

# Cost Benefit Analysis Template

The CBAX tool and database can help you estimate a dollar value for quantified impacts. The CBAX tool and supporting information is available on <http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis/cbax>. Contact [CBAX@treasury.govt.nz](mailto:CBAX@treasury.govt.nz) for support.

The Treasury's Cost Benefit Analysis Guidance has more information on how to do cost benefit analysis (CBA).

Public sector agencies should use this CBA Template to meet the CBA requirements as set out in the Budget guidance. Please refer to the Budget guidance and contact your Treasury Vote Analyst if you have questions about the template or how much detail to include. This template has been updated to be consistent with the CBAX Tool User Guidance, especially the illustrative example. The information required is unchanged.

## Section A Descriptive Information

<b>Vote</b>	Social Development
<b>Responsible Minister</b>	Hon Paula Bennett
<b>Initiative title</b>	Social Housing Combined Bid – Additional social housing places

Funding Sought (\$m)	2015/16	2016/17	2017/18	2018/19	2019/20 & outyears	TOTAL
Operating	-	9(2)(g)(i) Free and Fram				
Capital	-	-	-	-	-	-

### Problem Definition

#### *Demand for social housing exceeds supply*

Demand for social housing exceeds supply. Those with an unmet housing need on the social housing register are often in an unstable living situation, live in overcrowded conditions and/or live in substandard-quality housing. Research indicates that those with an unmet serious housing need have significantly worse health outcomes, as well as worse education, employment and criminal offending outcomes. Such negative outcomes present both a significant risk to the wellbeing of those New Zealanders and significant long-term costs to the Crown and tax-payer.

To address the serious housing needs of vulnerable New Zealanders, the Government has committed to securing 65,000 Income Related Rent Subsidy (IRRS) places across New Zealand by June 2018.

#### *Focussing on Auckland*

It is anticipated that 31,000 of the 65,000 places will need to be secured in Auckland. Earlier this year MSD held a Request for Proposals (RFP)

- secure 300 additional places in Auckland
- test what types of flexible contracting Community Housing Providers (CHPs) need to provide more places in Auckland by 2018, and
- reveal the price of bringing new supply into the market.

The Auckland 300 RFP was successful in securing 408 places to be provided by June 2018 through negotiating:

- long-term contracts (up to 25 years)
- upfront funding for new build developments
- an operating supplement in addition to IRRS for providing higher than market rent, and/or
- success fees for places leased from the private market.

Of the 408 places, 200 are to be secured by leasing from the private rental market, 20 through the re-designation of property use, 8 through re-locatable units and 180 through new builds. The majority of additional places to be further secured in

Auckland will need to come through new builds because they add to Auckland's overall housing stock. Securing places from Auckland's existing housing stock would increase price pressures in the affordable housing market.

#### *Upfront funding is needed to induce the supply of new build social housing properties*

The 180 places secured through new builds through the Auckland 300 RFP are being delivered from seven proposals. Six of the seven proposals negotiated for upfront funding. The only new build proposal that did not request upfront funding through the Auckland 300 RFP had already secured funding from the Social Housing Unit (SHU). Negotiations indicated that a significant proportion of existing CHPs do not have the equity required to invest in new builds and so require upfront funding for new build projects.

Five of the seven new build proposals being progressed included already secured access to land through charitable means (i.e. from the Church). Land available through charitable means is limited and the extent to which further social housing can be provided on this land is likely to be near or at capacity. Therefore new investments to provide additional social housing are likely to incorporate the cost of land (which continues to rise in Auckland) and in turn are likely to require more upfront funding.

Effective 1 November 2015, the Reserve Bank of New Zealand has restricted the Loan-to-Value-Ratio (LVR) on bank lending for investment properties in Auckland to 70 percent of total value. This restriction applies to loans for social housing property investments, meaning that CHPs will need to provide a contribution of 30 percent of total costs for new build developments. There is currently no further government funding available to assist with the upfront costs of new property developments.

