



Australian Government



National Housing Finance
and Investment Corporation

DELIVERING MORE AFFORDABLE HOUSING: AN INNOVATIVE SOLUTION

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KEY FINDINGS

- The growth in the community housing sector has been constrained by low rental returns despite a growing need for its services.
- The demand for social housing will continue to increase, with recent research suggesting over 700,000 new social dwellings will be required over the next 20 years.
- New financial modelling shows that contributions of government-owned land, mixed-tenure developments, lower-cost NHFIC finance and additional private sector finance can help address the challenge of low rental returns for community housing projects.
- This new collaborative approach reduces the amount of additional state government funding support needed to deliver more social housing.
- For example, NHFIC modelling shows that the upfront cost of social housing to state government could be cut by up to 80 per cent, from \$15 million to \$3 million for a 100-dwelling social housing project. Per dwelling, the upfront cost could reduce from \$375,000 to \$75,000 per dwelling for social housing.

OVERVIEW

This paper provides an update on some aspects of community housing¹ financing in Australia and complementary measures needed to close the funding gap that exists for community housing. This gap is the difference between the costs of delivering and operating new community housing developments (including construction and ongoing management costs) and the rental returns.

The paper draws on new financial modelling that shows how different combinations of federal, state and private sector support – and tenure mix and geographic location – can narrow the funding gap for community housing. It demonstrates that existing government resources such as underutilised land can be used more effectively to build more community housing across Australia.

DEVELOPMENTS IN FINANCING COMMUNITY HOUSING

Growth in the stock of subsidised rental housing has not kept pace with growth in the number of households overall in Australia.² Historically, governments built and owned social housing. In recent times, governments have turned to community housing providers (CHPs) to manage and grow the supply of affordable rental accommodation.³ The demand for community housing is likely to increase as a result of the economic and social impacts of the COVID-19 pandemic.

Australia's CHP sector is still relatively nascent (with around 93,000 dwellings)⁴, and the funding gap is one of the widely acknowledged constraints on its growth. The funding gap for a community housing development project will depend on a range of factors, particularly geographic location and tenancy mix. For example, the funding gap for social housing will be larger than that for affordable housing as social housing brings lower rental returns.

¹ Community housing can be broadly defined as including social and affordable housing provided to people on low to moderate incomes. Social housing rent is generally set at up to 30 per cent of a tenant's income, and affordable housing rent is generally set at no more than 75 per cent of the local market rent.

² Australian Institute of Health and Welfare, *Housing assistance in Australia 2019*. Available at <https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia-2019/contents/social-housing-dwellings>

³ Tenants in social housing managed by CHPs are eligible for Commonwealth Rent Assistance, while tenants in social housing operated by state governments are not.

⁴ The number of community housing dwellings includes dwellings that are owned by state housing authorities and managed by CHPs – Productivity Commission, *Report on Government Services 2020*, Table 18A.3.

RESEARCH ON ADDRESSING THE FUNDING GAP

The Council on Federal Financial Relations established the Affordable Housing Working Group (AHWG) in 2016 to investigate innovative financing options to attract greater private and institutional investment in the affordable housing sector.

The AHWG's 2016 report, *Innovative Financing Models to Improve the Supply of Affordable Housing*, recommended the establishment of a national bond aggregator. By aggregating CHP borrowing requirements and periodically issuing bonds to large-scale investors, the bond aggregator would be able to provide cheaper and longer-tenor finance to CHPs compared to existing sources of finance. This would in turn reduce operating costs for CHPs and free up some of their existing capital for new construction. However, the AHWG's report indicated that a bond aggregator by itself would not be able to entirely close the funding gap, which was estimated to be around 60 per cent for social housing and 35 per cent for affordable housing.⁵ The report noted that "... a key question for further work is the nature and extent of the gap relative to the desired policy outcomes and how it can be funded most efficiently".⁶

In 2017, the AHWG reported on complementary reforms that could enhance the ability of the bond aggregator to drive growth in the CHP sector. This included better use of existing public housing assets; government subsidies; and developments with a mix of social, affordable and private housing. The 2017 report highlighted that because housing policy levers are shared across all levels of government, improving housing outcomes would require a collaborative approach between governments, CHPs and the private sector.⁷

In 2018, the Australian Housing and Urban Research Institute (AHURI) released a paper outlining a new model it had developed to assess various scenarios to close the funding gap – the Affordable Housing Assessment Tool. This tool is designed to calculate the impact of different policy levers and funding sources on the feasibility of projects, based on housing needs in a given local context.

