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P1.54 PROCURING SOCIAL AND AFFORDABLE HOUSING

CHANGING DEMOGRAPHICS AND TYPOLOGIES

Research Report

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Preface

The Sustainable Built Environment National Research Centre (SBEnrc), the successor to Australia's Cooperative Research Centre (CRC) for Construction Innovation, is committed to making a leading contribution to innovation across the Australian built environment industry. We are dedicated to working collaboratively with industry and government to develop and apply practical research outcomes that improve industry practice and enhance our nation's competitiveness.

We encourage you to draw on the results of this applied research to deliver tangible outcomes for your operations. By working together, we can transform our industry through enhanced and sustainable business processes, environmental performance and productivity.

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1. Executive summary

The changes occurring in the demographics of those needing access to social and affordable housing in Australia, and the associated impact on housing typologies, is the focus of this report. The aim of the report is to inform approaches to the provision of such housing over the next 20 years. This research is one element of the Sustainable Built Environment National Research Centre's (SBEnrc) *Procuring Social and Affordable Housing* project[1]. This project has also investigated current and emerging social procurement approaches and funding and financing models, in order to develop a set of social procurement criteria to inform policy and delivery decision-making.

This report addresses current and emerging responses to the present situation in which social housing waiting lists are excessive and unlikely to be fully addressed in the foreseeable future. Home ownership and private rental is now unaffordable to many of those on low and medium incomes in a range of locations across Australia, placing additional pressure on social housing waiting lists. It is also now evident that housing stock (especially in social housing) no longer aligns with the demographic profiles of those needing and/or wanting housing. And there is also growing community demand for appropriate, resilient and resource-efficient housing, and community connectedness.

Key demographic changes highlighted in this report include:

1) The population is aging.
2) Household composition is changing.
3) Cities are key growth areas.
4) Home ownership is declining.

Together, these changes suggest the need for significant increases in social and affordable housing. This is particularly so in inner city and middle-ring areas in Perth, Brisbane, Sydney and Melbourne, where demand outstrips supply. Providing appropriate housing in remote and very remote Indigenous communities is also a priority highlighted in this report.

The changes in demographics identified are largely due to: longer life expectancy; migration (including of Indigenous households to urban locations); and growing household diversity (e.g. one person and multigenerational households). These general trends are altering the composition of households, and affecting lifestyles and the demand for appropriate housing. In terms of social and affordable private rental, these trends are affecting the capacity of governments and housing providers to effectively address specific needs.

Key needs in terms of changing housing typologies highlighted in the report include:

1) More diverse housing typologies and approaches are needed which: are affordable (reduce up-front costs); are appropriate (respond to current and emerging cohort demographics); ensure affordable living (i.e. energy, water and transport); are resilient (address climate adaptation); and address community connectedness.
2) Indigenous housing for remote and very remote Indigenous communities which addresses environmental, cultural and spiritual needs.
3) Appropriate housing (in the right location) for those with a disability.
4) In urban centres higher density infill, more affordable community and private rental housing and inclusionary zoning targets for both social and affordable housing.
5) Responsive planning systems.

What is also important is that we build a resilient Australian housing system, especial for those needing social and affordable housing. To do this we need to be able to better track and use data to

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[1] http://sbenrc.com.au/research-programs/1-54/

respond to trends in cohort demographics, in order to better align housing portfolios. This is now being undertaken in several Australian States, where administrative data is being better utilised to build evidence-based policy. There is a need for such data across the whole population to be better tracked, visualised and shared across the housing system as a whole, to inform future planning and construction.

A note of caution is also raised in terms of following current trends in the provision of housing types. The growth in social isolation has been recently highlighted by several organisations including Families Australia[2]. This SBEnrc report finds a strong trend in the Australian population towards single person households, and thus a need for additional 1-2 bedroom housing to meet this need. However, we need to consider if this is sustainable as a society, and for individuals. Are there other policy initiatives we should be investigating before committing to long-term housing portfolios which support this way of living? One such example is the growing awareness of elder intentional communities[3], and associated housing typologies. Future research in this area, exploring other ways of living to ensure housing system resilience, should be considered.

2. Background

The research question guiding this investigation is 'how are Australian housing typologies changing and how do they need to change to face growing demands, demographic variations and sustainability issues?'

The key aim of this part of the *Sustainable Built Environment National Research Centre* (SBEnrc) research project *Procuring Social and Affordable Housing*[4] is to understand how social and affordable housing will need to change in the next 20 years in line with demographic changes in the key cohorts. For example, in relation to other social measures such as community engagement, employment, education, resource efficiency (e.g. energy, transport and water), health and wellbeing and social connectedness, as identified in previous SBEnrc research projects[5,6].

In 2017, a limited review of literature concerning Australian and international approaches to expected changes was conducted. The Australian focus was on the States of Western Australia (WA), Queensland (Qld) and New South Wales (NSW). The team reviewed Australian Housing and Urban Research Institute (AHURI) research and other academic and industry literature. International literature was also reviewed, comparing practices and examples in Canada[7], the US[8], the UK and Europe[9].

The literature shows issues of housing affordability are affecting many areas in Australia, and impacting various segments of the population including those on low to moderate incomes, aging households and first home buyers (with many locked out of the housing market and experiencing increased private rental prices). This is, in turn, putting increased pressure on social housing resources. The literature also indicates that demographic trends are changing the nature of households in need of social and affordable housing, resulting in a mismatch between those in need and existing public housing stock. A tight fiscal and economic environment also means that there is limited funding available from traditional sources for public housing. Innovative approaches to

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[2] https://familiesaustralia.org.au/loneliness-a-growing-national-policy-challenge/

[3] http://www.geron.uga.edu/eic/elderintentionalcommunities.html

[4] http://sbenrc.com.au/research-programs/1-54/

[5] http://www.sbenrc.com.au/research-programs/1-31-rethinking-social-housing-effective-efficient-equitable-e3/

[6] http://www.sbenrc.com.au/research-programs/1-41-valuing-social-housing/

[7] https://www.cmhc-schl.gc.ca/en/

[8] https://www.nhc.org/

[9] https://www.enhr.net/

housing and community typologies are thus necessary to address the changing demographics and thus needs of key cohorts. This requires new solutions for the design and delivery of affordable, appropriate, sustainable and diverse housing portfolios.

The Productivity Commission's *Report on Government Services* (2017) defines social housing as 'rental housing provided by not-for-profit, non-government or government organisations to assist people who are unable to access suitable accommodation through the private market'. One aim of social and affordable housing is to enable households on low to moderate incomes to acquire independence to migrate to the private market. Another key focus is to provide a safety net for people without the personal resources to address their housing needs (e.g. those with a disability and/or chronic illnesses). People who are eligible for social housing may also be eligible for affordable housing properties (generally for households on higher levels of income). Affordable housing is managed similarly to private rental property, but with eligibility criteria. Managers are mostly not-for-profit Community Housing Providers (CHPs) (Figure 1).

Figure 1 - Social housing programs across Australia by total number of dwellings (30 June 2016)
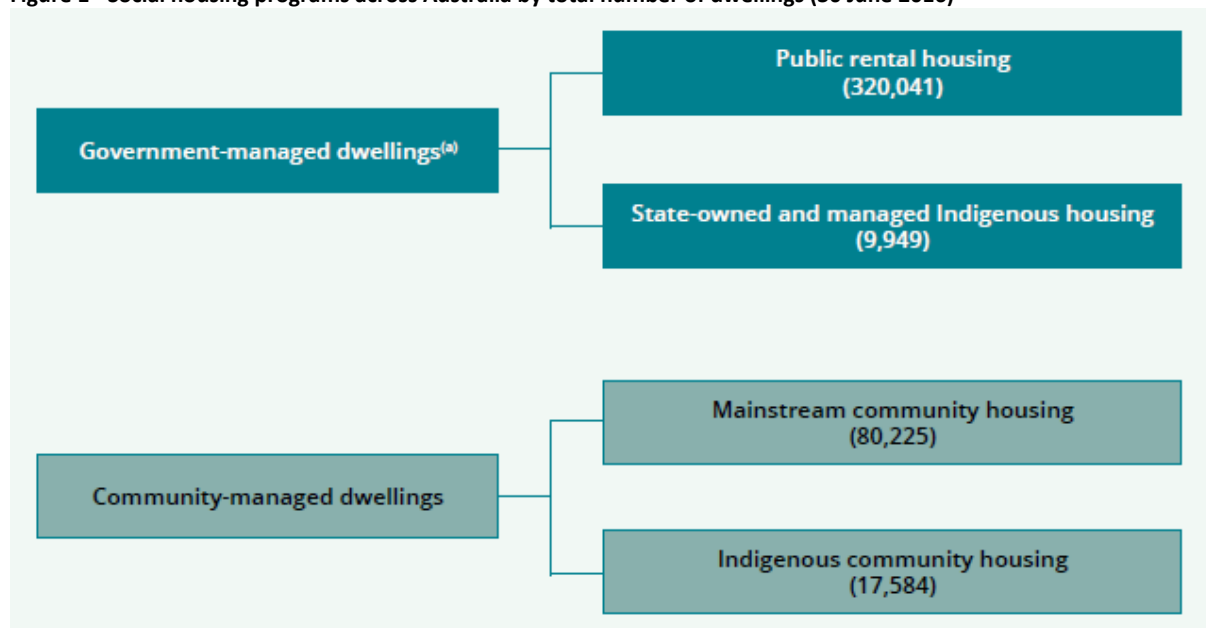
 (a) Excluding government-managed Northern Territory (NT) remote public housing (5,046 dwellings).
Source: Australian Institute of Health and Welfare, 2017

An important context for the following analysis and conclusions is the diversity which exists across and within Australian States and Territories.

> *The Australian outback makes up 5.6 million square kilometres (73%) of Australia's land mass and is characterised by relatively vast natural environments and low population densities. Of the existing dwellings in these sparsely populated areas, social housing makes up a notably high proportion of the housing stock with the highest rates recorded in the Northern Territory. For example, in East Arnhem, over 2 in 5 dwellings were social housing dwellings (44% or 1,111 of 2,513 dwellings). However, at a national level, less than 10% of Australia's social housing stock falls in Very Remote and Remote Australia (6% or 22,000 dwellings) with the majority of social housing dwellings located in Major cities (69% or 241,000 dwellings)'. (AIHW 2018)*

The following, through an analysis of conditions in WA, NSW and Qld, attempts to address some of this diversity.

3. Social and affordable housing

'Social housing stock not keeping pace with household growth; 5.1 per 100 households in 2007–08 down to 4.6, 2016–17' (AIHW 2018). Recent years has seen a decline in the share of dwellings in Australia accounted for by public rental housing (not include community housing). Census data for 1981 and 1996 shows a rise in public rental stock of 43 percent from 1981- to 1996. By contrast, from 1996 to 2011 there has been a decline in the share accounted for by public rental housing of 4.1 percent (AIHW 2018).

3.1. Current and changing needs

The range of people in need of social housing and affordable rental housing is changing and broadening in comparison to past decades. This is due to the reasons explained above and: the ensuing residualisation of public and social housing; and the persistent and the entrenched poverty occurring in some groups of our society, despite 25 consecutive years of economic growth (Hayes & Hacker, 2017). Those experiencing disadvantage is a diverse grouping, with differing needs and expectations. In a shift from traditional availability of public housing to low income households, public housing allocations are increasingly focused on households with the greatest need - being 'households that at the time of allocation are homeless, in housing inappropriate to their needs, in housing that is adversely affecting their health or placing their life and safety at risk, or, have very high rental housing costs' (Australian Government Productivity Commission 2018) (Table 1).

Table 1 -Proportion of new allocations to households in greatest need (See full report for definitions footnotes and caveats (Australian Government Productivity Commission 2018)
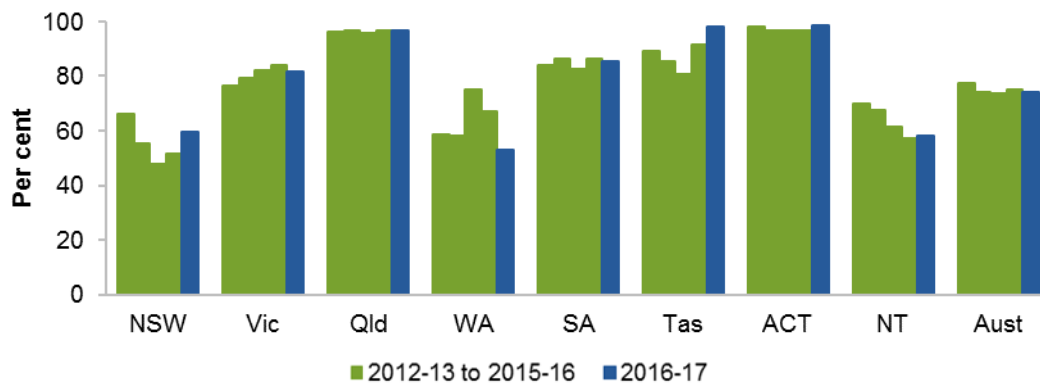
Table 2 provides a profile snapshot of social housing tenants across Australia at June 2016.

Table 2 - Ongoing[a] social housing tenants, by selected housing program and selected characteristics, 30 June 2016

| | Number of households (% change from 2008) | Sex[b] (%) | | Age[b] | Living arrangement | Income |
		Male	Female			
Public rental housing	312,000 (−6%)	37	63	54% older Australians (aged 55+)	54% living alone	29% disability support pension
SOMIH	9,700 (−22%)	24	76	64% aged 35–64	36% sole parent with dependent children	32% on other government payments[c]
Mainstream community housing	72,400 (+103%)	41	59	67% aged >45	59% living alone	n.a.

n.a. not available. (a) 'On-going' means that the household's tenancy is not concluded. (b) Excludes cases where sex or age were 'not stated' (less than 3% in each program). (c) 'Other government payments' are government payments provided other than set government allowances, pensions or cash incomes.
Source: AIHW, 2017

Figure 2 illustrates the distribution of socio-economic advantage and disadvantage across Australia, according to the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) Socio-Economic Indexes for Area (SIEFA) score, based on Australian Bureau of Statistics (ABS) 2016 census data[10]. This is included to provide a visual aid to understanding of the geographical scale of the issues which face those delivering housing solutions, and to highlight that areas of great disadvantage exist in often remote and very remote locations. Interactive maps are available by location at the ABS website.

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[10] http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IRSAD%20Interactive%20Map~16

Figure 2 - Distribution of socio-economic advantage and disadvantage according to the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) SIEFA score.

Source:
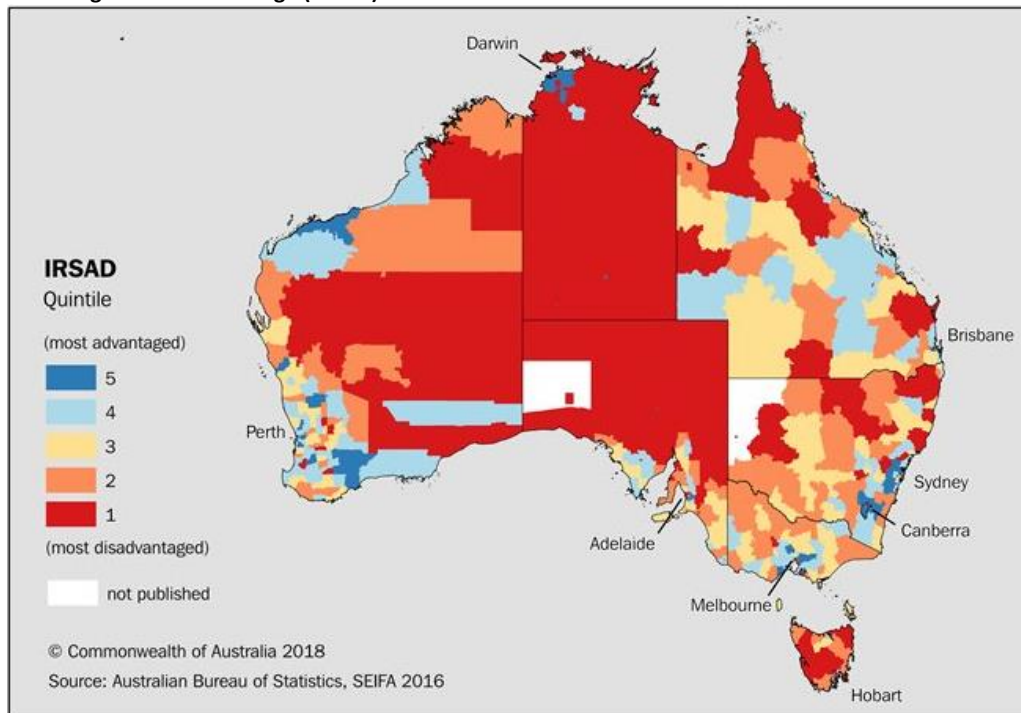**http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IRSAD%20Interactive%20Map~16**

According to the Australian Productivity Commission (2017), by 30 June 2016 most of the households in social housing were on a low income allocated according to eligibility criteria as follows (AIHW in Figure 3 provide an representation of the percentage of such households):

1) Public housing: 312,219 households and 320,041 dwellings; 97.6 percent were on low income with 0.7 percent in rental stress; and 4.2 percent of dwellings were overcrowded.

2) Community housing: 72,410 households and 80,225 dwellings; 95.1 percent were on low income with 4.4 percent in rental stress (typically considered where rent is greater than 30 percent of household income); and 5.3 percent of dwellings were overcrowded[11].

3) State Owned and Managed Indigenous Housing (SOMIH)[12]: 9,660 households and 9,949 dwellings; 94.4 percent were on low income with 0.2 percent in rental stress; and 8.9 percent of dwellings were overcrowded.

4) Indigenous Community Housing (ICH): 13,880 households and 15,643 permanent Indigenous dwellings (latest data available as at 30.06.2015).

AIHW (2018) notes that 'Indigenous households experiencing overcrowding in public rental housing, were more likely to be in Very remote (13%) and Remote (11%) areas than Major cities (8%). SOMIH households in Very remote (17%) and Outer regional (10%) areas were more likely to be living in overcrowded conditions than SOMIH households living in Major cities (8%)'.

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[11] 'In basic terms, overcrowding occurs when the dwelling is too small for the size and composition of the household living in it. In Australia, a dwelling requiring at least 1 additional bedroom is designated as "overcrowded", underpinned by the Canadian National Occupancy Standard' (AIHW 2018).

[12] Not all states have SOMIH for some such as WA it is simply part of mainstream public housing.

