Housing demand in Queensland: Ageing and Regional Change

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The Queensland Government is holding a housing summit on 20 October 2022 to tackle the state's housing affordability crisis. While much of the media attention to date has focused on constrained housing supply as the primary challenge, the issue may not be as straightforward. The University of Queensland's City Impact Lab has investigated key factors which drive housing demand and our research reveals some interesting findings for Queensland.

In this short research brief, we explore the shifts in population size and age structure and patterns of household formation in Queensland between 2016 and 2021. The data are drawn from the 2016 and 2021 Australian Censuses of Population and Housing based on the Family/Household Reference Person indicator (RPIP).

What's happening in Queensland

Queensland's growing population is commonly cited as the main reason for pressure on housing supply, when it is a combination of growth, demographic shifts and contemporary living arrangements which drive the demand for housing across the state.

The number of households (i.e. lone, related and unrelated people who live in a dwelling) is changing, reflecting growth in the adult population as well as shifts in age distribution, with older individuals more likely to be heads of households. Living arrangements are also changing in response to economic and social factors, for example, young adults staying longer or returning to the parental home, impacting the overall level of household formation. The relationship between housing and demography is therefore reflexive. On the one hand, demographic shifts, such as population ageing, increase the demand for housing.

Observations

- Households grew at a faster rate than the population between the 2016 and 2021 Census.
- Population ageing was the main driver of this growth as the baby boomer cohorts reached older ages.
- Older and younger Queenslanders are less likely to be leading their own households in 2021 than in 2016. This may reflect behavioural responses to the COVID-19 pandemic, including market factors.
- There is regional variation in patterns of household formation. In selected high-growth areas including the Sunshine Coast and Cairns, young adults are much less likely to form their own households in 2021 than in 2016.

On the other hand, shortages in supply can lead to changes in patterns of household formation at different ages. To understand the role of demography in the housing system it is necessary to understand both the compositional and behavioural dimensions.

Drivers of household formation

Between the 2016 and 2021 Censuses, the Usual Resident Population of Queensland increased by 9.6 percent, while households grew by 13.0 percent. Consequently, the average household size declined from 2.6 people per household in 2016 to 2.5 people per household in 2021.



Population growth was accompanied by ageing of the population, with the median age of Queenslanders increasing from 37 years in 2016 to 38 years in 2021. Figure 1 shows the growth in Queensland's population by five-year age groups over this intercensal period. The largest relative increases in population are observed in older age groups, with the number of 70-74 year-olds increasing by 35 percent and the number 75-79 year-olds increasing by 37 percent.

As seen in Figure 1, Householder Rates trend upwards with age. This leads to an increase in housing demand as populations age. Between 2016 and 2021, however, Householder Rates at older ages declined.

Older Queenslanders are less likely to lead households

In 2021, older Queenslanders were less likely to be leading households than in 2016. This suggests that older Queenslanders are increasingly living with other people i.e. partners, older children, or other unrelated individuals. Declines in Householder Rates were also observed among young adults aged 15-19 years suggesting delayed departure from, or return to, the parental homes.

Small increases in Householder Rates were observed among Queenslanders aged 25-29 years. Householder Rates were relatively stable at other ages suggesting no significant changes in the living arrangements of other households.

Fewer households than expected in Queensland

To better understand the joint contribution of population ageing and changes in Householder Rates to household formation we calculate a Standardised Householder Ratio (SHR). An SHR above 100 implies more households were formed than expected based on changing demographic composition. An SHR below 100 implies that fewer households were formed.

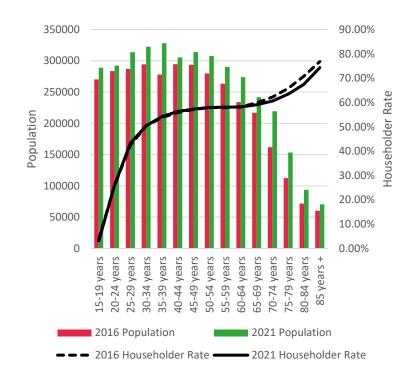


Figure 1: Population and Householder Rates by 5 year age groups, Queensland, 2016 and 2021

The Standardised Householder Ratio for Queensland in 2021 was 99.5. This means that there was half a percent fewer households in Queensland than what we would expect based on changes in the age structure of the population. This highlights the importance of behavioural shifts in reducing overall housing demand in Queensland.



Image 1: Cairns suburbia, Adobe Stock Images



Regional Shifts in Household Formation

A key feature of the contemporary housing crisis has been its regional dimension (Leishman. C. 2022). et.al. Across Queensland living arrangements and household formation trends have changed significantly within metropolitan and regional areas.

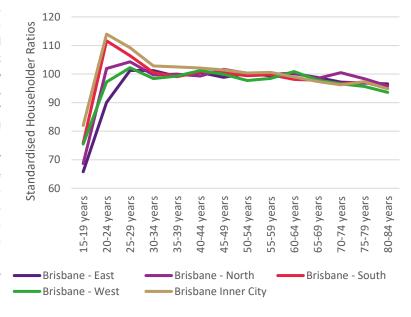
Table 1 reports population change, household Standardised Householder Ratios change, and (SHRs) for Queensland Regions (SA4s). All regions grew between 2016-2021, with Brisbane Inner City growing by 17 percent and Queensland - Outback growing at just over 0 percent. In all regions except Mackay-Isaac-Whitsunday, the number of households grew more than the population.

To explore the contribution of shifting age structure we calculate Standardised Householder Ratios (SHRs). The SHRs range from 98.3 in Cairns, suggesting almost 2 percent fewer households were formed than what would be expected based on shifts in age structure alone, to 102.4 in Brisbane Inner City, implying 2.4 percent more households were created. Regions with 1 percent fewer households than expected include Cairns, Sunshine Coast, Gold Coast, Wide Bay, Brisbane-West Brisbane-East. Regions with 1 percent more households include Queensland-Outback and Brisbane Inner City.