Using the same modelling tool, research by the City Futures Research Centre in 2019 showed that removing the upfront cost of land and providing cheaper NHFIC finance to

⁵ Affordable Housing Working Group report to the Council on Federal Financial Relations, *Innovative Financing Models to Improve the Supply of Affordable Housing*, October 2016, page 14.

⁶ Affordable Housing Working Group report to the Council on Federal Financial Relations, *Innovative Financing Models to Improve the Supply of Affordable Housing*, October 2016, page 2.

⁷ Affordable Housing Working Group report to the Council on Federal Financial Relations, *Supporting the implementation of an affordable housing bond aggregator*, September 2017, page 31.

CHPs through the bond aggregator could significantly improve the financial feasibility and cost-effectiveness of new community housing developments.⁸

ESTABLISHING THE AFFORDABLE HOUSING BOND AGGREGATOR

The Australian Government established NHFIC in June 2018 with a legislated government guarantee to provide additional support for institutional investment in NHFIC bonds and lower borrowing costs for CHPs.

NHFIC has issued three bonds under its Affordable Housing Bond Aggregator function, which have provided an indication of its pricing relative to other equivalent benchmarks such as federal and state government securities. NHFIC's credit practices have evolved to include both project and corporate-style financing.

Since NHFIC was established, there has also been a general reduction in interest rates, including more recent falls caused by COVID-19 concerns. It is therefore timely for some new analysis of the mix of funding options for delivering more community housing.

⁸ Professor Bill Randolph, UNSW City Futures Research Centre, *Dollars to Dwellings Financing Affordable Housing*, presentation to the National Housing Conference, Darwin, 2019; Dr Laurence Troy and Professor Bill Randolph, UNSW City Futures Research Centre, *Estimating need and costs of social and affordable housing delivery*, March 2019. Assuming CHPs are able to access NHFIC finance at a 1.5 percentage point discount, based on a commercial interest rate of 5 per cent.

NHFIC MODELLING

NHFIC has commissioned new modelling from Paxon Group to assess the financial feasibility of new community housing projects. The modelling is based on two main scenarios. Scenario 1 involves a state government contributing land on a concessional 49-year lease to a CHP to redevelop an existing social housing site (the reference project model – see box below). Scenario 2 involves using private land (that is, no government land contribution) for the new housing project.

The modelling estimates the key funding requirements needed to make the new community housing project viable. If the required level of equity contribution is not sustainable for the CHP, the project is assessed as being unviable without additional support. The modelling then identifies and quantifies the ability of various support mechanisms to increase the viability of new projects.

The modelling is based on a community housing reference project with particular characteristics, developed based on a range of benchmark projects, to demonstrate the potential impact of recent developments in financing for the sector. As it is inevitable that the characteristics of different community housing projects will vary due to a range of factors, the modelling also includes sensitivity analysis based on different underlying assumptions.

SCENARIO 1: DEVELOPMENT WITH A GOVERNMENT LAND CONTRIBUTION

The modelling for Scenario 1 is based on a reference project of delivering 100 medium-to-high-density dwellings in a large metropolitan area, with a total project cost of \$50 million including land. The land would be provided to a CHP at a ‘peppercorn’ lease rate for a 49-year term, allowing the CHPs to develop housing and manage the project for its economic life, before ownership of the land and assets reverts to the state government.

Key assumptions used in the modelling for the illustrative reference project scenario are outlined in Table 1.

