



Valuing Social Housing

Final Research Report

Attachment A – Domain Tables

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1. COMBINED TABLES

The following tables bring together details of the four dimensions of the **strategic evaluation framework** including: (i) outcomes and indicators; (ii) attribution; (iii) return on investment details; and (iv) data sources. The completeness of these tables is limited by available resources in the context of the current project. The intent has been to demonstrate the nature of the information and data available to guide users in developing a more complete listing based on selected outcomes and indicators.

NOTES

- a) Sources for this information (respectively): (i) the outcomes and indicators are those established from SBenrc Project 1.31 Rethinking Social Housing; (ii) & (iii) reviews of the literature; and (iv) discussions with project partners, Telethon Kids Institute (TKI) and an online scan.
- b) The outcomes and indicators provided are indicative only, as each organisation has typically developed their own. Ideally the social housing sector in Australia would negotiate and agree a master set of outcomes and indicators from which cohort and region-specific outcomes and indicators are derived. Priority outcomes and indicators for WA and NSW noted in relevant column e.g., (WA).
- c) These tables are to be read in conjunction with the additional reports available at the project website - <http://www.sbenrc.com.au/research-programs/1-41-valuing-social-housing/>
- d) Little of the literature referenced for the attribution analysis is specifically correlated with the aims of this current research. That referenced here however is done so due to its relevance to (i) social housing; and (b) links to the broader non-housing outcomes and indicators. Care must be taken with attribution due to the complex interplay of circumstances, as many of the authors cited in this document note.
- e) Return on Investment (ROI) - the values compiled in the following table are based on several credible sources, which also detail the methodology used to derive these values.
- f) ROI Element 1 SROI - includes some economic return via cost benefit analyses.
- g) ROI Element 3 Narratives - includes narratives from supported housing tenants.
- h) The data dimension is still being investigated, but currently identified datasets which can support this framework include:
 - Australian Bureau of Statistics (ABS) including: The Australian Census of Population and Housing; Survey of Income and Housing Costs; National Health Survey; Rental Investors Survey; Australian Housing Survey; Disability, Ageing and Carers Survey; Mental Health and Wellbeing of Adults Survey; Community Housing and Infrastructure Needs Survey; The Community Housing and Infrastructure Needs Survey (Chins); National Aboriginal and Torres Strait Islander Social Survey, 2014-15.
 - Agency datasets including various state and local government datasets and organisation and tenant data from community housing providers. These include those of the Western Australian Housing Authority (WAHA), Telethon Kids WA (TKI); Queensland Global; NSW Data Analytics Centre. Telethon Kids WA has linkages between datasets from Health; Corrective Services/Police/Attorney General; Education; Child Protection and Family Support; Geographical Data; Local Government and Communities Data; Housing; Disability; SA NT DataLink <https://www.santdatalink.org.au/>
 - Australian Institute of Health and Welfare (AIHW) including data on: ageing and aged care; alcohol and other drugs; broad array of health data; data standards; expenditure on health and welfare; functioning and disability; housing and homelessness; indigenous Australians; population health and risk factors; prisoner health and youth justice; workforce.
 - AIHW Aboriginal and Torres Strait Islander Health Performance Framework data including Tier 1 data on health status and outcomes and Tier 2 data on determinants of health. Tier 3 data on health system performance not reviewed.
 - Australian Urban Research Infrastructure Network (AURIN) - geolocated data aimed at 'urban researchers, policy analysts and decision makers' including 1661 datasets from 66 organisations (in 2016) <https://aurin.org.au>
 - Community Insight Australia (CIA) - enables heat maps of social indicators; map community services or programs; generates reports on the social profile of a community.
 - Household Income And Labour Dynamics In Australia Survey (HILDA) - broad social and economic longitudinal survey, with particular attention paid to family and household formation, income and work including data on: child care arrangements; housing; household spending and wealth; demographics; employment; education; health.
 - National Social Housing Survey (NSHS) - collects information on tenants and their social housing experiences including satisfaction with: services; amenities in the home; location of the home; tenant needs; perceived benefits from social housing; tenant and household characteristics e.g., education status, labour force participation, household composition.
 - Bankwest Curtin Economics Centre (BCEC).
 - WA Dept of Child protection and Family Support (DCPFS).
 - Indigenous Bank of Australia (IBA) - <http://www.iba.gov.au/home-ownership/>
- i) Productivity realm - this column links back to our Rethinking Social Housing conceptual framework which considered four the productivity realms of: individual/tenant (T); macroeconomic (M); fiscal (F); non-economic (N) such as social capital. The realms identified here are proposed for consideration and discussion.

COMMUNITY DOMAIN

Outcomes	Indicators	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narratives (incl. supported housing)	Indicative Data Examples	Product– ivity Realm
Indigenous Rights (WA)	Mobility between remote outstations, town camps and urban settings	<p>(Australian Institute of Health and Welfare (AIHW) 2015) - Measure 1.13 Aboriginal and Torres Strait Islander Australians have long sought health outcomes encompassing the physical, social, cultural and emotional elements of life. This includes the ability to live proudly and freely as Aboriginal and Torres Strait Islander Australians. Functioning is about the things people achieve or experience, consistent with their account of well-being. The conversion of capabilities into functioning is influenced by the values and personal features of individuals, families and communities and by the environment in which they live. Hence it is likely that different cultures will give greater or lesser priority to different aspects of functioning (OATSIH 2004).</p> <p>Measure 2.14 ‘Connection to family and community, land and sea, culture and identity has been identified as integral to health from an Aboriginal perspective (NAHSWP 1989). As stated by Anderson (1996, p.15)...Research in Victoria has found the role of Country in strengthening self-esteem, self-worth, pride, cultural and spiritual connection and positive states of wellbeing (Kingsley et al., 2013)’.</p>				<p>AIHW Aboriginal and Torres Strait Islander health performance framework 2014: data tables - Community Functioning 1.13 & Measure 2.14 Indigenous people with access to their traditional lands.</p> <p>(Alternative: AURIN – Social indicators for Indigenous Population).</p>	
Equitable opportunity for all community members (WA)	Use of local amenities	<p>(Kearns, Petticrew et al., 2008c) p.11; Link made with use of local amenities.</p> <p>(The Scottish Government, 2011a) p.18; Access to outdoors in home and neighbourhood – impact on mental wellbeing of child.</p> <p>(Bridge, Flatau et al., 2003) p.ii; By improving the physical, social and economic foundations of neighbourhoods that can be positive influences on education and training processes and outcomes.</p>				<p>Consider ABS socio-economic indices for areas (SEIFA e.g. disadvantage index) which is derived from many++ variables. 2011 data available online at suburb level & up. Lowest geographical level data are released is ~200-880 population level i.e. SA1.</p>	
– Community connectedness	Perception of belonging	(Australian Institute of Health and Welfare, 2014) p.20-21; Be able to continue living in this area; and feel part of the local community – perceived benefits of tenants.		p.14; £3,753 Feeling of belonging to neighbourhood; £1,747 Good neighbourhood - (Trotter, Vine et al. 2014).		<p>AURIN –Community Strength.</p> <p>Consider Australian Bureau of Statistics household with access to motor vehicles and population transiency i.e. proportion of population who moved house in last 5 years. NSHS – Proximity to facilities and services (Community and support services).</p>	T, NE

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		<p>(Australian Institute of Health and Welfare (AIHW) 2015) ‘Aboriginal and Torres Strait Islander Australians have long sought health outcomes encompassing the physical, social, cultural and emotional elements of life. This includes the ability to live proudly and freely as Aboriginal and Torres Strait Islander Australians. Functioning is about the things people achieve or experience, consistent with their account of wellbeing. The conversion of capabilities into functioning is influenced by the values and personal features of individuals, families and communities and by the environment in which they live. Hence it is likely that different cultures will give greater or lesser priority to different aspects of functioning’ (OATSIH, 2004).</p> <p>(Kearns, Petticrew et al., 2008c) p.27; Link made with sense of community and community cohesion (M). p.37; community cohesions (M).</p> <p>(Pawson, Milligan et al., 2015) p.54; Sense of community.</p> <p>(Bridge, Flatau et al., 2003) p. iv; There is some evidence that a sense of community or lack thereof, may be partly responsible for the crime problems commonly associated with some public housing estates.</p>				<p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 1.13 Community functioning.</p>	
	Active social network (WA)	<p>(Australian Bureau of Statistics (ABS), 2016) ‘The majority (82.6%) of Aboriginal and Torres Strait Islander people aged 15 years and over had face-to-face contact with family or friends at least once a week’.</p> <p>(Fujiwara, 2014) Socialising on most days of the week (R).</p> <p>(Kearns, Petticrew et al., 2008c) p.19; Link made with social networks(M).</p> <p>(The Scottish Government, 2011a) p.19; Neighbourhoods conducive to social interactions > parent’s mental well-being > child’s mental well-being.</p>		£3,000 value associated with being able to socialize and meet on most days (Fujiwara, 2013) p.35.		<p>ABS National Aboriginal and Torres Strait Islander Social Survey, 2014-15 http://www.abs.gov.au/ausstats/abs@.nsf/mf/4714.0</p> <p>NSHS – Proximity to facilities and services (Families and friends).</p> <p>NSHS – Self reported benefits gained by tenants living in social housing (feel part of the local community).</p>	T, NE