#### *IRRS expenditure is forecast to exceed the baseline IRRS appropriation*

Baseline IRRS appropriation has been calculated to account for 63,392 places by 2017/18. It is based on current national averages for IRRS and does not account for the additional number of places needed and the increased IRRS cost of new places in Auckland. Additional IRRS funding to baseline is required to pay for both existing places with higher expenditure costs than initially forecast for the baseline appropriation, as well as the increased additional costs for new places to be secured to contribute toward the 65,000 target.

### **Initiative Description**

This additional funding sought by this initiative will cover:

- the difference between the forecast cost and baseline appropriation (due to market rent cost pressures) for the 63,392 IRRS places to be secured for 2017/18, including the 2,800 new builds in Tamaki, contributing an additional 785 places overall
- the upfront funding and additional IRRS costs for the 260 places to be delivered through the Crown Land Development Programme in Auckland, and
- the upfront funding and additional IRRS costs for the 1,000 additional places to be secured through the Auckland Social Housing Supply Team procurement process.

The additional funding will enable MSE to reach 64,652 places by 2017/18 and will contribute to the Social Housing Reform Programme objectives to:

- ensure that people who need housing support can access it and receive social services that meet their needs
- ensure that social housing is of the right size and configuration, and in the right areas, for those households that need it
- encourage and develop a more diverse ownership of social housing, with more innovation and responsiveness to tenants and communities, and
- help increase the supply of affordable housing, especially in Auckland.

It will also help to:

- reduce overcrowding
- reduce homelessness
- house those with a serious housing need
- improve health outcomes
- improve educational outcomes
- improve employment outcomes, and

- reduce criminal offending.

<b>Additional places (1,260) to be secured through the Auckland Team</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20 &amp; outyears</b>	<b>Total</b>
Upfront funding	-	97.7	97.7	-	-	195.4
IRRS	-	2.2	16.5	28.9	31.2	78.8
<b>Total</b>	-	<b>99.9</b>	<b>114.2</b>	<b>28.9</b>	<b>31.2</b>	<b>274.2</b>

An Auckland Social Housing Supply Team (the Auckland Team) has been established to run a procurement process for securing additional places in Auckland. The Minister for Social Housing has agreed that the Auckland Team be able to negotiate contracts s 9(2)(j) Ongoing negotiations for new build properties that provide additional places. This will enable CHPs to seek bank loans under the LVR restriction for investing in new social housing properties in Auckland.

It has been estimated that \$195.4 million of upfront funding is needed for securing 1,260 new build places in Auckland. Of the 1,260 places, 260 are to be delivered through the MBIE Crown Land Development Programme and 1,000 are to be secured through the Auckland Team procurement process. It is assumed that on average \$155,000 will be needed per place. Of the \$195.4 million in upfront funding, \$97.7 million is sought in 2016/17 to be able to initiate contracts for new build IRRS places, with the other \$97.7 million in 2017/18 for milestone payments to be made as new build developments progress.

Additional IRRS funding will also be needed to pay for these places, as they are not included in the IRRS baseline forecast.

<b>Funding to cover the increased IRRS costs for 63,392 places</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20 &amp; outyears</b>	<b>Total</b>
	-	<u>9(2)(g)(i) Free and Frank</u>				

This covers the unappropriated costs associated with an increase in places from 62,607 at the end of 2015/16 to 63,392 by the end of 2017/18 and market rents rising at a faster rate than forecast in the initial appropriation. Through various initiatives, this funding will contribute to an additional 785 places.

<b>IRRS for the Tamaki Regeneration Company (TRC) places (2,800)</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20 &amp; outyears</b>	<b>Total</b>
	-	<u>9(2)(g)(i) Free and Frank</u>				

The 2,800 TRC places are already budgeted for under the 63,392 places with a standard market rent subsidy. This component of the cost represents the additional cost incurred as properties are redeveloped and the provider starts to receive s 9(2)(j) Ongoing negotiations on the investment of those properties. As the volume of regeneration phases in the costs increase over time.