Table 1: Valuation and revenue assumptions

Assumption	Value	Basis of assumption
Construction cost (including land)	\$500,000/dwelling	Assumed value, based on precedent CHP projects
Market rental value	\$500/week average per dwelling	Median two-bedroom rent for Greater Metropolitan Sydney region
Rental – social housing	\$180/week per dwelling	Benchmark figure from various CHPs
Operating costs (% of revenue)	43% for social housing 25% for affordable	NHFIC and CHP assumptions from precedent projects

The geographic location of each site is important in determining the level of private market rents that could be realised in a mixed-development project.

HOW THE MODELLING WORKS

The modelling starts with a base case of all 100 dwellings being provided as social housing, with rents set at the level shown in Table 1. The ‘No support’ column in Figure 1 indicates the level of debt a CHP could access from a commercial lender based on the cash flow generated by the social housing rents, without any additional support mechanisms. In this scenario, a commercial lender would provide 23 per cent of the total project funding.

The remaining 77 per cent of the funding requirement – the funding gap – would need to come from the CHP’s own equity contribution, which would make the project unviable without additional support.

The modelling then identifies the incremental contributions of additional support mechanisms that progressively help close the funding gap and ensure the project can proceed.⁹

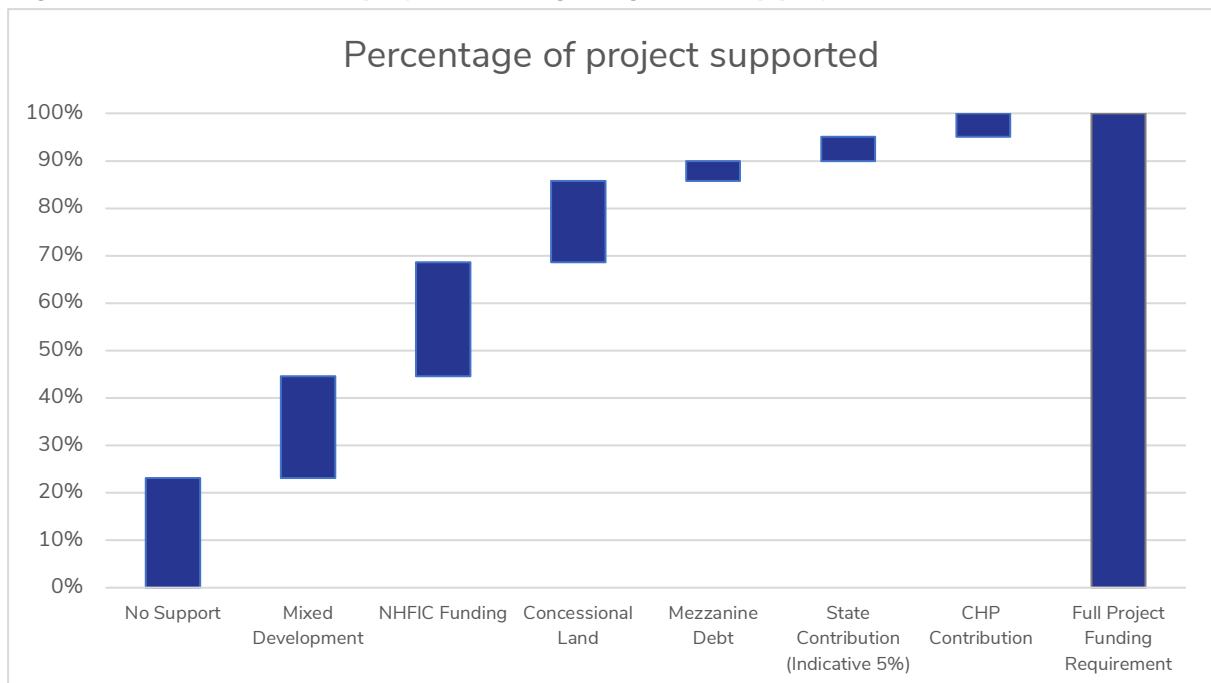
MODELLING RESULTS

1. MIXED DEVELOPMENTS

The viability of new projects can be improved by delivering a mix of social, affordable and private housing on a particular site. The higher revenues generated from the private and affordable rental properties can be used to support the lower rents from social housing. Mixed developments can also potentially improve broader social outcomes, depending on the appropriateness of the design and effective ongoing management of the development.

