

# Rethinking Social Housing

EFFECTIVE, EFFICIENT, EQUITABLE



Sustainable  
**Built Environment**  
National Research Centre



## Acknowledgements

This research has been developed with funding and support provided by Australia's Sustainable Built Environment National Research Centre (SBEnc) and its partners.

Core Members of SBEnc include Aurecon, Curtin University, Government of Western Australia, Griffith University, John Holland, New South Wales Roads and Maritime Services, Queensland Government, and Swinburne University of Technology.

We also acknowledge the funding and support of our project partner, the National Affordable Housing Consortium (NAHC).

The contribution of our Project Steering Group is of vital importance to our research.

The input of the following people for specific aspects of this research is also acknowledged:

**Dr Anne Roiko**

Assoc. Professor, School of Medicine, Griffith University

**Dr Eduardo Roco**

Professor, Griffith Business School

**Dr Benjamin Liu**

Senior Lecturer, Griffith Business School



The Sustainable Built Environment National Research Centre and its predecessor, the Cooperative Research Centre for Construction Innovation, have been committed to leading the Australian property, design, construction and asset management industry in collaboration and innovation since 2001.

The Sustainable Built Environment National Research Centre (SBEnc) project: Rethinking Social Housing: Effective, Efficient, Equitable is developing the E6 Strategic Evaluation Framework for social housing delivery that can be used by policy makers to help determine the most cost-effective program delivery options. This seed project will investigate the housing and tenant outcomes of different delivery mechanisms, as well as indirect non-housing outcomes that arise from different mechanisms. This will be explored through the lens of productivity, in terms of an array of benefits including tenant, macro-economic, fiscal and non-economic perspectives. This is a broad-based approach with a focus on practical

outcomes which can potentially contribute to outcomes-based contracts against which performance can be effectively validated. Further information about the project can be found at [www.sbenrc.com.au](http://www.sbenrc.com.au).

We are dedicated to disseminating practical research outcomes to our industry, to improve business practice and enhance the competitiveness of our industry. Developing applied technology and management solutions, and sharing useful industry knowledge is what our Centre is all about.

We look forward to your using the results of this applied research and working together, transforming our industry through enhanced business practices, safety and innovation.

**Dr Keith Hampson**  
Chief Executive Officer  
Sustainable Built Environment  
National Research Centre







Why do we need a house? It beats sleeping in the street. Yes, but it also means we are healthier so we need less hospital and medical care; it means we work better and can contribute to the economy, and our family and community life is likely to be much improved.

But how much is social housing worth? It's obviously more than shelter, but how much? This project, Rethinking Social Housing, aims to identify and count the benefits, with a particular focus on determining the productivity benefits to individuals and the broader community from the provision of secure housing. It starts this by mapping all the benefits through the development of a Framework that covers the benefits to tenants, to the broader economy, to governments through extra revenues, and to the environment and community (see below).

In the past, social housing provision has been seen as just an ethical issue, it's the right thing to provide as much as possible. But why not be ethical and show the productivity advantages at the same time? Especially if it makes the case more persuasively.

The **E6 Framework**<sup>1</sup>, which has been developed by this project, is responding to industry needs and requirements.

The long term goal of the project is to develop a national set of indicators based on the framework that aims to measure the broader impact of social housing and, by so doing, substantiate the case for greater investment.

The first stage of the research has been to think through how to measure these benefits. The next step, in the Valuing Social Housing extension project, is to test this in three case studies (in Western Australia, Queensland and New South Wales).

A key challenge for this research is to find indicators, such as hospital visits, criminal activity, incarcerations, poor educational achievement, unemployment, underemployment, anti-social behaviour, and substance abuse, at a household or individual level, and then relate these to relevant housing characteristics. Does the lack of housing contribute to these and how much?

---

<sup>1</sup> **E6 Framework**: Efficient, effective, equitable, environment, economy and evaluation.



This research seeks to provide a broad-based rationale for social housing investment and assist governments to evaluate various forms of housing assistance. For many people, providing more social housing is obvious; but this research will show why it's good for individual and national productivity.