Figure 3 – People living in households with a low weekly equivalised disposable household income, relevant to national median 2003-04 – 2015-16.
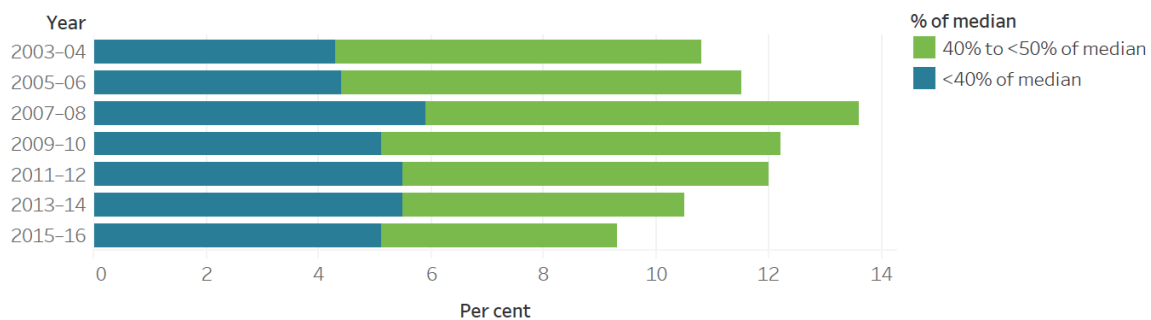
Source: https://www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health/proportion-of-people-with-low-income

The Productivity Commission (2017) suggest that the increase in community housing and a decrease in public and Indigenous housing has been due to the expanding role of community providers supported by changes in Federal and State Government policy that encourage the provision of affordable housing through public-private partnerships. Nevertheless, in some States, rental stress was still detected in some households in community housing (Table 3). This is particularly noted in WA during the resources boom years and in Tasmania[13].

Table 3 - Proportion of low-income households in social housing, spending more than 30 percent of their gross income on rent, at 30 June 2016 (percent)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust/Total
Public housing									
2016	0.7	0.4	-	2.9	-	0.1	0.3	3.5	0.7
2015	0.7	0.4	-	1.5	-	0.1	0.1	6.6	0.6
2014	0.4	0.3	0.1	1.4	-	0.1	0.1	6.9	0.5
2013	0.2	0.4	0.2	1.5	-	0.1	0.4	6.9	0.5
2012	0.2	-	0.7	1.3	-	0.1	0.7	1.8	0.4
SOMIH									
2016	0.3	n/a	0.1	n/a	-	-	n/a	n/a	0.2
2015	0.6	n/a	-	n/a	-	-	n/a	n/a	0.3
2014	0.5	n/a	0.5	n/a	-	-	n/a	n/a	0.4
2013	0.5	n/a	0.8	n/a	-	-	n/a	n/a	0.5
2012	0.5	n/a	1.1	n/a	-	-	n/a	n/a	0.7
Community housing									
2016	3.1	-	9.5	3.0	5.5	20.7	5.1	na	4.4
2015	7.6	0.1	na	17.1	8.9	27.6	0.4	na	8.6
2014	10.4	4.9	na	10.4	3.7	23.0	19.4	na	9.0
2013	8.4	9.5	na	30.4	6.5	27.1	0.6	na	9.8
2012	3.8	-	na	5.0	3.6	26.5	-	na	3.5

n/a: not applicable; na: not available; - nil or rounded zero
SOMIH: State Owned and Managed Indigenous Housing
Source: AIHW (unpublished) National Housing Assistance Data Repository; table 18A.16, cited in Productivity Commission 2017, Chapter 18 Housing, p.13

Table 4 further shows a breakdown of people, aged 15 and over, who face deep and persistent disadvantage (over the period 2001 to 2010).

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[13] In community housing CRA is counted as income though it is a housing specific payment. CRA goes to pay rent so this over inflates that proportion of households that look like they are paying more than 30%.

Table 4 - Demographic cohorts post 15 years old in persistent disadvantage over the period 2001-2010

Cohorts	Percentage of cohort in disadvantage
Living in public housing	23.6
Dependent on income support	15.3
Unemployed	11.5
People with disabilities	11.4
Sole parent families	11.3
Indigenous people	10.8
Highest educational achievement Year 11 or below	9.3
All Australians	4.4

Source: (Hayes & Hacker AIHW, 2017) [14]

Besides government funding (Commonwealth, State and Local), affordable housing attracts resources from other sources including: grant or land contributions; planning incentives; philanthropic sources; Community Housing Provider equity contributions; and from finance secured against assets owned by Community Housing Providers. Chappell (2016) provides useful clarification of those in need of affordable housing (e.g. key workers nurses, paramedics and child care workers) (Figure 4). Whilst having a NSW focus, this figure has relevance Australia-wide.

Figure 4 – NSW housing continuum
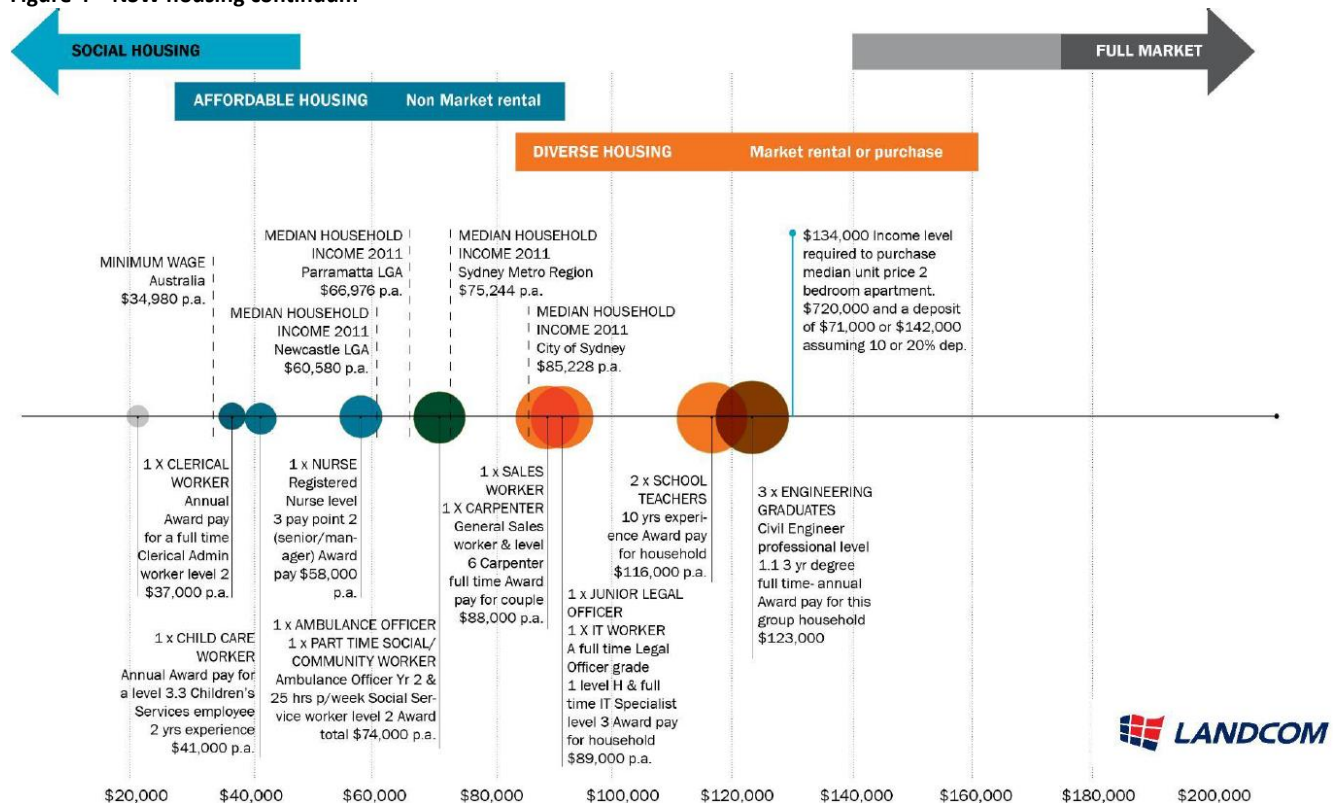
Source: Chappell 2017.

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[14] Deep and persistent disadvantage is directly related to social exclusion, which in turn relates to health, education, income and adverse life events.

3.2. Looking forward

The Australian Institute of Health and Welfare (2017) note that 'between 1994–95 and 2013–14, the proportion of Australians who owned their home outright fell from 42% to 31%'. They also note that over the past 20 years, the proportion of households living in private rentals has increased to 26 percent , with 11.5% of Australian households experiencing rental stress (households with rent payments greater than or equal to 30% of household income)[15].

The Australian Productivity Commission (2017) found an increase of 46 percent of households in community housing and a decrease of 10 percent in public housing over the period 2007 to 2016. This is due to the expanding role of Community Housing Providers (CHPs), supported by changes in government policy that encourage the provision of affordable housing through public-private partnerships. Nevertheless, in some States, rental stress was also detected in some households in community housing. Wood et al. (2017) forecast that the number of households eligible to receive CRA will also increase by 61 percent over the period 2011 to 2031. This will result in an increase of 62 percent in government expenditure, with half of the increase being due to demographic growth and the other half to private rental housing tenure. The authors note that this is due to the combined effect of demographic change and the shifts in the Australian population's tenure profile that will strongly impact the social housing system and related subsidies.

The challenge for the next 20 years is to provide an estimated minimum of 200,000 additional social or affordable dwelling to meet the demands for current and future social housing needs (Milligan et al., 2017). There is currently a waiting list of around 160,000 requests for social housing, due in part to the pressure of rental stress existing in the affordable private market sector.

Current public housing stocks across Australia are still dominated by detached housing, despite the change in needs evident across the country. At the same time we are seeing the rise of Community Housing Providers. AIHW (2017a) note a shift away from public provision towards community housing especially for older single women transferring from public housing and for Indigenous women with dependent children (AIHW 2017a). This is already underway with the provision of community housing in Australia doubling since 2008. This type of trend is reflected in the data in this report, where single person, and single person with children households are on the rise (the former reflected in the need for additional 1 or 2 bedroom accommodation).

In addition, urban consolidation in our cities is requiring key workers to provide health, education and other services to increasingly dense populations. These people however are often not able to find affordable accommodation close to work places, or ready access to public or active transport options which facilitate reasonable travel times between work, schools and home.

The introduction of the *National Disability Insurance Scheme* (NDIS) will also have a significant impact on the social and affordable housing sector in Australia. 'Australia is turning away from segregated and institutional disability housing and moving towards genuine choice and community inclusion through NDIS' Specialist Disability Accommodation (SDA) market' (PwC and Summer Foundation 2017). This will result in around 28,000 people with a disability receiving payments towards to housing costs with rates benchmarked to market prices. The authors note the following features of the current market: 'limited availability of housing stock; few funding sources for development; minimal transparency of potential tenants; a new and uncertain regulatory regime with insufficient future guarantees; and inadequate understanding of the SDA regime by developers, investors, contractors, property managers, disability service providers, people with disability and

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[15] Source:
http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/036?opendocument

their families, and in some cases, various levels of government'. They go on to note the following requirements to effectively meet needs:

1) A *supply of diverse housing types* that meet a range of accessibility needs, in a variety of locations.
2) A *variety of financing options and terms*, including banks, institutional investors, high net worth individuals, families of tenants, developers and other innovative forms of financing, underpinned by a good understanding of the vacancy risk.
3) A *portal* allowing: (i) consumers to locate and assess available dwellings; and (ii) property managers and/or developers of SDA dwellings to identify potential tenants.
4) *Regulatory regime that encourages investment* (including planning and zoning regulations).
5) *Release of government land* in suitable locations.
6) *Efficiency and safety* in providing disability support services in SDA dwellings.

In addition the provision of environmentally, culturally and spiritually appropriate Indigenous housing remains an outstanding issue for Australia. The design of remote and very remote housing, community infrastructure and associated services still needs to be addressed in an effective and appropriate manner.

4. Demographic trends

This section discusses demographic profiles and trends in WA, Qld and NSW. It is noted that: data was not available for all categories; there is some overlaps between categories; and definitions and data organisation varying from State to State.

A review of the literature revealed four major demographic trends with implications for housing in general:

1) The population is aging.
2) Household composition is changing.
3) Cities are key growth areas.
4) Home ownership is declining.

4.1. The population is aging

One of the key demographic trends in Australia is population aging, with the over 65 group almost doubling in size by 2030 (Figure 5) (Cigdem et al. 2015). These projections challenge the system of housing subsidies required by seniors and the associated risks for retirement incomes policy (Cigdem et al., 2015).

Table 5 then highlights changes by age group. This shows the over 65 group growing dramatically with the number of small and single person households in this group thus growing significantly. With this comes an unmet need for specialised housing for these people in appropriate locations.

Figure 5 – Population projections by age band; 2011–31 estimate from the 2011 Census, from ABS population projection time series B (Cigdem et al. 2015)
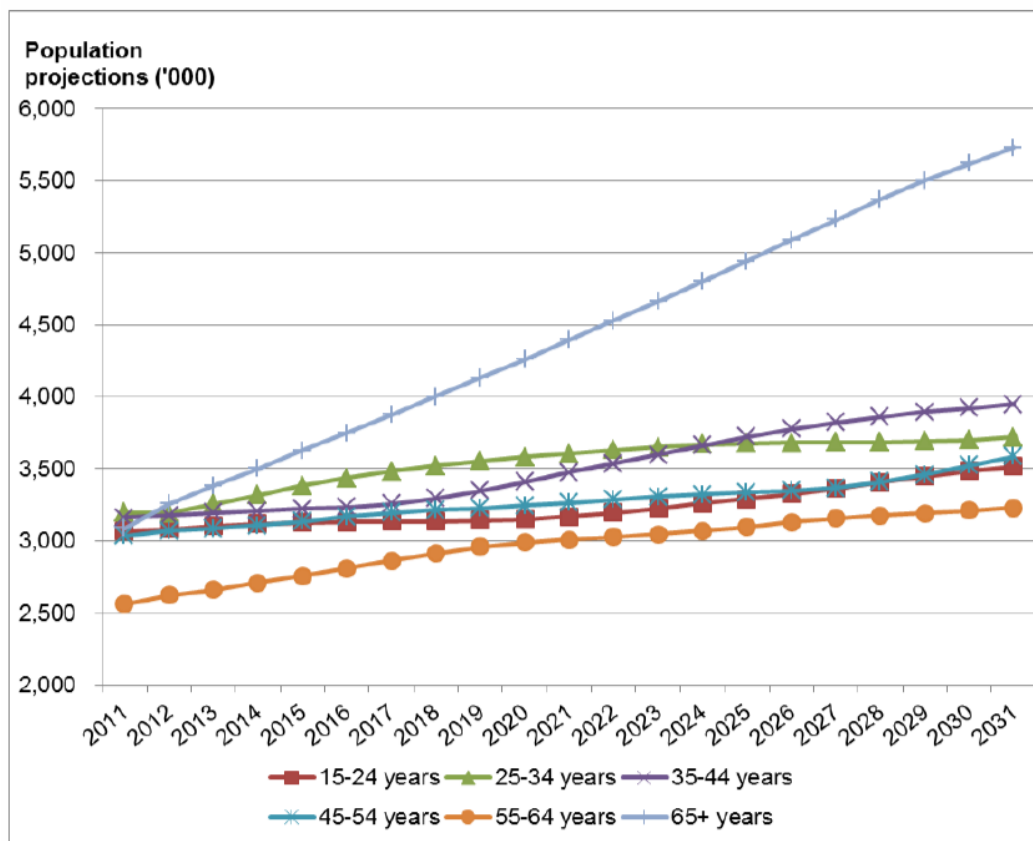
Source: 2011 estimate from the 2011 Census, 2012-2031 estimates from ABS population projection time series B

Table 5 - Demographic trends by age group and impacts on the Australian welfare system

Age cohorts	Trends
65+ years	Expected to double by 2031; singles will increase from 2.3M to 3.9M due to death, separation and divorce.
55 to 64 years	Increasing mortgage holders reaching retirement.
45 to 54 years	Mortgage debt has risen dramatically. In 2002, 89% of home owners in this age range had mortgage debt. This rose to 94% in 2014.
35 to 44 years	
25 to 34 years	Homeownership declined from 36% in 2002 to 25% in 2014. Decline in homeownership has been largest for families with dependent children, falling from 56% to 39%, and for those exiting homeownership due to separation and divorce. 50% of renters stay longer in the rental market, provoking rising prices and consequent rental stress.
18 to 24 years	Cannot afford to buy the first home; stay at parental home for longer.

Sources: based on Cigdem et al, 2015; AIHW, 2017; HILDA, 2017; Wilkins, 2017.

4.2. Household composition is changing

The rapid change in the composition of Australian households is affecting both housing needs and affordability (AIHW, 2017). Yates (2017) points out that the traditional household formation (two parents and children) has been declining in its dominance since 2006. The *Household, Income and Labour Dynamics* (HILDA) report (2017) also shows this trend through a survey conducted between 2001 and 2015. Traditional households, 'Couple with dependent children' and 'Couple without children', are still dominant but declining, as noted in other households such as 'Couple with children (with or without other household members)', 'Single parent with dependent children' and

'Group' households, while emerging household formations such as 'Multi-family' and 'Single parent with non-dependent children' are growing (HILDA 2017). Projections for household types from 2011 to 2036, include (See Section 7.1 for full table) (ABS 2015):

1) Single person households projected to be the fastest growing group, moving from 2.1 million in 2011 to between 3.3 to 3.5 million in 2036 (between 61 to 65 percent growth), reflecting changes in the population age structure.

2) Family households projected to remain the most common households across the country, increasing by approximately 3 million, from 6.1 million in 2011 to between 8.9 to 9.0 million (between 46 to 47 percent growth) by 2036.

3) Multi-family households projected to increase from 367,900 in 2011 to between 504,000 to 527,000 in 2036 (between 37 to 43 percent growth).

4.3. Cities are key growth areas

According to the recent report *Future Cities: Planning for our growing population* (Infrastructure Australia, 2018), Australia's population is estimated to increase by 11.8 million people between 2017 and 2046. This will mainly occur in the nation's biggest cities: Sydney, Melbourne, Brisbane and Perth. As of June 2016, 71 percent of the Australian population lived in major cities, an increase of 21 percent from 2006 (AIHW, 2017).

This sets the context for more detailed assessments of how to increase housing provision for all parts of the big cities, which are subject to major housing pressure due to migration. Meanwhile other areas in Australia in economic decline are experiencing increases in people in living in poverty. 'The distribution of Australian housing accords with the location of the Australian population, with 7 in 10 dwellings (71%) located in Major cities and fewer than 1 in 100 (0.6%) in Very remote areas (AIHW analysis of Census data)' (AIHW 2018). Capital cities host around two-thirds of all Australian households, with 65 percent in 2011 projected to grow to 68 percent in 2036, meaning an additional 4.3 million households.

The largest increase of households over this period is expected to occur in Victoria (adding 1.1 million households), with New South Wales and Queensland projected to gain 1.0 million households each. WA (based on current population projections), is expected to show the fastest household growth of between 85 to 93 percent (ABS 2015) (Table 5). However, recent demographic trends in WA now counter this, and more reasonable growth patterns are expected (ABS 2018). The trend in terms of household numbers however (see Section 7.2) is likely to be largely correct, especially in relation to the difference between the big cities and their regional areas. These increases represent around a 50 per cent increase in number of households over 25 years (mostly in Sydney, Melbourne, Brisbane and Perth), where over 3 million new housing units will be needed between 2011 and 2036. There are also significant variations in regional areas, which are subject to large fluctuations in economic conditions. In times of extreme growth (relating to mining), regional and remote areas experience significant housing pressure.