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	Access to social support	(Kearns, Petticrew et al., 2008c) p.19; Link made with social. (M)				NSHS – Proximity to services (Community and Support services).	T
– Culturally rich and vibrant communities (WA)	Actual participation in art and cultural activities					AURIN – LGA attended local arts and cultural event last 3 months (Melbourne only).	T, NE
	Opportunities to participate in sports and recreation activities	(The Scottish Government, 2011a) p.17; Space to play – impact on mental well-being for children.	£428 Participating in sport at least once per month (Fujiwara, 2013) p. 34.			-AURIN SA2 OECD Indicators: Volunteering 2011. - AURIN Socio-economic variables by Urban Centres & Localities (UCL) for Australia. - State based sport & recreation agencies. - State based local government community services.	T, NE
	Actual participation in sports and recreation activities	(The Scottish Government, 2011a) p.17; Space to play – impact on mental well-being for children.	£428 Participating in sport at least once per month (Fujiwara, 2013) p. 34.	£3,101 football; £1,670 keeping fit; £5,281 walking; £2,256 yoga or pilates; £3,052 dance; £4,179 frequent moderate exercise; £3,537 frequent mild exercise; £1,411 gardening; £1,515 hobbies (Trotter, Vine et al., 2014) p.15.	(Common Ground Queensland 2016) Rod’s Story – ‘Outside of the building I participate in a weekly meditation group and a community choir, both of which I thoroughly enjoy and contribute to my overall sense of wellbeing.’ (Churches of Christ Housing Services, 2016) p.30 ‘The outcome of the exhibition was the growth in confidence and pride, connections and new friendships, chances to serve and support others, and spaces to create and be purposeful together within the community’.	AURIN – LGA attended local arts and cultural event last 3 months (Melbourne only).	T, NE
	Youth and family support programs	Via ROI		£2,300 go to youth clubs (Trotter, Vine et al., 2014) p.14		(people have come through a specific support program).	T, NE
	Rates of discrimination					AURIN (indigenous only) - University of Canberra - National Centre for Social and Economic Modelling, (2011): SA2 Social Indicators for the Indigenous Population (Synthetic estimate) 2011.	T, NE
– Neighbourhood engagement	Numbers of issues, complaints and responses	(MacLennan, 2008) pp.50-51; Impact of neighbourhood. (Orr, Feins et al., 2003) p.35; A couple of		£3,555 No litter problems (Trotter, Vine et al., 2014) p.14.			

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(NSW)		residents had problems with landlords in private rentals, not dealing in timely fashion, or at all, with maintenance and safety issues (i.e., rodents and repairs). (p.67) Some residents complained about crime drugs and graffiti, especially at night, but said despite this, were way safer than where they had come from.					
	Rates of volunteering	Via ROI		£2,357 regular volunteering (Trotter, Vine et al., 2014) £11,800 cost associated with not being able to volunteer (on a frequent basis) (Fujiwara, 2013) p.32.		AURIN SA2 OECD Indicators: Volunteering 2011.	T, M, NE
	Event attendance	(MacLennan, 2008) p.60; The City of Toronto scores well on measures of connectivity: Toronto citizens are generally quite connected to their neighbourhoods and communities, which adds to their safety and security.				State based health and population surveys e.g., WA Dept of Health Population annual survey. Available on internet. Data available at large geographical areas only – social support – respondents asked how many groups/associations they belong to, including church, social groups, political and professional groups.	T, NE
	Informal contact with neighbours outside building - chatting in the street	Via ROI (Kearns, Petticrew et al., 2008c) p.19; Link made with neighbouring behaviours. (M)		£3,000 value associated with being able to socialize and meet on most days (Fujiwara, 2013) p.35.			T, NE
	Informal contact with neighbours outside of building - having coffee or like	Via ROI (Kearns, Petticrew et al., 2008c) p.19; Link made with neighbouring behaviours. (M)		£3,848 talks to neighbours regularly (Trotter, Vine et al., 2014) p.14.			T, NE
	Number of acquaintances						T, NE
– Resident perception of neighbourhood disorder (WA)	People drinking in public spaces in the neighbourhood	(Fauth, Leventhal et al., 2004) p.2278; Behaviours around alcohol, such as drinking in public, are more likely to be acceptable in low income neighbourhoods. (Parsell, Petersen et al., 2015) p.73, etc; One issue with Common Ground is residents’ unhappiness with drunken or drugged behaviour in the foyer or smoking outside the building, due to the single entry of the building, necessitating tenants coming into contact with undesirable tenants (i.e., drunk) despite the concierge on hand to manage behaviour.		£6,403 no problem with anti-social behaviour (Trotter, Vine et al., 2014) p.14.		Information in the housing provider’s complaints and disruptive behaviour records. (For privacy reasons these records are not searchable). Police records	T, NE

COMMUNITY DOMAIN

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	People bothering others or insulting others as they move around the neighbourhood	Via ROI		£5,760 No problems with teenagers hanging around (Trotter, Vine et al., 2014) p.14. Neighbour noise £1,068 (Fujiwara, 2013) p.25.		Information in the housing provider’s complaints and disruptive behaviour records. (For privacy reasons these records are not searchable). Police records	T, ME, F, NE
	Run down, unrepaired buildings	(MacLennan, 2008) p.58; Results of these studies show that while socio-economic disadvantage makes the largest relative contribution to the explanation of both violent and property crime rates, disadvantage is followed in importance by the relative contribution of the condition of housing in the neighbourhood, indicated by the proportion of dwellings in need of major repairs. As the proportion of dwellings in need of major repair increases, so do the violence and property crime rates net of the other variables in the model.				NSHS – Satisfaction with day-to-day and emergency maintenance services. NSHS – dwelling standard	M, F, NE
	People using drugs	(MacLennan, 2008) p.51; Child outcomes in three areas— lower conduct disorder scores, lower hyperactivity scores, and lower emotional disorder scores— neighbourhood problems (garbage and drugs) raised these scores.				Police records. Information in the housing provider’s complaints and disruptive behaviour records. (For privacy reasons these records are not searchable).	M, F, NE
	Avoided costs of reinstatement (vandalism reduction)	Via ROI		£4,072 no problem with vandalism / graffiti (Trotter, Vine et al., 2014) p.14. Vandalism £436 (Fujiwara, 2013) p.25.		Housing provider records Local authority sources	F
	Graffiti levels	Via ROI		See above		Housing provider records Local authority source NSHS – Satisfaction with day-to-day and emergency maintenance services. NSHS – dwelling standard	M, F, NE

ECONOMY DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product-ivity Realm
– Increases in property values and associated tax income	Property values					State and Territory-based Housing Authority databases. State agencies (e.g., Treasury, planning). Local governments (rates).	
– Return on investment (WA)	Benefit cost ratio	<p>(Flatau, Martin et al.. 2006) p.26/7, etc.; state that cost benefit analysis can be used to compare the dollar ratio of a given homelessness program with others and/or the no intervention case; ‘...cost-effectiveness ratio gives the incremental costs of providing the program in question per unit of incremental benefit.’ They say however, that using CBA is contested and could lead to ethical and practical issues, and it might be better just to use a narrower suite of economic evaluation tools. p.28; CBA has been used to evaluate the benefits of providing housing to people with severe mental illness, reporting a number of findings that supported housing for such people has a number of economic benefits over homelessness, including reduction in chronic illness, hospital visits, and reduced need for service. H</p> <p>(Berry, Chamberlain et al., 2003) p. 12; total cost of youth homelessness (NPV) as 574mill, and net benefit of successful interventions as 474 (benefit cost >5). p.51; Benefit cost of public housing ranges from 0.75 to 0.68.</p> <p>(Parsell, Petersen et al., 2015) p.4; ‘Compared to the costs to the Queensland Government of a person being chronically homeless for twelve months, a twelve month tenancy at Brisbane Common Ground achieves a tenant reducing their annual use of Queensland Government services – including the cost of providing Brisbane Common Ground – by \$13,100.’</p> <p>p.28 etc. Cite multiple studies showing the cost benefit of providing supported housing, i.e. Culhane et al., 2002, showing reduced hospital and shelter use, and mail time; and for those with severe mental illness, reduction in service utilisation for crisis emergency services. p.29; Details research on Australian examples.</p>					
	Direct financial						