## This Project has Delivered

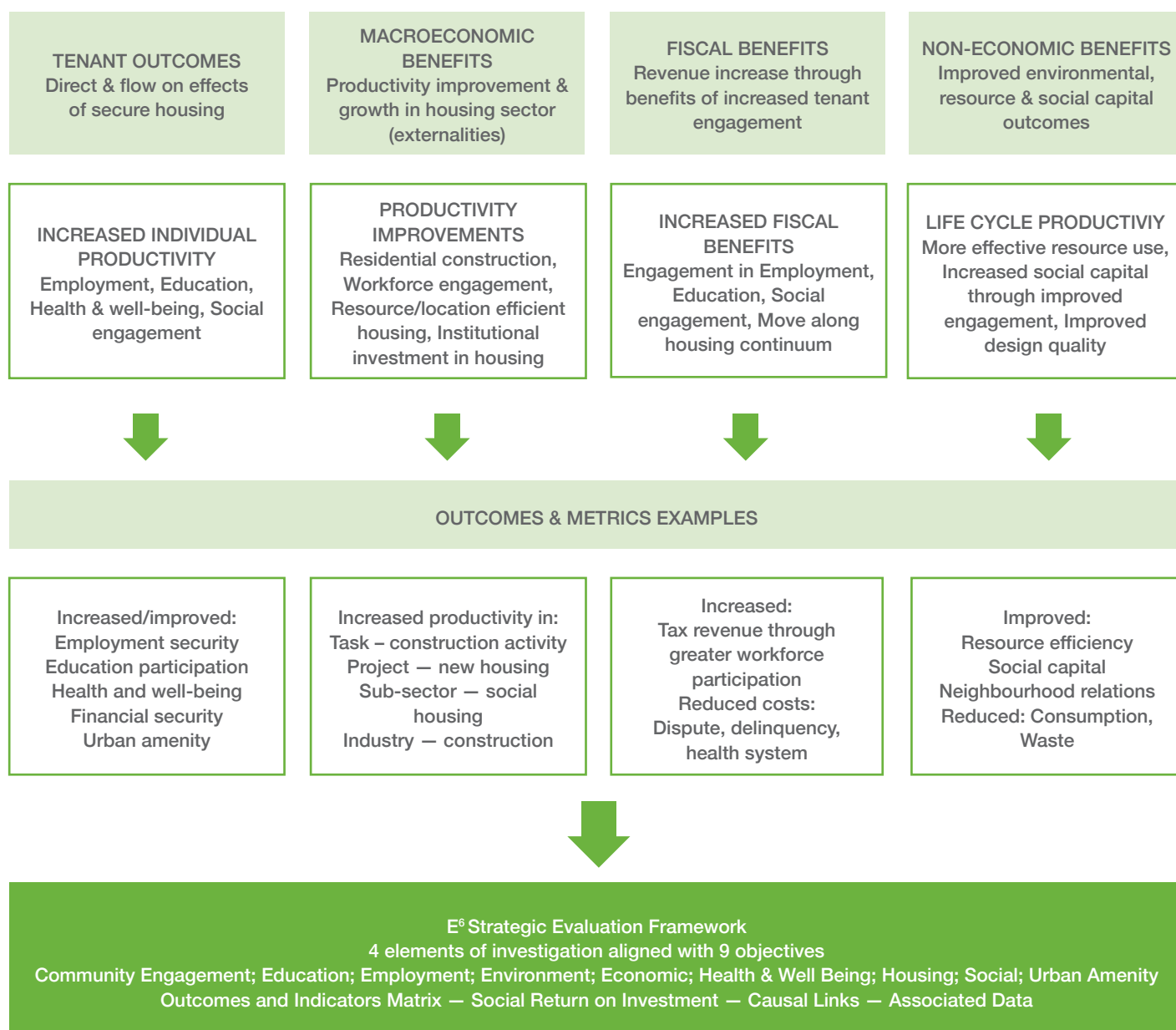
- The **E6 Strategic Framework** – exploring the benefits and costs of social housing through the four lenses of the tenant; macro-economic costs and benefits, fiscal perspective and non-economic focus (environmental and social capital)
- **Outcomes and Indicators Matrix** – drawing on both academic and industry literature, the project team has developed a comprehensive set of outcomes and over 180 indicators across the **NINE DOMAINS of community, education, employment, environment, economy, health and well-being, housing, social and urban amenity**
- A **methodology for attribution** which aims to provide robust links between indicators and outcomes, drawing on the long tradition of health research
- A **methodology to guide return on investment (ROI) apportionment** across these indicators
- A **pathway to further research** developed in consultation with project partners to consolidate findings of this project

