

September 12, 2016

# The Social and Economic Value of Affordable Housing Development Supported through the BC Housing Community Partnership Initiative

## A Social Return on Investment (SROI) Analysis



**BC HOUSING**

**This study has been completed with funding support from BC Housing.**



**Prepared by Constellation Consulting Group**



### **Acknowledgments**

We would like to extend our sincere appreciation to BC Housing and the three agencies selected as case studies for this analysis for sharing their insights and supporting the study. In particular, we would like to thank Deborah Kraus, Tammy Bennett, and Michael Pistrin with BC Housing; Kylie Sandham, Yvonne Blair and Kay Melliship with the Greater Victoria Housing Society; Scott Rodway, Renate Sutherland, and Michelle Genereux with the Kiwanis Housing Society; and Shawn Bayes, Justine Patterson, Elise Donais, and Kam Parmar with the Elizabeth Fry Society of Greater Vancouver. We would also like to sincerely thank all of the tenants who shared their perspectives with us as part of the study.

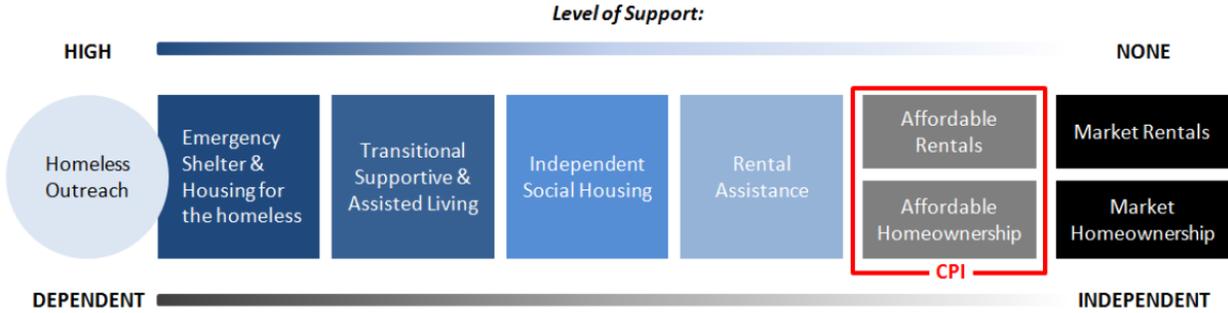
### **Recommended Citation**

Miller, A. & Ofrim, J. (2016). Social Return on Investment (SROI) of Affordable Housing Development Supported through the BC Housing Community Partnership Initiative. Calgary, AB: Constellation Consulting Group.

# Executive Summary

BC Housing seeks to make a difference in people's lives and communities through safe, affordable and quality housing. Since 2001, BC Housing has partnered with non-profit societies, government agencies, and community organizations through the Community Partnerships Initiative (CPI) to facilitate the development of affordable housing in communities across British Columbia. The CPI arranges mortgage financing to create self-sustaining affordable housing that does not require ongoing operating subsidies. BC Housing’s capacity to arrange financing with favourable terms is the cornerstone of the program.

The CPI fits within the Housing Continuum as follows:



In the interest of better understanding the impact of the CPI and to ensure continuous program improvement and accountability, BC Housing engaged with SROI Practitioners at Constellation Consulting Group to conduct a Social Return on Investment (SROI) analysis of affordable housing development supported by the CPI.

Social Return on Investment (SROI) is an internationally standardized methodology for articulating and understanding the financial value of outcomes created through a social investment, revealing how much social value is created for every dollar invested. An SROI combines quantitative, qualitative, and participatory research techniques. The current study has followed the methods outlined in *A Guide to Social Return on Investment*, the acknowledged international guidance document of The SROI Network for the application of the SROI methodology.

The end result of an SROI analysis is an SROI ratio that compares the amount invested in a social initiative to the financial value of social outcomes that are achieved. For example, an SROI ratio of 1 : 3 would indicate that for every dollar invested in the initiative, three dollars is created in social value. It demonstrates, in monetary terms, the financial benefit of social investments, like BC Housing’s CPI.

The current SROI analysis has been based on four case studies of CPI-supported affordable housing developments, chosen and profiled by BC Housing. Each case study was analysed separately using the SROI methodology to demonstrate the social value created. SROI results from the four case studies revealed that a range of significant value is created when investments are made in developing affordable housing in BC, no matter what type of investment is made. Looking at the four case studies together provides a snapshot of the range of value created through the CPI and speaks to the overall value of investing in the creation of affordable housing in BC.

The four case study SROI analyses revealed that:

For every dollar invested in supporting affordable housing through the CPI, between two and three dollars in social and economic value is created for individuals, governments, and communities.

The study found that, beyond the economic stimulation that housing construction generates, there is approximately 20-30% ‘value added’ when this construction results in *affordable* housing, and 92% ‘value added’ when that affordable housing is targeted to, and includes supports for, marginalized populations. As governments seek more cost efficient ways to support citizens and communities in thriving, the current study suggests that investment in affordable housing generates important economic and social returns.

Based on these findings, the following recommendations are made:

1. Invest in affordable housing.
2. Continue to Track Social Returns on Investment (SROI) Over Time.
3. Support Other Explorations of the Impact and Value of Affordable Housing.

**Summary of case study results:**

	<b>Case Study 1: Dahli Place</b>	<b>Case Study 2: Pembroke Mews</b>	<b>Case Study 3: Qualicum Park Village</b>	<b>Case Study 4: Ellendale</b>
<b>Location</b>	Victoria	Victoria	Qualicum Beach	Surrey
<b>Number of Units</b>	68	25	34	22
<b>Type of Investment</b>	New construction	Redevelopment and repurposing of a deteriorating asset	New construction replacing deteriorating assets	Building purchase and renovation adding new units
<b>Total Capital Investment (including CPI)</b>	\$13.2 million	\$4.2 million	\$5.3 million	\$1.7 million
<b>SROI Ratio</b>	1 : 1.96	1 : 2.37	1 : 2.18	1 : 3.22
<b>Social Value per Dollar Invested</b>	For every dollar invested, nearly two dollars in social and economic value is created.	For every dollar invested, nearly two and a half dollars in social and economic value is created.	For every dollar invested, just over two dollars in social and economic value is created.	For every dollar invested, just over three dollars in social and economic value is created.
<b>‘Value Add’ from social outcomes</b>	20%	26%	36%	92%

# Contents

- Executive Summary ..... i
- 1.0 Introduction and Background..... 3
- 2.0 Methods ..... 5
  - 2.1 The Social Return on Investment (SROI) Analysis Methodology ..... 5
  - 2.2 Application of the SROI Methodology in the Current Study ..... 5
    - Step 1. Establishing scope and identifying stakeholders ..... 6
    - Step 2. Mapping outcomes. .... 7
    - Step 3. Evidencing outcomes and giving them a value..... 8
    - Step 4. Establishing impact..... 9
    - Step 5. Calculating the SROI. .... 9
    - Step 6. Reporting, using embedding..... 9
  - 2.3 Evaluative and Forecast SROI Approaches ..... 10
  - 2.4 Privacy Considerations ..... 10
- 3.0 Research Findings on Outcomes and Value Created by Affordable Housing Development..... 11
  - 3.1 What is ‘affordable housing’?..... 11
  - 3.2 What is the need for affordable housing?..... 11
  - 3.3 What is the impact of access to affordable housing? ..... 12
  - 3.4 What value does affordable housing produce?..... 14
- 4.0 SROI Case Studies ..... 16
  - 4.1 SROI Analysis of Dahli Place..... 16
  - 4.2 SROI Analysis of Pembroke Mews ..... 23
  - 4.3 SROI Analysis of Qualicum Park Village..... 30
  - 4.4. SROI Analysis of Ellendale ..... 37
- 5.0 Case Study Comparison and Discussion..... 45
- 6.0 Limitations..... 46
- 7.0 Conclusions and Recommendations..... 47
- Appendix A: Resource List..... 48
- Appendix B: Dahli Place SROI Impact Map and Sensitivity Tests ..... 47
- Appendix C: Pembroke Mews SROI Impact Map and Sensitivity Tests ..... 51
- Appendix D: Survey and Interview Questions for Pembroke Mews and Dahli Place Tenants..... 55
- Appendix E: Qualicum Park Village SROI Impact Map and Sensitivity Tests..... 61

Appendix F: Interview Questions for Qualicum Park Village Tenants .....	65
Appendix G: Ellendale SROI Impact Map and Sensitivity Tests .....	66
Appendix H: Interview Questions for Participants at Ellendale .....	71
Appendix I: Research Consent Form.....	72
Appendix J: Financial Proxy Information .....	73
Appendix K: Operational Cost SROI Analysis Models .....	77

***This study has been completed with funding support from BC Housing.***



***Acknowledgements***

We would like to extend our sincere appreciation to BC Housing and the three agencies selected as case studies for this analysis for sharing their insights and supporting the study. In particular, we would like to thank Debbie Kraus, Tammy Bennett, and Michael Pistrin with BC Housing; Kylie Sandham, Yvonne Blair and Kay Melliship with the Greater Victoria Housing Society; Scott Rodway, Renate Sutherland, and Michelle Genereux with the Kiwanis Housing Society; and Shawn Bayes, Justine Patterson, Elise Donais, and Kam Parmar with the Elizabeth Fry Society of Greater Vancouver. We would also like to sincerely thank all of the tenants who shared their perspectives with us as part of the study.

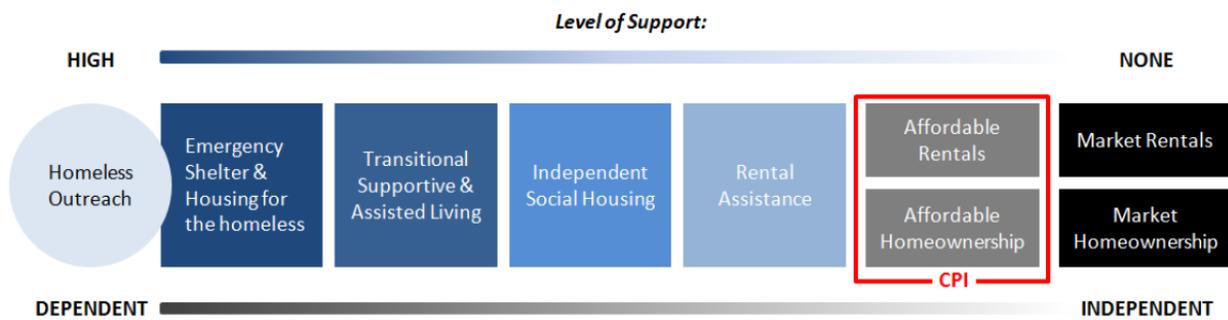
***Recommended Citation***

Miller, A. & Ofrim, J. (2016). *Social Return on Investment (SROI) of Affordable Housing Development Supported through the BC Housing Community Partnership Initiative*. Calgary, AB: Constellation Consulting Group.

## 1.0 Introduction and Background

BC Housing seeks to make a difference in people's lives and communities through safe, affordable and quality housing. It is an agency of the provincial government and is responsible for the development, management and administration of subsidized housing. BC Housing also supports a range of affordable housing options along the Housing Continuum for households with low and moderate incomes.<sup>1</sup> Since 2001, BC Housing has partnered with non-profit societies, government agencies, and community organizations through the Community Partnerships Initiative (CPI) to facilitate the development of affordable housing in communities across British Columbia.<sup>2</sup> The CPI arranges mortgage financing to create self-sustaining affordable housing that does not require ongoing operating subsidies. BC Housing's capacity to arrange financing with favourable terms is the cornerstone of the program.

The CPI fits within the Housing Continuum as follows:



Projects receiving support through the CPI must be considered self-sustaining, meaning they must not require any grants or ongoing operating subsidies from BC Housing to continue to operate. Where projects involve supports or services to residents, additional funding from other programs and/or commitments from other funders are necessary.

The affordable housing developed through the CPI is intended for low and moderate income households. While rent on all units must be *affordable* for eligible tenants, the specific rent structure may vary depending on the characteristics of the particular project, the tenant population served, and whether or not funding from other sources is layered into the project. As a result, rents may be structured as rent geared to income, fixed rent and/or up to affordable market rent.

In the interest of better understanding the impact of the CPI and to ensure continuous program improvement and accountability, BC Housing engaged with external SROI Practitioners at Constellation Consulting Group to conduct a Social Return on Investment (SROI) analysis of the affordable housing development fostered through the CPI. An SROI analysis provides a framework for measuring and

<sup>1</sup> For more information about BC Housing see: <http://www.bchousing.org/aboutus/about>

<sup>2</sup> For more information on the Community Partnerships Initiative see: <http://www.bchousing.org/Initiatives/Financing/CPI>

financially valuing social and economic outcomes from initiatives like the CPI. It provides a method for telling the story of change and social value created by investing in affordable housing development.<sup>3</sup>

The current SROI analysis has been based on four case studies of CPI-supported affordable housing developments chosen and profiled by BC Housing. Each case study was analysed separately using the SROI methodology to demonstrate the social value created. Looking at the four case studies together provides a snapshot of the range of value created through the CPI and speaks to the overall value of investing in the creation of affordable housing in BC. Results from the SROI analysis are presented in the current report.



*I think the investment is good –  
it's a wise move.*

*–Qualicum Park Village Tenant*



*I think it's a really important thing  
– affordable housing.  
It's something that I support and  
think is vital to the economy.*

*–Dahli Place Tenant*



---

<sup>3</sup> For more information on the Social Return on Investment Methodology see: Nicholls, J., Lawlow, E., Neitzert, E., & Goodspeed, T. (2012) *A Guide to Social Return on Investment*. London, UK: The SROI Network.

## 2.0 Methods

### 2.1 The Social Return on Investment (SROI) Analysis Methodology

The current research has used the internationally standardized Social Return on Investment (SROI) methodology. SROI is a methodology for articulating and understanding the financial value of outcomes created through a social investment, revealing how much social value is created for every dollar invested.

The SROI methodology goes beyond economic analysis by focusing on the value of *outcomes* or changes experienced by a variety of stakeholders, rather than focusing on solely investments and outputs.<sup>4</sup> This means that social outcomes, like increased well-being, are represented in financial terms alongside more tangible cost savings for governments and individuals.

An SROI analysis combines quantitative, qualitative, and participatory research techniques. The end result of an SROI analysis is an SROI ratio that compares investment to the financial value of social outcomes that are achieved demonstrating, in monetary terms, the financial benefit of social investments. This information can help in developing strategies to increase the value created by an initiative, managing ongoing program activities, and communicating with both funders and beneficiaries.

While SROI enables social initiatives to speak about social outcomes in the *language* of financial returns, it is important to note that the social value return calculated through an SROI analysis is not *equivalent* to a financial return that would see the creation of spendable dollars. Rather, it is better understood as an approach to valuing social outcomes through financial measures other than standard economic indicators, such as GDP.<sup>5</sup>

The current study has followed the methods outlined in *A Guide to Social Return on Investment*, the acknowledged international guidance document of The SROI Network for the application of the SROI methodology. The five steps outlined below are the standard process for conducting an SROI analysis that have been used in analyzing the value of BC Housing investment in affordable housing development.

### 2.2 Application of the SROI Methodology in the Current Study

For the current study, BC Housing chose four CPI-supported affordable housing case studies for separate SROI analysis, representing a range of development approaches, and communities. The four SROI case studies are intended to provide snapshots of the value created through CPI investments. The snapshots can then be considered in terms of the overall range of value created, which speaks to the broader value of BC Housing's investment in the creation of affordable housing in BC.

---

<sup>4</sup> See for example: Treasury Board of Canada Secretariat. (2013). *Assessing Program Resource Utilization When Evaluating Federal Programs*. Ottawa: Her Majesty the Queen in Right of Canada.

<sup>5</sup> See for example: Ravi, A., & Reinhardt, C. (2011) *The Social Value of Community Housing in Australia*. Melbourne, Australia: Net Balance. See also the work of economist Joseph Stiglitz in relation to well-being valuation.

	Investment Approach	Community	Developed By
<b>1. Dahli Place</b>	New construction of a 68-unit affordable housing rental apartment building.	Victoria	Greater Victoria Housing Society and the Greater Victoria Rental Development Society <sup>6</sup>
<b>2. Pembroke Mews</b>	Redevelopment and repurposing of a deteriorating asset into a 25-unit affordable housing rental apartment building.	Victoria	Greater Victoria Housing Society
<b>3. Qualicum Park Village</b>	New construction of 34 affordable and accessible rental homes on a site where deteriorating affordable units were previously situated.	Qualicum Beach	Kiwanis Housing Society
<b>4. Ellendale</b>	Purchase of building used for addictions service delivery for women and renovation to include 12 new spaces for women to access addictions treatment with children in their care.	Surrey	Elizabeth Fry Society

Sections 4.1 through 4.4 provide details on the application of the SROI methodology for each case study and Appendices B, C, E, and G include the SROI analysis impact maps for each case study.

Overall, each case study case has been conducted using the internationally standardized SROI Steps as follows:

**Step 1. Establishing scope and identifying stakeholders**

This process involves determining which aspects of the investment will be considered in the analysis, which stakeholders will experience outcomes due to the investment, and the timeframe over which outcomes and investment are considered.

For all case studies, the total investment in development, including both CPI and non-CPI investment was analyzed. For the Pembroke Mews, Dahli Place, and Qualicum Park Village case studies, ongoing operational costs were not included in the analysis as these costs do not require further investment beyond tenant rents. For the Ellendale case study, ongoing operational costs were included since outcomes experienced by participants (tenants) are intricately linked to the supportive programming embedded in the Ellendale housing model. Rents paid by tenants have not been included as inputs in any of the case study analyses since tenants would pay at least this amount (if not more) to live someplace else (100% deadweight).

The potential stakeholders of an SROI analysis can include a broad range of individuals and organizations including direct beneficiaries of service, service providers, governments, communities, neighbours, and so forth. Stakeholders of the four SROI case studies were determined separately in conversation with BC Housing and the four non-profit CPI recipients.

<sup>6</sup> NOTE: While the Greater Victoria Rental Development Society was involved in the development of Dahli Place, the Greater Victoria Housing Society is now the sole owner and operator of the development.

For all case studies, the same timeframes were analyzed, looking at:

- The immediate value created during the construction of the affordable housing development (e.g. construction job creation, economic multiplier effects etc.)
- The ongoing value created each year by the affordable housing development over 30 years<sup>7</sup> (e.g. value from social outcomes each year, economic multiplier effects within neighbourhoods from spending each year, etc.)

The examination of ongoing social value created over 30 years looks at outcomes that happen for any mix of tenants *each year* for a period of 30 years. This means that social value related to lasting change experienced by tenants (change experienced beyond a tenant's stay at an affordable housing development) has not been captured (e.g. ongoing health benefits, future ability to purchase a home due to rent savings, benefits from increased education, etc.).

Using these timeframes produces an understanding of both the immediate value created by affordable housing development and the cumulative value of outcomes achieved by tenants each year that the affordable housing assets are available to house tenants.

### Step 2. Mapping outcomes.

The next step in the SROI process involves mapping the logical links between the activities (economic and/or social) supported by an investment and the outcomes (changes) that these activities create. For each of the four case studies, outcomes of the affordable housing development were mapped for all identified stakeholders. Outcome mapping was guided by academic and grey literature (non-academic literature) research, information from the administrators of the housing developments, and information from tenants in the developments.

Beyond providing information on anticipated outcomes, exploring academic and grey literature research provides the opportunity to compare results from the current study to results determined by other researchers.

Academic and grey literature research was sought using the following search strategies:

- *Academic literature* was rigorously reviewed, through the use of electronic databases, with a particular focus on other SROI and economic analyses of affordable housing.
- *Grey literature* was sought via organizational and government websites, with a particular focus on other SROI and economic analyses of affordable housing.
- A *snowball strategy* was employed, following references from particularly rich research studies
- *News articles* were sought via Internet search and suggestions from the four case study CPI recipients.
- Recommendations from BC Housing and the four case study CPI recipients were explored.

Information from the administrators of the four case-study developments was gathered through in-depth conversations with these administrators about the outcomes they had observed and outcomes that were anticipated.

---

<sup>7</sup> Note: 30 years was used across analyses as a conservative estimate of the longevity of the capital asset without significant further investment in capital upgrades or re-development. Deterioration of the asset and associated decreases in value was factored into the analysis. See for example: Flikweert, Lawton, Collell & Simm (2009).

The SROI methodology also places significant emphasis on involving target stakeholders (beneficiaries) in articulating the outcomes that they personally experience (both positive and negative) so that the SROI analysis is not at risk of over-claiming value due to incorrect assumptions about the outcomes experienced. For each case study, tenants were engaged via in-depth interview to garner information and understanding around outcomes they had experienced due to their tenancy in the four case-study affordable housing developments. The interviews provided opportunities to understand the change experienced by tenants as articulated by them. Surveys were also conducted to understand *how many* tenants experienced outcomes that were mapped (see Step 3: Evidencing Outcomes, below).

### Step 3. Evidencing outcomes and giving them a value.

This step involves determining how many stakeholders experience each mapped outcome and then establishing the financial value of each mapped outcome.

#### **Evidencing Outcomes**

For the current study, the number of stakeholders achieving each mapped outcome was determined based on primary data gathered from tenant stakeholders via tenant surveys and interviews, as well as secondary data from research sources. Due to limited opportunity to engage a large sample of tenants in the current research study, evidence on the achievement of outcomes has been bolstered by reference to research (mostly academic). The impact of this reliance on research on the robustness of the current findings is discussed in the 'Limitations' section of this report.

#### **Valuing Outcomes**

Mapped outcomes were financially valued using financial proxies from academic and grey literature as well as financial proxies based on information provided directly by tenants.<sup>8</sup>

Outcome valuation methods included:<sup>9</sup>

- Estimations of wages from direct job creation
- Economic multipliers
- Intangible valuation techniques
  - Revealed preference valuation (also known as willingness to pay valuation)
  - Stated preference valuation (also known as contingent valuation)
- Estimations of direct spending and taxes paid

Where possible, valuation information/methods from other SROI and economic studies were used, enabling the possibility of some comparison between studies and ensuring results from the current study are aligned with other, similar, studies.

---

<sup>8</sup> Financial proxies are estimates of financial value where it is not possible to know an exact value.

<sup>9</sup> For more information on valuation techniques, see for example Cohen (2005).

#### Step 4. Establishing impact.

This step involves considering what other elements are part of the change experienced by stakeholders including:

- Deadweight – the change that would have happened anyway
- Displacement – the displacement of other positive activity
- Attribution – the change attributable to others

It also considers whether and how much an outcome that extends into the future (past the year of investment) will drop off over time.