4.4. Home ownership is declining

There has been a significant decline in homeownership over the past 30 years in Australia (Daley and Coates, 2018) (Figure 6), declining from 71 percent in 1994-1995, to 62 percent in 2013-2014 (AIHW 2017a, ABS 2016). The pattern of home ownership has also changed. While outright ownership fell from 42 percent to 31 percent, there has been an increase from 30 percent to 36 percent in mortgage tenure. The most impacted group are those from 25 to 34 years of age (AIHW, 2017).

Figure 6 - The decline in Australian home ownership. Daley and Coates, 2018.
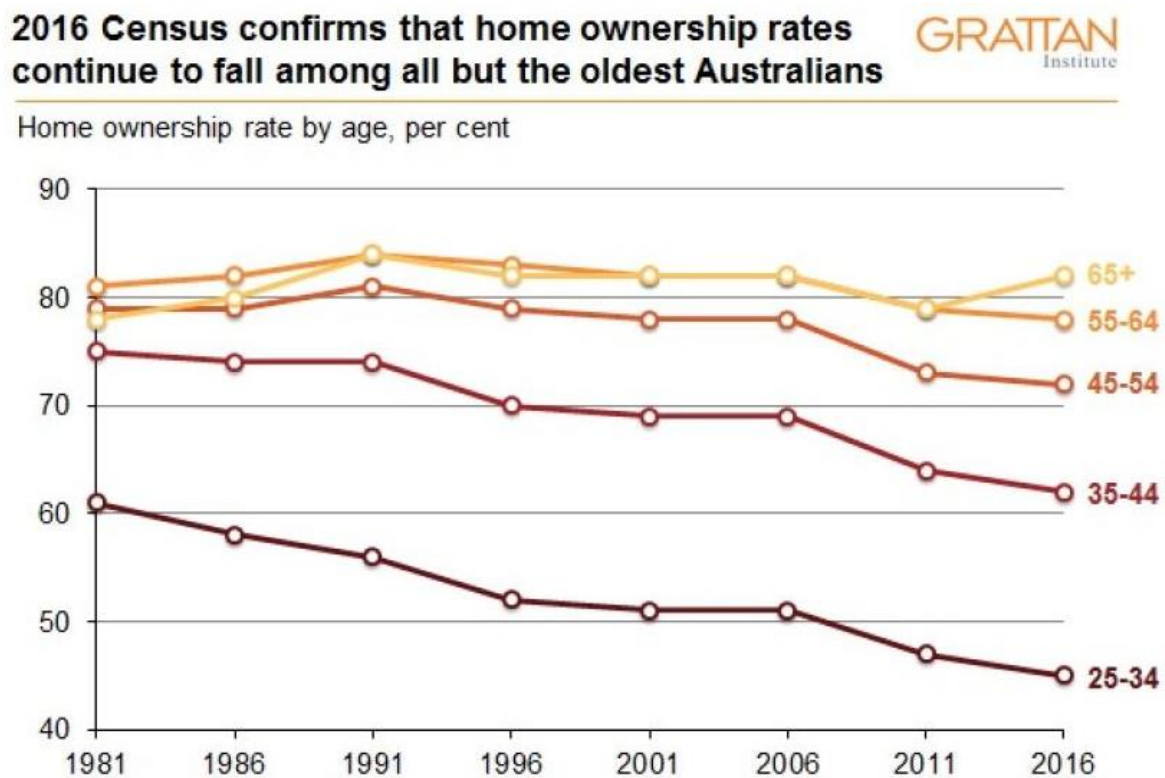
Notes: excludes 'Tenure type not stated'.
Source: Census data; Yates 2015; Colebatch 2017.

The data shows that home ownership remains very high in the 65 and over age group, with a small increase in the past census. All other groups show declining home ownership, especially among young adults (aged 25-34). The causes noted by Daley and Coates include 'rising incomes and falling interest rates, rapid migration, tax and welfare settings feeding demand, and planning rules restricting supply'. This can be especially so in inner city and middle-ring areas. This in turn impacts on housing affordability in both purchase and rental markets. The exit from homeownership, particularly for those who purchased their home in the past decade, is jeopardising re-entry into homeownership (Yates 2017). Consequently, the proportion of households living in private rental accommodation is higher than ever, at 26 percent, with half of the low income portion of these households experiencing rental stress (spending more than 30 percent of their gross income on rent) (AIHW, 2017).

4.5. Regional diversity

The following section focusses on demographic changes and social housing supply in WA, Qld and NSW in particular. It highlights changes and trends in each of these States (and within States), including the alignment between these trends with their public housing portfolios.

4.5.1. Western Australia snapshot

Demographic changes and trends

The population of Greater Perth, as recorded in the 2016 Census, was 1,943,858[16] representing around 78% of the WA's total population of 2,474,410[17] (ABS 2016), with this trend expected to remain into the future, adding about 1.5 million people by 2050 (WAPC 2015a). While families are the predominant households more than half are now small households, with 23 percent single person households (Table 6). There is little difference between Greater Perth and the remainder of WA in terms of employment status and household structure. These numbers, however, hide significant variations in social and economic disadvantage, as well as demographic characteristics within parts of regional WA (e.g. indigenous settlements compared to mining settlements).

Table 6 - Demographic characteristics in Greater Perth and Western Australia (Based on the ABS 2016 Census)

	Greater Perth percent	**WA** percent
Population age	Median age: 36 years 0 – 14 years: 19.1 65+ years: 13.9	Median age: 36 years 0 – 14 years: 19.3% 65+ years: 14
Family composition		
Couple without children	37.5	38.5
Couple with children	46.3	45.3
One parent family	14.5	14.5
Other family	1.8	1.7
Employment status of couple families		
Couple both working full-time	19.8	19.8
Couple both working part-time	4.1	4.1
One working full-time, other part-time	22.3	22.2
One working full-time, other not working	16.9	16.4
One working part-time, other not working	6.0	5.9
Both not working	17.2	17.4
Other (includes away from work)	5.3	5.6
Household composition		
Family household	73	72.7
Single (lone) person	23.0	23.6
Group household	4.0	3.8

Sources:
http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/5GPER?opendocument ;
WAPC, 2015a; HIFG, 2017, WA Communities, 2018

Aligning demographics and housing

The identified small household demographic across WA suggests that smaller dwelling types and sizes are needed in Perth and regional WA. The mismatch between the household composition and the dwellings is highlighted in Figure 7 (WA Communities 2018). In WA, dwellings and households are classified as large, medium and small. Large houses refer to detached houses with three or more bedrooms, with large households typically having four or more people in residence. Medium houses are semi-detached houses with two or three bedrooms, with typically two or three people in residence. Small dwellings are apartments, studios or units with one bedroom, and typically single person households (ABS 2016). ABS (2016) data shows that while 58 percent of WA households are 1 or 2 person, while only 18 percent of housing stock has 2 bedrooms or less, and 42 percent of the housing stock has 4 plus bedrooms.

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[16] http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/5GPER?opendocument
[17] http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/5?opendocument

Figure 7 - Mismatch between household size and provided dwelling size in 2016
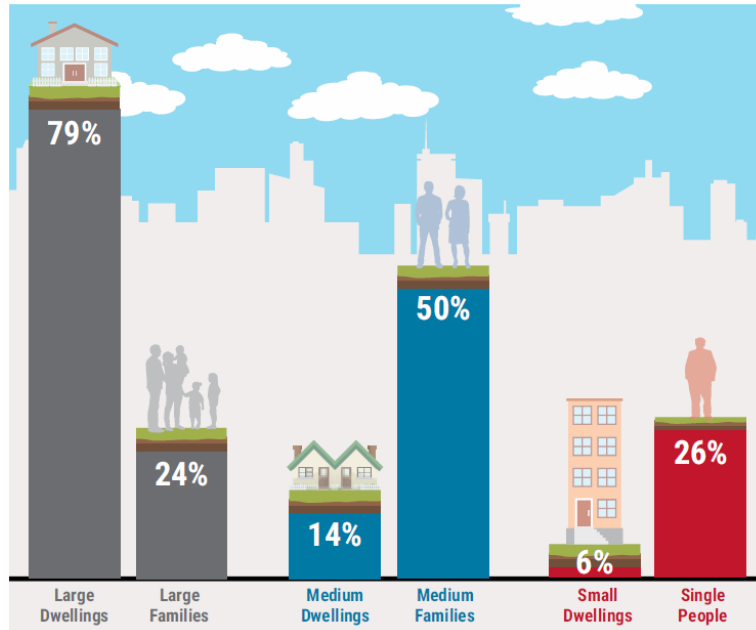
Source: WA Communities, 2018

Given the data around large dwellings and households, both land and dwellings in this category are underutilised. Whereas with medium and small sized dwelling, the supply is currently well under demand. In the *Housing We'd Choose* study for Perth and Peel in 2013, a shift in the balance of new supply is recommended, 'from the existing pattern of 80% separate houses to a more even spread of around 56% separate houses, 35% semi-detached and 9% apartments' (WA Communities 2018).

The *Affordable Housing Action Plan 2017-18 to 2019-20* was launched in May 2018 by the WA State Government, Department of Communities (Housing). This Plan aims to address the above dwelling to household mismatch. It's focus is system-wide, building on the existing *Opening Doors* strategy. There is an emphasis on location, specific needs and dwelling types to focus on a broader grouping of people, from homeless to low and moderate-income earners (WA Communities 2018). There is a target of 35,000 new homes for low-medium income households, with targets by tenure type being: low deposit home loans (56 percent); social rentals (21.3 percent); affordable rentals (12.3 percent); and shared equity (10.4 percent).

The Plan acknowledges affordability as a complex structural problem, which has evolved over the last 15 years, and needs a comprehensive approach rather than simple supply-demand responses. Complex drivers include soft wages growth, and that Commonwealth pensions and the Newstart Allowance have not kept pace with the cost of living (including housing). The Plan has three goals: better outcomes for individuals and families; a responsive housing system; and inclusive and connected communities. The eight focus areas are highlighted in Figure 8 (WA Communities 2018). There is also an important focus on regional, remote and very remote housing, with a priority to 'to improve employment, education and life outcomes through access to housing' through a place-based needs approach.

In terms of social housing, 'the main income types of Social Housing tenants are: 29% aged pensions; 29% disability or medical support pensions; and 19% parental or caring pensions' (WA Communities 2018). That report notes that approximately 1 in 25 homes in WA is social housing, with 14,000 households waitlisted, and 1,320 on the priority waitlist.

Figure 8 - Affordable Housing Action Plan 2017-18 to 2019-20
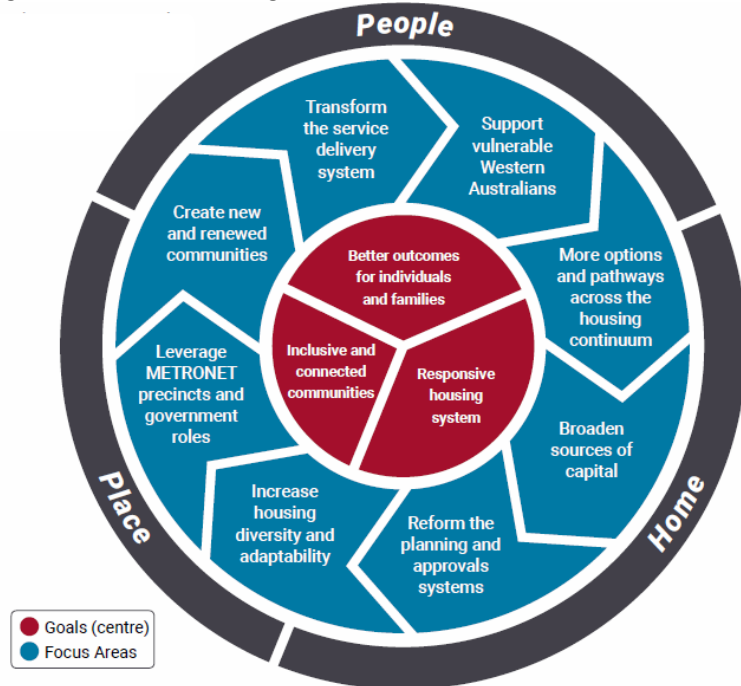
Source: WA Communities, 2018

4.5.2.   Queensland snapshot

Queensland is the third most populated state in Australia, with a current population of 4,703,193 people[18], with a projected estimate of 8,007,889 inhabitants by 2050[19]. Greater Brisbane is the fastest developing area, with a population of 2,270,800[20]. Table 7 provides a comparison between the demographics of Greater Brisbane to the whole of the State.

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[18] http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/3?opendocument
[19] http://www.qgso.qld.gov.au/subjects/demography/population-projections/tables/proj-pop-series-qld/index.php
[20] http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/3GBRI?opendocument

Table 7 - Demographic characteristics in Greater Brisbane and regional Queensland (based on the ABS 2016 Census)

	Greater Brisbane (percent)	**All of Qld** (percent)
Population age	Median age:35 0-14 yrs: 19.6; 65+yrs: 13.4	Median age: 37 0-14 yrs:19.4; 65+ yrs: 15.3
Family composition		
Couple without children	36.7	39.4
Couple with children	45.1	42.5
One parent family	16.3	16.5
Other family	1.9	1.6
Employment status of couple families		
Couple both working full time	24.3	22.5
Couple both working part time	3.7	3.9
One working full time, other part time	21.8	21.3
One working full time, other not working	15.5	14.5
One working part time, other not working	5.5	5.8
Both not working	18.0	20.1
Other	5.3	5.3
Household composition		
Family household	72.8	71.8
Single (lone) person	22.0	23.5
Group household	5.3	4.7

Source:
http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/3GBRI?opendocument

Table 8 provides a breakdown of the change in Qld public, Indigenous and community rental cohorts from 2008 to 2017. According to this data, the trend across most of the demographic cohorts is a consistent (and at times significant) increase in 'Single person', 'Single with children' and 'Other family group' households from 2008-2017. At the same time there is an associated decline in couples, both with and without children. A similar trend is noticed across Aboriginal and Torres Strait Islanders households, presenting a majority of 'Single person', 'Single with children' and 'Other family group' households.

Table 8 - Breakdown of Queensland public, Indigenous and community rental housing cohorts 2008-17

Household	2008 (no. of h'holds)	2017 (no. of h'holds)	Change over the period (per cent)	Trend
Youth (Household contains at least one legal tenant between 16-24 years or two legal tenants under 25)				
Single person	336	610	81.5	Grow
Single with children	753	847	12.5	Grow
Couple without children	24	19	-20.8	Decline
Couple with children	165	90	-45.5	Decline
Other family group*	112	143	27.7	Grow
Aging (Household contains at least one legal tenant or two aged +55 years)				
Single person	15,336	17,633	15.0	Grow
Single with children	1,945	2,543	30.7	Grow
Couple without children	3,436	2,571	-25.2	Decline
Couple with children	1,040	714	-31.3	Decline
Other family group	1,365	1,634	19.7	Grow
Single parent (Household contains a single legal tenant with a dependent child under 18)				
Single with one child	4,414	3,573	-19.1	Decline
Single with two children	4,359	3,544	-18.7	Decline
Single with three or more children	3,804	3,860	1.5	Grow
Aboriginal & Torres Strait Islanders (Household contains at least one person identified as A & TSI)				
Single person	1,186	2,578	117.4	Grow
Single with children	3,276	5,080	55.1	Grow
Couple	337	314	-6.8	Decline
Couple with children	1,196	1,034	-13.5	Decline
Other family group	728	1,213	66.6	Grow
Person with a disability (Household contains at least one person with a disability)				
Single person	12,019	16,039	33.4	Grow
Single with children	3,449	5,134	48.9	Grow
Couple without children	2,525	2,015	-20.2	Decline
Couple with children	2,323	1,828	-21.3	Decline
Other family group	1,704	2,291	34.4	Grow
All households				
Single person	23,968	27,195	13.5	Grow
Single with children	15,370	15,069	-2.0	Decline
Couple without children	4,502	3,369	-25.2	Decline
Couple with children	6,253	3,793	-39.3	Decline
Other family group	3,131	3,881	24.0	Grow

Source: SAP R/3@ 30 June 2008-2018, QDHPW

Table 9 lists dwelling supplied by government and community providers in 2017, showing a predominance of detached housing. As with WA, this is likely resulting in a mismatch between cohort needs and housing stock, suggesting a need to diversify and increase the provision of smaller units. This trend is supported by the findings of the *360 Degree Survey Findings* report prepared by Kraatz and Jayawardena (2018) as part of this research project[21].

Table 9 – Dwelling types provided, Qld, 2017

Dwelling types provided - 2017					
	Youth	Aging	Person with disability	Single parent	Aboriginal & Torres Strait Islander	All households
Apartment	469	3,652	5,733	730	964	8,787
Attached house*	469	3,866	4,726	1,921	1,940	9,223
Detached house	771	8,732	11,149	8,323	6,858	26,018
Universal access	0	8,845	5,679	3	457	9,279

*Duplex, dual occupancy, row houses, cluster housing. Other family group: (e.g. multigenerational; carer; relative with children). Note that in Qld the 'Aging' group includes people over 55 years of age.
Source: SAP R/3@ 30 June 2008-2018, QDHPW

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[21] http://sbenrc.com.au/app/uploads/2018/07/1.54-360-Report-Final-250718.pdf

4.5.3.   New South Wales snapshot

The population of NSW at the time of the 2016 Census was 7,480,228 people, with 4,823,991[22] in Greater Sydney, with an estimated growth to 9,900,000 expected by 2036[23] . With 1.74 million of this expected in Greater Sydney. A comparison of household composition between Greater Sydney and the whole of NSW is provided in Table 10.

Table 10 - New South Wales population, families and household composition (Based on the ABS 2016 Census)

	Greater Sydney percent	**NSW** percent
Population age	Median age: 36 0 - 14 years: 18.7 65+ years: 13.9	Median age: 38 0 – 14 years: 18.5 65+ years: 16.3
Family composition		
Couple without children	33.7	36.6
Couple with children	49.5	45.7
One parent family	15.2	16.0
Other family	1.8	1.7
Employment status of couple families		
Couple both working full time	24.6	22.6
Couple both working part time	3.7	4.0
One working full time, other part time	20.2	20.6
One working full time, other not working	16.7	15.0
One working part time, other not working	6.0	6.1
Both not working	18.4	21.0
Other	5.0	5.1
Household composition		
Family household	73.6	72.0
Single (lone) person	21.6	23.8
Group household	4.7	4.2

Source:
http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/1GSYD?opendocument

Table 11 shows the change in social and affordable community rental housing cohorts from 2012 to 2017. Data ranging back to 2008 was not available for this report. Changes in cohorts has remained relatively stable over the 5 year period for which data was available, with most growth occurring in the 'Aging' and 'Aboriginal & Torres Strait Islanders' households. The former suggests a need for dwellings with liveable housing design (or universal design) features. The 'Person with disability' cohort has been decreasing (likely due to the NSW response to introduction of the National Disability Insurance Scheme (NDIS)), with the exception of the 'Other family group', again indicating a need for liveable housing design features.