## The **E6 Framework** comprises four key elements:

Outcomes & Indicators Matrix	<ul style="list-style-type: none"> <li>• for each of the 9 objectives: community engagement; education; employment; environment; economic; health &amp; well-being; housing; social; urban amenity</li> </ul>
Associations/Causal links analysis	<ul style="list-style-type: none"> <li>• establish methodology</li> <li>• identify existing verified links</li> <li>• perform gap analysis</li> <li>• future expert panel to establish associations and/or causal links</li> </ul>
ROI Allocations	<ul style="list-style-type: none"> <li>• social and economic</li> <li>• housing and non-housing</li> <li>• using Social Return on Investment, Social Cost Benefit Analysis and Well-being Valuation Analysis initially as basis for gap analysis</li> </ul>
Data Sources	<ul style="list-style-type: none"> <li>• identify existing secondary sources</li> <li>• perform gap analysis</li> <li>• identify future primary data gathering opportunities</li> </ul>



The **E6 Framework** is innovative in that it links analysis to productivity, at several levels, including tenant outcomes, macro-economic and fiscal outcomes, and in terms of resource use and environmental benefits.





# Outcomes and Indicators

The **Outcomes and Indicators Matrix** is the result of an extensive literature review over a twelve month period in which the researchers have drawn together previously used indicators from different disciplines that have links with social housing.

The indicators have been sorted and placed into nine separate domains: community, education, employment, environment, economy, health and well-being, housing, social and urban amenity.

As part of identifying these indicators and developing the matrix, this research investigated the broad objectives of social housing provision. A key aim of this matrix is to provide both government agencies and community housing providers with the ability to measure outcomes and better articulate the broader community value of providing housing security to all.

The domains, outcomes and indicators have been compiled in a cascade utilising the Global Reporting Initiative (2013)<sup>2</sup>. This has been done to provide universality to the indicators, which intersect various policy and provision domains and to potentially enable them to be more readily aligned with existing organisational reporting.

---

<sup>2</sup> Global Reporting Initiative (GRI). (2013). G4 reporting guidelines. Amsterdam, The Netherlands: GRI.





# The Data

These domains, outcomes and indicators sit within the broader context of social housing delivery in Australia. This context includes other indicator sets used for specific performance evaluation purposes and in conjunction with other statistical reports and national data sets. Other statistical information (both national and state-based) is required to assist interpretation of the indicators.

Data needs to be gathered from several sources, dependent on resources and time (due to the longitudinal nature of the data required), including existing data sets as outlined to the right.

Other Commonwealth, State and Local Government data exists which will also be drawn upon, as will that from key overseas sources.

SOURCE	EXPLANATION
Household, Income and Labour Dynamics in Australia (HILDA) Survey	To support research questions falling within three broad areas of income dynamics, labour market dynamics and family dynamics
National Social Housing Survey (NSHS)	Includes tenant satisfaction metrics
Australian Bureau of Statistics (ABS) data	Australian Census of Population and Housing; Survey of Income and Housing Costs; National Health Survey; Rental Investors Survey; Disability, Aging and Carers Survey; Mental Health and Wellbeing of Adults survey; Time Series profile (TSP) DatePack; Survey of Housing Occupancy and Costs
Australian Institute of Housing and Wellbeing (AIHW)	Housing assistance in Australia 2011, 2012 & 2014. For example, this provides relevant demographic data, almost 40% of social housing households have a person with a disability, age and sex distribution; National Social Housing Survey - A summary of national results 2012
Community Housing and Infrastructure Needs Survey (CHINS)	Relates to Indigenous Community Housing not Community Housing, in general
The Australian Urban Research Infrastructure Network (AURIN) Portal	Browse for metadata for all the datasets available in the AURIN Portal — covers most aspects of urban environments in Australia, from health and well-being, to economic metrics and environmental indicators
Developmental Pathways Project – Telethon Kids Institute	Investigates pathways to health and wellbeing, education, disability, child abuse and neglect, and juvenile delinquency outcomes among Western Australian children and youth



# Attribution: Establishing Associates and/or Causality

A key challenge for this research is to be able to correlate non-housing indicators and data (e.g. at a neighbourhood, household or individual level) to housing (e.g. types, styles, tenures, locations and conditions), by way of direct associations or, if possible, causal connections.