These elements are applied as discounts to the value included in the SROI analysis (expressed as percentages). They help ensure that the SROI value is not over-claimed, and provide a 'reality check' on the actual impact of the social investment.

In the current analysis, these values have been based on feedback from target stakeholders as well as academic and grey literature research.

#### Step 5. Calculating the SROI.

The last step in an SROI analysis is calculating the SROI ratio. The ratio is calculated by multiplying the number of stakeholders achieving an outcome by the value of that outcome (financial proxy), and then discounting for impact. All outcomes are then added together for the total present value, which is divided by the total investment.

The SROI ratio indicates how much social value is created for every dollar invested in a social initiative. For example, an SROI ratio of 1 : 3 would indicate that for every dollar invested in the initiative, three dollars is created in social value (the value of outcomes achieved).

As part of this process, sensitivity tests are conducted to ensure the validity of any assumptions or estimations that were made as part of the analysis. The sensitivity tests for each case study were slightly different, but each explored the impact of estimations or assumptions around:

- Number of stakeholders experiencing outcomes
- Financial proxies used to represent the value of outcomes
- Discounts applied
- Timeframe of the analysis

#### Step 6. Reporting, using embedding.

The final activity related to an SROI analysis is the creation of an SROI report and other communications documents. The current report is part of this final activity. Communication can also involve presentations, executive summary reports, reports for government use, reports for fundraising use etc.

The final SROI activity also relates to using results on an ongoing basis for continuous program improvement (embedding). Each case study organization is now equipped with an SROI that they can use to understand their value creation each year, while BC Housing may consider using SROI as a way to understand CPI and other investment streams going forward.

### 2.3 Evaluative and Forecast SROI Approaches

An SROI analysis can be an ‘evaluative’ or ‘forecast’ analysis. An evaluative analysis provides a definitive statement of value based on rigorous primary research of outcomes achieved by stakeholders. A forecast analysis provides a projected value statement based on rigorous secondary research that reveals reasonable expectations of outcomes achieved by stakeholders. Both approaches are equally valid and powerful, and can be used in combination based on the availability of stakeholder data.

For the current study, the following approaches have been used within the four case studies:

	<b>SROI Approach</b>	<b>Rational for Approach</b>
<b>Dahli Place</b>	Primarily evaluative approach, with some outcome areas forecast.	Enough data was collected through tenant surveys and in-depth tenant interviews to create a primarily evaluative SROI model. Some forecasting was used for outcome areas where data was not considered robust.
<b>Pembroke Mews</b>	Forecast approach.	Available data from tenants was very limited since very few Pembroke Mews tenants completed a tenant survey or in-depth interview, therefore a forecast model was developed.
<b>Qualicum Park Village</b>	Forecast approach.	Available data from tenants was limited so the analysis was primarily based on research, and informed by in-depth tenant interviews.
<b>Ellendale</b>	Combination evaluative and forecast approach.	Previous (2014) research data on outcomes experienced by Ellendale participants was used and the analysis was informed by in-depth stakeholder interviews from a similar program at Elizabeth Fry Society. Since the 2014 research was not specifically geared towards SROI analysis of affordable housing, additional research on affordable housing outcomes has been used to inform the SROI analysis.

### 2.4 Privacy Considerations

To guarantee the privacy of tenant stakeholders, and to safeguard against any potential harm the research could cause, a detailed Privacy Impact Assessment was developed as part of the project. This document was approved by the BC Housing Privacy Officer and Senior Manager of Information Services. It included details on the research approaches used with tenants and sought to anticipate any potential issues participation in the research would cause for tenants. A Research Consent Form was developed as part of this process and is included in Appendix I. For further details on privacy and ethical research considerations of this study, please contact Constellation Consulting Group.

## 3.0 Research Findings on Outcomes and Value Created by Affordable Housing Development

### 3.1 What is ‘affordable housing’?

Different jurisdictions, departments, and individuals may have different concepts of what ‘affordable housing’ means. In Canada, the Canada Mortgage and Housing Corporation (CMHC) indicates that housing is considered ‘affordable’ if shelter costs account for less than 30 per cent of before-tax household income.<sup>10</sup> BC Housing also defines ‘affordable housing’ in this way.<sup>11</sup>

Affordable housing can include housing provided by the private, public and/or not-for-profit sectors. The experience of affordability in housing can relate to temporary or permanent housing and can refer to all forms of housing tenure, including rental, ownership, and cooperative housing. According to the CMHC affordable housing can thus refer to any part of the Housing Continuum.<sup>12</sup>

#### Housing Continuum

Emergency Shelters	Transitional Housing	Supportive Housing	Subsidized Housing	Market Rental Housing	Market Homeownership Housing
--------------------	----------------------	--------------------	--------------------	-----------------------	------------------------------

### 3.2 What is the need for affordable housing?

Housing affordability is impacted by both demand-side and supply-side economic factors. From both the demand- and supply-side, housing affordability is a growing concern across Canada. According to CMHC, the 2011 national census revealed that 12.5% of Canadian households, were in need of affordable housing (6.5% of home owner households, and 26.4% of renter households).<sup>13 14</sup> When households do not have access to the affordable housing that they need, they are considered to be in ‘core housing need’.<sup>15</sup>

In British Columbia, there is high demand for affordable housing resulting in many BC households living in ‘core housing need’.<sup>16</sup> CMHC has indicated that in 2011, 15.4% of BC households were living in ‘core housing need’ (8.8% of home owners, and 31.3% of renters).<sup>17 18</sup> According to the BC Non Profit Housing Association, the number of renter households in ‘core housing need’ could increase to 43% over the

<sup>10</sup> CMHC. (2016).

<sup>11</sup> BC Housing. (n.d.).

<sup>12</sup> CMHC. (2016).

<sup>13</sup> CMHC (2016)

<sup>14</sup> Statistics Canada (2012)

<sup>15</sup> Zon, N., Molson, M., & Oschinsky, M. (2014) (Page 6)

<sup>16</sup> Klein, S. & Copas, L. (2010).

<sup>17</sup> CMHC (2016) *Households in Core Housing Need, 2011*.

<sup>18</sup> Statistics Canada (2012)

next 25 years.<sup>19</sup> This is impacted by the fact that for individuals receiving income assistance, average rents in most communities are far beyond the shelter allowance amount provided.<sup>20</sup> For example, in Victoria, the average cost of a bachelor rental apartment is \$740 per month, approximately double the monthly shelter allowance of \$375.<sup>21</sup>

It is also impacted by low vacancy rates for market rental housing. While higher vacancy rates may not directly translate into greater availability of affordable housing, they can potentially increase market pressures for lower rent due to increased supply relative to demand.<sup>22</sup> In the four communities where CPI-supported affordable housing developments were selected for SROI case studies, vacancy rates are less than 2%, suggesting a lack of affordable rental housing supply.<sup>23</sup> The intention of the CPI-investments, such as those included in this study, is to increase the supply and range of affordable housing options for individuals in BC communities.

### 3.3 What is the impact of access to affordable housing?

Research has shown that the development and ongoing management of affordable housing has multiple positive effects on individuals and communities.<sup>24</sup> Affordable housing impacts not only residents within this type of shelter, but also the local neighbourhoods, and communities more broadly.<sup>25</sup>

#### Impact on Residents

Most directly, affordable housing impacts residents by increasing the residual disposable income available to them after meeting necessary shelter costs.<sup>26</sup> This can be particularly impactful for individuals on fixed incomes (e.g. seniors), as well as households at risk of homelessness, where choices are being made between paying for shelter and paying for other essential needs.<sup>27</sup>

Research has shown that being able to reasonably afford shelter costs leads to increased housing stability.<sup>28</sup> This stability leads to greater ability to engage in employment, provide positive environments for child rearing, and participate in the community.<sup>29</sup> Through research for CMHC, Condon *et al* (2010) revealed that the social benefits for affordable housing residents extend to positive changes in:

- Health;
- Diet;
- Ability to cope;
- Stress level;
- Children's school performance;
- Community involvement;

---

<sup>19</sup> BC Non Profit Housing Association (2013) (Page 1)

<sup>20</sup> See also: Currie, L. Moniruzzaman, A., Patterson, M. & Somers, J. (2014). (page 9)

<sup>21</sup> See: BC government social assistance rates and <http://www.cmhc-schl.gc.ca>

<sup>22</sup> CMHC. (2014).

<sup>23</sup> 0.6% overall vacancy rate in Victoria; 1.9% overall vacancy rate in Surrey; Approximately 1% vacancy rate in Qualicum Beach. See: City Spaces. (2009). And <http://www.cmhc-schl.gc.ca>

<sup>24</sup> Scally, C.P. (2012). (Page 719)

<sup>25</sup> Wegmann, J. (2014). (Page 694)

<sup>26</sup> Cohen, R., & Wardrip, K. (2011). (page 2)

<sup>27</sup> Scally, C.P. (2012). (Page 719)

<sup>28</sup> Heintze, T., Berger, L., Naidich, W., & Meyers, M. (2006).

<sup>29</sup> Scally, C.P. (2012). (Page 719)

- Income; and
- Participation in new activities.<sup>30</sup>

Affordable housing impacts health in a direct way, as accessing adequate housing “protects residents from the heat or cold; poor housing can also foster poor health when it contains lead paint, asbestos, or vermin”.<sup>31</sup> Housing is also a key social determinant of health.<sup>32</sup> In a strictly social context, affordable housing often results in residents making important social connections that increase their social capital over time.<sup>33</sup>

While affordable housing occupants are the most direct beneficiaries of affordable housing, there are frequently co-benefits for neighbourhoods and communities.

### Impact on Local Neighbourhoods

The increase in disposable income resulting from affordable housing can translate directly into increased spending in local communities. According to Cohen & Wardrip (2011), “low- and moderate-income households are more likely than others to spend [their increased disposable income] on basic household needs such as food, clothing, healthcare, and transportation. Local businesses stand to gain from the increased buying power made possible by the availability of affordable housing.” (Page 2). This increased local spending can increase economic diversity and sustainability while affordable housing residents themselves may impact the *social* diversity of a neighbourhood.<sup>34</sup>

Further, during affordable housing construction there is a direct impact on local communities as community members have the opportunity to gain construction-related employment, and local businesses are supported by construction-related purchasing.<sup>35</sup>

While some have expressed concerns over the possibility that affordable housing negatively impacts neighbourhood property values, in a review of studies examining the impact of proximity to affordable housing on property values, Nguyen (2005) revealed that most research finds no significant negative effect. Furthermore, property values examined in the studies consistently increased when affordable housing was created through the redevelopment of existing capital assets.<sup>36</sup>

### Broader Impact on Communities

Beyond local community impact, affordable housing also impacts communities in a broader sense. According to Scally (2012) communities with adequate affordable housing options “gain a more stable workforce by reducing common causes of employee stress and absenteeism, including high housing costs and mobility, lengthy and costly commutes, and poor adult and child health due to unsuitable living conditions.” (Page 719). It has even been suggested that a lack of affordable housing can create a competitive disadvantage for communities, from an economic perspective.<sup>37</sup>

---

<sup>30</sup> Condon, M., Istvanffy, N., Newton, R., & Pitman, B. (2010).

<sup>31</sup> Mueller, E. J., & Tighe, J. R. (2007).

<sup>32</sup> Mikkonen, J., & Raphael, D. (2010).

<sup>33</sup> Gaumer, E., Jacobowitz, A., & Brooks-Gunn, J. (2014). (Page 65).

<sup>34</sup> Scally, C.P. (2012). (Page 719)

<sup>35</sup> Wardrip, K., Williams, L., Suzanne, H. (2011)

<sup>36</sup> Nguyen, M. T. (2005). (Page 24).

<sup>37</sup> Cohen, R., & Wardrip, K. (2011). (Page 2)

Overall, Suttor, Bettencourt-McCarthy & Butler (2015) point out that housing is an integral part of broad-scale economic growth from construction, purchase, resale and lending, to ongoing repair, renovation, and maintenance.<sup>38</sup>

### 3.4 What value does affordable housing produce?

Investing in affordable housing creates the potential for significant economic and social value, as suggested above. While the links between affordable housing and economic/social value appear to be clear, there is a paucity of published literature that analyzes, in financial terms, the combined economic and social value of affordable housing development. This is particularly true in Canada. According to a review of methods for economically valuing affordable housing in Canada, Buzzelli (2009) indicates:

“Published research is thin, evidence can be equivocal if not pointing to economic costs (rather than benefits), and planners, policy makers and public (advocates, non-governmental and civil society organizations) have little to draw upon to understand the value of social housing programs....This state of affairs is especially true in Canada because of a dearth of a common set of indicators – measurable variables or characteristics that provide an indication of a condition or direction – that in turn limit sound evidence-based decision-making. There is little literature in Canada that formally analyzes, under any evaluative system, the economic value or costs of social housing whether at the household, local community, or macro-economic levels”. (Page iii)

Recent studies from places like Australia and Scotland that examined social returns from affordable housing by looking at ongoing operating costs compared to social outcomes, estimated social returns between \$3 and \$6 for every dollar invested.<sup>39 40 41 42</sup> These studies, however, did not consider the capital cost of affordable housing, meaning SROI ratios represent only benefits from the operation of existing assets (see Appendix K for further explanation and comparison to the current study). Other studies such as Kraatz, Mitchell, Matan & Newman (2015) and Frontier Economics Europe (2014), point to social and economic value from affordable housing in Australia and Europe without specifically calculating returns on investment.

In Canada and the USA, the direct and indirect *economic* impact of affordable housing development has been explored in recent years by authors such as Suttor, Bettencourt-McCarthy, & Butler (2015) and Newman, M., Blosser, S., & Woodward, S. (2014). These authors, however, do not attempt to financially value the social outcomes (like improved health and wellbeing) produced by affordable housing.

The area of housing research that has produced the greatest amount of information on the social costs of inadequate housing is research on the cost of homelessness. In recent years, numerous studies have explored the cost to society of the absolute lack of housing experienced by homeless individuals, such as Nyamathi, *et al* (2015), Fuehrlein, *et al.* (2015), Currie, Moniruzzaman, Patterson & Somers (2014), Holtgrave, *et al.* (2012), Larmier *et al.* (2009), Patterson *et al* (2008), Pomeroy (2005), and British

---

<sup>38</sup> See also: Mueller and Tighe (2007)

<sup>39</sup> Victorian Women’s Housing Association (VWHA) (2010).

<sup>40</sup> Munro, C. (2012, April 24).

<sup>41</sup> Ravi, A. & Reinhardt, C. (2011).

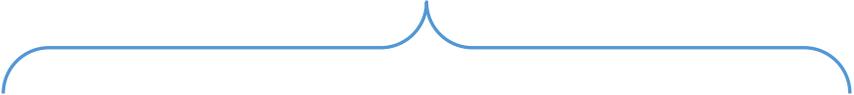
<sup>42</sup> Note: An SROI analysis conducted by MacKinnon and Alolo on the Multifaith Housing Initiative in Ottawa revealed a social return of \$1.4 for every dollar invested. While this study suggests it is analyzing the value of ‘affordable housing’ the program only works with homeless or near homeless individuals, indicating the return relates more directly to homelessness than affordable housing.

Columbia Ministry of Social Development and Economic Security (2001). While some of this research is relevant in the context of the value of affordable housing development, and has been taken into consideration with respect to the current study, homelessness is only one extreme example of the impact of a lack of affordable housing. For many other households of low or medium income, homelessness may not be an imminent risk associated with a lack of affordable housing, thus analysis of the value of affordable housing must extend beyond the cost of homelessness.



*This housing was a blessing beyond words.*

*–Qualicum Park Village Tenant*



*My life before was a mess.  
I was homeless.  
They helped me with supports, I got my surgery taken care of, I applied for BC Housing and got in touch with mental health and supports in the community.*

*–Elizabeth Fry Society Participant*



## 4.0 SROI Case Studies

The separate SROI results from the four SROI case studies (Dahli Place, Pembroke Mews, Qualicum Park Village, and Ellendale) are presented below, followed by a discussion of the implications of the case study findings across cases.

### 4.1 SROI Analysis of Dahli Place

#### **Background**

Dahli Place is a new affordable housing development built in 2014 by the Greater Victoria Housing Society (GVHS) and the Greater Victoria Rental Development Society with support from numerous funders and community members, including CPI funding provided through BC Housing. Dahli Place is a multi-unit apartment building developed with the intention of meeting the needs of low to moderate income workforce tenants in the Greater Victoria Area.<sup>43</sup> The apartment building includes 68 units: 8 studio apartments; 22 one bedroom apartments; 6 one bedroom and den apartments; and 32 two bedroom apartments. It also has one level of underground parking with 73 parking stalls and bicycle storage. Individuals and families are eligible for tenancy at Dahli Place if their gross household income is no higher than \$35,000 for studios, \$40,000 for one bedrooms, \$45,000 for one bedroom and dens, \$55,000 for lower priced two bedrooms, and \$65,000 for higher priced two bedrooms. To ensure accessibility for low to moderate income tenants, rents are pre-set ranging from \$675 to \$1,275 a month.

The building is located conveniently close to downtown Victoria and a variety of neighbourhood amenities including Gorge Waterway, local shopping, public transit, and parks.<sup>44</sup>

The demographic profile of tenants at Dahli Place is mixed, however all tenants have gross household incomes under \$65,000 per year. Currently Dahli Place is home to approximately 93 tenants, including six seniors and eleven families (primarily lone parents).

#### **Stakeholders**

The SROI analysis of Dahli Place included the following stakeholders:

- Tenants living at Dahli Place
- Businesses in the local community and neighbourhood
- Staff employed or contracted to develop Dahli Place
- Staff employed or contracted to maintain Dahli Place
- Governments (various levels)
- Investors (BC Housing, Capital Regional Housing Trust Fund, City of Victoria Housing Trust Fund, CMHC, Government of Canada, Vancity, Mr. and Mrs. Bal, Mr. and Mrs. Gill, Mr. Ron Neal)

#### **Inputs and Timeframe**

The total \$13.2 million capital development cost of Dahli Place was analyzed as part of the SROI analysis. Rent paid by tenants was not included as an input since tenants would pay at least this amount (if not more) to live someplace else (100% deadweight).

---

<sup>43</sup> NOTE: While the Greater Victoria Rental Development Society were involved in the development of Dahli Place, the Greater Victoria Housing Society is now the sole owner and operator of the development.

<sup>44</sup> For more information, contact the Greater Victoria Housing Society. <http://www.greatervichousing.org/>

The analysis examined both immediate value created during the construction of Dahli Place as well as the ongoing economic and social value created by annual operation of the apartment building over the next 30 years.

The examination of ongoing social value created over 30 years looks at outcomes that happen for any mix of tenants *each year* for a period of 30 years. This means that social value related to lasting change experienced by tenants (change experienced beyond a tenant’s stay at Dahli Place) has not been captured (e.g. ongoing health benefits, future ability to purchase a home due to rent savings, benefits from increased education, etc.).

Using these timeframes produces an understanding of both the immediate value created by the development of Dahli Place and the cumulative value of outcomes achieved by tenants each year that Dahli Place houses tenants.

**Outcomes**

Outcomes from the development and ongoing operation of Dahli Place were mapped based on:

- Academic and grey literature research;
- Information from the Greater Victoria Housing Society; and
- Feedback from tenant stakeholders.

In total, seven in-depth interviews were conducted with Dahli Place tenants to garner input on the outcomes that were mapped for Dahli Place (see Appendix D for interview questions).

The following outcomes were mapped and included in the SROI analysis:

Stakeholder	Outcome
Tenants living at Dahli Place	Decreased utility costs
	Increased disposable income due to move from market housing to secure, affordable & stable housing
	Increased wellbeing due to healthier living conditions and/or decreased stress (e.g. no mould, proper heating, etc.)
	Decreased housing instability
	Increased social connections, community, networks, independence (decreased social isolation)
	Decreased transportation time and costs (work, medical appointments, shopping services)
	Increased safety from assault, theft
Businesses in the local community and neighbourhood	Indirect employment generated during local construction (materials supplied, etc.)
	Increased local spending by Dahli Place tenants
Staff employed or contracted to develop Dahli Place	Direct employment generated during construction (contractors, construction)
Staff employed or contracted to maintain Dahli Place	Direct employment generated as a result of maintenance on an ongoing basis
Governments (various levels)	Increased revenue from local permits, taxes, etc. during construction (one-time costs)
	Increased revenue from ongoing taxes

Stakeholder	Outcome
	Decreased service use by tenants avoiding homelessness due to availability of affordable housing

While rents at Dahli Place are not significantly lower than market value rents, tenants interviewed and surveyed as stakeholders indicated that, for the area and quality of housing, they felt their rents were marginally lower (approximately \$100 per month). This is particularly important in a city such as Victoria, where the vacancy rate is less than 1%.<sup>45</sup>

Although research suggests that affordable housing development may impact local property values, this outcome was not included in the SROI analysis as the links between affordable housing development and property value are not direct and the Dahli Place development is too new to make reliable inferences about associations between the development and any changes in local property value in the area.<sup>46</sup>

Further, while Cohen & Wardrip (2011) suggest that “from an employer’s perspective, a lack of affordable housing can put a local economy at a competitive disadvantage” (page 2), and Dahli Place is targeted specifically towards working households, investigating broader employer-related impacts of the development was determined to be beyond the scope of the current study.

The number of stakeholders achieving the mapped outcomes was determined based on:

- Application information from tenants (e.g. reason for moving in);
- A mail-back tenant survey; and
- Academic and grey literature research.

In total, ten tenants participated in the tenant survey, representing a household response rate of 15% (see Appendix D for survey questions).

### **Financial Valuation of Outcomes**

The financial value of the outcomes mapped for Dahli Place was determined based on:

- Feedback from tenants (through the tenant survey and tenant interviews);
- Academic and grey literature research; and
- Financial valuation information from other SROI and economic studies.

The following financial proxies were used to value Dahli Place outcomes:

Outcome	Financial Proxy
Decreased utility costs for tenants	Difference in energy costs due to energy efficiency
Increased disposable income for tenants	Difference in rent between Dahli Place and typical rent in similar apartment/for similar income bracket
Increased wellbeing and/or decreased stress for tenants	Wellbeing valuation for move from poor quality to good quality housing
Decreased housing instability for tenants.	Revealed preference valuation: Cost of moving

<sup>45</sup> Overall vacancy rate in Victoria estimated by the CMHC as 0.6% in the fall of 2015. <http://www.cmhc-schl.gc.ca>

<sup>46</sup> See: Nguyen, M. T. (2005).

