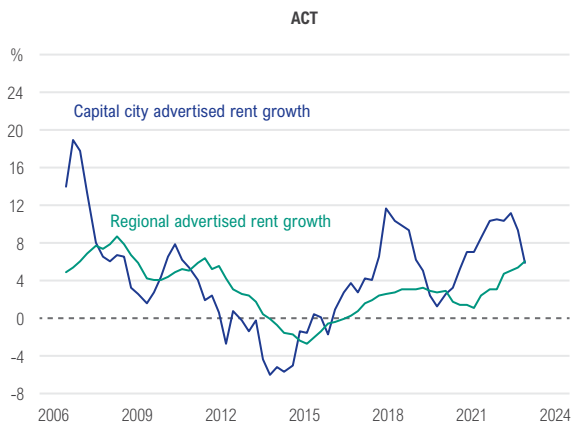
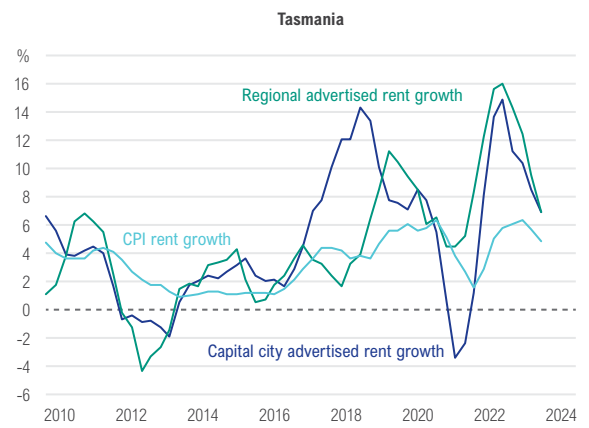
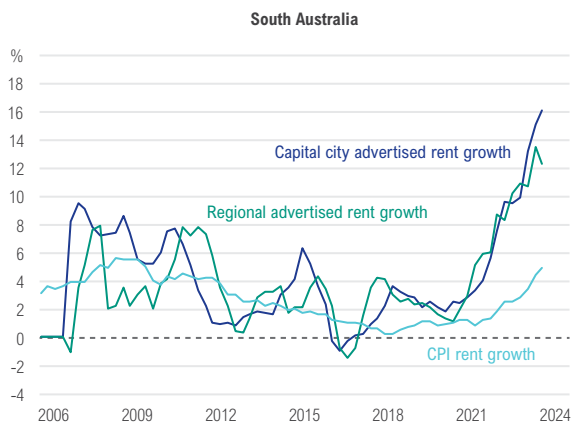
Rent growth across regional NSW and Vic was at decade highs during the pandemic, but it has now peaked. This is likely due to normalising intra-state migration patterns post COVID-19. As highlighted in the Household Formation chapter, the most recent Regional Mover's Index suggests net migration to the regions is declining<sup>15</sup>.

Figure 5.2: Rent inflation and advertised rents (4-quarter-ended rent growth)



15 Regional Mover's Index, December 2022

Figure 5.2: Rent inflation and advertised rents (4-quarter-ended rent growth) (Continued)



### Rent variability across states and within cities

Rent (and by extension affordability) outcomes have varied greatly between inter- and intra-state areas and within cities.

Although advertised rents rose strongly during 2022, rent levels in many areas are now only just above their pre-pandemic levels. During the pandemic, renters in Melbourne fared much better than those in other cities as net interstate migration became negative. In more than half of all Melbourne LGAs, rents in January 2023 were less than 10% higher than in February 2020.

Rent growth in many of Sydney's outer greater city LGAs has been 3 times higher than that in inner city LGAs. In January 2023, rents in LGAs such as Camden, the Blue Mountains and the Central Coast remain more than 30% higher than they were in early 2020. This compares with inner city LGAs, such as the inner west, where rents are now just 10% higher.

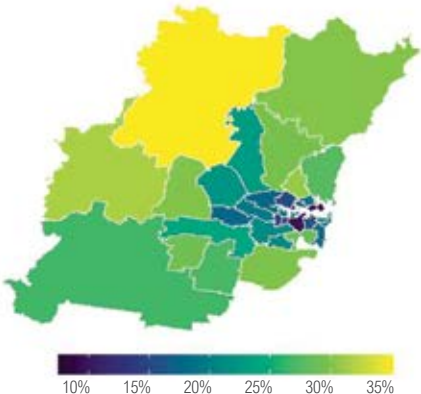
SE Qld, greater Perth and Adelaide all experienced surging rents across most LGAs. This reflects interstate migration patterns, strong demand and tight supply of rental stock. SE Qld renters fared the worst out of all states since the beginning of the pandemic. In all 10 LGAs, in January 2023 rent levels were more than 30% higher than pre-pandemic levels. Most Perth LGAs also now have rents 30% above where they were pre-pandemic.

Table 5.1: Rent growth since pre COVID-19 (Feb-2020 to Jan 2023)

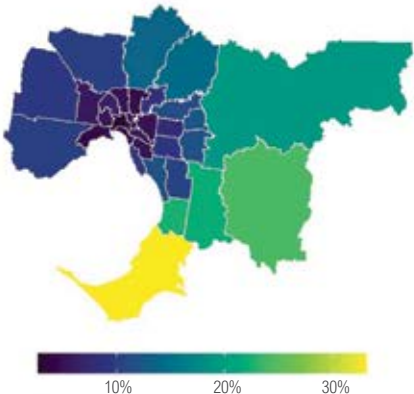
|                  | Total LGAs | LGAs <10% | % total | LGAs 10-20% | % total | LGAs 20-30% | % total | LGAs >30% | % total |
|------------------|------------|-----------|---------|-------------|---------|-------------|---------|-----------|---------|
| <b>Sydney</b>    | 37         | 3         | 8       | 13          | 35      | 15          | 41      | 6         | 16      |
| <b>Melbourne</b> | 31         | 17        | 55      | 10          | 32      | 3           | 10      | 1         | 3       |
| <b>SE Qld</b>    | 12         | 0         | 0       | 0           | 0       | 0           | 0       | 12        | 100     |
| <b>Adelaide</b>  | 19         | 0         | 0       | 1           | 5       | 6           | 32      | 12        | 63      |
| <b>Perth</b>     | 30         | 0         | 0       | 0           | 0       | 4           | 13      | 26        | 87      |
| <b>Hobart</b>    | 5          | 1         | 20      | 1           | 20      | 3           | 60      | 0         | 0       |

Figure 5.3: Rents – Highly variable across Sydney and Melbourne but high levels across SE Qld

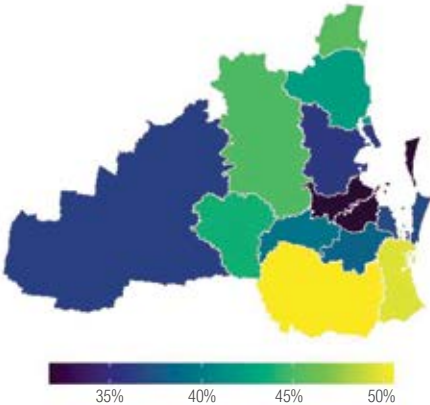
Greater Sydney Advertised Rent Growth  
Feb 2020 to Jan 2023



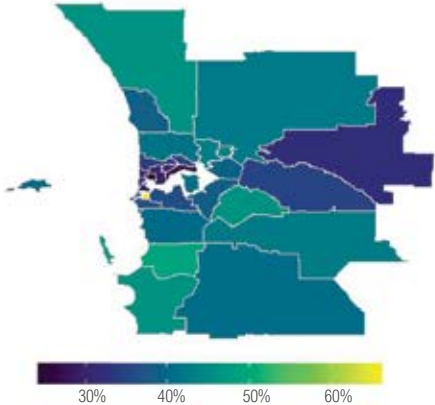
Greater Melbourne Advertised Rent Growth  
Feb 2020 to Jan 2023



SE-Queensland Advertised Rent Growth  
Feb 2020 to Jan 2023



Greater Perth Advertised Rent Growth  
Feb 2020 to Jan 2023



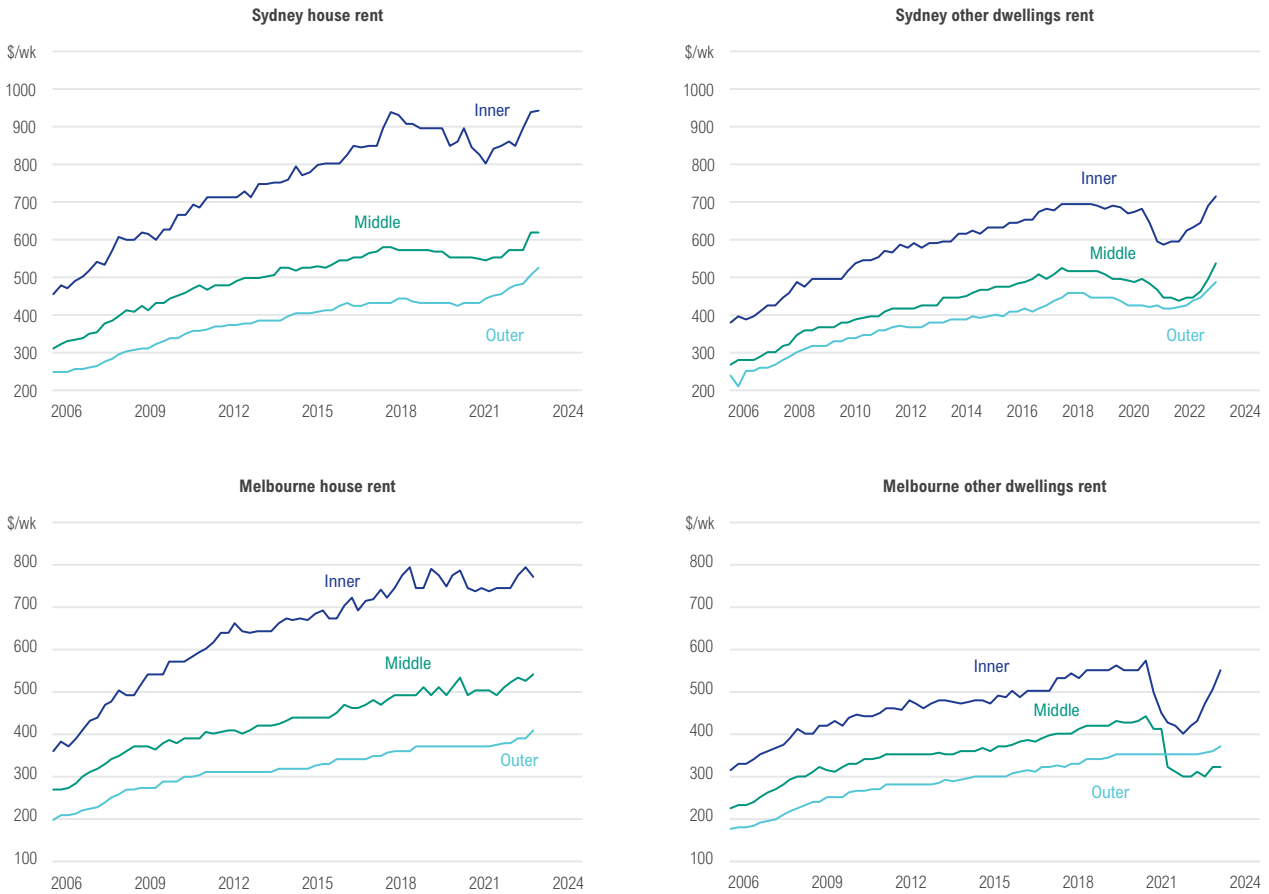
### Rent differences between city rings

Historically, the relationship between the levels of rents charged across inner, middle and outer city rings has held reasonably steady. The shorter travelling time required to reach employment hubs and amenities put a premium on rental areas closer to the city. However, flexible work during the pandemic shifted preferences away from higher priced, more densely populated central city locations, to lower-cost areas with more space.