We acknowledge that the relationship between housing and the various aspects of productivity we are considering are complex, multidirectional and mediated by a host of intervening factors. We thus sought a strong and logical hypothesis grounded in previous research on the nature of connections between housing and various knock-on effects plausibly related to housing that generate costs or benefits for taxpayers.

Strong links between safe and secure housing, and other aspects of a person's life, including health and well-being, and the ability to engage in education, the workforce and the community, are acknowledged and evident from many perspectives.

To this end we need to develop a rigorous and defensible method. In addition to drawing on the existing governmental perspective (from the UN to national and state-based legislation) we propose to draw upon literature from the ecosystems and health arena. The work of the Housing Associations' Charitable Trust (HACT)<sup>3</sup> in the UK, and the National Housing Conference<sup>4</sup> in the US, will also inform our continuing research.

## Adapting learnings from ecosystems and health-based models of causality

*Integrated environmental health impact assessment* is a concept which aims to establish 'a means of assessing the extent, time trends or spatial distribution of health effects related to environmental exposures, and health-related impacts of policies that affect the environment, in ways that take account of the complexities, interdependencies and uncertainties of the real world'<sup>5</sup>. This is aligned with the approach that we are seeking to achieve for social housing policy-making and delivery.

The Butterfly Model of Health developed in the late 1990s built on several previous models and reflects 'a 30-year trend to identify the direct relationships between human health and the so-called "determinants of health" defined as factors, whether they be events, characteristics, or other definable entities, that brings about change in a health condition'<sup>6</sup>.