Outcome	Financial Proxy
Increased social connections, community, networks, independence (decreased isolation) for tenants	Revealed preference valuation: City of Victoria Recreational Pass
Decreased transportation time and costs for tenants	Difference between cost of transit and cost of owning/maintaining a vehicle annually
	Time and carbon emission costs of car travel saved per year
Increased safety from assault, theft for tenants	Revealed preference valuation: Cost of professional property management (on-site presence)
Indirect local business employment generated during local construction (materials supplied, etc.)	Average income in construction industry in BC.
Increased spending by Dahli Place tenants at local businesses	Median income in Victoria BC
Direct employment for construction staff involved in developing project	Average income in construction industry in BC
Employment for maintenance staff generated as a result of maintenance on an ongoing basis	Dahli Place annual operational spend on maintenance/repair worker
Increased government revenue from local permits, taxes, etc. during construction	Estimated amount returning to government in taxes, permit fees during construction of Dahli Place
Increased government revenue from ongoing taxes	Property taxes paid annually by Dahli Place
Decreased government service use by tenants avoiding homelessness due to availability of affordable housing	Cost of services (health, justice) for the 'at imminent risk of homelessness' population

For a full list of financial proxies, dollar values, and sources for all case studies, refer to Appendix J.

### Discounts

Deadweight, displacement, attribution, and drop off discounts were determined based on:

- Information obtained from tenants;
- Academic and grey literature research; and
- Reasonable estimations.

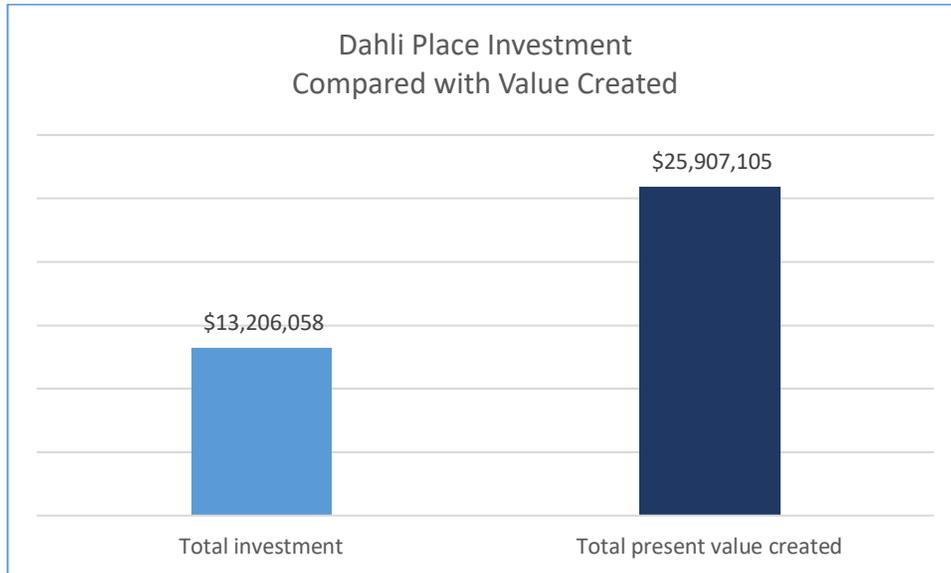
Where estimations were made, they were sensitivity tested to ensure estimated discounts were not over/under claimed. Outcomes that may be impacted by the deterioration of the asset over time (e.g. health outcomes for tenants) were discounted with a 1.5% average drop off.<sup>47</sup> Overall, a 3.5% discount rate was applied to any value claimed into the future to account for the time value of money.<sup>48</sup>

<sup>47</sup> Note: An estimated discount of 0% in the first 10 years, 2% in the next ten years, and 3% in the 10 years after that, was included to account for deterioration that may impact the achievement of some outcomes over time. This estimate was sensitivity tested. For more information on the calculation of asset deterioration, see for example: Flikweert, Lawton, Collell, & Simm (2009).

<sup>48</sup> Boardman, Moore and Vining (2010)

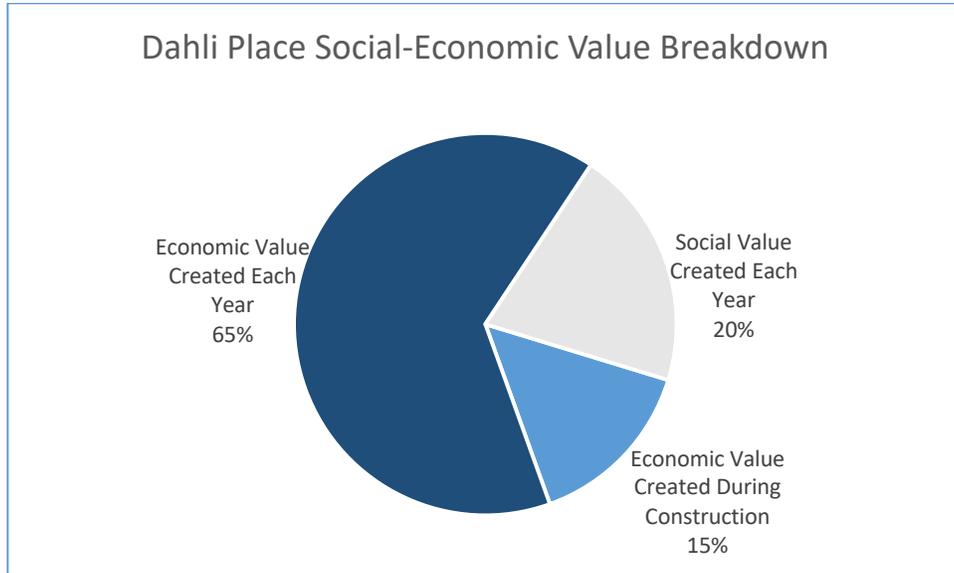
### Dahli Place SROI Results and Discussion

The SROI analysis of investing in the construction of Dahli Place as a new affordable housing option for renters in the Greater Victoria Area revealed an SROI ratio of 1 : 1.96. This indicates that **for every dollar invested in developing Dahli Place, nearly two dollars in social and economic value is created.**

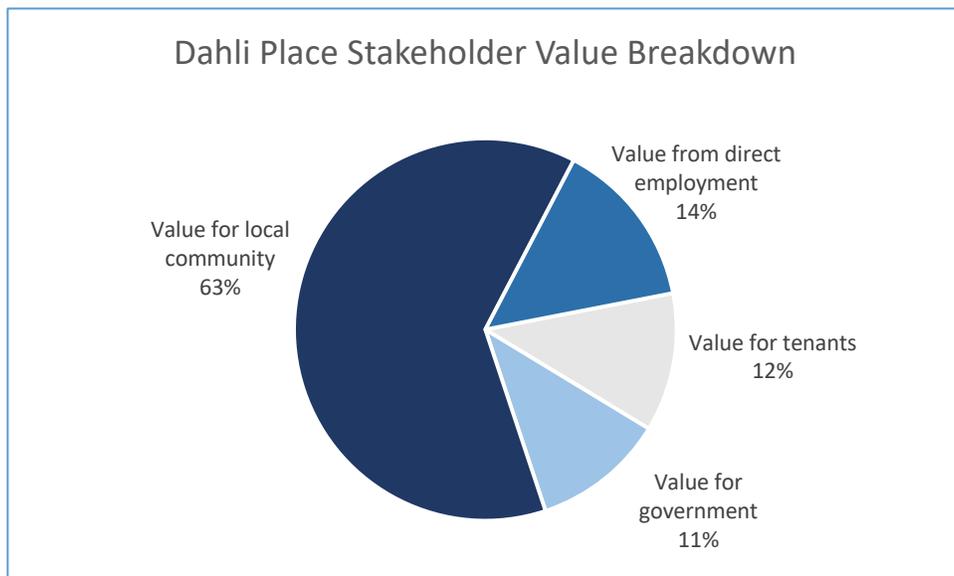


An SROI ratio of 1 : 1.96 suggests that significant social and economic value is created when investment in developing new affordable housing, such as Dahli Place, occurs. It is important to note, however, that the SROI analysis of Dahli Place represents a conservative estimation of the total value created, since it was not possible to measure and capture the financial value of all potential outcomes. Further, the social value created by Dahli Place is likely much higher, as outcomes included in the analysis were considered to last only during the time a tenant lives in Dahli Place, without consideration of longer term impact generated through the housing stability established during a period of tenancy at Dahli Place (e.g. ongoing health benefits, future ability to purchase a home due to rent savings, benefits from increased education, etc.).

Some of the value revealed through the SROI analysis was created during the construction of Dahli Place, and some of the value is created each year by the tenants experiencing the benefits of living at Dahli Place. Approximately 15% of the estimated value occurred at the time of development, through increased local economic activity and value back to various levels of government in the form of taxes and fees. Approximately two thirds (65%) of the estimated value is related to increased economic activity including both direct employment at Dahli Place and indirect employment fostered through local spending by Dahli Place tenants. Finally, approximately a fifth of the estimated value (20%) is generated via social outcomes experienced by tenants benefiting from living at Dahli Place each year.



Broken down by stakeholder, most of the value (63%) goes back to the local community in which Dahli Place was developed. Approximately 12% of the value goes directly back to tenants in savings and social outcomes. Approximately 11% of the value goes back to the government in social service savings and local taxes. Finally, 14% of the value goes directly to individuals employed in the development and ongoing maintenance of Dahli Place.



This indicates that affordable housing development creates significant value for local communities and also benefits tenants, governments, and other individuals directly in valuable ways.

The Dahli Place SROI analysis is well-aligned with findings from the Mowat Centre’s 2014 analysis of the economic benefits of housing development in Ontario.<sup>49</sup> That study indicated that for every dollar invested in residential building construction, an overall GDP increase of \$1.52 occurs as the investment cycles through the economy.<sup>50</sup> The SROI of Dahli Place revealed that for every dollar invested, \$1.56 is created in direct and indirect economic value, and \$0.40 is created in social value. This finding suggests that there is approximately 20% value added when residential construction also addresses affordable housing supply, which in turns creates valuable social outcomes for tenants and communities.

See Appendix B for the full Dahli Place SROI model and description of sensitivity tests conducted.



*It's more than a roof over our  
heads...it's a place where  
memories can be made.*

*–Dahli Place Tenant*



---

<sup>49</sup> It should be noted at other, American-based studies suggest slightly lower economic returns from housing construction. See Wardrip, K., Williams, L., Suzanne, H. (2011) Page 4.

<sup>50</sup> Zon, N., Molson, M., & Oschinsky, M. (2014)

## 4.2 SROI Analysis of Pembroke Mews

### **Background**

Pembroke Mews is a redevelopment project that was led by the Greater Victoria Housing Society (GVHS) in 2011, with support from numerous funders and community members, including CPI funding provided through BC Housing. The project resulted in the repurposing of a derelict industrial building (circa 1914) into a mixed-use commercial/affordable rental building targeted towards lower income working singles in the Greater Victoria Area. Pembroke Mews opened in 2012, offering 25 units of affordable rental housing including: 6 studio apartments; 9 junior one-bedroom apartments; and 10 one-bedroom apartments. It does not have dedicated parking, but offers tenants a bicycle storage room, onsite laundry, and Victoria Car Share Co-op memberships, as well as a one month bus pass upon moving in. Individuals and couples are eligible for tenancy at Pembroke Mews if their gross household income is lower than \$35,000 per year. To ensure accessibility for tenants with limited income, rents are pre-set ranging from \$500 to \$750 per month.

The building is located in a light industrial area that is beginning to be redeveloped for mixed residential and commercial use north of downtown Victoria. Neighbourhood amenities include China Town, downtown amenities within walking distance, local shopping, and public transit.<sup>51</sup>

The finished building has received positive feedback from the community around elements such as the design and suitability of the location for the target tenants.<sup>52</sup> The unique combination of repurposing an existing asset, neighbourhood rejuvenation, and the creation of affordable housing for low income working singles resulted in Pembroke Mews being profiled in Maschaykh's 2015 book titled *The Changing Image of Affordable Housing: Design, Gentrification, and Community in Canada and Europe*.<sup>53</sup>

### **Stakeholders**

The SROI analysis of Pembroke Mews included the following stakeholders:

- Tenants living at Pembroke Mews
- Businesses in the local community and neighbourhood
- Staff employed or contracted to develop Pembroke Mews
- Staff employed or contracted to maintain Pembroke Mews
- Governments (various levels)
- Investors (BC Housing, 555 Holdings, CMHC, Capital Region Housing Trust Fund, City of Victoria, United Way of Greater Victoria, Coast Capital, Home Depot Canada Foundation)

### **Inputs and Timeframe**

The total \$4.2 million capital development cost of Pembroke Mews was analyzed as part of the SROI analysis. Rent paid by tenants was not included as an input since tenants would pay at least this amount (if not more) to live someplace else (100% deadweight).

---

<sup>51</sup> For more information, contact the Greater Victoria Housing Society. <http://www.greatervichousing.org/>

<sup>52</sup> See for example: Holmen, R. (2012, May 23). Victoria building houses 25 low-wage earners. *Victoria News*. <http://www.vicnews.com/news/153126675.html>

<sup>53</sup> See pages 85-89.

The analysis examined both immediate value created during construction of Pembroke Mews as well as the ongoing economic and social value created by annual operation of the apartment building over the next 30 years.

The examination of ongoing social value created over 30 years looks at outcomes that happen for any mix of tenants *each year* for a period of 30 years. This means that social value related to lasting change experienced by tenants (change experienced beyond a tenant’s stay at Pembroke Mews) has not been captured (e.g. ongoing health benefits, future ability to purchase a home due to rent savings, benefits from increased education, etc.).

Using these timeframes produces an understanding of both the immediate value created by the development of Pembroke Mews and the cumulative value of outcomes achieved by tenants each year that Pembroke Mews houses tenants.

### Outcomes

Outcomes from the construction and ongoing operation of Pembroke Mews were mapped based on:

- Academic and grey literature research; and
- Information from the Greater Victoria Housing Society.

While two tenants participated in a tenant survey about *anticipated* outcomes, only one tenant chose to participate in a follow-up in-depth interview to provide input on the outcomes that were mapped for Pembroke Mews (see Appendix D for interview questions). This potentially limits the robustness of the SROI model, as mapped outcomes were not explicitly articulated by tenants, but were rather based on anticipated outcomes highlighted by research and the perspectives of experienced non-profit housing professionals. This limitation is discussed further in the Limitations section.

The following outcomes were mapped and included in the SROI analysis:

Stakeholder	Outcome
Tenants living at Pembroke Mews	Decreased utility costs
	Increased disposable income due to move from market housing to secure, affordable & stable housing
	Increased wellbeing due to healthier living conditions and/or decreased stress (e.g. no mould, proper heating, etc.)
	Decreased housing instability
	Increased social connections, community, networks, independence (decreased social isolation)
	Decreased transportation time and costs (work, medical appointments, shopping services)
	Increased safety from assault, theft
	Increased access to education (due to greater disposable income, increased stability)
Businesses in the local community and neighbourhood	Indirect employment generated during local construction (materials supplied, etc.)
	Increased local spending by Pembroke Mews tenants

Stakeholder	Outcome
Staff employed or contracted to develop Pembroke Mews	Direct employment generated during construction (contractors, construction)
Staff employed or contracted to maintain Pembroke Mews	Direct employment generated as a result of maintenance on an ongoing basis
Governments (various levels)	Increased revenue from local permits, taxes, etc. during construction (one-time costs)
	Increased revenue from ongoing taxes
	Decreased service use by tenants avoiding homelessness due to availability of affordable housing

While there is some research evidence that suggests that redevelopment of existing assets results in increased property values, this outcome was not included in the Pembroke Mews SROI model as an adequate review and modeling of property values in the area was determined to be outside the scope of the current study.<sup>54</sup> Maschaykh (2015), however, indicates that the construction of Pembroke Mews has positively impacted the desirability of the local neighbourhood. This suggests potential for positive increases in local property value due to Pembroke Mews, although these have not been included in the SROI analysis.

Further, while Cohen & Wardrip (2011) suggest that “from an employer’s perspective, a lack of affordable housing can put a local economy at a competitive disadvantage” (page 2), and Pembroke Mews is targeted specifically towards working singles, investigating broader employer-related impacts of the development was determined to be beyond the scope of the current study, meaning these broader economic outcomes have not been valued in the Pembroke Mews SROI analysis.

The number of stakeholders achieving the mapped anticipated outcomes was determined based on:

- Application information from tenants (e.g. reason for moving in);
- A mail-back tenant survey; and
- Academic and grey literature research.

In total, only two tenants participated in the tenant survey about anticipated outcomes, representing a very low household response rate of 8% (see Appendix D for survey questions). Due to the low response rate on the tenant survey, the Pembroke Mews SROI analysis includes several estimations related to the number of stakeholders who would achieve mapped outcomes. Quantity estimations have been based on application information from tenants, as well as research employing rigorous research methods. Further primary research on outcomes experienced by Pembroke Mews tenants can be used in the future to evolve the current forecast SROI analysis model into a more robust, evaluative, SROI model.

### **Financial Valuation of Outcomes**

The financial value of the outcomes mapped for Pembroke Mews was determined based on:

- Academic and grey literature research; and
- Financial valuation information from other SROI and economic studies.

<sup>54</sup> See: Nguyen, M. T. (2005).

The following financial proxies were used to value Pembroke Mews outcomes:

Outcome	Financial Proxy
Decreased utility costs for tenants	Difference in energy costs due to energy efficiency
Increased disposable income for tenants	Difference in rent between Pembroke Mews and typical rent in similar apartment/for similar income bracket
Increased wellbeing and/or decreased stress for tenants	Wellbeing valuation for move from poor quality to good quality housing
Decreased housing instability for tenants	Revealed preference valuation: Cost of moving
Increased social connections, community, networks, independence (decreased isolation) for tenants	Revealed preference valuation: City of Victoria Recreational Pass
Decreased transportation time and costs for tenants	Difference between cost of transit and cost of owning/maintaining a vehicle annually
	Time and carbon emission costs of car travel saved per year
Increased safety from assault, theft for tenants	Revealed preference valuation: Cost of professional property management (on-site presence)
Increased access to education for tenants	Earnings premium for an individual with a 'postsecondary certificate or diploma' over the average annual earnings of a worker who has 'graduated high school'
Indirect local business employment generated during local construction (materials supplied, etc.)	Average income in construction industry in BC
Increased spending by Pembroke Mews tenants at local businesses	Median income in Victoria BC
Direct employment for construction staff involved in developing project	Average income in construction industry in BC
Employment for maintenance staff generated as a result of maintenance on an ongoing basis	Pembroke Mews annual operational spend on maintenance/repair worker
Increased government revenue from local permits, taxes, etc. during construction	Estimated amount returning to government in taxes, permit fees during construction of Pembroke Mews
Increased government revenue from ongoing taxes	Property taxes paid annually by Pembroke Mews
Decreased government service use by tenants avoiding homelessness due to availability of affordable housing	Cost of services (health, justice) for the 'at imminent risk of homelessness' population

For a full list of financial proxies, dollar values, and sources for all case studies, refer to Appendix J.

### Discounts

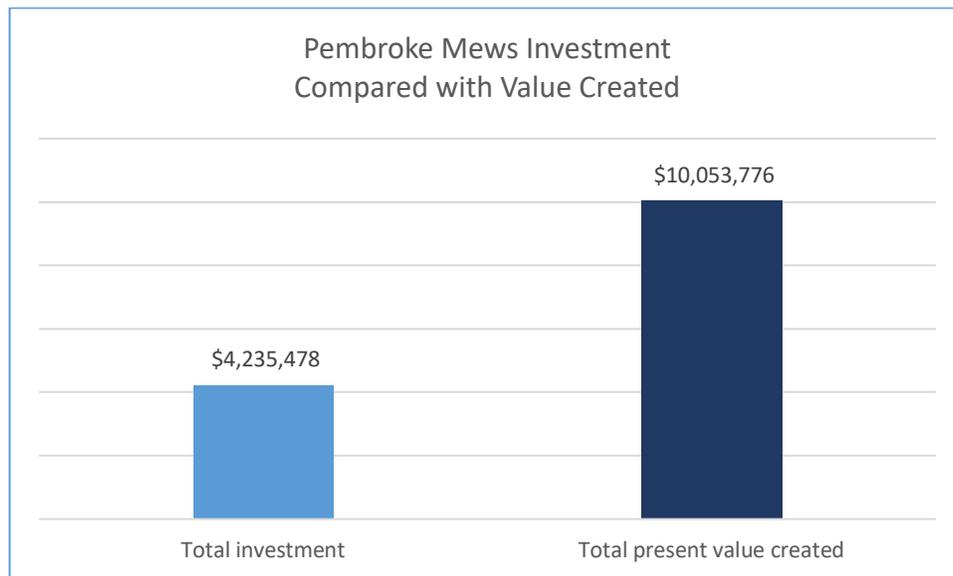
Deadweight, displacement, attribution, and drop off discounts were determined based on:

- Academic and grey literature research; and
- Reasonable estimations.

