

#### Overview

This paper outlines our approach to measuring the impact of shelter and housing programs in the Canadian context. In particular, we have explored research related to the short- and long-term benefits of various types of shelter or housing, including emergency shelter, supportive housing, subsidized (affordable) housing, and transitional housing<sup>1</sup>. Appendix III provides a partial bibliography of the studies that we used to inform our model<sup>2</sup>. Studies were selected based on their relevancy to different aspects of our model and availability of quantitative results. Results were weighted according to things like recency, geography, research design, and overall strength. These studies represent a fraction of the existing research literature on shelter and housing, a comprehensive review of which would exceed the limits of our resources. We acknowledge this limitation and have done our best to provide as thorough a survey of the research as possible with the studies we have selected.

### The Social Return on Investment (SROI) to Shelter and Housing

### **Outcome Categories**

Our research finds several categories of outcomes connected to shelter and housing – see Table I. This is not intended as an exhaustive list of all possible outcomes of shelter and housing.

Table I – Shelter and Housing Outcome Categories

Outcome Category Description Client C		
Shelter System	Fewer days in emergency shelter due to housing.	Adults, Youth, and Children
Health Care System		
Hospitalization	Fewer days spent in inpatient hospital care due to shelter or housing.	Adults, Youth, and Children
Emergency Department	Fewer visits to an emergency department due to shelter or housing.	Adults, Youth, and Children
Outpatient Care	Fewer visits to an outpatient facility due to housing	Adults, Youth, and Children

<sup>&</sup>lt;sup>1</sup> Emergency shelters are generally large communal settings that are intended to provide immediate respite to individuals whose only alternative may be to sleep rough. Supportive housing and subsidized housing generally are intended to be permanent housing solutions for residents. Supportive housing involves the highest level of care, typically with on-site services including medical care, addiction and mental health specialists, and case management. Comparably, subsidized housing generally is intended for clients with lesser needs, who may be provided rent assistance and case management but fewer, or none, of the other services involved in supportive housing. Transitional housing is not meant to be a permanent solution to clients' housing needs, but rather is intended to be a bridge to permanent housing, involving services aimed at helping clients to become self-sufficient in a relatively short period of time.

<sup>&</sup>lt;sup>2</sup> We focus on studies that were chosen as relating specifically to shelter and housing, and exclude more general sources of data that inform multiple program models.

Quality of Life	Improved quality of life due to shelter or housing.	Adults, Youth, and Children
Crime	Fewer crimes leading to arrest due to housing.	Adults and Youth
Incarceration	Fewer days incarcerated due to shelter or housing.	Adults and Youth
Victimization	Lesser crime victimization due to shelter or housing <sup>3</sup> .	Adults and Youth
Mortality	Lesser risk of mortality due to shelter or housing.	Adults and Youth
Employment Income	Improved employment income due to housing.	Adults
Employment	Greater employment due to shelter or housing.	Adults
Social Assistance	Greater access to social assistance due to shelter or housing <sup>4</sup> .	Adults
Grade Retention	Lesser grade repetition due to housing.	Youth and Children
High School Completion	Greater high school completion due to housing.	Youth and Children
Out-of-Home Care	Lesser out-of-home care placement due to housing.	Children

#### Social Return on Investment Model

We use a Social Return on Investment methodology to measure the impact of charitable activities. The SROI is an estimate of the total dollar value of social benefits that are realized as a result of a charity's programs divided by the charity's costs. Costs include program, administration, and fundraising costs, as well as the cost of goods in kind used in charitable activities and amortization on assets. Data informing the costs side of the SROI equation come from a charity itself, and generally are readily accessible. As such, we focus our research and this paper on the data informing the benefits side of the SROI equation.

The total dollar value of social benefits is the sum of the dollar values of often dozens of individual outcomes (or changes) brought about by a charity's programs. The calculation of the dollar value of a particular outcome requires knowledge of several pieces of information. We summarize these in Table II, providing examples in the context of shelter and housing.