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[22] http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/1GSYD?opendocument
[23] https://www.planning.nsw.gov.au/Research-and-Demography/Demography/Population-projections

Table 11 - Breakdown of NSW social and affordable community rental housing cohorts 2012-17

Household	2012 (% of h'holds)	2017 (% of h'holds)	Change from 2012-2017 (%)	Trend
Youth (Household contains at least one legal tenant between 16-24 years or two legal tenants under 25)				
Single person	1.15	1.10	-0.05	
Single with children	6.76	7.01	0.25	Slight growth
Couple without children	0.33	0.32	-0.02	
Couple with children	3.69	4.08	0.39	Slight growth
Other family group*	0.75	0.70	-0.06	
Aging (Household contains at least one legal tenant or two aged +65 years)				
Single person	40.98	42.76	1.78	Grow
Single with children	1.68	2.18	0.50	
Couple without children	58.12	62.11	3.99	Grow
Couple with children	4.04	5.90	1.86	
Other family group	21.03	25.50	4.48	Grow
Single parent (Household contains a single legal tenant with a dependent child under 18)				
Single with one child	44.12	43.51	-0.61	
Single with two children	29.34	29.23	-0.10	
Single with three children	15.46	16.19	0.73	
Single with four or more children	11.08	11.06	-0.02	
Aboriginal & Torres Strait Islanders (Household contains at least one person identified as A & TSI)				
Single person	5.19	7.08	1.89	Grow
Single with children	26.11	33.31	7.19	Grow
Couple	3.50	4.75	1.26	Grow
Couple with children	16.11	20.15	4.04	Grow
Other family group	9.72	12.26	2.54	Grow
Person with a disability (Household contains at least one person with a disability)				
Single person	42.29	40.90	-1.39	
Single with children	17.79	17.62	-0.17	
Couple without children	37.84	33.49	-4.35	Decline
Couple with children	38.04	38.63	0.58	
Other family group	42.40	45.50	3.10	Grow
All households				
Single person	52.34	54.41	2.07	Grow
Single with children	13.49	12.61	-0.88	
Couple without children	76.47	71.38	-5.09	Decline
Couple with children	3.88	3.22	-0.66	
Other family group	21.19	21.33	0.13	

Other family group: (e.g., multigenerational; carer; relative with children). Note that in NSW the 'Aging' group includes people over 65 years of age. Note that the data period for NSW (2012-2017) is shorter than for Qld
Source: Enterprise Data Warehouse (EDW), 30 June 2018

4.5.4.   Snapshot of Australian Indigenous communities

There are several social housing programs directed to Indigenous communities across Australia (AIHW 2018):

1) Public housing: publicly owned or leased dwellings funded and managed by State and Territory governments.
2) State Owned and Managed Indigenous Housing (SOMIH): operates in NSW, Qld, South Australia (SA) and Tasmania. Dwellings are administrated by State and Territory governments and directed to Indigenous households.
3) Mainstream Community Housing Provider programs (CHPs): managed by not-for-profit organisations (except in the Northern Territory).
4) Indigenous Community Housing (ICH): owned and/or Indigenous communities aiming to provide housing for Indigenous Australians.

A breakdown of social housing dwellings across NSW, Qld and WA is provided in Table 12.

Table 12 – Social housing dwellings, by State and Territory, at 30 June 2017 (extracted from Table 4.1 AIHW 2018)

Social housing program	NSW	Qld	WA	Aust.
Dwellings (percentage)				
Public Housing	71.4	71.9	76.3	73.4
SOMIH (a)	3.0	4.7	-	3.4
Mainstream community housing (b)	22.3	16.1	17.7	19.0
Indigenous Community Housing (b)(c)	3.3	7.3	6.0	4.1

a. WA does not have SOMIH program.
b. Community housing data incomplete. See full note at AIHW 2018 Table 4.1.
c. Does include permanent dwellings managed and funded by funded and unfunded providers.

Critical to considering the provision of Indigenous housing in Australia is understanding the need across urban, regional, remote and very remote locations. With the majority of Indigenous Community Housing being in remote and very remote locations, very different approaches to planning, design, procurement and delivery are required (Figure 9).

Figure 9 - Social housing dwellings (percent), by remoteness area, housing program and type, at 30 June 2017 (AIHW 2018)
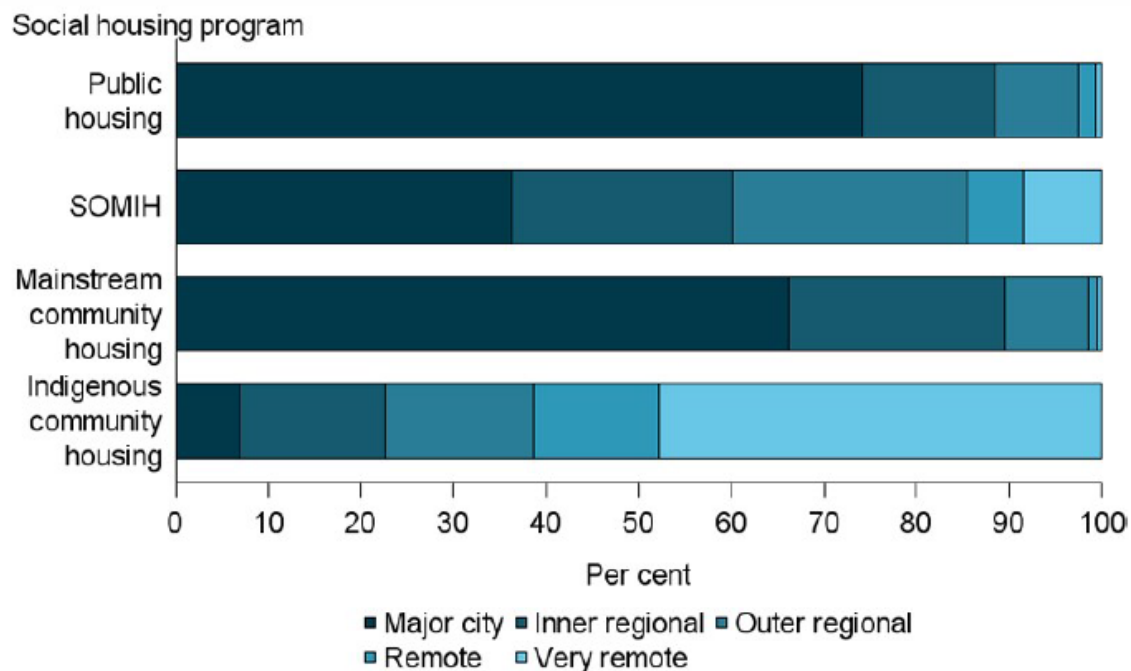
Note: Dwellings with missing location information are excluded.
Source: AIHW National Housing Assistance Data Repository. See supplementary table DWELLINGS.4.

Results of the Australian Institute of Health and Welfare National Social Housing Survey (NSHS) (AIHW 2016) show that Indigenous people are more likely to live in multigenerational households with extended family, particularly in regional and remote and very remote areas. However, with migration to cities, the household composition changes (AIHW 2018) with: 39 percent being 'single person living alone'; and 31 percent being 'single person living with one or more children'. Table 13 shows a further demographic breakdown of this data.

Table 13 - Characteristics of Indigenous Australian social housing tenants, 2016

Gender	Homelessness	Household	Age	Work	Location
73 % were females; 27% were males.	1 in 5 had experienced homelessness in the 5 years before the survey.	48% had lived in households with one or more children.	59% were aged 54 and under.	58% were either employed part-time, unemployed, or not in the labour force.	44% lived in major cities; 44% lived in inner and outer regional areas; 11% lived in remote and very remote areas.

Source: Social housing: Indigenous tenants, AIHW, May 2018

5. Housing typologies

Key issues highlighted in this section of the report include:

1. The need to provide diverse housing types to address social and affordable requirements of today and into the future:
   o Diverse housing typologies and approaches are required which are affordable (reduce up-front costs), appropriate (respond to current and emerging demographics), ensure affordable living (i.e. energy, water and transport), and are resilient (address climate adaptation).
   o This includes the need for consideration of more environmentally, culturally and spiritually responsive housing for remote and very remote Indigenous communities.
   o Housing should also be considered as a part of a sustainable community facilitating community engagement and active living.
   o House size also needs to be reconsidered. While Commsec noted in 2017 that the size of the average Australian home has fallen to a 20 year low, the average size still remains second only to the US in an international comparison (Commsec 2017).
2. In urban centres targeted for higher densities:
   o Infill needs to also improve access to services and active and public transport.
   o Affordable community and private rental needed in areas of employment for key workers.
   o Focus needed on the 'missing middle', with new and diverse housing typologies needed which are appropriate for 'density well-done' (including allowance for micro lots).
   o Inclusionary zoning targets are an important tool in increasing supply in appropriate locations.
3. Responsive planning systems are needed which address:
   o Higher densities and greater diversity of housing stock in our cities.
   o Mixed-use developments in our cities and towns.
   o Streamlined regulatory and design review processes to reduce construction costs (especially for developments providing social and affordable units).
   o Inclusionary zoning for social and affordable housing across all developments to address social housing waiting lists across Australia.
   o Value uplift from government land redevelopment directed towards social and affordable housing.

5.1. Housing affordability snapshot

Several factors are driving the need to provide additional and diverse housing types in order to address social and affordable requirements of today and into the future. In addition to the demographic changes discussed in the previous section, the *Committee for Economic Development of Australia* (CEDA 2017) highlight:

1) The uneven spread of population across Australia, for example, Sydney and Melbourne represent 40 percent of the total national population.
2) Social issues arising from high housing costs in the inner city and middle ring areas of cities. This results in low and medium income households moving to the peri-urban fringes and regional areas, with limited active and public transport options and job opportunities.
3) Where regional areas are dependent on the economic cycles (especially resource-based economies), people migrating to these areas in boom times compete for employment, housing and services.

The mismatch between house prices and wages in capital cities, especially Sydney and Melbourne, has provoked a housing affordability crisis across the nation (**Error! Not a valid bookmark self-reference.**).

Figure 10 - House prices (and wages) 5-year growth to December 2016
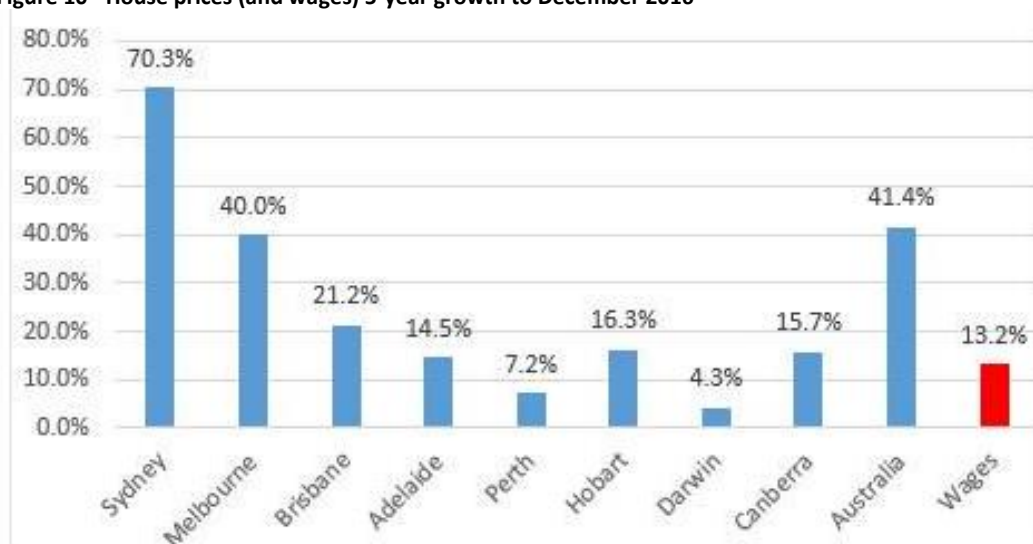
Source:
https://twitter.com/BenPhillips_ANU/status/843985693567156224/photo/1?ref_src=twsrc%5Etfw%7Ctwcamp%5Etwe eetembed%7Ctwterm%5E843985693567156224&ref_url=https%3A%2F%2Fwww.huffingtonpost.com.au%2F2017%2F03% 2F20%2Fthis-chart-shows-just-how-ridiculous-sydney-house-prices-are_a_21903757%2F

Table 14 provides an overview of affordability measures across Australia based on the percentage of income needed to save a deposit, to service a mortgage and to rent a home in 2016.

Table 14 – Affordability measures across the regions as at September 2016

Region	Price to income ratio	% of household income required for a 20% deposit	% of household income required to service an 80% LVR mortgage	% of of household income required to rent a home
Sydney	8.3	167.7%	44.5%	28.9%
Regional NSW	6.6	132.9%	35.2%	29.9%
Melbourne	7.1	142.8%	37.9%	25.6%
Regional Vic	5.6	111.2%	29.5%	27.0%
Brisbane	5.7	114.1%	30.3%	25.4%
Regional Qld	6.7	134.0%	35.5%	30.0%
Adelaide	6.2	124.5%	33.0%	25.7%
Regional SA	4.8	95.7%	25.4%	24.9%
Perth	5.5	110.9%	29.4%	22.2%
Regional WA	5.1	101.4%	26.9%	26.0%
Hobart	5.5	110.7%	29.4%	27.4%
Regional Tas	5.0	99.6%	26.4%	26.7%
Darwin	4.5	89.7%	23.8%	22.2%
Regional NT	4.7	93.5%	24.8%	28.1%
Australian Capital Territory	5.2	103.5%	27.5%	21.4%
National	6.9	138.9%	36.8%	29.0%
Combined capital cities	6.7	133.8%	35.5%	25.7%
Combined regional areas	6.3	125.3%	33.2%	28.6%

Source: CoreLogic, ANU

There is also a debate around urban containment versus urban sprawl and its impact on affordability. The *Demographia International Housing Affordability Survey* has maintained over the several years that new greenfield development is the only way to reduce housing prices (Cox and Pavletich 2017). The *13th Demographia International Housing Affordability Survey* (2017) focuses on middle-income housing affordability. This survey suggests that the failure to maintain middle-income housing affordability (which in turn impacts on the demand for social housing) is due to urban containment policy. There are however many opposing perspectives showing how sustainable living is reduced by such urban sprawl (Glaeser 2011, Newman and Kenworthy 2015). The *Demographia* approach does not take account of subsidies given to new housing at the fringes and to the economic impact of private transport (Cox and Pavletich, 2017, Newman and Kenworthy, 2015).

Urban infill, as a more holistic approach, is being adopted by many social housing providers in our cities, and is reflected in the *Grattan Institute's Reimagining the Australian Dream* report (Daley and Coates 2018). These authors claim that inner city infill for affordable living and sustainability is needed both for new developments and the refurbishing of existing stock. This approach includes a diversity of dwelling typologies and mixed uses to fulfil current and future demand with housing that is affordable, sustainable and of high amenity. Although planning systems and community attitudes often resist dense redevelopment, it can lead to significant increases in supply in areas where high demand and high housing costs are prevalent. Innovative design strategies are also required, addressing: smaller, energy-efficient dwellings; cost-effective, space-efficient and quality-controlled high density housing; and the adaptation of existing housing stock to accommodate multi-generational families and support aging-in-place (Maher, 2017).

The findings from the *360 Degree Survey* of stakeholders associated with social and affordable housing (Kraatz & Jayawardena 2018) highlight the need for a more holistic approach. Respondents strongly recognised the value of community integration as a significant part of the housing solution. Community input indicates the desire for housing in better locations, with access to transport, services, amenities, social networks and employment hubs.

5.2. Regional diversity

This section discusses the differences which exist between WA, NSW and Qld, and where possible (due to project scope/resources and the availability of data) within these States.

5.2.1. Western Australian snapshot

Housing affordability in WA

Housing affordability in WA has most recently been influenced by deflation observed in median house prices in the Perth Metropolitan area, in part attributed to the influence of the resources industry, which has trended downwards since 2011–12. This is mainly due to a decline in State-based economic activity, similar to that which occurred in Queensland (Queensland Government Statistician's Office, 2018). Table 15 illustrates the segments of WA's housing continuum. Table 16 then highlights the current variations in housing affordability across both Perth and regional WA.

Table 15 – Western Australian housing spectrum

Very low income	Low income	Moderate income	
< $43,550	$43,550 to $69,680pa	$69,680 to $104,520pa	
Social housing (3.7%) ***	Community housing providers (0.5%) ***	Private rental market (25.2%) ***	Homeownership (34.2%)
9,500 homeless (42/10,000) Social tenants: 29% on aged pensions 29% on disability pensions 19% on parental/care pensions 14,000 households 'on waitlists' 1,320 households 'on priority waitlists'. Social homes stock: Available: 2% to those on ageing or disability pensions; 10% to those on minimum wage.	Affordable housing demand: 47,800 (Metropolitan Perth); 13,800 (Regional WA) Key workers Retail workers ($50,000pa) Affordable lettings available: 19% to76%.	Including key workers on $75,000pa Many on rental stress. Affordable lettings available: 77% to 95%.	Homeowners occupants: Outright owned: 30% Owned with mortgage: 38.5% (Keystart: 1.6%; Shared equity: 0.5%).

Notes: *Shared equity program: the government co-owns a percentage of the home. **Percentage of all homes in WA.
Source: based on WAHA, 2015; WA Communities, 2018

Table 16 - Housing affordability in Western Australia (2016)

	Greater Perth	Regional WA									
		Albany	Broome	Bunbury	Busselton	Esperence	Geraldton	Kalgoorlie	Karratha	Northam	Port Hedland
Median house prices (a)	$515,000	$339,000	$470,000	$335,000	$410,000	$350,000	$275,000	$310,000	$317,500	$230,000	$205,500
Median annual household incomes (b)	$83,739	$56,420	$98,825	$67,990	$61,364	$67,939	$53,770	$106,929	$134,706	$60,039	$160,903
Price to income ratio	6.2	6.0	4.8	4.9	6.7	5.2	5.1	2.9	2.4	3.8	1.3
Proportion of household income required for a 20 deposit (percent)	123	120	95	99	134	103	102	58	47	77	26
Proportion of household income required to service an 80 LVR mortgage (percent)	32	32	25	26	35	27	27	15	12	20	7
Proportion of household income required to rent a house (percent)	22	32	25	25	32	23	27	16	15	24	11
(a) REIWA June Quarter 2018											
(b) Median household incomes from ABS Census 2016 indexed to June 2018 using ABS Wage Price Index											
Median weekly rents	$350	$345	$468	$320	$373	$300	$280	$330	$400	$280	$350
Median weekly household income	$1,606	$1,082	$1,895	$1,304	$1,177	$1,303	$1,031	$2,051	$2,584	$1,151	$3,086

Source: Compiled by WA Communities for Real Estate Institute of Western Australia data

According to the ABS Key Economic Indicators (ABS February 2017), the factors affecting housing affordability in Perth are:

1) Purchase Capacity – Perth & Peel: Moderate income households, including those earning 80 percent of the median income and key workers cannot afford to purchase a lower quartile-priced home with repayments below 30 percent of their income.

