Centre for Urban Transitions

School of Social Science, Media, Film and Education

Consequence of inaction: social and economic losses from the social and affordable housing shortage

The urgent case for social and affordable housing investment

A/Prof Christian A. Nygaard

Centre for Urban Transitions

Swinburne University of Technology

29 March 2022

1. Introduction

The Covid-19 pandemic starkly revealed how economic and social sustainability and wellbeing relies on affordable, adequate and secure housing. However, it also highlighted the inequities in housing outcomes and access that have built up in Australia over a longer period. For instance, work by Troy et al (2019) estimates a current shortfall of some 437,500 social and affordable rental dwellings for low-income households (here defined as Q1 households). This shortage is projected to increase to some 728,600 by 2036.[1] In a series of AHURI projects Hulse et al (2019) track the evolving lack of access to affordable private rental for low and moderate income households. This work also shows that access to affordable private rental continues to deteriorate and, in places such as Sydney, is beginning to affect middle-income households. These works show that the affordable housing shortage is endemic across Australia, in capital cities as well as many regional centres.

A series of Australian studies have detailed the role that social and affordable housing can play in enhancing societal wellbeing and productivity (reviews of this literature is provided in Nygaard 2019, Maclennan et al 2019, Davison et al 2020). This literature finds that a lack of affordable, adequate and secure housing generates *avoidable* public sector costs and *reduces* individual and household physical and mental wellbeing, and opportunities across a number of societal areas.

In work commissioned by the Community Housing Industry Association, Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021) used the available Australian evidence on monetary costs and benefits and the Australian Social Values Bank's Wellbeing Values to estimate the foregone wider social and economic benefits that the affordable housing shortage imposes in Australia on an annual basis – the social and economic cost of the affordable housing shortage.[2]

This document summarises the social and economic cost for Australia as a whole, and for each state and territory separately. Results are presented at Statistical Area 4 (SA4) level to enable additional geographic presentation and analysis of the social and economic costs of the affordable housing shortage. The magnitude and distribution of national, regional and Statistical Area 4s (SA4) estimates of these costs are based on the estimated shortage of social and affordable dwellings provided in Troy et al (2019).

---

[1] Troy et al (2019) provide an update of the current and projected social and affordable housing needs estimates in Lawson et al (2018).

[2] The researcher gratefully acknowledges use of the Australian Social Values Banks' invaluable Wellbeing Value data that enables monetisation and inclusion of people's experienced wellbeing resulting from better and more secure housing outcomes. This data was utilised under license to estimate a series of *wider benefits*, including Wellbeing Values. Wellbeing Values are monetary estimates of non-financial outcomes (ASVB 2017), they provide monetary equivalent values associated with educational attainment, housing security, stress, overcrowding and parental stress of non-financial outcomes.

2. The social and economic costs of the affordable housing shortage in Australia

Nygaard (2019a) provides an overview of monetary value of a series of wider social and economic benefits (*wider benefits)* generated by social and affordable housing; and provides an assessment of the incidence of these *wider benefits* accruing in new social and affordable housing construction. These include:

- Public sector cost savings (health cost associated with homelessness and stress/depression)
- Health and justice system costs associated with domestic violence,
- Private sector costs associated with stress/depression,
- Private educational attainment,
- Reduced disposable income, and
- Wellbeing Values.

The *wider benefits* associated with provision of social and affordable housing is a function of the monetary value (public and private) associated with specific outcomes; and estimates of the independent (housing only) effect of access to social and affordable rental housing for the average tenant of a specific profile (the incidence). Importantly, the *wider benefits* associated with social and affordable housing is a function of who is housed in these properties. Some benefits identified in the literature suggests a large *wider benefit*, but in practice the tenant profile will be mixed and many tenants are not associated with any *wider benefits* as a result of moving to a social or affordable property alone.[3]

Notably, these cost estimates do not include productivity gains or shared infrastructure gains, such as might arise from well-located and connected affordable housing (Maclennan et al 2019) or utilising affordable housing stock for additional service delivery (Nygaard 2019).