In this scenario, altering the dwelling composition from 100 per cent social housing to a mix of 35 per cent social housing and 65 per cent private rental accommodation significantly improves the overall cash flow for the project. The higher private market rents reduce the funding gap by around 21 percentage points. As a result, a commercial bank lender would finance around 45 per cent of the total project costs.

Figure 1: Contributions to project funding – high-density project with concessional land



⁹ The funding gap is the difference between the 'No support' column and the 'Full project funding requirement' column in Figure 1.

EXAMPLE OF A MIXED DEVELOPMENT

The Brisbane Housing Corporation (BHC) successfully completed a mixed development at Lutwyche (located 5.5 kilometres from Brisbane's CBD) in late 2016. The development was on a site made available to BHC by the Queensland Government.

The three-storey development (Spectrum Apartments) includes a total of 60 studio, one and two-bedroom apartments. These apartments are a mix of specialist disability accommodation (4), community housing (7), affordable rental for key workers (19) and private market rental (30), all with balconies and modern fixtures. The ground floor has five commercial spaces. The development is near public transport and services.



Spectrum Apartments (pictured above) won the 2017 Urban Development Institute of Australia Queensland Award for Excellence in Affordable Housing.

2. NHFIC DEBT FINANCING

The creation of NHFIC's bond aggregator function has provided the opportunity for CHPs to access lower-cost longer-term debt compared with other sources of finance. NHFIC has been able to provide CHPs with fixed interest rates of around 2 per cent for more than 10 years, which is at a substantial discount and involves longer tenor than is available under conventional bank financing.

NHFIC's ability to offer cash-flow loans rather than more traditional asset-backed loans also enables CHPs to undertake higher gearing levels and maximise the portion of project financing that can be provided at a low fixed interest rate. In the reference project scenario, the amount of senior debt now available to finance the project increases by 24 percentage points. That is, NHFIC would finance up to 69 per cent of the total project costs with a cash-flow loan, compared to around 45 per cent that would be available under conventional bank finance (see Table 2).

Table 2: Increase in project viability – NHFIC financing

	High density	Percentage of project value
Debt supported – bank debt	\$22.3 million	44.6%
NHFIC debt – asset-backed lend	\$28.0 million	56%
NHFIC debt – cash-flow lend	\$34.3 million	68.6%

3. CONCESSIONAL LAND

Governments often own older social housing sites or vacant land that is suitable for new community housing projects. Given the cost of land is often a significant proportion of the overall cost of new housing projects, the provision of government-owned land to CHPs on a concessional basis can greatly assist in closing the funding gap.

4. ADDITIONAL JUNIOR DEBT

While existing NHFIC financing can provide CHPs with a significant proportion of low-cost funding for new projects, the remaining funding requirement may be too high for CHPs to meet using their own equity.

An additional layer of junior debt funding can enable CHPs to meet a proportion of their remaining funding gap. The modelling assumes that this junior debt – which is subordinated to NHFIC's existing senior debt – is provided at a rate of 4 per cent by a third party, such as a superannuation fund that is looking to support further investment in community housing.¹⁰

The combination of NHFIC debt and a layer of junior debt increases the viability of new community housing projects by increasing the level of affordable debt funding and reducing the amount of equity funding needed to close the funding gap.

While modelling has assumed a rate of 4 per cent on the additional layer of junior debt, the reference project could support a higher rate of approximately 5.5 per cent while still meeting loan covenants for senior and junior debt finance. However, this would reduce the return a CHP could achieve on its investment in the project.

5. ADDITIONAL GOVERNMENT CONTRIBUTIONS

The modelling is based on the assumption that a CHP would need to provide at least a 10 per cent equity contribution towards a project, as it is unlikely that a junior debt provider would support a total debt or gearing level above 90 per cent of the project value.

