

### The Demography of a Housing Crisis

Associate Prof Elin Charles-Edwards



# Is population growth driving the housing crisis...



#### Migration boom, housing shortage create 'perfect' storm

Migration and the housing crisis are converging to become a singular and politically potent problem for the Albanese government.

18 hours ago







#### Housing and migration have collided. One will have to give

The high immigration numbers are a temporary spike. But that does not help with the spectacular failure of housing supply to meet demand.

14 Nov 2023









#### NSW MP calls for migration halt amid housing crisis

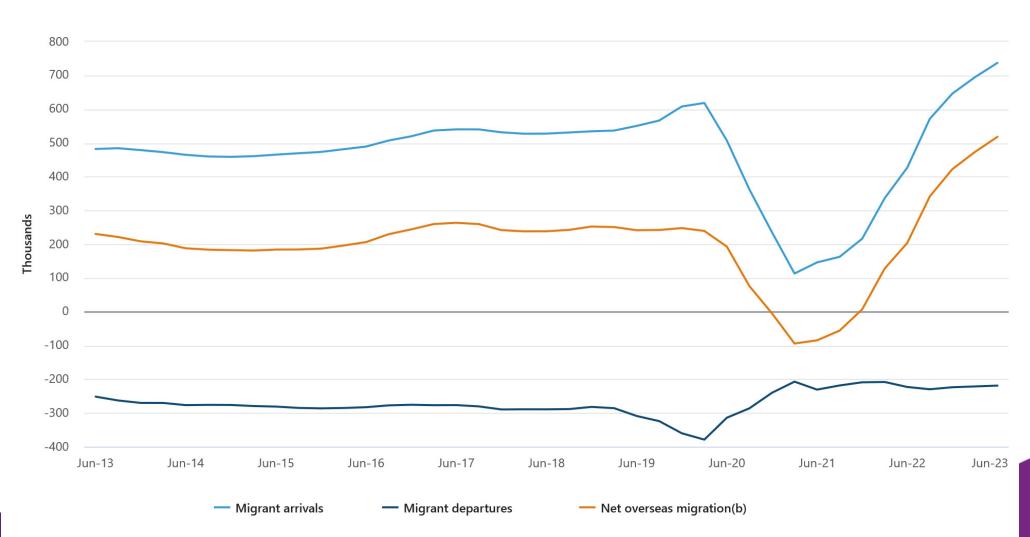
A NSW federal Senator has joined growing calls to halt migration until Australia can catch up and build more housing. Do you agree?

24 hours ago





Graph 1.1 - Overseas migration - Australia - year ending(a)



