

UNLOCKING POSITIVE SOCIAL BENEFITS WITH SOCIAL AND AFFORDABLE HOUSING



Credit: CHC Canberra

Affordable and appropriate housing is critical infrastructure to sustain societal and family functions. There is a well-documented shortage of affordable housing options for people experiencing homelessness or domestic abuse, low-income families and the critical workers that kept Australia going during the pandemic. Addressing the shortfall of social and affordable housing options is a means of unlocking social benefits and positive housing outcomes for Australia as a whole, individuals experiencing homelessness, and families struggling with the cost of private market rentals.

The Australian Government's Housing Accord and Housing Australia Future Fund (HAFF) will deliver 20,000 social and 20,000 affordable dwellings over a five-year period.

Providing appropriate and affordable housing creates financial and wellbeing benefits for public and private sectors in Australia.

SIGMAH was developed by CHIA and partners to estimate the wider social, economic and environmental benefits of new social and affordable housing developments.

NET SOCIETAL BENEFITS FROM 40,000 SOCIAL AND AFFORDABLE HOUSES

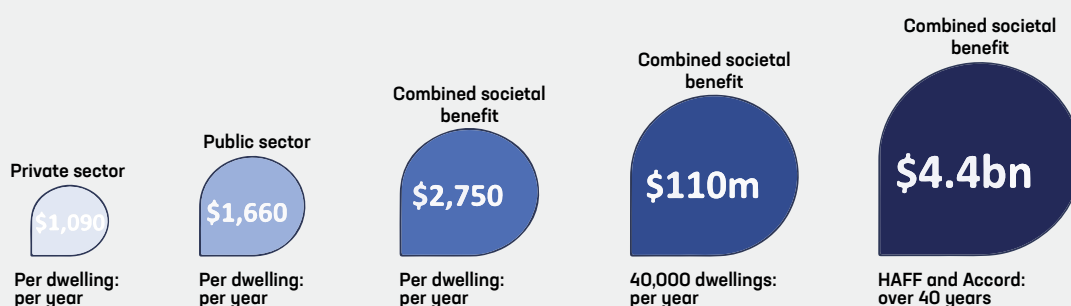
Providing secure, appropriate and affordable housing unlocks a positive societal and individual benefits and externalities. SIGMAH was created as a tool to assist social and affordable housing stakeholders to create better economic cases for investment in new housing developments.

The benefits estimated by SIGMAH represent social gains in the form of:

- Wider social, economic and wellbeing benefits as a direct effect of accessing secure, affordable and appropriate housing.
- Environmental and amenity benefits associated with thermal performance, green infrastructure and access to public space.

These benefits are over and above the appreciating value of the underlying land and housing assets and represent an overall gain to Australian society that would not have happened in the absence of these dwellings. The 40,000 dwellings provided under the HAFF and Housing Accord will over the next 40 years generate the benefits outlined in Figure 1 below:

Figure 1 - Unlocking social benefits with the HAFF and Housing Accord



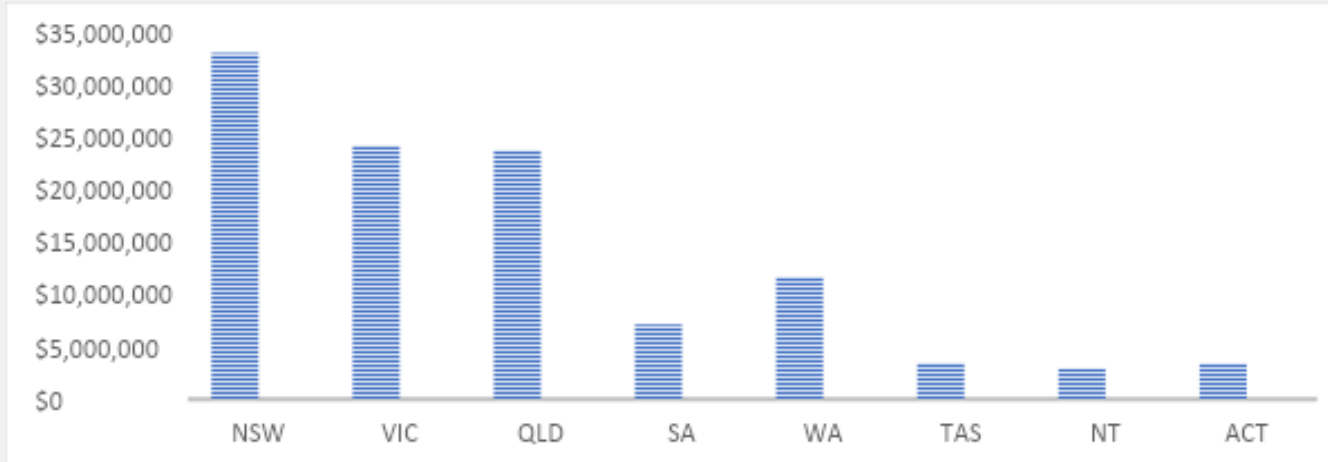
Source: SIGMAH

Note: All values expressed in real terms (\$=2023). Net benefit means benefit after adjusting for transfer payments.