Based on Nygaard and Kollmann (2020), Nygaard and Kollmann (2021) and Nygaard (2021) the current social and economic costs **(foregone *wider benefits*)** from the affordable housing shortage is **almost $676.5 million** (nominal, undiscounted) **per annum**. Based on the projected shortfall in social and affordable rental housing in **2036** this cost would increase to **$1,286 million** (nominal, undiscounted)**, per annum**.

Table 1 lists the 10 SA4s in Australia with the highest current social and economic costs due to the shortage of social and affordable housing. While many of these are metropolitan areas, it is evident that the social and economic costs arising due to the housing shortage is a national problem. Areas recently inundated by the floods, such as Richmond Tweed (NSW), were amongst the areas experiencing the highest social and economic cost already *before* the floods. Recent flooding will have exacerbated these estimates further. The social and economic cost is also high in the Northern Territory Outback (NT) where overcrowding, appropriate housing shortages and risk of homelessness are long recognised (Batterham et al 2021).

[3] In estimating the social and economic costs due to the affordable housing shortage the likelihood that a benefit materialises is thus a critical parameter (Nygaard 2019). In Nygaard and Kollmann (2020) tenant characteristics are based on the tenant profile of the Social Housing Survey 2018, Housing Assistance in Australia 2020 (AIHW 2020), State of the Industry: Community Housing NSW (CHIA 2018), and, Hulse et al. (2019) characteristics of Q1 and Q2 households in PRS.

Table 1 Highest current social and economic cost in Australia by SA4 (top 10)

SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Sydney - Inner South West	Greater Sydney	$28,221,678	$52,454,780
Gold Coast	Rest of Qld	$27,858,703	$45,613,499
Melbourne - Inner	Greater Melbourne	$22,936,168	$51,180,997
Sydney - Parramatta	Greater Sydney	$21,809,502	$42,339,952
Richmond - Tweed	Rest of NSW	$19,550,178	$24,320,608
Melbourne - West	Greater Melbourne	$18,116,958	$34,204,058
Sydney - City and Inner South	Greater Sydney	$16,554,980	$34,912,178
Sunshine Coast	Rest of Qld	$16,542,274	$27,264,600
Melbourne - South East	Greater Melbourne	$15,292,891	$29,577,375
Northern Territory - Outback	Rest of NT	$15,228,426	$32,370,538

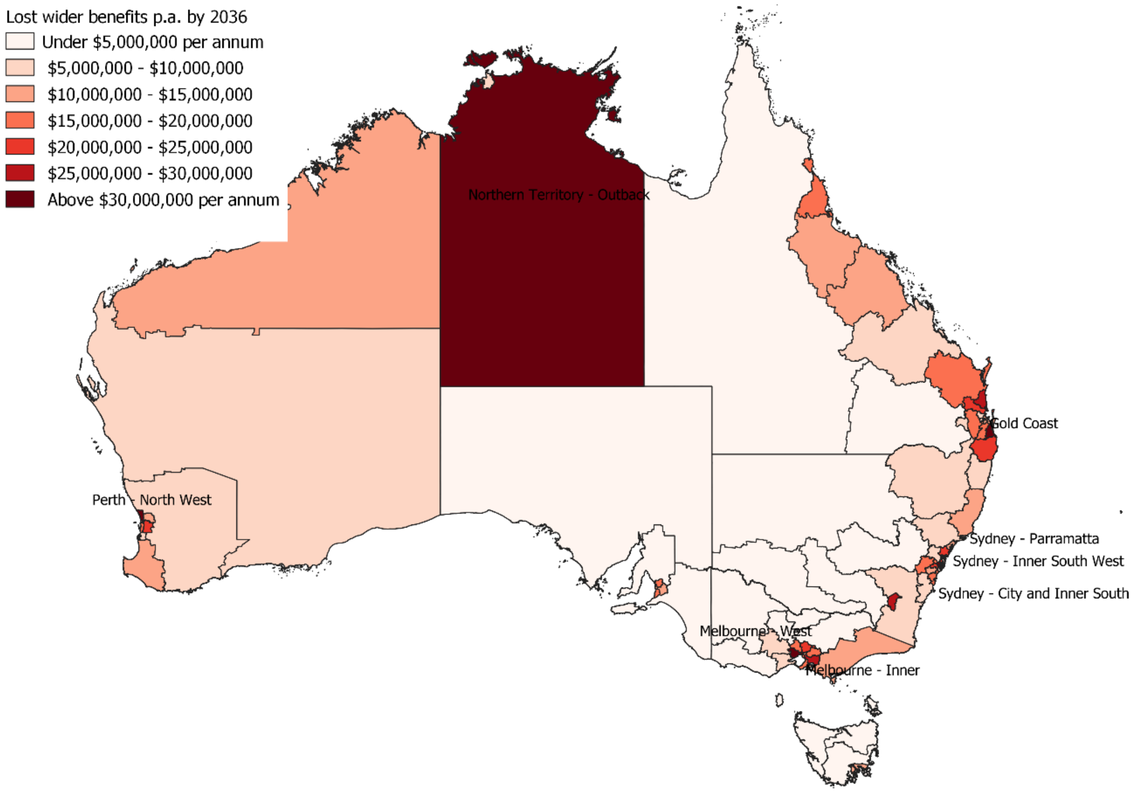
Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), Nygaard (2021); housing shortage data provided by Troy et al (2019).

