

# Supplementary analysis: Assessing the costs and benefits of the Future Directions for Housing in NSW Strategy

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## Summary

This report provides the findings from a supplemental cost-benefit analysis (CBA) of the three larger Future Directions Strategy programs: Social Housing Management Transfers (SHMT), the Social and Affordable Housing Fund (SAHF) and Land and Housing Corporation (LAHC) Future Directions Implementation (FDI). It conducts the CBA analysis from the perspective of NSW society asking the question: Did the benefits of the three Future Directions programs SHMT, SAHF and LAHC FDI outweigh the cost for NSW society? The findings from the supplemental analysis are not intended to replace those of the original evaluation reports but to complement them. It provides a better understanding of the financial impact of the Future Directions programs to NSW, including the inflow of Commonwealth Rent Assistance (CRA) to the State.

The methodology used in the supplemental analysis follows that used in the original reports. The key difference is that it is undertaken from a NSW standpoint. Thus, any injection of CRA into the NSW social housing sector is considered a benefit as it is assumed there is no opportunity cost for this funding. Also, Commonwealth outlays such as MBS and PBS expenditure are excluded from the analysis.

The analysis is also updated to account for updates to the NSW Treasury guidelines that advise discounting all future costs and benefits by a rate of 5%, with sensitivity to rates of 3% and 7%.

### Did the benefits of SHMT for NSW outweigh its costs?

The overall result of the CBA for NSW is that SHMT had a net present value of \$267,536,084 in June 2021 prices. With 35,686 individuals predicted to receive SHMT housing over ten years (23,084 existing tenants plus 12,612 new tenants), this results in a net present value of \$7,495 per person and a BCR of 8.82.

If the contribution of NSW taxpayers to the CRA outlay is considered the BCR drops to 6.01.

The vast majority of this comes from the additional injection of CRA into the state. While there are other benefits of SHMT, largely seen in new SHMT tenants' reduced interaction with the justice system, there are also substantial dis-benefits of the reform attributable to tenants who were transferred. These come from adverse health outcomes and an increase in evictions. Indeed, these dis-benefits largely outweigh the non-CRA benefits.

From a national perspective SHMT CRA is not a benefit as it is transferred from other taxpayers across the country. And the benefits to new SHMT tenants is not enough to outweigh the disbenefits to existing tenants combined with the cost of SHMT, generating an overall BCR of 0.04

### Did the benefits of SAHF for NSW outweigh its costs?

The additional cost of SAHF compared to public housing over 10 years is \$9,278 per person it houses, while the estimated additional benefits are \$14,903 per tenant. The BCR, or benefit to cost ratio, is thus 2.65, which means that for every dollar NSW invests in SAHF \$2.65 is returned to NSW.

This ratio drops to 1.92 once the contribution of NSW taxpayers to the additional CRA paid by the Commonwealth government to the state of NSW is considered.

From a national standpoint the BCR is 0.36 as the CRA injection into NSW is considered a transfer from other taxpayers across the country to SAHF providers and thus not included as a benefit of SAHF.

Following from our earlier analysis we again note that as most SAHF dwellings were only delivered in 2020 or 2021, the number of SAHF tenants that we can follow over the two-year observation

window is still relatively small. The benefit estimate is therefore quite sensitive to the criterion used to include benefits. If we use benefit estimates that are estimated with less precision ( $p < 0.10$ ) the NPV of SAHF for NSW becomes much larger, generating a net benefit of \$21,192 per person it houses and a BCR of 5.63. As we still lack confidence in the precision of these estimates, we recommend a follow-up evaluation of SAHF in coming years when the SAHF sample observed is larger and the follow-up period is longer. This will provide greater confidence in the estimated benefits of the program.

## Did the benefits of LAHC FDI for NSW outweigh its costs?

From the NSW perspective, the cost of LAHC FDI is \$2,619 per person it houses, while the estimated benefits come to a value of \$1,828 per tenant. The BCR, or benefit to cost ratio, is thus 0.7, which means that 70 per cent of the cost of delivering LAHC FDI is offset by observable measurable improvements to tenants' welfare. This ratio increases to 1.33 if we assume that LAHC FDI dwellings have an asset life of 66.6 years rather than 40 years.

When assessing the benefits from a NSW perspective the CBA looks more beneficial than when assessed from a national perspective, which was the focus in the original report. If we don't include additional CRA funding as a benefit and include additional MBS expenditure due to an increase in Medicare funded GP visits as a disbenefit, the BCR drops to 0.47.

The difference between the CBA conducted from the NSW perspective versus the national perspective is not as substantial as it was for SHMT and for SAHF as the reform only comprises of a small increase in the proportion of LAHC housing that is provided as community housing, thus the amount of CRA coming into the state (the main difference between NSW and national analyses) only increases marginally due to the reform.

## Concluding comments

All three programs show much more favourable BCR's when assessed from a NSW perspective relative to a national perspective. Indeed, SHMT and SAHF show benefits greater than their costs when assessed from a NSW perspective whereas they did not from a national perspective. Benefits for SHMT are particularly large due to the large injection of CRA into the state that followed it. The national BCR for SHMT was only 0.04 compared to one of 8.8 when assessed from a NSW perspective. For SAHF the national BCR is 0.36 whereas that for NSW is 2.65. While the CBA for LAHC FDI from a NSW perspective also looks more beneficial than it does from a national perspective, the difference is not as great as the other programs with the BCR remaining below 1.

The Future Directions reform has led to an injection of CRA into the NSW social housing sector. It has done so by expanding the community housing sector relative to government provided public housing. If one assumes that additional revenue brought into the NSW social housing system via CRA is welfare enhancing to the people of NSW and has no opportunity cost, then Future Directions has benefitted the people of NSW. But this comes at the expense of other Australians as they are funding the transfer to NSW Community Housing Providers (CHPs).

It however should not be taken as a given that the additional CRA leads to net welfare gains to the people of NSW as it depends on how this funding is used. Indeed, it could even be welfare reducing if the additional services that are funded by the CRA are displacing other more welfare enhancing services. This should be monitored over time.

# 1. Introduction

The Future Directions Evaluation was the first large-scale implementation, outcome and economic evaluation of social housing commissioned by the Department of Communities and Justice (DCJ), providing a unique opportunity to explore what works best for whom and why, to improve future policy and delivery. The evaluation used a rigorous mixed-methods approach and was groundbreaking in creating a large, linked data asset to track outcomes of clients over time. This allowed changes in broad outcomes to be attributed to various social housing interventions.

The evaluation was delivered in line with the prevailing NSW Treasury guidelines (2017) and has produced evidence to improve program delivery and support future policy decisions. The evaluation included tenant outcomes related to NSW and Commonwealth government savings, as this provided critical evidence for any changes in tenants welfare. Therefore, the cost benefit analyses were conducted from a national perspective of Australian Society as a whole.

Following the delivery of the evaluation reports and extensive stakeholder feedback, DCJ has further considered the way that Commonwealth funding of State government initiatives might be treated when considering the impacts of policy reforms on the State of NSW. Coinciding with this, NSW Treasury guidelines on cost-benefit analysis were updated in 2023. These better reflect the current economic environment than the earlier guidelines and provide finer detail of how Commonwealth funding of State government initiatives should be treated. This supplementary CBA analysis was undertaken to reflect these updated guidelines, with additional scenario analysis for the larger Future Directions programs from the perspective of the State of NSW. Separate from but aligned to the Future Directions evaluation, the research questions for the supplemental analysis focus around better understanding the financial impact of the Future Directions programs to NSW, including the inflow of Commonwealth Rent Assistance (CRA) to the State. The overarching question guiding the analysis was: Did the benefits of the three Future Directions programs SHMT, SAHF and LAHC FDI outweigh the cost for NSW society?

This report provides the findings from this supplemental analysis. The conclusions and recommendations made in the earlier evaluation reports considered a wide range of inputs from qualitative and quantitative analyses as well as the CBA. The findings from the supplemental analysis are therefore not intended to replace those of the original evaluation reports but to complement them. All conclusions and recommendations of the original analysis therefore hold.

In the next section the specific changes to the methodology made from the original analysis are discussed. The following three sections then provide the results of the NSW focused cost-benefit analyses for SHMT, SAHF and LAHC-FDI projects respectively. The report ends with concluding comments.

## 2. Difference in methodology from the original Future Directions evaluation reports

The CBA methodology adopted in this supplemental analysis follows that of the original analysis: see Sections 2.4 of Melbourne Institute 2024a, 2024b and 2024c for LAHC FDI, SAHF and SHMT respectively. The key difference here is that the analysis is undertaken from a NSW perspective rather than a national perspective. From a NSW perspective any Commonwealth funding that would not have come into the state if the Future Directions reform had not occurred is treated as a benefit under the assumption that there is no opportunity cost to this funding. MBS and PBS expenditures are also excluded as these are Commonwealth Government outlays. This analysis also adopts a discount rate of 5% to reflect the most recent NSW Treasury guidelines. Sensitivity to 3% and 7% discount rates is also undertaken.

The base case comparisons for each program in this supplemental analysis are as follows:

- SHMT: the NSW government continuing to manage SHMT properties as public housing,
- SAHF: NSW government build and own as public housing. Thus we only provide analysis equivalent to that comparing SAHF to base case scenario 1 in the original report as the difference between a NSW and national perspective is negligible if comparing to non-SAHF community housing.
- LAHC FDI: NSW government build and own as in the five years prior to the Future Directions reform, thus largely public housing with a small portfolio of stock run as community housing.

In addition to the main analysis, we also undertake a sub analysis that is as per the main analysis but subtracting NSW taxpayers' CRA contribution. As 32% of Australia's population reside in NSW, any increase in Commonwealth government expenditure on CRA comes disproportionately from NSW taxpayers. The sub analysis takes this into account.

Finally, the full methodology of the original reports is adopted but using a 5% discount rate. This does not include CRA as a benefit and includes net impacts on MBS and PBS expenditures where applicable. This allows us to make a direct comparison of the differences between the analysis from the NSW and national perspective in line with updated NSW Treasury guidelines.

## Treating the inflow of CRA as a benefit

Considering CRA as a benefit implies that the additional revenue brought into the NSW social housing system is welfare enhancing to the people of NSW and has no opportunity cost. This is only true however if the additional CRA that is transferred to CHPs is used in a welfare enhancing way. This could come about via improvements to the welfare of tenants in Future Directions programs via additional services, to other clients of CHPs via spillover effects, via improvements to assets that would not have occurred without the reform (for e.g. via additional maintenance) or via the provision of additional housing stock.

We have anecdotal reports that SHMT CHPs have paid for asset maintenance that was delayed prior to SHMT (and thus may not have occurred if it were not for the additional CRA coming into the social housing sector of NSW). This is one way that the additional CRA may be providing a benefit to NSW via the Commonwealth government.

However, it is also possible that the additional tenancy management services funded by the additional CRA revenue lead to welfare losses. We are already seeing that there are disbenefits from SHMT to current tenants. If these continue, it could be that the additional services provided by SHMT are displacing other more welfare enhancing services. If this is the case, then the CRA continues to have an opportunity cost even when seen from a NSW standpoint as it funding the additional labour required for an increase in tenancy management services to produce a welfare reducing outcome. This is particularly true in an economy where there is low unemployment, and CHPs are competing for labour. This should be monitored over time.

### 3. Did the benefits of SHMT outweigh the cost for NSW?

The overall result of the CBA for NSW is that SHMT had a net present value of \$267,536,084 in June 2021 prices. With 35,686 individuals predicted to receive SHMT housing over ten years (23,084 existing tenants plus 12,612 new tenants), this results in a net present value of \$7,495 per person. The main benefit of SHMT to NSW comes from the additional injection of CRA into the state. While there are other benefits of SHMT, largely seen in new SHMT tenants' reduced interaction with the justice system, there are also substantial dis-benefits of the reform attributable to tenants who were transferred. Indeed, these dis-benefits largely outweigh the non-CRA benefits.

This section provides details of the costs and benefits of SHMT to NSW leading to these CBA findings. These findings are equivalent to those presented in Section 6 of the original report but from the perspective of NSW rather than the national perspective that was originally the focus of analysis. The section concludes with sensitivity analyses to key parameter assumptions and a discussion of the implications of these findings.

#### How much did SHMT cost?

First, we discuss the net costs of SHMT in June 2021 prices. The average dwelling and unit cost estimates of SHMT are presented in Table 3.1, which is a reproduction of Table 2.10 from the original report. The unit cost measures are then utilised to calculate the total net cost of the SHMT reform in Tables 3.2a and 3.2b (which are the equivalent of Tables 6.9a and 6.9b in the original report).

As with the earlier tables, these two tables provide the calculations for the comparison of the overall costs of the SHMT program with the counterfactual costs if the NSW government had continued to manage the relevant dwellings as public housing. Table 3.2a provides the total costs of SHMT, which include one-off costs associated with the transfers. These costs are relevant for all existing tenants of SHMT. Table 3.2b provides the ongoing costs of SHMT excluding these one-off costs; these are the relevant costs for new tenants of SHMT dwellings.