Across Sydney and Melbourne, rents for 'other' dwellings (i.e. apartments, townhouses, villas) converged over 2021 and 2022. This was largely due to declining middle ring rents. The gap between more expensive rents in middle suburbs and cheaper outer suburbs has narrowed. For example, renting a typical middle city ring apartment or townhouse in Melbourne costs \$320 per week compared with outer ring dwellings at \$370. In Sydney, a similar pattern has played out.

Whether this convergence continues will depend on people continuing to see outer ring dwellings as attractive living options. If more people move to office-based or hybrid work arrangements, this convergence may begin to unwind.

Figure 5.4: Inner, middle and outer ring rents





## Rental affordability – Australia wide Census data

For the first time, the 2021 Census data included an indicator that assesses affordability by type of tenure.

The data tells us how many people in different income brackets are paying more than 30% of their incomes for rental and owner-occupied housing – a common (but not a universally accepted) measure of housing stress for people on lower incomes.

More households on low to moderate incomes pay more than 30% of incomes on housing costs. Census data shows that housing cost burdens remain more challenging for renters on incomes below \$78,000.

Around half of all households earning \$41,600 to \$78,000 are paying more than 30% in rental costs. Below this income level, significantly more households are paying more than 30%. Once people earn more than \$104,000, rental housing stress generally disappears.

People living in Tas and NSW face the most challenging rental markets. In these states, 35% of people are paying more than 30% of their incomes on rents (on average). Households in the NT and ACT have significantly less evidence of housing stress. Around 19% and 23% respectively pay more than 30% in rental costs.

Figure 5.5: Income levels likely to experience rental housing stress

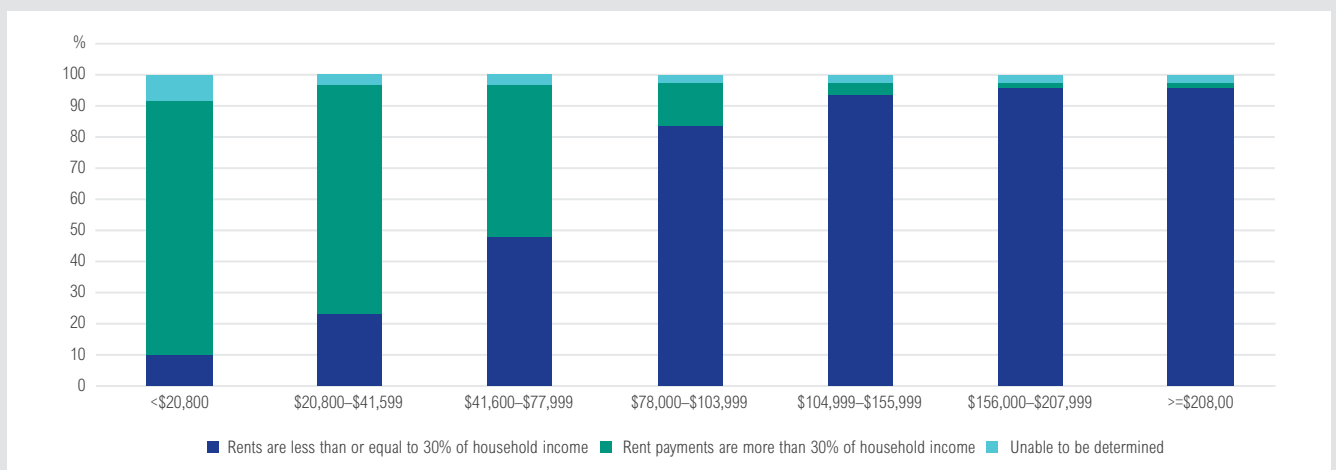
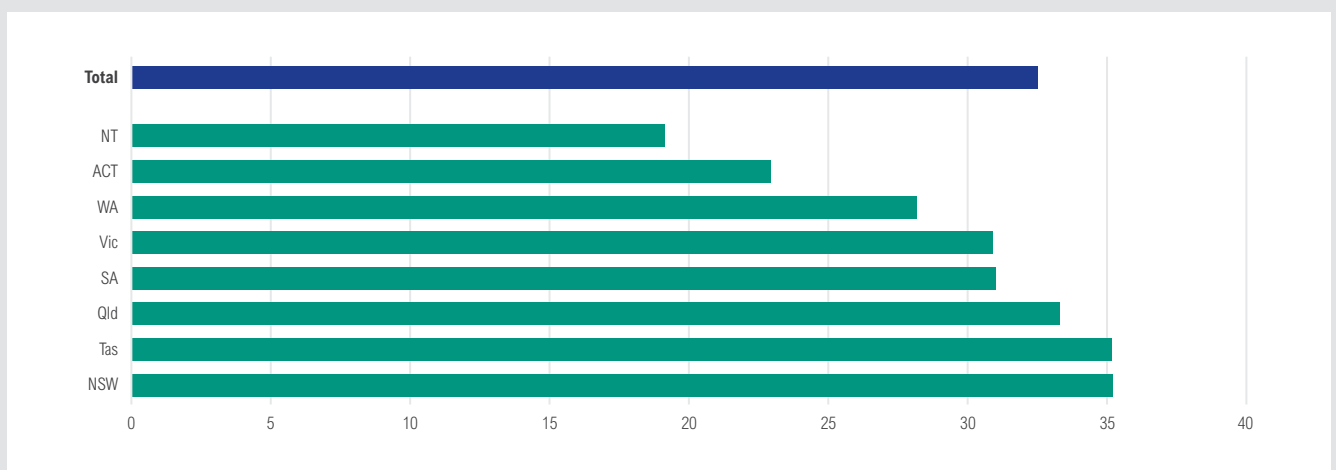


Figure 5.6: Percentage of private market renters paying more than 30% of income on rent



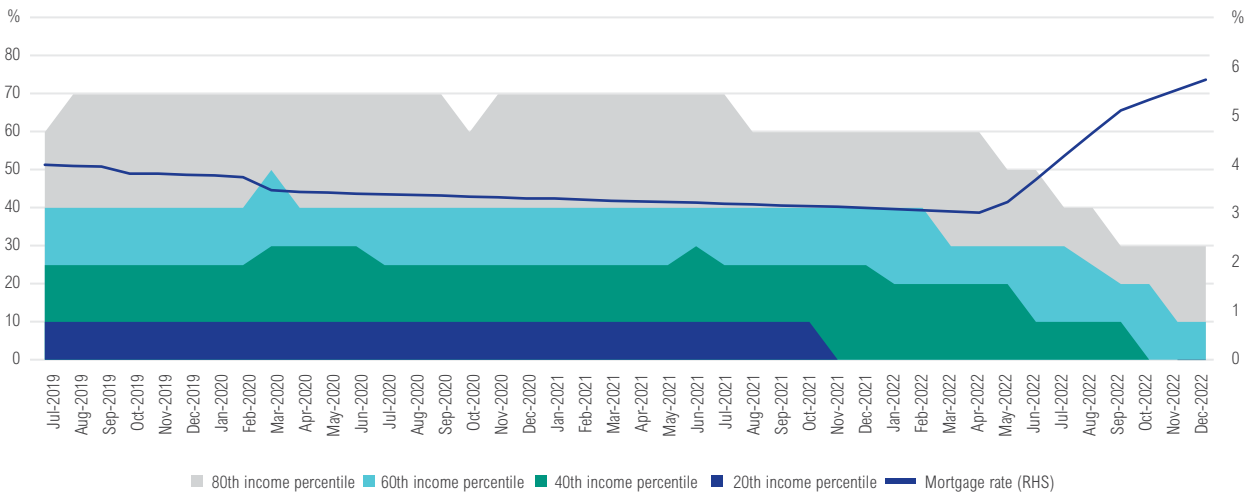
## Mortgage serviceability of first home buyers

Dwelling prices remain above pre-pandemic levels. But they have been decreasing more recently, potentially making entering the market more attractive. Despite this, rising interest rates are making it harder for (particularly lower income) first home buyers to access finance and service a mortgage.

In previous work, NHFIC has used Lorenz curves to analyse affordability for potential first home buyers across different geographical areas and for people on different incomes. However, one of the shortcomings of Lorenz curves is they only provide a snapshot in time, and don't track changes in affordability through time. This section looks at how rising interest rates can over time affect mortgage serviceability for potential first home buyers on different incomes. In this analysis, NHFIC considers properties unaffordable if potential buyers would have to pay more than 30% of their incomes servicing a mortgage.<sup>16</sup>

Until 2021, 70% of properties were affordable for potential first home buyers in the 80<sup>th</sup> percentile. But this fell to around 30% of properties following recent rate increases. In December 2022, properties for potential first home buyers at the 20<sup>th</sup> and 40<sup>th</sup> percentile were deemed unaffordable having fallen from 10% and 25% respectively. However, this analysis should be seen as illustrative, because while first home buyer numbers are down from their peaks, first home buyer participation relative to all owner occupier purchases is back at average levels.

Figure 5.7: Proportion of affordable properties for potential FHBs by income percentile mapped against mortgage rates



Source: NHFIC, RBA, CoreLogic, ANU

16 As discussed in other chapters, the definition of affordability changes depending on income and spending preferences. Many households choose to spend more than 30% of their income servicing a mortgage without being in financial stress. The State of the housing market chapter shows first home buyers are at long-run averages.

## Dwelling price to income ratios since 2016 Census

NHFIC analysed data from the last 2 Censuses to compare the hurdles faced by potential first home buyers getting into the market. Household income data was compiled for renters where the head of the household in 25-39, removing those households on less than \$26,000. Dwelling price to income ratios were then generated for both the 2016 and 2021 Censuses.

Since 2016, price to income ratios have increased for potential first home buyers in nearly all major cities and regional areas, with regional SA, regional NT, and Perth the exceptions. The largest increase was in regional areas across Tas (37%), followed by regional Vic (33%) and Hobart (33%). In Sydney, Melbourne and Brisbane, price to income ratios increased at a lower rate, at 11%, 10% and 8% respectively. Affordability for first home buyers in regional NSW, Vic and Tas deteriorated at more than double the rate in Sydney and Melbourne.

**Table 5.2: Dwelling price to first home buyer income ratios across major cities and regional areas (2016 to 2021)**

|                              | 2016 median dwelling price: income | 2021 median dwelling price: income | Change (%) |
|------------------------------|------------------------------------|------------------------------------|------------|
| Greater Sydney               | 6.6                                | 7.3                                | 11%        |
| Rest of NSW                  | 4.6                                | 5.7                                | 25%        |
| Greater Melbourne            | 5.6                                | 6.1                                | 10%        |
| Rest of Vic.                 | 3.7                                | 5.0                                | 33%        |
| Greater Brisbane             | 4.9                                | 5.3                                | 8%         |
| Rest of Qld                  | 4.0                                | 4.3                                | 6%         |
| Greater Adelaide             | 4.9                                | 5.0                                | 2%         |
| Rest of SA                   | 3.2                                | 3.1                                | -1%        |
| Greater Perth                | 4.6                                | 4.5                                | -2%        |
| Rest of WA                   | 3.1                                | 3.2                                | 1%         |
| Greater Hobart               | 4.4                                | 5.8                                | 33%        |
| Rest of Tas.                 | 3.4                                | 4.6                                | 37%        |
| Greater Darwin               | 3.4                                | 3.7                                | 8%         |
| Rest of NT                   | 3.2                                | 3.0                                | -7%        |
| Australian Capital Territory | 4.5                                | 5.6                                | 25%        |



Affordability for first home buyers in regional Tas and Greater Hobart, increased at 3-4 times more than in Brisbane, Melbourne and Sydney.