If the current under-investment in social and affordable housing persists, the social and economic cost of this underinvestment is projected to exceed $30 million per annum in most of the areas in Table 1.[4]

Map 1 therefore details the distribution of the *projected* social and economic cost due to the affordable housing shortage by 2036, at SA4 level, for all of Australia. The map highlights the spatial distribution of the problem, and also at the same time the spatial distribution of the opportunity that arises. Areas identified by yellow are areas where the annual cost social and economic costs associated with the projected shortfall in social and affordable housing to 2036 exceeds $30 million per annum (nominal, undiscounted). Apart from NT Outback and Perth North West the areas exceeding this threshold are all along the eastern seaboard.

[4] $30 million per annum is the definition of a nationally significant social or economic problem applied by Infrastructure Australia (Infrastructure Australia 2021)

Map 1 Predicted annual social and economic cost by SA4, to 2036, all Australia



Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019). Named SA4s exceed annual wider benefit losses of $30 million per annum or more.

3. State and territory summary of social and economic cost

3.1. NSW

The total current cost of the affordable housing shortage in NSW is $256.4 million per annum, rising to $445.3 million per annum by 2036 if the current under-investment in social and affordable housing persists.

Table 2 sets out the top 7 areas in NSW ranked by the wider social and economic costs that currently is created *annually* by the lack of social and affordable housing in NSW. The highest annual costs are typically in Sydney. For instance, Inner South West and Parramatta have current costs exceeding $20 million per annum, rising to over $40 million per annum by 2036 if the current under-investment in social and affordable housing persists.

However, the cost of a shortage of social and affordable housing is also evidenced in regional NSW. The flood stricken communities of the Richmond-Tweed area (including Lismore), were ranked third in terms of pre-flood social and economic costs. That cost is likely to increase substantially in the aftermath of the Feb/March floods.

Table 2 Highest social and economic cost in NSW by SA4 (top 7)