Where estimations were made, they were sensitivity tested to ensure estimated discounts were not over/under claimed. Outcomes that may be impacted by the deterioration of the asset over time (e.g. health outcomes for tenants) were discounted with a 1.5% average drop off.<sup>55</sup> Overall, a 3.5% discount rate was applied to value claimed into the future to account for the time value of money.<sup>56</sup>

### Pembroke Mews SROI Results and Discussion

The SROI analysis of investing in the redevelopment of an old industrial building to create Pembroke Mews, an affordable housing option for renters in the Greater Victoria Area, revealed an SROI ratio of 1 : 2.37. This indicates that **for every dollar invested in developing Pembroke Mews, nearly two and a half dollars in social and economic value is created.**



An SROI ratio of 1 : 2.37 suggests that significant social and economic value is created when existing and deteriorating capital assets can be redeveloped into affordable housing for singles living on lower incomes. It is important to note, however, that the SROI analysis of Pembroke Mews represents a conservative estimation of the total value created, since it was not possible to measure and capture the financial value of all potential outcomes. In particular, without the ability to properly value the impact of redevelopment on property values in the area, a potentially significant portion of local community

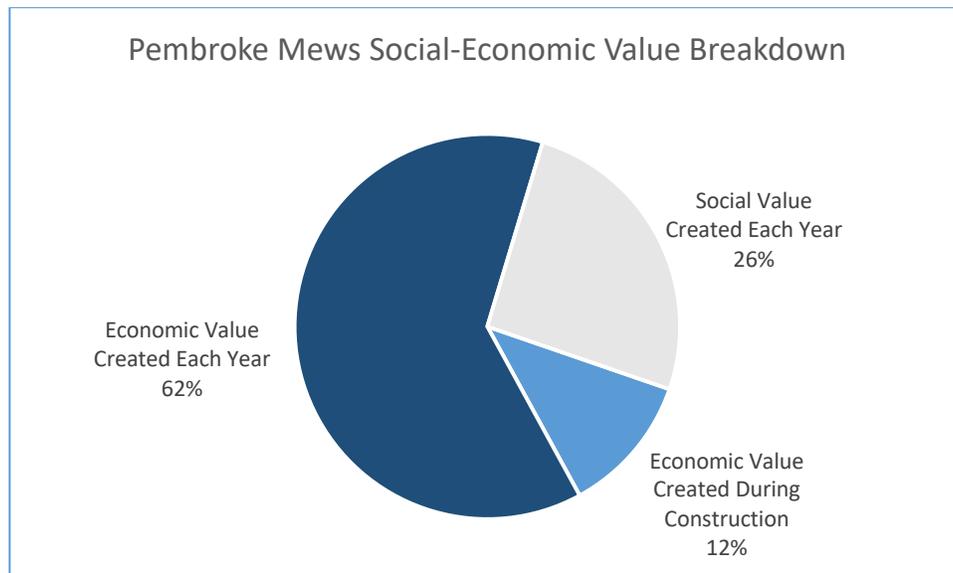
<sup>55</sup> Note: It was determined to be beyond the scope of the current study to create an asset deterioration model for each case study. Rather, an estimated discount of 0% in the first 10 years, 2% in the next ten years, and 3% in the 10 years after that, was included to account for deterioration that may impact the achievement of some outcomes over time. This estimate was sensitivity tested. For more information on the calculation of asset deterioration, see for example: Flikweert, Lawton, Collell, & Simm (2009).

<sup>56</sup> Boardman, Moore and Vining (2010)

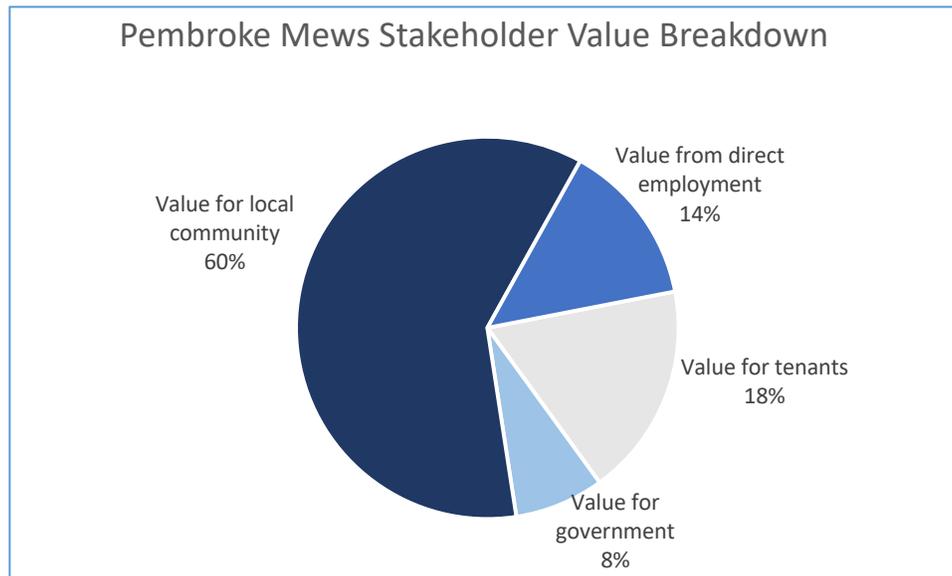
value has been missed in the analysis. Further, the social value created by Pembroke Mews is likely much higher, as social outcomes included in the analysis were considered to last only during the time a tenant lives in Pembroke Mews, without consideration of longer term impact generated through the housing stability established during a period of tenancy at Pembroke Mews (e.g. ongoing health benefits, future ability to purchase a home due to rent savings, benefits from increased education, etc.).

Some of the value revealed through the SROI analysis was created during the construction of Pembroke Mews, and some of the value is created year on year as tenants experience the benefits of living at Pembroke Mews.

Approximately 12% of the estimated value occurred at the time of development, through increased local economic activity and value back to various levels of government in the form of taxes and fees. Approximately two thirds (62%) of the estimated value is related to ongoing increased economic activity including direct employment at Pembroke Mews and indirect employment fostered through local spending by Pembroke Mews tenants. Finally, approximately a quarter of the estimated value (26%) is generated on an ongoing basis through the social outcomes experienced by tenants benefiting from Pembroke Mews each year.



Broken down by stakeholder, most of the value (60%) goes back to the local community in which Pembroke Mews was developed. Approximately 18% of the value goes directly back to tenants in savings and social outcomes. Approximately 8% of the value goes back to the government in social service savings and local taxes. Finally, 14% of the value goes directly to individuals employed in the development and ongoing maintenance of Pembroke Mews.



The Pembroke Mews SROI analysis demonstrates that there is a slightly higher economic return when an existing asset is redeveloped into affordable housing than when new affordable housing construction occurs. For example, Mowat Centre’s 2014 analysis of the economic benefits of housing development in Ontario revealed that for every dollar invested in residential building construction, an overall GDP increase of \$1.52 occurs.<sup>57</sup> The Pembroke Mews SROI revealed that for every dollar invested in redeveloping an existing asset into affordable housing, \$1.77 is created in direct and indirect economic value. These differences are likely due to the lower cost of redevelopment compared with new construction rather than greater economic activity generated by Pembroke Mews, since the building has a relatively small number of units and tenants (25 units).

Beyond the direct and indirect economic value created by Pembroke Mews, the SROI analysis revealed that for every dollar invested, \$0.61 of additional value is created through social outcomes experienced by tenants. This finding suggests that there is approximately 26% value added when asset redevelopment results in an increase in the affordable housing supply, creating valuable social outcomes for tenants and communities.

See Appendix C for the full Pembroke Mews SROI model and description of sensitivity tests conducted.

<sup>57</sup> It should be noted at other, American-based studies suggest slightly lower economic returns from housing construction. See Wardrip, K., Williams, L., Suzanne, H. (2011) Page 4.

### 4.3 SROI Analysis of Qualicum Park Village

#### **Background**

Based on a Housing Needs Assessment of the Qualicum Beach area produced by the Town of Qualicum Beach in 2009, the Qualicum Parkville Kiwanis Housing Society initiated a project to replace 20 aging one-bedroom affordable units for seniors with 34 new affordable rental homes for seniors, families, and persons with disabilities in the Qualicum Beach Area. The project, named Qualicum Park Village, was supported by numerous funders and community members, including CPI funding provided through BC Housing.

The 34 affordable rental homes of Qualicum Park Village are situated in an attractive park-like setting promoting a healthy environment for seniors and families. Of the 34 homes, there are 24 one-bedroom homes and 10 two-bedroom homes, with four of the homes designed to be fully accessible for persons with disabilities. Rents range from \$520 per month to \$750 per month. The development is intended for a mix of tenants, usually including 20 units occupied by seniors, 10 units occupied by lone parent families (with a maximum of two children), and 4 units occupied by persons with disabilities requiring accessible units. Typically, there are approximately 40 individuals living in Qualicum Park Village.

The development is located within blocks of downtown Qualicum Beach, and adjacent to a recreation centre and park. It is the only purpose-built affordable housing development in Qualicum Beach.<sup>58</sup>

#### **Stakeholders**

The SROI analysis of Qualicum Park Village included the following stakeholders:

- Tenants living in Qualicum Park Village
  - Tenants who are seniors
  - Tenants with disabilities
- Businesses in the local community and neighbourhood
- Staff employed or contracted to develop Pembroke Mews
- Staff employed or contracted to maintain Pembroke Mews
- Governments (various levels)
- Investors (BC Housing, Qualicum Parkville Kiwanis Housing Society, Regional District of Nanaimo, Municipality of Qualicum Beach)

While it was recognized that lone parents living at Qualicum Park Village may represent a separate stakeholder group, separate outcomes were not mapped and valued as many of these outcomes would happen too far in the future to be properly captured in the analysis (e.g. impact on children's access to education).

Further, while one disabled tenant's parent was interviewed as part of the SROI analysis, disabled tenants' parents were not included as a separate stakeholder group, since it was not clear how many disabled tenants have support from their parents, and outcomes for this group were not adequately measured. This means that the final SROI ratio for Qualicum Park Village represents a conservative

---

<sup>58</sup> For more information, contact the Qualicum Parkville Kiwanis Housing Society.  
<http://www.qualicumaffordablehousing.com/>

estimation of the total social value created, and that the actual social value created may be somewhat higher.

**Inputs and Timeframe**

The total \$5.3 million capital development cost of Qualicum Park Village was analyzed as part of the SROI analysis. Rent paid by tenants was not included as an input since tenants would pay at least this amount (if not more) to live someplace else (100% deadweight).

The analysis examined both immediate value created during the construction of Qualicum Park Village as well as the ongoing economic and social value created by annual operation of the affordable rental homes over the next 30 years.

The examination of ongoing social value created over 30 years looks at outcomes that happen for any mix of tenants *each year* for a period of 30 years. This means that social value related to lasting change experienced by tenants (change experienced beyond a tenant’s stay at Qualicum Park Village) has not been captured (e.g. ongoing health benefits, future ability to purchase a home due to rent savings, benefits from increased education, etc.).

Using these timeframes produces an understanding of both the immediate value created by the development of Qualicum Park Village and the cumulative value of outcomes achieved by tenants each year that Qualicum Park Village houses tenants.

**Outcomes**

Outcomes from the construction and ongoing operation of Qualicum Park Village were mapped based on:

- In-depth interviews with tenants and related stakeholders;
- Academic and grey literature research; and
- Information from the Qualicum Parkville Kiwanis Housing Society.

In total, four in-depth interviews were conducted with Qualicum Park Village tenants from four demographic profiles, including interviews with a senior tenant, a tenant with a disability, and two interviews with families. An interview was also conducted with the mother of a tenant with a disability, providing additional perspective on the impact of Qualicum Park Village beyond directly impacted tenant stakeholders. The interviews informed the outcomes mapped for the SROI analysis (see Appendix F for interview questions).

The following outcomes were mapped and included in the SROI analysis:

Stakeholder	Outcome
Tenants living in Qualicum Park Village	Increased disposable income due to move from market housing to secure, affordable & stable housing
	Increased wellbeing due to healthier living conditions and/or decreased stress (e.g. no mould, proper heating, etc.) <sup>59</sup>
	Increased accessibility for tenants with a disability
	Decreased housing instability

<sup>59</sup> NOTE: This outcome has been valued separately for seniors, non-seniors, and individuals with disabilities.

Stakeholder	Outcome
	Increased social connections, community, networks, independence (decreased social isolation)
	Decreased transportation time and costs (work, medical appointments, shopping services)
Businesses in the local community and neighbourhood	Indirect employment generated during local construction (materials supplied, etc.)
	Increased local spending by Qualicum Park Village tenants
Staff employed or contracted to develop Qualicum Park Village	Direct employment generated in developing project (contractors, construction)
Staff employed or contracted to maintain Qualicum Park Village	Direct employment generated as a result of maintenance on an ongoing basis
Governments (various levels)	Increased revenue from local permits, taxes, etc. during construction (one-time costs)
	Increased revenue from ongoing taxes
	Decreased service use by tenants avoiding homelessness due to availability of affordable housing
	Decreased health service use by senior tenants and tenants with disabilities

According to Suttor, Bettencourt-McCarthy and Butler (2015), affordable housing development is particularly important in areas such as Qualicum Beach that are somewhat isolated and subject to seasonal economic fluctuations, because commercial developers are often cautious about constructing new rental housing stock due to concerns about demand levels, prices, and uncertain profitability. These authors point out that “deteriorating housing stock and a lack of investment in new supply [can exacerbate] negative community conditions, with serious impacts for upward mobility and human capital development.” (Page 18). Further, the potential for social isolation in an area such as Qualicum Beach, means that renters in need of affordable housing are more likely to remain trapped in poverty cycles when affordable housing is not available.<sup>60</sup>

While the SROI analysis of Qualicum Park Village begins to capture the social outcomes created by the development, the broader community outcomes associated with developing affordable housing in an isolated community where other purpose-built affordable housing does not exist have not been included in the SROI analysis as they were determined to be beyond the scope of the current study.

The number of stakeholders achieving the mapped outcomes was determined based on:

- Academic and grey literature research;
- Demographic information on tenants; and
- In-depth tenant interviews (see above).

<sup>60</sup> Suttor, Bettencourt-McCarthy and Butler (2015) Page 18.

### Financial Valuation of Outcomes

The financial value of the outcomes mapped for Qualicum Park Village was determined based on:

- Academic and grey literature research;
- In-depth interviews with tenants; and
- Financial valuation information from other SROI and economic studies.

The following financial proxies were used to value Qualicum Park Village outcomes:

Outcome	Financial Proxy
Increased disposable income for tenants	Difference in rent between Qualicum Park Village and typical rent in similar apartment
Increased wellbeing and/or decreased stress for tenants	Wellbeing valuation for move from poor quality to good quality housing
Increased accessibility for tenants with a disability	Revealed preference valuation: Minimum cost to upgrade unit for accessibility
Decreased housing instability for tenants	Revealed preference valuation: Cost of moving
Increased social connections, community, networks, independence (decreased isolation) for tenants	Revealed preference valuation: City of Victoria Recreational Pass
Decreased transportation time and costs for tenants	Time and carbon emission costs of car travel saved per year
Indirect local business employment generated during local construction (materials supplied, etc.)	Average income in construction industry in BC
Increased spending by Qualicum Park Village tenants at local businesses	Median income in Victoria BC
Direct employment for construction staff involved in developing project	Average income in construction industry in BC
Employment for maintenance staff generated as a result of maintenance on an ongoing basis	Qualicum Park Village annual operational spend on property manager/maintenance/repair worker
Increased government revenue from local permits, taxes, etc. during construction	Estimated amount returning to government in taxes, permit fees during construction of Pembroke Mews
Increased government revenue from ongoing taxes	Property taxes paid annually by Pembroke Mews
Decreased government service use by tenants avoiding homelessness due to availability of affordable housing	Cost of services (health, justice) for the 'at imminent risk of homelessness' population
Decreased health service use by senior tenants	Cost of health-related issues for seniors living in low quality housing who are exposed to excess cold
Decreased health service use by tenants with disabilities	Cost of reduced demand for health services for 'heavy users' and disabled populations due to affordable housing

For a full list of financial proxies, dollar values, and sources for all case studies, refer to Appendix J.

### Discounts

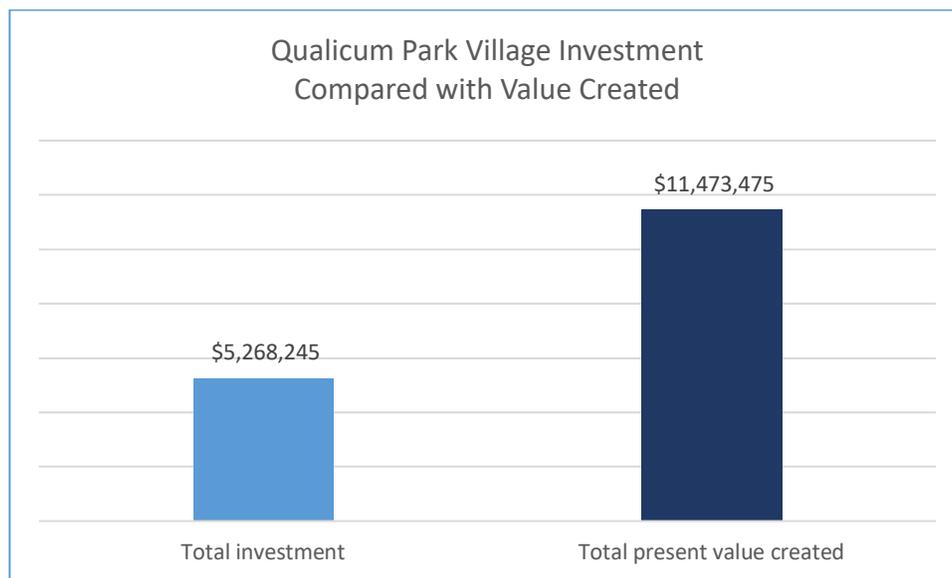
Deadweight, displacement, attribution, and drop off discounts were determined based on:

- Academic and grey literature research; and
- Reasonable estimations.

Where estimations were made, they were sensitivity tested to ensure estimated discounts were not over/under claimed. Outcomes that may be impacted by the deterioration of the asset over time (e.g. health outcomes for tenants) were discounted with a 1.5% average drop off.<sup>61</sup> Overall, a 3.5% discount rate was applied to value claimed into the future to account for the time value of money.<sup>62</sup>

### Qualicum Park Village SROI Results and Discussion

The SROI analysis of investing in the creation of Qualicum Park Village, an affordable housing option for renters in the Qualicum Beach Area, revealed an SROI ratio of 1 : 2.18. This indicates that **for every dollar invested in developing Qualicum Park Village, just over two dollars in social and economic value is created.**



An SROI ratio of 1 : 2.18 indicates that significant social and economic value is created when new affordable rental homes can be developed for seniors, single parent families, and persons with disabilities living in a small/isolated community. It is important to note, however, that the SROI analysis of Qualicum Park Village represents a conservative estimation of the total value created, since it was not possible to measure and capture the financial value of all potential outcomes. In particular, without the ability to properly value the impact of new affordable housing development specifically in a

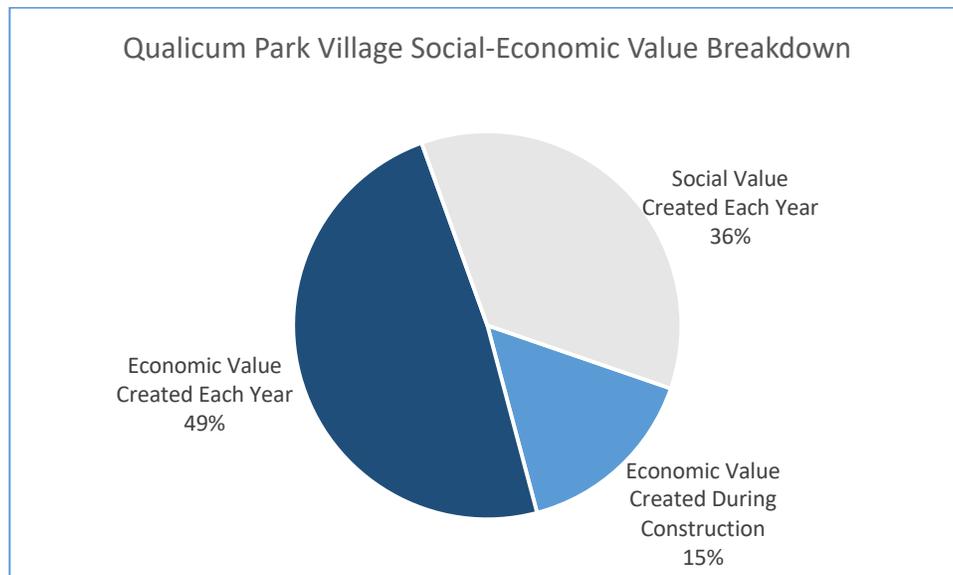
<sup>61</sup> Note: It was determined to be beyond the scope of the current study to create an asset deterioration model for each case study. Rather, an estimated discount of 0% in the first 10 years, 2% in the next ten years, and 3% in the 10 years after that, was included to account for deterioration that may impact the achievement of some outcomes over time. This estimate was sensitivity tested. For more information on the calculation of asset deterioration, see for example: Flikweert, Lawton, Collell, & Simm (2009).

<sup>62</sup> Boardman, Moore and Vining (2010)

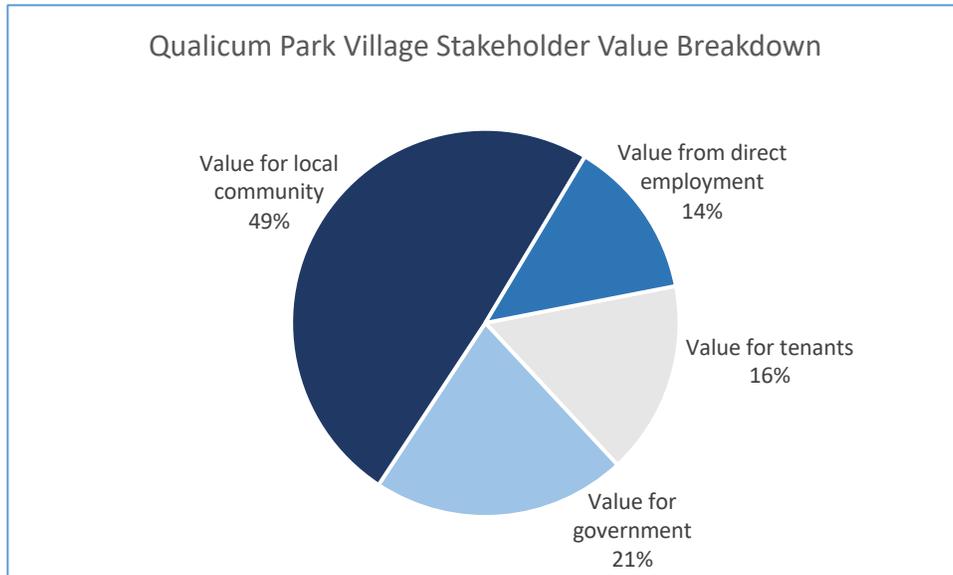
small/isolated community, a potentially significant portion of local community value has been missed in the analysis. Further, the social value created by Qualicum Park Village is likely much higher, as social outcomes included in the analysis were considered to last only during the time a tenant lives in the Village, without consideration of longer term impact generated through the housing stability established during tenancy (e.g. ongoing health benefits, future ability to purchase a home due to rent savings, benefits from increased education, etc.).

Some of the value revealed through the SROI analysis was created during construction of Qualicum Park Village, and some of the value is created year on year as tenants experience the benefits of living at Qualicum Park Village.

Approximately 15% of the estimated value occurred at the time of development, through increased local economic activity and value back to various levels of government in the form of taxes and fees. Approximately half (49%) of the estimated value is related to ongoing increased economic activity including direct employment at Qualicum Park Village and indirect employment fostered through local spending by tenants. Finally, approximately 36% of the estimated value is generated on an ongoing basis through the social outcomes experienced by tenants benefiting from Qualicum Park Village each year.