## Deposit hurdle rates and the broader macroeconomy

Given the interrelationships between the housing market and economic factors, affordability is affected by trends in the broader macroeconomy. General monetary (and fiscal) policies can be more important influences on housing affordability than policies specifically targeted towards the housing market.<sup>17</sup> In particular, interest rates and broader economic variables like incomes can affect people's ability to save a deposit to purchase a home.

After a period of prolonged low interest rates, rates have been increasing since May 2022. Previous tightening cycles have not tended to reduce deposit hurdle rates<sup>18</sup>. During tightening cycles, deposit hurdle rates have increased by around 8% (on average) and, in many, instances not at all since the 1990s. This is likely due to other factors also affecting demand, such as income growth. In the current cycle the deposit hurdle has declined by 10% in absolute terms and as a % of income.

**Table 5.3: Changes in deposit hurdle rates in tightening cycles (including current cycle)**

| Sydney first-home buyers: ◆ in deposit and serviceability barriers in tightening cycles |                         |             |             |             |                             |              |
|---|-------------------------|-------------|-------------|-------------|-----------------------------|--------------|
| Period  | ◆ Mortgage rate<br>(bp) | Deposit     |             |             | Mortgage payment (% income) |              |
|   |                         | ◆ % income* | ◆ % income* | ◆ % income* | ◆ % income*                 |              |
|   |                         | (%)         | (%)         | (%pts)      | (%)                         | (%pts)       |
| Aug–94  |                         |             | 60          |             |                             |              |
| May–95  | 181                     | 0           | 60          | 0           | 58                          |              |
| Jun–99  |                         |             | 70          |             | 46                          |              |
| Dec–00  | 155                     | 20          | 80          | 10          | 61                          | 15           |
| Apr–02  |                         |             | 90          |             | 60                          |              |
| Apr–05  | 123                     | 30          | 100         | 10          | 74                          | 14           |
| Mar–06  |                         |             | 90          |             | 70                          |              |
| Aug–08  | 232                     | 0           | 70          | -20         | 67                          | 17           |
| Aug–09  |                         |             | 80          |             | 48                          |              |
| Jan–11  | 201                     | 10          | 70          | -10         | 56                          | 8            |
| Oct–15  |                         |             | 110         |             | 66                          |              |
| Apr–16  | 17                      | 0           | 100         | -10         | 64                          | -2           |
| May–22  |                         |             | 120         |             | 70                          |              |
| Feb–23**  | 277                     | -10         | 110         | -10         | 84                          | 14           |
| <b>Average</b>  | <b>+169</b>             | <b>+8.3</b> | <b>86.4</b> | <b>-5</b>   | <b>63.4</b>                 | <b>+11.0</b> |

Source: NHFIC, RBA, ABS, ANU, CoreLogic. House price is 25th percentile. Deposit is 10% of median dwelling price. Mortgage payments are calculated using the RBA's standard variable mortgage rate assuming a 30-year term loan and an LVR of 90%. \*Disposable income is average first-home buyer disposable income.

\*\* indicates cycle is probably not complete.

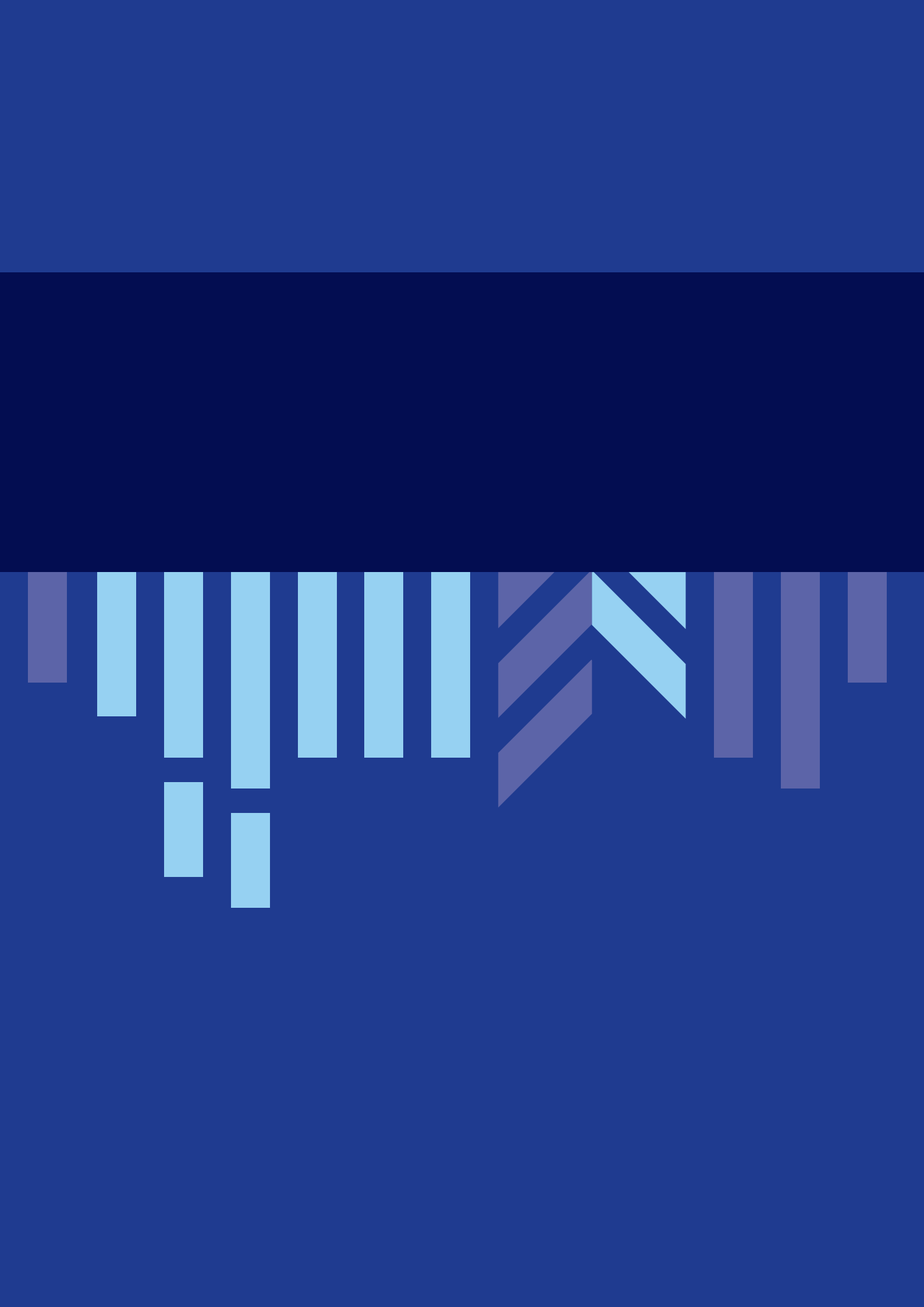
17 Meen, G & Whitehead, C (2020) Understanding Affordability – the Economics of Housing Markets

18 Deposit hurdle rates refer to the up front deposit required to access finance and purchase a property, and how this relates to incomes.

For completeness, the analysis also includes the impacts from easing cycles. In the last few decades until 2022, like many other countries, Australia experienced a large structural decline in interest rates. During easing cycles, average deposit hurdle rates in Sydney rose by 26%. Over the same period, the amount of income required for a deposit doubled from around 61% to 118%. Not surprisingly, this led to falling home ownership for younger age groups.

**Table 5.4: Changes in deposit hurdle rates in easing cycles**

| Sydney first-home buyers: ◆ in deposit and serviceability barriers in easing cycles |                         |                    |                  |                       |                             |                     |
|---|-------------------------|--------------------|------------------|-----------------------|-----------------------------|---------------------|
| Period  | ◆ Mortgage rate<br>(bp) | Deposit            |                  |                       | Mortgage payment (% income) |                     |
|   |                         | ◆ % income*<br>(%) | % income*<br>(%) | ◆ % income*<br>(%pts) | ◆ % income*<br>(%)          | % income*<br>(%pts) |
| Mar-91  |                         |                    |                  |                       |                             |                     |
| Aug-94  | -575                    | 14                 | 61               |                       | 52                          |                     |
| May-95  |                         |                    | 58               |                       | 58                          |                     |
| Jun-99  | -404                    | 34                 | 57               | -1                    | 46                          | -12                 |
| Dec-00  |                         |                    | 77               |                       | 61                          |                     |
| Apr-02  | -200                    | 29                 | 92               | 25                    | 60                          | -1                  |
| Apr-05  |                         |                    | 99               |                       | 74                          |                     |
| Feb-06  | -18                     | -4                 | 94               | -5                    | 70                          | -4                  |
| Aug-08  |                         |                    | 73               |                       | 67                          |                     |
| Aug-09  | -382                    | 9                  | 76               | 3                     | 48                          | -19                 |
| Jan-11  |                         |                    | 73               |                       | 56                          |                     |
| Oct-15  | -249                    | 59                 | 106              | 33                    | 65                          | 9                   |
| Apr-16  |                         |                    | 102              |                       | 63                          |                     |
| Sep-21  | -138                    | 32                 | 118              | 16                    | 65                          | 2                   |
| <b>Average</b>  | <b>-281</b>             | <b>+26</b>         | <b>84</b>        | <b>+16</b>            | <b>60</b>                   | <b>-4</b>           |





# State of housing need – Housing needs assessments



State of the Nation's Housing 2022–23

# State of housing need – housing needs assessments



377,600

households are considered in housing need



10.3%

of all households in the NT are in housing need

## KEY POINTS

- Housing needs assessments estimate the scale of affordable housing assistance a nation requires. Specifically, NHFIC quantifies the need for additional rental homes that would be affordable to lower income households.
- Between 2006 and 2021, the number of social housing dwellings in Australia increased in net terms by about 2,000 each year, taking the total from 409,000 to 440,000. This accounts for all provider types, including public and community housing. Social housing dwellings as a proportion of all occupied private dwellings declined over this time, from 5.4% in 2006 to 4.7% in 2021. In other words, social housing has failed to keep pace with demand and population growth.
- Those most acutely in housing need are the homeless. The data includes the most vulnerable individuals living on the street as well as those living in overcrowded conditions. Based on the 2016 Census, the rate of homeless persons per 10,000 of the population is highest in the NT, at 600 per 10,000 people – 12 times higher than any other state or territory.
- Most housing need assessments include those households considered to be in 'rental stress'. The widely accepted definition for rental stress is low-income households (those in the bottom 2 income quintiles) paying more than 30% of their income in rent. However, many people defined as being in rental stress do not perceive themselves to be in financial deprivation.
- NHFIC conservatively estimates that 377,600 households are in need of social and affordable housing, either due to rental stress or homelessness. Under a hierarchy approach ranging from extreme to less extreme, housing need is estimated to range from 208,200 households to 577,400 households in Australia, depending on different measures of rental stress.
- As a percentage of population, NT has the highest levels of housing need (representing 10.3% of households or 7,300 households) followed by NSW (representing 4.6% of households or 132,600 households).



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## Introduction

# The Government's housing policies, including the new Housing Australia Future Fund, seek to increase social and affordable housing.

Housing needs assessments are an important process to help determine the amount of housing potentially required in different geographical locations and, if possible, the type of housing required.