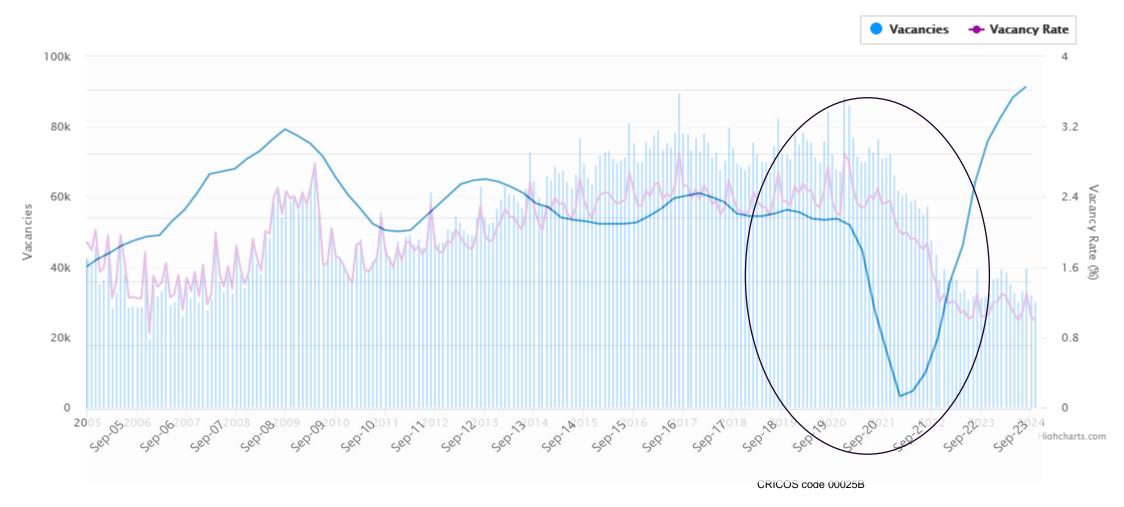


### **RESIDENTIAL VACANCY RATES**

#### **NATIONAL**

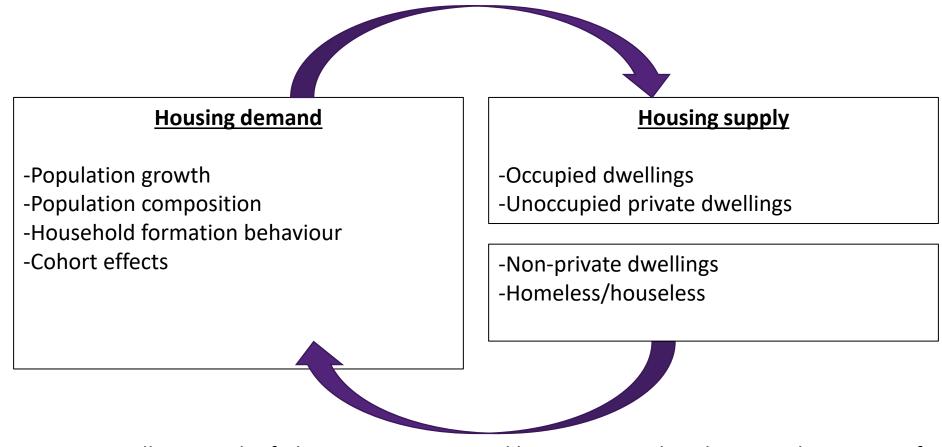
#### Residential Vacancy Rates

Source: SQM Research





### A simple demographic model of the aggregate housing system



Economists typically stress the fit between incomes and housing costs, but demographers more often stress the household size or composition and dwelling type (Myers and Doyle 1992)