---

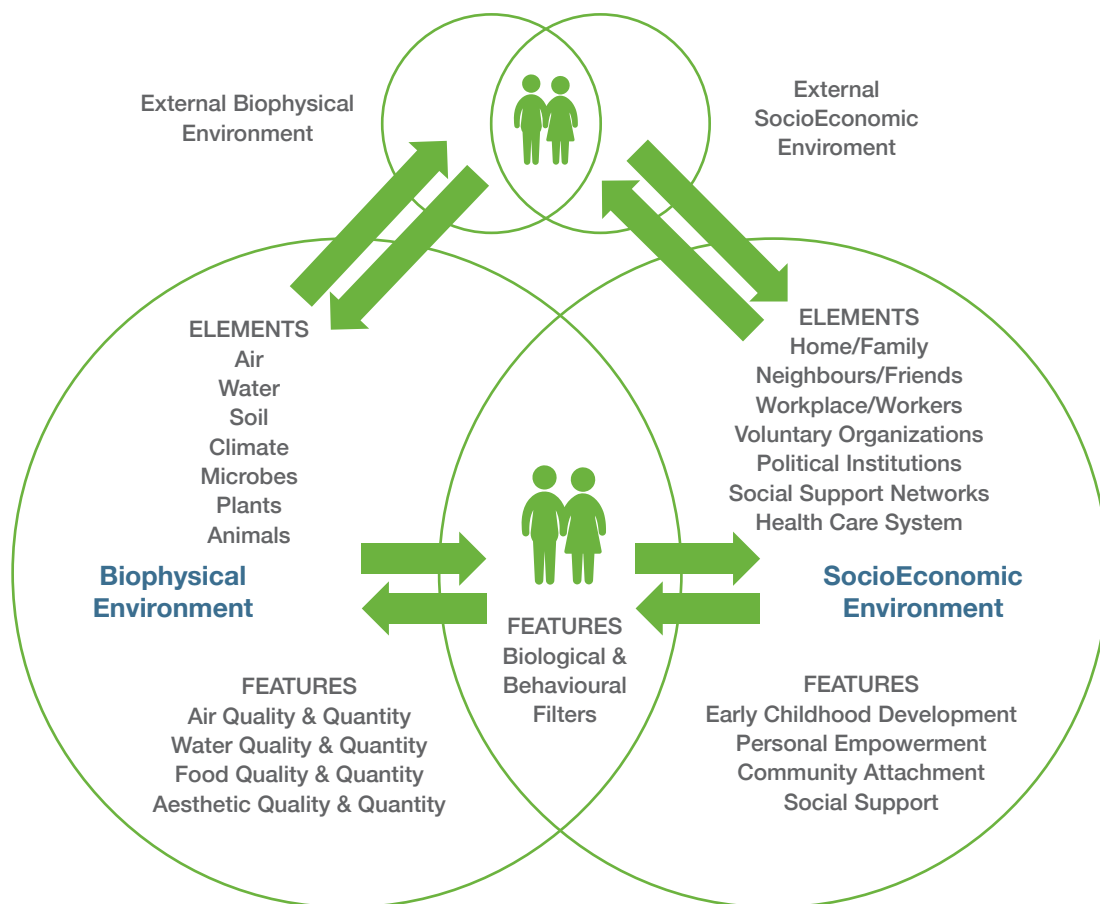
<sup>3</sup> <http://www.hact.org.uk/>

<sup>4</sup> <http://www.nhc.org/>

<sup>5</sup> Knol, A. B., Briggs, D. J., & Lebre, E. (2010). Assessment of complex environmental health problems: Framing the structures and structuring the frameworks. *Science of the Total Environment*, 408, 2785–2794.

<sup>6</sup> Van Leeuwen, J. A., Waltner-Toews, D., Abernathy, T., & Smit, B. (1999). Evolving models of human health toward an ecosystem context. *Ecosystem Health*, 5(6), 204-219.





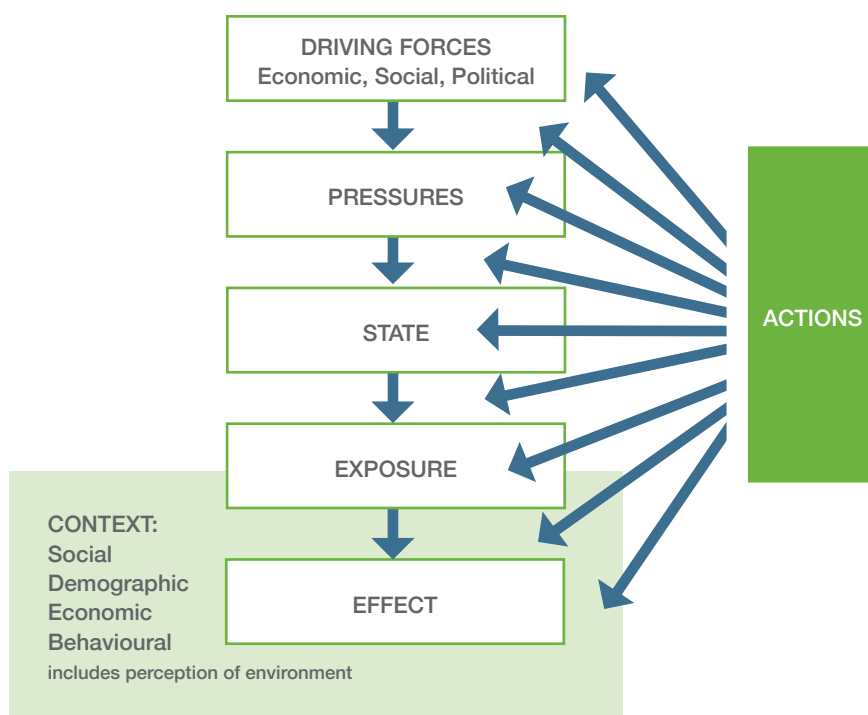
Butterfly model of health, modified from Van Leeuwen, J. A., Waltner-Toews, D., Abernathy, T., & Smit, B. (1999). Evolving models of human health toward an ecosystem context. *Ecosystem Health*, 5(6), 204-219).

A considerable body of knowledge thus exists, which can be drawn upon, which acknowledges the links between social, environmental and health conditions. A key model for building these causal relationships is the DPSIR framework developed for the World Health Organisation in the 1990s:

- **Driving** forces and
- The resulting environment **Pressures** on
- The **State** of the environment, and
- **Impacts** resulting from changes in environment
- The societal **Response** to these changes in the environment

DPSEEA Model, modified from Morris et al. (2006) (as cited in The Scottish Government<sup>7</sup>, 2008)

<sup>7</sup> The Scottish Government. (2008). *Good Places, Better Health: A new approach to environment and health in Scotland — Implementation Plan*. Edinburgh, Scotland: The Scottish Government.