Table II – Basic Components of Social Benefits Model

<b>Model Component</b>	Description	Example
Number of Clients	The total unique number of clients provided a service or involved in a program (i.e., the total number of clients where each client is counted only once).	The number of clients provided supportive housing (e.g., 100).
Baseline Distribution	The percentage of clients in one of potentially multiple, mutually exclusive	In the context of employment, the percentage of employed individuals

<sup>&</sup>lt;sup>3</sup> Costs of crime victimization include tangible and intangible costs to victims, where tangible costs include things like damaged or stolen property, and intangible costs relate to pain and suffering experienced as a result of crime victimization.

<sup>&</sup>lt;sup>4</sup> Though social assistance involves a cost to society in the form of greater public costs related to social assistance payments, it is also a benefit to clients for whom social assistance represents income. The cost of social assistance to the public and the benefit of income to the client might cancel each other out, except that in the case of direct cash transfers (including public transfers) we consider the 'marginal utility' of additional cash available to low-income individuals, to whom a modest increase in income means more than it would to someone who was more well off. This means that the nominal, monetary value of a direct cash transfer is multiplied by a factor that depends, among other things, on a client's pre-program income and the size of the cash transfer.

	groups which differ in some important way, leading to different outcomes.	who are employed full- versus part- time (e.g., 40 versus 60 percent).
Marginal Success Rate	The percentage of clients who achieve an outcome, net of the percentage of clients who would have achieved the outcome anyway, even without the program.	In the context of supportive housing, the difference in annual mortality rate between housed and homeless individuals (e.g., 1 percentage point) <sup>5</sup> .
(Annual) Outcome Value	The annual, per person dollar value of a particular change that has happened due to a program or service.	In the context of supportive housing, the annual value per person of fewer days in inpatient hospital care due to housing (e.g., \$4,100).
Start and End Years	The number of years that must pass after completion of a program, 1) before the annual outcome value begins to take effect (start year), and 2) after which the annual outcome value is no longer considered (end year).	In the context of supportive housing operated by a focal charity <sup>6</sup> , 1) the average number of years until the benefits of housing are realized, and 2) the start year plus the expected duration of outcomes (e.g., 0 and 1).
(Annual) Drop-Off	The percentage of clients who initially achieve an outcome but lose it over time.	In the context of supportive housing operated by an organization other than the focal charity <sup>7</sup> , the annual percentage of newly housed individuals who lose housing (e.g., 19 percent).
Baseline Attribution	The amount of credit a charity gets for a particular outcome, typically based on its contribution to the total cost of a service or program.	In the context of supportive housing, the share of the total cost of housing borne by a focal charity (e.g., 100 percent).

In addition to the above, we consider various elements of outcome value depreciation over time. In this context, attribution decay accounts for the fact that, over time, other factors besides the initial intervention will contribute to a client's success, such that the original (baseline) attribution percentage should fall incrementally (we have chosen a rate of 10 percent per year). Similarly, time discounting is a standard adjustment in the field of economics to value outcomes that are achieved earlier in time more highly than those achieved later in time (we have chosen a discount rate of 3 percent per year). These adjustments apply to all programs.

### **An Example SROI**

<sup>5</sup> In the case of housing provided to clients, the 'counterfactual' – or what we expect would be clients' circumstances if not for the program – is assumed to be homelessness, where 'homelessness' refers broadly to a lack of regular, dependable housing. To be homeless may mean that a person spends their time in some combination of precarious housing (Single Room Occupancy residences, hotels or motels), in the homes of friends or relatives, in emergency shelters, or in public or private spaces not meant for habitation (e.g., on the streets, in parks, in parked vehicles). In the case of emergency shelter provided to clients, the counterfactual is assumed to be street homelessness, or habitation in public or private spaces not meant for this purpose. For the source of definitions of homelessness, see Goering, P. et al. (2014). *National At Home/Chez Soi final report*. Mental Health Commission of Canada.