2) Affordable Rental Stock – Perth: The affordable rental price for a household earning a minimum wage is AU$200/week. Just 3 percent of advertised rental stock is under this price.

3) Lower Quartile Purchase Capacity: Households whose income makes them eligible for public housing are locked out of the housing market. These households would not be able to afford to purchase a lower quartile house in any Perth region.

4) Housing and Incomes: The cost of housing in Perth has far outpaced increases in the aged pension and minimum wage. Between 2000 and 2016, rents in Perth have increased by 150 percent while the aged pension has increased by 115 percent and the minimum wage by only 75 percent.

There is a consistent demand experienced for all kinds of social housing with a dependence on rental assistance (CRA) including for discount-to-market initiatives. Shared equity programs (such as that offered by Keystart Home Loans) are crucial support toward home ownership (WA Communities, 2018).

The decrease in home ownership highlighted above carries over to the private and affordable rental markets, leading to pressure on social housing. The WA Government's *Affordable Housing Action Plan 2018-19 to 2019-20* aims to increase the supply of this housing by 35,000 while supporting the transitional and affordable models between social housing and private rental. This 35,000 will include: 56 percent for low deposit home loans; 21.3 percent for social rental; 12.3 percent for affordable rentals; 10.4 percent for shared equity (WA Communities 2018).

Table 17 shows the breakdown of dwelling tenure and structure, and mortgage stress in Perth and the whole of WA.

Table 17 - Dwellings tenure, structure, mortgage and rent in Western Australia, 2016

Dwelling tenure		
	Perth percent	WA percent
Owned outright	28.1	28.5
Owned with mortgage	41.9	39.7
Rented	26.7	28.3
Other tenure	1.1	1.1
Dwelling structure		
Detached house	76.9	79.1
Semi-detached, row or terrace	16.0	14.1
Flat or apartment	6.6	5.7
Other dwelling	0.3	0.7
Dwelling count		
Occupied private dwelling	89.0	86.7
Unoccupied private dwelling	11.0	13.3
Rent weekly payments		
Median rent	360	347
Rent pay't < 30% h'hold income	90.1	90.3
Rent pay't > 30%h'hold income	9.9	9.7
Mortgage monthly payments		
Median	2,000	1,993
Mort. pay't < 30% h'hold income	90.7	91.4
Mort. pay't > 30% h'hold income	9.3	8.6

Source: http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/5?opendocument

There is a real need to deal with the under supply of well-located smaller dwellings in a housing market well supplied with detached housing. More detailed data showing the variation between areas of need, for example Indigenous and mining communities, is likely to show significantly more variation in the economic data.

Supporting new housing typologies in WA

According to the *WA Planning Commission*, almost 50 percent of the planned residential units will be provided through infill development in strategic locations in existing suburbs. This will particularly be around activity centres, METRONET[24] station precincts and along public transport corridors. This will raise residential density and require greater diversity in housing typologies to address the changing demographics. This is known as the 'missing middle'[25]. Higher density precincts will be addressed in the new planning review (WA Dept of Planning, Lands and Heritage 2018). Of the 7,700 homes still to be provided, 1,800 will be in regional areas (WA Communities, 2018)[26].

Western Australia has a comprehensive suite of policies, strategies and review processes to support the changes which are needed in order to address current and future demands. The *Review of the Residential Planning and Building Approvals Processes* (2014) led to a reform in State regulations aiming to improve the delivery of affordable housing in WA. The report, *Opportunities to improve planning and home building approvals* (2016) summarised the findings of the review and proposed an action plan to further reduce red tape and improve approval processes in the home building sector.

The *Affordable Housing Action Plan 2017-18 to 2019-20* involves four key elements for establishing clear targets and regulations for social and affordable housing, including more flexible housing types and multi-generational occupancy:

1. The *Department of Planning* based their action on the following regulations and initiatives:

   a) Facilitates lodging and tracking planning applications online (WAPC, 2014).
   b) *Towards Perth and Peel@3.5 Million* (framework) establishes compact, connected cities, a higher Planning Makes it Happen blueprint for planning reform which is composed of 11 key strategic priorities (WAPC, 2009).
   c) *Planning Makes it Happen – Phase 2* streamlines approval processes, land supply and essential services (WAPC, 2014).
   d) *E-Plan* densities, quality design and amenities for urban infill (WAPC, 2015a).
   e) In May 2018, the Minister for Planning commissioned an independent review of the planning system. A green paper was prepared and released for public feedback, and this will be used to inform a white paper that will be sent to the State Government for consideration**[27]**.

2. The *Department of Communities* through their Housing division has defined a comprehensive strategy to address the affordability crisis and improve housing delivery for those in need based on:

   a) *Affordable Housing Strategy 2010-2020*: comprises Opening Doors to Affordable Housing (WAHA 2015).
   b) *Aiming Higher* (Action Plan) Housing supply and diversity, transport aligned development, 'fit for purpose' policy, market efficiency and supply of affordable housing. Involves the whole of government (WAHA, 2010, 2015).
   c) Seniors Housing Strategy (WAHA, 2016).

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[24] https://www.metronet.wa.gov.au/
[25] http://missingmiddlehousing.com/
[26] http://www.housing.wa.gov.au/HousingDocuments/Affordable_Housing_Action_Plan_2017_2018_2019_20 20.pdf
[27] http://www.planning.wa.gov.au/Planning_reform.aspx

d) *Connected Living* is a government and private sector partnership initiative launched in December 2015 to deliver innovative and affordable residential housing in metropolitan Perth[28].

e) The recently launched Affordable Housing Action Plan 2017-18 to 2019-20, which is committed to addressing the affordability crisis through a comprehensive strategy (WA Communities, 2018).

3. *Landgate* made reforms that are expected to create more housing choices and promote increased investments by developers:

a) Updated the *Strata Titles Act 1985* to provide more flexible and sustainable housing and development options.

b) Proposed the introduction of *Community titles* and *Leasehold titles* to allow for multiple levels of management for large-scale or mixed-use developments, and a wider range of tenure options.

4. The *WA Building Commission* offers improved guidance for building approvals and certification processes. Building reforms:

a) Builder and plumber licensing systems with unified state-wide coverage.

b) E-business systems to deliver faster processing of transactions.

c) Better use of building information data for industry, building owners and the state government.

Despite all these initiatives over a number of years, low density dwellings still make up two thirds of all building approvals in the Perth metropolitan area, according to a report released by the Australian Bureau of Statistics (ABS, 2017). This study shows that this proportion has changed little in the past decade despite State Government goals for higher urban density. As the fastest growing capital city in Australia, State Government estimates indicate that Perth would need 328,000 additional dwellings by 2031, if a projected population of more than 2.2 million is reached. In this scenario, almost half of these dwellings would be required as urban infill (WAPC, 2015a).

Emerging typologies in WA

The following initiatives and developments provide examples of how to improve the mix of housing typologies in favour of more infill at densities. They address key issues by providing options and demonstrations for social and affordable housing and living into the future. The key innovations include social housing, affordable community rentals and affordable housing:

1. Social housing initiatives:
   a) *Social Housing Investment Package:* supports transition through the housing continuum aiming to favour seniors and families with children on the waiting list through provision of 1,000 new dwellings, purchase of spots and private rental leases.
   b) *Rental Pathways Pilot* assists eligible tenants to transition from public housing to the private rental market and maintain a successful tenancy there.
   c) *Foyer Oxford* is an award-winning Foundation Housing, Anglicare and Central TAFE partnership for homeless youth looking for secure housing and opportunities to study and work. It is fully self-contained accommodation to house up to 98 people between 16 and 25 years, singles, young parents and people with a disability.

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[28] www.housing.wa.gov.au

2. Affordable community rental:
   a) *Sustainable Housing for Artists and Creatives (SHAC)* was developed and is owned by community provider Access Housing, and won the 2017 UDIA (WA) award for Excellence in the 'Leading Affordable Housing Development Project' category. SHAC comprises 12 apartments and two art and creative studios which offer residents strata community-based solar energy capture, storage and shared usage infrastructure[29].

3. Affordable housing:
Partnerships with the development sector include the release of Government owned land in strategic locations and, where appropriate, the investigation of opportunities for financial incentives for the development sector.
   a) *Connected Living[30],* a strategy of the Department of Communities-Housing, which aims to deliver medium to high density developments comprising 500 apartments around key transit precincts and activity centers in metropolitan Perth. The development of these transit-oriented developments (TODs) is supported by four objectives: affordability, design quality, innovation and diversity (WAPC 2015b).
   b) *WGV 'Innovation through demonstration'* precinct in Fremantle is a partnership between the City of Fremantle, which has offered a parcel of council-owned land, and Landcorp, WA's land authority. Landcorp is undertaking a similar initiative to build a cooperative housing development designed according to WGV *Design Guidelines and Sustainability Rebate Package*. WGV offers a variety of new approaches, such as family and row houses, apartment studios (SHAC), and a cohousing development led by architect Geoffrey London and designed by SpaceAgency[31].
   c) The *Gen Y Demonstration Housing Project*, designed by architect David Barr, is on the same site used for WGV. This project, which consists of three interlocking one-bedroom apartments that appear as a single house, is designed specifically with affordability in mind and was offered for sale to first home buyers earlier this year (Cheng, 2017)[32].
   d) *Micro lots* target first home buyers and downsizers, offering a new housing typology consisting of villages of lots under 100sqm and homes of up to 120sqm, located close to public transport. The first community was launched in Ellenbrook and was designed to house eight villages with an estimated population of 30,000. This is a public-private partnership between the Department of Communities/Housing and two private companies (WA Communities, 2018).
   e) *One on Aberdeen* is a mixed use development with 161 apartments made available to people on low-to-moderate incomes, and it is a result of a government-private partnership. The initiative, which includes rental and purchases through Keystart and shared equity, is the winner of the 2016 Award National Property Council of Australia Innovation and Excellence Awards.
   f) *Tiny Houses* - the City of Fremantle has supported an amendment to the Western Australian planning scheme, proposing the subdivision of larger residential blocks to create smaller independently owned houses and encouraging the conversion of one single dwelling into multiple smaller dwellings within the existing built form (Cheng, 2015).

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[29]https://www.accesshousing.org.au/more-awards-success-for-access-housing
[30] http://www.housing.wa.gov.au/News/Pages/Connected-Living.aspx
[31] http://www.baugruppen.com.au
[32] https://www.landcorp.com.au/Residential/White-Gum-Valley

g) *Transitional Housing* and *Move to Town* are important initiatives highlighted in the current Action Plan which aim to increase the 'access Aboriginal people have to improved housing amenity, education, training and employment, and ultimately home ownership opportunities'. The former, through the North West Aboriginal Housing Fund, provides 'a stable affordable home, along with access to tailored support services to help you with managing your home, finances, health and work'.[33]

5.2.2.   Queensland snapshot

Housing affordability in Qld

Like WA, Qld experiences significant climatic, social and cultural diversity from its urban centres to remote communities, which is reflected in diverse housing needs. Similarly, housing affordability varies across the state, being even more extreme in regional centres (Table 18). The ratio of median housing prices to median incomes differs between Brisbane and the rest of the State. While house prices are higher in the capital, incomes are also higher, so affordability is slightly better in the capital, leaving aside the Sunshine Coast, with a 9.3 ratio and the Gold Coast with 7.7 (CoreLogic 2016).

Table 18 - Housing affordability in Queensland (2016)

	Brisbane	**Regional QLD**
Median prices and household incomes (weekly)	$468,000 $1,575	$400,000 $1,148
Price to income ratio	5.7x	6.7x
Proportion of household income required for a 20 percent deposit	114.1 percent	134.0 percent
Proportion of household income required to service an 80 percent LVR mortgage	30.3 percent	35.5 percent
Proportion of household income required to rent a house	25.4 percent	30.0 percent

Source: CoreLogic 2016

Details of dwelling tenure, structure, mortgage and rent in both Brisbane and the whole of Qld are provided in Table 19. Home ownership is lower than in other States, and has decreased over the last 20 years. This is mostly affecting young people and low-income earners but remains stable for householders over 65 years. The strongest barrier to home ownership is accumulating the required deposit (Geck and Mackay 2018).

Detached houses are the dominant dwelling structure both in Qld. The number of those renting approximately equals the number of homeowners with a mortgage. In Brisbane (and across Qld) 12.8 percent of renters are likely to be in rental stress, compared to 14.2 in Greater Sydney. An opportunity exists to increase the provision of smaller dwellings, such as attached houses and apartments, for purchase in regional areas. This, combined with low deposits or shared equity home loans could facilitate access to homeownership.

By way of comparison with WA and NSW, Queensland's housing spectrum presents a rather lower proportion of homeowners and a higher proportion of youth homelessness (Table 20).

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[33] http://www.housing.wa.gov.au/transitionalhousing

Table 19 - Dwellings tenure, structure, mortgage and rent in Queensland (2016 Census)

Dwelling tenure		
	Greater Brisbane percent	Qld percent
Owned outright	26.4	28.5
Owned with mortgage	35.7	33.7
Rented	34.5	34.2
Other tenure	0.8	0.9
Dwelling structure		
Detached house	76.4	76.6
Semi-detached, row or terrace	10.0	10.6
Flat or apartment	12.6	11.3
Other dwelling	0.6	1.0
Dwelling count		
Occupied private dwelling	92.0	89.4
Unoccupied private dwelling	8.0	10.6
Rent weekly payments		
Median rent	355	330
Rent pay't < 30% h'hold income	87.1	87.2
Rent pay't > 30%h'hold income	12.9	12.8
Mortgage monthly payments		
Median	1,861	1,733
Mort. pay't < 30% h'hold income	93.6	93.6
Mort. pay't > 30% h'hold income	6.4	6.4

Source: http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/3?opendocument
http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/3GBRI?opendocument

The *Queensland Housing Strategy 2017-2027* is driving reforms and targeted investment across the housing continuum, including crisis accommodation, social and affordable housing, private rental, home ownership and retirement living (QDHPW 2017b). The Strategy aims to deliver more than 5,000 social and affordable dwellings across the state, and facilitate urban renewal and employment. It also aims to encourage innovative housing design that responds to contemporary housing needs. In line with a person-centred approach, it targets service delivery reforms to assist those most in need through a safety net of early interventions and wrap-around services. The strategy commits to delivering at least 50 percent of new social housing to the *Platinum* or *Gold Level Liveable Housing Design*. This is responding to data showing: 1 in 5 people with some form of disability[34]; and an aging population (with those over 65 in 2014 making up 14 percent of the population, growing to 21.1 percent in 2044[35]).

Supporting new housing typologies in Qld

Initiatives to influence the social and affordable housing system in Queensland are included in the State's planning system and the *Queensland Housing Strategy 2017-2027*.

The Queensland planning system aims to play a role in facilitating the delivery of social and affordable housing, related to housing supply, diversity and promoting liveable communities. The role of planning in this context includes, but is not limited to (Queensland Government, Department of Infrastructure, Local Government and Planning, Affordable and Social Housing Factsheet, 2017):

1) Ensuring an abundant supply of appropriately zoned land and a mix of lot sizes.
2) Encouraging best practice, innovative and adaptable urban design.
3) Reducing barriers and regulatory inefficiencies in the planning system.

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[34] https://www.queenslandplan.qld.gov.au/about/community.aspx
[35] ibid.

4) Promoting incentives.

Table 20 provides a summary of planning mechanisms conducive to addressing the housing challenge in the State.

Table 20 - Queensland planning process in relation to the social and affordable housing challenge

Planning Act 2016
Embeds a relevant reform and broad community consultation and encompasses the *State Planning Policy (SPP)* and the *Regional Plans*
Planning Regulation 2017
Defines 'affordable housing': "Affordable housing is housing that is appropriate to the needs of low to moderate income households, where those households will spend no more than 30 percent of gross income on housing costs".
State Planning Policy (SPP 2016)
Establishes Guiding principles, State interests and State interest policies - Policies in housing supply and diversity, Policies in liveable communities and Policies in development and construction.

Source: **https://planning.dsdmip.qld.gov.au/**

The *Queensland Housing Strategy 2017-2027* is 'a framework to drive key reforms and targeted investments across the housing continuum' (QDHPW, 2017). The strategy is built upon four pillars: growth, prosperity, connections and confidence and will be delivered through a series of action plans that detail key actions and deliverables.

Emerging typologies in Qld

1. *Shaping SEQ*[36] builds on previous regional plans and has included significant consultation with State and Local governments and the community in response to the region's changing population, both in size (5.3 million people by 2041) and demographics. The plan sets a vision for the next 50 years and provides a framework for managing the South-East Queensland region's growth during the next 25 years. Regarding social and affordable housing, *Shaping SEQ* ensures the removal of unnecessary regulatory costs and the use of State-owned and Council-owned land located in underutilised or inner-urban areas to accommodate social and affordable housing catering for a diverse range of community needs (QDILGP 2017).

2. The Queensland Government also launched the *Density and Diversity Done Well Open Ideas Competition*[37] in 2017 (Qld Department of State Development, Manufacturing, Infrastructure and Planning 2017). This initiative encourages built environment designers to deliver innovative ideas for affordable housing and sustainable communities. The competition is based on one held in NSW which called for designs for the 'missing middle'. This term is used to describe a range of housing types between the two extremes of detached houses and high-rise apartment buildings, incorporating affordable and buildable projects (Figure 11). In Qld, the competition focused on the South-East Queensland region, which is home to 71 percent of Qld's population (QDILGP 2017).

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[36] https://www.dilgp.qld.gov.au/noindex/shapingseq/background-paper-1-grow.pdf
[37] https://www.statedevelopment.qld.gov.au/planning/entries.html

Figure 11 - Missing middle typologies
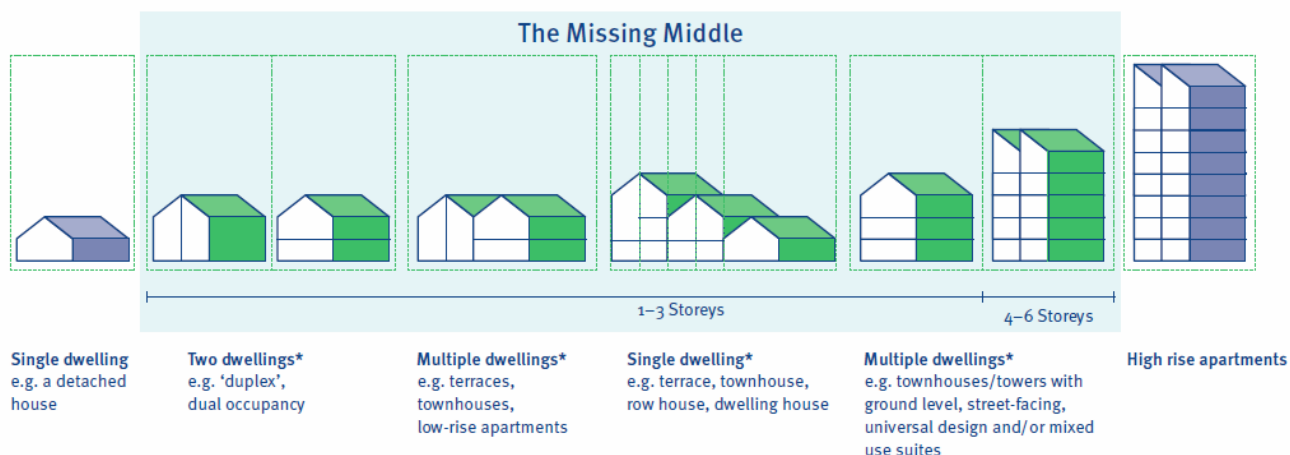
Note: Dwelling may be built on separate freehold titled 'lots' in a body corporate/community title including common property – 'lots' may be vertically or horizontally separated by title.
Source: QDILGP 2017

3. *Building Housing Options* is a research collaboration between the Brisbane Housing Company (BHC), Churches of Christ in Queensland (CofCQ) and the Qld Department of Housing and Public Works (QDHPW). The project focussed on older people living in Logan City, and 'sought to understand the housing needs and aspirations of older people living in public housing' in that area. (CofCQ 2016). The report identifies 13 recommendations, including with regards to accessibility.