ECONOMY DOMAIN

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	Benefits						
	Earned rate of return					State and Territory-based Housing Authority databases NB. The authorities charge less rent than market rent, so data would be meaningless.	
	Net present value						
– Business agility	Flexibility/optionality in the project						
	Increased business flexibility						
– Economic stimulation	Local economic impact	<p>(Carter and Polevychok, 2004) p.vi; Affordable housing frees up income for other purposes, benefitting local economies. (p.9) ‘In Toronto, families of two who use food banks spend an average of 67 percent of their income on rent; families of four spend 70 percent. These families had about \$3.65 a day per person left to spend on clothing, food, transportation, personal care and other expenses (Jacobs, 2004).’ Low mortgage rates (and rent) result in increased disposable income.</p> <p>(Canada Mortgage and Housing Corporation (CMHC), 2011) p.39; Homeowners participate more in social and political affairs if they have a local financial stake. p.5; Reduction in local home foreclosure rates.</p> <p>(Australian Institute of Health and Welfare (AIHW), 2015) ‘There is strong evidence from Australia and other developed countries that low socio-economic status is associated with poor health (Turrell et al., 2000; Marmot et al., 2010). People with a lower socio-economic status bear a significantly higher burden of disease (Begg et al., 2007). The level of income inequality within a society has been identified as a determinant of differential health outcomes’ (Wolfson et al., 1999).</p>				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.08 Income	
	Indirect economic benefits						
	Creation of construction-related jobs						
– Productivity	Construction Cost	(Association of Oregon Community Development Organizations (AOCD), 2003) - referenced in Buzzelli p 21; <i>‘The report focuses on both “construction-phase” and “occupancy-phase” returns</i>				NSHS – Satisfaction with day-to-day and emergency maintenance.	

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		<i>and, in terms of the latter, calculates an internal (State) annual rate of return of 25.5%, aggregate rent savings of \$24 million and 833 jobs supported by rent savings, all based on \$94 million in investment. This is based on calculations across a range of sectors for resident spending, income tax returned and comparison of market versus affordable housing rents, all for cost-shared developments delivered by community development corporations leveraging 20% State capital subsidy and ongoing subsidy cost sharing’.</i>				services.	
	Construction Time						
	Increased personal productivity related to secure tenure	(MacLennan, 2008a) p.iii; Poor housing and neighbourhood outcomes have direct productivity effects and can raise costs of non-housing programs aimed at raising human capacities. (R)				WA Housing Authority records tenant income, but quality of data for this indicator is questionable as only income and main source are recorded.	
– Profitability	Maintenance costs - life cycle					State and Territory-based Housing Authority databases - maintenance work records.	
	Has the development/program increased the resources of the organisation to further increase supply?					State and Territory-based Housing Authority databases.	
– Longer term savings on future welfare through preventing intergenerational poverty – or – Subsidies and Assistance (WA)	Number of households receiving subsidies	<p>(Kliger, Large et al., 2011), (Victorian Women’s Housing Association, 2010) p.4; Savings on future welfare expense for children i.e. secure safe housing, over 20 yrs.</p> <p>(Zon, Molson et al., 2014) p.34; Average annual savings to government per single individual with no dependents who moves off social assistance and into the labour market.</p> <p>(Australian Institute of Health and Welfare (AIHW) 2015).</p> <p>(Pomeroy, 2007) p.21; A seniors facility ‘...derived daily subsidy cost (amortizing capital subsidy and adding ongoing rent supplements) is approximately \$17/day.’ Savings on providing subsidies depend on the level of government that pays the subsidies; in some cases, this is federal/state or both.</p> <p>‘In one US study, placement in supportive housing was associated with a reduction in service two and one half times less expensive than the costs when homeless (from \$40,000 per person per year to</p>	<p>\$1,398,267 savings on future welfare expense for children i.e. secure safe housing, over 20 yrs (prevents intergenerational poverty.</p> <p>Positive increase in children’s confidence, academic performance, physical and mental health and family relationships) (Kliger, Large et al., 2011)p.4 See also (Victorian Women’s Housing Association, 2010)</p> <p>CA\$6,576 the cost of one year’s worth of social assistance benefits in Ontario in 2006 for a single individual with no dependents.</p> <p>(Average annual savings to government per single individual with no dependents who moves off social assistance and into the labour</p>			<p>State and Territory-based Housing Authority databases.</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.08 Income</p>	

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		<p>\$16,282 per housing unit per year, adjusting for concurrent changes in the individuals' service use patterns).' p.i.</p> <p>(Victorian Women's Housing Association, 2010) p.810; 'The women interviewed who had children spoke of a series of outcomes that collectively provide strong evidence for positive outcomes in the future lives of the children living in the housing.' Estimated to save over \$1.3 million on intergenerational poverty, positive increase in children's confidence, academic performance, physical and mental health and family relationships.</p>	market). (Zon, Molson et al., 2014) p.34.				
	No. of households receiving home purchase assistance from: State and Territory-based Housing Authority databases; FHOS & FHOB from State Revenue Offices; and from Home Ownership Program (HOP) & Home Ownership on Indigenous Land (HOIL)					State and Territory-based Housing Authority databases.	
Greater financial flexibility for low income households as a result of alleviation from "housing stress"	Increased disposable income for tenants as compared with private rental	<p>(Pawson, Milligan et al., 2015) p.54; Increased independence / control over circumstances (L-M).</p> <p>(Bridge, Flatau et al., 2003) p.ii; By reducing housing costs and increasing family resources that can be used to purchase educational and training resources (R).</p> <p>See also: (Anderson, Charles et al., 2003); (Kliger, Large et al., 2011)</p> <p>(Carter and Polevychok, 2004) (p.vi, p.8, 9. etc.) In Canada, more moving to home ownership, leaving the rental market for lower income sector (also higher income people choosing to rent giving limited options for lower incomes). Freeing up rental market will enable lower income people more disposable income to spend on things other than rent.</p> <p>(Carter, Polevychuk et al., 2009) p.309; Many immigrants/refugees have very little disposable income because their housing costs take up much more than 30% of their incomes, and thus have too</p>	<p>\$2,548 per person per year (Ravi and Reinhardt, 2011) p.3 & 53</p> <p>\$2,318,763 over 20 yrs (Kliger, Large et al., 2011).</p> <p>CA\$5,169.63 the average subsidy per assisted household used as a proxy for the additional disposable income households will have after moving into social housing (average annual subsidy per assisted household) 228,287 households affected (Zon, Molson et al., 2014) p.33.</p>	£7,347 able to pay for housing (Trotter, Vine et al., 2014) p.15.		State and Territory-based Housing Authority databases – data on tenant income over time. Possibly the Henderson Poverty Index.	

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		little money left over to spend on other necessities (let alone luxuries). p.313; Improving incomes are reflected in improved housing circumstances, particularly when rent is set at a fixed percentage of gross income, caps on rent increases, improved access to social housing, and different housing choices than the general population (i.e. small apartments rather than houses) (R). p.314; However, despite improvements in rental affordability, low income homeowners were still in severe housing affordability stress. (Moloughney, 2004), p.15; Increases in housing costs (during the Great Depression) led to worsening health due to less funds for adequate nutrition. p.18; Higher housing costs limit the funds available to spend on other things (including food and medications). However, this variable is complex, and does not take into account various trade-offs that individuals make (i.e., the voluntary choice to spend more on housing in a better SES area).					
	Rent commensurate to financial needs	(Carter, Polevychuk et al., 2009) pp.313, etc; Winnipeg has implemented programs such as rents capped to a fixed proportion of gross income, which has reduced renter affordability stress from 46% to 23% over 3 years (for refugees/immigrants).				State and Territory-based Housing Authority databases – rent often indexed to tenant income.	
	Secure tenure					State and Territory-based Housing Authority databases - Tenure is largely secure in Australian public housing (though some tenants are on fixed-term tenancies).	
	Ability to save and/or financial comfort - existence of savings		\$2,318,763 Increased ability to purchase more food, clothes, entertainment, education, health services, etc. (Increased disposable income) (Kliger, Large et al., 2011) p.5.	£2,155 able to save regularly (Trotter, Vine et al., 2014) p.15.		State and Territory-based Housing Authority databases.	
	Availability of financial management advice					State and Territory-based Housing Authority databases - Information only available on what has been funded by the Housing Authority, no client data.	
Reduced financial stress (WA)	Relief from being burdened with financial debt	(Australian Institute of Health and Welfare 2014) p. 20-210; Able to manage rent/money better – tenants perceived benefits. See also : (Canada Mortgage and Housing Corporation (CMHC), 2011).		£2,300 services that help people to lift themselves out of heavy debt (Fujiwara, 2013) p.34. £1,593 debt-fee; £9,428 relief from being heavily burdened	(National Affordable Housing Consortium 2015) p.17 Tenant Profile - NRAS helped Stephen move himself and his daughter from a caravan to an apartment. Stephen says	-AURIN OECD Indicators: Income, Inequality & Financial Stress (SA2) 2011. -AURIN Personal & Financial Stressors (SD) 2014. - AURIN Centre of Full Employt &	