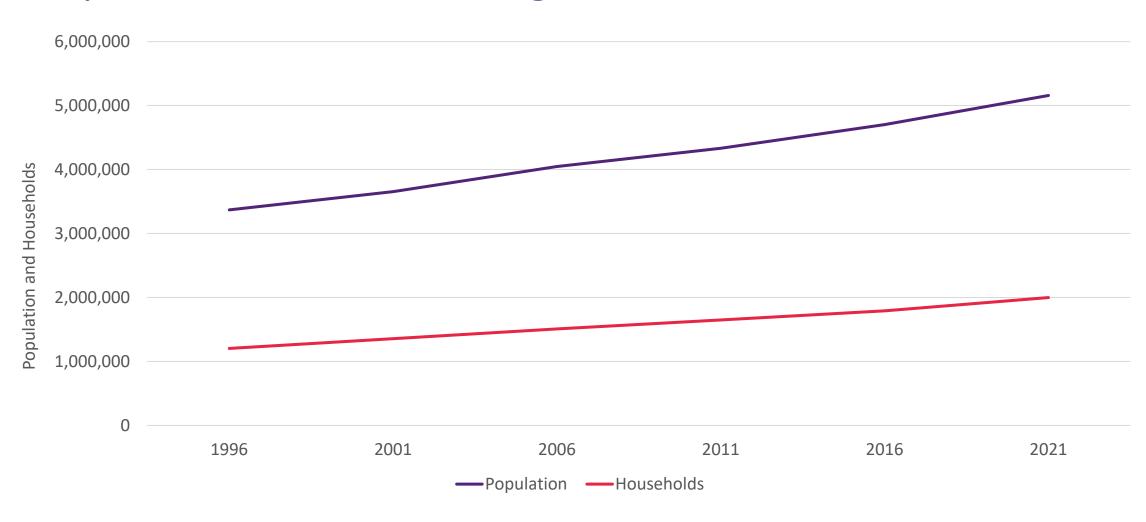


# Case study: Queensland



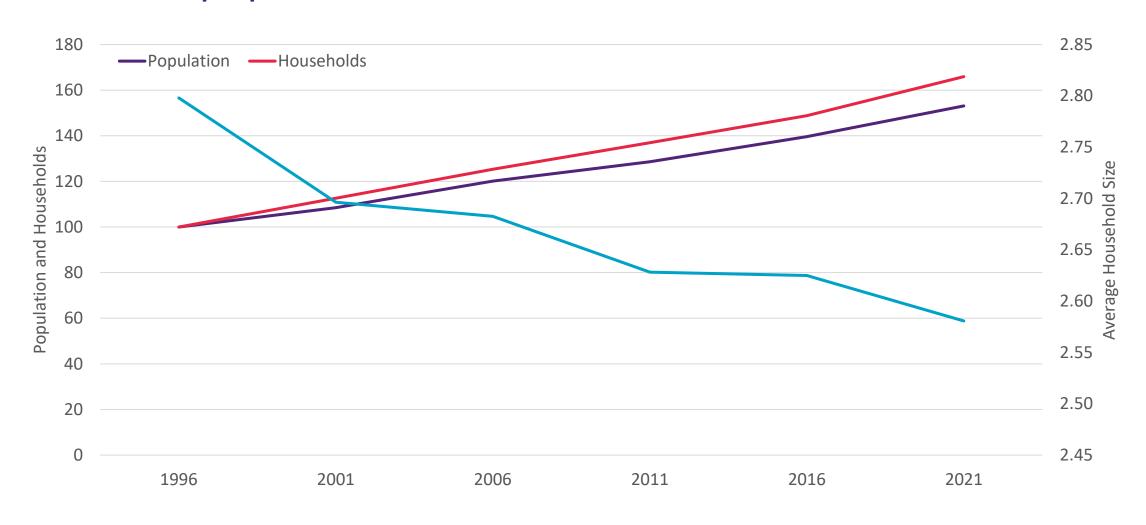


### Population and household growth, Queensland, 1996-2021





### Growth in population and households; 1996 = 100





### Impact of change in AHS

- Between the 2016 and 2021 Censuses, the usual resident population of Queensland increased by 9.6 percent, while households grew by 13.0 percent.
- The average household size (AHS) declined from 2.6 people per household in 2016 to 2.5 people per household in 2021
- Decline in AHS in Qld = extra 32,000 dwellings due to changing household structure
- Australia =130,000 just due to changes in AHS

			Extra
			dwellings due
			_
CA 4 (11D)	Davida Cara da	1111 11.	to change in
SA4 (UR)	Pop'n Growth	HH growth	AHS
Brisbane - East	7%	11%	1648
Brisbane - North	9%	11%	899
Brisbane - South	9%	13%	2561
Brisbane - West	6%	9%	493
Brisbane Inner City	17%	26%	5418
Cairns	6%	8%	1174
Darling Downs - Maranoa	2%	5%	1036
Central Queensland	3%	7%	2003
Gold Coast	12%	15%	796
lpswich	14%	18%	2404
Logan - Beaudesert	13%	16%	2220
Mackay - Isaac - Whitsunday	7%	7%	523
Moreton Bay - North	12%	16%	2435
Moreton Bay - South	12%	16%	1468
Queensland - Outback	0%	2%	801
Sunshine Coast	15%	17%	56
Toowoomba	8%	12%	890
Townsville	2%	5%	2666
Wide Bay	7%	10%	2008
Total	10%	13%	31875



### **Explanations for change in AHS**

### Long term trends

- Population ageing (-)
- Fertility decline (-)
- Changing patterns of partnership formation (-)
- Delayed exit from the parental home (+)
- Increased international migration (+/-)
- Changing housing preference (+/-)

### Impact of COVID-19

- Less willingness to live in group households (-)
- Return to the parental home (+)
- Rising cost of housing (+)

#### Speech

#### **Housing in the Endemic Phase**

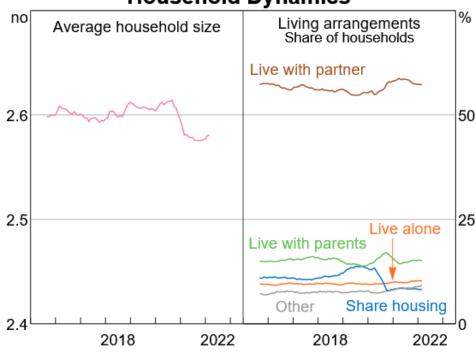
Luci Ellis [\*]
Assistant Governor (Economic)