4. The *Closing the Gap* action in the *Qld Housing Strategy 2017-2027,* will 'investigate and establish a new Aboriginal and Torres Strait Islander housing body that will work with Indigenous Community Housing Organisations and Aboriginal and Torres Strait Islander Councils to improve Indigenous housing outcomes in urban, regional and remote communities across Queensland'.

5.2.3.   New South Wales snapshot

Housing affordability in NSW

Along with other factors, the price of land in Sydney has been recognised as a key driver of the housing affordability issues in NSW. In 2017, the Property Council of Australia (PCA) proposed a 10-point plan to address this problem (Property Council of Australia, 2017):

1) *Crank up housing supply, diversity and choice.*
2) *Make housing cheaper to produce.*
3) *Incentives to spur reform.*
4) *Bridge the deposit gap – Keystart low deposit home loans.*
5) *Remove barriers to downsizing.*
6) *Don't play with negative gearing.*
7) *Institutional investment in 'build to rent' housing to give more choice for renters.*
8) *Location matters – densities around transport hubs and corridors.*
9) *Phase out stamp duty.*
10) *Re-establish the National Housing Supply Council.*

Variation in housing affordability between Sydney and regional NSW is illustrated in Table 21, showing Sydney as having far greater affordability issues than Perth and Brisbane, and regional NSW

on par with regional Qld for affordability. This does not however reflect issues in some specific areas of regional NSW, particularly along the coastal region (e.g. Port Macquarie).

Table 21 - Housing affordability in New South Wales, 2016.

	Sydney	Regional NSW
Median prices and household incomes (weekly)	$785,000 $1,800	$405,000 $1,172
Price to income ratio	8.4x	6.6x
% of h'hold income required - 20 % deposit	167.7 percent	132.9 percent
% of h'hold income required - service 80 % LVR mortgage	44.5 percent	35.2 percent
Proportion of household income required to rent a house	28.9 percent	29.9 percent

Source: CoreLogic 2016

Again, detached housing is the most common type of housing, with ownership (outright or with a mortgage) being the predominant form of tenure (ABS, 2017) (Table 22). The percentage of households with mortgages, in rental stress, is on par with WA and Qld. Meanwhile, those renting in NSW are in more stress than those in Perth and at similar levels to those in Qld.

Table 23 then shows a breakdown of NSW social housing by dwelling type and location. A further breakdown of this data by cohort is provided in Section 7.3.

Table 22 - Dwellings tenure, structure, mortgage and rent in New South Wales (2016 Census)

Dwelling tenure		
	Greater Sydney percent	NSW percent
Owned outright	29.1	32.2
Owned with mortgage	33.2	32.3
Rented	34.1	31.8
Other tenure	0.9	0.9
Dwelling structure		
Detached house	56.9	66.4
Semi-detached, row or terrace	14.0	12.2
Flat or apartment	28.1	19.9
Other dwelling	0.6	0.9
Dwelling count		
Occupied private dwelling	92.3	90.1
Unoccupied private dwelling	7.7	9.9
Rent weekly payments		
Median rent	440	380
Rent pay't < 30% h'hold income	85.8	87.1
Rent pay't > 30% h'hold income	14.2	12.9
Mortgage monthly payments		
Median	2,167	1,986
Mort. pay't < 30% h'hold income	91.6	92.6
Mort. pay't > 30% h'hold income	8.4	7.4

Source:
http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/1GSYD?opendocument
http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/1?opendocument

Table 23 - NSW social housing by dwelling type and location (percentage of households at 30 June 2018)

Dwelling Type/Location	2012	2017
Cottage	39.36%	38.40%
Townhouse	11.90%	11.81%
Terrace	0.05%	0.04%
Unit	41.94%	42.74%
Villa	6.75%	7.01%
Northern Cluster		
Western Sydney Districts	27.34%	27.52%
Nepean Blue Mountains District	5.29%	5.41%
Hunter New England District	20.94%	20.76%
Central Coast District	5.71%	5.87%
Mid North Coast District	4.10%	4.08%
Northern NSW District	4.18%	4.20%
South Western Sydney District	32.43%	32.16%
Southern Cluster		
Sydney District	26.30%	26.99%
South Eastern Sydney District	24.73%	24.30%
Northern Sydney District	10.08%	9.94%
Murrumbidgee District	7.21%	7.14%
Far West	-	-
Western NSW District	8.72%	8.56%
Illawarra Shoalhaven District	18.69%	18.81%
Southern NSW District	4.27%	4.25%

Source: Data provided by NSW LAHC June 2018

Supporting new housing typologies in NSW

To address issues with the current housing system (Table 24), the NSW Government has defined a vision for social housing in the State, *Future Directions for Social Housing in NSW* strategy in 2016.

Table 24 - New South Wales housing spectrum

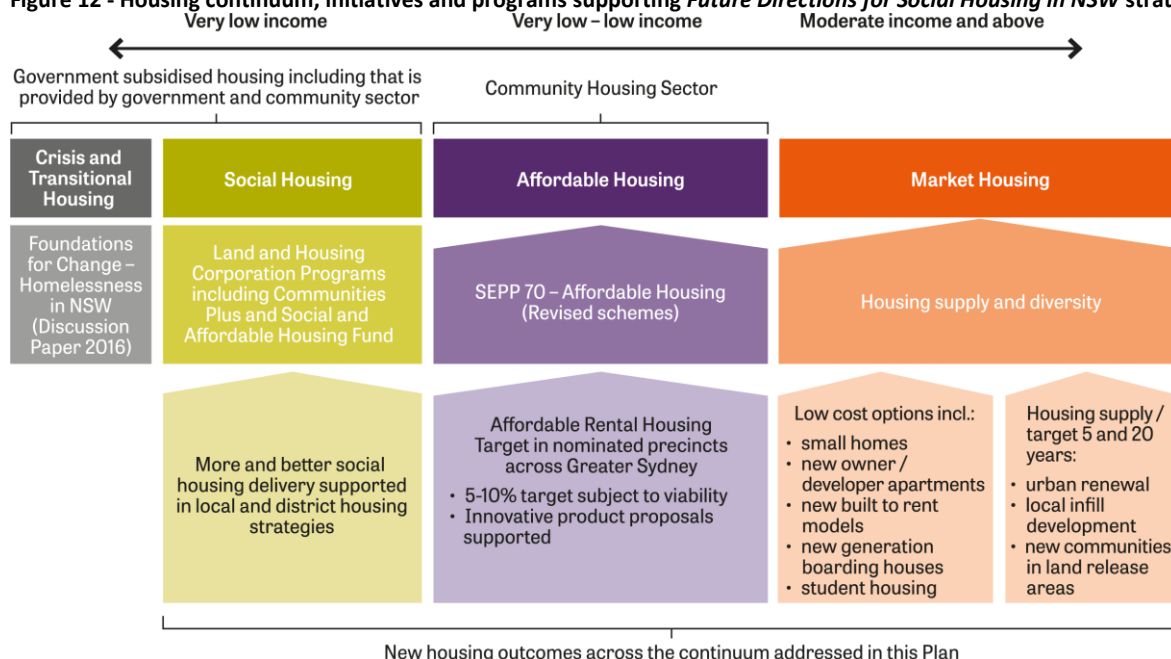| Very low income	Low income	Moderate income	
< $43,550	$43,550 to $69,680pa	$69,680 to $104,520pa	
Social housing	Community housing providers	Private rental market (35.6% of all rental market)	Homeownership (32%)
28,191 homeless (40.8/10,000) of which 17% are youth. Social tenants: 290,000 (60% are singles) 70,000 supported by CRA* 59,500 approved applicants still 'on waitlists' due to long tenures (50% of tenants stay for 10+ years). Social homes stock: 150,000 (90% govt-owned).	Stepping stone for independence. Social housing management will gradually be transferred to CHPs (35% by 2025). Key workers Retail workers ($50,000pa) Govt support for tenants to transit to private rental.	Including key workers on $75,000pa Rental stress.	Homeowners occupants: Outright owned: 31% Owned with mortgage: 33%.

*Rental assistance in NSW is provided to 420,000 households in rental stress.
Source: based on Future Directions for Social Housing Discussion Paper, NSW Government, 2016; ABS, 2017

This strategy (Figure 12) aims to deliver more housing and opportunities, support and incentives to avoid and/or leave social housing, and to improve the social housing experience.

The NSW Land and Housing Corporation (LAHC) owns and manages the State's social housing portfolio. LAHC delivers new and replacement social housing through the Communities Plus program, as part of the *Future Directions for Social Hou*sing in NSW strategy.

Figure 12 - Housing continuum, initiatives and programs supporting *Future Directions for Social Housing in NSW* **strategy**

Source: https://www.greater.sydney/metropolis-of-three-cities/liveability/housing-city/housing-more-diverse-and-affordable

Emerging typologies in NSW

Several significant initiatives, along with an array of planning initiatives, were established as a part of the NSW strategy:

1) Urban Growth NSW projects
2) Western Sydney City Deal
3) Communities Plus
4) Missing middle design competition

To encourage affordable and social housing development which incorporates the needs and character of the surrounding area, the NSW Department of Planning and Environment created several planning regulations to support the development of new housing and the maintenance of existing stock (Table 25).

Table 25 - Planning regulations supporting affordable and social housing development in New South Wales

NSW State Environmental Planning Policy (Affordable Rental Housing) (2009)	Aims to increase the supply and diversity of affordable rental and social housing in the State including: villas; townhouses and apartments; secondary dwellings (granny flats); new generation boarding houses; group homes; social housing and supportive accommodation.
NSW State Environmental Planning Policy N0. 70 Affordable Housing (Revised Schemes) SEPP 70	Identifies a need for affordable housing in a limited number of Local Government areas and amends relevant local and regional environmental planning instruments to enable levying of development contributions to provide for affordable housing. It: requires an amendment to the SEPP if these provisions were to be extended to other areas of NSW; establishes priority growth areas and precincts for affordable housing developments;

	and allows for medium-density development under a Council's Local Environment Plan.
Complementary policies applicable to affordable housing:	*State Environmental Planning Policy (SEPP) (Seniors Living) 2004 State Environmental Planning Policy (SEPP) 9: Group Homes State Environmental Planning Policy (SEPP) 36: Manufactured Home Estates NSW State Environmental Planning Policy (SEPP) 65 – Design Quality of Residential Apartment Development.*
NSW Statutory Planning Framework for Housing Provision	This: (i) outlines main elements of the statutory planning framework in place in NSW related to housing; (ii) explains the implications for housing as local government exercises its general planning responsibilities; and (iii) provides an overview of the NSW planning context, highlighting objectives and specific provisions of key planning instruments that relate to housing or can be used to implement housing objectives.
Local Government Housing Kit	Created to help Councils, Community Housing Providers and others understand local housing needs and issues and to formulate appropriate local responses. The database provides up-to-date information on housing need and affordability.
Planning Mechanisms for Affordable Housing	Identifies and explains the range of planning mechanisms that are available for use in NSW under current and proposed planning legislation and policy, although not all mechanisms are appropriate for every local community.
Draft Design Guide for medium-density housing	This: sets out design standards for medium-density housing types (including: terrace houses; town houses; dual occupancies; semi-detached dwellings; and manor homes); integrates input from architects, Councils and industry stakeholders (addressing issues such as layout, landscaping, private open space, sunlight, natural ventilation, and privacy). It proposes a height limit of two storeys; and will be inserted into the SEPP codes, for application to areas that already allow medium density housing.
Affordable and Rental Housing	Provides information for planners, developers, managers, buyers and renters of affordable housing: https://www.planning.nsw.gov.au/Policy-and-Legislation/Housing/Affordable-Rental-Housing?acc_section=ahsepp_part_3_information

Source: NSW Government, Planning & Environment, Policy and Legislation[38].

Multi-residential developments are also part of the sustainable compact city and are good examples of affordable living. They can be modelled on *NSW State Environmental Planning Policy Number 65 – Design Quality of Residential Apartment Development* (*SEPP 65*). Three key aspects of SEPP 65 contribute to its success in delivering quality housing: (i) a strong and effective design code; (ii) the mandated use of architects in multi-residential buildings; (iii) and peer review by design practitioners with experience in the design of multi-residential buildings (Maher, 2017). Emerging examples of multi-residential affordable housing developments in NSW that are demonstrating appropriate typologies in this sector include: The Commons, Nightingale Housing, Platform Apartments, Marrickville houses (dual occupancies), and Glebe and South Sydney, which are inner-city innovations in social housing delivery.

Other initiatives include:

1) *Urban Growth NSW*'s projects[39] have been allocated to three separate Government organisations to better reflect the NSW Government's priorities and commitments in delivering urban development policy, including addressing housing affordability.

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[38] http://www.planning.nsw.gov.au/Policy-and-Legislation/Housing/Affordable-Rental-Housing
[39] https://www.ugdc.nsw.gov.au/

2) The *Western Sydney City Deal*[40] is a large-scale development involving the three levels of Government (Commonwealth, State and Local) focussed on the key priorities of: having a measurable impact on productivity, liveability and sustainability; complementing NSW planning decisions to 2036; and influencing the State vision to 2056.

3) *Communities Plus*[41] is an innovative program to deliver integrated housing developments through partnerships with non-government and private sectors. Proposed developments include Ivanhoe, Waterloo, Telopea and Riverwood redevelopments, and smaller neighbourhoods in metropolitan Sydney and regional areas. For example, the Ivanhoe Estate will provide between 3000 to 3500 homes with over 950 social housing units and 128 affordable rental units over the next 10 to 12 years.[42] This program is part of the *Future Directions for Social and Affordable Housing in NSW* strategy to renew and grow the social housing portfolio.

4) *The Missing Middle Design Competition* was established by the NSW Government Architect and the NSW Department of Planning and Environment to highlight the *Design Guide for medium-density housing*. The aim was to put into practice the design principles for medium-density housing for that State (Cheng, 2016). This competition sought high-quality, innovative design solutions for low-rise medium-density housing (including detached and attached dual-occupancy dwellings, terraces and townhouses) to bridge the gap between inner-city high-rise apartments and low-density housing on the outer fringes (Maher 2017). Queensland also adopted this initiative to promote design solutions in that State.

5.3. An Indigenous housing snapshot

'Improving housing outcomes for Indigenous Australians is a critical public policy concern due to the huge discrepancy in their housing experience compared to the general population' (Moran et al. 2016).

The Australian Institute of Health and Welfare (2018) provide the following breakdown of Indigenous housing across Australia (the majority is again provided as detached housing with 3 or more bedrooms) (Figure 13 and Figure 14).

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[40] https://www.nsw.gov.au/improving-nsw/projects-and-initiatives/western-sydney-city-deal/

[41] https://www.communitiesplus.com.au/

[42] https://www.communitiesplus.com.au/major-sites/ivanhoe-1

Figure 13 – Social housing dwellings (percent), by structure and social housing program, at 30 June 2017 (AIHW 2018)
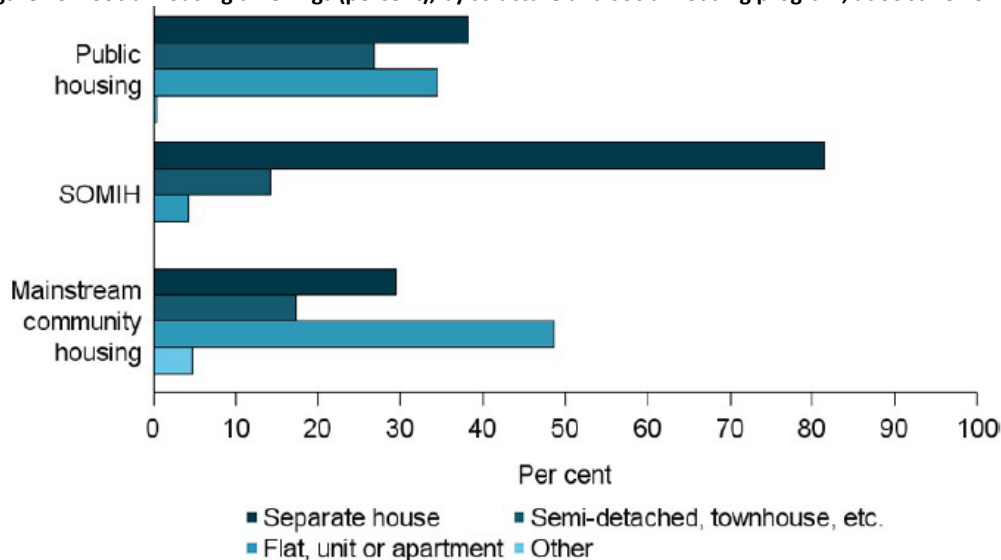
Notes: 1. Dwellings with missing dwelling type information are excluded; 2. Excludes SOMIH data for the NT as only selected information are submitted as final aggregate data for the SOMIH data collection; 3. Data for dwelling structure in Indigenous Community Housing were unavailable.
Source: AIHW National Housing Assistance Data Repository. See supplementary table DWELLING.5

Figure 14 – Social housing dwellings (percent), by bedrooms and social housing program, at 30 June 2017 (AIHW 2018)
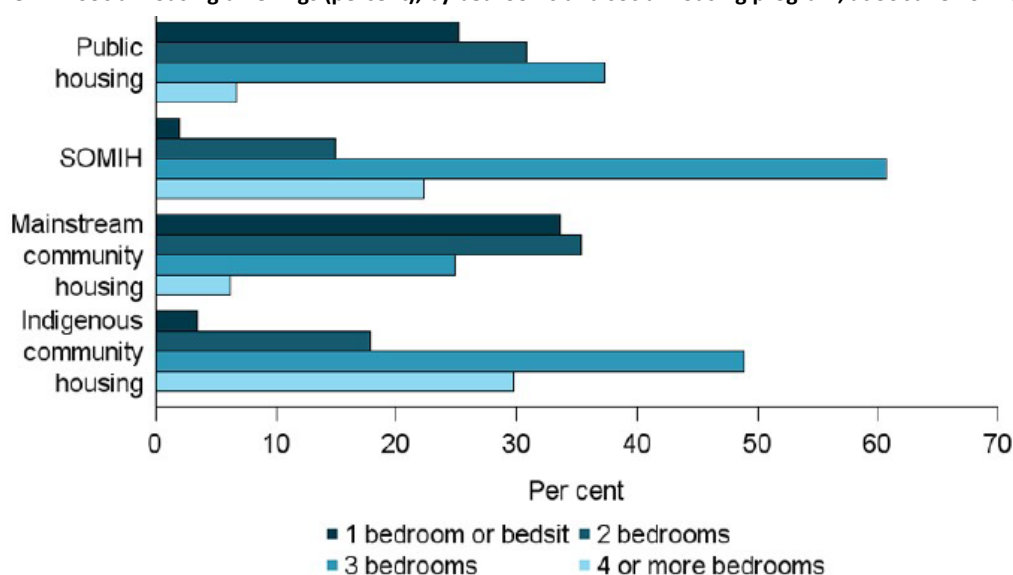
Notes: 1. Dwellings with missing bedroom information are excluded; 2. Excludes SOMIH data for the NT as only selected information are submitted as final aggregate data for the SOMIH data collection.
Source: AIHW National Housing Assistance Data Repository. See supplementary table DWELLING.6.