ECONOMY DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
		(Carter and Polevychok, 2004) p.9; Lower rents and mortgage payments mean more disposable income, therefore greater ability to pay off debts (including mortgage).		with debt; £7,347 able to pay for housing; £8,917 financial comfort; £3652 able to insure home contents (Trotter, Vine et al., 2014) p.15.	the reduced rent made it very affordable for them. (Common Ground Queensland 2016) Nina's story 'Last year Nina's hours of work were reduced and she was concerned about being able to afford her rent. Common Ground Qld were able to reduce Nina's rent in line with her reduced income, this saved her from becoming homeless again'. (Churches of Christ Housing Services 2016) p.12 Tabra's Story - Tabra is currently paying 30 percent of her income for the house and is guaranteed this rate for the length of the lease. She is no longer stressed about keeping a roof over her kids' heads and 'worrying all the time if we will have to move out and have nowhere to go'.	Equity, (2015): Australia By CofFEE Functional Economic Regions Housing & Labour Data. - Other possible sources incl. BCEC, ABS and Centrelink. http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.08 Income	
	Reduction in proportion of low-income renter households in rental stress					Some Housing Authority's rent is, for example, based on 25% of income, so financial burdens associated with housing should be relieved through social housing tenancy.	
	Difficulty paying bills on time (past 12 months)					Housing providers NSHS – Self reported benefits gained by tenants living in social housing (be able to manage rent/money better).	
	Couldn't pay rent on time (past 12 months)					Housing providers NSHS – Self reported benefits gained by tenants living in social housing (be able to manage rent/money better)	
	Going without meals for financial reasons	(Phibbs and Young, 2005) p.I; Eating better foods as a result of increased financial resources.				NSHS – Self reported benefits gained by tenants living in social housing (be able to manage rent/money better).	
	Sold or pawned possessions (past 12 months)					NSHS – Self reported benefits gained by tenants living in social housing (be able to manage rent/money better).	

ECONOMY DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product-ivity Realm
	Sought help from welfare/ community orgs (past 12 mths)					NSHS – Self reported benefits gained by tenants living in social housing (be able to manage rent/money better).	
	Sought financial assistance from family/ friends (past 12 mths)					NSHS – Self reported benefits gained by tenants living in social housing (be able to manage rent/money better).	
Increased Affordability and Availability (WA)	Number of homes sold / built per 1000 low & mod. income h’holds that are affordable by low & mod. income h’holds					State and Territory-based Housing Authorities - sold and built homes.	
	Estimated cumulative gap between underlying demand for housing and housing supply, as a proportion of the increase in underlying demand	(Carter and Polevychok, 2004) p.20; Much more money spent on housing assistance than housing programs, leading to a continued and increasing shortfall of housing. For example, in Winnipeg, 1999/2000, \$5 million spent on housing and \$101 million spent on social assistance programs with only \$50k flowing through to housing and most to private sector rentals. This money is not providing adequate housing, especially for people on welfare.				E.g. internal demand models from state and territory based agencies - used to show underlying demand for affordable and public housing.	
Matched supply & demand (WA)	Pace of population to gross dwelling growth (GE)					ABS	
	Level of appropriate dwelling production (Greenfield and infill; detached, semi-detached & unit)	(Carter and Polevychok. 2004) p.20/21; Even if more funding for provision of housing was available, this is insufficient to meet the demand, still leaving many on benefits waiting years for a house. ‘Any supply program is expensive and rental housing for welfare recipients may require long-term ongoing subsidies, a program option governments have avoided since 1993.’				ABS, Urban Growth Monitor (WAPC)	
Ability to reinvestment in housing services and production (WA)	Proportion of investment return from housing provision channelled back into housing services & production					Housing providers	
Local procurement ○	Proportion of local procurement					Housing providers	
	Incentives exist for local procurement					Housing providers	
Incentive programs							

EDUCATION DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
Increased participation	Literacy levels - adults	(Kliger, Large et al., 2011); see 3.1.2 (Australian Institute of Health and Welfare (AIHW) 2015) ‘There is a two-way association between health and education. People with low educational attainment tend to have poorer health, fewer opportunities, low incomes and reduced employment prospects (Johnston et al., 2009). In turn, poor health is associated with lower educational attainment’ (Conti et al., 2010). (Canada Mortgage and Housing Corporation (CMHC) 2011) fm p.31; Various metrics used to measure literacy levels, but mostly school based, such as test scores/grades etc. The NLSCY (?) has information on adult educational attainment including literacy. Difficult to link this causally to housing, especially for adults.				AIHW 2015 Measure 2.04 Literacy numeracy http://www.aihw.gov.au/indigenous-data/health-performance-framework/ NSHS – Self reported benefits gained by tenants living in social housing (more able to state or continue education / training).	
	Participation in adult learning courses	(Australian Institute of Health and Welfare, 2014) p.20-21; Feel more able to start or continue education/training - perceived tenant benefit (R) (Australian Institute of Health and Welfare (AIHW), 2015) ‘Adult learning is a powerful tool in achieving better health, education and economic outcomes (Chandola et al., 2014). Research also shows that the value of education in midlife is greatest for those with the poorest education at the time of leaving school, with qualifications achieved at this life stage offering a protective effect against coronary heart disease (Chandola et al., 2011). There are strong associations between formal educational attainment (particularly Year 12), parental educational attainment and measures of health literacy (ABS, 2008). Lower health literacy is a barrier to acquiring health education information and accessing treatment’ (ACSQHC, 2013). (Kliger, Large et al. 2011), p.5-7; 3 women gained higher education certificates after moving into the housing. ‘The women linked their ability to further their education with the increased stability found in their	\$102,473 Increase in education / training over 20 yrs (Increase in stakeholders completed/completing TAFE/ other course) (VWHA) (VWHA (Kliger, Large et al. 2011)) p.5. AUS CA\$4,874.55 Additional earning potential resulting from continuing education and retraining. Affecting 188,676 (2006) (Zon, Molson et al. 2014) p. 35. CAN	£1,773 general training for job; £1,124 vocational training; £9,447 government training scheme; £1,747 apprenticeships; £ 807 employment training (Trotter, Vine et al., 2014)p.14. UK £754 value of undertaking one part-time course to the individual (Fujiwara, 2013) p.32. UK	(Common Ground Queensland 2016) Anne’s story – ‘Ann now proudly shares that she has just completed the Ceramics component of the Certificate III in Visual Arts at Queensland TAFE Brisbane Southbank Campus and is one of the key artists and tenant co-facilitators engaged in creating the Cross-link Mosaic Sculpture which will grace Brisbane Common Ground’s public thoroughfare that links Hope Street and Fleet Lane’. (Churches of Christ Housing Services, 2016) p. 22 Ellie’s Story - also just finished a Certificate in Community Services. And p.53 Sharon’s story ‘This has been my best year. It’s amazing	- AURIN, Public Health Information Development Unit, (2014): SD Learning or Earning (15-19 y.o). http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.06 Educational attainment and participation of adults. NSHS – Self reported benefits gained by tenants living in social housing (more able to state or continue education / training). - See also list below ¹	T, M, F

¹ WA Department of Education: Attendance; Suspension; On-entry assessment; National Assessment Program – Literacy and Numeracy (NAPLAN) - Years 3, 5, 7 and 9 in reading, writing, language conventions (spelling, grammar and punctuation), numeracy; WA Literacy and Numeracy Assessment (WALNA) - Years 3, 5 and 7 in reading, writing, spelling, numeracy ; Teacher grades and assessments – reporting to parents and senior secondary. Currently available for WA public schools only.
Refer to the Australian Curriculum, Assessment and Reporting Authority (ACARA) website <http://www.acara.edu.au/reporting> for the Measurement Framework for Schooling in Australia.
Commonwealth - Australian Early Development Census (AEDC): First year formal schooling - Physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, communication skills and general knowledge.
School Curriculum and Standards Authority: WA Certificate of Education (WACE); National Assessment Program – Literacy and Numeracy (NAPLAN).
Kindergarten to Year 12 for all WA schools.
Playgroups WA?