All figures presented in these tables are replicated from those in the original report. The only figures that vary are those costs that are discounted (that is, TC and T4) as this supplementary analysis applies a 5% discount rate in the main analysis rather than a discount rate of 7% which was used in the original analysis.

**Table 3.1. Average annual per dwelling costs of SHMT, June 2021 prices (Table 2.10 from the original report)**

	SHMT CHPs		Public housing		Net SHMT costs	
	Average cost per dwelling	Per-dwelling-night cost	Average cost per dwelling	Per-dwelling-night cost	Average cost per dwelling	Per-dwelling-night cost
Tenancy management costs	\$2,405.76	\$6.59	\$2,229.30	\$6.10	\$176.46	\$0.48
Access and demand costs	\$554.77	\$1.52	\$381.31	\$1.04	\$173.45	\$0.47
Total recurrent annual costs	\$2,960.52	\$8.11	\$2,610.61	\$7.15	<b>\$349.91</b>	<b>\$0.96</b>
One-off costs <sup>1</sup>	\$558.17	\$1.53	N/A	N/A	\$558.17	\$1.53

1. These costs are only included in the first year for existing tenants.

**Table 3.2a. Estimated full costs of SHMT compared to public housing base scenario over first 10 years, June 2021 prices, (\$)**

		Years after entry to treated dwelling										Net present cost	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		
<i>Recurrent costs per dwelling night (pdn)<sup>1</sup></i>													
Reform	C1	9.6	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	NA
Base case	C2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	NA
Net unit cost per dwelling night	C3=C1-C2	2.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA
<i>Net rental revenue</i>													
Impact on weekly rent charged – existing tenants <sup>2</sup>	C4	6.3	-2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	NA
Impact on daily rent charged – existing tenants	C5=C4/7	0.9	-0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	NA
<i>Time spent in SHMT dwellings</i>													
Total number of days in dwellings per existing tenant households <sup>3</sup>	C6	4,524,788	4,125,786	3,726,783	3,327,781	2,928,779	2,529,776	2,130,774	1,731,772	1,332,769	933,767		NA
<i>Total net annual costs</i>													
Net recurrent costs	C7=C6*(C3-C5)	7,195,099	5,349,917	2,528,351	2,257,657	1,986,963	1,716,269	1,445,575	1,174,881	904,187	633,493		NA
Discounted net recurrent cost (annual)	TC=C7/(1+r/100) <sup>4</sup>	6,852,475	4,852,532	2,184,084	1,857,380	1,556,837	1,280,706	1,027,343	795,206	582,847	388,910	21,378,320	
<i>Annual rent foregone by NSW government (existing tenants)<sup>4</sup></i>													
Discounted rent foregone (existing tenants)	T3	93,755,230	90,589,504	79,524,467	71,010,303	62,496,138	53,981,974	45,467,809	36,953,645	28,439,480	19,925,316		NA
	T4	89,290,696	82,167,350	68,696,225	58,420,352	48,967,360	40,282,180	32,313,123	25,011,681	18,332,343	12,232,415	475,713,725	

1. Includes tenancy management costs, access and demand service costs and one-off costs associated with SHMT.

2. Average treatment effect on weekly rent paid (excluding CRA) estimated from outcome evaluation

3. Calculated across all existing principal tenants of SHMT dwellings from HOMES for years 1 and 2. Years 3 to 10 are estimated based on linear trend.

4. The rent foregone by NSW government is the rent they would have raised if no transfer had occurred. Weekly rent foregone is therefore estimated as average weekly rent collected from SHMT properties by CHPs minus C4, the impact on rent charged estimated in the outcome evaluation. This is then converted to a daily amount and multiplied by C6.

**Table 3.2b Estimated ongoing costs of SHMT compared to public housing base scenario over first 10 years, June 2021 prices, (\$)**

		Years after entry to treated dwelling										Net present cost	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		
<i>Recurrent costs per dwelling night (pdn)<sup>1</sup></i>													
Reform	C1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	NA
Base case	C2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	NA
Net unit cost per dwelling night	C3=C1-C2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA
<i>Net rental revenue</i>													
Impact on weekly rent charged – new tenants <sup>2</sup>	C4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
Impact on daily rent charged – new tenants	C5=C4/7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
<i>Time spent in SHMT dwellings</i>													
Total number of days in dwellings per new tenant households <sup>3</sup>	C6	445,194	405,936	366,678	327,420	288,163	248,905	209,647	170,389	131,131	91,873		NA
<i>Total net annual costs</i>													
Net recurrent costs	C7=C6*(C3-C5)	427,386	389,699	352,011	314,324	276,636	238,949	201,261	163,574	125,886	88,198		NA
Discounted net recurrent cost (annual)	TC=C7/(1+r/100) <sup>4</sup>	407,035	353,468	304,080	258,595	216,752	178,307	143,032	110,713	81,147	54,146		2,107,276
Annual rent foregone by NSW government (new tenants) <sup>4</sup>	T3	9,625,186	8,776,424	7,927,661	7,078,898	6,230,135	5,381,373	4,532,610	3,683,847	2,835,084	1,986,321		NA
Discounted rent foregone (new tenants)	T4	9,166,844	7,960,475	6,848,212	5,823,827	4,881,474	4,015,663	3,221,241	2,493,373	1,827,521	1,219,429		47,458,058

1. Includes tenancy management costs and access and demand service costs.

2. Average treatment effect on weekly rent paid (excluding CRA) estimated from outcome evaluation.

3. Calculated across all new principal tenants of SHMT dwellings from HOMES for year 1. Years 2 to 10 take year 1 values.

4. The rent foregone by NSW government is the rent they would have raised if no transfer had occurred. Weekly rent foregone is thus estimated as rent collected from SHMT properties by CHPs minus C4, the impact on rent charged estimated from the outcome evaluation. This is then converted to a daily amount and multiplied by C6.



C1 and C2 present the net unit costs for the reform and base case respectively, with C3 the net unit cost of the SHMT reform (i.e. the difference between C1 and C2). Rent paid by tenants (excluding CRA) offset these costs. Thus, the net impact of SHMT on weekly rents paid by existing tenants is presented as C4 and C5 converts these weekly figures to a per-dwelling-night estimate.

Annual SHMT cost estimates (C7) are then calculated by multiplying the respective per-dwelling-night unit costs net of rent revenue (C3-C5) by the total amount of time “treated” households spent in SHMT dwellings in each year (C6). Costs C7, which can be thought of as the recurrent costs of a more traditional CBA, are then discounted in the row labelled TC.

The ten-year sum of costs (TC) presented in the final column shows that SHMT is estimated to cost an additional \$21,378,320 compared to continuing with public housing management over the first 10 years when considering existing tenants only.

Finally, estimates of the rental revenue foregone by the NSW government in transferring the management of SHMT dwellings to CHPs (T3) are presented. Discounting these annual estimates (T4) and then summing over the ten years shows that the NSW government is estimated to lose around \$475.7 million in rental revenue due to SHMT over ten years in present values when considering existing tenants only.

The equivalent costs for new tenants of SHMT dwellings are presented in Table 3.2b. In this table, unit costs exclude any one-off costs associated with the reform. We then undertake the same calculations as conducted in Table 3.2a for existing tenants, replacing values with those estimated for new tenants where relevant. This shows that in relation to the 2,082 new tenants that SHMT has already housed it costs an additional \$2,107,276 in present values. In addition, the \$47.5 million in rental revenue for these 2,082 new tenants is no longer received by the NSW government.

## What did the resources from SHMT achieve for NSW?

In Section 6.1 of the original report SHMT was shown to affect tenant outcomes in several key areas. These estimates are used in the CBA by multiplying them with the monetary values that were presented in Table 2.12 of Section 2.4 of the original report to calculate the overall net benefits of SHMT. Panel A of Table 3.3 below presents the results for the sample of tenants that were in SHMT housing at the time of the transfer (the existing tenant cohort) and Panel B presents the results for new entrants to SHMT housing (the new tenant cohort).

Table 3.3 presents the steps involved in calculating the annual monetary benefits of SHMT over ten years. It shows how the monetary values of key outcomes (reproduced in column B1 of the table) are multiplied by the estimate of the overall SHMT effect for each outcome. This overall SHMT effect is computed by multiplying the population of individuals ‘treated’ by the SHMT reform (B2) by the estimate of the causal impact of SHMT for each outcome (reproduced by year in the two B3 columns), to generate the estimated benefit for years 1 and 2. Thus the annual monetary benefit (B4) equals B1 times B2 times B3. Outcomes where average treatment effects are not significant are denoted by zeros in the table.

The effects of SHMT are expected to persist beyond the period captured in the outcome evaluation (which is two years for the existing sample of tenants and 1 year for new tenants). For new tenants we assume that the 1-year outcomes are repeated for years 2 to 10, whereas for existing tenants longer-term outcomes are predicted for years 3 to 10 after the transfer by

**Table 3.3 Estimated benefits of SHMT compared to public housing base case scenario over first 10 years**

	\$ Benefit (-Cost) Value	Number of treated persons	Estimates of average treatment effects (ATEs)		Total estimated annual benefit (\$)		Total predicted annual benefit (\$)
	B1	B2	B3		B4=B1xB2xB3		Mean of B4
			Year 1	Year 2	Year 1	Year 2	Years 3 to 10
<b>A. Existing tenant cohort</b>							
<i>Health</i>							
Hospital days (non-psychiatric)	-\$1,579	23,084	0	0	\$0	\$0	\$0
Days in psychiatric ward/hospital	-\$1,269	23,084	0	0	\$0	\$0	\$0
Ambulance call-out	-\$910	23,084	0	-0.008	\$0	\$168,955	\$84,477
Number of emergency department presentations (leading to admission)	-\$1,049	23,084	0	0	\$0	\$0	\$0
Number of emergency department presentation (not admitted)	-\$657	23,084	0	0.156	\$0	-\$2,365,838	-\$1,182,919
Use of mental health services (ambulatory)	-\$297	23,084	0.013	0.009	-\$87,570	-\$61,302	-\$74,436
<i>Housing</i>							
Evicted from social housing	-\$25,432	23,084	0.000	0.003	\$0	-\$1,581,997	-\$790,999
Use of homelessness support with accommodation	-\$12,201	23,084	0	0	\$0	\$0	\$0
<i>Safety</i>							
Adult days in custody	-\$292	20,695	0	0	\$0	\$0	\$0
Juvenile justice days in custody	-\$1,956	20,695	0	0	\$0	\$0	\$0
Proven court appearance	-\$11,556	20,695	0	0	\$0	\$0	\$0
Child ever in contact with child protection services	-\$1,412	5,200	0	0	\$0	\$0	\$0
<i>Education</i>							
Child achieves minimum NAPLAN standard	\$4,954	0	0	0	\$0	\$0	\$0
Completion of a VET qualification/apprenticeship at Cert III or above	\$16,628	18,582	0	0	\$0	\$0	\$0
<i>Commonwealth Rent Assistance</i>							
CRA	Actual value	Table 2a C6	\$8.62	\$8.76	\$39,002,728	\$36,158,821	\$32,393,009
CRA excluding NSW taxpayer contribution	Actual value	Table 2a C6	\$8.62	\$8.76	\$26,521,855	\$24,587,998	\$22,027,246

**Table 3.3 Estimated benefits of SHMT compared to public housing base case scenario over first 10 years**

	\$ Benefit (-Cost) Value	Number of treated persons B2	Estimates of average treatment effects (ATEs)		Total estimated annual benefit (\$)		Total predicted annual benefit (\$)	
	B1		B3	Year 1	Year 2 (Uses Year 1 values)	B4=B1xB2xB3		Mean of B4 Years 3 to 10
						Year 1	Year 2	
<b>B. New tenant cohort</b>								
<i>Health</i>								
Hospital days (non-psychiatric)	-\$1,579	2,072	0	0	\$0	\$0	\$0	
Days in psychiatric ward/hospital	-\$1,269	2,072	0	0	\$0	\$0	\$0	
Ambulance call-out	-\$910	2,072	0	0	\$0	\$0	\$0	
Number of emergency department presentations (leading to admission)	-\$1,049	2,072	0	0	\$0	\$0	\$0	
Number of emergency department presentations (not admitted)	-\$657	2,072	0	0	\$0	\$0	\$0	
Use of mental health services (ambulatory)	-\$297	2,072	0.023	0.023	-\$13,972	-\$13,972	-\$13,972	
<i>Housing</i>								
Evicted from social housing	-\$25,432	2,072	0.010	0.010	-\$541,417	-\$541,417	-\$541,417	
Use of homelessness support with accommodation	-\$12,201	2,072	0	0	\$0	\$0	\$0	
<i>Safety</i>								
Adult days in custody	-\$292	1,583	-1.958	-1.958	\$905,008	\$905,008	\$905,008	
Juvenile justice stays	-\$1,956	1,583	0	0	\$0	\$0	\$0	
Proven court appearance	-\$11,556	1,583	0	0	\$0	\$0	\$0	
Child ever in contact with child protection services	-\$1,412	725	0	0	\$0	\$0	\$0	
<i>Education</i>								
Child achieves minimum NAPLAN standard	\$4,954	0	0	0	\$0	\$0	\$0	
Completion of a VET qualification/apprenticeship at Cert III or above	\$16,628	1,394	0	0	\$0	\$0	\$0	
<i>Commonwealth Rent Assistance</i>								
CRA	Actual value	Table 2a C6	7.97	7.97	\$3,548,981	\$3,236,027	\$2,923,073	
CRA excluding NSW taxpayer contribution	Actual value	Table 2a C6	7.97	7.97	\$2,413,307	\$2,200,498	\$1,987,690	

taking a simple average of the effects on outcomes in the two years.<sup>1</sup> In the future, once outcomes for further years are known, these predictions should be substituted for the ex-post outcome effects estimated and the CBA analysis updated.