The SHRs presented in Table 1 obscure important differences in household formation by age. In Figures 2 – 4, Age-Specific SHRs are shown for the Brisbane Region; the Rest of Southeast Queensland; and Regional Queensland. There have been significant changes in household formation in Brisbane. The level of household formation among young adults 15-19years has dropped markedly. This likely reflects the departure of international students during the COVID-19 pandemic as well as the delayed departure from, or return to, the parental home by other young Queenslanders. The picture is more varied for people in their twenties. In Inner Brisbane and Brisbane-South, 10 percent more households were headed by 20-24 year-olds in 2021 than expected. This shift may be a response to growth in attached housing stock encouraging household growth in these regions. By contrast, the SHR for 20-24 year-olds in Brisbane-East was 10 percent lower. In most parts of Brisbane, the level of household formation among older adults was lower than Figure 2: Age-Specific Standardised Householder Ratios for the Brisbane Region expected after controlling for shifts in age structure.

Table 1: Population change, Household change and Standardised Householder Ratios (SHRs), 2016-2021, Statistical Level Area 4s, Queensland

Queensland Regions (SA4s)	Population change 2016-2021	Household change 2016- 2021	SHR
Brisbane Inner City	17%	26%	102.4
Queensland - Outback	0%	2%	101.9
Central Queensland	3%	7%	100.3
Townsville	2%	5%	100.3
Logan - Beaudesert	13%	16%	100.1
Toowoomba	8%	12%	100.1
Brisbane - South	9%	13%	100
Brisbane - North	9%	11%	99.9
lpswich	14%	18%	99.9
Darling Downs - Maranoa	2%	5%	99.8
Moreton Bay - South	12%	16%	99.6
Moreton Bay - North	12%	16%	99.4
Mackay - Isaac - Whitsunday	7%	7%	99.1
Brisbane - East	7%	11%	98.9
Brisbane - West	6%	9%	98.6
Wide Bay	7%	10%	98.6
Gold Coast	12%	15%	98.4
Sunshine Coast	15%	17%	98.4
Cairns	6%	8%	98.3



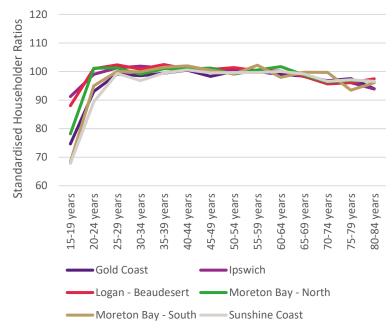


Figure 3 Age-Specific Standardised Household Ratios for the Rest of Southeast Queensland

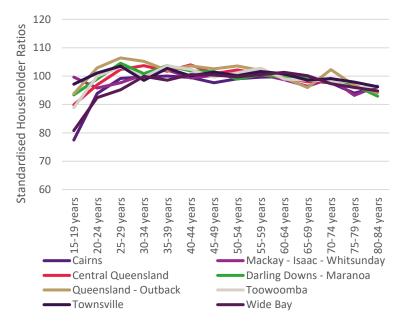


Figure 4 Age-Specific Standardised Household Ratios for Regional Queensland

References

Leishman, C., Aminpour, F., Baker, E., Beer, A., Crowe, A., Goodall, Z., Horton, E., Jacobs, K., Lester, L., Torchia, S., Maclennan, D., Martin, C., Nash, M., Pawson, H., Rowley, S., Stone, W. and Ong ViforJ, R. (2022) Australia's COVID-19 pandemic housing policy responses, AHURI Final Report No. 376, Australian Housing and Urban Research Institute Limited, Melbourne, https://www. ahuri.edu.au/research/final-reports/376, doi: 10.18408/ ahuri3227801.



Declines in the propensity of Queenslanders aged 15-19years to form households were observed in most other parts of Queensland, with the exception of Mackay-Isaac-Whitsundays. More concerning from a policy perspective is the decline in household formation among adults in their 20s. For example, the Sunshine Coast saw 10 percent fewer 20-24-year-olds heading up households than expected based on 2016 Householder Rates. Large declines (>5 percent) in the levels of household formation in this age group were also observed in Gold Coast, Moreton Bay South, Wide Bay and Cairns. The precise drivers of this regional variation is unknown, but it may reflect local housing market dynamics affordability issues among Queenslanders. Critically it is this age group that would traditionally be looking to form their own household in the next 5 to 10 years. The decline household formation among Queenslanders is also observed across the state. It is unclear if this represents a cohort effect, with baby boomers choosing to live with other family members, or a short-term response to the COVID-19 pandemic.

Conclusion

People must be at the centre of any well-formed housing policy. As Queensland's population continues to age the demand for housing will outpace population growth. The relationship between demography and housing is reflexive. In periods of housing shortage, individuals may adapt by moving-in with families or staying at home longer, however, this is not possible for all people and not sustainable for many. It is clear that 2016-2021 has seen shifts in the levels of housing formation among both young and older Queenslanders. More research is needed to understand the drivers of these changes. It is important to recognise, however, that these shifts likely represent future pent up demand for housing that needs to be realized in the near to medium term.

Definitions

Householder Rate - the number of household representatives divided by the number of persons in private households. These can be calculated for the total population aged 15 and over or for five year age groups (Age-Specific Householder Rate).

Standardised Householder Ratio - calculated by multiplying the number of people in each age group in 2021 by the corresponding Age-Specific Householder Rates in 2016 to determine the expected number of households. The observed number of households in 2021 is then divided by the expected number of households and multiplied by 100.