EDUCATION DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
		lives after moving on from their old circumstances and into new housing'. (Parsell, Petersen et al., 2015), p.85; Minor improvement in enrolment in courses (approximately double of very small numbers of people, i.e. 1 to 2) Fujiwara, p.32; WV (Wellbeing Valuation) can be used to predict the value of adult education, stating, 'has a positive impact on life satisfaction. On average undertaking one part-time course has a value of £754 to the individual'. Also adds to confidence in raising families, parenting and assisting with schoolwork.			what comes out of bad things happening. I have started university, doing a Bachelor of Digital Media. I want to do a scholarship with a curator in Europe for a year. I've had a couple of exhibitions of paintings and they sold pretty well'.		
	Preschool enrolment and/or attendance	(The Scottish Government, 2011a) p.24; High numbers of household moves – problems accessing schools, poor school performance and behavioural problems in children.				State and Territory based Depts of Education - for public school data. ABS National Early Childhood Education and Care Collection - http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4402.0Appendix1June%202014?opendocument&tabname=Notes&prodno=4402.0&issue=June%202014&num=&view=	
	Learning that helped people to feel more confident with family and others	(The Scottish Government, 2011a) p.21; Punitive parenting (neg. impact of parental esteem and confidence, more restrictiveness and rigid control over child's activity – impact on child health and wellbeing & higher levels of chaos in the home) parents may socially withdraw as a coping mechanism, negative impact on parental esteem and confidence.		£690 (Fujiwara, 2013) p. 32			
	Learning that helped people become a more confident parent	(The Scottish Government, 2011a) p.21; Punitive parenting (neg. impact of parental esteem and confidence, more restrictiveness and rigid control over child's activity – impact on child health and wellbeing & higher levels of chaos in the home) parents may socially withdraw as a coping mechanism, negative impact on parental esteem and confidence.		£690 (Fujiwara, 2013) p.32			
	Learning that helped people to be able to help their children with school	(Fujiwara, 2013) p.32; participation in adult education made parents feel more confident helping children with homework.		£435 (Fujiwara, 2013) p.32			
	Parental participation in schooling	(Phibbs and Young, 2005) p. iii; increased happiness of the child now living in a good quality dwelling to a decrease in parental stress levels. (Australian Institute of Health and Welfare (AIHW), 2015)				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.06 Educ. Attainment and participation of adults.	

EDUCATION DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
	Volunteer work placement availability (for skills development)	(Fujiwara, 2013) p.32; Adult education courses improved the ability to get volunteer work placements. Quoted studies by Meier and Stutzer (2004) and Frijters et al. (2004) to show the causal links between volunteering and income.		£11,800 (Fujiwara, 2013)	(Common Ground Queensland 2016) Cameron's Story – 'I volunteer some Friday mornings with the food vans in Wickham Park or Ivory Street. I also volunteered at the PA Hospital for over a year. There are a lot of people in worse situations than me and I try to keep myself positive'.	AURIN: National Centre for Social and Economic Modelling, (2011): SA2 OECD Indicators: Volunteering 2011. AURIN -Australian Bureau of Statistics, (2011): SA1-based B19 Voluntary Work for an Organisation or Group by Age by Sex as at 2011-08-11.	
Enhanced educational performance (NSW)	Annual additional earning potential for Year 12 graduates - 5 years out	<p>(MacLennan, 2008) p.48; Mueller and Tighe (2007) cite evidence of a strong, negative relationship between both frequent residential mobility and poor housing conditions on one hand, with children's educational performance on the other. (R)</p> <p>See also: (Phibbs and Young, 2005); (Hay, 2005); (Center for Housing Policy (CHP), 2007a); (Brennan, 2011); (Ravi and Reinhardt, 2011); (MacLennan, 2008); (Newman and Harkness, 2000); (Partnership for America's Economic Success (PAES), 2008); (Wasserman, 2001).</p> <p>(Orr, Feins et al., 2003) p.38; In 1990, only 20% (of the combined groups) had education beyond high school; by 2000 this had increased to 30% for the control group (and the combined group was 25%). Statistically (p.45), all differences were significant at the 0.05 level. Thus relocation to low poverty environments had a positive effect on both educational performance, retention and post graduate study (p.102 etc.). R.</p> <p>(Zon, Molson et al., 2014) p.35; Review (see Element 1) refers to footnote: 'This is consistent with the approach taken in the 2011 SROI analysis of the community housing sector in Australia.' That study notes that while '[n]o specific data is available on Year 12 attainment rates for community housing tenants...the correlation between improved academic performance and attainment rates is supported by a broad research base.' Ravi and Reinhart., 2011. p. 54 back this up.</p> <p>(Carter and Polevychok, 2004) p.16/17; Links between housing condition, neighbourhood condition and children's educational achievements; such children scoring poorly on tests, retardation in reading age, increased mental illness including higher levels of aggression.</p> <p>(Canada Mortgage and Housing Corporation (CMHC), 2011) p18; Cite Boehm & Schlottmann, 1999, p. 217,</p>	<p>\$3,016 per person/yr as compared to those earning Year 10 certificate or below (Ravi and Reinhardt, 2011) p.3 & 54. AUS</p> <p>CA\$2,600 this financial proxy based on part-time employment, instead of full-time. The difference between the average annual income of a part-time worker with a high school diploma and one with less than a high school diploma was in 2009. Affected 177,285 people (Zon, Molson et al., 2014) p.35 CAN</p>			NSHS – Self reported benefits gained by tenants living in social housing (more able to state or continue education / training).	

EDUCATION DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
		where the authors state that home ownership is a causal factor for educational outcomes, with children more likely to achieve higher levels of education and improved earnings. (Briggs, Ferryman et al., 2008) p.56; Having access to better schools should directly influence children's academic results and better attainment in general, thus potentially improve future earning potential.					
	Proportion of the 20–24 year old population having attained at least a year 12 or equivalent or AQF Certificate II or above (all jurisdictions by remoteness)					ABS Cat No 6227.0 Education and Work. AURIN -Australian Bureau of Statistics, (2011): SA1-based B40B Non-School Qualification: Level of Education by Age by Sex as at 2011-08-11. http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.06 Educ. Attainment and participation of adults.	
	People aged 20–64 years who have attained post school qualifications in AQF Certificate level III or above, or are currently at any level (all jurisdictions by remoteness: nationally by age; sex)					AURIN - Australian Bureau of Statistics, (2011): SA1-based B40B Non-School Qualification: Level of Education by Age by Sex as at 2011-08-11. AURIN- Australian Bureau of Statistics, (2011): AUS-based B37 Selected Labour Force, Education and Migration Characteristics by Sex as at 2011-08-11. http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.06 Educ. Attainment and participation of adults	
	Participation in higher education (national by course level and field of education)	See (Partnership for America's Economic Success (PAES), 2008); (Ravi and Reinhardt, 2011); (Zon, Molson et al., 2014) p.31 & 35; Mostly refer to completion of school (reduction in dropout rates) and not higher education. (Kliger, Large et al., 2011), see section 3.1.2.				NSHS – Self reported benefits gained by tenants living in social housing (more able to state or continue education / training).	
	VET national load pass					National Centre for Vocational	

EDUCATION DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
	rate (all jurisdictions: national by remoteness)					and Education research (NCVER)	
	Pre-school performance (new indicator)	(Maclennan, 2008) p.51; Verbal competencies and cognitive development.				AURIN: Regional Australia Institute, (2011): LGA Human Capital Indicators 2011.	
	Primary school performance (new indicator)	(Maclennan, 2008) p.50; Adverse affects of housing disrepair on children’s math scores ... adverse impacts on social and academic competency in elementary-school-age children and on adolescent absent-mindedness and forgetfulness. Lower educational attainment has been linked to crowding. (Carter and Polevychok, 2004) p. 17; 68% of children in substandard housing do well in school compared to 75% in adequate housing (<i>as a proviso however, this is not a large difference, despite the authors phrasing it as 68% on one hand, versus 3 out of 4 on the other</i>). One factor contributing to poor performance was frequent moving by parents, disrupting schooling. P.28; Constant moving especially by women undermines confidence and influences the healthy development of children; and may even result in women moving back into abusive relationships because of lack of housing opportunities.				As above NAPLAN	
	Secondary school performance (new indicator)	(Maclennan, 2008) p.50; High school students in crowded housing demonstrate weakened motivation and persistence; reduced high school graduation rates—11 percent for males and 6 percent for females—when residents lived in crowded housing. (Australian Institute of Health and Welfare (AIHW), 2015) ‘Higher levels of education are associated with improved health outcomes through greater health literacy and better prospects for socio-economic status, including income and employment (Clarke & Utz, 2014). Research in the US (Wong et al., 2002) found that mortality has declined at a faster pace for those with more education, with a seven year increase in life expectancy for college-educated students. International literature also documents improvements in child mortality associated with increased levels of maternal education and attributed this to a variety of factors, including improved understanding of and greater willingness to access health services’ (Gakidou et al., 2010).				As above AIHW Measure 2.05 Educational outcomes for young people (School Yr 10-12) http://www.aihw.gov.au/indigenous-data/health-performance-framework/	
	Higher education success rate (all	(Maclennan, 2008) p.51; Significance may be explained not only by homeownership as a tangible asset, but also				As above	