### Alternative Options Considered

There are a number of options that were considered relating to the number of places sought. The current option has been chosen as it is the option most likely to result in the government achieving its aim of 65,000 social housing places by June 2018. However, there are still a large number of variables related to this Bid and the amount of funding sought may change as the work on achieving the 65,000 target continues in coming weeks and months.

**Impact Analysis**

**Who will this initiative benefit?**

This initiative will primarily benefit those New Zealanders who are:

- existing social housing tenants transferring into the 2,800 TRC new builds
- on the social housing register that will be placed in the 260 properties delivered by the Crown Land Development Programme and the 1,000 places to be secured through the Auckland Team procurement process and
- currently, or will be, tenanted in the 63,392 places forecast for in the IRRS baseline.

**Health**

International research indicates a strong link between housing and health outcomes. Research shows that:

- "housing deprivation has a substantial impact upon the risk of severe ill health" (Mueller, F. & Tighe, J., 2007)
- living in poor housing conditions as a child has long-lasting effects (e.g. greater risk of ill-health as an adult) (ibid., 2007)
- those living in poor living conditions are at "... 25 percent greater risk of disability (on average) or severe ill health across [their] life course" (ibid., 2007)
- low income families who pay more than half their income for housing costs are more likely to experience food insecurity and forgo medical costs. Children in these families are more likely to have fair or poor health than children in poor families with lower housing costs (Lipman, F. J., 2005)
- housing instability leads to high levels of stress that have adverse health consequences, especially for mental health (Lubell, J. et al, 2007, CSSP, 2011)
- affordable and stable housing is linked with improved health outcomes for families and children. Stable, affordable housing is a foundation for well-being (CSSP, 2011)

New Zealand based research also indicates a strong link between housing and health outcomes.

The Social Housing Outcomes Worth (SHOW) study measured the difference in hospitalisation rates between HNZ applicants and HNZ tenants. The study was based on data collected from HNZ and the Ministry of Health and matched the records of HNZ applicants and tenants between 2004 and 2008 to their health records. Not including private hospital cases, hospital transfers, hospital waiting list cases, day cases, and readmissions within a month, it found that 27 percent of HNZ applicants were hospitalised each year, compared to only 23 percent of social housing tenants (Baker, M. et al, 2010).

Another study measured the difference in health outcomes for people moving into insulated housing to those in non-insulated housing and found that those in insulated housing require less GP visits. During the three winter months, those in non-insulated homes visited a GP 1.36 times while those in insulated homes visited a GP 1.27 times (Chapman, R. et al, 2004). It is assumed that this is an appropriate proxy measure for the health outcomes would apply to social housing applicants and tenants.

It is assumed that this initiative will help to reduce the number of hours needed with a health specialist each year and that, based on the strong link between housing and health outcomes, this initiative will increase the quality of life for those housed.

This CBA has only included quantified values for assumed reductions in hospitalisations, GP visits, specialist visits and quality-adjusted life years. Assuming that the reduction in hospitalisations is a reliable measure of improved health outcomes, the health benefits for people transferring from the social housing register into social housing are likely to be wider and greater than those quantified.

**Employment**

There is limited evidence on the impact of social housing on employment outcomes, but research generally suggests that stable, quality housing may improve employability (Frontiers Economics Ltd 2014). It is assumed that both a stable living environment and improved health outcomes contribute to a jobseeker's ability to find and keep a job, increasing both annual incomes for households and income tax revenue for the government.

**Social Development**

Where someone receiving a benefit earns income above the relevant benefit income threshold, there will be a reduction in benefit expenditure. It is assumed that this initiative will help a proportion of those receiving a benefit with work obligations to get into work.

It is assumed that those with a serious housing need on the social housing register are likely to be receiving the Accommodation Supplement and/or living in substandard housing. People housed in a subsidised social housing place are not eligible to receive the Accommodation Supplement, meaning this initiative causes a reduction in Accommodation Supplement expenditure.

The improved health outcomes achieved through social housing are likely to decrease a client's on-going Disability Allowance.