Keynote Speech to the UDIA 2022 National Congress
Sydney – 25 May 2022

Audio ● 17.8MB Q&A Transcript Download PDF 481KB



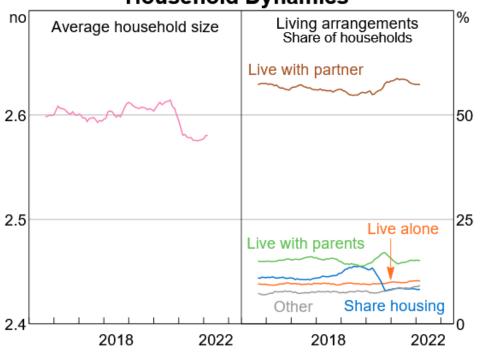
Graph 1
Household Dynamics\*



<sup>\*</sup> Based on self-reported survey data; six-month moving average. Sources: RBA; Roy Morgan Single Source

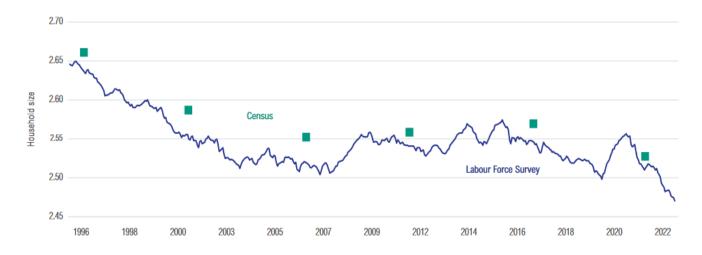


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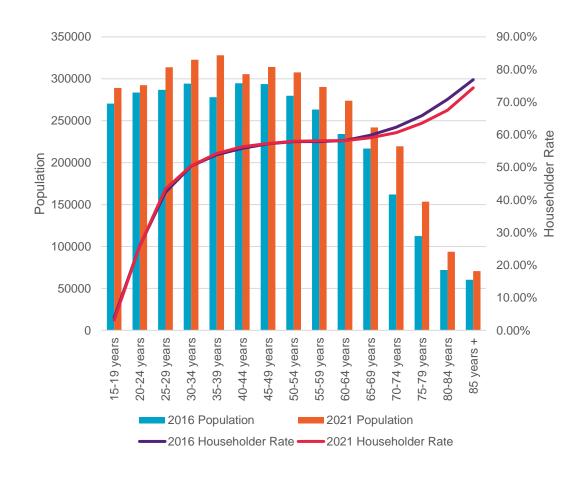
gure 2.4 Average household size – Census and Labour Force Survey estimates





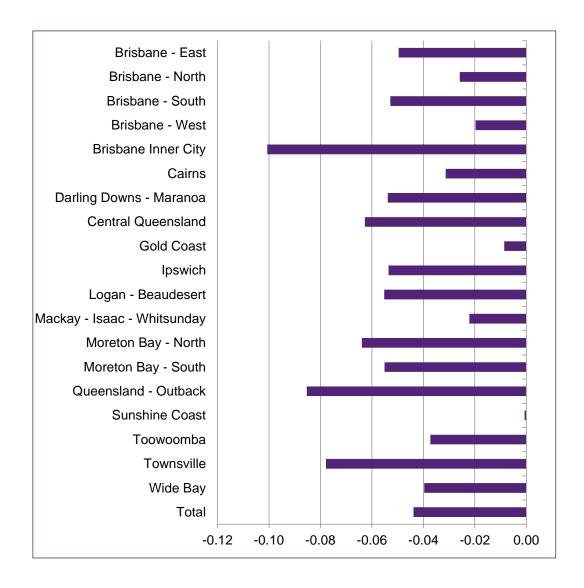
Explanation of shifts in AHS can be made by reference to two types of factors:

- 1. Changing population composition
- Changing household formation behaviours (period and cohort effects)