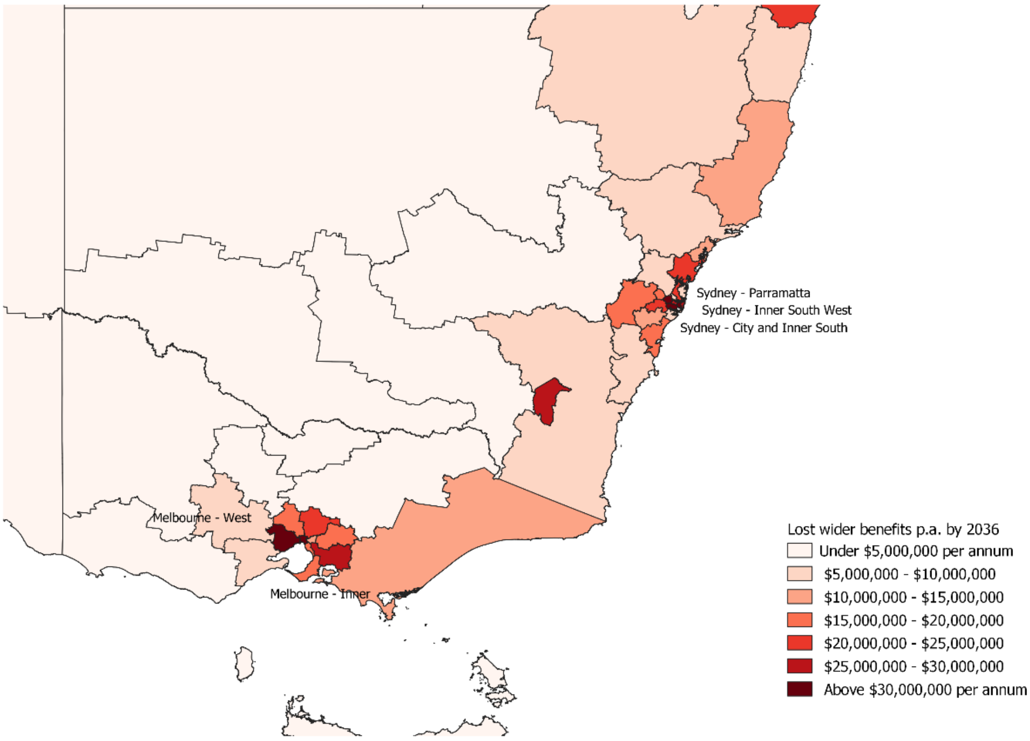
SA4	Region within NSW	Annual cost (2020)	Annual cost (2036)
Sydney - Inner South West*	Greater Sydney	$28,221,678	$52,454,780
Sydney – Parramatta*	Greater Sydney	$21,809,502	$42,339,952
Richmond – Tweed*	Rest of NSW	$19,550,178	$24,320,608
Sydney - City and Inner South*	Greater Sydney	$16,554,980	$34,912,178
Sydney - Inner West	Greater Sydney	$14,765,528	$25,300,474
Sydney - Eastern Suburbs	Greater Sydney	$14,332,419	$26,691,071
Central Coast	Greater Sydney	$14,188,560	$24,877,378

Note: there are 28 SA4s in NSW. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019).

Map 2 zooms in on the distribution of *annually* lost wider benefits in New South Wales and Victoria by 2036 if the current under-investment in social and affordable housing persists.

Map 2 Predicted annual social and economic cost by SA4, to 2036, New South Wales and Victoria



Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019). Named SA4s exceed annual wider benefit losses of $30 million per annum or more.

3.2. VIC

The total current cost of the affordable housing shortage in VIC is $141.2 million per annum, rising to $263.7 million per annum by 2036 if the current under-investment in social and affordable housing persists.

Table 3 sets out the top 7 areas in Victoria ranked by the wider social and economic costs created *annually* by the lack of social and affordable housing in VIC. Unlike NSW, the top 7 areas are all within metropolitan Melbourne, reflecting the greater concentration of Victorians in the capital city. Melbourne Inner and Melbourne West are experiencing current annual social and economic costs due to the affordable housing shortage exceeding $20 million per annum. The costs are projected to increase to $51.2 and $34.2, respectively, by 2036 if current under-investment in social and affordable housing persists.

The non-metropolitan area with the highest current social and economic costs is LaTrobe – Gippsland and Geelong; $7.4 and $4.9, respectively.

Table 3 Highest social and economic cost in VIC by SA4 (top 7)

SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Melbourne – Inner*	Greater Melbourne	$22,936,168	$51,180,997
Melbourne – West*	Greater Melbourne	$18,116,958	$34,204,058
Melbourne – South East*	Greater Melbourne	$15,292,891	$29,577,375
Melbourne – North East	Greater Melbourne	$11,700,806	$22,652,029
Melbourne – North West	Greater Melbourne	$11,088,790	$19,957,174
Mornington Peninsula	Greater Melbourne	$10,113,611	$18,010,562
Melbourne – Outer East	Greater Melbourne	$9,427,666	$17,959,422

Note: there are 17 SA4s in NSW. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019).