# Return on Investment

Identifying the ROI associated with social housing is driven by the need to better articulate the social and economic returns to the community of investment in social housing. To effectively do this, we are developing outcomes and indicators that go beyond the traditional specific housing indicators to embrace externalities not typically measured in relation to the investment in social housing itself.

This is driven by our conceptual framework in which the broader productivity benefits of providing secure housing are being identified and potentially measured. This is important in the current context of social impact measurement being pursued by governments across Australia and internationally. Dunn (2014)<sup>7</sup> defines social impact investing as investing in efforts that not only provide a return on investment, but also target specific social needs. Such measurement is also important in order to attract institutional investment to the delivery of social housing through establishing the expectation (supported by evidence) that you'll get your money back and potentially an income stream from the investment (Knowles in Dunn 2014).

Three methods for measuring outcomes and potentially determining return on investment have been identified by the research team for further research in the context of the *E6 Framework*:

- Social Return on Investment (SROI)
- Social Cost Benefit Analysis (SCBA)
- Well-being Valuation Analysis (WVA).

Professor Eduardo Roco and Dr Benjamin Liu at Griffith University are currently undertaking parallel research, Financing Social Housing, as an additional (separately funded) component to the Rethinking Social Housing project. In this research they are seeking to develop a Real Options Model for the Delivery of Social Housing. This model would complement the development of a systems dynamic model which is proposed as a part of the ARC Linkage bid currently under development, and submitted in November 2015.

---

<sup>7</sup> Dunn, J. (2014). Social Impact Investing - Good returns from new sector, Available: <http://business.nab.com.au/afr-special-report-social-impact-investing-8140/> [Accessed 20 April 2015].



	SOCIAL RETURN ON INVESTMENT (SROI)	SOCIAL COST BENEFIT ANALYSIS (SCBA)	WELL-BEING VALUATION ANALYSIS (WVA)
<b>Aim</b>	Providing ratio of inputs to impacts. Calculating \$ value of social impact compared to cost of benefits	Attaching a monetary value to non-market goods by looking at the impact that these things have on utility	Measuring the social value of housing associations in the UK. Developed in response to the perceived lack of appropriate tools for quantifying social value on a large scale
<b>Usage</b>	Assess performance against social impact	How to go about valuing social costs and benefits for which there is no market price	How to financially value the social impact results of social housing association's and arts organisation's community investment activities
<b>How to implement</b>	Accredited practitioners	Various market-based approaches: Stated preference; revealed preference; subjective well-being approach; and direct assessment	Draws on UK databases: British Household Panel Survey; Understanding Society; Crime Survey for England and Wales; & Taking Part. Understanding causal relationships is a key part
<b>Resources</b>	<a href="http://www.thesroinetwork.org/sroi-analysis/the-sroi-guide">http://www.thesroinetwork.org/sroi-analysis/the-sroi-guide</a>	The Green Book – especially Annex 2 Valuing Non-Market Impacts <a href="https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government">https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government</a>	Survey templates – (Trotter, Vine et al. 2014)  Calculation Tool – <a href="http://www.hact.org.uk/value-calculator">http://www.hact.org.uk/value-calculator</a>
<b>Logic</b>	Inputs are applied to service activities to produce outputs, from which outcomes are derived, which result in impacts	Can impacts be measured and quantified? Can prices be determined from the market?  If not, then determine willingness to pay or willingness to accept	Self-reported well-being – estimates impact of a goods/service on subjective well-being – then uses this to calculate the exact amount of money that would produce equivalent impact
<b>Examples</b>	<i>Australia:</i> Food Connect Brisbane, Living in Construction and others <a href="http://socialventures.com.au/assets/SROI-Lessons-learned-in-Australia.pdf">http://socialventures.com.au/assets/SROI-Lessons-learned-in-Australia.pdf</a>  See working example p.8 SVAC 2012 <i>International:</i> <a href="http://www.thesroinetwork.org/publications/case-studies">http://www.thesroinetwork.org/publications/case-studies</a>	UK Department for Transport – valuing time in the appraisal of road schemes  UK DWP – economic and social impacts of work into cost-benefit analysis of employment programmes: <a href="https://www.gov.uk/government/publications/the-dwp-social-cost-benefit-analysis-framework-wp86">https://www.gov.uk/government/publications/the-dwp-social-cost-benefit-analysis-framework-wp86</a>	Impact of adult learning for decision making at local and national level - Fujiwara 2012 <a href="http://www.siaassociation.org/topics/well-being-valuation-wv/">http://www.siaassociation.org/topics/well-being-valuation-wv/</a>  Arts for all Queenslanders Strategy: <a href="http://www.arts.qld.gov.au/blog/index.php/measuring-social-value-in-the-arts/">http://www.arts.qld.gov.au/blog/index.php/measuring-social-value-in-the-arts/</a>