If it was not feasible for a CHP to provide this level of equity from its own sources, it is assumed that additional finance (up to 5 per cent) could be provided by a state or territory government. This may be in the form of an upfront cash contribution, or through service-type payments for housing, a top-up of social housing rents or another mechanism that best meets the need of an individual project.

¹⁰ For the recently announced NSW Land and Housing Corporation pilot project, Cbus Super has indicated it is willing to offer CHPs junior debt finance at 3.1 percentage points above the bank bill swap rate, which at current market rates is around 4 per cent. *Australian Financial Review*, (Michael Bleby), 20 August 2020, page 37.

NSW PILOT PROJECT

NHFIC has partnered with the NSW Land and Housing Corporation (LAHC) and Cbus Super on a pilot project to more efficiently deliver new mixed social and private rental housing.

The first tranche of the project involves redeveloping six existing social housing sites in south-west Sydney on land owned by LAHC. CHPs will be able to develop and operate a mix of 96 new social, affordable and/or private rental dwellings under a 49-year 'peppercorn' or concessional lease from LAHC, through an expression of interest process.

The estimated cost of the development is \$40 million. CHPs will have the option to fund the project with financial support from the NHFIC bond aggregator and up to \$10 million in additional junior debt from Cbus. The CHP will use the surplus rental cash flow from the new dwellings to repay the NHFIC and Cbus loans. At the end of the lease, the land and buildings will be handed back to the NSW Government.

It is expected that this collaborative funding model will be used to support a second tranche of 300 dwellings being built in NSW under the LAHC Community Housing Renewal Program.