NATIONAL DISTRIBUTION OF NET SOCIETAL BENEFITS FROM 40,000 SOCIAL AND AFFORDABLE HOUSES

The HAFF ensures that each state and territory receive at least 1,200 new social and affordable properties over a 5-year period. Figure 2 shows the estimated combined annual societal benefits arising from the new housing developments under the HAFF and Housing Accord in each state and territory.

Figure 2 – Distribution of annual social benefits unlocked by the HAFF and Housing Accord



Note: Allocation of new dwellings to each state and territory was based on a per capita basis, with a floor to ensure a minimum allocation of 1,200 new dwellings. All values expressed in real terms (\$=2023).



Credit: City West Housing

COST-OF-LIVING RELIEF FOR TENANTS IN SOCIAL AND AFFORDABLE HOUSING

SIGMAH was developed to estimate societal gains from investing in social and affordable housing. However, accessing affordable and appropriate housing also has clear financial benefits to tenants in the form of lower rents and lower energy expenditures¹, compared to equivalent rental in the private sector. SIGMAH therefore produces a Cost-of-Living Relief (CLR) measure - a measure of the distributional benefit experienced by tenants in the social and affordable housing.

Is the annual Cost-of-Living relief resulting from social or affordable rent setting, and lower energy expenditure - each year.

\$10,100

Per dwelling: per year

Is the combined Cost-of-Living relief resulting from social or affordable rent setting, and lower energy expenditure - over 4 decades.

\$16.2bn

HAFF and Accord: over 40 years

MEASURING THE CARBON FOOTPRINT OF HOUSING DEVELOPMENTS

SIGMAH provides the ability to estimate the embodied carbon, energy and water use associated with new housing developments. This function is based on integration of the Environmental Performance in Construction (EPIC) database². The inclusion of embodied carbon allows users to combine insights about carbon and environmental benefits from design or green infrastructure in new housing developments, and the carbon footprint of newly constructed dwellings. Overtime the inclusion of both positive and negative greenhouse gas emissions impacts is hoped to drive more sustainable building solutions and design standards in social and affordable housing.



Credit: Housing Choices Australia



SIMETRICA Jacobs



Fine print

SIGMAH calculates societal benefits based on a large body of housing research in Australia³ and Wellbeing Values produced by the Australian Social Values Bank⁴. The wider social and economic benefits produced by SIGMAH are intended for use in cost-benefit analysis and considers only benefits that can be attributed to an independent cost-reducing, productivity or wellbeing effects arising from the affordability and tenure security status of new housing developments. Benefits associated with housing people experiencing homelessness can be estimated with or without wrap around support.

These benefits capture the positive externalities that arise from investing in social and affordable housing. Estimated benefits in the current version of SIGMAH include: reduction in health and emergency services costs associated with housing people experiencing homelessness, reduced costs associated with mental health, domestic violence and alcohol/substance abuse; human capital accumulation and educational attainment; reduction in public and private mental health related expenditure and family functioning; propensity to consume adjusted private expenditure gains; and monetised estimates of wellbeing associated with housing security and stress reduction. SIGMAH carefully distinguishes between the monetary benefits associated with any of the above categories and the likelihood that these benefits arise as a direct result of access to secure, appropriate and affordable housing (the incidence of benefits). In most of the category (outside of homelessness) the incidence of benefits is low⁵.

In estimating the impact of the HAFF and Housing Accord the following assumptions are made:

- Private sector rents are lower quartile rents in the respective capital cities/rest of state. Rental discount is set to 25.01% for affordable rental. Effective rental discount for social housing relative to private rental varies from 50-80%, relative to lower quartile private rents.
- 70% of allocations are single adult allocation. Number of children estimated as a function of number of rooms.
- Social housing allocations reflect the Specialist Homelessness Services allocation (2011/12-2021/22) for each state/territory.
- NatHERs rating of dwellings set to 7.5 stars. Energy performance of cooling/heating equipment varies by climate zone, typical star rating is 3-4 (heating) and 5-6 (cooling).

Key categories of benefits not included:

- Asset appreciation of land and or buildings. Assuming an average dwelling and land value of \$400,000, the expected appreciation (1.5% real price growth) would yield an average \$8,140 per annum (over 40 years).
- Additional tenant service provision or housing provider specific benefits outside of homelessness services.
- Productivity or labour market gains associated with location of new dwellings.

¹ Nominal rent reductions do not represent a net societal gain. In large part it represents a transfer payment. Only a very small fraction of the rental reduction is therefore included in the wider social and economic benefits produced by SIGMAH, reflecting variations in the propensity to consume across the income distribution.

² Crawford, R.H., Stephan, A. and Prideaux, F. (2019) Environmental Performance in Construction (EPIC) Database, The University of Melbourne, Melbourne. EPIC is used under Creative Commons License CC BY-NC-ND 4.0.

³ Nygaard, C. (2019) Social and affordable housing as social infrastructure: a literature review for the community housing industry association, Community Housing Industry Association: Sydney.

⁴ Fujiwara, D., Keohane, K., Clayton, V., Maxwell, C., MacKenzie, M. and Seto, M. (2017) Australian Social Value Bank: A user guide, Alliance Social Enterprise and Simetrica.