# Conclusions and Next Steps

This SBEnrc research project has provided those working in this sector with a broad-ranging strategic framework for considering the costs and benefits of providing social housing.

- Through the ***E6 Strategic Framework*** and the ***Outcomes and Indicators Matrix*** a first step to developing an operational framework for use by agencies involved in the delivery of social housing in Australia has been taken.
- Through ***identifying methodologies*** for establishing attribution and the return on investment for these indicators the groundwork has been laid to further consolidate this approach.
- Through ***attracting further funding, project partners and affiliates*** the research team will move to consolidate this framework so that the tangible benefits to the Australian community for providing housing to those unable to do so themselves can be determined. This will be further explored through pilot case studies to be undertaken in 2016 in Western Australia, Queensland and New South Wales.

We have developed a state-of-the-art approach to assessing the contribution of social housing to individual and collective well-being, productivity, the economy more generally, and the environment. Now we begin the hard work of obtaining the data, making and weighing the assessments, and drawing out the lessons for policy and practice.

## Find out more:

- See our YouTube video – **Rethinking Social Housing**
- Follow us on Twitter – **RethinkSocialHousing@DrJAKraatz**
- Go to our project webpage <http://www.sbenrc.com.au/research-programs/1-31-rethinking-social-housing-effective-efficient-equitable-e3/>





# Project Team

## Research Team Members

**Dr Judy A Kraatz**, Senior Research Fellow, Urban Research Program  
Griffith University (Project Leader)

**Dr Annie Matan**, Lecturer, Curtin University Sustainability Policy (CUSP)  
Institute, Curtin University (Deputy Project Leader)

**Johanna Mitchell**, PhD Candidate, Curtin University Sustainability Policy  
(CUSP) Institute, Curtin University

**Professor Peter Newman**, Curtin University Sustainability Policy (CUSP)  
Institute, Curtin University (Program Leader)

## Project Steering Group

**Owen Donald**, Independent Chairperson

**Sarah Mewett**, Manager Research and Analytics, WA Housing Authority

**Alix Rhodes**, Manager Housing Policy, WA Housing Authority

**Mike Myers**, CEO, National Affordable Housing Consortium

**Lyn Brun**, Manager Strategic Projects, Access Housing Australia

**Andre Brits**, Portfolio Leader Housing, Logan City

**Sonya Keep**, CEO, Common Ground Qld

**Tina Davey**, Ageing and Human Services Sector, KPMG Director Health

**Keith Hampson**, CEO, SBEnrc

**Sherif Mohamed**, Professor Civil Engineering, Griffith University

**George Earl**, Professor Sustainable Living Infrastructure, Griffith University

**Eddy Burke**, Policy Officer, Community Housing Federation of Australia

## For further information:

**Dr Judy A Kraatz**, Senior Research Fellow  
Urban Research Program, Griffith University  
[j.kraatz@griffith.edu.au](mailto:j.kraatz@griffith.edu.au)

**Dr Annie Matan**, Lecturer  
Curtin University Sustainability Policy (CUSP)  
Institute, Curtin University  
[anne.matan@curtin.edu.au](mailto:anne.matan@curtin.edu.au)

## Acronym List:

NAHC – National Affordable Housing Consortia

ROI – return on investment

SCBA – social cost benefit analysis

SROI – social return on investment

WVA – well-being valuation analysis

## Recommended citation:

Kraatz JA, Matan A, Mitchell J and Newman P, 2015. Rethinking Social Housing: Effective, Efficient, Equitable. Brisbane, Sustainable Built Environment National Research Centre (SBEnrc).



This research would not have been possible without the ongoing support of our industry, government and research partners:

---

### Core members



---

### Project members



---

### Project affiliates