Broken down by stakeholder, the largest proportion of value (49%) goes back to the local community in which Qualicum Park Village was developed. Approximately 16% of the value goes directly back to tenants in savings and social outcomes. Approximately 21% of the value goes back to the government in social service savings and local taxes. Finally, 14% of the value goes directly to individuals employed in the development and ongoing maintenance of Qualicum Park Village.



The Qualicum Park Village SROI analysis demonstrates a slightly lower economic return than the return recently calculated by Mowat Centre of the economic benefits of housing development in Ontario. The Mowat Centre’s 2014 analysis revealed that for every dollar invested in residential building construction, an overall GDP increase of \$1.52 occurs.<sup>63</sup> The Qualicum Park Village SROI revealed that for every dollar invested in developing the Village, \$1.37 is created in direct and indirect economic value. This lower economic return is likely due to the higher cost of development in a small community like Qualicum Beach in comparison to the lower economic activity from tenants due to the scale of the project (only 34 units). However, as discussed earlier, the current calculated SROI ratio represents only a conservative estimation of the value created, and the actual value is likely higher.

Beyond the direct and indirect economic value created by Qualicum Park Village, the SROI analysis revealed that for every dollar invested, \$0.78 of additional value is created through social outcomes experienced by tenants. This finding suggests that there is approximately 36% value added when residential construction in small communities also addresses affordable housing supply for seniors, lone parent families, and persons with disabilities, which in turn creates valuable social outcomes for tenants and communities.

See Appendix E for the full Qualicum Park Village SROI model and description of sensitivity tests conducted.

<sup>63</sup> It should be noted at other, American-based studies suggest slightly lower economic returns from housing construction. See Wardrip, K., Williams, L., Suzanne, H. (2011) Page 4.

#### 4.4. SROI Analysis of Ellendale

##### **Background**

Ellendale is a 10-bed, residential stabilization program in Surrey that provides structured relapse prevention support for women with substance use issues. It has been operated by the Elizabeth Fry Society of Vancouver since 2006. The program seeks to mitigate the harm of substance use while providing a safe space for women to stay for up to three months.

In 2012, the Elizabeth Fry Society received BC Housing CPI funding to purchase the facility to ensure the sustainability of Ellendale addictions treatment programming. The purchase of the building also allowed Elizabeth Fry Society to undertake the redevelopment of the lower level of the Ellendale facility to add an additional 12 units.<sup>64</sup> The redevelopment was completed with additional grants from the Surrey Homeless and Housing Society, and the Federal Homeless Partnering Strategy.

The new units are targeted towards mothers with newborns seeking to reduce their substance use, whereas the existing units at Ellendale do not allow women to come with children. Mothers may live with their children there for eight months. The alternative for many women seeking addictions support is leaving their children in the care of the Province and enduring a period of separation from their children while they receive support. While at Ellendale, mothers are supported to engage and develop a strong attachment with their children. Research shows that children with responsive caregivers during the first year of life develop a stronger ability to manage stress, form healthier relationships, perform better in school, and enjoy higher self-worth.<sup>65</sup> Ellendale is located in a quiet neighbourhood in Surrey, with the new lower-level units having direct access to a safe green space in the back yard for children.

Programming is funded through Fraser Health and the Ministry of Social Development and Social Innovation, with referrals into the program from Fraser Health, local physicians, detox centers, courts, and women themselves.

The Elizabeth Fry Society was the first organization in Canada to operate a facility such as Ellendale, believing that women struggling with addiction need and deserve help in overcoming their issues. The purchase of the building supports the sustainability of the Elizabeth Fry Society's ability to provide important services for women facing addictions. The addition of 12 new units targeted specifically towards women receiving treatment who have young children amplifies the impact generated by Ellendale.

The SROI analysis has examined the impact of purchasing the facility, maintaining the services provided in the 10 existing units, and developing 12 additional spaces for mothers with newborns.

##### **Stakeholders**

The SROI analysis of Ellendale included the following stakeholders:

- Women staying at the 10 original units at Ellendale
- Women staying, with their children, in 12 new units at Ellendale
- Children of participants staying in 12 new units at Ellendale
- Businesses in the local community and neighbourhood

---

<sup>64</sup> NOTE: Ongoing programming costs are not provided by BC Housing.

<sup>65</sup> See for example: Larkin, Shields, & Anda (2012).

- Staff employed or contracted to develop 12 new units at Ellendale
- Staff employed or contracted with Ellendale on an ongoing basis
- Governments (various levels)
- Investors (BC Housing, Fraser Health, the Ministry of Social Development and Social Innovation, Surrey Homeless and Housing Society, and the Federal Homeless Partnering Strategy)

### **Inputs and Timeframe**

The total \$1.4 million capital purchase cost of Ellendale<sup>66</sup> as well as the development cost of the 12 new units on the lower level (\$286,500) was analyzed in the SROI analysis. The ongoing operational costs of Ellendale were included in the analysis, since key social outcomes created by Ellendale are intricately linked to the programming participants receive while staying at the facility. A 1.5% estimated increase in program costs was included in the total operational cost for the program over 30 years of operation analyzed.<sup>67</sup> The total operational cost input included in the SROI analysis was \$32 million (yearly budgeted cost of operations over 30 years with inflation).

The analysis examined both the social value created *each year* over the next 30 years by Ellendale's supportive housing model and the economic value created during the construction of the 12 new units. The examination of ongoing social value created over 30 years looks at outcomes that happen participants *each year* for a period of 30 years. This means that social value related to lasting change experienced by participants (change experienced beyond a participant's stay at Ellendale) has not been captured (e.g. ongoing health benefits for themselves or their children, sustained reduction in harm caused by substance use, etc.). While this timeframe helps to capture the value of owning the Ellendale facility, it possibly underestimates the impact of the lasting social change created by the programming at Ellendale (see Appendix K for discussion).

### **Outcomes**

Outcomes from Ellendale were mapped based on:

- Academic and grey literature research;
- Information from Elizabeth Fry Society of Greater Vancouver staff (frontline and executive level);
- Program statistics included in Mumford, S. (2014, November). *Elizabeth Fry- Ellendale. Adult-Stabilization and Transitional Living Residences (STLR), 2003-2004 to 2013-2014 (FH MHSUS Foundation Report)*. Vancouver: Fraser Health;
- Program statistics included in Patterson, J. (2014). *The Ellendale Program: Response to the FH and MHSUS Foundation Report*. Vancouver: Elizabeth Fry Society of Greater Vancouver; and
- Feedback from comparable stakeholders living at Firth Residence in Abbotsford.

Since the twelve new spaces at Ellendale were not operational as the start of the SROI analysis, comparable stakeholders from Firth Residence in Abbotsford were interviewed. Firth Residence is also operated by the Elizabeth Fry Society of Greater Vancouver and is the only other addictions treatment facility in the province of British Columbia that allows women to access addictions treatment and housing with their children in their care. Since the new units at Ellendale will serve this profile of participants, input from Firth Residence participants was sought in order to garner information on the

---

<sup>66</sup> \$679,294 granted from BC Housing, and \$746,848 borrowed by Elizabeth Fry Society.

<sup>67</sup> Canadian inflation rate 2016.

outcomes expected for the new units at Ellendale. In total, five in-depth interviews were conducted with Firth Residence participants to understand the impact of housing and addictions treatment for women, including those with children in their care (see Appendix G for interview questions).

The following outcomes were mapped and included in the SROI analysis:

Stakeholder	Outcome
Women staying at Ellendale Residence	Increased access to necessities during stay (increased personal resources not spent on necessities)
	Increased ability to move past withdrawal symptoms and learn long-term sobriety skills
	Increased safety from violence (e.g. intimate partner violence, violence experienced while homeless, violence in unstable housing situations, etc.)
	Increased wellbeing due to healthier living conditions and/or decreased stress (e.g. no mould, proper heating, etc.)
Children of women staying in 12 new units at Ellendale	Children experience less instability and violence in their lives and are able to avoid and/or respond appropriately to violent situations in their lives.
Businesses in local community and neighbourhood	Increased indirect employment generated during renovation (materials supplied, etc.)
Staff employed or contracted to develop 12 new units at Ellendale	Increased employment due to renovation (contractors, construction)
Staff employed or contracted with Ellendale on an ongoing basis	Increased employment for programming and maintenance on an ongoing basis
Governments (various levels)	Increased revenue from local permits, taxes, etc. during construction (one-time costs)
	Participants experience increased housing stability and decreased homelessness while living at Ellendale resulting in reduced government service use
	Participants avoid sexual exploitation linked to homelessness and addictions resulting in the avoidance of government service use.
	Women are able to move past withdrawal symptoms and learn long-term sobriety skills resulting in reduced government service use
	Participants avoid need for committing survival crimes (e.g. selling drugs, selling sex, stealing, etc.) resulting in reduced court/prosecution time
	Decreased brain damage to babies from substance use while participants are pregnant resulting in reduced lifetime health, justice, and education costs to the government

Stakeholder	Outcome
	Reduced number of children in foster care (participants do not have to place their children in care to receive support)

Outcomes for marginalized women who come to Ellendale to receive support with their addictions go beyond the outcomes mapped for the SROI analysis. Information from academic and grey literature and feedback from participants and Elizabeth Fry Society staff suggest that there are important outcomes for participants around receiving support with dental issues, learning about sexually transmitted infection transmission and ways to avoid risk, and avoiding violent victimization while living on the streets or while high. Further, the children of women who access treatment at Ellendale experience longer-term impacts that have not been mapped as part of the SROI analysis. These outcomes have not been mapped as part of the SROI model due to difficulties valuing or measuring longer term or complex outcomes. While this ensures that the final SROI result is not over-claimed, it also means that some key outcomes are not included in the SROI value and the final SROI ratio is only a conservative estimation of the total value created.

The number of stakeholders achieving the mapped outcomes was determined based on:

- Academic and grey literature research;
- Program statistics included in Mumford, S. (2014, November). *Elizabeth Fry- Ellendale. Adult-Stabilization and Transitional Living Residences (STLR), 2003-2004 to 2013-2014 (FH MHSUS Foundation Report)*. Vancouver: Fraser Health;
- Program statistics included in Patterson, J. (2014). *The Ellendale Program: Response to the FH and MHSUS Foundation Report*. Vancouver: Elizabeth Fry Society of Greater Vancouver; and
- Feedback from comparable stakeholders living at Firth Residence in Abbotsford (see above).

### **Financial Valuation of Outcomes**

The financial value of the outcomes mapped for Ellendale was determined based on:

- Academic and grey literature research;
- The SROI Canada Financial Proxy Database; and
- Financial valuation information from other SROI and economic studies.

The following financial proxies were used to value Ellendale outcomes:

Outcome	Financial Proxy
Increased access to necessities during stay (increased personal resources not spent on necessities) for participants	Value of basic needs support provided
Increased ability for participants to move past withdrawal symptoms and learn long-term sobriety skills	Personal cost of supporting an addiction
Increased safety from violence for participants	Cost of pain and suffering due to assault (personal costs)

Outcome	Financial Proxy
Increased opportunity for participants to participate in counselling related to previous traumas, learn new coping skills and patterns to help maintain positive and healthy lifestyles	Revealed preference valuation: Counselling Therapy - Couple/Family Session
Increased wellbeing due to healthier living conditions and/or decreased stress for participants	Wellbeing valuation for move from poor quality to good quality housing (e.g. dampness, mould, etc.)
Children experience less instability and violence in their lives and are able to avoid and/or respond appropriately to violent situations in their lives.	Cost of child abuse to survivors
Increased indirect employment generated during local construction (materials supplied, etc.)	Average income in construction industry in BC
Increased employment to develop project (contractors, construction)	Average income in construction industry in BC
Increased employment for programming and maintenance on an ongoing basis	Ellendale annual operational spent on staff workers
Increased government revenue from local permits, taxes, etc. during construction (one-time costs)	Estimated amount returning to government in taxes, permit fees during Ellendale 12-unit construction
Participants experience increased housing stability and decreased homelessness while living at Ellendale resulting in reduced government service use	Cost of services (health, justice) for the absolute homelessness population
Participants avoid sexual exploitation linked to homelessness and addictions. Resulting in the avoidance of government service use	Cost of exiting sexual exploitation (program cost)
Women are able to move past withdrawal symptoms and learn long-term sobriety skills resulting in reduced government service use	Cost of substance abuse per person (health cost, justice cost, government spending on research and prevention, lost productivity)
Participants avoid need for committing survival crimes (e.g. selling drugs, selling sex, stealing, etc.) resulting in reduced court/prosecution time	Government cost of criminal court case
Decreased brain damage to babies from substance use while participants are pregnant resulting in reduced lifetime health, justice, and education costs	Cost of child born with Fetal Alcohol Spectrum Disorder (FASD)
Reduced number of children in foster care	Average annual cost of maintaining a child in foster care or formal kinship care with regular visits by child protection worker

For a full list of financial proxies, dollar values, and sources for all case studies, refer to Appendix J.

### Discounts

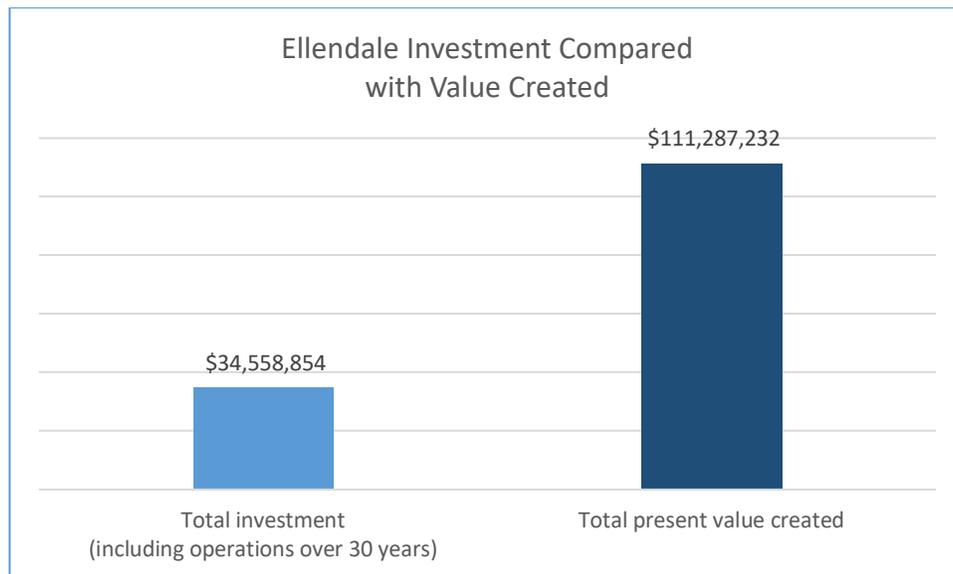
Deadweight, displacement, attribution, and drop off discounts were determined based on:

- Academic and grey literature research;
- Ellendale program statistics outlined in Mumford (2014) and Patterson (2014); and
- Reasonable estimations.

Where estimations were made, they were sensitivity tested to ensure estimated discounts were not over/under claimed. Outcomes that may be impacted by the deterioration of the asset over time (e.g. health outcomes for tenants) were discounted with a 1.5% average drop off.<sup>68</sup> Overall, a 3.5% discount rate was applied to value claimed into the future to account for the time value of money.<sup>69</sup>

### Ellendale SROI Results and Discussion

The SROI analysis of investing in purchasing and operating Ellendale, including twelve new spaces for women with young children, revealed a ratio of 1 : 3.22. This indicates that **for every dollar invested in Ellendale, just over three dollars in social and economic value is created.**



An SROI ratio of 1 : 3.22 indicates that significant social and economic value is created when investment is made to establish ownership of an existing asset, ensuring sustainability and enabling expansion of programming, such as the supportive housing and treatment program at Ellendale. It is important to note, however, that the SROI analysis Ellendale represents a conservative estimation of the total value created, since it was not possible to measure and capture the financial value of all potential outcomes. In particular, the longer term impact of the availability of substance use reduction support where

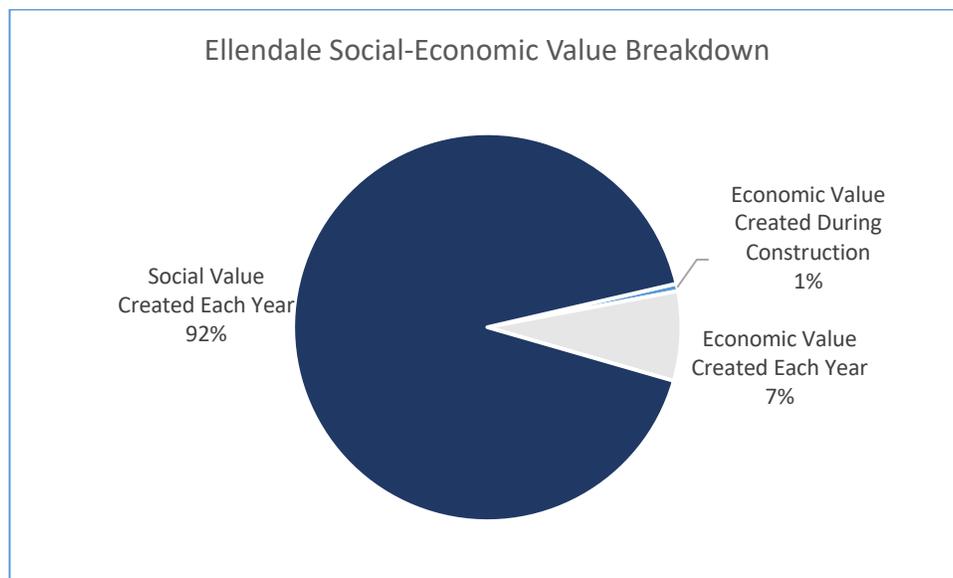
<sup>68</sup> Note: It was determined to be beyond the scope of the current study to create an asset deterioration model for each case study. Rather, an estimated discount of 0% in the first 10 years, 2% in the next ten years, and 3% in the 10 years after that, was included to account for deterioration that may impact the achievement of some outcomes over time. This estimate was sensitivity tested. For more information on the calculation of asset deterioration, see for example: Flikweert, Lawton, Collell, & Simm (2009).

<sup>69</sup> Boardman, Moore and Vining (2010)

women can stay with their children has not been articulated and captured within the Ellendale model, meaning the social value created is likely much greater than what has been calculated in this case study.

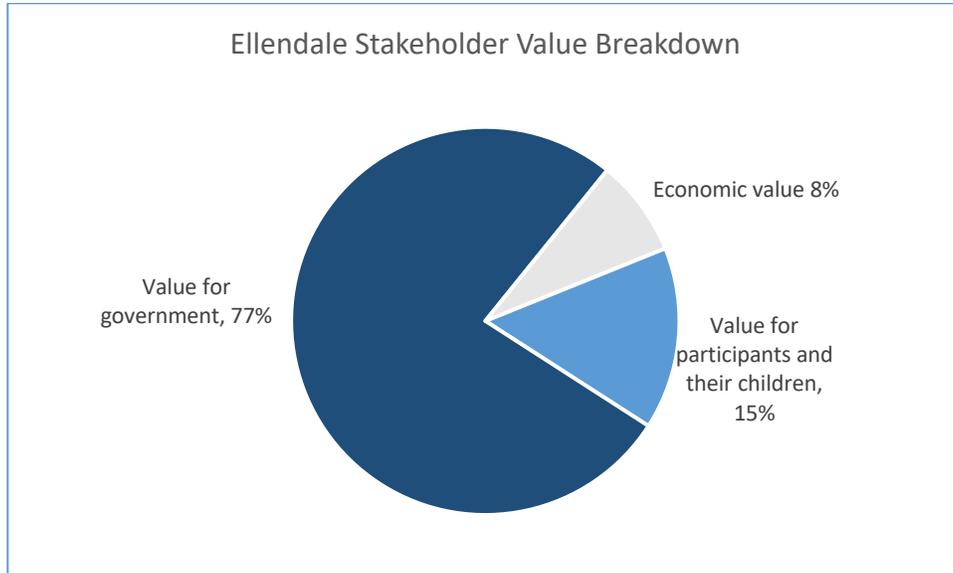
Most of the value revealed through this SROI analysis is social value as participants at Ellendale do not interact as consumers in the community during their stay at the facility. While there was some calculated value generated during the renovation of Ellendale, the greater value comes from the impact of the programming offered at Ellendale.

Only 1% of the estimated value occurred during the renovation, through increased local economic activity and value back to various levels of government in the form of taxes and fees. Approximately 7% of the estimated value is related to increased economic activity due to direct employment supported by Ellendale. Most significantly, approximately 92% of the value is generated via social outcomes experienced by the women who access housing and services at Ellendale each year.



Broken down by stakeholder, the majority of value (77%) goes back to the government, as the services provided at Ellendale significantly impact the use of government systems like foster care, the medical system, and the justice system. This finding indicates that providing both housing and recovery programming creates important value for society overall, as at-risk populations, like Ellendale clients, mitigate risk, increase wellness, and are able to move forward in their lives.

Approximately 15% of the value goes back to Ellendale participants and their children in direct cost savings and social outcomes. Only 8% of the calculated SROI value is due to economic activity, including direct employment and local economic activity. This proportion is quite small as participants at Ellendale form a small piece of the local neighbourhood population and they are not spending significantly in the community. Further, the renovation at Ellendale, while significant in terms of the social benefit, was not a large capital undertaking resulting in significant local economic activity during construction.



While SROI ratios cannot be compared across different types of programs, other SROI analyses of the value of investing in homelessness avoidance and addictions treatment can provide some context for the findings from the Ellendale SROI. Findings from recent studies about supporting women in exiting homelessness reveal SROI results from 2 : 1 to 9.75 : 1.<sup>70</sup> Ellendale fits within the lower range of these findings, due to the inclusion of both capital and operational costs in the calculation of the SROI ratio (see Appendix K for further discussion). Most SROI analyses of social initiatives do not analyze capital costs, looking only at year-on-year programming costs. Further, the Ellendale SROI analysis has been conducted using a conscientiously conservative approach, ensuring the value calculated is not over-claimed.

See Appendix G for the full Ellendale SROI model and description of sensitivity tests conducted.

*They loved me until I could love myself.  
These people got me the support that I  
needed and softly nursed me back to health.  
–Elizabeth Fry Society Participant*

<sup>70</sup> See: MacKinnon, L., & Alolo, S. (2015); Miller, A., & Robertson, S. (2014); Robertson, S., & Miller, A. (2013); Victorian Women’s Housing Association (VWHA) (2010); SiMPACT Strategy Group, (2011)

## 5.0 Case Study Comparison and Discussion

The findings from the four case studies reveal that a range of significant value is created when investments are made in developing affordable housing in BC, no matter what type of investment is made.