<sup>&</sup>lt;sup>6</sup> We make a distinction between housing that is operated by a focal charity (in the sense of them footing the bulk, or all, of the costs of housing) and housing that is operated by an organization other than the focal charity, in relation to which the role of a charity is not in housing clients themselves but in helping clients find homes in the community. Aside from start and end years, this affects things like drop-off and baseline attribution values.

<sup>&</sup>lt;sup>7</sup> See the above footnote.

The total dollar value of social benefits of shelter and housing will change based on several factors. We identify in Table III the variables affecting the shelter and housing social benefits model.

Table III – Shelter and Housing Social Benefits Model Variables

Variable	Description	Example
Number of Clients	The number of clients served.	100
Geography	The province or territory wherein clients are served, or Canada as a whole.	Canada
Age Group	The age group of clients (adults, youth, or children).	Adults
Gender	The gender of clients (female or male <sup>8</sup> ).	Female
Age	The average age of clients.	35
Attribution	The portion of program costs borne by the focal charity.	100 percent
Type of Shelter or Housing	The type of shelter or housing provided to clients (emergency shelter, or supportive, subsidized, or transitional housing).	Supportive Housing
Days per Year in Shelter or Housing	The average annual number of days in shelter or housing per client.	365 days
Charity-Operated Housing	In the context of supportive or subsidized housing, whether or not the focal charity operates the buildings in which clients are housed (yes or no).	Yes
Graduation Rate, Independent Housing	In the context of transitional housing, the percentage of participants who successfully move on to independent housing.	43 percent
Private Rooms, Emergency Shelter	In the context of emergency shelter, whether or not clients are provided private rooms.	No
Victimization	The average annual fewer number of physical assault, theft, robbery, sexual assault, vandalism, and breakand-enter victimizations per client, due to shelter or housing <sup>9</sup> .	0.8, 1.1, 0.9, 0.5, 0.7, and 0.3 fewer victimizations
Duration of Housing	The number of years of housing per client.	1 year
Drop-Off	In the context of housing operated by an organization other than a focal charity, the annual percentage of newly housed individuals who lose housing.	19 percent

It is beyond the scope of this paper to identify all of the data that go into the impact model for a shelter or housing program, as each outcome category involves several specific values for each of the components of our model, described in Table II. As such, a full account of each outcome would overwhelm this paper. Instead, based on the information in Table III, we present final estimates of social benefits of an example supportive housing program<sup>10</sup>. In Appendix II we identify the types of data that

<sup>&</sup>lt;sup>8</sup> Note that the binarization of this variable is for technical reasons, as we do not yet have research specific to non-binary individuals.

<sup>&</sup>lt;sup>9</sup> In the context of housing, all six types of victimization are considered. In the context of shelter, only physical assault, theft, robbery, and sexual assault victimizations are considered.

<sup>&</sup>lt;sup>10</sup> Since we are assuming, for this example, that the service provided is supportive housing operated by a focal charity, some of the variables in Table II are not applicable and do not factor into the estimation of total social

inform the various components of our model. Some of these data are from program-specific research (e.g., experiences of crime victimization among housed versus homeless individuals), while others are common to multiple program models (e.g., annual outcome values connected to high school completion).

As part of our process, we identify certain 'final' outcomes downstream from the outcome categories identified in earlier sections of this paper. We estimate the total social benefits of a program by summing the values of final outcomes. In cases where the same final outcomes are connected with multiple outcome categories, those with the greatest absolute values are included in the sum. This is to simplify the presentation of our findings and to account for potential double-counting in our model (e.g., overlapping values connected to different criminal justice system outcomes). We present in Table IV the total social benefits of our example supportive housing program. In Appendix I, we present our formula for bringing together all of the various components of our approach to valuing a particular final outcome – for example, in the context of supportive housing, lesser public costs related to emergency shelter.