It is beyond the scope of this report to address issues around housing typologies for Indigenous communities. The following issues are, however, highlighted from some of the key literature.

Moran et al. (2016) note around one third of the Indigenous population rely on social housing and around one quarter on private rental. However, 'in remote discrete communities, residents are almost wholly dependent on social housing because home ownership and private rental markets are largely non-existent (AIHW 2014b, p.5)'.

They go on to note the following key issues arising from their research:

1) Indigenous social housing tenants report lower levels of satisfaction than non-Indigenous social housing tenants (AIHW 2017b).

2) Homelessness remains more prevalent within the Indigenous community with 'Aboriginal and Torres Strait Islander people make up 3.3% of the Australian population, yet they made up 25% of the clients accessing specialist homelessness services in 2016–17'. [43]

3) Indigenous social housing tenants experience extremely high levels of tenancy breaches (Jones et al. 2014, p.63).

4) Housing condition is poorer for Indigenous households in social housing (AIHW 2013, p.15).

5) Higher prevalence of household crowding (AIHW 2017b).

6) Continuing low rates of Indigenous home ownership (ibid).

7) Indigenous private renters more likely to face affordability problems (SCRGSP 2015b; SCRGSP 2015a).

Habibis et al. (2016) state that adaption to local context is critical in the provision of Indigenous housing. They note that 'this is best achieved through a hybrid model, involving a partnership between the government housing agency and knowledgeable, preferably indigenous, third party providers delivering a culturally appropriate service'. The authors go on to say: 'that government housing agencies have come a considerable way in implementing public-housing-like tenancy management standards in some remote Indigenous communities'; and that agencies are delivering 'more appropriate, efficient and effective housing services to remote communities' as part of governments' public housing program. Milligan et al. (2013) discuss social housing for indigenous people in urban areas, and also highlight the need for 'flexible, adaptive and accountable policy and service responses that acknowledge the cultural norms and circumstances of Indigenous clients' and promotes collaboration between Indigenous housing agencies and networks and mainstream agencies.

O'Rourke (2017) states that 'a more consistent public record of well-informed housing designs is required to address the lack of published evidence around Indigenous housing typologies. This is especially needed given the diversity of cultural, spiritual and environmental needs and aspirations ranging across urban, regional, remote and very remote households and communities'.

The reader is also directed to Fien et al. (2007) calling for a system for remote housing 'with principles for the design and modification of Indigenous housing that reflect the ways in which Indigenous people use their homes and which meet the cultural and social requirements of Indigenous communities in remote Australia'.

5.4. An international snapshot

Based on a limited review of the international literature, the following examples from Canada, the United States (US), the United Kingdom (UK), Germany, Austria and Sweden are considered as providing insights for the Australian housing system.

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[43] https://www.aihw.gov.au/reports/homelessness-services/specialist-homelessness-services-2016-17/contents/client-groups-of-interest/indigenous-clients

5.4.1.   Canada

Canada has developed some relevant examples of affordable housing and seniors' accommodation that may be adapted to Australian conditions.

1. *Age-in-place Laneway Project[44]* - this is a portable module that can be temporarily placed in a backyard of a residential lot, designed to address the needs of seniors, including built-in medical devices and health monitoring. It comprises a bedroom, a bathroom and a kitchenette. The project is a collaboration between: Environmental Design, University of Calgary (EVDS); the W21C research and innovation initiative within the Cumming School of Medicine's O'Brien Institute for Public Health; and the City of Calgary.

2. *Gentle density including Laneway houses and Secondary suites* - some municipalities have introduced innovative affordable housing options for medium density in established neighbourhoods. *Laneway houses* and *secondary suites* are mid-rise housing types that also provide less controversial, and more liveable, options. Both are easily adaptable models for Australia. Laneway houses[45] are an excellent way to increase the diversity of rental units in single family neighbourhoods, by providing:
   a) An additional opportunity beyond owning a house or renting a basement suite.
   b) More opportunity to live in detached and ground-oriented rental housing.
   c) Additional housing that preserves the existing streetscape and adds character, vibrancy and security to the lane.
   d) Housing for diverse groups of people, including seniors ready to downsize, adult children who want to live independently and renters who want to live in detached housing.
   e) More opportunities for people to live in the city, close to their jobs, services and frequent transit.

3. *Secondary suites[46]* are similar to Australian 'granny flats'. A maximum of one secondary dwelling unit is permitted per principal dwelling unit in the case of detached, linked-detached, semi-detached and townhouse dwellings. The secondary dwelling unit must meet the following requirements:
   a) It does not change the streetscape character along the road on which it is located.
   b) It is not a stand-alone, principal unit capable of being severed.
   c) It must be located on the same lot as its principal dwelling unit.
   d) It only exists along with, and must be contained within, the same building as its principal dwelling unit.

4. *Housing affordability by design* is about designing, building and renovating housing to be adaptable, durable, functional, resource-efficient and cost-effective. Well-designed typologies allow for:
   a) Accessible housing through the effective use of space to fit families with young children, older people and persons with disability.
   b) Adaptable housing to fit changing needs in an affordable manner.
   c) Sustainable housing which is resource-efficiency, built with durable materials, and is easy to maintain.

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[44] https://evds.ucalgary.ca/news/age-place-laneway-house-project-presented-calgary-city-council
[45] https://www.dwell.com/article/can-compact-laneway-houses-like-this-one-in-canada-transform-inner-city-neighborhoods-f3dcad01
[46] http://www.newjourneyhousing.com/article/landlords/secondary-suites-program

5.4.2.   Philadelphia, United States

While many American industrial cities underwent a shrinking process after the loss of their main economic activity (e.g. Detroit), Philadelphia has undergone a process of regeneration, at the same time addressing issues of housing affordability. Since 2005, the city has experienced significant population growth, with an increase of 150,000 people over a decade to reach 1,550,000 residents. This was due to foreign immigration and college graduates' staying in the city (Hamilton, 2017). Nevertheless, the city preserved its levels of affordability, accommodating the newcomers through infill development and renovation of existing housing stock. Developers were able to deliver a variety of housing types which restricted rising prices. Sustainability was also a priority through: the promotion of mixed-use developments; addressing transit issues; incentives for fresh food markets; density bonus for green buildings; and mixed-income households.

This was due to several different approaches:

1. *Zoning code reforms* aimed at increasing the percentage of development that is built as-of-right while at the same time increasing community engagement in approval decisions. The new revised Zoning Code (2013) controls construction and development in Philadelphia in a simple and predictable manner. At the same time it formalises standards for: multi-family residential, commercial and institutional buildings; enhanced landscape and tree requirements; protection of natural resources; transit-oriented developments; reduced parking requirements; and improved access for walking and cycling.
2. The *Philadelphia Land Bank Strategic Plan* (2017) brought in several land reforms. The Land Bank expedites the city's acquisition and sale of vacant lots and tax-delinquent properties for redevelopment. These are properties that prove to be attractive to developers and serve the needs of Philadelphia residents. After losing one fifth of its affordable rental units between 2000 and 2004, the plan aims to return 2,000 properties to productive use (1,600 for market-rate and 650 targeted to low-income renters). It also includes the clearing of titles of vacant lots for conversion into urban agriculture and green infrastructure projects (Philadelphia Land Bank 2017a).
3. The *Affordable Housing Design Competition[47]* was a design-centred approach to rebuilding Philadelphian communities, featuring three prototypes for change. It aimed to address the needs of low to moderate-income households whose annual incomes are at or below 120 percent of the Area Medium Income (AMI) of the metropolitan area. It focused on 'site-specific challenges of small-scale row homes and blocks in three Philadelphia neighbourhoods'. The three design teams were commissioned to: create prototypes for single-family, three-plus bedroom homes, ranging from approximately 1,200 to 1,600 square feet; consider how their designs would respond to open space creation and management, traffic congestion mitigation, preservation of the historical character and neighbourhood context; and evaluate the cost and associated size constraints that come with subsidised development (Philadelphia Neighborhood Development Collaborative, and Community Design Collaborative of AIA Philadelphia 2005).

5.4.3.   United Kingdom

In the United Kingdom (UK), lack of supply is one of the key issues in accessing social housing. The provision of new units for social rent strongly declined from 39,560 in 2010-11 to 6,550 in 2015-16. In the affordable rental sector, the number of new units initially increased rapidly with 40,730 new units supplied in 2014-15. However, the number of new affordable homes in 2015-16 was much lower at 16,550 (Fears et al. 2016).

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[47] https://cdesignc.org/uploads/files/661989402500144183-affordable-infill-housing-design-challenge.pdf

Affordable rent takes up a larger proportion of household income than social rent, particularly in London and the South East, when comparing mean social and affordable rents to the median household income of social-sector renters (Fears et al., 2016). This is in part resulting from a trend in many European countries where large social estates are demolished (in whole or in part) and are often replaced by mixed-tenure housing (e.g. France, England and the Netherlands). The aim is to use the land asset more effectively while providing mixed communities, sometimes at higher densities and with greater sustainability (Whitehead and Scanlon, 2007).

In England, between 20 to 50 percent of larger new and regeneration developments must be affordable housing and this is currently enabling about half of all new social provision. There is also a new initiative to allow private-developer social housing, but the clear majority of provision will continue to involve housing associations (Whitehead and Scanlon, 2007).

In Wales, a recent report addressed the potential of an alternative and holistic approach to housing delivery (Green and Forster, 2017). This report suggests that there is potential for more and better housing through the combination of innovative delivery pathways and construction techniques. It is based upon the principles of *The Well-being of Future Generations (Wales) Act 2015*, together with the *Environment Act,* which demands a focus upon long-term gains over short-term expedience. The authors highlight the seven well-being 'goals' embedded in the Act that can be translated into a set of aspirations for housing development in Wales (Figure 15).

Figure 15 - The seven well-being goals of The Well-being of Future Generations (Wales) Act 2015

A globally responsible Wales	**Setting higher standards – reduced carbon footprints and energy-positive communities**
A prosperous Wales	*Developing an integrated all-Wales supply chain using local resources and a sustainable economy*
A resilient Wales	**Future proofing with long term flexibility, adaptability, ecological value and climate resilience**
A healthier Wales	*Reduced pressure on the health service through homes that promote physical and mental wellbeing*
A more equal Wales	**Eliminating household poverty by delivering affordable housing for all**
A Wales of cohesive communities	**Stronger neighbourhoods that support co-housing, self-building and cohesive communities**
A Wales of thriving culture and language	**Promoting diversity through Wales' unique cultural heritage, context and landscape**

Source: redrawn from Green and Forster 2017.

According to Green and Forster (2017), the Welsh construction industry already has appropriate alternative construction techniques, but they need to be complemented with similar innovation in housing delivery to address the affordable housing crisis. Land should be made available for the delivery of social/affordable housing projects, through a mechanism that encourages exploration of innovative delivery pathways:

1) Locally administered registers could assess the appetite for self-build and community projects and connect people who have a better chance of success to work together.
2) Local authorities could facilitate such projects by providing serviced plots with 'principles of development' in place. Affordable land removes the two biggest barriers to self-building: availability of land and cost.
3) There are around 23,000 empty properties in Wales. Well placed infrastructure projects could unlock significant quantities of housing without building a single home.

4) Powers that enable local authorities to tackle derelict or empty infill sites, unoccupied buildings and land-hoarding by investors should be exploited.

5) The location of new housing should not only be influenced by short term 'need', but also by resource availability (land, skills, materials) and a wider understanding of longer term growth (e.g. population migration to 'urban' areas) (Green & Forster, 2017).

In terms of construction techniques, the traditional 'bricks and mortar' construction techniques used by a small number of nationally operating house builders could be complemented and gradually substituted with alternative construction techniques, including established supply chains and standardised designs. Incentives for smaller 'alternative' operators to up-scale could be introduced in Wales to enable larger residential developments. The upscaling process and adoption of alternative construction techniques could help in accelerating the transition toward a more sustainable way of building. Many of these alternative techniques are timber-based, a sustainable resource existing widely in Wales that 'locks' carbon into buildings, improving carbon footprints and providing opportunities for local resource use and economic benefit (Green and Forster, 2017).

5.4.4.   Three other European examples

Community-led solutions are demonstrating success in northern Europe, providing affordable housing through innovative approaches such as building communities and solving social problems at the same time (Davies et al., 2017). Three examples of such approaches are: the Baugruppen phenomenon in Germany; public-private financing of social housing in Austria; and the renovation of social housing in Sweden.

1. *Co-housing in Germany - Baugruppen* (German for 'building groups') is a model of co-housing which is architect-led and collectively funded by the future residents, allowing them to act as their own developer in a multi-unit housing project. This affordable housing model allows for a reduction of costs of between 10 and 20 percent. It targets medium income households. An important aspect of Baugruppen developments is the connection with the urban context and the social interaction it promotes. It adds to urban vitality by incorporating mixed-use elements that fuel urban interaction considering social issues of inclusion and community. Every Baugruppen project in Berlin has a shared garden, which is often open to the public (Ring, 2013). The Nightingale projects in Australia follow a similar model.

2. *Public-private financing of social housing in Austria* - Vienna's City Government owns and manages 220,000 housing units, which represent about 25 percent of the city's housing stock (Gruber and Lang 2014). In the 1980s, the city adopted a different approach, aiming to collaborate with the private sector to build affordable housing rather than developing and owning more public housing. As a result, the city indirectly controls 200,000 units that are built and owned by limited-profit private providers, developed through a local government-regulated process (Figure 16).

Figure 16 - City of Vienna's public-private partnership

City of Vienna
- Calls for proposals from various private developers, which will build and retain ownership of the housing units.
- Buys land deemed suitable for residential development and retains control over the type and nature of development.

City of Vienna
- Selection is done based on architectural quality, environmental performance, social sustainability, and economic parameters such as proposed rent levels and costs.
- Sells the land to the developer at affordable price, and grants a loan at low interest rates and extended repayment periods. However, conditions apply:

City of Vienna
- Developers must allow the city to rent 50% of the new apartments to lower-income residents.
- The developer generally leases the remaining units to moderate-income residents. In some projects, future tenants participate in the planning, design and construction process, giving input on what kind of facilities they would like to have in the building.*

*Rents are regulated by the City Government, which warrants that none of the residents pay more than 20 to 25 percent of their household income for housing. It is interesting to note that income restrictions for subsidised units only apply when families first move in. Long-term tenures are also ensured, as tenants of subsidised units are never asked to move out, even if the household income has risen to a moderate income. This mixing together of residents with different income levels helps with social integration.
Source: based on Gruber and Lang (2014)

3. *Social housing renovations in Sweden* – these have resulted in the displacement of residents who no longer can afford to stay. Renovations of flats resulted in a 50 percent rent rise and consequent displacement of at least 30 percent of tenants. The National Board of Housing, Building and Planning reveals that displaced tenants tended to move to poorer areas, contributing to the deepening of segregation in Sweden (Polanska, 2017). Looking at the present situation in the country, the original aim of the renovations as a means for the improvement of living conditions became a 'renoviction' or means for eviction. A proposed report from the Swedish government is to be published on the improvement of the rights of tenants facing renovation.

Relevant lessons can be drawn from the international examples regarding their application to Australian conditions.

The Baugruppen model is currently underway in the White Gum Valley precinct in Fremantle, as described in the WA initiatives section, and may be replicated in urban infill. The Austrian and Philadelphian examples could be of great inspiration to reduce land cost for affordable housing and expand collaborations with the private and not-for-profit sectors. The Swedish example can serve as a relevant 'mirror' precedent for Australia. According to Martin (2018), housing companies in Sweden are the dominant landlord type. Their experience (and similar ones in the US) can help to guide policy outcomes based on the desirable types of housing supply, affordability, security, social housing renewal and community development that Australians need (Martin, 2018).

6. In conclusion

The nature of the Australian population is changing, and with it the demographics of those living in social housing traditionally provided by State and Territory-based housing agencies. At the same time, the nature of the housing system is also being subjected to new and diverse pressures, which have resulted in a lack of affordability across many parts of Australia.

Key demographic changes highlighted in this report across the general population include: an aging population; changing household composition; cities are key growth areas; and a decline in home ownership. In addition, AIHW (2017) findings show that Indigenous people are more likely to live in multigenerational households with extended family, particularly in regional and remote and very remote areas. However, this is changing with migration to cities, where household composition changes to single people living alone and single people living with one or more children. These demographic changes need to be better understood, visualised and shared so that trend data can inform housing portfolios and development into the future.

Building on these changes, identifying and developing new housing typologies and approaches which also address overall affordability is critical. Australia's heritage of the private, single owner detached house is changing, but still constrains our thinking. We also need to develop new approaches to affordable housing, such as the co-housing Baugruppen-inspired development currently underway in the WGV precinct in Fremantle. This development demonstrates that mixed-use, multi-residential, sustainable precincts can address changing demographics, and the ongoing need for social and affordable housing. The Canadian examples of Laneway houses and secondary suites toward 'gentle density' also offer smaller low-cost solutions to increasing diversity in low-density consolidated neighbourhoods.

In addition, the creation of sustainable communities as foundations for affordable housing and affordable living is highlighted. This facilitates resilient urban infill with strong community-design elements and infrastructure. This holistic approach is crucial to ensuring affordable living, through affordability analyses of the costs of dwellings, transport, food and clothing, access to amenities and green space, schools and jobs. Medium-density typologies with a variety of units that allow for multigenerational, diverse and inclusive social connections are also appropriate for the inner-city infill. In regional areas, where low-density single-family homes are still suitable, a focus on affordable living remains important, with access to transport, and public and social services essential.