While the Ellendale case study demonstrated the greatest social return, all of the case studies indicate that there is a ‘value add’ when affordable housing is developed. This ‘value add’ comes from the social outcomes that affordable housing creates for tenants and communities.

The Dahli Place case study suggests that additional value is created when new developments address affordable housing supply, creating social outcomes while stimulating economic development.<sup>71</sup>

The Pembroke Mews case study suggests that, since capital costs are lower in redevelopment projects (e.g. land purchase, materials needed), slightly greater returns can be garnered when new affordable housing stock is created by redeveloping existing assets.

The Qualicum Park Village case study suggests that affordable housing development geared towards individuals with high need (e.g. seniors, individuals with disabilities), particularly in smaller communities like Qualicum Beach, generates positive economic returns and significant social value related to tenant outcomes.

The Ellendale case study suggests that investing in capital assets that support programming for marginalized populations, generates higher social returns, despite lower economic returns. The value of enabling social programming through the ownership of capital assets is significant for participants, their children, and society as a whole (e.g. government systems).

	<b>Dahli Place</b>	<b>Pembroke Mews</b>	<b>Qualicum Park Village</b>	<b>Ellendale</b>
<b>Location</b>	Victoria	Victoria	Qualicum Beach	Surrey
<b>Number of Units</b>	68	25	34	22
<b>Type of Investment</b>	New construction	Redevelopment and repurposing of a deteriorating asset	New construction replacing deteriorating assets	Building purchase and renovation adding new units
<b>Total Capital Investment (including CPI)</b>	\$13.2 million	\$4.2 million	\$5.3 million	\$1.7 million
<b>SROI Ratio</b>	1 : 1.96	1 : 2.37	1 : 2.18	1 : 3.22
<b>Social Value per Dollar Invested</b>	For every dollar invested, nearly two dollars in social and economic value is created.	For every dollar invested, nearly two and a half dollars in social and economic value is created.	For every dollar invested, just over two dollars in social and economic value is created.	For every dollar invested, just over three dollars in social and economic value is created.
<b>‘Value Add’ from social outcomes</b>	20%	26%	36%	92%

<sup>71</sup> For comparison with non-affordable development economic (not social) returns, refer to Zon, Molson, & Oschinsky (2014).

## 6.0 Limitations

There are a number of limitations within the current study that impact the robustness of findings and the general applicability of results in a broader context.

First, the SROI methodology that has been used is limited by its novelty and potential for biases. While the researchers that contributed to the current study are Accredited SROI Practitioners through the International Social Value Network and the SROI Canada Network, and have tried to mitigate biases within the analysis, SROI inherently involves many assumptions that may impact the robustness of the current findings.<sup>72</sup> Since the SROI methodology has only been widely used internationally since the early 2000s, and is still limited within Canada, the current study has been somewhat restricted by a lack of comparable studies and precedence for financial valuation related specifically to social outcomes of affordable housing.<sup>73</sup> Where possible, the current study has drawn on standardized financial information from the SROI Canada Network's Financial Proxy Database. The availability of standardized financial proxy information related to affordable housing, however, is limited within Canada and has potentially impacted the general applicability of the current findings.

The current study has also been limited by the availability of data and input from tenant stakeholders in the establishment of links between affordable housing and anticipated outcomes as well as the quantification of the number of tenants experiencing outcomes. While there is robust research pointing to the social and economic impacts of affordable housing development, the applicability of this research to the context of the current study may be limited due to differences in demographics and local communities. The current study has relied heavily, in some areas, on established research, however it is recognised that rigorous primary research would provide more robust results.

Finally, the current study uses information based on today's tenants to understand the value of investment in assets that may last up to 30 years. The predictive quality of the data within the current analyses should be tested in coming years to ensure the point-in-time data that has been used to predict future value is accurate. Overall, this means the general applicability of the current results may be limited and should be further tested with greater input from tenant and other stakeholders.



*I never dreamed I would be  
someplace as nice as this.*

*—Qualicum Park Village Tenant*



---

<sup>72</sup> For further discussion of limitations of the SROI methodology, see for example: Fujiwara (2015).

<sup>73</sup> For further discussion of the Canadian context, see for example: Buzzelli (2009).

## 7.0 Conclusions and Recommendations

Using the internationally standardized SROI methodology, the current study has revealed that for every dollar invested in supporting affordable housing development through the CPI, between \$1.96 and \$3.22 in social and economic value is created for individuals and communities. As governments seek more cost efficient ways to support citizens and communities in thriving, the current study suggests that investment in affordable housing generates important economic and social returns. Beyond the economic stimulation that housing construction generates, there is approximately 20-30% 'value added' when this construction results in *affordable* housing, and 92% 'value added' when that affordable housing is targeted to, and includes supports for, marginalized populations.

The findings from the current study are in line with findings from available literature on the value of affordable housing, and suggest that further study is warranted to garner a deeper understanding of this value. The current study contributes to the literature by providing an estimation of the value of four investments in different types of affordable housing in BC.

Based on these findings, the following recommendations are made:

- 1. Invest in affordable housing.** Based on the findings from the current study, it is recommended that governments invest in affordable housing, particularly redevelopment projects, construction in small communities, and supportive housing for marginalized populations. The current study indicates that by doing so, governments not only address a core need of their citizens, but they also create significant economic and social value for individuals, communities, and various levels of government.
- 2. Continue to Track Social Returns on Investment (SROI) Over Time.** The four case study SROI analyses conducted through this research study are an important first step towards understanding the social and economic value of affordable housing. These studies, however, were limited by availability of data and research. It is recommended that the SROI models that were established are updated with new and current data over time to understand the general applicability and predictive ability of the models and to track SROI ratios over time.
- 3. Support Other Explorations of the Impact and Value of Affordable Housing.** While the current study begins to shed light on the value of affordable housing, more rigorous research is needed on affordable housing impacts and values in order to develop a more robust understanding. It is recommended that governments support ongoing research on the subject to expand available knowledge and information about affordable housing.

## Appendix A: Resource List

- BC Housing. (n.d.). *BC Housing Glossary*. Available online at: <http://www.bchousing.org/glossary> (accessed May 20, 2016)
- BC Non Profit Housing Association (2013) *Factsheet: Affordable Housing in BC*. Vancouver, BC: BC Non Profit Housing Association.
- BC Stats. (2016). *Earning and Employment Trends*. Available online at: <http://www.bcstats.gov.bc.ca/StatisticsBySubject/LabourIncome/Earnings.aspx> (accessed May 18, 2016).
- Boardman, A., Moore, M., and Vining, A. (2010) The Social Discount Rate for Canada Based on Future Growth in Consumption. *Canadian Public Policy*, 36(3), 325-343.
- British Columbia Ministry of Social Development and Economic Security, and BC Housing Management Commission. (2001). *Homelessness – Causes and Effects Volume 3: The Costs of Homelessness in British Columbia*. Victoria, BC: Government of British Columbia. ISBN 0-7726-4412-8.
- Bush, R. (2003). *Housing and Health Uncovered*. London, UK: Shepherds Bush Housing Association
- Buzzelli, M. (2009). *Is it Possible to Measure the Value of Social Housing?* Ottawa, ON: Canadian Policy Research Networks.
- City Spaces. (2009). *Qualicum Beach Housing Needs Assessment*. Victoria, BC: City Spaces.
- CMHC. (2016). *About Affordable Housing in Canada*. Available online at: [http://www.cmhc-schl.gc.ca/en/inpr/afhoce/afhoce\\_021.cfm](http://www.cmhc-schl.gc.ca/en/inpr/afhoce/afhoce_021.cfm) (accessed May 21, 2016)
- CMHC (2016) *Households in Core Housing Need, 2011*. Available online at: [http://www.cmhc-schl.gc.ca/en/hoficlincl/homain/stda/inin/inin\\_003.cfm](http://www.cmhc-schl.gc.ca/en/hoficlincl/homain/stda/inin/inin_003.cfm) (accessed May 21, 2016)
- CMHC. (2014). *CMHC Vacancy Rates – RDN Fall 2014 Summary*. Available online at: <http://www.rdn.bc.ca/cms/wpattachments/wpID2881atID5025.pdf> (accessed May 19, 2016)
- Cohen, R., & Wardrip, K. (2011). The Economic and Fiscal Benefits of Affordable Housing. *Planning Commissioners Journal*, 83, 1-7.
- Cohen, M. (2005). *The Costs of Crime and Justice*. London, UK: Routledge.
- Condon, M., Istvanffy, N., Newton, R., & Pitman, B. (2010). *Affordable Housing for Families: Assessing the Outcomes, Final Report*. Ottawa: Canadian Mortgage and Housing Corporation (CMHC).
- Currie, L. Moniruzzaman, A., Patterson, M. & Somers, J. (2014). *At Home/Chez Soi Project: Vancouver Site Final Report*. Calgary, AB: Mental Health Commission of Canada.
- DeReviere, L. (2006). A Human Capital Methodology for Estimating the Lifelong Personal Costs of Young Women Leaving the Sex Trade. *Feminist Economics*, 12:3, 383.
- Deriviere, L. (2005). An Examination of the Fiscal Impact from Youth Involvement in the Sex Trade: The Case for Evaluating Priorities in Prevention. *Canadian Public Policy*, 31(2), 181-206.
- Environment Canada. (2011). *National Inventory Report 1990-2009: Greenhouse Gas Sources and Sinks in Canada*. Catalogue number: En81-4/1-2009E-PDF. Ottawa: Government of Canada.
- Flikweert, J., Lawton, P., Collell, M., & Simm, J. (2009). *Guidance on Determining Asset Deterioration and the Use of Condition Grade Deterioration Curves*. London, UK: Environment Agency. Product Code SCHO0509BQAT-E-P.
- Frontier Economics Europe Ltd. (2014). *Assessing the Social and Economic Impact of Affordable Housing Investment*. London, UK: G15 and the National Housing Federation.
- Fuehrlein, B., Cowell, A., Pollio, D., Cupps, L., Balfour, M., & North, C. (2015). A Prospective Study of the Associations Among Housing Status and Costs of Services in a Homeless Population. *Psychiatric Services*, 66(1), 27-32.

- Fujiwara, D. (2015). *The Seven Principle Problems of SROI*. London, UK: SIMETRICA.
- Gaumer, E., Jacobowitz, A., & Brooks-Gunn, J. (2014). Building Ties: The Social Networks of Affordable Housing Residents. *Cityscape: A Journal of Policy Development and Research*, 16(3), 47-68.
- Heintze, T., Berger, L., Naidich, W., & Meyers, M. (2006). Housing Assistance and Employment: How Far-Reaching Are the Effects of Rental Subsidies? *Social Service Review*, 80(4), 635-674.
- Holmen, R. (2012, May 23). Victoria building houses 25 low-wage earners. *Victoria News*. Retrieved May 31, 2016, from <http://www.vicnews.com/news/153126675.html>
- Holtgrave, et al. (2012). Cost-Utility Analysis of the Housing and Health Intervention for Homeless and Unstably Housed Persons Living with HIV. *AIDS and Behavior*, 17(5), 1626-1631.
- Home Advisory USA (2016). *2016 Wheelchair Ramp Construction Costs*. Available online at: <http://www.homeadvisor.com/cost/environmental-safety/build-a-disability-ramp/#> (accessed March 29, 2016)
- Klein, S. & Copas, L. (2010). *Unpacking the Housing Numbers: How Much New Social Housing is BC Building?* Vancouver, BC: Canadian Centre for Policy Alternatives.
- Kraatz, J., Mitchell, J., Matan, A. & Newman, P. (2015). *Rethinking Social Housing: Efficient, Effective & Equitable. Analysis of Literature (systematic & qualitative)*. Perth, Australia: Sustainable Built Environment National Research Centre.
- Larkin, H., Shields, J., & Anda, R. (2012). The Health and Social Consequences of Adverse Childhood Experiences (ACE) Across the Lifespan: An Introduction to Prevention and Intervention in the Community. *Journal of Prevention & Intervention in the Community*, 40(4), 263-270.
- Larmier et al. (2009). Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons With Severe Alcohol Problems. *Journal of the American Medical Association*, 301(13), 1349-1357.
- MacKinnon, L., & Alolo, S. (2015). *The Social Return on Investment of Multifamily Housing Initiative's Housing Program: Demonstrating Social Value in Affordable Housing*. Ottawa, ON: Carleton Centre for Community Innovation.
- Maschaykh, U. (2015). *The Changing Image of Affordable Housing: Design, Gentrification and Community in Canada and Europe*. New York, NY: Routledge.
- Mikkonen, J., & Raphael, D. (2010). *Social Determinants of Health: The Canadian Facts*. Toronto: York University School of Health Policy and Management.
- Miller, A., & Robertson, S. (2014). *Telling the Story of Social Value at First Steps*. Toronto, ON: SiMPACT Strategy Group.
- Mueller, E. J., & Tighe, J. R. (2007). Making the Case for Affordable Housing: Connecting Housing with Health and Education Outcomes. *Journal of Planning Literature*, 21(4), 371-385.
- Mumford, S. (2014, November). *Elizabeth Fry-Ellendale. Adult-Stabilization and Transitional Living Residences (STLR), 2003-2004 to 2013-2014 (FH MHSUS Foundation Report)*. Vancouver: Fraser Health
- Munro, C. (2012, April 24). Why preventative spending should be invested in housing. *The Guardian, UK*. Available online at: <http://www.theguardian.com/housing-network/2012/apr/24/scottish-sheltered-housing-preventative-spending?newsfeed=true>
- Newman, M., Blosser, S., & Woodward, S. (2014) *Affordable Housing Cost Study: Analysis of the Factors that Influence the Cost of Building Multi-Family Affordable Housing in California*. Sacramento: CA: Blue Sky Consulting Group.
- Nguyen, M. T. (2005). Does Affordable Housing Detrimentially Affect Property Values? A Review of the Literature. *Journal of Planning Literature*, 20(1), 15-26.
- Nyamathi, et al (2015). A randomized clinical trial of tailored interventions for health promotion and recidivism reduction among homeless parolees:

- Outcomes and cost analysis. *Journal of Experimental Criminology*, 12(1), 49-74.
- Patterson, J. (2014). *The Ellendale Program: Response to the FH and MHSUS Foundation Report*. Vancouver: Elizabeth Fry Society of Greater Vancouver.
- Patterson, M., Somers, J., McIntosh, K., Shiell, A., & Frankish, C. (2008). *Housing and Support for Adults with Severe Addictions and/or Mental Illness in British Columbia*. Vancouver, BC: Simon Fraser University, Centre for Applied Research in Mental Health and Addiction.
- Pomeroy, S. (2005). *The Cost of Homelessness: Analysis of Alternative Responses in Four Canadian Cities*. Ottawa: National Secretariat on Homelessness.
- Potter-King, G., & De Jon, I. (2013) *Intensive Case Management Considerations to Improve Housing Stability Amongst Women Involved in High-Risk and/or Exploitative Situations: Final Report*. Edmonton: Homeward Trust Edmonton and the Government of Canada.
- Province of British Columbia. (2007). *Income Assistance Rate Table*. Available online at: <http://www2.gov.bc.ca/gov/content/governments/policies-for-government/bcea-policy-and-procedure-manual/bc-employment-and-assistance-rate-tables/income-assistance-rate-table> (accessed March 20, 2016).
- Ravi, A. & Reinhardt, C. (2011). *The Social Value of Community Housing in Australia*. Sydney, AU: Net Balance.
- Robertson, S., & Miller, A. (2013). *Region of Waterloo STEP Home SROI Roll-Up Report: The Story Behind the Number: Uncovering Hidden Value in STEP Home's Intensive Support Programs*. Waterloo, ON: Regional Municipality of Waterloo.
- Scally, C.P. (2012). The Nuances of NIMBY: Context and Perceptions of Affordable Rental Housing Development. *Urban Affairs Review*, 49:5, 718-747.
- SiMPACT Strategy Group. (2011). *Social Return on Investment (SROI) Case Study: Minwaashin Lodge Addictions Treatment Centre*. Calgary, AB: SiMPACT Strategy Group.
- Statistics Canada (2012) *Census in Brief: Canadian Households in 2011: Type and Growth*. Ottawa: Minister of Industry, Catalogue no. 98-312-X2011003.
- Statistics Canada. (2015). *Median total income, by family type, by census metropolitan area (All census families)*. Available online at: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil107a-eng.htm> (accessed May 29, 2016).
- Suttor, G., Bettencourt-McCarthy, W., & Butler, S. (2015) *Affordable Housing as Economic Development: How Housing Can Spark Growth in Northern and Southwestern Ontario*. Toronto, ON: Ontario Non-Profit Housing Society.
- Tenants BC website. [www.tenantsbc.ca](http://www.tenantsbc.ca) (accessed June 2, 2016).
- Town of Qualicum Beach. (n.d.) *Fast Facts – Why we're the place to be!* Available online at: <http://www.qualicum.bc.ca/cms/wpattachments/wpid21atID6.pdf> (accessed May 31, 2016)
- Treasury Board of Canada Secretariat. (2013). *Assessing Program Resource Utilization When Evaluating Federal Programs*. Ottawa: Her Majesty the Queen in Right of Canada.
- Victorian Women's Housing Association (VWHA) (2010). *Research Report: Victorian Women's Housing Association investment in affordable housing for women – the social and economic returns*. Victoria, AU: Victorian Women's Housing Association.
- Wardrip, K., Williams, L., Suzanne, H. (2011) *The Role of Affordable Housing in Creating Jobs and Stimulating Local Economic Development: A Review of the Literature*. Washington, D.C.: Center for Housing Policy and the MacArthur Foundation.
- Wegmann, J. (2014). Measuring What Matters: A Call for a Meaningful Metric of Affordable Rental Housing Production Cost-Efficiency. *Housing Policy Debate*, 24:4, 692-716.
- Zhang, T., Hoddenbagh, J. McDonald, S., & Scrim, K. (2009). *An Estimation of the Economic Impact of*

*Spousal Violence in Canada, 2009.* Ottawa, ON:  
Department of Justice, Government of Canada.

Zhang, T. (2008). *The Costs of Crime in Canada, 2008.*  
Ottawa, ON: Department of Justice, Government of  
Canada.

Zon, N., Molson, M., & Oschinsky, M. (2014) *Building  
Blocks: The Case for Federal Investment in Social and  
Affordable Housing in Ontario.* Toronto: Mowat  
Centre.

## Appendix B: Dahli Place SROI Impact Map and Sensitivity Tests

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
Tenants living in Dahli Place	Completion of application form, lease/rental contract agreement, rent NOTE: Rent paid by tenants not financially valued because they would pay at least this amount (if not more) to live someplace else (100% deadweight)	# tenants of Dahli Place	Decreased utility costs	# of tenants paying less for utilities	68	30	Difference in energy costs due to energy efficiency	\$240	Greater Victoria Housing Society estimation	15%	0%	0%	1.5%
			Increase in disposable income due to move from market housing to secure, affordable & stable housing	# of tenants living at Dahli Place who report paying less rent than they would otherwise	29	30	Difference in rent between Dahli Place and typical rent in similar apartment/for similar income bracket	\$1,200	Tenant survey (Q2)	0%	0%	0%	0%
			Increased wellbeing due to healthier living conditions and/or decreased stress	# who would have otherwise be living in low quality accommodation	28	30	Wellbeing valuation for move from poor quality to good quality housing (e.g. dampness, mould)	\$1,895	Frontier Economics Europe Ltd. (2014). Page 66	0%	13%	0%	1.5%
			Decreased housing instability & stress related to housing	# tenants reporting they experience more stability because of their tenancy at Dahli Place	56	30	Cost of moving (transience, instability)	\$112	Rental costs Uhaul.com website, retrieved on April 9, 2016 BC minimum wage, 2016	10%	0%	5%	0%
			Increased social connections, community, networks, independence (decreased isolation)	# of tenants who report increased sense of community/social network	9	30	Revealed preference valuation: City of Victoria Recreational Pass	\$679	City of Victoria website, retrieved April 10, 2016	10%	0%	5%	0%
			Decreased transportation time and costs (work, medical appointments, shopping services)	# of tenants who report avoiding use of car/cabs	1	30	Difference between cost of transit and cost of owning/maintaining a vehicle annually.	\$7,808	CAA Car Costs Calculator Victoria Regional Transit System Website	0%	5%	0%	0%
				# tenants reporting a shorter commute to	47	30	Time and carbon emission costs of car travel saved per year	\$1,222	BC Minimum Wage 2016; www.caa.ca;	10%	0%	0%	0%

Report on SROI of Affordable Housing Supported by BC Housing

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
				work; shorter distances to amenities					Environment Canada. (2011).				
			Increased safety from assault, theft	# of tenants who cite improved sense of security	0.2	30	Revealed preference valuation: Cost of professional property management	\$64,840	8% of gross monthly rents www.tenantsbc.ca; Dahli Place budget	0%	0%	10%	1.5%
Businesses in local community & neighbourhood	NA	# local businesses	Increased local spending due to increased density	# of jobs created by local spending by tenants	20	30	Median income in Victoria BC	\$84,500	Statistics Canada	50%	0%	0%	0%
			Increased indirect employment generated during local construction (materials supplied, etc.)	# jobs supported by local spending during development	29	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	50%	0%	0%	0%
Staff employed or contracted to develop Dahli Place			Increased employment to develop project (contractors, construction)	# people employed in the construction/upgrading	54	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	10%	0%	0%	0%
Staff employed or contracted to maintain Dahli Place			Increased employment for maintenance on an ongoing basis	# labour/staff employed on an ongoing basis at Dahli Place	1	30	Dahli Place annual operational spend on maintenance/repair workers	\$67,479	Dahli Place annual budget line: labour/staff, service contracts, office/building staff	10%	0%	0%	-1%
Government (various levels)	Captured in total investment inputs	# units developed # permits required	Increased revenue from local permits, taxes, etc. during construction (one-time costs)	Permits, taxes and fees	1	1	Estimated amount returning to government in taxes, permit fees	\$562,360	Dahli Place construction budget	0%	0%	0%	0%
			Increased revenue from ongoing taxes	Property taxes	1	30	Property taxes paid	\$74,194	Dahli Place annual operational budget	0%	0%	0%	-1%

Report on SROI of Affordable Housing Supported by BC Housing

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
		# individuals avoiding homelessness	Decreased service use by tenants avoiding homelessness due to availability of affordable housing	# of tenants reporting they would have 'no place else to live' if they didn't live at Dahli Place	1	30	Cost of services (health, justice) for the 'at imminent risk of homelessness' population	\$41,855	Patterson, et. al (2008) table 26, page 93.	0%	0%	0%	0%

Full SROI Calculation available in Excel Workbook format available upon request.