This chapter takes an in-depth look at social and affordable housing need. The chapter covers how housing need is defined, the practices used to measure housing need, both in Australia and overseas, and includes NHFIC estimates of housing need.

The purpose of the chapter is to:

- build greater understanding of housing need assessments and their limitations, both in Australia and internationally
- produce estimates of housing need based on a hierarchy framework.



## What is housing need?

'Housing need' is based on assumptions around what is acceptable in terms of housing provision. Over time, perceptions of appropriate need have changed in line with standards of living, improvements in dwelling quality and increases in dwelling size. Social and affordable housing need estimates are concerned with those who require non-market housing.

The concept of housing need is different to the concept of housing demand. Demand estimates show the quantity and quality of housing for which households are willing to pay market price. They model demand on a large range of variables, such as housing costs, government policy, demographics and incomes.

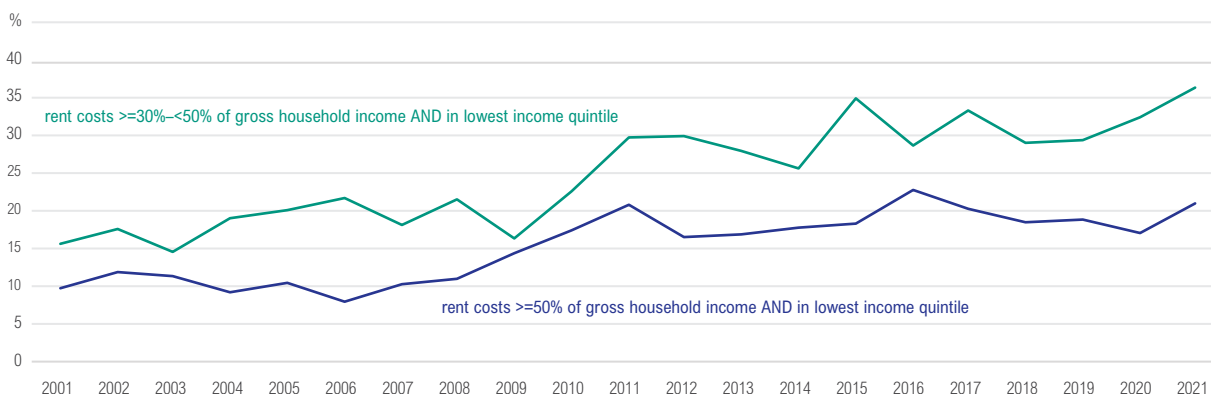
NHFIC calculates housing need as those in significant rental stress (defined as those in the lowest household income quintile paying more than 30% of their income in rent), as well as those without a home.

## Housing need within the broader housing system

Housing policy researchers and policy makers concur on the existence of market failure in parts of Australia's housing system.<sup>19</sup> The current private rental market is not meeting the needs of many Australian households.

As outlined in the State of housing affordability chapter, the proportion of the Australian population in private rental accommodation has increased significantly in the last 20 years. An increasing proportion of those renting in the private rental market are in the 2 lowest income quintiles (the poorest), growing from 43.0% of those renting privately in 2001 to 46.9% in 2021 (or an additional 1.45 million people.)<sup>20</sup> When rents rise, those on the lowest incomes have the least capacity to move to cheaper accommodation. As such, many low-income renters are paying a significant proportion of their income in rent. Between 2001 and 2021, the proportion of lowest-income quintile individuals renting in the private sector paying more than 50% of their household income in rent doubled from 10% to 20% (see Figure 6.1). The persistence of rental stress has also increased, with nearly half (47 per cent) of those who were in rental stress in 2013 also in rental stress in 2017, compared to 31% between 2001 to 2005.<sup>21</sup> As recently noted by the Productivity Commission, 'private rental unaffordability and low vacancy rates are fuelling demand for NHHA-funded homelessness services and social housing'.<sup>22</sup>

Figure 6.1: Changes in rent costs over time for the lowest income quintile



Source: Melbourne Institute, customised data request, the Household, Income and Labour Dynamics in Australia Survey, 2021 release.

19 For example, see Flanagan, K., Martin, C., Jacobs, K. and Lawson, J. (2019) A conceptual analysis of social housing as infrastructure, AHURI Final Report No. 309, Australian Housing and Urban Research Institute Limited, Melbourne, p. 64.

20 Melbourne Institute, customised data request, the Household, Income and Labour Dynamics in Australia Survey, 2021 release.

21 Productivity Commission 2019, Vulnerable Private Renters: Evidence and Options, Commission Research Paper, Canberra, p. 55.

22 Productivity Commission, In need of repair: The National Housing and Homelessness Agreement, Study Report, Canberra, 2022.

To address these issues, governments can intervene to improve the function of the existing housing market. When housing supply is responsive to changes in price, new supply improves affordability in all parts of the market, including for low-income renters. The Productivity Commission has recommended reforms around removing barriers to new supply and for governments to 'level the playing field' and review barriers around institutional investment.<sup>23</sup> The Australian Government's recently announced National Housing Accord is also looking to increase housing supply.

However, the extent to which the increase in new supply will allow older dwellings stock to 'filter down' to low-income renters or homeowners is in question. Recent research indicates that 'successive transfer of housing to lower income households as properties age (downwards filtering) may be negated or weakened by countervailing neighbourhood socio-economic determinants and locational characteristics (such as proximity to labour markets or urban amenities)'.<sup>24</sup> Regardless, removing barriers to supply more broadly is at least somewhat likely to reduce demand for social and affordable housing.

## Social and affordable housing in Australia

Between 2006 and 2021, the number of social housing dwellings in Australia increased in net terms by about 2,000 each year (from 409,000 to 440,000). This accounts for all provider types, including public and community housing.<sup>25</sup> Social housing dwellings as a proportion of all occupied private dwellings declined over this time, failing to keep pace with demand and population growth.

Returns from the proposed Housing Australia Future Fund are expected to deliver 20,000 new social dwellings and 10,000 new affordable dwellings over 5 years.<sup>26</sup> This will, on average, increase the number of social housing dwellings twofold each year for at least 5 years, from Commonwealth contributions alone. As part of the National Housing Accord, the 2022–23 Budget also included funding to support a further 10,000 affordable homes from 2024–25 onwards.

## Housing need assessments

Australia has no single agreed methodology for assessing housing need. In broad terms, researchers use 2 approaches:

- 1. Demographic models:** These estimates of housing need are generally based on ABS demographic data. To calculate future need, these models apply ABS household projections figures, which are based on assumptions relating to historical trends. These projections do not attempt to predict future changes in behaviour or in non-demographic factors, such as economic changes.<sup>27</sup> An example of this is Yates' work for CHIA NSW.<sup>28</sup>
- 2. Econometric models:** These models incorporate economic and social conditions, such as the labour market, incomes and interest rates, into current and future estimates of housing need. For example, Rowley et. al.<sup>29</sup> predicts housing need numbers through demographic effects, and partly through the interaction of housing system and labour market variables.

An econometric model has several advantages over a demographic model.

1. It can recognise the relationships between household formation and economic conditions. Research has identified a range of factors beyond the demographic (such as age structure) that can influence household formation, including income, employment and house prices. The Canada Mortgage and Housing Corporation argues that demographic estimates of housing need systematically under-estimate demand for housing. Over the long term, demand for housing is driven by not only the larger number of households, but also higher average incomes.<sup>30</sup>
2. It allows users to vary assumptions in the model, allowing for different scenarios (e.g., high growth in labour market earnings).
3. It allows for interaction between different variables. For example, wage rates have an impact on labour market participation and employment.

However, econometric approaches are inherently complex. This makes them harder to explain to stakeholders, difficult to replicate and validate, and time consuming to develop and upkeep. Relevant data may also be scarce for smaller geographic areas. Econometric models also rely on a range of assumptions that can change the output of the model quite significantly.

23 Productivity Commission, *In need of repair: The National Housing and Homelessness Agreement*, Study Report, Canberra, 2022.

24 Nygaard, C., van den Nouweland, R., Glackin, S., Martin, C. and Sisson, A. (2022) *Filtering as a source of low-income housing in Australia: conceptualisation and testing*, AHURI Final Report No. 387, Australian Housing and Urban Research Institute Limited, Melbourne.

25 AIHW, *Housing Assistance in Australia*, Data Tables: Social Housing Dwellings 2022, Table 1.

26 Media Release, 25 October 2022, The Hon Julie Collins MP, *Helping More Australians into Homes*.

27 ABS, *Household and Family Projections, Australia, 2016–2041*

28 Yates, J. *Social and Affordable Housing Projections, 2016–2026 (and 2036)*, for CHIA NSW.

29 Rowley, S., Leishman, C., Baker, E., Bentley, R. and Lester, L. (2017) *Modelling housing need in Australia to 2025*, AHURI Final Report 287. Australian Housing and Urban Research Institute Limited, Melbourne

30 CMHC, *Canada's Housing Supply Shortages: Estimating what is needed to solve Canada's housing affordability crisis by 2030*, Data released: June 2022.

Whichever model is adopted, Australia needs a consistent assessment methodology to:

- inform the scale of government funding
- prioritise projects receiving funding (at all levels of government)
- develop social and affordable housing targets
- provide evidence to support policy decisions.

A common, public framework would also be more transparent and open to criticism and improvement. Given the limits on government resourcing, this model should also allow for segmentation into different priority groups whose needs should be addressed in the first instance.

## Models of housing need in Australia

Building on work in the State of the Nation's Housing 2021–22, housing need in Australia can be estimated using a range of methodologies, a selection of which are outlined below. These differ in terms of time frame, geography, definitions of low income, definitions of rental stress and whether they include households in need of both social and affordable housing.

**Table 6.1: Recent methodologies for assessing housing need**

| Study methodology  | Findings – housing need estimate   |
|--|--|
| Demographic model: deficit of affordable and available dwellings for low-income rental households <sup>31</sup>  | Australia, 2016: 305,000 (Q1), 173,000 (Q2)  |
| Demographic model: no. of additional dwellings required to house private renters with low incomes (and paying rents more than 50%/30% of gross income) <sup>32</sup>   | Australia, 2011: 158,593 (50%), 287,724 (30%)  |
| Demographic model: no. of additional social housing dwellings required in future years in NSW, to reach 6% share of households by 2026 and 2.5% for affordable housing dwellings. <sup>33</sup>  | NSW, 2016–2026: 5,000 per year over 10 years (social housing), 7,500 per year over 10 years (affordable housing) |
| Demographic model: Met need (those in social housing) plus manifest need, i.e., homeless population plus evident need i.e., housing need unmet by the market (bottom quintile for household type and in rental stress). Estimate is of unmet need. <sup>34</sup>   | Australia, 2016–2036: 730,000 by 2036  |
| Demographic model: Unmet need (spending greater than 30% income on rent and in lowest/second lowest quintile for household type, plus implied need from homeless). <sup>35</sup>   | Australia, 2021: 640,500 [437,000 (Q1), 203,500 (Q2)]  |
| Econometric model: housing need defined as: <ul style="list-style-type: none"> <li>• no. of households predicted to form, but unable to access market housing</li> <li>• no. of households predicted to form, but expending such a significant proportion of income on rent that they require assistance to avoid rental stress.<sup>36</sup></li> </ul> | Australia, 2017: 1,300,000   |
| Econometric model: no. of social housing households, no. of homeless persons and no. of renting households in rental stress. Estimate of unmet need. <sup>37</sup>   | Monash LGA 2016: 6,640   |

31 Hulse, K., Reynolds, M., Nygaard, C., Parkinson, S., and Yates, J. (2019) The supply of affordable private rental housing in Australian cities: short-term and longer-term changes, AHURI Final Report No. 323.