We illustrate how to read Table 3.3 Panel A using an example focusing on the use of mental health outpatient services of existing tenants. Column 'B1' shows that mental health outpatient services cost the government on average \$297 per person treated. Column 'B2' shows that there were 23,084 individuals that lived in SHMT dwellings at the time of the SHMT transfer. Column 'B3' shows that the causal impacts of SHMT are to increase the use of mental health outpatient services by 1.3 percentage points one year after the SHMT transfer and by 0.9 percentage points two years after the transfer. This equates to a disbenefit of \$87,570 in year 1 and \$61,302 in year 2. The predicted disbenefits in Years 3 through 10 take the simple average of costs over the first two years, which comes to \$74,436 per year.

Panel B shows that a further 2,072 individuals started tenancies in SHMT dwellings after the transfer. Using the same example of mental health outpatient services as for panel A, Table 3.3 Panel B shows that the causal impacts of SHMT are to increase new SHMT tenants' use of mental health outpatient services by 2.3 percentage points one year after their entry to SHMT dwellings. This leads to a disbenefit of \$13,972 in year 1 which is assumed to continue in years 2 to 10.

Table 3.3 Panel A shows that SHMT adversely affected existing tenants on a number of key outcomes, with disbenefits from an increase in dwelling evictions and an increase in the number of visits to hospital emergency departments. The only outcome which showed a positive monetary benefit was from reduced ambulance call-outs, with SHMT reducing the probability of call-out by 0.8 percentage point in the second year following the transfer leading to a saving of \$168,955 in year 2 and an average predicted saving of \$84,777 for years 3 to 10.

In addition to the disbenefits associated with an increase in the use of mental health services, the only other outcomes affected by SHMT relative to a public housing base case for new tenants relates to evictions and contact with the justice system. SHMT led to a 1 percentage point increase in evictions of new tenants compared to a public housing counterfactual. This leads to a further annual disbenefit of \$541,417 if we assume that this eviction rate persists in Years 2 to 10. On the other hand, SHMT led to a 1.96 day reduction in the average number of days tenants spent in adult prison which, if it persists in later years, leads to a benefit of \$905,008 each year.

As discussed in the original report a challenge for the CBA is that we only have relatively crude proxies for tenants' welfare. While utilisation of health services is captured, actual health and wellbeing are not (at least not in the administrative data). By taking increases in the utilisation of these services as a cost we are implicitly assuming the former, but this may not be accurate. The increase in acute health services that are most affected by SHMT, such as increases in emergency department presentations, seem to suggest that the health of tenants has been negatively affected by SHMT. However, the increase in the use of mental health services that is also observed may also indicate a better use of primary (preventive) health services which may lead to reduced health services use in future years.

Similarly, there may be further costs to SHMT that are not currently monetised. For example, the increase in evictions from SHMT dwellings for new tenants may have led to homelessness that has remained unobserved because homelessness services were not utilised. Such homelessness would thus not be identified through the administrative data. Thus, a longer-term assessment of outcomes is required, with the use of other (complementary) measures where possible.

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<sup>1</sup> Another option would be to predict using a linear extrapolation of estimates from earlier years, but as the two-year outcomes do not have the same predicted power of those of year 1 (and therefore are more likely to be zero) a simple average was considered to be more appropriate.

For this analysis we also consider any injection of Commonwealth funding into NSW (via CRA payments) as a benefit. Thus Table 3.3 also presents the annualised estimates of additional CRA funds that are brought about by the SHMT reform. The daily estimate of CRA paid to SHMT tenants by the Australian Government (T1) equals \$8.60 per dwelling night on average for each existing SHMT household in the year following the transfer, and \$8.80 per dwelling night two years following the transfer and so on. For details behind the estimates of the average effects of SHMT on CRA see Section 6.1 of the original report. To convert these CRA payments to annual estimates they are multiplied by the cumulative number of days households resided in SHMT properties in each respective year (C6 from tables 3.2a and 3.2b).

Future costs and benefits require discounting. Thus Table 3.4 presents the annual benefit estimates by outcome discounting the amounts in Table 3.3 by a 5% discount rate. Table 3.5 then presents the total estimated annual benefits. All monetary values are reported in June 2021 prices.

For existing tenants, Table 3.4 Panel A shows that while SHMT led to savings in the number of ambulance callouts (of \$648,482), it led to greater increases in expenditure on other health and hospital services due to an increase in emergency department visits that did not lead to hospital admission, costing an additional \$9.1 million, and increased utilisation of community mental health services, costing an additional \$575,371. Table 3.4 also shows a large increase in expenditure arising from an increase in evictions from SHMT housing for existing tenants. This increased government expenditure by almost \$6.1 million.

On the other hand, SHMT is estimated to increase the total amount of CRA flowing to social housing by just under \$193.9 million over ten years in present values when existing tenants only are considered. This drops down to \$131.8 million once the 32 per cent NSW taxpayer contribution has been accounted for.

Panel B of Table 3.4 shows that SHMT led to further savings when considering its impact on new tenants. Although SHMT led to an increase in expenditure on mental health services (by \$107,885) and evictions from social housing (by almost \$4.2 million), a reduction in the average number of days tenants spent in adult detention saves almost \$7 million. Further, an additional \$17.5 million of CRA funding is diverted into the NSW social housing system. Overall, the result is a net benefit of \$20.2 million.

**Table 3.4 Discounted benefits of SHMT compared to base scenario of public housing over first 10 years, June 2021 prices, (\$)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Net present benefit	NPB per capita <sup>1</sup>
<b>A. Existing tenant cohort</b>												
<i>Health</i>												
Hospital days (non-psychiatric)	0	0	0	0	0	0	0	0	0	0	0	0
Days in psychiatric ward/hospital	0	0	0	0	0	0	0	0	0	0	0	0
Ambulance call-out	0	153,247	72,975	69,500	66,190	63,038	60,037	57,178	54,455	51,862	648,482	28
Emergency department presentation (leading to admission)	0	0	0	0	0	0	0	0	0	0	0	0
Emergency department presentation (not admitted)	0	-2,145,885	-1,021,850	-973,190	-926,848	-882,712	-840,678	-800,646	-762,520	-726,210	-9,080,540	-393
Use of mental health services (ambulatory)	-83,400	-55,603	-64,301	-61,239	-58,323	-55,545	-52,900	-50,381	-47,982	-45,697	-575,371	-25
<i>Housing</i>												
Evicted from social housing	0	-1,434,918	-683,294	-650,757	-619,768	-590,255	-562,148	-535,379	-509,885	-485,605	-6,072,010	-263
Use of homelessness support with accommodation	0	0	0	0	0	0	0	0	0	0	0	0
<i>Safety</i>												
Adult days in custody	0	0	0	0	0	0	0	0	0	0	0	0
Juvenile justice stays	0	0	0	0	0	0	0	0	0	0	0	0
Proven court appearance	0	0	0	0	0	0	0	0	0	0	0	0
Child ever in contact with child protection services	0	0	0	0	0	0	0	0	0	0	0	0
<i>Education</i>												
Child achieves minimum NAPLAN standard	0	0	0	0	0	0	0	0	0	0	0	0
Completion of a VET qualification/apprenticeship at Cert III or above	0	0	0	0	0	0	0	0	0	0	0	0
<i>Commonwealth Rent Assistance</i>												
CRA	37,145,455	32,797,117	27,982,299	23,796,588	19,946,064	16,408,296	13,162,229	10,188,105	7,467,384	4,982,677	193,876,214	8,399
CRA excluding NSW taxpayer contribution	25,258,910	22,302,039	19,027,963	16,181,680	13,563,323	11,157,641	8,950,316	6,927,911	5,077,821	3,388,220	131,835,825	5,711

1. Net present value divided by total number of SHMT tenants in cohort (n=23,084).

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Net present benefit	NPB per capita <sup>1</sup>
<b>B. New tenant cohort</b>												
<i>Health</i>												
Hospital days (non-psychiatric)	0	0	0	0	0	0	0	0	0	0	0	0
Days in psychiatric ward/hospital	0	0	0	0	0	0	0	0	0	0	0	0
Ambulance call-out	0	0	0	0	0	0	0	0	0	0	0	0
Emergency department presentation (leading to admission)	0	0	0	0	0	0	0	0	0	0	0	0
Emergency department presentation (not admitted)	0	0	0	0	0	0	0	0	0	0	0	0
Use of mental health services (ambulatory)	-13,306	-12,673	-12,069	-11,494	-10,947	-10,426	-9,929	-9,457	-9,006	-8,577	-107,885	-52
<i>Housing</i>												
Evicted from social housing	-515,636	-491,081	-467,697	-445,425	-424,215	-404,014	-384,775	-366,453	-349,002	-332,383	-4,180,681	-2,018
Use of homelessness support with accommodation	0	0	0	0	0	0	0	0	0	0	0	0
<i>Safety</i>												
Adult days in custody	861,913	820,869	781,780	744,553	709,098	675,331	643,173	612,545	583,376	555,597	6,988,234	3,373
Juvenile justice stays	0	0	0	0	0	0	0	0	0	0	0	0
Proven court appearance	0	0	0	0	0	0	0	0	0	0	0	0
Child ever in contact with child protection services	0	0	0	0	0	0	0	0	0	0	0	0
<i>Education</i>												
Child achieves minimum NAPLAN standard	0	0	0	0	0	0	0	0	0	0	0	0
Completion of a VET qualification/apprenticeship at Cert III or above	0	0	0	0	0	0	0	0	0	0	0	0
<i>Commonwealth Rent Assistance</i>												
CRA	3,379,982	2,935,172	2,525,060	2,147,351	1,799,888	1,480,648	1,187,730	919,352	673,840	449,626	17,498,650	8,445
CRA excluding NSW taxpayer contribution	2,298,388	1,995,917	1,717,041	1,460,199	1,223,924	1,006,841	807,657	625,159	458,211	305,745	11,899,082	5,743

1. Net present value divided by total number of SHMT tenants in cohort (n=2,072).

**Table 3.5 Total estimated annual benefits of SHMT compared to base scenario of public housing over first 10 years, June 2021 dollars**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<b>A. Existing tenant cohort</b>										
Undiscounted net benefit/cost	38,915,158	32,318,638	30,429,132	26,961,025	23,492,917	20,024,810	16,556,702	13,088,595	9,620,487	6,152,380
Discounted net benefit/cost <sup>1</sup>	37,062,055	29,313,958	26,285,829	22,180,902	18,407,315	14,942,821	11,766,539	8,858,876	6,201,452	3,777,027
Discounted net benefit/cost (upper bound) <sup>2</sup>	37,781,707	30,463,416	27,846,967	23,954,521	20,265,197	16,770,463	13,462,114	10,332,258	7,373,302	4,577,948
Discounted net benefit/cost (lower bound) <sup>3</sup>	36,369,307	28,228,350	24,839,236	20,568,437	16,750,125	13,343,376	10,310,682	7,617,681	5,232,908	3,127,558
Undiscounted net savings/dissavings (Australian)	-87,570	-3,840,183	-1,963,876	-1,963,876	-1,963,876	-1,963,876	-1,963,876	-1,963,876	-1,963,876	-1,963,876
Discounted net savings/dissavings (Australian) <sup>1</sup>	-83,400	-3,483,159	-1,696,470	-1,615,686	-1,538,748	-1,465,475	-1,395,690	-1,329,229	-1,265,932	-1,205,650
<b>B. New tenant cohort</b>										
Undiscounted net benefit	3,898,601	3,585,647	3,272,692	2,959,738	2,646,784	2,333,829	2,020,875	1,707,921	1,394,967	1,082,012
Discounted net benefit <sup>1</sup>	3,712,953	3,252,287	2,827,075	2,434,984	2,073,824	1,741,539	1,436,198	1,155,988	899,208	664,262
Discounted net benefit (upper bound) <sup>2</sup>	3,785,049	3,379,816	2,994,977	2,629,689	2,283,139	1,954,545	1,643,156	1,348,248	1,069,126	805,119
Discounted net benefit (lower bound) <sup>3</sup>	3,643,552	3,131,843	2,671,492	2,257,970	1,887,120	1,555,129	1,258,499	994,025	758,769	550,040
Undiscounted net savings/dissavings (Australian)	349,619	349,619	349,619	349,619	349,619	349,619	349,619	349,619	349,619	349,619
Discounted net savings/dissavings (Australian) <sup>1</sup>	332,971	317,115	302,014	287,633	273,936	260,891	248,468	236,636	225,368	214,636

Notes: costs and dissavings are represented by negative values in red.