EDUCATION DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
	jurisdictions by sex)	as an important investment in locale, ‘accompanied by concern for neighbourhood quality and processes’.					
	School leaving age		CA\$ 353.51 (in 1993 dollars) Estimated social savings per individual from increasing high school completion rates. Affected 90,648 people (Zon, Molson et al., 2014) p.37				
	Ability to study at home (Trotter et al.)	(MacLennan, 2008) p.49; Living in a noisy environment is associated with lower reading levels, heightened blood pressure, and reduced motivation. (M) (Phibbs and Young, 2005) p. iii; Improved performance occurred because children now had more space and could do their homework without disturbance from, or fighting with, their siblings.				NSHS – Self reported benefits gained by tenants living in social housing (more able to state or continue education / training).	
	Truancy (see note re naming under dataset column)		CBA Persistent truancy - total fiscal cost of persistent truancy (missing at least five weeks of school per year), per individual per effective year - Fiscal value £1,878; econ value £1,048 (New Economy, 2015).			Attendance data available from various sources including <i>My School</i> , RoGS, Department of Education WA. Note that the term Truancy is rarely used. National Standards for Student Attendance Data Reporting http://www.acara.edu.au/reporting/national-standards-for-student-attendance-data-reporting	
	Apprenticeship & Vocational training enrolments	(Australian Institute of Health and Welfare (AIHW), 2015) Adult learning is a powerful tool in achieving better health, education and economic outcomes (Chandola et al., 2014).				AURIN - Public Health Information Development Unit, (2014): SLA11 Education. http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.06 Educ. Attainment and participation of adults.	
	Improved earning potential	(Australian Institute of Health and Welfare (AIHW), 2015) Adult learning is a powerful tool in achieving better health, education and economic outcomes (Chandola et al., 2014).	\$29,847 - Increased taxes due to increased education over 20 yr period (Additional salary earned as a result of increased education) (VWHA (Kliger, Large et al., 2011)) p.4. \$17,784 per person/yr - SROI as measured by part-time employment rates at minimum wage (Ravi and Reinhardt, 2011). CA\$2,600 Resulting from			AURIN: University of Newcastle - Centre of Full Employment and Equity, (2015): Australia By Less Skilled CoFEE Functional Economic Region 2011 http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.06 Educ. Attainment and participation of adults	

EDUCATION DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity Realm
			improved educational performance (Zon, Molson et al., 2014) p. 35. CA\$4,875.55 Resulting from continued education and training (Zon, Molson et al., 2014).				
Access to Internet	Internet access at home			£1,875 access to internet (Trotter, Vine et al., 2014) p. 15.		AURIN: Torrens University Australia - Public Health Information Development Unit, (2014): SD Internet Access at Home. The Dropping off the Edge report had some broad information about internet access. ABS collected in 2011 and 2016 census. 2011 data available online at suburb level & up.	

EMPLOYMENT DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
Increased participation in employment (NSW & WA)	Move from unemployment to employment	<p>(Australian Institute of Health and Welfare, 2014) AUS p.20-21; Feel more able to improve job situation - perceived tenant benefit. (R)</p> <p>(Australian Institute of Health and Welfare (AIHW), 2015) 'Participation in employment has important consequences for health, social and emotional wellbeing and living standards for individuals, families and communities (Bambra, 2011). Conversely, being sick or disabled, or looking after someone in poor health acts as a barrier to labour-force participation (Belachew et al., 2014). In addition to poor health outcomes, reasons for Indigenous Australians having lower employment rates include lower levels of education and training, higher levels of contact with the criminal justice system, experiences of discrimination and lower levels of job retention (Gray et al., 2012)'.</p> <p>(MacLennan, 2008) p. iii; Job readiness; lowered levels of labour market participation, absenteeism as a result of health issues(R). CAN</p> <p>(Bridge, Flatau et al., 2003) p. ii; Amount of labour supplied will depend on the structure & parameters of the HA (housing assistance) program and how this affects labour market opportunities; residing in public housing as a child has beneficial effects on labour market outcomes as a young adult. p. iii; Evidence that public housing tenure reduces an individual or household's willingness to migrate. (R) AUS</p> <p>(Phibbs and Young, 2005) p. ii; Increase in self-esteem reported by some respondents meant they wanted to work on their career. AUS</p> <p>(Orr, Feins et al., 2003) p.xiii; No statistically significant impacts on unemployment or earnings but increase in proportion of female youth remaining at school. Employment is related to other economic factors beyond the control of the study.</p> <p>Fauth (p.2275) found a highly significant (p. 0.01) positive relationship between employment and moving to better socio-economic area. Of note however, although significant, the effect sizes were small, meaning that although they were more likely to be employed, their actual income didn't rise much (if at all). H</p>	<p>\$987,012 increased tax income due to tenants employed over 20 year period (Increased taxes and reduced welfare payments) (VWHA (Kliger, Large et al., 2011)) p.4. AUS F</p> <p>\$543,894 Increase in employment (stable employment since tenancy) (VWHA (Kliger, Large et al., 2011)) p.6. AUS M/T</p> <p>\$17,784/year per worker Financial Proxy: Improved earning potential as measured by part-time employment rates at minimum wage (Ravi and Reinhardt, 2011) p. 55. AUS</p> <p>CA\$9,532.50 part-time employment at Ontario's minimum wage is used for the financial proxy. 34,519 people affected (Zon, Molson et al., 2014) p. 33. CAN</p> <p>CBA 'Income Support Fiscal and economic benefit from a workless claimant entering work'. Fiscal value £7,972; economic value £9,163. UK</p>	<p>Unemployment - £8,700 per year in addition to loss of income (Fujiwara 2013) p.31. UK</p> <p>Full-time employment £10,767; self-employment £11,588; part-time employment £1,229; secure job £12,034 (Trotter, Vine et al., 2014) p.14. UK</p>	<p>(Common Ground Brisbane 2016) Melissa's story – 'All those years I had nothing but drama and in a matter of 14 months of me living here, I've got safe and secure accommodation, money in the bank. I never have to rely on anybody. I've got myself two jobs and the best one being the housing keeping at the Brisbane Exhibition and Convention Centre.'</p> <p>(Churches of Christ Housing Services, 2016) p. 17; Social Enterprise – An opportunity for Corey. AUS</p>	<p>A tenant employment status and income source from State and Territory based housing authorities on nature of housing assistance, and location of housing.</p> <p>- Centrelink</p> <p>- AURIN Regional Australia Institute, (2011): LGA Human Capital Indicators 2011.</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.07 Employment</p> <p><i>Data required:</i> <i>Employment status</i> <i>Nature of Housing Assistance</i> <i>Sources of Employment</i> <i>Location of housing</i> NSHS – Self reported benefits gained by tenants living in social housing (feel more able to improve job situation).</p>	M; F & T

EMPLOYMENT DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		<p>(Carter and Polevychok, 2004) p.24; Housing can help with local skills development training, for groups such as indigenous, youth, crime prevention (esp. juvenile). This also has ancillary benefits to policing, social assistance, health care, etc.</p> <p>(Canada Mortgage and Housing Corporation (CMHC), 2011), p.42/3, cite Coulson & Fisher (2002) saying that homeowners have less unemployment, and when unemployed, remain so for shorter periods. Also Phipps & Young (2005) state that staying in a home and reducing mobility has positive effects on remaining employed. However, it is difficult to establish direct causal relationships with good housing as the metric of employment is highly varied (i.e., full time, part time, casual, etc.) or types and industry of employment. Improved employment (i.e. better job, higher wages, etc.) does tend to translate into better housing.</p> <p>(Kliger, Large et al., 2011) p.3; If assuming that all the women gained paid employment (17 vs 6 interviewed) then the ‘...social value created for women increases from \$3,143,609 to \$4,140,748 over the 20 year period. Additionally, the value to government in terms of reduced welfare costs and increased taxes increases from \$9,006,922 to \$10,816,444.’</p> <p>(Parsell, Petersen et al., 2015), pp.85+; Minor improvements in employment; however this and the general literature support that it is extremely difficult for long term homeless/unemployed persons to reintegrate into the community via the labour market, due to various circumstances, including employer discrimination.</p> <p>See also (Fauth, Leventhal et al., 2004); (Olsen, Tyler et al., 2005); (Susin, 2005); (Wasserman, 2001); (Oreopoulos, 2003); (Hay, 2005).</p>					
	Employment to population ratio (all jurisdictions by full time/part time; CDEP; remoteness: national by age; sex)					<p>AURIN - University of Canberra - National Centre for Social and Economic Modelling, (2011): SA2 OECD Indicators: Employment 2011.</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.07 Employment</p>	