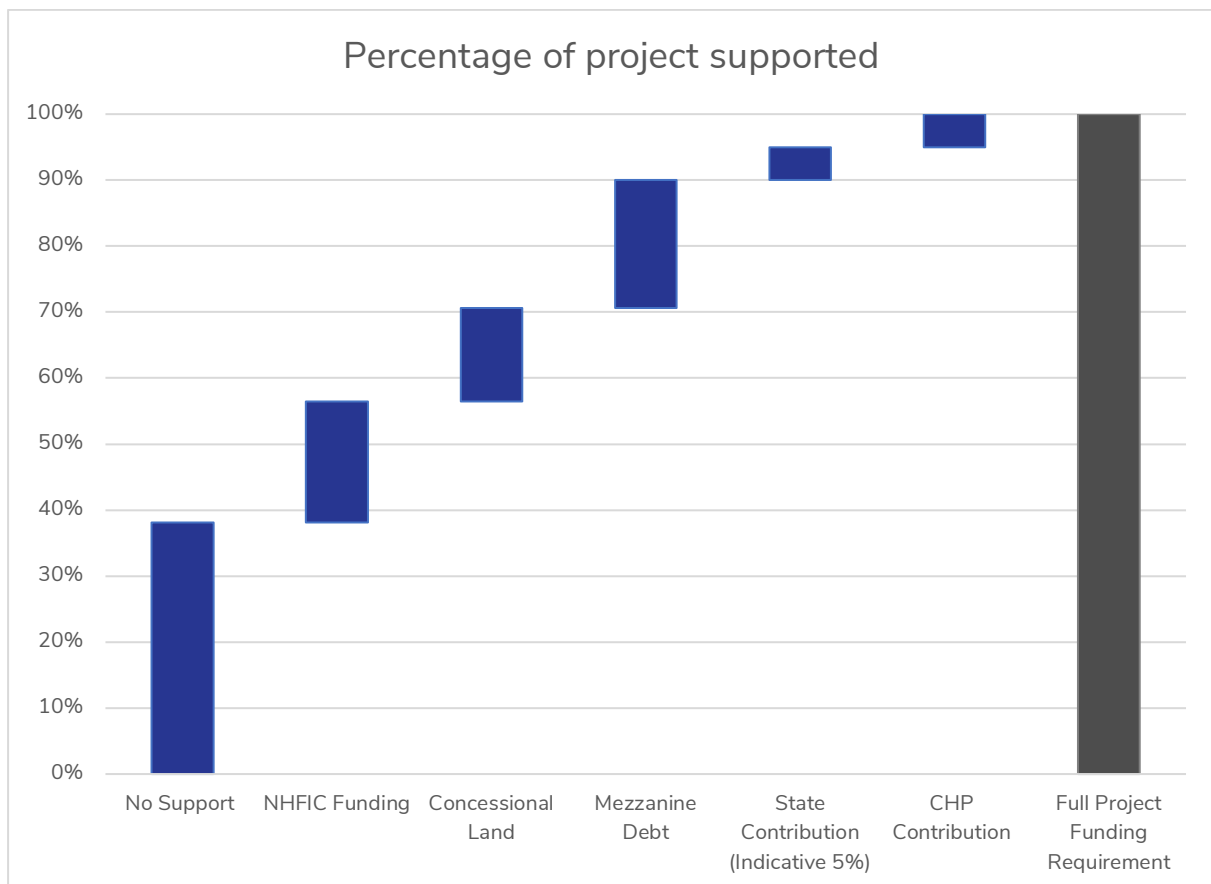
SCENARIO 1A: SOCIAL AND AFFORDABLE MIXED DEVELOPMENT

NHFIC has also modelled an alternative scenario using the same reference project assumptions, where the dwelling mix is 35 per cent social and 65 per cent affordable housing, rather than 65 per cent private rental.

As the cash flow from the affordable housing component of the mixed development is lower than that from private market rents, the gap between what the project can fund without additional support and the total project funding requirement is larger. However, the lower occupancy risk level for discounted affordable rental compared to private market rental increases the amount of debt finance potentially available for the project.

Figure 2 shows the percentage the additional measures of support contribute to closing the funding gap for this social and affordable mixed development.

Figure 2: Contribution to project funding – social and affordable housing project



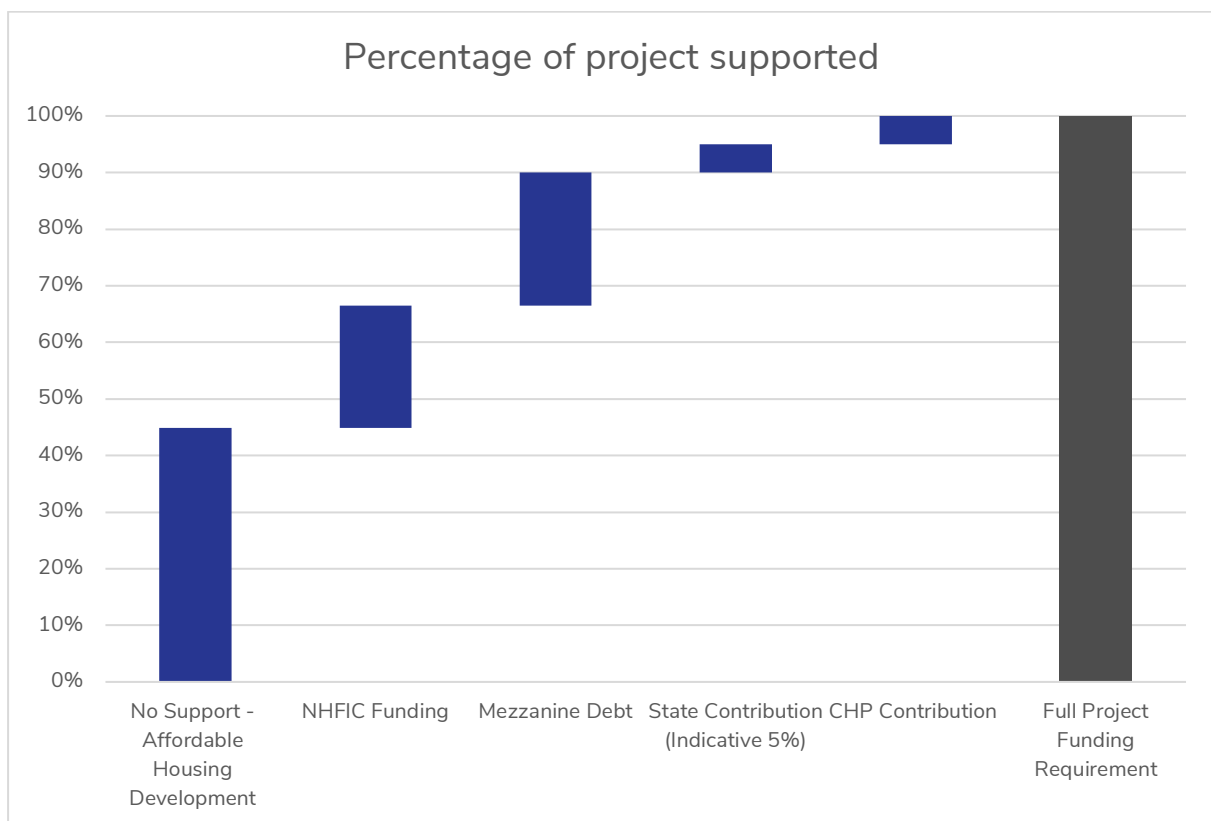
SCENARIO 2: 100 PER CENT AFFORDABLE RENTAL HOUSING WITH NO GOVERNMENT LAND CONTRIBUTION