Total Investment	\$13,206,058
Total Present Value (TPV)	\$ 25,907,105
Net Present Value (TPV minus the investment)	\$ 12,701,047
<b>Social Return \$ per \$</b>	<b>1 : 1.96</b>

\*Note: Outcomes highlighted in grey represent **social** value created by Dahli Place.

**Sensitivity Tests**

The SROI model for Dahli Place included a number of estimations and assumptions. In order to ensure that these estimations and assumptions did not result in unreasonable claims, sensitivity tests were conducted on the model. These tests included the following:

Assumption Tested	Changes Made to Model	Ratio Result
Number of stakeholders experiencing outcomes	Any quantities including an estimation were reduced by 25%, except the number of tenants experiencing health outcomes (the tenant survey suggested 30% but research suggests 40%), the number of tenants living closer to work (50% of survey respondents indicated this as an outcome, but only 14 households listed it as their reason for wanting to live at Dahli Place on their application), and the number of tenants who might otherwise be homeless (the model included a conservative estimation of 1, but the tenant survey revealed 20% of respondents might otherwise have been homeless).	1 : 2.29
Financial proxies used to represent the value of outcomes	Four financial proxies were changed as part of the sensitivity test. First, all rent savings for tenants were removed from the model as rents at Dahli Place do not differ significantly from market rents. <sup>74</sup> Next, the cost savings from one tenant avoiding homelessness was increased from someone experiencing lower level costs associated with ‘imminent risk of homelessness’ to higher level costs associated with ‘absolute homelessness’. Next, the income for local jobs sustained by economic activity was decreased from median income to minimum wage income. Finally, the amount in government revenue from the development was changed from the estimated amount from budget lines, to a researched average amount.	1 : 1.01
Discounts applied	An additional 10% discount was added to all estimated discounts, including drop off.	1 : 1.60
Timeframe of the analysis	A duration of outcomes from the continued existence of the capital asset of 20 years rather than 30 years, which was included in the model.	1 : 1.58

Except for the potential impact of assumptions made about financial proxies, the impact of assumptions generally suggests an approximate value of two dollars for every dollar invested in the development of Dahli Place. Further exploration of financial valuation techniques is thus warranted. Overall, the sensitivity tests confirm the model and suggest robustness in the results garnered.

<sup>74</sup> Although, stakeholder feedback suggested that what tenants would have to pay for a place comparable to Dahli Place in terms of quality would be about \$100 per month higher.

## Appendix C: Pembroke Mews SROI Impact Map and Sensitivity Tests

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
Tenants living in Pembroke Mews	Completion of application form, lease/rental contract agreement, rent  NOTE: Rent paid by tenants not financially valued because they would pay at least this amount (if not more) to live someplace else (100% deadweight)		Decreased utility costs	# of tenants paying less for utilities	25	30	Difference in energy costs due to energy efficiency	\$240	Greater Victoria Housing Society estimation	15%	0%	0%	1.5%
			Increase in disposable income due to move from market housing to secure, affordable & stable housing	# of tenants living at Pembroke Mews who report paying less rent than they would otherwise	25	30	Difference in rent between Pembroke Mews and typical rent in similar apartment/for similar income bracket	\$1,200	Canada Mortgage and Housing Corporation	0%	0%	0%	0%
			Increased wellbeing due to healthier living conditions and/or decreased stress	# who would have otherwise be living in low quality accommodation	10	30	Wellbeing valuation for move from poor quality to good quality housing (e.g. dampness, mould)	\$1,895	Frontier Economics Europe Ltd. (2014). Page 66	0%	13%	0%	1.5%
			Decreased housing instability & stress related to housing	# tenants reporting they experience more stability because of their tenancy at Pembroke Mews	2	30	Cost of moving (transience, instability)	\$112	Rental costs Uhaul.com website, retrieved on April 9, 2016 BC minimum wage, 2016	10%	0%	5%	0%
			Increased social connections, community, networks, independence (decreased isolation)	# of tenants who report increased sense of community/social network	12	30	Revealed preference valuation: City of Victoria Recreational Pass	\$679	City of Victoria website, retrieved April 10, 2016	10%	0%	5%	0%
			Decreased transportation time and costs (work, medical appointments, shopping services)	# of tenants who report avoiding use of car/cabs	5	30	Difference between cost of transit and cost of owning/maintaining a vehicle annually.	\$7,808	CAA Car Costs Calculator Victoria Regional Transit System Website	0%	5%	0%	0%

Report on SROI of Affordable Housing Supported by BC Housing

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
				# tenants reporting a shorter commute to work; shorter distances to amenities	4	30	Time and carbon emission costs of car travel saved per year	\$1,222	BC Minimum Wage 2016; www.caa.ca; Environment Canada. (2011).	10%	0%	0%	0%
			Increased safety from assault, theft	# of tenants who cite improved sense of security	0.04	30	Revealed preference valuation: Cost of professional property management	\$64,840	8% of gross monthly rents www.tenantsbc.ca; Dahli Place budget	0%	0%	1.5%	1.5%
			Increased access to education (greater disposable income, increased stability)	# tenants able to access education due to tenancy at Pembroke Mews	1	30	Earnings premium for an individual with a 'postsecondary certificate or diploma' over the average annual earnings of a worker who has 'graduated high school'	\$5,741	Zon, N., Molson, M., & Oschinsky, M. (2014) (Page 35)	0%	0%	1.5%	0%
Businesses in local community & neighbourhood	NA	# local businesses	Increased local spending due to increased density	# of jobs created by local spending by tenants	7.5	30	Median income in Victoria BC	\$84,500	Statistics Canada	50%	0%	0%	0%
			Increased indirect employment generated during local construction (materials supplied, etc.)	# jobs supported by local spending during development	10.5	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	50%	0%	0%	0%
Staff employed or contracted to develop Pembroke Mews			Increased employment to develop project (contractors, construction)	# people employed in the construction/upgrading	20	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	10%	0%	0%	0%
Staff employed or contracted to maintain			Increased employment for maintenance on an ongoing basis	# labour/staff employed on an ongoing basis at Pembroke Mews	1	30	Pembroke Mews annual operational spend on maintenance/repair workers	\$67,479	Pembroke Mews annual budget line: labour/staff, service	10%	0%	0%	-1%

Report on SROI of Affordable Housing Supported by BC Housing

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
Pembroke Mews									contracts, office/ building staff				
Government (various levels)	Captured in total investment inputs	# units developed # permits required	Increased revenue from local permits, taxes, etc. during construction (one-time costs)	Permits, taxes and fees	1	1	Estimated amount returning to government in taxes, permit fees	\$562,360	Pembroke Mews construction budget	0%	0%	0%	0%
			Increased revenue from ongoing taxes	Property taxes	1	30	Property taxes paid	\$74,194	Pembroke Mews annual operational budget	0%	0%	0%	-1%
		# individuals avoiding homelessness	Decreased service use by tenants avoiding homelessness due to availability of affordable housing	# of tenants reporting they would have 'no place else to live' if they didn't live at Pembroke Mews	1	30	Cost of services (health, justice) for the 'at imminent risk of homelessness' population	\$41,855	Patterson, <i>et. al</i> (2008) table 26, page 93.	0%	0%	0%	0%

Full SROI Calculation available in Excel Workbook format available upon request.

Total Investment	\$4,235,478
Total Present Value (TPV)	\$10,053,776
Net Present Value (TPV minus the investment)	\$5,818,298
<b>Social Return \$ per \$</b>	<b>1 : 2.37</b>

\*Note: Outcomes highlighted in grey represent **social** value created by Pembroke Mews.

**Sensitivity Tests**

The SROI model for Pembroke Mews included a number of estimations and assumptions. In order to ensure that these estimations and assumptions did not result in unreasonable claims, sensitivity tests were conducted on the model. These tests included the following:

Assumption Tested	Changes Made to Model	Ratio Result
Number of stakeholders experiencing outcomes	Since quantities for this model were based largely on research, all quantities were reduced by 25%, except the number of tenants who might otherwise be homeless (the model included a conservative estimation of 1, but the tenant application data suggested 2 tenants might otherwise have been homeless), and the number of tenants able to pursue education (increased from conservative estimation of 1 tenant to 25% of all tenants since all tenants are under 40, and 1 of 2 survey respondents indicated this was an outcome for them).	1 : 2.14
Financial proxies used to represent the value of outcomes	Five financial proxies were changed as part of the sensitivity test. First, all rent savings for tenants were removed from the model as rents at Pembroke Mews only differ from market rents by about \$100. Next, the cost savings from one tenant avoiding homelessness was increased from someone experiencing lower level costs associated with 'imminent risk of homelessness' to higher level costs associated with 'absolute homelessness'. Next, the income for local jobs sustained by economic activity was decreased from median income to minimum wage income. Finally, the amount in government revenue from the development was changed from the estimated amount from budget lines, to a researched average amount.	1 : 1.48
Discounts applied	An additional 10% discount was added to all estimated discounts, including drop off.	1 : 1.96
Timeframe of the analysis	A duration of outcomes from the continued existence of the capital asset of 20 years rather than 30 years, which was included in the model.	1 : 1.94

Except for the potential impact of assumptions made about financial proxies, the impact of assumptions generally suggests an approximate value of two dollars for every dollar invested in the development of Pembroke Mews. Further exploration of financial valuation techniques is thus warranted. Overall, the sensitivity tests confirm the model and suggest robustness in the results garnered.

## Appendix D: Survey and Interview Questions for Pembroke Mews and Dahli Place Tenants

### Dahli Place Tenant Survey

Constellation Consulting Group is conducting a research study on affordable housing in BC on behalf of BC Housing and the Greater Victoria Housing Society. As part of this study, we would like to get some feedback from you as a tenant of Dahli Place.

Your responses will be kept strictly confidential with Constellation Consulting Group and any information shared with BC Housing or the Greater Victoria Housing Society will be aggregated so that no individual responses can be identified. Participation in this research is entirely voluntary, and will not impact your tenancy at Dahli Place.

We request that you submit your survey responses by **March 20, 2016**.

1. How long have you been living in Victoria?: \_\_\_\_\_

2. If you didn't live at Dahli Place, approximately how much rent per month would you have to pay for a similar place to live in Victoria?:

\$ \_\_\_\_\_ per month

3. If you didn't live at Dahli Place, what do you think your living situation would look like? (Please check all that apply)

- |  |  |
|--|--|
| <input type="checkbox"/> Paying more rent  | <input type="checkbox"/> Living someplace with a longer commute to work                                      |
| <input type="checkbox"/> Paying higher utility costs                                 | <input type="checkbox"/> Living someplace where I would have concerns for my children (health, safety, etc.) |
| <input type="checkbox"/> Living with my family                                       | <input type="checkbox"/> No other place to live (e.g. homeless, staying with friends, staying at a shelter)  |
| <input type="checkbox"/> Living in a lower quality building                          | <input type="checkbox"/> Living in a building where I wouldn't feel safe                                     |
| <input type="checkbox"/> Living in a building that would negatively impact my health |  |

Other (please specify) \_\_\_\_\_

4. What difference has living at Dahli Place made in your life? (Please check all that apply)

- Less money spent on rent each month
- Less money spent on utilities each month
- Greater ability to save money
- Shorter commute to work
- More stability (e.g. fewer moves)
- Better able to obtain or keep my job
- Easier to pursue my education
- Healthier environment for myself and/or my children
- New friends or social connections for myself and/or my children
- Other (please specify) \_\_\_\_\_

5. What is the best thing about living at Dahli Place?

\_\_\_\_\_

6. Is there anything that could be improved about your experience at Dahli Place?

\_\_\_\_\_

\_\_\_\_\_

7. Would you be willing to participate in a short interview (in-person or by phone) as part of this research study?

Yes     No

8. If yes, please provide us with the following information and someone from our team will contact you to arrange an interview time.

Name: \_\_\_\_\_

Phone number: \_\_\_\_\_

Preferred interview format:  In-person     Telephone

Please provide your signature to indicate your consent for participating in this research study:

\_\_\_\_\_

Signature

Printed Name

Date

Thank you for your participation in this study. When the study is complete, you will be notified and will have the opportunity to receive a copy of the results.

If you have any questions about the research, please contact Anne Miller at (403) 923-7611, or [anne@constellationconsulting.ca](mailto:anne@constellationconsulting.ca). For more information on Constellation Consulting Group, please visit [www.constellationconsulting.ca](http://www.constellationconsulting.ca)

### **Interview Questions for Tenants at Dahli Place**

→Interviewer reviews the research consent form with participants, ensures they understand the nature of the study and that their participation is entirely voluntary. The interviewer answers any questions regarding the research before beginning the interview.

1. What made you decide to apply to become a tenant at Dahli Place?
2. If you didn't live at Dahli Place, what do you think your living situation would look like?  
(Interviewer prompt: Can you speculate about where you would be living if you were not living at Dahli Place?)
3. What difference has living at Dahli Place made in your life?  
(Interviewer prompt: What changes have you experienced? Do you save money each month? Do you have better access to amenities? Is it easier to get to work? Etc.)
4. If you have children, what difference has living at Dahli Place made in the life/lives of your child/children?  
(Interviewer prompt: Do they have more friends? Do they have more stability? Etc.)
5. Have there been any unexpected things about being a tenant at Dahli Place?  
(Interviewer prompt: These could be positive or negative things)
6. Is there anything that could be improved about your experience at Dahli Place?
7. For you, what is the most valuable thing about living at Dahli Place?
8. Anything else to share?

## Pembroke Mews Tenant Survey

Constellation Consulting Group is conducting a research study on affordable housing in BC on behalf of BC Housing and the Greater Victoria Housing Society. As part of this study, we would like to get some feedback from you as a tenant of Pembroke Mews.

Your responses will be kept strictly confidential with Constellation Consulting Group and any information shared with BC Housing or the Greater Victoria Housing Society will be aggregated so that no individual responses can be identified. Participation in this research is entirely voluntary, and will not impact your tenancy at Pembroke Mews.

We request that you submit your survey responses by **March 20, 2016**.

1. How long have you been living in Victoria?: \_\_\_\_\_
  
2. If you didn't live at Pembroke Mews, approximately how much rent per month would you have to pay for a similar place to live in Victoria?:  

\$		per month
----	--	-----------
  
3. If you didn't live at Pembroke Mews, what do you think your living situation would look like?
  - Paying more rent
  - Paying higher utility costs
  - Living with my family
  - Living in a lower quality building
  - Living in a building that would negatively impact my health
  - Living someplace with a longer commute to work
  - Living someplace where I would have to own a car
  - Living someplace where pursuing my education would be more difficult
  - No other place to live (e.g. homeless, staying with friends, staying at a shelter)
  - Living in a building where I wouldn't feel safe
  - Other (please specify)\_\_\_\_\_
  
4. What difference has living at Pembroke Mews made in your life? (Please check all that apply)
  - Less money spent on rent each month
  - Less money spent on utilities each month
  - Greater ability to save money
  - Shorter commute to work
  - More stability (e.g. fewer moves)
  - Better able to obtain or keep my job
  - Easier to pursue my education
  - Healthier environment for myself
  - New friends or social connections
  - Other (please specify)\_\_\_\_\_
  
9. What is the best thing about living at Pembroke Mews?  
  
\_\_\_\_\_

10. Is there anything that could be improved about your experience at Pembroke Mews?

---

11. Would you be willing to participate in a short interview (in-person or by phone) as part of this research study?

Yes     No

12. If yes, please provide us with the following information and someone from our team will contact you to arrange an interview time.

Name: \_\_\_\_\_

Phone number: \_\_\_\_\_

Preferred interview format:  In-person     Telephone

Please provide your signature to indicate your consent for participating in this research study:

---

Signature

Printed Name

Date

Thank you for your participation in this study. When the study is complete, you will be notified and will have the opportunity to receive a copy of the results.

If you have any questions about the research, please contact Anne Miller at (403) 923-7611, or [anne@constellationconsulting.ca](mailto:anne@constellationconsulting.ca). For more information on Constellation Consulting Group, please visit [www.constellationconsulting.ca](http://www.constellationconsulting.ca)

### **Interview Questions for Tenants at Pembroke Mews**

→ Interviewer reviews the research consent form with participants, ensures they understand the nature of the study and that their participation is entirely voluntary. The interviewer answers any questions regarding the research before beginning the interview.

1. What made you decide to apply to become a tenant at Pembroke Mews?
2. If you didn't live at Pembroke Mews, what do you think your living situation would look like?  
(Interviewer prompt: Can you speculate about where you would be living if you were not living at Pembroke Mews?)
3. What difference has living at Pembroke Mews made in your life?  
(Interviewer prompt: What changes have you experienced? Do you save money each month? Do you have better access to amenities? Is it easier to get to work? Etc.)
4. Have there been any unexpected things about being a tenant at Pembroke Mews?  
(Interviewer prompt: These could be positive or negative things)
5. Is there anything that could be improved about your experience at Pembroke Mews?
6. For you, what is the most valuable thing about living at Pembroke Mews?
7. Anything else to share?

## Appendix E: Qualicum Park Village SROI Impact Map and Sensitivity Tests

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
Tenants living in Qualicum Park Village	Completion of application form, lease/rental contract agreement, rent NOTE: Rent paid by tenants not financially valued because they would pay at least this amount (if not more) to live someplace else (100% deadweight)		Increase in disposable income due to move from market housing to secure, affordable & stable housing	# of tenants living at Qualicum Park Village who report paying less rent than they would otherwise	24	30	Difference in rent between Qualicum Park Village and typical rent in similar apartment	\$2,556	Canada Mortgage and Housing Corporation	10%	0%	0%	0%
			Increased wellbeing due to healthier living conditions and/or decreased stress non-seniors only	# non-seniors who would have otherwise be living in low quality accommodation	6	30	Wellbeing valuation for move from poor quality to good quality housing (e.g. mould, etc.)	\$1,895	Frontier Economics Europe Ltd. (2014). Page 66	10%	13%	0%	1.5%
			Increased accessibility for tenants with a disability	# people with disabilities who would otherwise be living in less accessible accommodation	4	30	Revealed preference valuation: Minimum cost to upgrade unit for accessibility	\$2,025	Home Advisory USA (2016). "2016 Wheelchair Ramp Construction Costs."	0%	0%	0%	1.5%
			Decreased housing instability & stress related to housing	# Qualicum Park Village tenants who would otherwise experience housing instability	4	30	Cost of moving (transience, instability)	\$112	Rental costs Uhaul.com website, retrieved on April 9, 2016 BC minimum wage, 2016	10%	0%	5%	0%
			Increased social connections, community, networks, independence (decreased isolation)	# of tenants who report increased sense of community/social network	19	30	Revealed preference valuation: Qualicum Beach Ravensong Aquatic Centre 10x pass	\$651	Telephone conversation with Ravensong Aquatic Centre	10%	0%	5%	0%
			Decreased transportation time and costs (work, medical appointments, shopping services)	# tenants in Qualicum Park Village who would otherwise live farther away from amenities	20	30	Time and carbon emission costs of car travel saved per year	\$1,222	BC Minimum Wage 2016 www.caa.ca Environment Canada. (2011).	10%	0%	0%	0%

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
Businesses in local community & neighbourhood	NA	# local businesses	Increased local spending	# of jobs created by local spending by tenants	10	30	Median income in Qualicum Beach	\$57,456	Town of Qualicum Beach	50%	0%	0%	0%
			Increased indirect employment generated during local construction (materials supplied, etc.)	# jobs supported by local spending during development	14	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	50%	0%	0%	0%
Staff employed or contracted to develop Qualicum Park Village	NA	# individuals employed	Increased employment to develop project (contractors, construction)	# people employed in the construction/upgrading	27	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	10%	0%	0%	0%
Staff employed or contracted to maintain Qualicum Park Village	NA	# individuals employed	Increased employment for maintenance on an ongoing basis	# labour/staff employed on an ongoing basis at Qualicum Park Village	1	30	Qualicum Park Village annual operational spend on property manager/maintenance/repair worker	\$16,680	Qualicum Park Village annual budget line: labour/staff, service contracts, office/building staff	10%	0%	0%	-1%
Government (various levels)	Captured in total investment inputs	# units developed # permits required	Increased revenue from ongoing taxes	Property taxes	1	30	Property taxes paid	None recorded	Qualicum Park Village annual operational budget	0%	0%	0%	0%
			Decreased service use by tenants avoiding homelessness due to availability of affordable housing	# of tenants reporting 'previous housing temporary' as reason for moving to Qualicum Park Village	1	30	Cost of services (health, justice) for the 'at imminent risk of homelessness' population	\$41,854	Patterson <i>et. al</i> (2008) table 26, page 93.	0%	0%	0%	0%
		# individuals avoiding homelessness	Decreased health service use due to healthier living conditions and/or decreased stress - seniors only	# seniors who would have otherwise be living in low quality accommodation	8	30	Cost of health-related issues for seniors living in low quality housing who are exposed to excess cold	\$15,291	Frontier Economics Europe Ltd. (2014). Page 60	10%	13%	0%	1.5%

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
			Decreased health service use due to healthier living conditions and/or decreased stress -people with disabilities only	# people with disabilities who would have otherwise be living in low quality accommodation	2	30	Cost of reduced demand for health services for 'heavy users' and disabled populations due to affordable housing.	\$605	Kraatz, J., Mitchell, J., Matan, A. & Newman, P. (2015). Page 30	10%	13%	0%	1.5%

Total Investment	\$5,268,245
Total Present Value (TPV)	\$11,473,475
Net Present Value (TPV minus the investment)	\$6,205,231
<b>Social Return \$ per \$</b>	<b>1 : 2.18</b>

\*Note: Outcomes highlighted in grey represent **social** value created by Qualicum Park Village.