1. Applying a 5% discount rate.
2. Applying a 3% discount rate.
3. Applying a 7% discount rate.



## Did the economic benefits for NSW of SHMT outweigh its costs?

Table 3.6 combines the results of previous sections to summarise the findings of the CBA for SHMT against the base case scenario where public housing continues to be managed by the NSW government. The results are the NSW equivalent to Table 6.13 in the original report which provides the results from a national perspective. As with the earlier table, results are first presented separately for existing and new tenants for whom separate outcome comparisons were made. Then in the final two columns these estimates are combined to reflect the CBA estimates across all tenants. As the new tenant sample includes tenants who entered SHMT properties after the transfer occurred, transitory (one-off) costs are not included when estimating the costs for the new tenants.

The table shows that when assessing the costs and benefits of SHMT from a NSW perspective the benefits outweigh the costs, with a net present value of \$267.5 million and a BCR ratio of 8.82 overall. The BCR for existing tenants is slightly lower at 8.36 and slightly higher for new tenants at 9.59. This differs from the original analysis that found that the benefits did not outweigh the costs from a national perspective with a BCR of 0.04. This is due to the different treatment of CRA. When CRA is treated as a transfer and not a benefit, as in the original report, there are overall disbenefits of the SHMT reform on existing tenants (\$15.1 million when applying a 5% discount rate).<sup>2</sup> These disbenefits combined with SHMT costs outweigh the estimated benefits to new tenants, even when we project for a growth of new tenants over the 10-year analysis period. But when CRA is treated as a benefit, as in this supplementary analysis, the \$300.4 million in projected CRA benefits in present values more than offsets the negative impacts of SHMT on existing tenants.

The caveats described in the earlier analysis are equally valid here. This is especially the case for new tenants. Only one-year outcomes were able to be estimated for new tenants and it is assumed that these effects continue over the ten-year period. Effects, either positive or negative, may wane over time. Also there could be other effects, either positive or negative, that only materialize over longer periods of time thus the analysis may overestimate or underestimate the benefits of SHMT when assessed over a longer time frame. This is, to a slightly smaller extent, also an issue in the analysis of existing tenants, although there we are at least able to examine outcomes over a two-year window and observe whether impacts on outcomes in the first year are sustained in the second year. This suggests that caution should be taken in drawing strong conclusions of the results at this early stage.

We also suggest that caution be taken when considering the benefits of the injection of Commonwealth funding to NSW via CRA. It is not a given that this leads to a benefit to NSW. It depends on what this funding achieves. As we noted in the earlier report at present it appears that this funding has been used by CHPs, at least in part, to deliver additional tenant services and to cover asset maintenance costs. If these services are not delivering welfare gains to CHP clients, whether they are SHMT tenants or non-SHMT clients, and no asset maintenance is conducted that would not have otherwise occurred if the assets remained as public housing, then this should not be considered a benefit even from NSW's perspective. As we noted in the original report any additional social housing supply that arises from the injection of funds is also evidence of a benefit. Thus, future evaluations should examine whether there is evidence that this funding is being used in ways to benefit the social housing sector in some way, whether that be by providing better services to tenants<sup>3</sup>, improving the current stock of housing by additional maintenance or by growing the sector thus adding to social housing supply.

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<sup>2</sup> Or \$13.7 million if applying a 7% discount rate as in Table 6.13 of original report.

<sup>3</sup> Providing additional services is not necessarily equivalent to providing better services. Better services are services that improve the welfare of tenants or other clients of CHPs.

**Table 3.6 Ten-year CBA results for SHMT compared to a public housing counterfactual (5% discount rate, June 2021 prices)**

Category	Existing tenants		New tenants (within sample period)		All tenants <sup>1</sup>	
	Total	Per capita	Total	Per capita	Total	Per capita
<b>Costs</b>						
Tenancy Management and Access and Demand services	\$28,010,837	\$1,213	\$2,107,276	\$1,017	\$40,837,527	\$1,144
Rental offsets	-\$6,632,516	-\$287	\$0	\$0	-\$6,632,516	-\$186
<b>Total costs</b>	<b>\$21,378,320</b>	<b>\$926</b>	<b>\$2,107,276</b>	<b>\$1,017</b>	<b>\$34,205,011</b>	<b>\$958</b>
<b>Benefits</b>						
<i>Health</i>						
Hospital days (non-psychiatric)	\$0	\$0	\$0	\$0	\$0	\$0
Stay in psychiatric ward/hospital	\$0	\$0	\$0	\$0	\$0	\$0
Ambulance call-out	\$648,482	\$28	\$0	\$0	\$648,482	\$18
Emergency department presentation (leading to admission)	\$0	\$0	\$0	\$0	\$0	\$0
Emergency department presentation (not admitted)	-\$9,080,540	-\$393	\$0	\$0	-\$9,080,540	-\$254
Use of mental health services (ambulatory)	-\$575,371	-\$25	-\$107,885	-\$52	-\$1,232,050	-\$35
<i>Housing</i>						
Evicted from social housing	-\$6,072,010	-\$263	-\$4,180,681	-\$2,018	-\$31,519,227	-\$883
Use of homelessness support with accommodation	\$0	\$0	\$0	\$0	\$0	\$0
<i>Safety</i>						
Adult days in custody	\$0	\$0	\$6,988,234	\$3,373	\$42,536,399	\$1,192
Juvenile justice stays	\$0	\$0	\$0	\$0	\$0	\$0
Proven court appearance	\$0	\$0	\$0	\$0	\$0	\$0
Child ever in contact with child protection services	\$0	\$0	\$0	\$0	\$0	\$0
<i>Education</i>						
Child achieves minimum NAPLAN standard	\$0	\$0	\$0	\$0	\$0	\$0
Completion of a VET qualification/apprenticeship at Cert III or above	\$0	\$0	\$0	\$0	\$0	\$0
Commonwealth Government funding						
CRA	\$193,876,214	\$8,399	\$17,498,650	\$8,445	\$300,388,032	\$8,415
CRA excluding NSW taxpayer contribution	\$131,835,825	\$5,711	\$11,899,082	\$5,743	\$204,263,862	\$5,722
<b>Total benefits</b>	<b>\$178,796,775</b>	<b>\$7,745</b>	<b>\$20,198,318</b>	<b>\$9,748</b>	<b>\$301,741,095</b>	<b>\$8,453</b>
<b>Net present value</b>	<b>\$157,418,455</b>	<b>\$6,819</b>	<b>\$18,091,042</b>	<b>\$8,731</b>	<b>\$267,536,084</b>	<b>\$7,495</b>
<b>Benefit-cost ratio</b>	<b>8.36</b>	<b>8.36</b>	<b>9.59</b>	<b>9.59</b>	<b>8.82</b>	<b>8.82</b>

1. Assume an exit rate of 7.6% for existing tenants that is fully compensated by new entrants. This leads to a further 12,612 new entrants over 10 years in addition to the 23,084 existing SHMT tenants.

Table 3.7 reports results testing the sensitivity of these CBA results to alternative scenarios or assumptions, including assumptions about discount rates (alternative scenarios B and C), and expanding the criterion to include benefits of outcomes where the p-value is less than 0.10 (instead of 0.05 which is used in the main analysis) (Alternative Scenario D). The table also presents a direct comparison to results when assessing costs and benefits from the national perspective as was undertaken in the original report but now utilising a 5% discount rate (Alternative Scenario E).

Alternative scenario A presents the results when the NSW taxpayer contribution of 32 per cent to Commonwealth funding is subtracted from the CRA benefit. This reduces the net present value to \$171.4 million with a BCR of 6.0.

Scenario B and C show that the results are not overly sensitive to assumptions about the discount rate: applying a 3% discount rate results in a slightly larger net present value of SHMT of \$289.5 million and BCR of 8.9 whereas a 7% discount rate results in a slightly lower net present value of \$248.2 million and BCR of 8.74.

Scenario D shows that if we expand the criterion to include benefits where the outcome effect is significant at a 90% level of confidence, as opposed to the 95% criterion used in the main analysis, SHMT results in a net present value of almost \$245.1 million and a BCR of 10.0. Although we observe some further benefits when the criterion is expanded, with decreases in the use of homelessness services and in the need for child protection services, at the same time there is a much larger offsetting increase in the need for acute health services, with relatively large increases in psychiatric ward stays.

**Table 3.7 Sensitivity of CBA results for 'All tenants' to alternate assumptions**

	NPV	NPV per capita	BCR
Main CBA: 5% discount rate	\$267,536,084	\$7,495	8.82
Alternative A: 5% discount rate, sub-analysis	\$171,411,914	\$4,802	6.01
Alternative B: 3% discount rate (upper bound)	\$289,458,490	\$8,109	8.90
Alternative C: 7% discount rate (lower bound)	\$248,208,155	\$6,953	8.74
Alternative D: Expanded criterion to include benefits (p<0.10)	\$245,054,200	\$6,865	10.04
Alternative E: 5% discount rate (Australian perspective)	-\$32,851,948	-\$920	0.04

Note: An exit rate of 7.6% for existing tenants that is fully compensated by new entrants is assumed. As a result, a further 12,612 new entrants are predicted over 10 years in addition to the 23,084 existing SHMT tenants.

The final row of Table 3.7 (Alternative E) shows the overall estimated cost implications of SHMT when the analysis is taken from the Australian perspective rather than that of NSW only. This provides a direct comparison to the analysis undertaken from the NSW perspective, as was undertaken in the original report, but updated with a 5% discount rate. Here we see that from an Australian perspective SHMT leads to a net present cost \$32.85 million, or \$930 per person it houses, and a BCR of 0.04. The net present cost is slightly larger than that of the original report (which was found to be \$30.8 million or \$862 per person) reflecting the lower discount rate of 5%. The BCR is equivalent to that found earlier.

## Discussion

If the goal of SHMT was to inject further investment into the NSW social housing system, then it was successful. This supplementary analysis has estimated that the SHMT program will have injected a net present value of \$267,536,084 into NSW over 10 years relative to if the NSW government were to continue managing SHMT properties as public housing (with an overall BCR ratio of 8.82). It is however essential to point out that the vast majority of this comes from the additional CRA funded by the Commonwealth government to SHMT CHPs.

In addition to the CRA there were also benefits from reduced ambulance call outs for existing tenants and reduced contact with the justice system from new tenants. The caveat is that we only have data on this for two years following existing tenants SHMT tenancies and one year following those of new tenants. Future evaluation is required to examine whether the effects on these outcomes are sustained in future years.

More than offsetting the non-CRA benefits are the quite substantial disbenefits due to a rise in the use of health services and an increase in evictions. It is not yet clear whether the increase in health services observed reflects better (more health service access) or worse (worse health) outcomes. Some of the increases in preventive health services may be due to more proactive tenant support coordination services by SHMT CHPs. However, at this stage it is not clear whether the increase in preventive health services will reduce future service use. Also the increase in evictions from SHMT dwellings for new tenants may have led to homelessness that has remained unobserved because homelessness services were not utilised. Such homelessness would thus not be identified through the administrative data. Thus, a longer-term assessment of outcomes is required, with the use of other (complementary) measures where possible.

From a national perspective SHMT CRA is not a benefit as it is transferred from other taxpayers across the country to pay for the CRA. From this perspective the BCR is therefore only 0.04.

The caveats and limitations of the analysis, and to CBA more broadly, that were outlined in Melbourne Institute Consortium (2024c) also apply to this supplemental analysis.

The overall analysis in the original SHMT evaluation report, as well as that in the strategy report, take these into account when assessing the performance of SHMT and its impact. The conclusions and recommendations made in these reports considered a wide range of inputs from qualitative and quantitative analyses as well as the CBA. They are therefore not affected by this supplementary analysis and the conclusions and recommendations of the original analysis still hold.

## 4. Did the benefits of SAHF outweigh the cost for NSW?

The CBA for NSW finds that SAHF produces a net present value of \$19,001,597 over 10 years in June 2021 prices; a benefit-cost ratio of 2.65. With 2,048 individuals provided with SAHF housing over the observed period, the net value of providing a SAHF dwelling rather than public housing dwelling to NSW is \$9,278 per person. The large majority of the benefits for NSW are the injection of CRA into the state. Once the NSW taxpayers contribution to this is considered, the BCR drops to 1.92 and net present value to \$10,571,929.

This section provides details of the costs and benefits of SAHF leading to these CBA findings. It provides the equivalent to Section 4.4 in the original SAHF report but from the standpoint of NSW rather than the national perspective of the original. It presents the costs and benefits of SAHF relative to the base scenario of the NSW government building and continuing to manage SAHF dwellings as public housing rather than community housing (through service contracts). The second base scenario of non-SAHF community housing is not presented here as CRA is available for all community housing providers therefore the difference between the NSW and national perspective is less relevant. The estimates are also updated to reflect a 5% discount rate rather than the 7% discount rate used in the original estimates. As in the original report, we conclude this section with sensitivity analyses to key parameter assumptions and a discussion of the limitations of this analysis.