Table IV – Total Social Benefits, Example Supportive Housing Program

<b>Outcome Category</b>	Final Outcome	Total Social Benefits (\$)	
Shelter System	Public Systems, Shelter	99,252	
Health Care System	Public Systems, Health Care	577,972	
Quality of Life	Quality of Life, Mental Health	<del>62,412</del>	
	Quality of Life, Physical Health	<del>38,055</del>	
Crime	Cash on Hand, Income (Employment Income)	<del>71,628</del>	
	Crime Victim Costs	2,661,763	
	Public Systems, Criminal Justice	227,452	
	Public Systems, Income Tax	<del>21,684</del>	
Incarceration	Public Systems, Criminal Justice	<del>94,391</del>	
Victimization			
Tangible Costs	Cash on Hand, Cost Savings (Victimization)	1,773,041	
Quality of Life	Quality of Life, Mental Health	4,504,902	
	Quality of Life, Physical Health	1,108,094	
Mortality	Mortality, All Causes	107,720	
Employment Income	Cash on Hand, Income (Employment Income)	<del>3,821</del>	
	Public Systems, Income Tax	<del>1,157</del>	
Employment			
Income	Cash on Hand, Income (Employment Income)	199,273	
	Public Systems, Income Tax	63,157	
Mortality	Mortality, All Causes	<del>772</del>	
Quality of Life	Quality of Life, Mental Health	<del>12,388</del>	
Social Assistance	Cash on Hand, Income (Public Transfer)	511,856	
	Public Systems, Social Assistance	(91,173)	
	·	11,743,309	

**Note:** Numbers with strikethrough format do not factor into the sum total social benefits. These represent values of particular final outcomes that are common to multiple outcome categories, where only the greatest absolute value of a particular outcome is included in the sum. Negative values are in parentheses.

benefits. These include the graduation rate connected to transitional housing, privacy of rooms connected to emergency shelter, and drop-off connected with housing operated by an organization other than a focal charity.

As can be seen in Table IV, the total social benefits of our example supportive housing program is about \$12,000,000, or \$120,000 in short- and long-term benefits per client. The SROI to this example program would then be calculated by dividing the total social benefits by the total cost of the program. Thus, if the program costs \$120,000 per client, the SROI would be 1.0. If it costs \$24,000, the SROI would be 5.0. That is, \$5 of social value created for every \$1 of costs.

These estimates are based on a particular set of circumstances, and there is a wide range of possible results for shelter and housing programs. As identified in Table III, our shelter and housing model involves several variables, differences in any one of which will affect the estimate of total social benefits. Depending on the unique circumstances of and data available from a charity, estimates of the impact of a program could vary considerably. In particular, the onus is on charities to provide data about things like the type of and duration of shelter or housing, and experiences of victimization before and after shelter or housing. When charity data are not available, we make conservative assumptions about things like experiences of victimization, such that specific estimates of total social benefits may be smaller than those in this paper.

### Appendix I – Charity Intelligence Outcome Valuation Formula

As it relates to the total social benefits of a charity program, we calculate the total dollar value of a particular outcome, for all clients who are candidate for it, using the following formula.

$$TV = \frac{\left(ba \times c \times bd \times msr \times ov \times \left((1-do) \times (1-ad)\right)^{-ys} \times \left(\left((1-do) \times (1-ad) \times (1-td)\right)^{ys} - \left((1-do) \times (1-ad) \times (1-td)\right)^{ye}\right)\right)}{1 - \left((1-do) \times (1-ad) \times (1-td)\right)}$$

#### where:

TV is the total value of a particular outcome, for all clients ba is baseline attribution c is the total number of clients candidate for a particular outcome bd is baseline distribution percentage msr is the marginal success rate ov is the annual per person value of an outcome do is drop-off ys is year start ye is year end ad is attribution decay td is time discounting

Based on our example supportive housing program, we estimate the total dollar value of lesser public costs related to emergency shelter due to housing. Below, we identify the data informing the components of our model for valuing an outcome. Our intention here is not to explain the derivation of these data, but just to illustrate how the formula for valuing a given outcome works.