32 Groenhart, L. and Burke, T. (2014) *Thirty years of public housing supply and consumption: 1981–2011*, AHURI Final Report No.231.

33 Yates, J. *Social and Affordable Housing Projections, 2016–2026 (and 2036)*, for CHIA NSW.

34 Lawson, J., Pawson, H., Troy, L., van den Nouwelant, R. and Hamilton, C. (2018) *Social housing as infrastructure: an investment pathway*, AHURI Final Report 306, Australian Housing and Urban Research Institute Limited, Melbourne.

35 van den Nouwelant, R., Troy, L., and Soundararaj, B. (November 2022), *Quantifying Australia's unmet housing need: A national snapshot*, prepared for the Community Housing Industry Association.

36 Rowley, S., Leishman, C., Baker, E., Bentley, R. and Lester, L. (2017) *Modelling housing need in Australia to 2025*, AHURI Final Report 287. Australian Housing and Urban Research Institute Limited, Melbourne.

37 SGS Economics and Planning, Final Report for Monash Affordable Housing Strategy 2019: 'Housing Assistance Demand micro simulation model.'

## Social housing waiting lists

The media often uses social housing waiting lists as indicators of housing need. These administrative lists are maintained by states/territories to allocate public and, in certain instances, other social housing.

The Productivity Commission's *Report on Government Services* contains a breakdown of social housing waiting lists by housing program and state/territory. At June 30, 2022, excluding transfers, the total applicants on the social housing waiting list in Australia were 174,624 (public housing), 13,724 (State owned and managed Indigenous housing) and 41,906 (community housing). Recent NHFIC discussions with selected community housing providers indicate that these waiting lists do help to inform their decisions around where to allocate funding.

However, social housing waiting lists only represent 'expressed need'. On their own, they do not provide a good methodology for those in need of housing assistance. For example, they do not include people who do not meet eligibility criteria in a state or territory where social housing is being 'rationed'. Nor do these lists include eligible people who do not put their name down due to:

- the stigma associated with social housing
- being put off by the anticipated wait times
- not viewing themselves as being in need.

Comparisons between time periods and jurisdictions using waiting lists can also be problematic. For example, applicants can be counted twice if they put their names down for multiple types of social housing programs.

Applicant behaviour can also skew demand figures. Local waiting lists may not include those who, daunted by the long waiting list in a particular area, put their name on a list in a different area. Other applicants may only apply in areas with significant levels of public and/or social housing. Nor do waiting lists consider the type of housing need. For example, a lone person with extended family that regularly visit, may only be entitled to a small one-bedroom apartment under the relevant rules.

A 2001 study commissioned by the Queensland Department of Housing looked at how low-income renters in rental stress perceived their own housing situation. The majority of participants (63%) had not previously applied for public housing. For many, this was because they didn't know about it, didn't know how to apply or didn't think they would be eligible. As such, no linkage can be assumed between those in housing need (based on affordability measures) and expressed need on the public housing waiting list.

Tim Seelig & Peter Phibbs (2006) *Beyond the Normative: Low Income Private Renters' Perspectives of Housing Affordability and Need for Housing Assistance*, *Urban Policy and Research*, 24:1, 53–66



# 174,624

Number of applicants on public housing waiting list in Australia

AS AT 30 JUNE 2022

## The 30/40 measure of rental stress

The 30/40 rule is a widely accepted measure of rental stress. It refers to lower income earners (usually the 2 lowest household income quintiles) paying more than 30% of their household income in rent.<sup>38</sup> See the Appendix for a detailed discussion of limitations of this model.

Many private renters in the 2 lowest income quintiles facing housing stress struggle to make ends meet after paying rent. Table 6.2 shows residual incomes for these renters in 2019–20. On average, those in the lowest income quintile paying more than 30% of their income in rent had around \$430 weekly income remaining after tax, and \$285 if paying more than 50% of their income.

In its recent report on the National Housing and Homelessness Agreement (NHHA), the Productivity Commission noted that being in rental stress (based on the 30/40 measure) is not a particularly strong indicator of perceived financial deprivation. Based on HILDA data from 2020, 49% of low-income private renters in rental stress rated their financial situation as 'prosperous', 'very comfortable' or 'reasonably comfortable'. In the next NHHA, the Productivity Commission recommended moving away from rental stress as a headline measure of housing affordability, for example, towards measures that include the depth and duration of affordability pressures.<sup>40</sup> This is confirmed by more recent analysis of HILDA data. According to the Melbourne Institute, many Australians defined as being in rental stress did not perceive themselves to be suffering financial hardship. About 50% of those paying more than 30% of their income in rent in the second lowest income quintile rated themselves as 'prosperous', 'very comfortable' or 'reasonably comfortable'.<sup>41</sup>

**Table 6.2: Income remaining after rent for low-income earners**

|                                       | Average weekly gross household income (annual) | Rental cost 30% gross household income | Residual (ex tax) | Rental cost 50% gross household income | Residual (ex tax) |
|---------------------------------------|--|--|-------------------|--|-------------------|
| <b>First income quintile (lowest)</b> | \$706 (\$36,712)                               | \$212                                  | \$494 (\$426)     | \$353                                  | \$353 (\$285)     |
| <b>Second income quintile</b>         | \$1,353 (\$70,356)                             | \$406                                  | \$947 (\$670)     | \$677                                  | \$677 (\$400)     |

Note: ABS, *Household Income and Wealth, 2019–20*, Table 5.4<sup>39</sup> and NHFIC analysis.

**Table 6.3: Perceptions of prosperity among low-income renters in the private market**

|                        | Lowest income quintile                                 |  | Second lowest income quintile                          |  |
|------------------------|--|--|--|--|
|                        | rent costs >= 30% - <50% of gross household income (%) | rent costs >=50% of gross household income (%) | rent costs >= 30% - <50% of gross household income (%) | rent costs >=50% of gross household income (%) |
| Prosperous             | 0.6  | 2.4  | 0.9  | 1.8  |
| Very comfortable       | 6.1  | 9.0  | 7.0  | 7.4  |
| Reasonably comfortable | 27.7   | 32.7   | 41.3   | 42.2   |
| Just getting along     | 49.4   | 43.1   | 44.3   | 43.9   |
| Poor                   | 11.8   | 9.1  | 5.1  | 4.0  |
| Very poor              | 4.4  | 3.7  | 1.5  | 0.7  |

Source: Melbourne Institute, customised data request, the Household, Income and Labour Dynamics in Australia Survey, 2021 release. Grey shading refers to non-reliable estimates.

38 Yates and Gabriel note that use of the 30/40 rule, with the 30% housing cost ratio defined by housing costs and gross household income, and the lowest 2 quintiles of the income distribution based on equivalised disposable income, generates conservative estimates of the numbers in housing stress. (Housing affordability in Australia, National Research Venture 3: Housing Affordability for Lower Income Australians, Research Paper 3 authored by Judith Yates and Michelle Gabriel for the Australian Housing and Urban Research Institute Sydney Research Centre, Southern Research Centre, February 2006).

39 In this publication, rent assistance is characterised as income. The lowest 2 quintiles of the income distribution are based on equivalised disposable income.

40 Also see Rowley, S. and Ong, R. (2012) *Housing affordability, housing stress and household wellbeing in Australia*, AHURI Final Report No.192. Melbourne: Australian Housing and Urban Research Institute.

41 As part of the HILDA Survey's Self Completion Questionnaire, respondents are asked "Given your current needs and financial responsibilities, would you say that you and your family are: prosperous; very comfortable; reasonably comfortable; just getting along; poor; or very poor." Melbourne Institute, customised data request, the Household, Income and Labour Dynamics in Australia Survey, 2021 release..

Part of the reason for these results may be due to perceptions of prosperity across different age brackets. Households with a reference person aged 15–29 are most likely to perceive themselves as 'prosperous', 'very comfortable' or 'reasonably comfortable'. Those with a household reference person older than 60 are also comparatively more likely to perceive their financial situation positively compared with other age groups.

Regardless, the HILDA and ABS data outlined above suggest that those in rental stress with the most acute housing need are those in the bottom income quintile. Individuals that live in households in the bottom equivalised disposable income quintile are characterised by:

- high household reliance on government pensions and allowances
- low levels of household labour force participation compared with those in other income quintiles
- greater likelihood of being in a one-parent family with dependent children compared with those in other income quintiles
- and greater likelihood of being in a lone, older household (aged 65 and over) compared with those in other income quintiles.<sup>42</sup>

### Housing need assessments internationally

As part of this year's industry liaison, NHFIC consulted with experts in housing need assessments in the United Kingdom and Canada. NHFIC also hosted a workshop with domestic and international experts, and representatives from the community housing industry. These consultations have provided some insight into how other countries measure and implement national housing need analysis.

#### England

Experts characterise measuring housing need in England as chaotic and inconsistent.

- The lack of a central and independent responsible authority results in inconsistent measurement and reporting.
- Relying on non-independent bodies, such as local authorities, tends to inflate local needs assessments.
- Consultants active in the market for local need studies contribute to over inflation.

Considering these problems, UK practitioners recommend putting in place a national, independent, properly staffed, analysis unit. The unit would need sufficient 'clout' to provide clearer analysis, guidance and evidence sharing to support sounder decisions on housing requirements and needs.

#### Canada

Some years ago, Canada developed the concept of 'core housing need', which requires basic levels of affordability (less than 30% of before-tax household income), adequacy (in appropriate condition) and suitability (enough bedrooms) among low-income households. Unlike other calculations of housing need, Canada does not include those who are paying more than 30% of their income in housing costs, but whose income is sufficient to afford the rent for an alternative unit in the local housing market which would mean they could pay less than 30% of their income in housing costs.<sup>43</sup> This excludes people who may be choosing to live in a better, or more convenient neighbourhood, but who could rent more cheaply. The majority of rental households in core housing need in Canada in 2016 (91%) were facing affordability concerns.

Canadian practitioners also noted that:

- Data is derived from the Census, which is valued for its independence, but can become stale due to timeframes between Censuses.
- The 'suitability' element of core housing need reflects norms of the day; for example, number of bedrooms required given age, sex and relationships in the household.
- The high proportion of those in core need receiving government assistance, and the structure of welfare assistance in Canada, can reduce the usefulness of core need as an outcomes measure.<sup>44</sup>

#### State and territory jurisdictions

Recent NHFIC discussions with state/territory jurisdictions on methodologies for undertaking housing need assessments have indicated that there is no common approach to assessing housing need. However, some similarities were observed across jurisdictions, including:

- Estimates of current and future social housing need are often informed by current social housing waiting list data
- Estimates of future social housing need are informed by population projections, and often include estimates around different household types
- Other factors which were incorporated into housing need assessments (but not always explicitly) include homelessness data, rental stress data, levels of private rental assistance and Census data

42 ABS, Household Income and Wealth, 2019–20, Table 4.1.

43 Identifying Core Housing Need | CMHC (cmhc-schl.gc.ca)

44 Pomeroy, S. (2017), Why core housing need is a poor metric to measure outcomes of Canada's national housing strategy, Caledon Institute of Social Policy.



- Econometric modelling does not appear to be widely used
- Housing need estimates are frequently undertaken for specific cohorts, such as the elderly and victims of domestic violence
- Consultants are used to undertake housing need assessments
- Estimates are often created at lower geographic levels, such as Statistical Area 4
- Social housing waiting lists and tenant information can usefully inform planning on the distribution and characteristics of demand for social housing assistance. For example, the NSW Department of Communities and Justice has recently developed a 'Social Housing Assistance Commissioning Dataset', which the Department has advised has enabled a more complete view of client support needs to emerge.