**Justice**

Research shows that housing stability can reduce instances of domestic violence (Tually, S., et al., 2008; Futures Without Violence, 2009; Cohen, R., 2011) and the number of criminal offences likely to occur as a result of housing instability (Youth Justice Board 2008; Friedman, D., 2010; Carlson, D., et al., 2011; Zaretsky, K., et al., 2013)

It is assumed that there will be reduced violent offences, reduced property damage and reduced 'other offences' for those with a serious housing need moving into social housing.

**Education**

International research shows that housing instability and overcrowding has negative impacts on educational outcomes and that stable housing is likely to improve educational outcomes (Read, D. and Svetlova, A., 2012; Cunningham, M. and McDonald, G., 2012). It is likely that improving health outcomes for school-aged children will also have a flow-on effect on their educational outcomes. The impacts of this initiative on education outcomes have not been quantified for this CBA.

**Impact Summary Table**

Impacts - Identify and list \$m present value, for monetised impacts	Scenario	Assumptions and evidence (quantify if possible, and use ranges where appropriate)	Certainty
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**Estimated impact on key outcomes**

5,522 individuals with a serious housing need will have their need met through stable, affordable housing	100%	On average, each new social housing place will provide for 2.7 individuals.	Medium
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(2)(g) Mr. Lee and Frank

**Cost of the Initiative (\$m)**

Fiscal operating and capital costs of the initiative		<p>The Crown Land Development Programme will deliver an additional 260 places.</p> <p>The Auckland Team procurement process will deliver an additional 1,000 places.</p> <p>The additional funding sought for the difference between forecast expenditure and the baseline appropriation for the 63,392 places (including the 2,800 new build TRC places) will provide an additional 785 places.</p>	Medium
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**Government Benefits/(Costs \$m)**

- Overarching assumptions:
- each social housing place provides for a household of 2.7 individuals (based on social housing register data as at June 2015); 5,522 individuals across the 260 Crown Land Development Programme places, the 1,000 Auckland Team places and the 785 additional places through other various initiatives

- each impact occurs half a year into the tenancy (except for reduced Accommodation Supplement which is effective at the start of the tenancy)
- each impact lasts for 15.5 years (15.5 years is the median between 3.5 years and 25 years; 3.5 years for additional IRRS until benefit is covered by baseline IRRS, 25 years for upfront funding as place would not have been secured without it)
- the IRRS baseline appropriation will account for all IRRS places in 2020/21
- figures have been calculated based on NPV across 50 years.

Reduced Health sector costs	20.0	<p>27% of social housing applicants are hospitalised per year and 23% of social housing tenants are hospitalised per year based on SHOW study (see above). Probability difference = 4%. Impact is applied to the whole cohort. Each hospitalisation lasts for two days.</p> <p>During the three winter months, social housing applicants visit the GP 1.57 times and social housing tenants visit the GP 1.27 times based on insulation study (see above). These figures are multiplied by two (3.13 and 2.53 respectively) to account for the full year. This impact is applied to the whole cohort</p> <p>It is assumed that for 5% of the cohort there will be a reduction of 6 hours of specialist visits per year.</p>	Medium
Improved employment outcomes	13.3	<p>It is assumed that 10% of the cohort receives the Job Seeker Support payment.</p> <p>It is assumed that if those recipients do not get placed in social housing, only 10% will enter fulltime employment and stop receiving a benefit. If those recipients are placed in social housing, it is assumed that 25% will enter fulltime employment and stop receiving a benefit.</p> <p>It is assumed that 10% of the cohort receive Sole Parent Support. It is assumed that if this 10% are not placed in social housing, only 0.01% would enter fulltime employment. It is assumed that if they are placed in social housing, 20% will enter fulltime employment and stop receiving a benefit.</p>	Low
Reduced supplementary assistance costs	202.6	<p>It is assumed that 50% of the cohort receive Accommodation Supplement. They will not receive Accommodation Supplement once placed in social housing.</p> <p>It is assumed that 20% of the cohort receive Disability Allowance and that once placed in social housing the amount of Disability Allowance they receive will reduce by 50%.</p>	Low
Reduced Justice sector costs	23.2	<p>It is assumed that as a result of the cohort being placed in social housing, there will be a:</p> <ul style="list-style-type: none"> <li>- 1% reduction in violent offences</li> <li>- 5% reduction in property damage and</li> <li>- 5% reduction in all other offences</li> </ul>	Low
<b>Total Quantified Government Impact</b>	<b>259.1</b>		Low
<b>Wider Societal Benefits/(Costs \$m)</b>			
Improved quality of life	314.5	It is assumed that those on the social housing register experience live at 70% quality-adjusted life years, while tenants have 90% quality-adjusted life years.	Low
Increased employment income after tax	37.8	See 'Improved employment outcomes above' above. It is assumed that the same proportion of Jobseeker and Sole Parent Support recipients entering fulltime employment will receive the minimum wage.	Low