Model Component	Value
Number of Clients	100
Baseline Distribution	100.0 percent
Marginal Success Rate	100.0 percent
(Annual) Outcome Value	\$993
Start Year	0.0
End Year	1.0
Drop-Off	0.0 percent
Baseline Attribution	100.0 percent
Attribution Decay	10.0 percent
Time Discounting	3.0 percent

Inputting these data into the formula, we get:

$$=\frac{\left(100.0\% \times 100 \times 100.0\% \times 100.0\% \times \$993 \times \left((1-0.0\%) \times (1-10.0\%)\right)^{-0.0} \times \left(\left((1-0.0\%) \times (1-10.0\%) \times (1-3.0\%)\right)^{0.0} - \left((1-0.0\%) \times (1-10.0\%) \times (1-3.0\%)\right)^{1.0}\right)}{1-\left((1-0.0\%) \times (1-10.0\%) \times (1-3.0\%)\right)}$$

$$=\$99,252^{11}$$

 $<sup>^{11}</sup>$  The difference between this figure and what you would get by the formula is due to rounding in the provided data.

# Appendix II – Types of Data Informing Social Benefits Model Components

Shelter System	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	There is no baseline distribution value in the context of shelter system costs.
Marginal Success Rate	There is no marginal success rate value in the context of shelter system costs.
(Annual) Outcome Value	<ul> <li>The annual value per person of fewer emergency shelter visits due to housing.</li> <li>The annual number of days in housing per client.</li> </ul>
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>
(Annual) Drop-Off	<ul> <li>In the context of transitional modeling, the number of years of independent modeling per electric.</li> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>
Health Care System	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	There is no baseline distribution value in the context of health care system costs.
Marginal Success Rate	There is no marginal success rate value in the context of health care system costs.
(Annual) Outcome Value	<ul> <li>The annual value per person of fewer days in inpatient hospital care due to shelter or housing.</li> <li>The annual value per person of fewer emergency department visits due to shelter or housing.</li> <li>The annual value per person of fewer outpatient visits related to general health issues due to housing.</li> <li>The annual value per person of fewer outpatient visits related to substance use due to housing.</li> <li>The annual value per person of fewer outpatient visits related to mental illness due to housing.</li> <li>The annual number of days in shelter or housing per client.</li> </ul>
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> </ul>

()	<ul> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>
Quality of Life	
Number of Clients	<ul> <li>The number of clients provided shelter or housing.</li> </ul>
Baseline Distribution	There is no baseline distribution value in the context of quality of life.
Marginal Success Rate	<ul> <li>In the context of emergency shelter, the difference in the percentage of individuals who are and are not provided shelter who have poor mental health.</li> </ul>
	<ul> <li>In the context of emergency shelter, the difference in the percentage of individuals who are and are not provided shelter who have poor physical health.</li> <li>The annual number of days in shelter per client.</li> </ul>
(Annual) Outcome Value	<ul> <li>In the context of housing, the annual value per person of improved quality of life related to mental health due to housing.</li> </ul>
	<ul> <li>In the context of housing, the annual value per person of improved quality of life related to physical health due to housing.</li> </ul>
	<ul> <li>The annual number of days in housing per client.</li> <li>In the context of emergency shelter, the annual cost per person of poor mental health.</li> </ul>
	<ul> <li>In the context of emergency shelter, the annual cost per person of poor physical health.</li> </ul>
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> </ul>
	<ul> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> </ul>
	<ul> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> </ul>
	<ul> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> </ul>
	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> </ul>