### How much did SAHF cost?

Table 4.1 reproduces the average SAHF costs per dwelling night from Table 2.8 of the original report to be used in the CBA. Unit costs are provided for 40, 50 and 66 year life of assets, which correspond to 2.5, 2 and 1.5 per cent annual asset depreciation. In the main analysis a 40-year asset life is assumed, which corresponds to a net SAHF cost of \$1.05 per dwelling night.

The resulting 10-year estimated costs of SAHF compared to the main base case counterfactual of public housing in June 2021 prices, are presented in Table 4.2 (applying a 5% discount rate to Table 4.7 of the original report where applicable). The table outlines the calculations to obtain the overall incremental costs of the SAHF program compared to the counterfactual costs of the NSW government building and managing the equivalent type and quality of public housing. As the analysis period of 10 years differs from the SAHF contract period of 25 years all costs are converted to an equivalent time unit – estimating costs of the reform per dwelling night and then aggregating to the 10-year analysis period.

**Table 4.1 Average SAHF costs per dwelling night for 40, 50 and 66 year life of assets, June 2021 prices (Table 2.8 of the original report)**

	SAHF	Base case	Net Future Directions costs
40-year asset life	\$36.86	\$35.81	\$1.05
50-year asset life	\$36.86	\$35.25	\$1.61
66-year asset life	\$36.86	\$34.68	\$2.18

The net unit cost of purchasing housing services from community housing providers ('ServiceCos') via Monthly Service Payments (MSPs) is denoted as 'C3' in Table 4.2 and is derived as the difference between the per dwelling night cost of the reform, C1, and the per dwelling night cost of the base

case, C2. This equals \$1.05 per dwelling night (see Table 4.1). For further details behind the unit cost estimates of C1, C2 and C3 see Section 2.4 of the original report. There is an additional weekly cost of SAHF (C4) arising from CRA paid to tenants by the Australian Government offset by the rental revenue paid to the SAHF housing provider. This equals \$29.50 a week on average for each SAHF tenant in the first year following the SAHF tenancy start date, and \$34.40 in the second year and so on. For details behind estimates of the average treatment effects on CRA and rent paid, see Section 4.3 of the original report. C5 represents the daily amount of this cost, which is about \$4.20 per day in year 1 and \$4.90 per day in year 2.

Annual estimates of these costs (C7 and C8) are calculated by multiplying the respective per dwelling night unit costs (C3 and C5) by the total amount of time treated households spent in SAHF dwellings in each year (C6). C8 can be thought of as the recurrent costs of a more traditional CBA, which are discounted (leading to C9) and added to the total housing service cost estimate of C7 to obtain the total net cost of SAHF (CT).<sup>4</sup>

The resulting net present cost (CT) presented in the final column and row of the table shows that based on the current population of SAHF tenants it is estimated to cost \$11.521 million more than it would have cost to provide an equivalent amount of public housing to these tenants over the first 10 years, or \$5,625 per person it houses. If this funding had been used to house public housing tenants an additional 268 tenants would have been able to be housed over this period.<sup>5</sup> The largest component of these costs is the additional service provided by the net CRA (offset by the base level of rent paid) that is paid to ServiceCos by the Australian Government which comes to just over \$9.1 million. As we assume that ServiceCos use this to fund additional services to tenants (for example via lower dwelling to staff ratios) it is treated as an additional cost of delivering SAHF services (although these are counterbalanced by the benefit of the CRA into NSW discussed in the following subsection). In addition, the cost of purchasing housing services from ServiceCos via MSPs is also estimated to be greater than the associated capital cost involved in building the equivalent public housing, to the value of nearly \$2.5 million in June 2021 prices.

## What did the resources from SAHF achieve for NSW?

In the original report Section 4.3 presented evidence that SAHF improved tenant outcomes in several key areas. Here we calculate the overall net benefits of SAHF by assigning the monetary values that were presented in Table 2.9 of Section 2.4.3 of the original report to these estimates.

Estimated benefits achieved by SAHF compared to Base Case Scenario 1 of public housing provision are presented in Tables 4.3 and 4.4. Firstly, Table 4.3 presents the estimated annual benefits of SAHF compared to the base case over a period of 10 years. The estimated benefits for years 1 and 2 (columns B4) is obtained by multiplying the monetary values of key outcomes presented in Table 2.9 (reproduced in column B1 of the table) by the estimate of the overall SAHF effect for each outcome. The latter is calculated by multiplying the population of individuals 'treated' by the SAHF reform (B2) by the estimate of the causal impact of SAHF for each outcome (reproduced by year in the two B3 columns, to generate  $B4=B1*B2*B3$ ). Insignificant average treatment effects are represented by zeros in the table.

Benefits of SAHF are expected to persist beyond the two-year period captured in the outcome evaluation. Longer-term outcomes are predicted for years 3 to 10 after initial treatment by taking a

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<sup>4</sup> Housing service costs are not discounted in this step as discounting has already been applied in the calculation of unit costs (see Section 2.4 of original report).

<sup>5</sup> With a per dwelling night cost of public housing of \$35.81 and total household days in SAHF dwellings summing to 2.344.339, an additional 13.1% of tenants could be housed in public housing. 13.1% of 2048 is 268.

simple average of the treatment effects for client outcomes calculated at t=1 and t=2.<sup>6</sup> In future, once outcomes for further years after the first two years are known, these predictions should be replaced by the estimated *ex-post* outcome effects in an updated CBA analysis.

To give an example of how to read Table 4.3 focusing on the use of mental health outpatient services, Column 'B1' shows that mental health outpatient services cost the government on average \$297 per person they treat, thus a reduction in the need for these services would save the government \$297 per person. Column 'B2' shows that there were 2,048 individuals that have lived in SAHF dwellings at some stage since Future Directions was implemented and prior to June 2021. Columns B3 show that the causal impact of SAHF is to reduce the need for mental health outpatient services by 5.2% 1 year after entry to SAHF dwellings, while there was no effect in year 2. This leads to a saving of \$31,745 in year 1 and \$0 in year 2. The predicted savings in Years 3 to 10 are based on a simple average of savings over the first two years, which comes to \$15,872 per year.

The only other outcome affected by SAHF relative to a public housing base case scenario relates to contact with the justice system, with a reduction in proven court appearances. This leads to a saving of just over \$1 million in year 1, zero savings in year 2, and an average saving of \$522,231 for years 3 to 10.

The main difference between Table 4.3 and its equivalent in Table 4.9 of the original report is in the addition of CRA as a benefit. SAHF leads to over \$3 million in additional CRA in each year after it is introduced (approximately \$3.15 million in year 1, \$3.676 in year 2 and \$3.413 in years 3 to 10. The Commonwealth expenditures on MBS and PBS are also excluded, but as there were no significant treatment effects for these services this makes no difference to the overall benefit estimates.

Table 4.4 then presents the resulting annual benefit estimates derived using the data in Table 4.3 by discounted outcome using a 5% discount rate. All monetary values presented are in June 2021 prices.

Table 4.4 shows that SAHF led to reductions in the need for mental health outpatient services, saving \$123,282 (or \$60 per person), and in the need for justice services via reductions in proven court appearances, saving an additional \$4.1 million (or \$1,981 per person). CRA provides an additional \$26.343 million into NSW (or \$12,863 per person SAHF houses) or \$17.913 million once the NSW taxpayer contribution is excluded from this.

Table 4.5 presents both undiscounted and discounted total estimated annual benefits, showing the impact of discounting. The penultimate two rows of Table 4.5 also present undiscounted and discounted total annual benefits from the national perspective so a direct comparison can be made to the NSW analysis shown in earlier tables. This shows the impact that CRA has made to the analysis. If CRA is not included as a benefit, the benefits of SAHF are considerably smaller.

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<sup>6</sup> Another option would be to predict using a linear extrapolation of estimates from earlier years, but as the two-year outcomes do not have the same predicted power of those of year 1 (and therefore are more likely to be zero) a simple average was considered to be more appropriate.

**Table 4.2 Estimated costs of SAHF compared to base scenario 1<sup>1</sup> over first 10 years, June 2021 prices, (\$)**

		Years after SAHF tenancy start date										Net present cost	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		
Unit costs paid by MSPs													
Unit cost per dwelling night (pdn)													
Reform	C1	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	NA
Base case	C2	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	NA
Net unit cost pdn	C3=C1-C2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	NA
Unit recurrent costs													
CRA (weekly) minus base rent charged <sup>1</sup>													
	C4	29.5	34.4	31.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
CRA minus base rent charged (pdn)	C5=C4/7	4.2	4.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
Total number of days treated households in SAHF dwellings <sup>3</sup>													
	C6	504,365	441,657	382,740	321,295	260,482	199,669	138,856	78,043	17,230	0	2,344,339	
Net capital cost (annual)	C7=C6xC3	529,584	463,740	401,877	337,360	273,506	209,653	145,799	81,946	18,092	0	2,461,555	
Net recurrent cost (annual)	C8=C6xC5	2,124,018	2,170,363	1,746,326	1,465,973	1,188,502	911,031	633,560	356,089	78,617	0	10,674,477	
Discounted net recurrent cost (annual)	C9=C8/(1+r/100) <sup>t</sup>	2,022,874	1,968,583	1,508,542	1,206,059	931,222	679,825	450,259	241,015	50,678	0	9,059,057	
Total net cost of SAHF	CT=C7+C9	2,552,458	2,432,324	1,910,419	1,543,419	1,204,728	889,478	596,058	322,960	68,770	0	11,520,612	

1. A counterfactual where the NSW government develops new public housing under a build and own model.

2. Average treatment effect on rent paid (excluding CRA) estimated from outcome evaluation. Market rent of dwellings assumed to be equivalent for reform and base.

3. Calculated across all head tenants of SAHF dwellings for years 1 and 2. Years 3 to 10 predicted based on linear trend.



**Table 4.3 Estimated annual benefits of SAHF compared to base scenario 1<sup>1</sup> over first 10 years, June 2021 prices, (\$)**

	\$ Benefit (-Cost)	Number of treated persons	Estimates of average treatment effects (ATEs)		Total estimated annual benefit (\$)		Total predicted annual benefit (\$)	
	Value		B3	Year 1	Year 2	Year 1	Year 2	μ(B4)
	B1	B2						
<b>Health</b>								
Hospital days (non-psychiatric)	-1,579	2,048	0	0	0	0	0	0
Stay in psychiatric ward/hospital	-1,269	2,048	0	0	0	0	0	0
Ambulance call out	-910	2,048	0	0	0	0	0	0
Emergency department presentation (leading to admission)	-1,049	2,048	0	0	0	0	0	0
Emergency department presentation (not admitted)	-657	2,048	0	0	0	0	0	0
Use of mental health services (ambulatory)	-297	2,048	-0.052	0	31,745	0	15,872	
<b>Housing</b>								
Evicted from social housing	-25,432	2,048	0	0	0	0	0	0
Use of homelessness support with accommodation	-12,201	2,048	0	0	0	0	0	0
<b>Safety</b>								
Adult days in custody	-292	1,812	0	0	0	0	0	0
Juvenile justice stays	-1,956	1,812	0	0	0	0	0	0
Proven court appearance (assume all for magistrate's court)	-11,556	1,812	-0.050	0	1,044,462	0	522,231	
Child ever in contact with child protection services	-1,412	343	0	0	0	0	0	0
<b>Education</b>								
Child achieves minimum NAPLAN standard	4,954	133	0	0	0	0	0	0
Completion of a VET qualification/apprenticeship at Cert III or above	16,628	1,727	0	0	0	0	0	0
<b>Commonwealth funding</b>								
CRA	Actual value	2,048	1,538	1,795	3,150,163	3,675,929	3,413,046	
CRA excluding NSW taxpayer contribution	Actual value	2,048	1,046	1,221	2,142,111	2,499,631	2,320,871	

1. A counterfactual where the NSW government develops new public housing under a build and own model.

**Table 4.4 Discounted annual benefits of SAHF compared to base scenario 1<sup>1</sup> over first 10 years, June 2021 prices (\$)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Net Present Benefit	NPB per capita <sup>2</sup>
<i>Health</i>												
Hospital days (non-psychiatric)	0	0	0	0	0	0	0	0	0	0	0	0
Stay in psychiatric ward/hospital	0	0	0	0	0	0	0	0	0	0	0	0
Ambulance call out	0	0	0	0	0	0	0	0	0	0	0	0
Emergency department presentation (leading to admission)	0	0	0	0	0	0	0	0	0	0	0	0
Emergency department presentation (not admitted)	0	0	0	0	0	0	0	0	0	0	0	0
Use of mental health services (ambulatory)	30,233	0	13,711	13,058	12,436	11,844	11,280	10,743	10,231	9,744	123,282	60
<i>Housing</i>												
Evicted from social housing	0	0	0	0	0	0	0	0	0	0	0	0
Use of homelessness support with accommodation	0	0	0	0	0	0	0	0	0	0	0	0
<i>Safety</i>												
Adult days in custody	0	0	0	0	0	0	0	0	0	0	0	0
Juvenile justice stays	0	0	0	0	0	0	0	0	0	0	0	0
Proven court appearance	994,726	0	451,123	429,641	409,182	389,697	371,140	353,467	336,635	320,605	4,056,214	1,981
Child ever in contact with child protection services	0	0	0	0	0	0	0	0	0	0	0	0
<i>Education</i>												
Child achieves minimum NAPLAN standard	0	0	0	0	0	0	0	0	0	0	0	0
Completion of VET qualification at Cert III or above	0	0	0	0	0	0	0	0	0	0	0	0
<i>Commonwealth funding</i>												
CRA	3,000,155	3,334,176	2,948,317	2,807,921	2,674,211	2,546,867	2,425,588	2,310,084	2,200,080	2,095,314	26,342,714	12,863
CRA excluding NSW taxpayer contribution	2,040,106	2,267,239	2,004,856	1,909,387	1,818,463	1,731,870	1,649,400	1,570,857	1,496,054	1,424,814	17,913,046	8,747