EMPLOYMENT DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
	Increased tax income from increased workforce participation						
Inter-regional mobility	Number of moves for social housing tenants compared to private rental and ownership market					Housing providers (if moves are internal to the organisation). NSHS – Length of time in current home.	
	Level of employment + residential density (WA)					AURIN - ABS, (2016): SA2 National Regional Profile (NRP) - Economy 2009 – 2013; Australian Bureau of Statistics, (2016): SA2 National Regional Profile (NRP) - People/Population 2009 – 2013.	
Household economic well-being	Employment status	<p>(MacLennan, 2008) p.54; Poor health related to substandard housing affects the labour market and productivity because of higher rates of absenteeism and lower levels of concentration.</p> <p>(Phibbs and Young, 2005) p. ii; Respondents gave mixed messages about their experiences in the labour market. In some cases households used the extra disposable income generated by savings on rent to reduce their employment. This reduction allowed some people to provide extra care for a household member, or enabled more time to be spent with children. In other cases it gave people extra time out. Several households reduced their employment in order to undertake additional training. Another man was able to give up his part time job as a result of employment reductions, and began working for a charity on a full time basis. Households were aware that one benefit of reducing employment levels was a decrease in rent.</p> <p>See also: (Carter and Polevychok, 2004; Oreopoulos, 2003).</p> <p>(Orr, Feins et al., 2003) p. xiii; Found no statistical significance to changes in employment status or receipt of public assistance.</p> <p>(Parsell, Petersen et al., 2015), pp.86+; Minor improvements in employment, but a number of tenants over the period of the study now felt that they were capable of being employed (lower perception of disability for the same people) and were actively looking for work (also see section 4.1.1).</p>	Additional earning capacity from continuing education and re-training CAD\$ 4,874.55 (Zon, Molson et al., 2014) p. 35.			<p>State and Territory-based housing authorities - Income data available for tenants. Data quality may vary based on collection time frames.</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.07 Employment</p>	

EMPLOYMENT DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
	Receipt of employment welfare benefits	CMHC, p.44, cite Feeny et al., 2008 and Jacob & Ludwig, 2008, that receipt of housing benefits has very little impact on employment, in some cases leading to increased unemployment levels. They cite other papers highlighting the complexity of the relationship between housing, benefits and employment.				State and Territory-based housing authorities. http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.07 Employment. AURIN - Torrens University Australia - Public Health Information Development Unit, (2014): SA2 Income Support.	

ENVIRONMENT DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
Reduced energy consumption - Macro (NSW)	Household energy use	See also (Canada Mortgage and Housing Corporation (CMHC), 2011) p.55; The structural characteristics of a house and the adoption of energy efficient technologies have a direct influence on energy use, but there is little data available on these on the social housing sector.	Economic return can be calculated based on savings on electricity costs through good passive design and solar hot-water/power.	Indirect – reduced financial stress in economy domain.		NSHS – energy efficiency.	
	Household renewable energy use						
	Commercial vehicle movements (construction)						
	Heat stress/microclimate/ Heat Island effect		Value of residential energy saving due to proximity of large trees £23 per household per year. (GVE)				
	Emission/CO2 from energy use						
Dwelling design adequacy appropriateness and quality (WA)	Thermal comfort	See also (Canada Mortgage and Housing Corporation (CMHC), 2011). (The Scottish Government, 2011a) p.17; Level of natural daylight, warmth and no dampness - impact on mental wellbeing in children.	Economic return can be calculated based on savings on electricity costs through good passive design and solar hot-water/power.	Indirect – reduced financial stress in economy domain; impact on mental well-being; health benefits of good thermal environment.		NSHS – thermal comfort.	
	Beyond minimal compliance based on ratings tools						
	Access to public transport					NSHS – Proximity to facilities and services (public transport). AURIN –MeteroARIA. Public Transport Authorities.	
	Whole of life performance						
Maximised Social Quality of Life (SQOL) (based on life cycle costs of dwelling design) (NSW)	Indoor lighting quality	See also (MacLennan, 2008a)				Would require housing provider / tenant surveys of individual dwellings.	
	Indoor air quality					Would require housing provider / tenant surveys of individual dwellings.	
Reduced water consumption - process (NSW)	Potable water consumption	(Canada Mortgage and Housing Corporation (CMHC), 2011) only refers to water consumption as brief references to other documents.	Economic return can be calculated based on savings from water sensitive gardening; grey water reuse; water capture.	Indirect – reduced financial stress in economy domain.		NSHS – Social tenant amenity rating – water efficiency. State based water authorities.	
	Degree of hard cover					Housing provider site audits.	
Positive impact on biodiversity	Area of habitat created / retained						
Site selection, planning and context analysis	Site sensitivity						

Reduction in waste (NSW)	Recycling rates					Local authorities	
	Waste to landfill					Local authorities	
Appropriate level of density (WA)	Level of employment + residential density					AURIN - ABS, (2016): SA2 National Regional Profile (NRP) - Economy 2009 – 2013; Australian Bureau of Statistics, (2016): SA2 National Regional Profile (NRP) - People/Population 2009 – 2013.	
	Level of residential density					ABS - total persons per household at area level and population density.	

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
Improved Health (physical & mental)	Decrease in medications	<p>(Kearns, Petticrew et al., 2008b) p.33; Link to medications.</p> <p>(Bridge, Flatau et al., 2003) p.ii; Poor quality construction and lack of regular maintenance, specifically bad plumbing, poor drainage, lack of insulation and poor ventilation negatively impact on mortality and morbidity; and negatively impact mental health and wellbeing.</p> <p>General see also: (Canada Mortgage and Housing Corporation (CMHC), 2011); (Center for Housing Policy, 2007b); (Maqbool, Viveiros et al., 2015); (Fertig and Reingold, 2006); (MacLennan, 2008); (Orr, Feins et al., 2003); (Partnership for America’s Economic Success (PAES), 2008); (Kearns, Petticrew et al., 2008a); (Thomson, Petticrew et al., 2003); (Thomson, Petticrew et al., 2001); (Wasserman, 2001); (Wright and Kloos, 2007); (Leventhal and Brooks-Gunn, 2000); (Leventhal and Brooks-Gunn, 2003); (Leventhal and Brooks-Gunn, 2004); (Kliger, Large et al., 2011); (Pawson, Milligan et al., 2015); (Parsell, Petersen et al., 2015); (Phibbs and Young, 2005); (Hay, 2005).</p> <p>(Pomeroy, 2007) p.i; Use of various emergency services (including hospital) 10x less expensive than supported housing. For those with serious substance abuse/mental health issues, supported housing is 4 times cheaper than tertiary care. In general, supported housing is far cheaper for those with mental health and substance abuse problems (p 4). pp.3-8 (Pomeroy); Multiple studies found consistent reductions in acute emergency, tertiary psychiatric care (hospitalisation), general health services, Medicaid funded services, hospital bed days, substance abuse, medical inpatient services, etc., with provision of supported housing. <i>‘Overall, while most empirical research focuses on the sub-population of persons with severe mental health and substance use issues (both quite prevalent in the persistent homeless population), the evidence does confirm significant reduction in frequency and intensity of use in higher cost emergency and institutional facilities’.</i></p> <p>(Carter and Polevychok, 2004) p.14; Clear correlation between poor housing and ill health, but no direct causality (multi variable issue). Also, no specific link to serious health issues, such as heart disease and cancer. Nonetheless, the researchers conclude that overall, housing is a significant influence on both physical and</p>		£20,141 Good overall health (Trotter, Vine et al., 2014) p.14.		AIHW	

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		mental health. In addition, locational aspects of some low income housing (p15) such as proximity to industry, air quality issues and environmental contaminants, can and do contribute to higher levels of illness, such as bronchitis and issues from exposure to lead. (Moloughney, 2004), p.v; There is strong causal and empirical evidence for the health effects of housing on various exposures (biological, chemical and physical) such as lead, asbestos, mould, pests, tobacco, etc.; also include environmental factors such as temperature extremes. Other housing characteristics influence health (although to a lesser extent) such as tenure, floor level, crowding, density, and satisfaction. p.5/6; Many studies found that residents in poorer neighbourhoods have worse health outcomes than those in wealthier neighbourhoods; i.e., survival to age 75 (1996) for males was 68.8% (most affluent) vs 53.4% (least affluent); and females 79.7% vs 73%. However, it is difficult to establish a direct causal link between this and housing per se (due to multiple confounding variables, direction of causality, delayed onset of many chronic illnesses, etc.). CAN p.9+; Table and descriptions giving strength of association between environmental factors and health (i.e., strong causal links between factors such as lead, asbestos, mould, damp, smoke, overcrowding, radon, etc., and health). Includes psychosocial factors, and describes how an issue (i.e. overcrowding) is influenced also by contextual factors, such as other stressors, presence or absence of social support, responsibilities and family conflict. (Briggs, Darden et al., 1999) p.54/5; Helping lower income families move to better neighbourhoods had significant positive impacts on physical and mental health (nothing on medications however).					
	Reduced absenteeism		(Fujiwara 2014)				
	Symptom-Driven Diagnostic System for Primary Care (SDDS-PC) - self-report of mental health symptoms experienced in the last month.						
	Security of tenure	(Kearns, Petticrew et al., 2008b) p.36; Accessibility and security of home. (Wood, Flatau et al., 2016) p.7; Confident in maintaining					