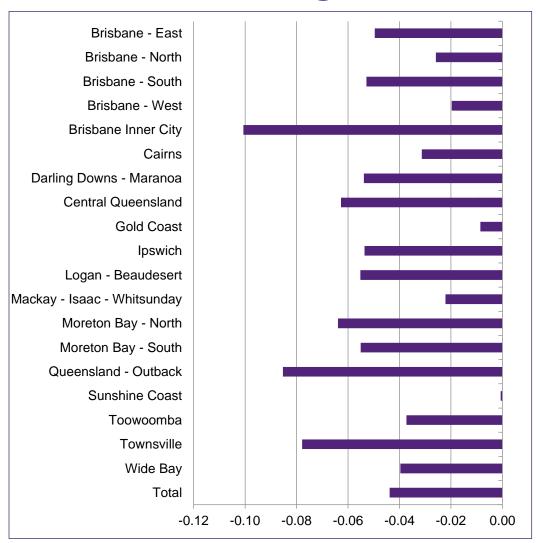
### Change in AHS: Das Gupta decomposition

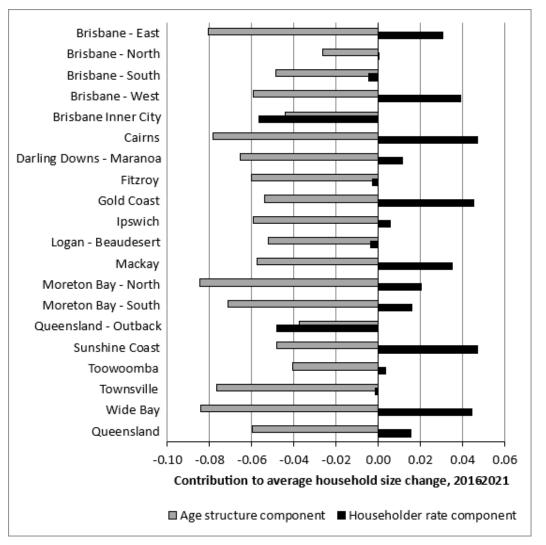


- Das Gupta's (1993) decomposition method of demographic rates from crossclassified data. This method allows us to quantify the additive contributions of changes in population composition and changes in household formation behaviour to the difference in average household size (Cooper et al 2015)
- Related to demographic standardisation
- 1 factor decomposition into an age and rate effect



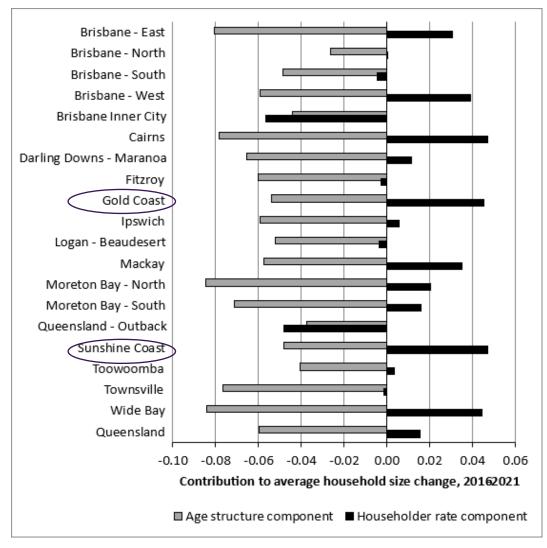
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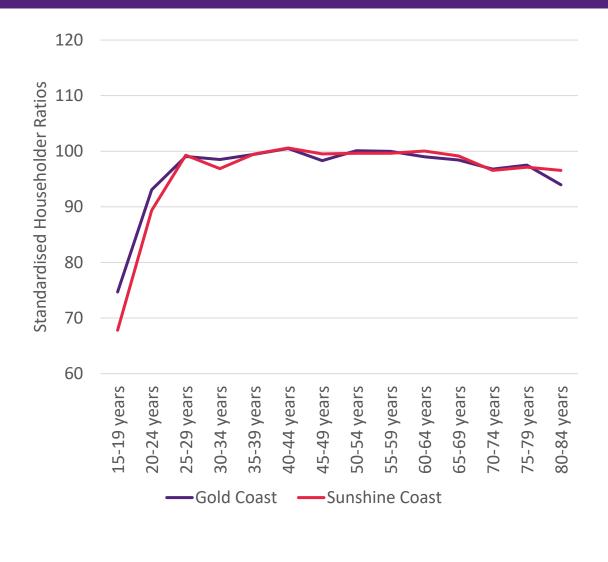




Strong impact of population ageing on AHS. There is evidence of shifts in household formation behaviours – but these are generally putting **upward** pressure on AHS.