1. A counterfactual where the NSW government develops new public housing under a build and own model.

2. Net present value divided by total number of SAHF tenants in cohort (n=2,048).

**Table 4.5 Discounted annual net benefits of SAHF compared to base scenario 1<sup>1</sup> over first 10 years, June 2021 prices (\$)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Annual net benefit (undiscounted)	4,226,370	3,675,929	3,951,149	3,951,149	3,951,149	3,951,149	3,951,149	3,951,149	3,951,149	3,951,149
Discounted net benefit <sup>2</sup>	4,025,114	3,334,176	3,413,151	3,250,620	3,095,829	2,948,408	2,808,008	2,674,293	2,546,946	2,425,663
Discounted net benefit (upper bound) <sup>3</sup>	4,103,272	3,464,915	3,615,861	3,510,545	3,408,296	3,309,025	3,212,646	3,119,074	3,028,227	2,940,026
Discounted net benefit (lower bound) <sup>4</sup>	3,949,879	3,210,698	3,225,315	3,014,313	2,817,115	2,632,818	2,460,577	2,299,605	2,149,163	2,008,564
Annual net benefit (Australia) (undiscounted) <sup>5</sup>	1,076,207	0	538,103	538,103	538,103	538,103	538,103	538,103	538,103	538,103
Discounted net benefit (Australia) <sup>2</sup>	1,024,959	0	464,834	442,699	421,618	401,541	382,420	364,210	346,866	330,349

1. A counterfactual where the NSW government develops new public housing under a build and own model.
2. Discounted net benefits applying a 5% discount rate.
3. Discounted net benefits applying a 3% discount rate.
4. Discounted net benefits applying a 7% discount rate.
5. Undertakes CBA from a national perspective. Thus does not treat CRA as a benefit and includes MBS and PBS expenditures if applicable.

## Did the economic benefits for NSW of SAHF outweigh its costs?

Table 4.6 summarises the findings of the NSW cost-benefit analysis for SAHF against the base case scenario where new public housing is delivered via LAHC ownership and DCJ management.<sup>7</sup> Benefits accrue to the value of \$30,522,210, with \$26,342,714 arising from additional CRA coming into NSW and the remaining \$4.179 million from reductions in the use of mental health services and from fewer court appearances. Additional costs of the program are estimated to be \$11,520,612. As a result, SAHF has an incremental overall present value of \$19,001,597, with a benefit-cost ratio of 2.65. With 2,048 individuals provided with SAHF housing so far, this results in a net present value of \$9,278 per person.

Table 4.7 presents the sensitivity of these CBA results to alternative scenarios or assumptions. In Alternative Scenario A the NSW taxpayer contribution to CRA is offset. Other alternatives include assumptions about discount rates (Alternative Scenarios B and C), the useful life of dwellings (Alternative Scenarios D and E) and expanding the criterion to include benefits where the p-value of the estimated impact is less than 0.10 (rather than the 0.05 used in the main analysis) (Alternative Scenario F). The table also presents an analysis from the national perspective such as that from the original report (Alternative Scenario G).

Compared to public housing overall NPVs and BCRs are not overly sensitive to alternative assumptions about the discount rate nor the effective/useful life of dwellings, with the overall conclusion from the analysis qualitatively unaffected when these parameters are varied. The BCR ranges from a low of 2.15 when the effective life of dwellings is 66.6 years (Alternative Scenario E) to a high of 2.78 when a 3% discount rate is adopted (Alternative Scenario B).

However, expanding the criterion to include benefits with a treatment effect p-value of less than 0.10, rather than 0.05 as used in the main analysis, has a much larger impact (Alternative Scenario F). As mentioned in the original report, as most SAHF dwellings were only delivered in 2020 or 2021, the number of SAHF tenants that can be followed over the observation window is still relatively small so many estimates of SAHF impact may be imprecisely estimated, making the benefit estimate quite sensitive to the criterion used to include benefits. If we use benefit estimates that are estimated with less precision ( $p < 0.10$ ) the NPV of SAHF becomes substantially larger, generating a net present value of over \$43.4 million, or \$3,407 per person SAHF houses. This results in a BCR of 5.63. The additional benefits are due to reductions in hospital stays and the estimate is large. The SAHF treatment effect is estimated to decrease non-psychiatric hospital stays by 1.8 days in the second year, leading to a large monetary benefit of over \$20 million over the ten years. This effect may not be evident over a more representative population of SAHF tenants housed over a longer time frame.

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<sup>7</sup> These estimates assume that the quality of new public housing developments used as a counterfactual to estimate costs in the CBA is similar to the quality of public housing for those tenants that comprise the comparison group when estimating benefits, which is in most cases much older public housing stock. This is unlikely to be the case. A more appropriate comparison to SAHF housing is new LAHC housing, but we could not make this direct comparison due to limitations with sample sizes. The result is that benefits are likely to be overestimated relative to costs.

**Table 4.6 Ten-year CBA results for SAHF compared to base case scenario 1<sup>1</sup> (5% discount rate, June 2021 prices)**

<b>Category</b>	<b>Total</b>	<b>Per capita</b>
<b>Costs</b>		
Housing services paid via rent (CRA minus rents)	\$9,059,057	\$4,423
Housing services paid via MSPs	\$2,461,555	\$1,202
<b>Total costs</b>	<b>\$11,520,612</b>	<b>\$5,625</b>
<b>Benefits</b>		
<i>Health</i>		
Hospital days (non-psychiatric)	\$0	\$0
Stay in psychiatric ward/hospital	\$0	\$0
Ambulance call out	\$0	\$0
Emergency department presentation (leading to admission)	\$0	\$0
Emergency department presentation (not admitted)	\$0	\$0
Use of mental health services (ambulatory)	\$123,282	\$60
<i>Housing</i>		
Evicted from social housing	\$0	\$0
Use of homelessness support with accommodation	\$0	\$0
<i>Safety</i>		
Adult days in custody	\$0	\$0
Juvenile justice stays	\$0	\$0
Proven court appearance	\$4,056,214	\$1,981
Child ever in contact with child protection services	\$0	\$0
<i>Education</i>		
Child achieves minimum NAPLAN standard	\$0	\$0
Completion of a VET qualification/apprenticeship at Cert III or above	\$0	\$0
Commonwealth funding		
CRA	\$26,342,714	\$12,863
CRA minus NSW taxpayer contribution	\$17,913,046	\$8,747
<b>Total benefits</b>	<b>\$30,522,210</b>	<b>\$14,903</b>
<b>Net present value</b>	<b>\$19,001,597</b>	<b>\$9,278</b>
<b>Benefit-cost ratio</b>	<b>2.65</b>	<b>2.65</b>

1. Base case: new public housing under LAHC ownership and DCJ management.

**Table 4.7 Sensitivity of CBA results to alternate assumptions**

	NPV	NPV per capita	BCR
Main CBA: 5% discount rate	\$19,001,597	\$9,278	2.65
Alternative Scenario A: 5% discount rate, minus NSW taxpayer contribution	\$10,571,929	\$5,162	1.92
Alternative Scenario B: 3% discount rate (upper bound)	\$21,597,090	\$10,545	2.78
Alternative Scenario C: 7% discount rate (lower bound)	\$16,782,842	\$8,195	2.53
Alternative Scenario D: Asset life of 50 years (2% depreciation)	\$17,688,768	\$8,637	2.38
Alternative Scenario E: Asset life of 66.7 years (1.5% depreciation)	\$16,352,495	\$7,985	2.15
Alternative Scenario F: Expanded criterion to include benefits (p<0.10)	\$43,400,935	\$21,192	5.63
Alternative Scenario G: 5% discount rate, National perspective	-\$7,341,117	-\$3,585	0.36

It is therefore essential to continue evaluating the effects of SAHF once a larger sample of SAHF tenants is available over a longer time period. This will allow for greater precision around program impacts and thus greater confidence in the estimated benefits of the program. However, for the moment the more conservative approach of only using the estimated effects that are significant at the 5%-level is preferred.

The final row of Panel A shows the overall estimated implications of SAHF from a national perspective. As in the original report we see that the amount of non-CRA benefits of SAHF are not substantial enough to outweigh its costs, thus leading to a net present cost of \$7.341 million or \$3,585 per person it houses. The resulting BCR is 0.36.

## Discussion

The evaluation revealed measurable benefits of SAHF for NSW that outweigh the program's cost. Compared to LAHC-provided public housing, the economic evaluation revealed a benefit-cost ratio for every dollar spent of 2.65. This is however largely due to the additional funds coming into the NSW social housing sector via Commonwealth-funded rent assistance.

Although not all benefits were able to be monetised, best estimates from the literature suggest that any additional benefits due to improvement in overall quality of life from improved housing stability accruing to SAHF tenants (relative to the counterfactual of tenants in comparable, secure and stable public housing) are only likely to lead to a marginal additional increase in benefits relative to costs. There are also possible social benefits from the provision of stable and secure housing that are not easily monetised, and that go beyond the more direct effects on tenant welfare. However, these would also be provided by state government provided public housing.

It is essential that the program continues to be evaluated as the current evaluation only extends to two years since the dwellings were tenanted. SAHF tenants observed in the outcome evaluation, which forms the basis of the CBA, are a relatively small sample of the current population of SAHF tenants that were housed early on in the program. As a result, benefit estimates are imprecisely estimated. Continued evaluation will increase the ability to identify the impacts of SAHF. This could have a notable effect on the CBA as can be seen by the sensitivity analysis which expanded the criterion for including benefits to include effects on outcomes that were estimated with lower precision and which returned a benefit-cost ratio for every dollar spent of 5.63. Currently, however, the analysis does not provide the necessary confidence in these effects to include their associated benefits in the main CBA.

It is also essential to continue monitoring whether the injection of CRA into the social housing sector due to SAHF makes a material difference. As discussed in the SHMT CBA above, for CRA to be of

benefit to people in NSW it must be used to provide a service that wouldn't otherwise occur if additional housing was to be built and run as public housing. It would have to benefit CHP clients (either SAHF or non-SAHF), be utilized to provide additional maintenance and therefore extend the asset life of dwellings or be used to provide additional social housing stock.

As with the earlier analysis there are limitations to this analysis and to CBA more broadly, which are outlined in further detail in the original report. These caveats and limitations all remain relevant to this analysis.

The overall analysis in the original SAHF evaluation report, as well as that in the strategy report, take these into account when assessing the performance of SAHF and its impact. The conclusions and recommendations made in these reports considered a wide range of inputs from qualitative and quantitative analyses as well as the CBA. They are therefore not affected by this supplementary analysis and the conclusions and recommendations of the original analysis still hold.

## 5. Did the benefits of LAHC-FDI outweigh the cost for NSW?

LAHC-FDI projects are estimated to cost \$12,083,194 over ten years when compared with the pre-Future Directions strategy. With 4,614 individuals provided LAHC FDI housing over this period, this comes to a cost of \$2,619 per person it houses. On the flip side we find that LAHC FDI leads to estimated additional benefits of \$8,433,440 to NSW over ten years, or \$1,828 per tenant. Thus, the CBA finds that LAHC FDI has a net overall present cost (a negative net present value) of \$3,649,754, or \$791 per tenant, in June 2021 prices. This translates to a BCR of 0.7.

This section provides details of the costs and benefits of LAHC FDI Projects leading to these CBA findings. The results in this section are equivalent to those in Section 6 of the original LAHC FDI report but from the NSW rather than national perspective and discounts future costs and benefits by 5% rather than 7%. We present results of the CBA of the incremental costs and benefits of LAHC FDI Projects when compared with a base case scenario where LAHC continued with its pre-Future Directions social housing delivery strategy. As in the original report, we conclude this section with sensitivity analyses to key parameter assumptions and a discussion of the limitations of this analysis.

### How much did LAHC FDI Projects cost?

Social housing assets need to be renewed when they are no longer fit for purpose or become expensive to maintain. Delivering uplift in developments allows the stock to be renewed and replaced with homes that are fit for purpose and make best use of the available land. While market forces and cost inflation are the dominant forces in cost differences of social housing delivery over a long-term period, policy decisions to prioritise silver-standard dwellings, and locations with additional amenity have led to identified benefits but also come at a cost. In Table 5.1 we produce panel A from Table 2.8 from the original report which presents the average LAHC capital costs per dwelling night pre and post FD for a 40-year asset life.<sup>8</sup> Here we see that the incremental net capital cost of LAHC FDI is \$2.0 per dwelling night (which corresponded to \$29,862.4 on average per dwelling).