	• In the context of housing operated by an organization other than the focal charity, the cost per person of case management.
Crime <sup>12</sup>	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	There is no baseline distribution value in the context of crime.
Marginal Success Rate	There is no marginal success rate value in the context of crime.
(Annual) Outcome Value	<ul> <li>The annual values per client of fewer crimes leading to arrest due to housing.</li> <li>The annual number of days in housing per client.</li> </ul>
Start and End Years	<ul> <li>In the context of supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided housing.</li> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>
Incarceration	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	There is no baseline distribution value in the context of incarceration.
Marginal Success Rate	There is no marginal success rate value in the context of incarceration.
(Annual) Outcome Value	<ul> <li>The annual value per person of fewer days incarcerated due to shelter or housing.</li> <li>The annual number of days in shelter or housing per client.</li> </ul>
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>

 $^{\rm 12}$  For more information on crime, see the Crime Prevention summary paper.

(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>	
Baseline Attribution	The charity's costs relative to the total cost of the program.	
buseline Attribution	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> </ul>	
	• In the context of housing operated by an organization other than the focal charity, the cost per person of case management.	
Victimization		
Number of Clients	The number of clients provided shelter or housing.	
Baseline Distribution	There is no baseline distribution value in the context of victimization.	
Marginal Success Rate	There is no marginal success rate value in the context of victimization.	
(Annual) Outcome Value	<ul> <li>The annual values per client of reduced tangible costs of crime victimization, from fewer experiences of crime victimization due to shelter or housing.</li> </ul>	
	<ul> <li>The annual values per client of improved quality of life related to mental health, from fewer experiences of crime victimization due to shelter or housing.</li> </ul>	
	<ul> <li>The annual values per client of improved quality of life related to physical health, from fewer experiences of crime victimization due to shelter or housing.</li> </ul>	
	The annual number of days in shelter or housing per client.	
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> </ul>	
	<ul> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> </ul>	
	<ul> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> </ul>	
	<ul> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>	
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>	
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> </ul>	
	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> </ul>	
	• In the context of housing operated by an organization other than the focal charity, the cost per person of case management.	
Mortality		
Number of Clients	The number of clients provided shelter or housing.	
Baseline Distribution	There is no baseline distribution value in the context of mortality.	
Marginal Success Rate	• In the context of housing, the annual difference in mortality rate between housed and homeless individuals.	

	<ul> <li>In the context of emergency shelter, the annual difference in mortality rate between homeless and street homeless individuals.</li> <li>The annual number of days in shelter or housing per client.</li> </ul>
(Annual) Outcome Value	The cost per person of a full year of lost life.
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>
Employment Income	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	There is no baseline distribution value in the context of employment income.
Marginal Success Rate	There is no marginal success rate value in the context of employment income.
(Annual) Outcome Value	<ul> <li>The annual value per person of improved employment income due to housing.</li> <li>The annual number of days in housing per client.</li> </ul>
Start and End Years	<ul> <li>In the context of supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided housing.</li> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>

Employment <sup>13</sup>	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	The baseline distribution values associated with employment.
Marginal Success Rate	<ul> <li>The difference in the percentage of individuals who are and are not provided shelter or housing who are employed.</li> <li>The annual number of days in shelter or housing per client.</li> </ul>
	<ul> <li>The marginal success rate values associated with employment.</li> </ul>
(Annual) Outcome Value	<ul> <li>The annual values per person of outcomes associated with employment.</li> </ul>
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> </ul>
	<ul> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> <li>In the context of transitional housing, the number of years of independent housing per client.</li> </ul>
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>
Social Assistance	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	There is no baseline distribution value in the context of social assistance.
Marginal Success Rate	<ul> <li>In the context of emergency shelter, the difference in the percentage of individuals who are and are not provided shelter who access social assistance.</li> <li>The annual number of days in shelter per client.</li> </ul>
(Annual) Outcome Value	<ul> <li>In the context of housing, the annual public cost per person of increased social assistance payments due to housing.</li> <li>In the context of housing, the annual value per person of increased social assistance payments due to housing related to the marginal utility of cash transfers in the form of social assistance payments.</li> <li>The annual number of days in housing per client.</li> <li>In the context of emergency shelter, the annual public cost per person of social assistance.</li> </ul>

<sup>&</sup>lt;sup>13</sup> For more information on employment, see the Employment Programs summary paper.