NHFIC modelling shows that there are some scenarios where new affordable housing projects are viable without a concessional land contribution from a state government.

Using the same parameters as the project reference model in Scenario 1, a new development on private land for 100 per cent affordable rental housing (such as for key workers in essential service sectors) could generate sufficient cash flow to service a combination of NHFIC senior funding debt and a layer of junior debt (see Figure 3).

The level of junior debt needed to support the project would be higher than if there was a concessional land contribution (such as in Scenario 1).

Figure 3: Contributions to project funding – high-density, 100 per cent affordable housing on private land



SENSITIVITY ANALYSIS

As the characteristics of different community housing projects will inevitably vary, NHFIC has conducted a sensitivity analysis based on a different set of assumptions. This includes a reduction in social housing rent; a lower market rent, which affects the affordable rental rate as this is set at 74.9 per cent of market rent; and higher operational costs (outlined in Table 3). The sensitivity analysis is also based on an assumption of a mix of 30 per cent social and 70 per cent private market rental, as this is likely to be a more standard approach in mixed developments.

Table 3: Sensitivity analysis assumptions

Assumption	Value	Basis of assumption
Market rental value	\$450/week average per dwelling	Reduced 10% from \$500 per week for the reference project
Rental – social housing	\$150/week per dwelling	Reduced from \$180 per week for the reference project, reflecting a lower portion of houses with dual income or supplementary eligibility
Operating costs (percentage of revenue)	50% for social housing 35% for affordable and market	Assumed values reflecting a scenario with higher operating costs (compared to 43% for social housing and 25% for affordable housing in the reference project)

Applying these different assumptions, the project would have a lower cash flow and therefore would only support lower levels of NHFIC senior debt and junior debt. Where the requirement for the CHP equity contribution is constrained to 5 per cent of the project's value, the government contribution would need to be larger.

Table 4 shows the government funding requirement as a percentage of total project funding that would be needed due to varying assumptions.

Table 4: Additional government funding requirement

	Scenario 1: 30% social, 70% market	Scenario 1A: 30% social, 70% affordable	Scenario 2: 100% affordable
Reduced social housing rent	1.2%	1.2%	–
Increased operating costs – social housing	0.7%	0.8%	–
Increased operating costs – affordable housing	–	6.4%	8.8%
Increased operating costs – market housing	7.9%	–	–
Reduced market rent	5.1%	4.1%	5.7%
Total	14.8%	12.5%	14.5%

The percentages shown in Table 4 are in addition to the base funding requirement of a 5 per cent government contribution, indicating that the total contribution required varies between 17.5 per cent and 19.8 per cent if all downside assumptions are applied. The analysis demonstrates that the greatest impact on project economics, and hence the required government support, is an increase in assumed operating costs. Where operating costs for affordable and market housing can be contained, this limits the required increase in government funding support.