## Housing need in Australia

NHFIC's assessment of Australia's housing need draws on the above approaches. For simplicity, it takes a demographic, rather than an econometric, approach. Housing need is defined as the homeless and low-income earners paying more than 30% of their income in rent.

This measure does not include:

- those living in poor quality housing, largely due to data limitations although they may be captured in estimates of rental stress or homelessness
- very low-income earners paying less than 30% of their income in rent but under substantial financial stress
- homeowners under financial pressure from a mortgage, as their long-term financial situation is stronger than that of rental households.

NHFIC's approach is supported by ABS data on financial stress indicators by tenure type. This data suggests that those renting from a private landlord are most likely, of any tenure type, to experience 2, 3 or 4 or more indicators of financial stress in the last financial year.<sup>45</sup>

## A hierarchy approach to measuring housing need

Within any estimates of housing need, households experience different levels of material deprivation. The homeless can be viewed as the most 'in need' group, followed by those in extreme rental stress, and those in less extreme levels of rental stress. In this context, NHFIC has calculated a range of different scenarios around rental stress.

## Homelessness estimates

ABS homelessness data draws on information from the 5-yearly Census of Population and Housing.<sup>46</sup> At the time of drafting the report, the most recent data available was from the 2016 Census (released in 2018). More recent data from the 2021 Census was released 22 March 2023, which indicates an absolute increase of 5.2% since 2016, although a decrease in the rate of homelessness over this time. On Census night 2016, Australia had about 116,000 homeless persons – of which 44% were living in 'severely crowded dwellings'.<sup>47</sup> Assuming that the homeless form households at the same rate as other Australians (which is not necessarily the case), this equates to about 46,500 households in need.

The ABS' methodology for defining and calculating homelessness has been subject to some criticism.

- It does not include all 'housed-homeless' included in the ABS conceptual definition of homelessness (such as women and children subject to domestic violence who do not feel safe and secure).<sup>48</sup>
- It does not accurately describe overcrowding, which is a significant problem in and of itself, including in Indigenous households.<sup>49</sup>
- It is based on subjective measures of appropriate housing; for example, no more than 2 people per bedroom.<sup>50</sup>

The following table based on ABS Census data indicates that, in absolute terms, NSW and Vic have the highest number of homeless persons. However, the rate of homeless persons per 10,000 of the population in the NT is extraordinarily high, at 599.4 per 10,000 people. More than 11,000 of the 13,700 homeless people in the NT are characterised as living in 'severely overcrowded' dwellings.

Information on other data to inform estimates of homelessness, including from the Australian Institute of Health and Welfare and the 'Advance to Zero' methodology are outlined in the Appendix.

45 ABS, *Household Income and Wealth, 2019–20*, Table 16.4.

46 The ABS advises that: "As homelessness itself is not a characteristic that is directly collected in the Census, estimates are derived from Census data using analytical techniques. Prevalence estimates (of how many people experienced homelessness at a particular point-in-time) enable analysis of the scale of homelessness and can be used to report trends and to target services to prevent or ameliorate the circumstances of homelessness through knowing both the locations of the homeless and their characteristics." (Quality Declaration Summary)

47 The ABS defines homelessness as follows: "When a person does not have suitable accommodation alternatives, they are considered homeless if their current living arrangement: is in a dwelling that is inadequate; has no tenure, or if their initial tenure is short and not extendable; or does not allow them to have control of, and access to space for social relations." This includes 'persons living in severely crowded dwellings' (which require 4 or more extra bedrooms to accommodate the people who usually live there), 'persons living in improvised dwellings, tents or sleeping out'; 'persons in supported accommodation for the homeless'; 'persons staying temporarily with other households'; 'persons living in boarding houses'; and 'persons in other temporary lodgings.'

48 Chamberlain, C. (2014) *Homelessness: re-shaping the policy agenda?*, AHURI Final Report No.221. Melbourne: Australian Housing and Urban Research Institute.

49 Chamberlain, C. (2014) *Homelessness: re-shaping the policy agenda?*, AHURI Final Report No.221. Melbourne: Australian Housing and Urban Research Institute.

50 This is based on the Canadian National Occupancy Standard, Census of Population and Housing: Estimating Homelessness methodology, 2016, Explanatory notes.



**Table 6.4: State/Territory estimates of homelessness**

|                                   | NSW    | Vic    | Qld    | WA    | SA    | Tas   | NT     | ACT   | Aust.   |
|-----------------------------------|--------|--------|--------|-------|-------|-------|--------|-------|---------|
| Total homeless persons            | 37,700 | 24,800 | 21,700 | 9,000 | 6,200 | 1,600 | 13,700 | 1,600 | 116,400 |
| Rate per 10,000 of the population | 50.4   | 41.9   | 46.1   | 36.4  | 37.1  | 31.8  | 599.4  | 40.2  | 49.8    |

Source: ABS, Census of Population and Housing, Estimating Homelessness, 2016 Census.

## Rental stress estimates

NHFIC has calculated a range of different options around rental stress.

**Table 6.5: Rental stress estimates**

|                                       | Lowest income quintile households | Lowest and second lowest income quintile households |
|---------------------------------------|-----------------------------------|---|
| Households paying >50% income in rent | 161,700                           | 190,700   |
| Households paying >30% income in rent | 331,100                           | 530,900   |

Source: Census of Population and Housing, 2021, TableBuilder Pro.<sup>51</sup>

Assuming that all 46,500 homeless households fall into the most extreme level of need, this results in the following estimated ranges of total housing need.

**Table 6.6: Ranges of housing need**

| Households               |         | Household income |         |
|--------------------------|---------|------------------|---------|
|                          |         | Very low → Low   |         |
| % of income paid in rent | Highest | 208,200          | 237,200 |
|                          | Lowest  | 377,600          | 577,400 |

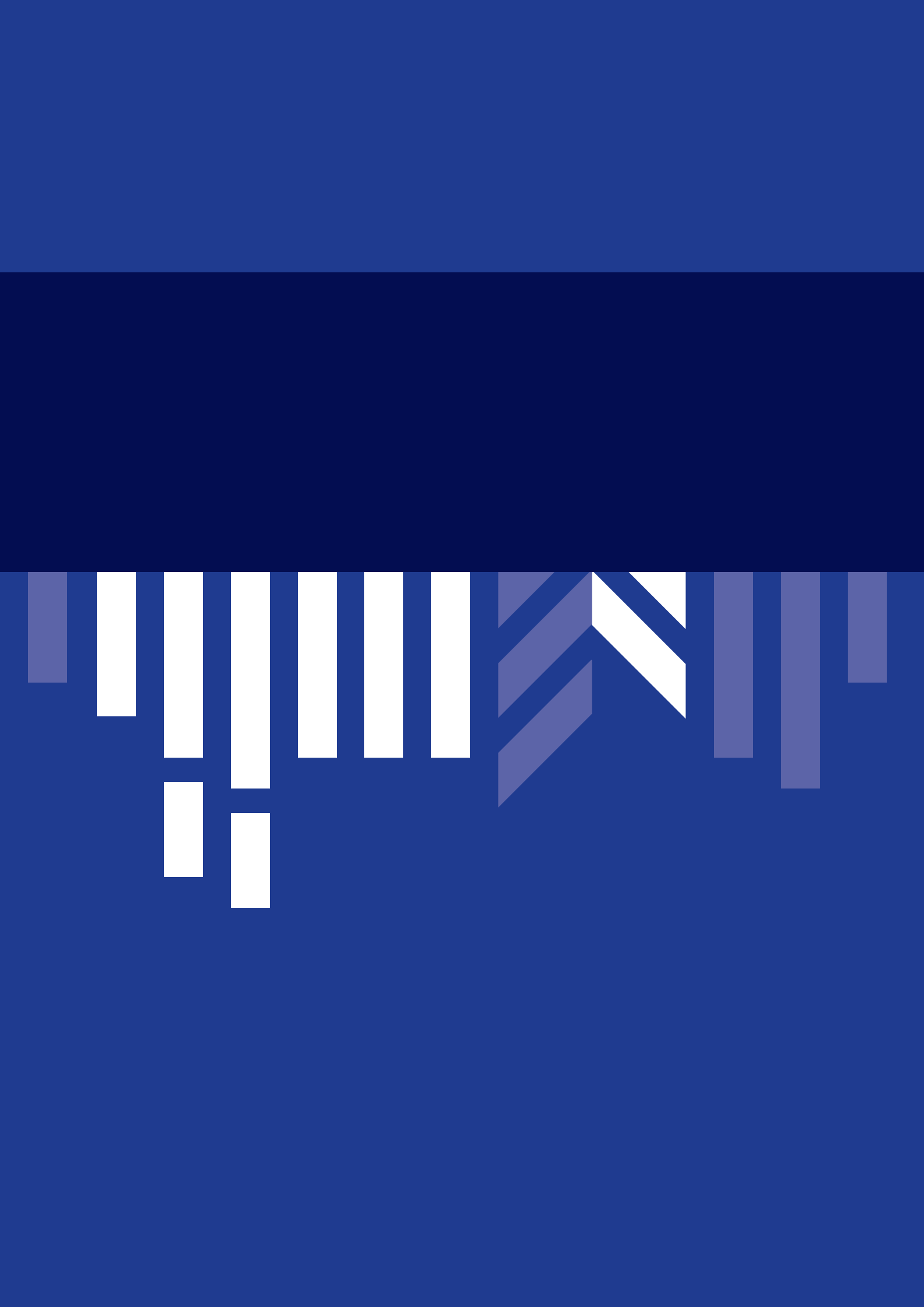
Sources: As above

**Table 6.7: Housing need estimates by State/Territory**

|                                | NSW            | Vic           | Qld           | WA            | SA            | Tas          | NT           | ACT          | Aust.          |
|--------------------------------|----------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|----------------|
| Couple family with children    | 30,600         | 17,700        | 14,400        | 4,900         | 3,200         | 1,000        | 400          | 1,000        | 73,200         |
| Couple family without children | 23,800         | 15,400        | 14,500        | 4,500         | 3,300         | 1,100        | 200          | 1,100        | 63,900         |
| Lone parent family             | 19,400         | 13,900        | 15,500        | 5,700         | 4,200         | 1,200        | 300          | 600          | 60,800         |
| Group household                | 9,100          | 7,800         | 5,900         | 1,800         | 1,400         | 400          | 100          | 600          | 27,100         |
| Lone person household          | 34,600         | 28,700        | 22,700        | 9,300         | 6,400         | 1,900        | 800          | 1,700        | 106,100        |
| <b>Total in rental stress</b>  | <b>117,500</b> | <b>83,500</b> | <b>73,000</b> | <b>26,200</b> | <b>18,500</b> | <b>5,600</b> | <b>1,800</b> | <b>5,000</b> | <b>331,100</b> |
| Homeless                       | 15,100         | 9,900         | 8,700         | 3,600         | 2,500         | 600          | 5,500        | 600          | 46,500         |
| <b>Total in housing need</b>   | <b>132,600</b> | <b>93,400</b> | <b>81,700</b> | <b>29,800</b> | <b>21,000</b> | <b>6,200</b> | <b>7,300</b> | <b>5,600</b> | <b>377,600</b> |

Source: Census of Population and Housing, 2021, TableBuilder Pro, Counting Dwellings by Place of Enumeration. Estimate of homelessness is based on ABS estimates of homelessness (2016) divided by 2.5 (average household size). These figures exclude: households with a negative income or where all or some incomes have not been stated; households where rent is not stated; and 'visitor only' households. 'Other family' household types, which are not material in number, have also not been included. Private renter households include those renting from a real estate agent and other unrelated persons not in the same household.