	• In the context of emergency shelter, the annual marginal utility per person of social assistance payments.
Start and End Years	<ul> <li>In the context of emergency shelter and supportive and subsidized housing operated by the focal charity, outcome values are counted over one year, concurrent with the year during which clients are provided shelter or housing.</li> </ul>
	<ul> <li>In the context of supportive and subsidized housing operated by an organization other than the focal charity, the number of years of housing per client.</li> </ul>
	<ul> <li>In the context of transitional housing, the number of years of transitional housing per client.</li> </ul>
	In the context of transitional housing, the number of years of independent housing per client.
(Annual) Drop-Off	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual percentage of newly housed individuals who lose housing.</li> </ul>
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> </ul>
	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> </ul>
	• In the context of housing operated by an organization other than the focal charity, the cost per person of case management.
Grade Retention	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	There is no baseline distribution value in the context of grade retention.
Marginal Success Rate	<ul> <li>The difference in the percentage of individuals who are and are not provided housing who are held back at least one grade in school.</li> </ul>
	The annual number of days in housing per client.
(Annual) Outcome Value	<ul> <li>The annual public cost per student of primary or secondary education.</li> </ul>
Start and End Years	In the context of grade retention, outcome values are assumed to be realized over one year.
(Annual) Drop-Off	There is no drop-off value in the context of grade retention
Baseline Attribution	<ul> <li>The charity's costs relative to the total cost of the program.</li> </ul>
	<ul> <li>In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.</li> </ul>
	• In the context of housing operated by an organization other than the focal charity, the cost per person of case management.
High School Completion <sup>14</sup>	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	<ul> <li>The baseline distribution values associated with high school completion.</li> </ul>
Marginal Success Rate	<ul> <li>The difference in the percentage of individuals who are and are not provided housing who complete high school.</li> </ul>

<sup>&</sup>lt;sup>14</sup> For more information on educational attainment, see the Educational Support summary paper.

	The annual number of days in housing per client.
	<ul> <li>The number of years in housing per client, and the average age of clients, relative to the number of years until high school completion.</li> </ul>
	<ul> <li>The marginal success rate values associated with high school completion.</li> </ul>
(Annual) Outcome Value	<ul> <li>The annual values per person of outcomes associated with high school completion.</li> </ul>
Start and End Years	<ul> <li>The start and end years of outcomes associated with high school completion.</li> </ul>
(Annual) Drop-Off	There is no drop-off value in the context of high school completion.
Baseline Attribution	The charity's costs relative to the total cost of the program.
	• In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.
	<ul> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>
Out-of-Home Care <sup>15</sup>	
Number of Clients	The number of clients provided shelter or housing.
Baseline Distribution	<ul> <li>The baseline distribution values associated with out-of-home care.</li> </ul>
Marginal Success Rate	<ul> <li>The difference in the percentage of individuals who are and are not provided housing who are placed in out- of-home care.</li> </ul>
	The annual number of days in housing per client.
(Annual) Outcome Value	<ul> <li>The annual values per person of outcomes associated with out-of-home care.</li> </ul>
Start and End Years	<ul> <li>The start and end years of outcomes associated with out-of-home care.</li> </ul>
(Annual) Drop-Off	There is no drop-off value in the context of out-of-home care.
Baseline Attribution	The charity's costs relative to the total cost of the program.
	• In the context of housing operated by an organization other than the focal charity, the annual cost per person of housing.
	<ul> <li>In the context of housing operated by an organization other than the focal charity, the cost per person of case management.</li> </ul>

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 $<sup>^{15}</sup>$  For more information on out-of-home care, see the Out-of-Home Care summary paper.

## Appendix III - Bibliography of Studies Used to Inform Shelter and Housing Model

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