3.3. QLD

The total current cost of the affordable housing shortage in QLD is $151.6 million per annum, rising to $292.1 million per annum by 2036 if the current under-investment in social and affordable housing persists.

Unlike both NSW and VIC the areas with the very highest social and economic costs due to the affordable housing shortage are outside the capital city. The Gold Coast and Sunshine Coast areas have experienced rapid population growth in the 21st century, with an ensuing pressure on housing markets. Their annual social and economic costs due to the affordable housing shortage is $16.5 and $27.9 million, respectively – rising to $45.6 and 27.3 million per annum by 2036 if current under-investment in social and affordable housing persists.

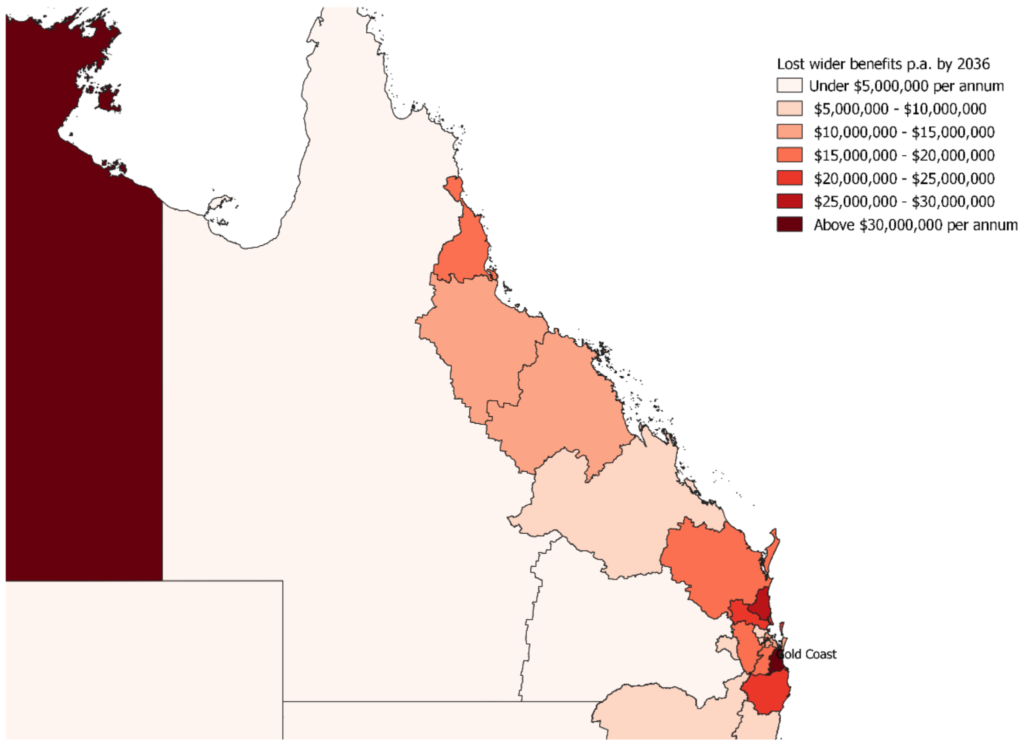
Table 4 Highest social and economic cost in QLD by SA4 (top 7)

SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Gold Coast*	Rest of Qld	$27,858,703	$45,613,499
Sunshine Coast*	Rest of Qld	$16,542,274	$27,264,600
Brisbane Inner City	Greater Brisbane	$11,197,195	$22,119,780
Moreton Bay - North	Greater Brisbane	$10,679,199	$20,960,435
Cairns	Rest of Qld	$10,637,997	$19,481,889
Wide Bay	Rest of Qld	$9,733,041	$17,649,308
Logan - Beaudesert	Greater Brisbane	$9,380,445	$19,794,662

Note: there are 19 SA4s in NSW. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Map 3 zooms in on the distribution of *annually* lost wider benefits in Queensland by 2036 if the current under-investment in social and affordable housing persists.