**Table 5.1. Average LAHC capital costs per dwelling night for 40-year life of assets, June 2021 prices (Table 2.8 from the original report)**

	Post Future Directions "FY2017 to FY2021"	Pre Future Directions "FY2012 to FY2016"	Incremental net costs
40-year asset life			
Acquisitions	\$40.9	\$45.9	-\$5.0
Construction	\$42.8	NA	NA
Redevelopment	\$36.5	\$32.2	\$4.2
Conversion	\$12.9	\$11.0	\$1.9
All dwellings (unweighted)	\$38.3	\$34.6	\$3.7
All dwellings (pre-Future Directions weighted average)	<u>\$36.7</u>	<u>\$34.6</u>	<u>\$2.0</u>

<sup>8</sup> Table 2.8 of the earlier report also presents unit cost estimates for asset lives of 50 and 66 years.



The reform scenario assumes that any incremental increase in real capital costs incurred by LAHC in the years following 1 July 2016 was associated with a change in policy strategy which comprised the following elements:

- more construction of new dwellings,
- a focus on different locations,
- an increased focus on silver standard dwellings / improving quality and design,
- an increased/scaled up focus on mixed tenure dwellings,
- more support services, and
- an increase in dwellings delivered and managed by Community Housing Providers (although sample sizes do not permit separate analyses of public and community housing).

It should be emphasised that LAHC did not receive any additional funding to deliver dwellings as part of the Future Directions strategy. Rather, the strategy provided the strategic policy framework under which LAHC scaled up its existing approach to renewal and developing new social housing stock. Also LAHC's funding stream to build new stock was and remains post-Future Directions, the same, that is "new" stock is purchased via the buying and selling of "old" stock on the private market.<sup>9</sup> Therefore, the costs that are included in the CBA should be considered as opportunity costs – they provide a monetary value of what the people of NSW are foregoing by LAHC implementing its Future Directions strategy rather than continuing with its earlier pre-Future Directions strategy.

The ten-year estimated costs of LAHC FDI Projects, in June 2021 prices, are presented in Table 5.2. The table is a reproduction of Table 6.1 from the original report with a 5% discount rate adopted where applicable. It reports on the calculations used to compute the overall incremental costs of LAHC FDI Projects compared to the prior costs associated with LAHC delivery of social housing in the five years immediately preceding Future Directions. It starts from the per dwelling night costs and builds up to the total net present cost of LAHC FDI.

The net unit capital cost measure is denoted as 'C3' in Table 5.2 and equals the difference between the per dwelling night cost of the reform, C1, minus the per dwelling night cost of the base case, C2. This equates to \$2.04 per dwelling night (as shown in Table 5.1). The cost offset due to rental revenue received from tenants (C4) reflects the additional \$3.50 a week of rental revenue that LAHC receives for each tenant on average due to Future Directions. C5 converts this to a daily amount of roughly 50 cents per day.

The annualised net capital cost (C7) and net recurrent cost (C8) are then calculated by multiplying the respective per dwelling night unit costs (C3 and C5) by the total amount of time households spent in the LAHC FDI dwellings in each year (C6). Recurrent costs are then discounted (C9) and added to the total capital cost estimate of C7 to generate the total net cost of LAHC FDI (CT). Total capital costs are treated as upfront costs, in that these are not discounted, but they are adjusted to account for the longer life of assets and the total time tenants have spent in LAHC FDI dwellings over the CBA analysis period.

The resulting net present cost (CT) presented in the final column of the table shows that LAHC FDI is estimated to cost an additional \$12.083 million over the first ten years. This is equivalent to \$2,619 per person it houses based on 4,614 people.

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<sup>9</sup> Although it is outside the scope of this evaluation, it would be valuable to undertake a CBA of the LAHC business model, which would evaluate the costs and benefits of selling older stock and buying new stock versus the costs and benefits of continuing to maintain and redevelop older stock.

**Table 5.2 Estimated costs of LAHC FDI compared to base scenario over first 10 years, June 2021 prices, (\$)**

		Years after entry to LAHC FDI dwelling										Net present cost
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Unit capital costs												
Unit cost per dwelling night (pdn)												
Reform (post Future												
Directions)	C1	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	NA
Base case (Pre Future												
Directions)	C2	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	NA
Net unit cost pdn	C3=C1-C2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	NA
Unit recurrent costs/cost offsets												
Cost offset due to rental												
revenue (weekly) <sup>1</sup>	C4	-3.5	-5.0	0.0	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	NA
Cost offset due to rental												
revenue (pdn)	C5=C4/7	-0.5	-0.7	0.0	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	NA
Total number of days												
households live in LAHC FDI												
dwellings <sup>2</sup>	C6	981,445	919,808	859,311	798,054	736,987	675,920	614,853	553,786	492,719	431,652	7,064,535
Net capital cost (annual)	C7=C6*C3	2,002,148	1,876,408	1,752,994	1,628,030	1,503,453	1,378,877	1,254,300	1,129,723	1,005,147	880,570	14,411,651
Net recurrent cost (annual)	C8=C6*C5	-490,761	-655,570	0	-322,617	-297,931	-273,244	-248,557	-223,871	-199,184	-174,497	-2,886,232
Discounted net recurrent	C9=C8/(1+											
cost (annual)	r/100) <sup>t</sup>	-467,391	-594,622	0	-265,418	-233,436	-203,899	-176,645	-151,524	-128,396	-107,126	-2,328,458
Total net cost of LAHC FDI	CT=C7+C9	1,534,756	1,281,787	1,752,994	1,362,612	1,270,017	1,174,978	1,077,655	978,199	876,751	773,444	12,083,194

1. Average treatment effect on rent paid (excluding CRA) as estimated from outcome evaluation.

2. Calculated across all principal tenants of LAHC FDI dwellings for years 1 to 3. Years 4 to 10 predicted based on linear trend.

## What did the resources from LAHC FDI Projects achieve for NSW?

In Section 5 of the original report LAHC FDI was found to have improved tenant outcomes in several key areas. In this section we monetise these estimates to calculate the overall net benefits of LAHC FDI.

Resulting estimates of the benefits achieved by LAHC FDI are presented in Tables 5.3 to 5.5. Firstly Table 5.3 presents the undiscounted estimated annual benefits of LAHC FDI compared to the base case over ten years. It shows how the monetary values of key outcomes presented in Table 2.9 of the original report (reproduced in column B1 of the table) are multiplied by the estimate of the overall LAHC FDI effect for each outcome. This overall effect is calculated by multiplying the population of individuals 'exposed' to the reform (B2) by the estimated causal impact of LAHC FDI for each outcome (reproduced by year in the three B3 columns) to generate the estimated benefit for years one, two and three ( $B4=B1*B2*B3$ ). Outcomes where the average LAHC FDI effects are not significant are denoted by zeros in the table.

Benefits of LAHC FDI are expected to persist beyond the three-year period captured in the outcome evaluation. Longer-term outcomes are predicted for years four to ten after initial treatment by taking a simple average of the treatment effects for client outcomes calculated at  $t=1$ ,  $t=2$  and  $t=3$ .<sup>10</sup> In future evaluations, once outcomes for further years after the first three years are known, these predictions can be substituted with the estimated ex-post outcome effects and the CBA analysis updated.

Annual amounts of additional CRA coming into NSW are estimated slightly differently. Here the treatment effect estimates are a household base measure (not an individual measure) thus we multiply these effects by the cumulative number of days households resided (or are projected to reside) in LAHC-FDI dwellings (C6 in Table 5. 2).

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<sup>10</sup> Another option would be to predict using a linear extrapolation of estimates from earlier years, but since the three-year outcomes do not have the same predicted power as the outcomes of earlier years (and therefore are more likely to be zero), a simple average was considered to be more appropriate.

**Table 5.3 Estimated annual benefits of LAHC FDI compared to base scenario over first 10 years, June 2021 prices**

	\$ Benefit (-Cost) Value	Number of treated persons	Estimates of average treatment effects (ATEs)			Total estimated annual benefit (\$)			Total predicted annual benefit (\$)
	B1	B2	B3			B4=B1xB2xB3			μ(B4)
			Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Years 4 to 10
<b>Health</b>									
Hospital days (non-psychiatric)	-1,579	4,614	0	0	0	0	0	0	0
Stay in psychiatric ward/hospital	-1,269	4,614	0	0	0	0	0	0	0
Ambulance call out	-910	4,614	-0.105	-0.069	0	442,260	291,357	0	244,539
Emergency department presentation (leading to admission)	-1,049	4,614	-0.049	0	0	235,044	0	0	78,348
Emergency department presentation (not admitted)	-657	4,614	0	-0.149	0	0	452,712	0	150,904
Use of mental health services (ambulatory)	-297	4,614	-0.021	0	0	29,397	0	0	9,799
<b>Housing</b>									
Evicted from social housing	-25,432	3,782	0	0	0	0	0	0	0
Use of homelessness support with accommodation	-12,201	4,614	0	0	-0.010	0	0	546,157	182,052
<b>Safety</b>									
Adult days in custody	-292	4,172	0	0	0	0	0	0	0
Juvenile justice stays	-1,956	4,172	0	0	0	0	0	0	0
Proven court appearance (assume all for magistrate's court)	-11,556	4,172	-0.011	0	0	520,188	0	0	173,396
Child ever in contact with child protection services	-1,412	945	0	0	-0.057	0	0	75,777	25,259
<b>Education</b>									
Child achieves minimum NAPLAN standard	4,954	562	0	0	0	0	0	0	0
Completion of a VET qualification/apprenticeship at Cert III or above	16,628	3,782	0	0	0	0	0	0	0
<b>Commonwealth funding</b>									
CRA	Actual amount	Table 2 C6	\$0.26	\$0.27	\$0.39	260,039	252,300	333,339	246,643
CRA excluding NSW taxpayer contribution	Actual amount	Table 2 C6	\$0.26	\$0.27	\$0.39	176,826	171,564	226,670	167,717

**Table 5.4 Discounted annual benefits of LAHC FDI compared to base scenario over first 10 years, June 2021 prices (\$)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Net present benefit	NPB per capita <sup>1</sup>
<b>Health</b>												
Hospital days (non-psychiatric)	0	0	0	0	0	0	0	0	0	0	0	0
Stay in psychiatric ward/hospital	0	0	0	0	0	0	0	0	0	0	0	0
Ambulance call out	421,200	264,269	0	201,183	191,603	182,479	173,789	165,514	157,632	150,126	1,907,794	413
Emergency department presentation (leading to admission)	223,852	0	0	64,457	61,388	58,465	55,681	53,029	50,504	48,099	615,474	133
Emergency department presentation (not admitted)	0	410,623	0	124,149	118,237	112,607	107,245	102,138	97,274	92,642	1,164,914	252
Use of mental health services (ambulatory)	27,997	0	0	8,062	7,678	7,312	6,964	6,632	6,316	6,016	76,976	17
<b>Housing</b>												
Evicted from social housing	0	0	0	0	0	0	0	0	0	0	0	0
Use of homelessness support with accommodation	0	0	471,791	149,775	142,643	135,850	129,381	123,220	117,353	111,764	1,381,778	299
<b>Safety</b>												
Adult days in custody	0	0	0	0	0	0	0	0	0	0	0	0
Juvenile justice stays	0	0	0	0	0	0	0	0	0	0	0	0
Proven court appearance	495,417	0	0	142,653	135,860	129,391	123,229	117,361	111,773	106,450	1,362,135	295
Child ever in contact with child protection services	0	0	65,459	20,781	19,791	18,849	17,951	17,096	16,282	15,507	191,715	42
<b>Education</b>												
Child achieves minimum NAPLAN standard	0	0	0	0	0	0	0	0	0	0	0	0
Completion of VET qualification at Cert III or above	0	0	0	0	0	0	0	0	0	0	0	0
<b>Commonwealth funding</b>												
CRA	247,656	228,844	287,950	202,913	178,463	155,882	135,046	115,841	98,159	81,899	1,732,654	376
CRA excluding NSW taxpayer contribution	168,406	155,614	195,806	137,981	121,355	106,000	91,831	78,772	66,748	55,691	1,178,205	255

1. Net present value divided by total number of LAHC FDI tenants in cohort (n=4614)

**Table 5.5 Total estimated benefits of LAHC FDI compared to base scenario over first 10 years, June 2021 dollars (\$)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Undiscounted annual net benefit	1,486,928	996,369	955,272	1,110,940	1,092,067	1,073,194	1,054,321	1,035,448	1,016,575	997,701
Discounted annual net benefit <sup>1</sup>	1,416,122	903,736	825,200	913,973	855,663	800,834	749,286	700,832	655,293	612,502
Discounted annual net benefit (upper bound) <sup>2</sup>	1,443,619	939,173	874,209	987,056	942,026	898,783	857,259	817,392	779,120	742,384
Discounted annual net benefit (lower bound) <sup>3</sup>	1,389,652	870,267	779,787	847,531	778,629	715,114	656,578	602,640	552,949	507,181
Undiscounted annual net benefit (National) <sup>4</sup>	829,058	744,068	621,934	731,687	731,687	731,687	731,687	731,687	731,687	731,687
Discounted annual net benefit (National) <sup>1</sup>	789,579	674,892	537,250	601,960	573,296	545,996	519,996	495,234	471,652	449,192

1. Annual net benefit with a 5% discount rate.

2. Annual net benefit with a 3% discount rate.

3. Annual net benefit with a 7% discount rate.

4. This excludes CRA paid to CHPs as a benefit and adds benefits attributed to the Commonwealth government such as MBS and PBS services where relevant.