### Sensitivity Tests

The SROI model for Qualicum Park Village included a number of estimations and assumptions. In order to ensure that these estimations and assumptions did not result in unreasonable claims, sensitivity tests were conducted on the model. These tests included the following:

Assumption Tested	Changes Made to Model	Ratio Result
Number of stakeholders experiencing outcomes	Since quantities for this model were based largely on research, all quantities were reduced by 25%, except the number of tenants who might otherwise be homeless (the model included a conservative estimation of 1, but interviews with tenants and a recent news story suggested 2 tenants might otherwise have been homeless), and the number of tenants with increased housing stability (increased from conservative estimation of 10% of tenants to 25% of all tenants since all tenants).	1 : 1.75
Financial proxies used to represent the value of outcomes	Four financial proxies were changed as part of the sensitivity test. First, the cost savings from one tenant avoiding homelessness was increased from someone experiencing lower level costs associated with 'imminent risk of homelessness' to higher level costs associated with 'absolute homelessness'. Next, the income for local jobs sustained by economic activity was decreased from median income to minimum wage income. Next, the amount saved by government from positive changes in seniors' health was changed from the conservative estimation calculated by Frontier Economics (2014) to a higher value of \$28,783.73 per year calculated by Bamberger, J. & Dobbins, S. (2015) (Page 273) Finally, the amount in government revenue from the development was changed from the estimated amount from budget lines, to a researched average amount.	1 : 1.61
Discounts applied	An additional 10% discount was added to all estimated discounts, including drop off.	1 : 1.65
Timeframe of the analysis	A duration of outcomes from the continued existence of the capital asset of 20 years rather than 30 years, which was included in the model.	1 : 1.66

All sensitivity tests for Qualicum Park Village suggest the potential for a slightly lower SROI ratio. While this could suggest that the model slightly over-claims the value of the investment, the lack of available data on local economic benefit implications for a small community such as Qualicum Beach likely means the model still represents a reasonable forecast of the value created. Further exploration of the number of tenants achieving outcomes and the financial value of these outcomes is thus warranted.

## Appendix F: Interview Questions for Qualicum Park Village Tenants

### Interview Questions for Tenants at Qualicum Park Village

→ Interviewer reviews the research consent form with participants, ensures they understand the nature of the study and that their participation is entirely voluntary. The interviewer answers any questions regarding the research before beginning the interview.

1. What made you decide to apply to become a tenant at Qualicum Park Village?
2. If you didn't live at Qualicum Park Village, what do you think your living situation would look like?  
(Interviewer prompt: Can you speculate about where you would be living if you were not living at Qualicum Park Village?)
3. What difference has living at Qualicum Park Village made in your life?  
(Interviewer prompt: What changes have you experienced? Do you have more social interaction? Do you save money each month? Do you have better access to amenities? Etc.)
4. Have there been any unexpected things about being a tenant at Qualicum Park Village?  
(Interviewer prompt: These could be positive or negative things)
5. Is there anything that could be improved about your experience at Qualicum Park Village?
6. For you, what is the most valuable thing about living at Qualicum Park Village?
7. Anything else to share?

## Appendix G: Ellendale SROI Impact Map and Sensitivity Tests

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
Participants of Ellendale (10 single units upstairs, 12 units for mothers with infants downstairs)	Commitment to accessing treatment and support Women do not pay to access the service	# participants at Ellendale  # women recovering from addictions and maintaining sobriety  # children staying with their mothers while they access treatment at Ellendale	Increased access to necessities during stay (increased personal resources not spent on necessities)	# women accessing basic needs support that they would otherwise have to pay for themselves (# of women with an annual income of \$9,000 or less)	37	30	Value of basic needs support provided	\$885	Miller, A., & Robertson, S. (2014).	0%	0%	75%	0%
			Increased ability to move past withdrawal symptoms and learn long-term sobriety skills	# women remaining sober throughout treatment & at follow-up	27	30	Personal cost of supporting an addiction	\$15,181	DeReviere, L. (2006). Page 383.	0%	0%	75%	0%
			Increased safety from violence (e.g. intimate partner violence, violence experienced while homeless, etc.)	# of women reporting increased safety # women avoiding violence or responding more appropriately to violence	28	30	Cost of pain and suffering due to assault (personal costs)	\$10,844	SROI Canada Financial Proxy Database J22	0%	0%	75%	0%
			Increased opportunity to participate in counselling related to previous traumas, learn new coping skills to help maintain positive and healthy lifestyles	# of women accessing counselling or other trauma treatment programs while at Ellendale	49	30	Revealed preference valuation: Counselling Therapy - Couple/Family Session	\$2,160	SROI Canada Financial Proxy Database SS14	0%	0%	75%	0%
			Increased wellbeing due to healthier living conditions and/or decreased stress	# who would have otherwise be living in low quality accommodation	13	30	Wellbeing valuation for move from poor quality to good quality housing (e.g.mould, etc.)	\$1,895	Frontier Economics Europe Ltd. (2014). Page 66	0%	13%	75%	1.5%
			Children of participants staying in 12	NA	# children who stay at Ellendale with their mothers	Children experience less instability and violence in their lives and are	# children staying with their mothers in 12 new rooms at Ellendale who	16	30	Cost of child abuse to survivors	\$3,177	SROI Canada Financial Proxy Database (PC17)	0%

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
new rooms at Ellendale			able to avoid and/or respond appropriately to violent situations in their lives.	might otherwise be exposed to abuse									
Businesses in local community and neighbourhood	NA	# local businsses	Increased indirect employment generated during local construction (materials supplied, etc.)	# jobs supported by local spending during development	5	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	50%	0%	0%	0%
Staff employed or contracted to develop 12 new rooms at Ellendale	NA	# individuals employed	Increased employment to develop project (contractors, construction)	# people employed in the construction/upgrading	10	1	Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends.	10%	0%	0%	0%
Staff employed or contracted with Ellendale on an ongoing basis	NA	# individuals employed	Increased employment for programming and maintenance on an ongoing basis	# labour/staff employed on an ongoing basis at Ellendale	1	30	Ellendale annual operational spend on staff	\$446,246	Ellendale annual budget line: labour/staff, service contracts, office/building staff	10%	0%	0%	-1%
Government (various levels)	Valued with total inputs	# units developed # permits required	Increased revenue from local permits, taxes, etc. during construction (one-time costs)	Permits, taxes and fees	1	1	Estimated amount returning to government in taxes, permit fee	\$3,500	Ellendale construction budget	0%	0%	0%	0%
			Participants experience decreased homelessness while living at Ellendale resulting in reduced government service use	# of participants who were homeless before coming to Ellendale	35	30	Cost of services (health, justice) for the absolute homelessness population	\$62,473	Patterson <i>et al</i> (2008) table 22, page 91.	0%	0%	75%	0%

Stakeholder	Inputs	Outputs	Outcome	Indicator	Quantity	Duration	Financial Proxy	Value \$	Source	Deadweight	Displacement	Attribution	Drop off
		# participants at Ellendale  # women recovering from addictions and maintaining sobriety  # children staying with their mothers while they access treatment at Ellendale	Participants avoid sexual exploitation linked to homelessness and addictions resulting in the avoidance of government service use.	# of participants who avoid involvement with sexual exploitation # of women who recognize their own experiences & risks of sexual exploitation	6	30	Cost of exiting sexual exploitation (program cost)	\$40,096	Deriviere, L. (2005) Page 206.	0%	0%	75%	0%
			Women are able to move past withdrawal symptoms and learn long-term sobriety skills resulting in reduced government service use.	# women remaining sober throughout treatment and at follow-up	27	30	Cost of substance abuse per person (health cost, justice cost, gov't spending on research and prevention, lost productivity)	\$61,687	SROI Canada Financial Proxy Database (PC08)	0%	0%	75%	0%
			Participants avoid need for committing survival crimes (e.g. selling drugs, selling sex, stealing, etc.) resulting in reduced court time.	# of women who have been in conflict with the law	31	30	Cost of criminal court case	\$1,603	SROI Canada Financial Proxy Database (J19)	0%	0%	75%	0%
			Decreased brain damage to babies from substance use while participants are pregnant resulting in reduced lifetime health, justice etc. costs.	# of women assessed and accessing treatment early in pregnancy	4	30	Cost of child born with Fetal Alcohol Spectrum Disorder (FASD)	\$17,811	SROI Canada Financial Proxy Database (H39)	0%	0%	75%	0%
			Reduced number of children in foster care (participants do not have to place their children in care to receive support)	# child apprehensions avoided	16	30	Average annual cost of maintaining a child in foster care or formal kinship care with regular visits by child protection worker	\$26,880	Zhang, T., Hoddenbagh, J. McDonald, S., & Scrim, K. (2009).	0%	0%	75%	0%

Total Investment	\$10,810,865
Total Present Value (TPV)	\$111,287,232
Net Present Value (TPV minus the investment)	\$76,728,378
<b>Social Return \$ per \$</b>	<b>1 : 3.22</b>

*\*Note: Outcomes highlighted in grey represent **social** value created by Ellendale.*

**Ellendale SROI Sensitivity Tests**

The SROI model for Ellendale included a number of estimations and assumptions. In order to ensure that these estimations and assumptions did not result in unreasonable claims, sensitivity tests were conducted on the model. These tests included the following:

<b>Assumption Tested</b>	<b>Changes Made to Model</b>	<b>Ratio Result</b>
Number of stakeholders experiencing outcomes	Since quantities for this model were based partially on research, all quantities were reduced by 25%, except where only one stakeholder was included for an outcome. The model was also tested for the number of children staying with their mothers, where the model assumes mothers have two children on average, it was tested for whether they only have one. Finally, the number of women avoiding violence was reduced to 20 based on research by Perreault (2014).	1 : 2.47
Financial proxies used to represent the value of outcomes	Two financial proxies were changed as part of the sensitivity test. First, the cost savings from one tenant avoiding homelessness was decreased from someone experiencing higher level costs associated with 'absolute homelessness' to lower level costs associated with 'imminent risk of homelessness'. Next, the financial proxy associated with women avoiding violence was increased from the cost of pain and suffering due to assault to the cost of pain and suffering due to sexual assault since women are more likely to experience sexual assault while living on the streets.	1 : 4.10
Discounts applied	An additional 10% discount was added to all estimated discounts, including drop off.	1 : 2.83
Timeframe of the analysis	A duration of outcomes from the continued existence of the capital asset of 20 years rather than 30 years, which was included in the model.	1 : 2.49

Except for the potential impact of assumptions made about financial proxies, the impact of assumptions generally suggests an approximate value over two and a half dollars for every dollar invested in purchasing and renovating Ellendale. Further exploration of financial valuation techniques is thus warranted. Overall, the sensitivity tests confirm the model and suggest robustness in the results garnered.



## Appendix H: Interview Questions for Participants at Ellendale

### SROI Focus Group (or Interview) Questions for Participants at Firth Residence

→ Interviewer reviews the research consent form with participants, ensures they understand the nature of the study and that their participation is entirely voluntary. The interviewer answers any questions regarding the research before beginning the interview.

1. What made you decide to enter the program at Firth Residence?
2. If you didn't come to Firth Residence, what do you think your situation would look like?  
(Interviewer prompt: Can you speculate about where you would be living if you were not living at Firth Residence? Can you speculate about what your life might look like?)
3. What difference has living at Firth Residence made in your life?  
(Interviewer prompt: What changes have you experienced? Do you have more social interaction? Do you save money each month?)
4. What difference has living at Firth Residence made in the life/lives of your child/children?  
(Interviewer prompt: Do they have more friends? Are they able to stay in your care and bond with you? Etc.)
5. Have there been any unexpected things about your participation at Firth Residence?  
(Interviewer prompt: These could be positive or negative things)
6. Is there anything that could be improved about your experience at Firth Residence?
7. For you, what is the most valuable thing about Firth Residence?
8. Anything else to share?

## Appendix I: Research Consent Form

**Date:**

**The Research Study:** Social Return on Investment (SROI) analysis of affordable housing

In **this research study** we will be studying:

- The economic and social impact of affordable housing developments that received financial support from BC Housing
- The impact on tenants who access affordable housing

**Your role** in this research will be:

- To let us know about your experience as a tenant in affordable housing
- This includes:
  - The positive things about being a tenant
  - The negative or unexpected things about being a tenant
  - What the alternative to being a tenant might have looked like for you

This research is not anticipated to involve any risks or discomfort for you. Your participation in the study is **completely voluntary** and you may choose to stop participating at any time. Your decision not to volunteer will not affect your tenancy in any way. It will not affect the ongoing relationship you may have with the researchers or staff. If you decide to stop participating in the study, all associated data collected will be immediately destroyed wherever possible.

All information from you will be **confidential** and your name will not appear in any report or publication of the research. Notes will be taken during the interview but no audio/video recordings will be made. Your data will be safely stored on an encrypted hard drive and only research staff will have access to this information. After the study your information will be kept for a maximum of one year before being destroyed (permanently deleted). Your information will not be used for any purpose other than the current research, including future research, without your consent.

If you have **questions** about the research in general or about your role in the study, please feel free to contact Anne Miller, lead consultant at Constellation Consulting Group. You can contact her either by telephone at 403-923-7611 or by e-mail at [anne@constellationconsulting.ca](mailto:anne@constellationconsulting.ca). For more information on Constellation Consulting Group, please visit [www.constellationconsulting.ca](http://www.constellationconsulting.ca).

For questions or concerns regarding the research purpose or uses please contact Deborah Kraus Research Manager at BC Housing: [dkraus@bchousing.org](mailto:dkraus@bchousing.org) or 604-439-4781.

I \_\_\_\_\_, consent to participate in the Research Study outlined above. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent to participate in the research.

---

Signature and date

## Appendix J: Financial Proxy Information

Financial proxy	Value	Source	Case Study Use
Difference in energy costs due to energy efficiency	\$240 per year (\$20 per month)	Greater Victoria Housing Society estimation	Dahli Place Pembroke Mews
Difference in rent between Dahli Place and typical rent in similar apartment/for similar income bracket	\$1,200 per year (\$100 per month)	Dahli Place Tenant survey (Q2)	Dahli Place
Difference in rent between Pembroke Mews and typical rent in similar apartment/for similar income bracket	\$1,200 per year (\$100 per month)	Canada Mortgage and Housing Corporation and Pembroke Mews rental information	Pembroke Mews
Difference in rent between Qualicum Park Village and typical rent in similar apartment	\$2,556 per year (\$213 per month- one-bedrooms only)	Canada Mortgage and Housing Corporation	Qualicum Park Village
Wellbeing valuation for move from poor quality to good quality housing (e.g. dampness, mould, etc.)	\$1,895 per year	Frontier Economics Europe Ltd. (2014). Page 66	Dahli Place Pembroke Mews Qualicum Park Village Ellendale
Revealed preference valuation: Cost of moving (transience, instability)	\$112 per move (assuming 1 move per year)	Rental costs Uhaul.com website, retrieved on April 9, 2016 BC minimum wage, 2016	Dahli Place Pembroke Mews Qualicum Park Village
Revealed preference valuation: City of Victoria Recreational Pass	\$679 per year (\$56.60 per month)	City of Victoria website, retrieved April 10, 2016	Dahli Place Pembroke Mews
Revealed preference valuation: Qualicum Beach Ravensong Aquatic Centre 10x pass	\$651 per year (\$54.29 per month assuming 10x use in one month)	Telephone conversation with Ravensong Aquatic Centre May 12, 2016	Qualicum Park Village
Revealed preference valuation: Minimum cost to upgrade unit for accessibility	\$2,025 per upgrade	Home Advisory (2016) "2016 Wheelchair Ramp Construction Costs." Available online at: <a href="http://www.homeadvisor.com/cost/environmental-safety/build-a-disability-ramp/#">http://www.homeadvisor.com/cost/environmental-safety/build-a-disability-ramp/#</a> (accessed May 16, 2016)	Qualicum Park Village

Difference between cost of transit in Victoria and cost of owning/maintaining a vehicle annually	\$7,808 per year	CAA Car Costs Calculator  Victoria Regional Transit System Website	Dahli Place Pembroke Mews
Time and carbon emission costs of car travel saved per year	\$1,222 per year	www.caa.ca (March 21, 2016); Environment Canada. (2011). National Inventory Report 1990-2009: Greenhouse Gas Sources and Sinks in Canada. Catalogue number: En81-4/1-2009E-PDF. Ottawa: Government of Canada.;	Dahli Place Pembroke Mews Qualicum Park Village
Revealed preference valuation: Cost of professional property management (on-site presence)	\$64,840	8% of gross monthly rents (www.tenantsbc.ca); Dahli Place budget (revenue from rents)	Dahli Place
Revealed preference valuation: Cost of professional property management (on-site presence)	\$16,930	8% of gross monthly rents (www.tenantsbc.ca); Pembroke Mews budget (revenue from rents)	Pembroke Mews
Median income in Victoria BC	\$84,500	Statistics Canada (http://www.statcan.gc.ca/tables-tableaux/sum-som/I01/cst01/famil107a-eng.htm)	Dahli Place Pembroke Mews
Median income in Qualicum Beach	\$57,456	Town of Qualicum Beach	Qualicum Park Village
Average income in construction industry in BC	\$52,900	BC Stats. Earnings and Employment Trends	Dahli Place Pembroke Mews Qualicum Park Village Ellendale
Dahli Place annual operational spend on maintenance/repair workers	\$67,479	Dahli Place annual budget line: labour/staff, service contracts, office/building staff	Dahli Place
Pembroke Mews annual operational spend on maintenance/repair workers	\$24,809	Pembroke Mews annual budget line: labour/staff, service contracts, office/building staff	Pembroke Mews

Qualicum Park Village annual operational spend on property manager/maintenance/repair worker	\$16,680	Qualicum Park Village annual budget line: labour/staff, service contracts, office/building staff	Qualicum Park Village
Estimated amount returning to government in taxes, permit fees during construction of Qualicum Park Village	\$190,975	Qualicum Park Village construction budget	Qualicum Park Village
Estimated amount returning to government in taxes, permit fees during construction of Ellendale 10 new units	\$3,500	Ellendale construction budget	Ellendale
Estimated amount returning to government in taxes, permit fees during construction of Dahli Place	\$562,360	Dahli Place construction budget	Dahli Place
Property taxes paid by Dahli Place annually	\$74,194	Dahli Place annual operational budget	Dahli Place
Property taxes paid by Pembroke Mews annually	\$25	Pembroke Mews annual operational budget	Pembroke Mews
Cost of services (health, justice) for the 'at imminent risk of homelessness' population	\$41,855	Patterson, <i>et. al.</i> (2008) table 26, page 93.	Dahli Place Pembroke Mews Qualicum Park Village
Cost of services (health, justice) for the absolute homelessness population	\$62,473	Patterson, <i>et. al.</i> , (2008) table 22, page 91.	Ellendale
Cost of health-related issues for seniors living in low quality housing who are exposed to excess cold	\$15,291	Frontier Economics Europe Ltd. (2014). Page 60	Qualicum Park Village
Cost of reduced demand for health services for 'heavy users' and disabled populations due to affordable housing	\$605	Kraatz, J., Mitchell, J., Matan, A. & Newman, P. (2015). Page 30.	Qualicum Park Village
Value of basic needs support provided	\$885	Miller, A., & Robertson, S. (2014).	Ellendale
Personal cost of supporting an addiction	\$15,180	DeReviere, L. (2006). Page 383.	Ellendale
Cost of pain and suffering due to assault (personal costs)	\$10,844	SROI Canada Financial Proxy database (J22)	Ellendale
Revealed preference valuation: Counselling Therapy - Couple/Family Session	\$2,160 per year (\$180 per session)	SROI Canada Financial Proxy Database (SS14)	Ellendale

Cost of child abuse to survivors	\$3,177 per year	SROI Canada Financial Proxy Database (PC17)	Ellendale
Cost of exiting sexual exploitation (program cost)	\$40,096 per year	Deriviere, L. (2005). Page 206.	Ellendale
Cost of substance abuse per person (health cost, justice cost, gov't spending on research and prevention, lost productivity)	\$61,869 per year	SROI Canada Financial Proxy Database (PC08)	Ellendale
Government cost of criminal court case	\$1,603 per case	SROI Canada Financial Proxy Database (J19)	Ellendale
Cost of child born with Fetal Alcohol Spectrum Disorder (FASD)	\$17,811 per year	SROI Canada Financial Proxy Database (H39)	Ellendale
Average annual cost of maintaining a child in foster care or formal kinship care with regular visits by child protection worker	\$26,880	Zhang, T., Hoddenbagh, J. McDonald, S., & Scrim, K. (2009)	Ellendale

## Appendix K: Operational Cost SROI Analysis Models

The current study has investigated the value of affordable housing from a capital investment perspective, exploring the social and economic value that is created when investment supports the development, redevelopment, or purchasing of affordable housing capital assets. The study has considered the immediate and lasting impact that affordable housing assets create in communities for tenants, local economies, and governments.

While there is very little research on the social value of affordable housing, researchers in Australia and Scotland have begun to produce SROI studies of affordable housing. The social returns from these studies have been between \$3 and \$6 for every dollar invested, however these studies examine investment in affordable housing in a different way than the current study.<sup>75</sup> Rather than comparing the value created by affordable housing to the total capital cost, these studies compare the value created to the ongoing operational costs of affordable housing.

This pattern is also true for SROI analyses of supportive housing programs similar to the Ellendale program. Recent studies examining the value created by residential programming that supports women in exiting homelessness (sometimes involving addictions treatment) look only at operational costs of the programs, without consideration of the capital costs of facilities. The social returns from these studies have been between \$2 and \$10 for every dollar invested.<sup>76</sup>

If the SROI models established in the current research are revised to align with an annual operational-cost model, higher SROI ratios are revealed across the case studies. The revision of the models includes changing inputs in the model from total capital costs of the housing to inputs including only this year's operational costs. Changing the investment included in the model to an annual investment then means outcomes should be considered within the same timeframe, with consideration of whether the outcomes achieved this year may last into the future (e.g. if a woman reduces her substance use while at Ellendale, she may continue to avoid substance use after leaving Ellendale). If capital costs are not considered, direct outcomes from the capital investment (e.g. construction jobs created) should be removed from the models. The results of changing the models in this way reveal:

	Dahli Place	Pembroke Mews	Qualicum Park Village	Ellendale
<b>Total capital cost SROI ratio</b>	1 : 1.96	1 : 2.37	1 : 2.18	1 : 3.22
<b>Annual operational cost SROI ratio</b>	1 : 3.88	1 : 5.79	1 : 5.94	1 : 8.69

The recalculated results align with current research conducted in the same manner. They also highlight the significant ongoing social value created by operating affordable housing developments, particularly housing that is paired with supportive services for vulnerable populations. While this approach allows for a different perspective on social value, it potentially misses a significant aspect of BC Housing's approach to investment: the development of physical capital assets.

<sup>75</sup> See: Victorian Women's Housing Association (VWHA) (2010); Munro, C. (2012, April 24); Ravi, A. & Reinhardt, C. (2011).

<sup>76</sup> See: MacKinnon, L., & Alolo, S. (2015); Miller, A., & Robertson, S. (2014); Robertson, S., & Miller, A. (2013); Victorian Women's Housing Association (VWHA) (2010); SiMPACT Strategy Group, (2011).