Map 3 Predicted annual social and economic cost by SA4, to 2036, Queensland



Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019). Named SA4s exceed annual wider benefit losses of $30 million per annum or more.

3.4. SA

The total current cost of the affordable housing shortage in SA is $38 million per annum, rising to $69.3 million per annum by 2036 if the current under-investment in social and affordable housing persists.

As in NSW and VIC, the highest current social and economic cost due to the ongoing shortage of social and affordable housing is experienced in metropolitan areas – Adelaide South, North and

Central & Hills each have annual costs exceeding $8 million, rising to $13.6-17.5 million per annum by 2036 if current under-investment in social and affordable housing persists.

Table 5 Highest social and economic cost in SA by SA4 (all)

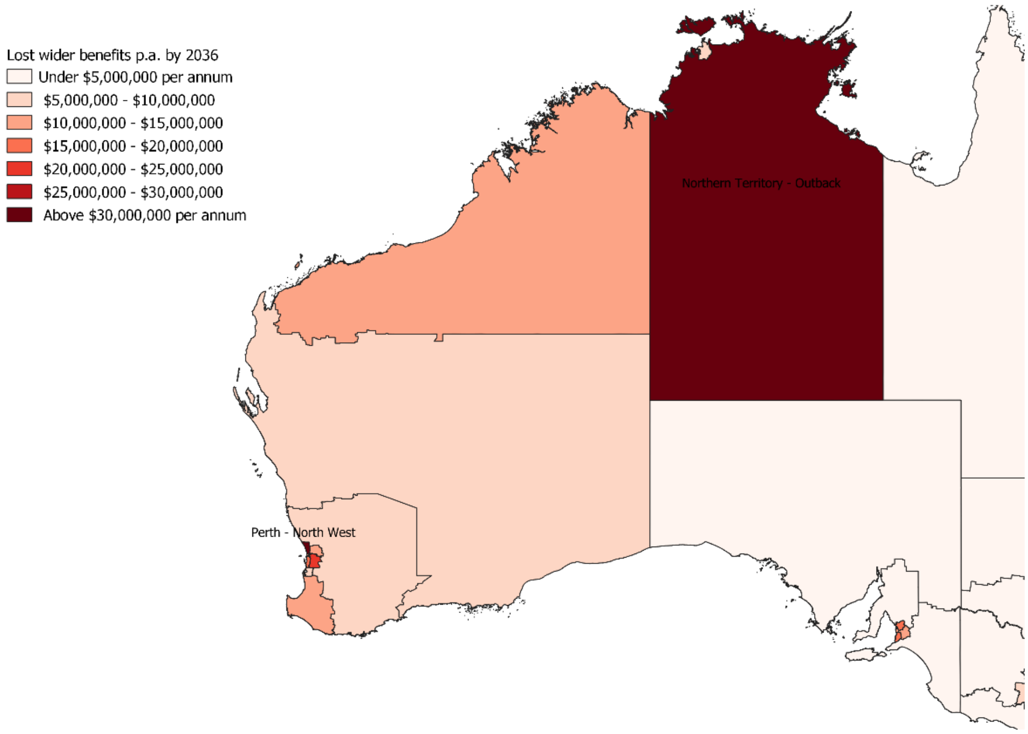
SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Adelaide - South	Greater Adelaide	$8,603,705	$15,756,868
Adelaide - North	Greater Adelaide	$8,336,539	$17,507,582
Adelaide - Central and Hills	Greater Adelaide	$8,241,970	$13,643,267
Adelaide - West	Greater Adelaide	$6,760,347	$13,879,640
South Australia - South East	Rest of SA	$3,108,326	$4,084,620
Barossa - Yorke - Mid North	Rest of SA	$1,663,913	$2,249,995
South Australia - Outback	Rest of SA	$1,314,184	$2,132,019

Note: there are 7 SA4s in SA. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019).