The housing affordability problem is a complex structural problem which has been developing over the last 15 years, and needs a more comprehensive approach than simple supply-demand responses. The issues to be resolved include:

1. The cost of housing has outpaced minimum wages and pensions. In some places this is because of the decline in local economic activity, and in others because of the strong demand due to the mismatch between population growth and the supply of new units.
2. Slow-to-change planning, zoning and land-use regulations which have limited land availability for affordable housing and land packages.
3. The need for more innovative and creative approaches to affordable housing. This needs a change in traditional approaches to housing across the supply chain. This is not just about floor area, but also about understanding demographic trends into the future, and improving community integration and resilience of housing, neighbourhoods, cities and regions.
4. The need to ensure there is affordable living not just affordable housing due to costs of utilities, and access to employment, public and social services, and transport.

All of these factors impact on first-home buyers and low to medium-income households that must remain renting for longer periods. This in turn impacts on other segments of the housing continuum, for example increasing the pressure on social housing.

The three Australian States studied in this research (WA, Qld and NSW) are all undergoing changes to their local planning systems and regulations to facilitate mechanisms that allow for higher densities and greater diversity of housing stock. Many cities are guiding their actions through comprehensive action plans and strategies to spur the construction of more multi-residential typologies for affordable housing. Local governments are also streamlining regulatory and design review processes to reduce construction costs. Some countries have already developed land regulations to achieve housing goals, as is the case in the UK, and from which lessons can be drawn to ameliorate the Australian system. All of these approaches need to ensure that procurement of housing, even for smaller typologies, includes inclusionary zoning targets for social and affordable housing outcomes. Whilst some targets exist in several States for Government-owned land, if we are to address the current shortfall, this needs to be extended also to private developments.

Targeted government investment has been successful in Philadelphia. In line with its population growth, the city invested in infill and existing housing stock renovation to accommodate migrants and local demand. Austria also provides a successful example of collaboration between the public and private sector, since the 1980s, where the Government collaborated with the private sector to build affordable housing rather than developing and owning more public housing. This approach is now evident in each of Qld, NSW and WA. The Swedish experience can also help to define policy outcomes based on the desirable types of housing supply, affordability, security, social housing renewal and community development.

6.1. Summary of findings

This report aims to highlight the key changes in both population demographics and housing typologies occurring in Australia (Figure 17).

Figure 17 – Changing demographics and typologies - overview of findings
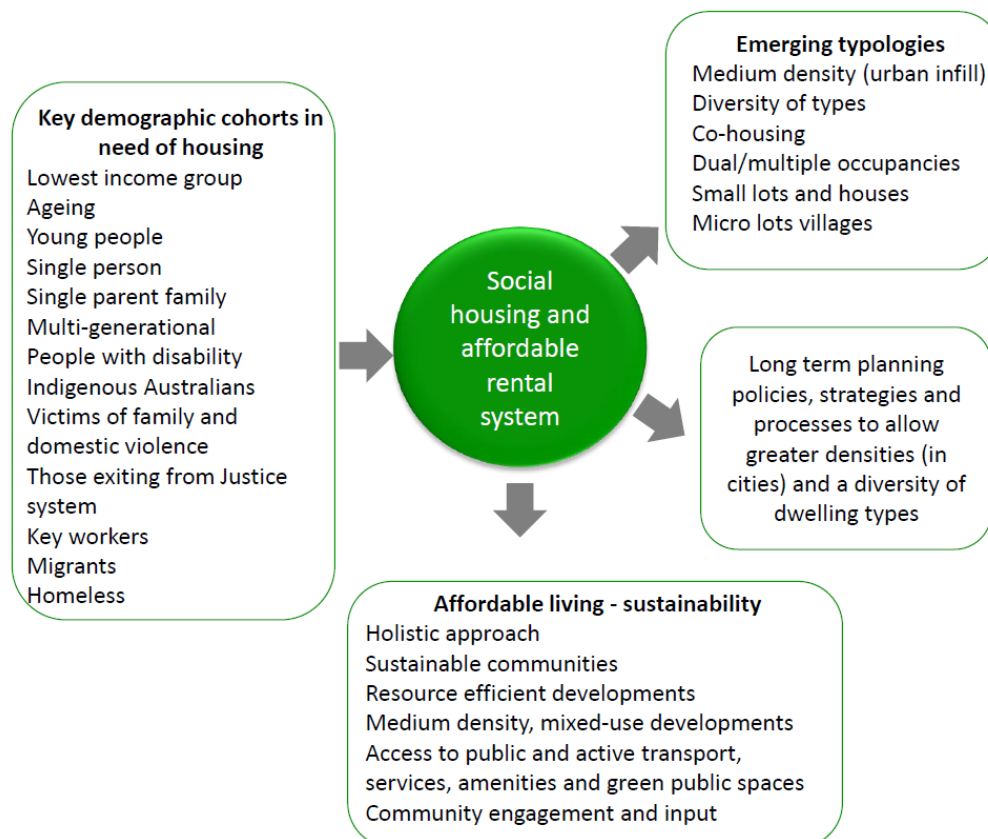
The report addresses current and emerging responses to the present situation in which: (i) social housing waiting lists are excessive and unlikely to be fully addressed in the foreseeable future; (ii) home ownership and renting is unaffordable to those on low and medium incomes in many locations; (iii) housing stock (especially in social housing) does not align with the demographic profiles of those needing/wanting housing; and (iv) there is a need to respond to growing community demand for appropriate, resilient and resource-efficient housing (in terms of energy, water and transport) and community connectedness.

Key demographic changes highlighted in this report include:

1. The population is aging.
2. Household composition is changing.
3. Cities are key growth areas.
4. Home ownership is declining.

Together, these changes suggest the need for significant increases in social and affordable housing particularly in inner city and middle-ring areas in Perth, Brisbane, Sydney and Melbourne, where demand outstrips supply.

The changes in demographics identified are largely due to: longer life expectancy; migration (including of Indigenous households to urban locations); and growing household diversity (e.g. one person and multigenerational households). For the latter this is due to increases in divorce, separation, lone parenthood, and longer stays of young adults in the parental home (often for financial or cultural reasons). These general trends are altering the composition of households, and affecting lifestyles and the demand for appropriate housing. In specific social and affordable private rental cohorts, this trend is affecting the capacity of governments and housing providers to address needs.

Key needs regarding changing housing typologies highlighted in the report include:

1. The need for more diverse housing typologies and approaches which: are affordable (reduce up-front costs); are appropriate (respond to current and emerging cohort demographics); ensure affordable living (i.e. energy, water and transport); are resilient (address climate adaptation); and address community connectedness. Some of these new and emerging approaches include:
   a) Addressing the 'missing middle' with a variety of medium density homes, infill solutions and micro lots.
   b) Addressing the size of Australian homes (second in size only to the US in an international comparison; Commsec 2017).
   c) Co-housing models building on the German and WGV (Australia) examples given earlier.
   d) Building on the 'Laneway' models (Canada), and re-thinking the traditional 'granny flat approach', now in line with the 'tiny house' movement.
   e) Making use of vacant infrastructure, whether by way of short–term pop-up shelters, or in the longer term through placing a priority use for housing on the redevelopment of vacant government land.
2. Indigenous housing for remote and very remote Indigenous communities which addresses environmental, cultural and spiritual needs.
3. Appropriate housing (in the right location) for those with a disability.
4. In urban centres:
   a) Higher densities infill which also improves access to services, and active and public transport.
   b) More affordable community and private rental housing needed for key workers in areas of employment.

    c)   Inclusionary zoning targets for both social and affordable housing (which are variable across Australia).

  5. Responsive planning systems which address:
    a)   Higher densities and greater diversity of housing stock in our cities.
    b)   Mixed-use developments in our cities and towns.
    c)   Streamlined regulatory and design review processes to reduce construction costs (especially for developments providing social and affordable units).
    d)   The needs of those with a disability (especially in an aging population).
    e)   Inclusionary zoning for social and affordable housing across all developments to address social housing waiting lists across Australia.
    f)   Value uplift from government land redevelopment directed towards social and affordable housing.

What is also important is that we build a resilient Australian housing system, especially for those needing social and affordable housing. To do this we need to be able to better track and use data to respond to trends in cohort demographics, to better align housing portfolios. This is now being undertaken in several Australian States, where administrative data is being better utilised to build evidence-based policy. There is a need for such data across the whole population to be better tracked, visualised and shared across the housing industry as a whole to inform future policy, planning and construction.

A note of caution is also raised in terms of following current trends in the provision of housing types. The growth in social isolation has been recently highlighted by several organisations including Families Australia[48]. This SBEnrc report finds a strong trend in the Australian population towards single person households, and thus a need for additional 1-2 bedroom housing to meet this need. However, we need to consider if this is sustainable as a society, and for individuals. Are there other policy initiatives we should be investigating before committing to long-term housing portfolios which support this way of living? One such example is the growing awareness of elder intentional communities[49], and associated housing typologies. Future research in this area, exploring other ways of living to ensure housing system resilience, should be considered.

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[48] https://familiesaustralia.org.au/loneliness-a-growing-national-policy-challenge/
[49] http://www.geron.uga.edu/eic/elderintentionalcommunities.html

7. Appendices

7.1. Changing living arrangements, Australia, 2011-2026

Table 3 - Projected number of persons in different living arrangements in Australia, 2011-36

	Household Type	2011	2016	2021	2026	2031	2036
		As at 30 June					
		'000	**'000**	**'000**	**'000**	**'000**	**'000**
In a family household							
	Couple families with children						
	Partner in a couple family with children	5 424.5	5 850.9	6 312.8	6 764.8	7 191.0	7 590.7
	Child in a couple family	5 544.6	5 944.3	6 375.4	6 779.0	7 129.3	7 434.8
	Other related person in a couple family with children	126.5	140.6	155.9	172.8	190.6	207.8
	Couple families without children						
	Partner in a couple family without children	4 656.9	5 229.0	5 784.0	6 296.3	6 784.5	7 275.9
	Other related person in a couple family without children	81.9	89.9	97.9	108.0	120.6	134.0
	One parent families						
	Male lone parent in a one parent family	173.6	188.6	204.6		240.6	258.9
	Female lone parent in a one parent family	818.8	888.1	962.9	1 042.2	1 123.9	1 202.6
	Child in a one parent family	1 618.2	1 727.8	1 850.3	1 972.8	2 084.6	2 182.1
	Other related person in a one parent family	88.1	97.1	106.7	117.0	127.7	138.2
	Other families						
	Related person living in another family	234.9	254.7	272.6	291.2	312.8	335.4
	Total in family households (a)						
		19 034.1	20 696.2	22 424.0	24 083.4	25 643.2	27 120.1
In a group household							
	Group household member	820.9	888.2	942.2	993.2	1056.1	1126.5
In lone person households							
	Male lone person	937.5	1 036.9	1 139.1	1 242.4	1 347.3	1 451.3
	Female lone person	1 115.1	1 255.9	1 412.5	1 583.4	1 761.7	1 936.2
Usual resident of a non-private dwelling		432.5	482.6	534.3	603.4	692.8	791.8
Total		22 340.0	24 359.8	26 452.1	28 505.9	30 501.2	32 426.0

Source: ABS 2015

7.2. Projected household numbers 2011-36

Table 26 - Projected number of households over the period 2011 - 2036, capital cities and regions.

	2011	2036			Increase, 2011-2036		
		Series I	Series II	Series III	Series I	Series II	Series III
Region	'000	'000	'000	'000	%	%	%
Sydney	1 658.4	2 478.6	2 464.7	2 437.6	49.5	48.6	47.0
Balance of NSW	1 031.1	1 253.0	1 256.8	1 261.5	21.5	21.9	22.3
Total NSW	2 689.5	3 731.6	3 721.5	3 699.0	38.7	38.4	37.5
Melbourne	1 541.1	2 479.9	2 475.1	2 463.1	60.9	60.6	59.8
Balance of Vic.	557.7	710.1	715.2	724.7	27.3	28.2	29.9
Total Vic.	2 098.8	3 190.0	3 190.3	3 187.8	52.0	52.0	51.9
Brisbane	787.1	1 306.5	1 296.9	1 277.0	66.0	64.8	62.2
Balance of Qld	891.9	1 385.6	1 385.0	1 380.9	55.3	55.3	54.8
Total Qld	1 679.0	2 692.0	2 681.9	2 657.9	60.3	59.7	58.3
Adelaide	504.4	673.3	672.3	669.6	33.5	33.3	32.8
Balance of SA	156.1	179.3	180.4	182.1	14.9	15.6	16.7
Total SA	660.5	852.5	852.7	851.7	29.1	29.1	29.0
Perth	684.8	1 383.7	1 370.0	1 343.0	102.1	100.1	96.1
Balance of WA	189.3	305.2	295.4	271.0	61.2	56.1	43.1
Total WA	874.1	1 688.9	1 665.4	1 614.0	93.2	90.5	84.6
Hobart	88.1	108.5	108.6	108.4	23.1	23.2	23.0
Balance of Tas.	119.4	135.5	135.8	136.1	13.5	13.7	14.0
Total Tas.	207.5	244.0	244.4	244.5	17.6	17.7	17.8
Darwin	45.2	65.8	65.3	63.3	45.6	44.4	40.1
Balance of NT	25.5	42.7	42.1	40.8	67.6	65.2	60.1
Total NT	70.7	108.6	107.4	104.1	53.5	51.9	47.3
Total ACT	139.1	219.1	216.8	211.9	57.6	55.9	52.3
Total capital cities(a)	5 448.2	8 715.4	8 669.7	8 573.9	60.0	59.1	57.4
Total balance of state(b)	2 971.8	4 012.5	4 011.7	3 998.0	35.0	35.0	34.5
Total Aust.(b)	8 420.0	12 727.9	12 681.5	12 571.9	51.2	50.6	49.3

(a) Includes Australian Capital Territory.

(b) Includes other territories.
Series I, II and III are different scenarios used by ABS and values are percent increase projected between 2011 and 2036.

Source: ABS 2015

7.3. NSW social housing demographics and typologies

The following data was supplied by NSW LAHC in June 2018.

		% of H'holds at 30 June	
Key Cohort	**Dwelling/Location**	**2012**	**2017**
Youth: H'hold contains at least 1 legal tenant <24.	Cottage	2.19%	2.43%
	Townhouse	2.30%	2.27%
	Terrace	0.00%	0.00%
	Unit	1.46%	1.23%
	Villa	1.46%	0.89%
	Northern Cluster		
	Western Sydney Districts	1.41%	1.39%
	Nepean Blue Mountains District	2.13%	2.15%
	Hunter New England District	2.62%	2.60%
	Central Coast District	1.24%	1.16%
	Mid North Coast District	1.06%	1.52%
	Northern NSW District	1.44%	1.73%
	South Western Sydney District	1.30%	1.18%
	Southern Cluster		
	Sydney District	1.27%	0.78%
	South Eastern Sydney District	0.93%	0.89%
	Northern Sydney District	0.64%	0.46%
	Murrumbidgee District	7.16%	8.21%
	Far West	-	-
	Western NSW District	5.85%	6.07%
	Illawarra Shoalhaven District	1.66%	1.66%
	Southern NSW District	3.49%	2.98%

Ageing: H'hold contains at least 1 legal tenant over 65+A50	Cottage	22.33%	25.17%
	Townhouse	17.53%	22.37%
	Terrace	14.29%	22.45%
	Unit	42.42%	43.94%
	Villa	43.04%	47.19%
	Northern Cluster		
	Western Sydney Districts	29.16%	33.97%
	Nepean Blue Mountains District	25.47%	26.95%
	Hunter New England District	26.07%	28.35%
	Central Coast District	33.46%	33.29%
	Mid North Coast District	32.86%	34.72%
	Northern NSW District	35.77%	35.76%
	South Western Sydney District	30.05%	34.39%
	Southern Cluster		
	Sydney District	38.88%	41.72%
	South Eastern Sydney District	40.67%	43.92%
	Northern Sydney District	43.45%	45.85%

	Murrumbidgee District	20.25%	21.11%
	Far West	-	-
	Western NSW District	21.86%	21.77%
	Illawarra Shoalhaven District	30.10%	31.35%
	Southern NSW District	23.41%	24.50%

Single parent: H'hold has single legal tenant with dependent child <18+A73	Cottage	21.39%	20.83%
	Townhouse	22.49%	21.33%
	Terrace	15.87%	16.33%
	Unit	4.44%	3.83%
	Villa	7.71%	6.41%
	Northern Cluster		
	Western Sydney Districts	13.99%	12.63%
	Nepean Blue Mountains District	15.99%	15.97%
	Hunter New England District	17.13%	16.55%
	Central Coast District	11.38%	10.80%
	Mid North Coast District	14.48%	12.26%
	Northern NSW District	14.11%	14.35%
	South Western Sydney District	13.59%	12.09%
	Southern Cluster		
	Sydney District	7.72%	7.40%
	South Eastern Sydney District	7.58%	7.42%
	Northern Sydney District	5.98%	5.00%
	Murrumbidgee District	25.09%	24.80%
	Far West	-	-
	Western NSW District	25.87%	26.00%
	Illawarra Shoalhaven District	13.88%	12.84%
	Southern NSW District	22.61%	19.71%

Aboriginal and Torres Strait Islander: 1 person in h'hold identifies as Aboriginal and Torres Strait Islander.	Cottage	15.86%	19.63%
	Townhouse	7.75%	10.40%
	Terrace	14.29%	20.41%
	Unit	3.75%	5.33%
	Villa	7.34%	9.45%
	Northern Cluster		
	Western Sydney Districts	6.15%	7.78%
	Nepean Blue Mountains District	9.05%	12.39%
	Hunter New England District	15.96%	19.49%
	Central Coast District	6.30%	9.56%
	Mid North Coast District	18.81%	23.04%
	Northern NSW District	17.78%	23.03%
	South Western Sydney District	4.60%	6.01%
	Southern Cluster		
	Sydney District	6.27%	7.67%

	South Eastern Sydney District	4.23%	6.18%
	Northern Sydney District	0.92%	1.69%
	Murrumbidgee District	21.73%	27.28%
	Far West	-	-
	Western NSW District	35.68%	42.64%
	Illawarra Shoalhaven District	8.28%	10.98%
	Southern NSW District	16.94%	21.86%
Person with a disability: H'hold incl. at least 1 person with a disability	Cottage	36.74%	37.43%
	Townhouse	33.93%	34.68%
	Terrace	28.57%	46.94%
	Unit	40.93%	39.62%
	Villa	40.84%	40.28%
	Northern Cluster		
	Western Sydney Districts	36.01%	34.71%
	Nepean Blue Mountains District	38.65%	39.68%
	Hunter New England District	43.14%	43.14%
	Central Coast District	44.55%	46.15%
	Mid North Coast District	43.16%	44.52%
	Northern NSW District	45.09%	45.87%
	South Western Sydney District	33.67%	33.79%
	Southern Cluster		
	Sydney District	39.11%	36.43%
	South Eastern Sydney District	38.48%	37.69%
	Northern Sydney District	41.35%	43.55%
	Murrumbidgee District	38.01%	35.78%
	Far West	-	-
	Western NSW District	36.42%	36.42%
	Illawarra Shoalhaven District	39.24%	41.54%
	Southern NSW District	40.87%	42.44%

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