VALUE FOR MONEY

Translating the financial structuring into potential costs and benefits, NHFIC has undertaken a comparative analysis to determine the value that can be achieved under the innovative financing approach outlined above, in which various forms of support are incorporated. This compares to the relative cost of governments fully funding social housing under a conventional public housing approach.

The analysis was conducted on a pilot portion of the reference project used in Scenario 1, delivering 40 social housing properties from a 100-property project across multiple sites.

Under the traditional delivery approach, the state government would need to pay the full cost of construction of the social housing upfront (excluding the value of government land). This would require the state government to contribute \$375,000 per property, or a total of \$15 million. Where the state government chooses to use a CHP as the delivery agent, the CHP can access a combination of NHFIC finance and junior debt to finance a substantial proportion of the upfront construction costs. In this case, the state government would only need to contribute \$75,000 per social housing property, or a total of \$3 million.

For affordable housing, a government contribution of 5 per cent for the project equates to a contribution of \$25,000 per dwelling. The required government contribution is significantly less, as a higher volume of affordable housing within the development generates higher rental revenues than social housing.

A recent submission by the Grattan Institute to a parliamentary committee into homelessness in Australia indicated that government equity injections to CHPs combined with government-guaranteed finance from NHFIC was a cost-effective way to fund the construction of more social housing.¹¹

While state governments can benefit from the more cost-effective delivery of new social housing dwellings by using CHPs as delivery agents and innovative financing mechanisms, CHPs can also obtain benefits from involvement in public housing regeneration projects with 49-year leases.

The scenarios in this paper also include an upfront 5 per cent contribution from the CHP towards the total project capital costs (around \$6 million for the reference project). The modelling indicates that a CHP could achieve a return of 6–8 per cent on a \$6 million capital contribution over the life of a project. This return would support the CHP to invest in an additional 15 new properties.

The CHP involved would also expand its ability to provide affordable rental accommodation and services to people on low and moderate incomes over the life of the project.

CHPs would need to assess these potential benefits against the risks involved with mixed development projects, including the likely level of private market returns that could be sustained by a particular project.

¹¹ Grattan Institute, *Tackling Homelessness in Australia*, submission to the Standing Committee on Social Policy and Legal Affairs Inquiry into Homelessness in Australia, B. Coates, J. Nolan and T. Chen, page 12.

EMPLOYMENT BENEFITS

The NHFIC also commissioned Paxon Group to analyse the potential new construction and employment benefits from the additional 5 per cent government contribution towards community housing projects used in the modelling scenarios. These estimates are based on metrics used by the NSW LAHC for two direct construction jobs and three indirect jobs being supported, per \$1 million of residential construction activity.

Table 5: New construction and employment benefits

Scenario	Development value per \$m (\$m)	Direct construction jobs per \$m	Indirect jobs per \$m
Social housing – high-density	15.9	31.9	47.8
Social housing – low-density	10.5	21.0	31.4
Affordable housing – government land	20.0	40.0	60.0
Affordable housing – private land	15.9	31.9	47.8

NHFIC's previous analysis in its research paper *Building jobs: How residential construction drives the economy* confirms that, relative to other industries, residential construction has strong economic spill-overs in terms of economic output and jobs, particularly when there is spare capacity. Multipliers can overstate industry effects when the economy has limited spare capacity, but the current economic outlook means that this is unlikely to occur over the next few years.¹²

¹² NHFIC, *Building jobs: How residential construction drives the economy*, June 2020, page 3.

FINAL OBSERVATIONS

There has been a long-standing shortage of social and affordable rental housing in Australia. Previous work by AHURI shows that in addition to current waiting lists, an estimated 727,300 additional social dwellings will be required over the next 20 years.¹³ The ongoing challenges with increasing the supply of community housing are the low level of rental returns and closing the funding gap.

The modelling in this report illustrates that the ability of CHPs to access new sources of cheaper finance can make a substantial contribution to closing the funding gap in this low market interest rate environment. Relatively small government contributions and better use of government-owned land can enable CHPs to deliver new cost-effective and affordable rental housing for people on low incomes and key workers providing essential services for the community.

¹³ AHURI, *Social housing as infrastructure: an investment pathway*, 2018.