Map 4 zooms in on the distribution of *annually* lost wider benefits in South Australia, Western Australia and the Northern Territory by 2036 if the current under-investment in social and affordable housing persists.

Map 4 Predicted annual social and economic cost by SA4, to 2036, South Australia, Western Australia and the Northern Territory



Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019). Named SA4s exceed annual wider benefit losses of $30 million per annum or more.

3.5. WA

The total current cost of the affordable housing shortage in WA is $45.4 million per annum, rising to $131 million per annum by 2036 if the current under-investment in social and affordable housing persists.

The highest current social and economic cost due to the shortage of social and affordable housing are in North West and South East Perth, but societal costs are high also in non-metropolitan areas such as Bunbury and Western Australia – Outback (North) areas. Perth North is experiencing an annual social and economic cost due to the shortage of affordable housing of $11.3 million – rising to $30.1 million per annum if the current under-investment in social and affordable housing persists.

Table 6 Highest social and economic cost in WA by SA4 (top 7)

SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Perth - North West	Greater Perth	$11,259,993	$30,128,019
Perth - South East	Greater Perth	$6,266,498	$20,836,671
Bunbury	Rest of WA	$5,619,192	$11,426,335
Perth - South West	Greater Perth	$5,531,144	$17,807,040
Perth - Inner	Greater Perth	$3,916,108	$10,928,054
Perth - North East	Greater Perth	$3,618,515	$11,494,890
Western Australia - Outback (North)	Rest of WA	$3,242,940	$11,870,421

Note: there are 10 SA4s in WA. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019).

3.6. TAS

The total current cost of the affordable housing shortage in TAS is $16.7 million per annum, rising to $23.4 million per annum by 2036 if the current under-investment in social and affordable housing persists.

The highest current social and economic cost in Tasmania is experienced in Hobart where annual costs exceed $9.5, rising to $14.2 million per annum if the current under-investment in social and affordable housing persists.

Table 7 Highest social and economic cost in TAS by SA4 (all)

SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Hobart	Greater Hobart	$9,528,854	$14,186,364
Launceston and North East	Rest of Tas.	$3,733,059	$4,782,198
West and North West	Rest of Tas.	$2,751,063	$3,633,100
South East	Rest of Tas.	$687,789	$822,448

Note: there are 4 SA4s in TAS. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019).

3.7. NT

The total current cost of the affordable housing shortage in the NT is $18.4 million per annum, rising to $39.2 million per annum by 2036 if the current under-investment in social and affordable housing persists.

The highest social and economic cost due to the shortage of social and affordable housing options in the NT is outside the capital Darwin. The North Territory – Outback SA4 ranks amongst the 10 areas in Australia with the highest annual social and economic costs resulting from the affordable housing shortage. Here the annual cost exceeds $15.2 million – rising to 32.4 million per annum by 2036 if the current under-investment in social and affordable housing persists.

Table 8 Highest social and economic cost in NT by SA4 (all)

SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Northern Territory – Outback*	Rest of NT	$15,228,426	$32,370,538
Darwin	Greater Darwin	$3,192,549	$6,795,864

Note: there are 2 SA4s in the NT. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019).

3.7. ACT

The total current cost of the affordable housing shortage in the ACT is $8.8 million per annum, rising to $26.2 million per annum by 2036 if the current under-investment in social and affordable housing persists.

Table 8 Highest social and economic cost in ACT by SA4 (all)

SA4_name	GCCSA	Annual cost (2020)	Annual cost (2036)
Australian Capital Territory	ACT	$8,796,249	$26,169,230

Note: there is 1 SA4s in the ACT. * In the top 10 by nationally by annual social and economic cost due to the affordable housing shortage.

Source: Author's *wider benefits* calculations based on Nygaard (2019a), Nygaard and Kollmann (2020), Nygaard and Kollmann (2021), and Nygaard (2021); housing shortage data provided by Troy et al (2019).