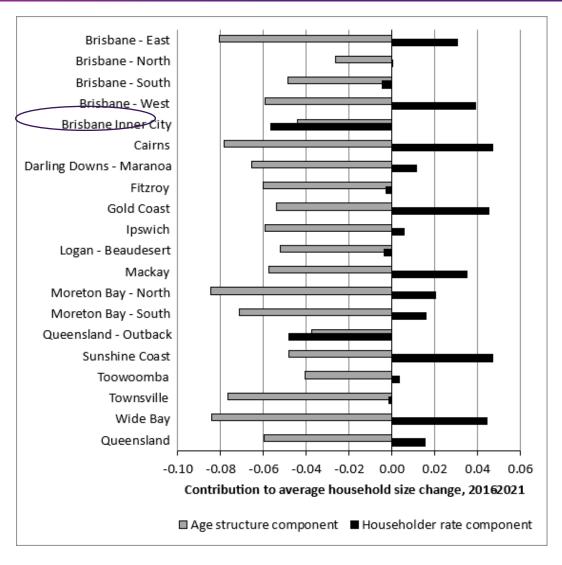


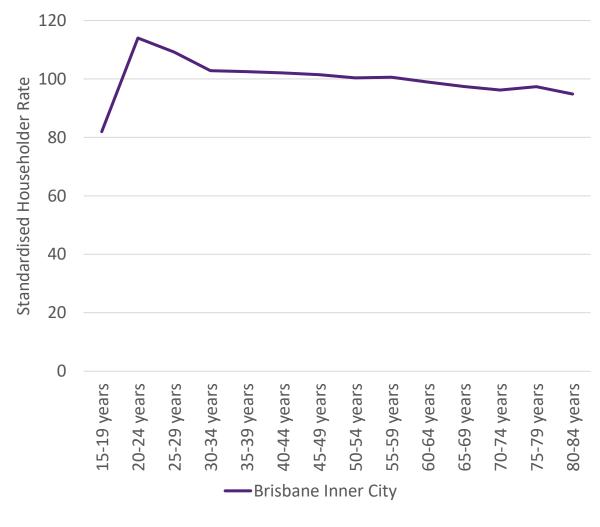




There is regional variation in patterns of household formation. In selected high-growth areas including the Sunshine Coast and Gold Coast, both young and older adults are much less likely to form their own households in 2021 than in 2016.



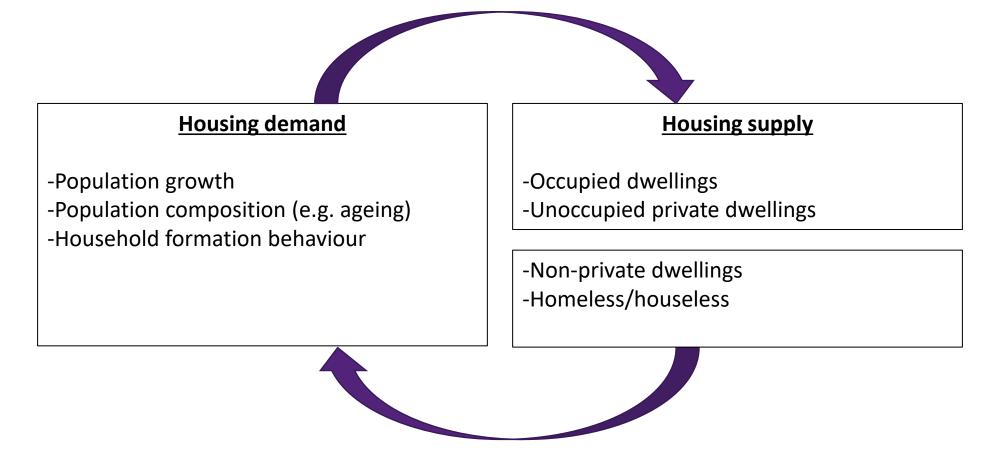




Adults aged 20-24 in Inner Brisbane more likely to form their own households than in 2016.