51 These figures exclude: households with a negative income or where all or some incomes have not been stated; households where rent is not stated; and 'visitor only' households. 'Other family' household types, which are not material in number, have also not been included. Private renter households include those renting from a real estate agent and other unrelated persons not in the same household.





# Appendix



State of the Nation's Housing 2022–23



# Appendix

## Household formation

| Effective Household Type (No.)   | 2022              | 2023              | 2024              | 2025              | 2026              | 2027              | 2028              | 2029              | 2030              | 2031              | 2032              | 2033              |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Couple family with children      | 3,094,200         | 3,119,100         | 3,145,400         | 3,178,800         | 3,209,100         | 3,237,200         | 3,264,800         | 3,291,900         | 3,318,900         | 3,344,600         | 3,368,600         | 3,393,100         |
| Couple family without children   | 2,674,500         | 2,717,600         | 2,763,300         | 2,814,800         | 2,866,600         | 2,916,000         | 2,965,700         | 3,015,100         | 3,063,600         | 3,113,900         | 3,160,900         | 3,208,000         |
| Lone parent family               | 1,102,000         | 1,116,000         | 1,130,500         | 1,147,500         | 1,163,900         | 1,180,200         | 1,196,300         | 1,212,300         | 1,228,100         | 1,243,700         | 1,261,900         | 1,280,200         |
| Other family household           | 119,600           | 121,000           | 122,600           | 124,600           | 126,700           | 129,000           | 131,300           | 133,500           | 135,600           | 137,700           | 139,900           | 142,100           |
| Group household                  | 387,300           | 395,100           | 403,800           | 413,800           | 424,800           | 436,700           | 449,100           | 461,600           | 474,100           | 486,800           | 497,600           | 508,400           |
| Lone household                   | 2,663,200         | 2,702,500         | 2,746,900         | 2,798,300         | 2,849,700         | 2,902,100         | 2,954,000         | 3,006,100         | 3,058,200         | 3,111,000         | 3,169,100         | 3,226,700         |
| <b>Total occupied households</b> | <b>10,040,700</b> | <b>10,171,300</b> | <b>10,312,500</b> | <b>10,477,800</b> | <b>10,640,700</b> | <b>10,801,100</b> | <b>10,961,200</b> | <b>11,120,400</b> | <b>11,278,600</b> | <b>11,437,700</b> | <b>11,598,100</b> | <b>11,758,500</b> |

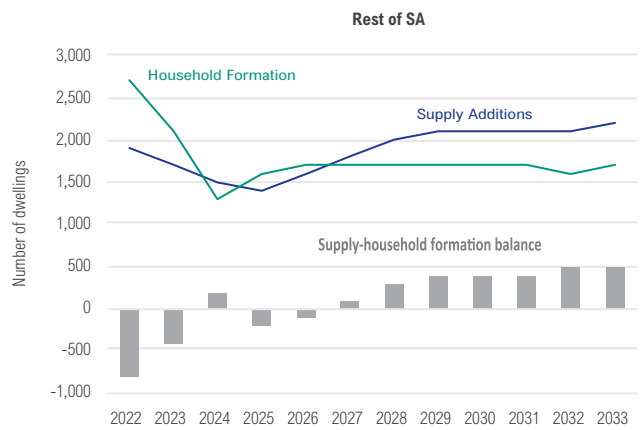
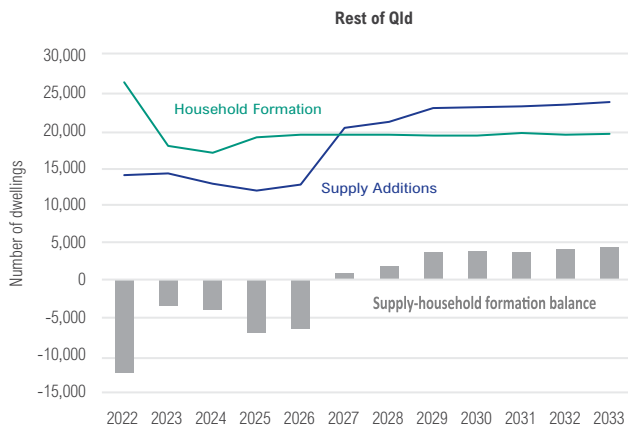
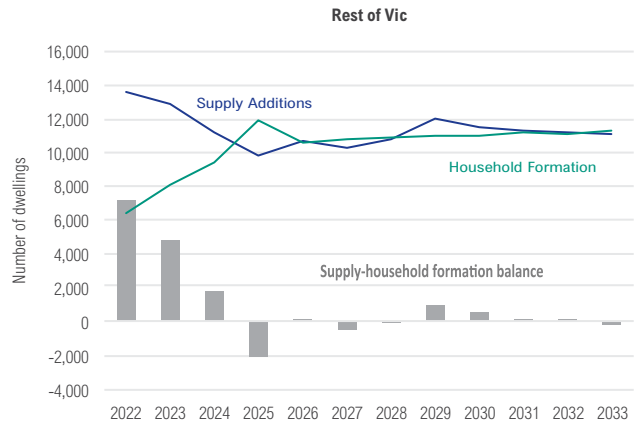
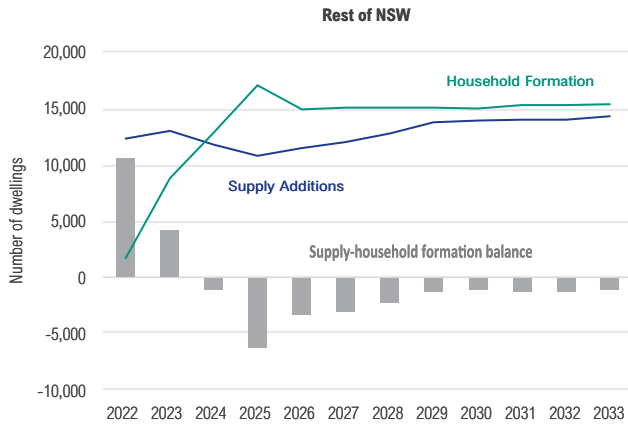
  

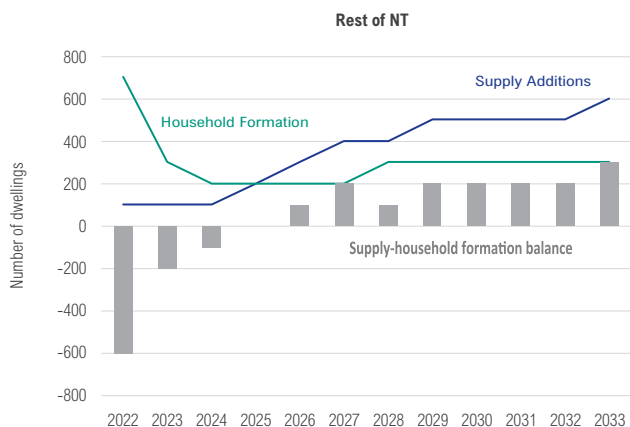
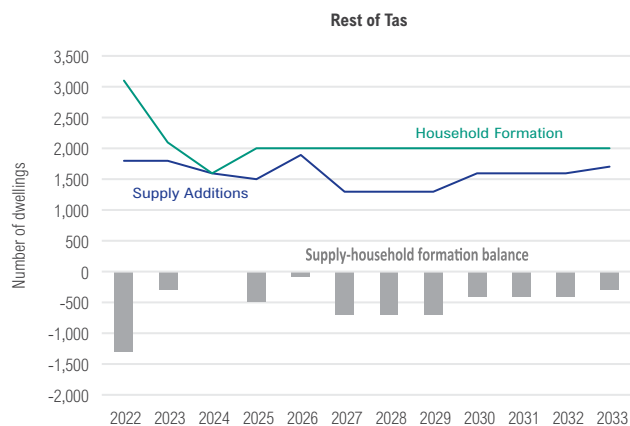
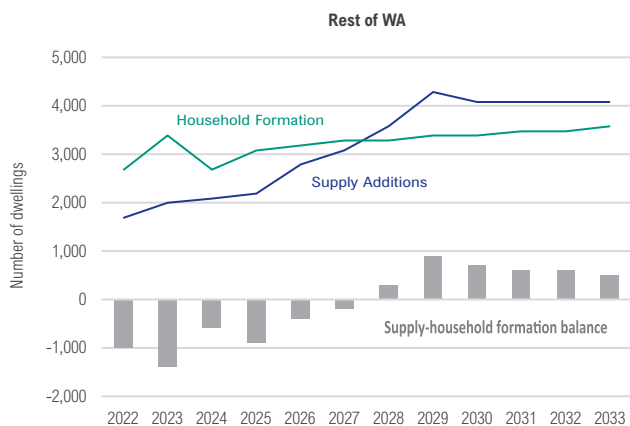
| Effective Household Type (Annual Change No.) | 2022     | 2023           | 2024           | 2025           | 2026           | 2027           | 2028           | 2029           | 2030           | 2031           | 2032           | 2033           | Total            |
|--|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|
| Couple family with children                  | -        | 25,000         | 26,300         | 33,400         | 30,300         | 28,100         | 27,600         | 27,100         | 27,100         | 25,600         | 24,100         | 24,500         | 299,100          |
| Couple family without children               | -        | 43,100         | 45,700         | 51,500         | 51,700         | 49,400         | 49,700         | 49,400         | 48,500         | 50,300         | 46,900         | 47,100         | 533,300          |
| Lone parent family                           | -        | 13,900         | 14,500         | 17,000         | 16,400         | 16,200         | 16,100         | 16,000         | 15,800         | 15,600         | 18,200         | 18,300         | 178,000          |
| Other family household                       | -        | 1,400          | 1,600          | 2,000          | 2,100          | 2,300          | 2,300          | 2,200          | 2,100          | 2,100          | 2,300          | 2,200          | 22,600           |
| Group household                              | -        | 7,900          | 8,600          | 10,100         | 10,900         | 11,900         | 12,400         | 12,500         | 12,600         | 12,600         | 10,800         | 10,700         | 121,000          |
| Lone household                               | -        | 39,300         | 44,400         | 51,400         | 51,400         | 52,400         | 52,000         | 52,000         | 52,100         | 52,900         | 58,100         | 57,600         | 583,600          |
| <b>Total occupied households</b>             | <b>-</b> | <b>130,600</b> | <b>141,200</b> | <b>165,400</b> | <b>162,900</b> | <b>160,300</b> | <b>160,200</b> | <b>159,200</b> | <b>158,200</b> | <b>159,100</b> | <b>160,400</b> | <b>160,400</b> | <b>1,717,900</b> |

Note: Total households are occupied dwellings (only) and do not include vacant dwellings such as second properties (e.g., holiday homes).