4. Conclusion and solution

The affordable housing shortage is imposing large, but avoidable, annual social and economic costs in Australia. By 2036 these cost will exceed $1billion – each year – unless the supply of affordable, adequate and secure housing is significantly improved. These estimates do not include productivity gains or shared infrastructure gains, such as might arise from well-located and connected affordable housing (Maclennan et al 2019) or utilising affordable housing stock for additional service delivery (Nygaard 2019).

Ensuring that new supply of affordable housing actually is made available to low-income households (where the social and economic costs accrue) requires an institutional and a financial component.

Institutionally, social and affordable housing as currently operated in Australia by the Community Housing Sector and public sector provides a mechanism for ensuring that any new housing is made available to low-income households. Hulse et al (2019) show that under the prevailing housing market conditions in Australia, housing that otherwise *might* be affordable is not available to low-income households.

Financially, a support stream is required to address the equity, or construction feasibility gap, that arises from providing housing below market-level rents. Typically a 30-60% equity gaps exists in construction of new social and affordable housing. The Housing Boost Aggregator provides a blueprint whereby refundable tax offsets obtained by affordable housing developers on reverse auction principles can be aggregated and packed for institutional investors to generate the required upfront equity to attain construction feasibility (Nygaard 2019b, Constellation Project 2021).

References

Australian Institute of Health and Welfare. (2020) Housing assistance in Australia 2020: social housing households, supplementary data tables, Cat. No. HOU 320, AIHW: Canberra.

Australian Social Value Bank (ASVB). (2017) A user's guide, Australian Social Value Bank. www.asvb.com.au

Community Housing Industry Association NSW. (2019) State of the industry 2018: community housing in NSW, Community Housing Industry Association NSW: Sydney.

Constellation Project. (2021) Housing Boost Aggregator A solution to unlock private investment in social and affordable rental housing supply, Constellation Project. https://theconstellationproject.com.au/more-homes/

Davison, J., Brackertz, N. and Alves, T. (2020) Scoping the costs and benefits of affordable housing in the ACT: Stage 1 report, Australian Housing and Urban Research Institute: Melbourne.

Hulse, K., Reynolds, M., Nygaard, C., Parkinson, S. and Yates, J. (2019) The supply of affordable private rental housing in Australian cities: short-term and longer-term changes, AHURI Final Report 323, Australian Housing and Urban Research Institute Limited, Melbourne.

Infrastructure Australia. (2021) Overview Assessment Framework, Infrastructure Australia: Sydney, NSW.

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

Maclennan, D., Randolph, B., Crommelin, L,. Witte, E., Klestov, P., Scealy, B. and Brown, S. (2019) Strengthening economic cases for housing policies, City Futures Research Centre, UNSW Built Environment: Sydney.

Nygaard, C. (2021) Stage 1 Submission: National program for construction of social and affordable rental housing, proponent submission to Infrastructure Australia by the Community Housing Industry Association.

Nygaard, C. (2019a) *Social and affordable housing as social infrastructure: a literature review for the community housing industry association*, a report for the Community Housing Industry Association, National Shelter, PowerHousing Australia, Homelessness Australia, CHIA NSW, CHIA VIC, Q Shelter, NSW Shelter and WA Shelter, Community Housing Industry Association: Sydney.

Nygaard, C. (2019b) Affordable Housing Infrastructure Booster: A report and policy blueprint for the Community Housing Industry Association NSW, a report commissioned by the Community Housing Industry Association NSW, BlueCHP Limited, Evolve Housing, and the National Affordable Housing Providers Limited.

Nygaard, C. and Kollmann, T. (2021) Memo: On the cost of a housing shortage for low-income households: total forgone wider social and economic benefits, commissioned by the Community Housing Industry Association, National Shelter and Homelessness Australia, Community Housing Industry Association: Sydney.

Nygaard, C. and Kollmann, T. (2020) Social and affordable housing in Australia: a social cost-benefit analysis, a report commissioned by the Community Housing Industry Association, National Shelter and Homelessness Australia, Community Housing Industry Association: Sydney.

Troy, L., van den Nouwelant, R. and Randolph, B. (2019) Estimating need and costs of social and affordable housing delivery, report for the Community Housing Industry Association. *Unpublished additional data.*