### A simple demographic model of the housing system





### Housing supply

2016		Dwelling occupancy on census night		
		Occupied	Unoccupied	Total
Dwelling occupancy	Occupied	8,713,202†	435,224	9,148,426
on a usual residence basis	Unoccupied	148,418†	604,655	753,073
	Total	8,861,620†	1,039,879†	9,901,499†

2021		Dwelling occupancy on census night		
		Occupied	Unoccupied	Total
on a usual residence	Occupied	9,647,543†	186,821	9,834,364
	Unoccupied	160,883†	856,955	1,017,838
	Total	9,808,426†	1,043,776†	10,852,202†

Reason	1986
For sale	6.5%
Rental (short and long term)	11.3%
Newly completed	3.8%
Repairs or alterations	4.4%
Holiday home	24.7%
Awaiting demolition	1.2%
Resident absent	34.7%
Other	13.5%
Total	100%

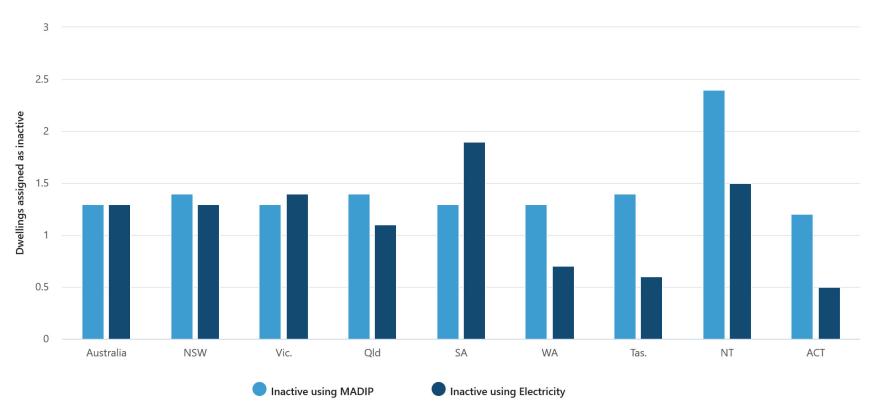
+ 264,765 Unoccupied on a usual residence basis

Source: Wilson, Sigler and Zhao 2022



### Inactive dwellings (MADIP)

Dwellings assigned as inactive using MADIP and electricity data, by state/territory



Source: Australian Bureau of Statistics, Administrative data snapshot of housing 30 June 2021



#### Dwelling demolitions approved, Queensland, South Australia & Western Australia



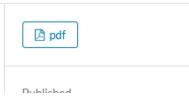
Source: Australian Bureau of Statistics, National, state & territory level dwelling demolition approvals 9/06/2021

### Living in more than one place: capturing dual-local lives in the 2026 Census

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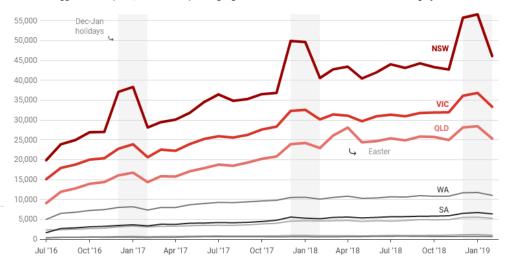




#### Airbnb listings spike during holidays

Monthly Airbnb listings by state and territory, July 2016 to February 2019.

The three biggest states (NSW, VIC and QLD) are highlighted in red. Other states and territories are in grey.



Grey highlight ranges indicate the holiday months of December and January

Data excludes listings from other territories (eg. Jervis Bay)

CRICOS code 00025B

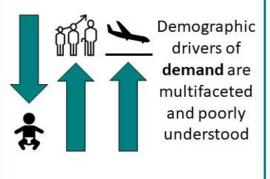


### **Future Work**

### CONTEXT

Australia is in a housing crisis driven by a mismatch of supply and demand





#### STUDY DESIGN

1. Have our behaviours changed or has our population changed?

Census 2006-2021

Decompose

ageing migrants empty-nest lone group

2. How can we better measure shifting housing demand?



Standardise and differentiate



3. What impact will demographic shifts have on future demand?

Analytic Projections



#### **OUTCOMES**

New knowledge of the demographic drivers of increasing household demand

New toolkit of leading indicators of household demand

Practical impact for planning through improved forecasts of household demand

## Questions?

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