Total Quantified Wider  
Societal Impact 352.3

Net Present Value of Total  
Quantified Societal Impacts 252.2

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Section C Conclusions

**Conclusions**

Based on the quantified impacts of this initiative, analysis suggests that the fiscal benefits to the Government of this initiative present a negative ROI, while the societal benefits present a positive ROI.

It should be assumed that the accuracy of this quantified CBA is low, as the assumptions made are conservative and are likely to be understated.

The un-quantified impacts of providing stable accommodation for those with a serious housing need are likely to have significant long-term impacts on education outcomes, and as a flow on effect, on employment/welfare outcomes. However, research struggles to isolate the impact of housing on these outcomes from other determinants.

It is likely that cross-agency data that will be available in coming years will help to better identify quantifiable impacts of social housing on wider societal outcomes in the New Zealand context. Once data makes these comparisons, a subsequent CBA will be more accurate in calculating the fiscal and societal impacts of social housing.

**Summary of monetised results**

Use ranges for values where appropriate	Discount Rate	
	8% real (default)	4% real (sensitivity)
Net Present Value (NPV)	9(2)(g)(i) Free and Frank	
Benefit Cost Ratio (BCR)		
Return on Investment (ROI) – Societal Total		
Return on Investment (ROI) – Government		

**Supporting Evidence**

**Health**

Baker, M., Zhang, J. and Howden-Chapman, P. (2010) *Health Status of Housing New Zealand Applicants and Tenants: Key Indicators for 2004-2008*

Chapman, R., Howden-Chapman, P. and O'Brien, D. (2004) 'A cost-benefit evaluation of housing insulation: results from the New Zealand 'Housing Insulation and Health' study

CSSP (2011) *Affordable Housing as a Platform for Improving Family Well-Being: Federal Funding and Policy Opportunities*

Lipman, B. J. (2005) *Something's gotta give: Working families and the cost of housing*

Lubell, J., Crain, R. and Cohen, R. (2008) *Framing the Issues — the Positive Impacts of Affordable Housing on Health*

Mueller, E. and Tighe, J. (2007) *Making the Case for Affordable Housing: Connecting Housing with Health and Education Outcomes*

**Education**

Read, D. & Tsvetkova, A. (2012) *Housing And Social Issues: A Cross Disciplinary Review Of The Existing Literature*

Cunningham, M. and McDonald, G. (2012) *Housing as a Platform for Improving Education Outcomes among Low-Income Children.*

**Justice**

Carlson, D., Haveman, R., Kaplan, T., and Wolfe, B. (2011) *The benefits and costs of the Section 8 housing subsidy program: framework and estimates of first-year effects*

Cohen, R. (2011) *The Impacts of Affordable Housing on Health: A Research Summary*

Friedman, D. (2010) *Social impact of poor housing*



Futures Without Violence (2009) The Facts on Housing and Violence

Tually, S., Faulkner, D., Cutler, C., and Slatter, M. (2008) Women, Domestic and Family Violence and Homelessness A Synthesis Report

Youth Justice Board (2008) Accommodation: Source document

Zaretsky, K., Flatau, P., Clear, A., Conroy, E., Burns, L., and Spicer, B. (2013) The cost of homelessness and the net benefit of homelessness programs: a national study

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