# Supply-household formation balances

Annual change in household formation and supply and supply-household formation balance for rest of state areas





Annual change in household formation and supply and supply-household formation balance for rest of state areas

| Year | Rest of NSW                    |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 12,300                         | 1,700                              | 10,600                             |
| 2023 | 13,000                         | 8,800                              | 4,200                              |
| 2024 | 11,800                         | 12,900                             | -1,100                             |
| 2025 | 10,800                         | 17,100                             | -6,300                             |
| 2026 | 11,500                         | 14,900                             | -3,400                             |
| 2027 | 12,000                         | 15,100                             | -3,100                             |
| 2028 | 12,800                         | 15,100                             | -2,300                             |
| 2029 | 13,800                         | 15,100                             | -1,300                             |
| 2030 | 13,900                         | 15,000                             | -1,100                             |
| 2031 | 14,000                         | 15,300                             | -1,300                             |
| 2032 | 14,000                         | 15,300                             | -1,300                             |
| 2033 | 14,300                         | 15,400                             | -1,100                             |

| Year | Rest of VIC                    |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 13,600                         | 6,400                              | 7,200                              |
| 2023 | 12,900                         | 8,100                              | 4,800                              |
| 2024 | 11,200                         | 9,400                              | 1,800                              |
| 2025 | 9,800                          | 11,900                             | -2,100                             |
| 2026 | 10,700                         | 10,600                             | 100                                |
| 2027 | 10,300                         | 10,800                             | -500                               |
| 2028 | 10,800                         | 10,900                             | -100                               |
| 2029 | 12,000                         | 11,000                             | 1,000                              |
| 2030 | 11,500                         | 11,000                             | 500                                |
| 2031 | 11,300                         | 11,200                             | 100                                |
| 2032 | 11,200                         | 11,100                             | 100                                |
| 2033 | 11,100                         | 11,300                             | -200                               |

| Year | Rest of Qld                    |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 13,900                         | 26,300                             | -12,400                            |
| 2023 | 14,200                         | 17,800                             | -3,600                             |
| 2024 | 12,800                         | 16,900                             | -4,100                             |
| 2025 | 11,800                         | 19,000                             | -7,200                             |
| 2026 | 12,700                         | 19,300                             | -6,600                             |
| 2027 | 20,200                         | 19,300                             | 900                                |
| 2028 | 21,100                         | 19,300                             | 1,800                              |
| 2029 | 22,900                         | 19,200                             | 3,700                              |
| 2030 | 23,000                         | 19,200                             | 3,800                              |
| 2031 | 23,100                         | 19,500                             | 3,600                              |
| 2032 | 23,300                         | 19,300                             | 4,000                              |
| 2033 | 23,700                         | 19,400                             | 4,300                              |

| Year | Rest of SA                     |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 1,900                          | 2,700                              | -800                               |
| 2023 | 1,700                          | 2,100                              | -400                               |
| 2024 | 1,500                          | 1,300                              | 200                                |
| 2025 | 1,400                          | 1,600                              | -200                               |
| 2026 | 1,600                          | 1,700                              | -100                               |
| 2027 | 1,800                          | 1,700                              | 100                                |
| 2028 | 2,000                          | 1,700                              | 300                                |
| 2029 | 2,100                          | 1,700                              | 400                                |
| 2030 | 2,100                          | 1,700                              | 400                                |
| 2031 | 2,100                          | 1,700                              | 400                                |
| 2032 | 2,100                          | 1,600                              | 500                                |
| 2033 | 2,200                          | 1,700                              | 500                                |



| Year | Rest of WA                     |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 1,700                          | 2,700                              | -1,000                             |
| 2023 | 2,000                          | 3,400                              | -1,400                             |
| 2024 | 2,100                          | 2,700                              | -600                               |
| 2025 | 2,200                          | 3,100                              | -900                               |
| 2026 | 2,800                          | 3,200                              | -400                               |
| 2027 | 3,100                          | 3,300                              | -200                               |
| 2028 | 3,600                          | 3,300                              | 300                                |
| 2029 | 4,300                          | 3,400                              | 900                                |
| 2030 | 4,100                          | 3,400                              | 700                                |
| 2031 | 4,100                          | 3,500                              | 600                                |
| 2032 | 4,100                          | 3,500                              | 600                                |
| 2033 | 4,100                          | 3,600                              | 500                                |

| Year | Rest of Tas                    |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 1,800                          | 3,100                              | -1,300                             |
| 2023 | 1,800                          | 2,100                              | -300                               |
| 2024 | 1,600                          | 1,600                              | 0                                  |
| 2025 | 1,500                          | 2,000                              | -500                               |
| 2026 | 1,900                          | 2,000                              | -100                               |
| 2027 | 1,300                          | 2,000                              | -700                               |
| 2028 | 1,300                          | 2,000                              | -700                               |
| 2029 | 1,300                          | 2,000                              | -700                               |
| 2030 | 1,600                          | 2,000                              | -400                               |
| 2031 | 1,600                          | 2,000                              | -400                               |
| 2032 | 1,600                          | 2,000                              | -400                               |
| 2033 | 1,700                          | 2,000                              | -300                               |

| Year | Rest of NT                     |                                    |                                    |
|------|--------------------------------|------------------------------------|------------------------------------|
|      | New net annual dwelling supply | New net annual household formation | Supply-household formation balance |
| 2022 | 100                            | 700                                | -600                               |
| 2023 | 100                            | 300                                | -200                               |
| 2024 | 100                            | 200                                | -100                               |
| 2025 | 200                            | 200                                | 0                                  |
| 2026 | 300                            | 200                                | 100                                |
| 2027 | 400                            | 200                                | 200                                |
| 2028 | 400                            | 300                                | 100                                |
| 2029 | 500                            | 300                                | 200                                |
| 2030 | 500                            | 300                                | 200                                |
| 2031 | 500                            | 300                                | 200                                |
| 2032 | 500                            | 300                                | 200                                |
| 2033 | 600                            | 300                                | 300                                |

## Limitations of 30/40 measure of rental stress

When using the '30/40 measure' of rental stress, practitioners should note the following.

- Different definitions (such as inclusion/exclusion of Commonwealth Rent Assistance, use of gross/disposable/equivalised income, all rental households/private rental households) can affect results. Research indicates that different measures will influence the type of households identified as being in housing stress.<sup>52</sup>
- The measure does not capture the trade-offs households make when choosing where to live. Some in rental stress choose to spend more of their income on rent to gain additional benefits from being in a better neighbourhood (such as better schools). Some households may live in a location far from their employment to pay less in rent. People in these households will spend significant time travelling but are not captured in the rental stress results.<sup>53</sup> Canada's approach to measuring housing need addresses this by analysing whether household income is sufficient to afford the rent for an alternative unit in the local housing market, rather than actual housing costs being paid by households.
- The measure excludes those experiencing housing stress from a mortgage. Data from the ABS' Housing Occupancy and Costs publication (2019–20) indicates that 320,000 low-income households with a mortgage are paying more than 30% of their income in housing costs, and 130,000 more than 50%.
- Some people in financial deprivation are not technically in rental stress. They may not be paying more than 30% of their income in rent, but they have very low incomes.
- If rental stress is used to inform relative need across regions, the measure does not differentiate between those in persistent long-term rental stress, and those temporarily facing housing cost pressures. HILDA data indicates that around 20% of low-income individuals paying more than 50% of their income in rent in Year 1 were in this situation 3 years later (year 4).<sup>54</sup> In 2021–22, AIHW reported that 35,200 people were experiencing 'persistent homelessness' – a 5,700 client increase since 2018–19.<sup>55</sup>
- The measure does not include 'concealed households': potential households that are unable to form due to lack of income.<sup>56</sup>
- Reported household income data from the Census tends to be understated, which will inflate figures of rental stress.

52 Yates, J. and Gabriel, M., February 2006, *Housing affordability in Australia National Research Venture 3: Housing Affordability for Lower Income*, Research Paper 3 authored by Judith Yates and Michelle Gabriel for the Australian Housing and Urban Research Institute Sydney Research Centre Southern Research Centre.

53 Rowley, S. and Ong, R. (2012) *Housing affordability, housing stress and household wellbeing in Australia*, AHURI Final Report No.192. Melbourne: Australian Housing and Urban Research Institute.

54 Melbourne Institute, customised data request, the Household, Income and Labour Dynamics in Australia Survey, 2021 release.

55 AIHW, Specialist Homelessness Services Annual Report, 2021–22: National Housing and Homelessness Agreement Indicators. 'Persistent homelessness' describes the number of Specialist Homelessness Services clients who have been homeless for more than 7 months over a 24-months study period, that is, 30% of the study period. The homeless months do not need be consecutive.

56 Rowley, S., Leishman, C., Baker, E., Bentley, R. and Lester, L. (2017) *Modelling housing need in Australia to 2025*, AHURI Final Report 287, Australian Housing and Urban Research Institute, Melbourne.

## Other data to inform estimates of homelessness

Given the limitations of the ABS data, other data sources can provide further insights into relative levels.

- The Australian Institute of Health and Welfare (AIHW)** provides information on specialist services provided to the homeless, or those at risk of homelessness.<sup>57</sup> Within this data set, a person is homeless if they are living in non-conventional accommodation (such as living on the street), or short-term or emergency accommodation (such as living temporarily with friends and relatives). Compared to the Census, the definition of people experiencing homelessness does not include severely over-crowded dwellings. AIHW reports that about 272,700 individuals were assisted in 2021–22, with most clients (56% or around 140,000 clients) categorised as 'at risk of homelessness' rather than homeless.<sup>58</sup> This data does not identify the level of homelessness in Australia, but simply where services are provided.
- The 'Advance to Zero' methodology** is used by organisations aiming to eliminate rough sleeping and chronic homelessness. This method uses 'by name' lists for rough sleepers, continuous data analysis and service coordination. The Productivity Commission recently noted that 'Governments should investigate implementing by-name lists across Australia to provide a timely measure of homelessness that supports homelessness research, service delivery, and policy development.'<sup>59</sup> A key aspect of this approach is the provision of long term, supported accommodation, to reduce the cycle of moving in and out of homelessness. This approach incorporates the 'Housing First' philosophy, which aims to provide secure, long-term housing with associated support services to the homeless, particularly for this with complex needs (such as mental health issues or drug and alcohol dependency).

Data from the 'Advance to Zero' methodology is currently being published in selected areas of WA, Adelaide and Brisbane (see table below). At this stage, the NSW lists are still in development and do not represent the full scale of those rough sleeping/temporarily sheltered in these areas.<sup>60</sup> Nor do these figures include some of those persons categorised as homeless by the ABS, such as those in severely overcrowded dwellings.

**Table 5.5: Estimates of those sleeping rough by selected regions**

| Region                   | Date          | No. sleeping rough |
|--------------------------|---------------|--------------------|
| <b>Western Australia</b> |               |                    |
| Bunbury                  | December 2022 | 44                 |
| Geraldton                | December 2022 | 19                 |
| Mandurah                 | December 2022 | 86                 |
| Perth/Fremantle          | December 2022 | 343                |
| Rockingham               | December 2022 | 73                 |
| <b>South Australia</b>   |               |                    |
| Inner Adelaide           | December 2022 | 163                |
| <b>Queensland</b>        |               |                    |
| Brisbane                 | December 2022 | 230                |
| <b>Victoria</b>          |               |                    |
| Port Philip              | December 2022 | 24                 |
| Melbourne                | December 2022 | 121                |
| Frankston                | December 2022 | 29                 |
| Stonnington              | December 2022 | 4                  |
| Dandenong                | December 2022 | 51                 |

Sources: Track Our Progress – Zero Project WA, Our Progress – South Australian Alliance to End Homelessness (saaeh.org.au), Reducing Homelessness | Brisbane Zero. Victorian data advised directly to NHFIC by Launch Housing.

<sup>57</sup> A specialist homelessness service is an organisation that receives government funding to deliver accommodation related and/or personal services to people who are homeless or at risk of homelessness. Under the National Housing and Homeless Agreement, these agencies are required to participate in the Specialist Homelessness Services Collection (SHSC). (Specialist Homelessness Services Annual Report 2020–21).

<sup>58</sup> Housing status at the start of support was unknown for around 22,500 SHS clients. AIHW, Specialist Homelessness Services Annual Report, 2021–22.

<sup>59</sup> Productivity Commission, In need of repair: The National Housing and Homelessness Agreement, Study Report, Canberra, 2022.

<sup>60</sup> NSW Progress Dashboard — End Street Sleeping Collaboration