As we did in the original report, we work through Table 5.3 with an example focusing on ambulance call outs. Column 'B1' shows that ambulance call outs cost the NSW government on average \$910 per call out; thus a reduction in call outs would save the government \$910 per call out. Column 'B2' shows that there were 4,614 individuals that lived in LAHC FDI dwellings at some stage since Future Directions was implemented and prior to June 2021. B3 shows that the causal impacts of LAHC FDI are to reduce ambulance call outs by 0.105 call outs per person one year after entry to LAHC dwellings and 0.069 call outs per person two years after entry. There was no effect in year three. This equates to a saving of \$442,260 in year 1 and \$291,357 in year two. The predicted savings in years four through ten take the simple average of savings over the first three years, which comes to \$244,539 per year.

Table 5.4 then presents the resulting annual benefit estimates derived using the data in Table 5.3 by outcome discounted by a 5 per cent discount rate. Table 5.5 presents undiscounted and discounted total estimated annual benefits for 3, 5 and 7 per cent discount rates. It also presents both undiscounted and discounted total annual benefits from a national perspective, that is excluding CRA from benefit calculations and including MBS and PBS expenditure where applicable. All monetary values presented are in June 2021 prices.

Table 5.4 shows that there were positive impacts of LAHC FDI in monetary terms. Improvements in the health and welfare of LAHC FDI tenants led to savings in government expenditure (in net present value units) associated with health and hospital services, improvements in child safety (via reductions in child protection notifications), reductions in contact with the justice system, and reduced use of homeless services.

Savings in health and hospital services include just over \$1.908 million in reductions in ambulance call outs; a further \$1.780 million in reductions in emergency department presentations and \$76,976 in reductions in the need for ambulatory mental health services. Assuming these reflect a genuine reduction in the need for these services these benefits are considerable.

Further benefits of LAHC FDI arise through improvements in housing stability therefore reducing the use of homelessness accommodation services to the value of \$1.382 million. Reduced contact with the justice system led to savings of another \$1.362 million, and reductions in child protection notifications led to an additional benefit of \$191,715.

## Did the economic benefits for NSW of LAHC FDI outweigh its costs?

Table 5.6 provides a summary of the findings of the cost-benefit analysis for LAHC FDI against the base case scenario where LAHC continued to develop their social housing stock as they did in the years leading up to Future Directions. Although there were sizeable, monetised benefits associated with the LAHC FDI reforms, the calculated benefits do not outweigh its overall costs over a ten-year period.

Benefits were estimated to accrue to a total value of \$8,433,440. These include benefits in the form of reduced ambulance call outs, emergency department presentations, use of mental health services, use of homelessness support, and fewer court appearances. It also includes benefits to children from less contact with child protection services.

Incremental costs of the program are however estimated to be just above \$12.083 million, or \$2,619 for every person it houses. As a result, LAHC FDI Projects implemented between July 2016 and June 2021 have a net present cost of \$3,649,754, with a benefit-cost ratio of 0.7. With 4,614 individuals having lived in LAHC FDI housing at some stage, this results in a net cost of \$791 per person.

**Table 5.6 Ten-year CBA results for LAHC FDI compared to main base case scenario<sup>1</sup>, 5% discount rate, June 2021 prices**

<b>Category</b>	<b>Total</b>	<b>Per capita</b>
<b>Costs</b>		
Rental revenue offset	-\$2,328,458	-\$505
Capital costs <sup>2</sup>	\$14,411,651	\$3,123
<b>Total costs</b>	<b>\$12,083,194</b>	<b>\$2,619</b>
<b>Benefits</b>		
<i>Health</i>		
Hospital days (non-psychiatric)	\$0	\$0
Stay in psychiatric ward/hospital	\$0	\$0
Ambulance call out	\$1,907,794	\$413
Emergency department presentation (leading to admission)	\$615,474	\$133
Emergency department presentation (not admitted)	\$1,164,914	\$252
Use of mental health services (ambulatory)	\$76,976	\$17
<i>Housing</i>		
Evicted from social housing	\$0	\$0
Use of homelessness support with accommodation	\$1,381,778	\$299
<i>Safety</i>		
Adult days in custody	\$0	\$0
Juvenile justice stays	\$0	\$0
Proven court appearance	\$1,362,135	\$295
Child ever in contact with child protection services	\$191,715	\$42
<i>Education</i>		
Child achieves minimum NAPLAN standard	\$0	\$0
Completion of a VET qualification/apprenticeship at Cert III or above	\$0	\$0
Commonwealth funding		
CRA	\$1,732,654	\$376
CRA minus NSW taxpayer contribution	\$1,178,205	\$255
<b>Total benefits</b>	<b>\$8,433,440</b>	<b>\$1,828</b>
<b>Net present value</b>	<b>-\$3,649,754</b>	<b>-\$791</b>
<b>Benefit-cost ratio</b>	<b>0.70</b>	<b>0.70</b>

1. Base case: LAHC social housing delivered between 1 July 2011 to 30 June 2016.

2. Capital costs are considered upfront costs and therefore not discounted although adjustments have been made considering the effective life of the asset.



Table 5.7 below presents the sensitivity of these CBA results to alternative scenarios or assumptions. Alternative scenario A offsets the NSW taxpayer contribution to Commonwealth funded rent assistance. Alternative scenarios B and C explore the sensitivity of estimates to the discount rate, adopting 3 and 7 per cent discounting respectively. Alternative scenarios D and E explore the impact of varying assumptions about the useful life of dwellings and Alternative F expands the criterion to include benefits to one where outcomes are included where the p-value is less than 0.10 (rather than the 0.05 used in the main analysis). Finally, alternative scenario G presents the analysis undertaken from a national perspective as in the original analysis but with a 5% discount rate.

Table 5.7 shows that offsetting CRA with the NSW taxpayer contribution reduces the BCR marginally to 0.65. Also, the overall NPVs and BCRs are not overly sensitive to alternative assumptions regarding the discount rate and the overall conclusion of the analysis are unaffected when this parameter is varied. The BCR ranges from a low of 0.63 when a 7% discount rate is adopted (alternative scenario C) to a high of 0.78 when a discount rate of 3% is adopted (alternative scenario B).

Assumptions about the effective/useful life of dwellings are more important to the overall results. If we assume that the effective life of dwellings is 66.6 years rather than 40 years the BCR becomes 1.33 turning a net present cost to a net present value of over \$2.072 million (alternative scenario E). This is because a longer assumed asset life arithmetically reduces the derived cost per dwelling night and results in a lower cost in the CBA computation, decreasing from a cost estimate of \$12,083,194 for the main analysis, to \$9,257,380 for alternative scenario D and \$6,360,920 for alternative scenario E.

Expanding the criterion to include benefits which were significant at the 10% level in the outcome evaluation has little impact only increasing the BCR from 0.70 to 0.71. The only additional benefit included if we expand the criterion is an additional reduction in emergency department presentations for those not admitted in the first year following the start of a LAHC FDI tenancy.

Finally, Table 5.7 shows a direct comparison to a CBA undertaken from a national perspective as was undertaken in the original report. Not including the CRA flowing into NSW as a benefit and adding MBS expenditure as a disbenefit has a substantial impact, reducing the net benefit of LAHC FDI, thus increasing the net present cost and reducing the BCR from 0.7 to 0.47.

**Table 5.7 Sensitivity of CBA results to alternative assumptions**

	NPV	NPV per capita	BCR
Main CBA: 5% discount rate	-\$3,649,754	-\$791	0.70
Alternative Scenario A: 5% discount rate, minus NSW taxpayer contribution	-\$4,204,203	-\$911	0.65
Alternative Scenario B: 3% discount rate (upper bound)	-\$2,602,424	-\$564	0.78
Alternative Scenario C: 10% discount rate (lower bound)	-\$4,557,319	-\$988	0.63
Alternative Scenario D: Asset life of 50 years (2% depreciation)	-\$823,940	-\$179	0.91
Alternative Scenario E: Asset life of 66.7 years (1.5% depreciation)	\$2,072,520	\$449	1.33
Alternative Scenario F: Expanded criterion to include benefits (p<0.10)	-\$3,556,989	-\$771	0.71
Alternative Scenario G: 5% discount rate, national perspective	-\$6,424,147	-\$1,392	0.47

## Discussion

When assessing the benefits from a NSW perspective the CBA looks more beneficial than when assessed from a national perspective, which was the focus in the original report. If we don't include additional CRA funding as a benefit and include additional MBS expenditure due to an increase in Medicare funded GP visits as a disbenefit, the BCR drops from 0.7 to 0.47.

However, the difference between the CBA conducted from the NSW perspective versus the national perspective is not as substantial as it was for SHMT and for SAHF as the reform only comprises of a small increase in the proportion of LAHC housing that is provided as community housing and eligible for CRA. Thus the amount of CRA coming into the state (the main difference between NSW and national analyses) only increases marginally due to the reform.

We reiterate that there are limitations to this analysis and to CBA more broadly, which are outlined in further detail in the original report. These caveats and limitations all remain relevant to this analysis. The discussion of potential additional benefits that we have not been able to measure is also equally important here.

The overall analysis in the original LAHC FDI evaluation report, as well as that in the strategy report, take these into account when assessing the performance of LAHC FDI and its impact. The conclusions and recommendations made in these reports considered a wide range of inputs from qualitative and quantitative analyses as well as the CBA. They are therefore not affected by this supplementary analysis and the conclusions and recommendations of the original analysis still hold.

## 6. Concluding comments

This analysis has found that when taking a NSW standpoint to CBA the economic impact is larger than that estimated when taking a national perspective. This is overwhelmingly due to the differential treatment of Commonwealth funded rent assistance. If one considers the injection of CRA into NSW due to Future Directions as a benefit, the BCR improves for all three programs, with SHMT and SAHF now showing benefits greater than their costs. This is most apparent for SHMT, with a national BCR of only 0.04 compared to one of 8.8 for NSW. For SAHF the national BCR is 0.36 whereas that for NSW is 2.65. For LAHC FDI, while the CBA from a NSW perspective also looks more beneficial than it does from a national perspective, the difference is not as great with the BCR remaining below 1.

The findings in this supplemental analysis are intended to complement those of the earlier reports, with all conclusions and recommendations made in these earlier reports prevailing. We however add some further discussion of the value of the additional CRA injection into the NSW social housing sector as this is the key difference between the original and supplementary analysis.

The Future Directions reform has led to an injection of CRA into the NSW social housing sector. It has done so by expanding the community housing sector relative to government provided public housing. If one assumes that additional revenue brought into the NSW social housing system via CRA is welfare enhancing to the people of NSW and has no opportunity cost then Future Directions has benefitted the people of NSW. But even when considered from a NSW standpoint this is only true if the additional CRA that is transferred to CHPs is used in a welfare enhancing way. This could come about in a range of ways: via improvements to the welfare of Future Directions tenants via additional services, to other non-Future Directions clients of CHPs if their services are reaching a wider population, via improvements to social housing assets that would not have occurred without the reform (e.g. via additional maintenance) or via the provision of additional housing stock.

It should not however be taken as a given that the additional CRA leads to net welfare gains to the people of NSW. For example, we have anecdotal reports that CHPs providing housing via SHMT have paid for asset maintenance that was delayed prior to SHMT. This is one way that the CRA may be providing a benefit to NSW via the Commonwealth government. However, it is also possible that the additional services provided via the additional CRA revenue lead to welfare losses by displacing other more beneficial services. If so, these amount to disbenefits rather than benefits. This should be monitored over time. It may also be more efficient to better resource the social housing sector directly via the Commonwealth-State Housing Agreement rather than indirectly via CRA.

## References

Melbourne Institute Consortium. 2024a. Final Report for the NSW Land and Housing Corporation Future Directions Implementation Projects (LAHC FDI) Evaluation. Melbourne: The University of Melbourne.

Melbourne Institute Consortium. 2024b. Final Report for the Social and Affordable Housing Fund (SAHF) Evaluation. Melbourne: The University of Melbourne.

Melbourne Institute Consortium. 2024c. Final Report for the Social Housing Management Transfer (SHMT) Evaluation. Melbourne: The University of Melbourne.

NSW Treasury (2023). *NSW Government Guide to Cost-Benefit Analysis*. Treasury Policy and Guidelines Paper, TPP 23-08, Sydney.

NSW Treasury (2017). *NSW Government Guide to Cost-Benefit Analysis*. Treasury Policy and Guidelines Paper, TPP 17-03, Sydney.