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		tenancy. (R)					
	Neighbourhood social and physical disorder (impacting mental health)	(The Scottish Government, 2008) p.21; Role of regeneration of area, place making, opportunity for physical activity, clean attractive environments, well used accessible greenspace, quiet environments, safe streets, active travel opportunities, opportunities for play on improved mental well-being.					
	Level of satisfaction with neighbourhood (mental health)					NSHS – Satisfaction with safety/security of the neighbourhood.	
	Socio-economic status of neighbourhood e.g. poor, wealthy (impacting mental health)	(Carter and Polevychok, 2004) p.15; Lower socio-economic status of housing/neighbourhood linked to increased rates of accidents, mental health (i.e. depression, anxiety and stress), malnutrition, diarrheal disease, respiratory ailments, hypothermia, etc. (Moloughney, 2004), p.16; The SES of neighbourhoods can have a strong relationship to health (mental and physical); several studies (albeit without control groups) have found strong correlations between improvements in housing quality/neighbourhoods and mental health. Four large scale tenant rental assistance programs in the USA (helping families move to better areas; i.e. The Moving to Opportunity Project) have provided consistent evidence of lessened crime victimization, fewer behavioural problems (especially teenage boys) and improve psychological and physical health. R.				AURIN – ABS (2011): SA2 SEIFA 2011 - The Index of Relative Socio-Economic Disadvantage (IRSD).	
	Treated prevalence rates for mental illness	(The Scottish Government, 2008) p.5; Good Places Better health program. p.16; In relation to mental health and well-being, managers will be better equipped to ensure regeneration projects can create positive environments in terms of noise, litter, access to greenspace, access to culture, safe street, opportunities for play, increased opportunities for active travel, reduced isolation, improved community cohesion... (Wood, Flatau et al., 2016) p.7; Mental health is a continuing issue that must be addressed after housing through NPAH program. (Bridge, Flatau et al., 2003) p.v; The psychological impact of housing quality has been shown to benefit mental health in proportion to the degree of improvement. p.6; Significant reduction in proportion of people accessing psychiatric and mental health services after one year of tenancy.	Common Assessment Framework £1492.9 per child (GVE). CBT to build psychological resilience and self esteem costs per treatment £1240; per session £62. (GVE)			AIHW	
	Dwelling density	(MacLennan, 2008) p.49; Boyle and Lipman (2002) cite inadequate housing as a strong, reliable predictor of behavioural problems for children aged 4 to 11. (M)	\$1,872 per person/yr (Ravi and Reinhardt 2011).			Housing providers AURIN - ABS BO1 Population Density by SA1.	

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- Ivity
		(The Scottish Government, 2011a) p.1; Level of overcrowding/privacy control – impact on mental wellbeing in children. (R)				NSHS – privacy of the home. NSHS- Proportion of tenants satisfied with services provided by housing organisation, by Indigenous status, prior homelessness, number of structural problems, and dwelling utilisation (Overcrowding).	
Improved overall health	Reduction in annual spend on health services	(Pawson, Milligan et al., 2015) p.54; Reduction in medications. (L) AUS (Wood, Flatau et al., 2016) p.5; The provision of public housing significantly reduces health service use. (R) AUS (Phibbs and Young, 2005) p.i; Extra income, which means they can participate in illness prevention programs such as joining a gym and getting more exercise. AUS See also: (MacLennan, 2008); (Katz, Kling et al., 2001). (Pomeroy, 2007) pi/ii; Use of emergency services 10 x more expensive than supportive housing. Supported housing much more stable and likely reduces incidence of use of emergency services. M	\$1,872/ year per household Financial Proxy: Average annual spend on health services (Ravi and Reinhardt 2011) p.56. AUS \$429,975 Improved physical and mental health of women and their children over 0 yrs (Reduced reliance on social workers through time) (Kliger, Large et al., 2011) p. 5. AUS \$4,846 per person/year direct calculable government health care cost savings associate with reduced health service use following public housing entry (Wood, Flatau et al., 2016) p.6. AUS CD\$211 million (cost avoidance) Average homeless adult with severe addictions and/or mental illnesses to cost British Columbia approximately \$55,000 per year, a sum reduced to \$37,000 per year with adequate supportive housing (Buzzelli, 2009) p.36. CAN		(Churches of Christ Housing Services, 2016) p. 49; Rent increases are minor, which gives us the financial ability to cover other areas like our health and better nutrition.	AURIN -Torrens University Australia - Public Health Information Development Unit, (2014): SSD MBS Services. Australian Institute of Health and Welfare: Costs of health services. NSHS – Self reported benefits gained by tenants living in social housing (enjoy better health).	
	Subjective well-being	(Kearns, Petticrew et al., 2008b) p.11; self reported health improvement. (M) UK (Pawson, Milligan et al., 2015) p.54; improved health. (L) AUS (Phibbs and Young, 2005) p.i; Reduced stress due to		£12,470 feel in control of life; £13,080 high confidence (Trotter, Vine et al., 2014) p. 14. UK	(Common Ground Queensland 2016) – Lisa’s story - Unfortunately while Lisa was in rehab she lost her home. At this point she didn’t know where she would live once her time at the centre came to an end. Lisa heard about Common Ground	For example - State and Territory based Health Department Population annual surveys. Available on internet – self reported health status measured using SF-8 instrument, a quality of life measure, to produce physical	

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		security of tenure and more income. AUS See also (Australian Institute of Health and Welfare, 2014).			from another client in rehab and with the help of a nurse who advocated on her behalf she was able to secure accommodation in the newly built South Brisbane apartment complex. This was a major turning point in Lisa's recovery, as was gaining some employment at the rehab centre as a cook. Lisa feels that Common Ground has given her a strong foundation, independence, safety, comfort and a private place to retreat to when she needs her own space.	and mental wellbeing scores. Also Kessler 10 used to report psychological distress. Prevalence of major life events experienced e.g. financial hardship; robbed or burgled, moved house. Data available at large geographical areas only. AURIN – Social economic modelling indicators (NATSEM). - WA Dept of Health. See note below ² . - AURIN, University of Canberra. - National Centre for Social and Economic Modelling, (2011): SA2 Life Satisfaction from 0 to 100 (Synthetic Data. (Australian Institute of Health and Welfare (AIHW) 2015) - Measure 1.17: Perceived health status. NSHS – Self reported benefits gained by tenants living in social housing (enjoy better health).	
	Life expectancy (incl. gap between indigenous and non-indigenous)					AIHW - publish national life expectancy.	
	Incidence and prevalence of important preventable diseases	(MacLennan, 2008) p.55-56; Bad housing outcomes particularly affect children. ... poverty affects children's social and emotional development. Low-income children are exposed to significantly more environmental stressors, such as noisy, crowded, poor-quality housing, than their better-off peers. Such children register higher levels of stress and stress-induced hormones. Cumulative exposure to housing-related stressors steadily widens the gap between poor and middle-income children and has potential implications for educational performance and future labour market participation. (R)				For example, WA Hospital Morbidity Data System. Australian Institute of Health and Welfare publish national incidence and prevalence. AURIN - Torrens University. Australia - Public Health Information Development Unit, (2014): SA2 Chronic Disease - Modelled Estimate.	

² WA Department of Health:

- WA Health and Wellbeing Surveillance System (HWSS) (population annual surveys). Available online – self-reported health status measured using SF-8 instrument. Kessler 10 used to report psychological distress. Prevalence of major life events e.g. financial hardship, moving house. Data available at large geographical areas.

WA Department of Health:

- Hospital Morbidity Data System (HMDS)
- Emergency Department Data Collection (EDDC).

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- Ivity
		(Carter and Polevychok, 2004) p.14; ‘...researchers (Dunn, 2003; Fuller-Thomson, Hulchanski and Wang, 2000) identify a subset of seven dimensions of housing as potentially influential factors on health: physical hazards including chemical and biological exposure, physical design, social dimensions of housing, psychological, political and financial dimensions and housing location.’					
Reduced demand for health services for ‘heavy-users’ and disabled populations	Reduced spend on health services for ‘heavy users’ after moving into public housing	(Wood, Flatau et al., 2016) p.5; The provision of public housing significantly reduces health service use. (R) (Pomeroy, 2007) p.4; Refers to a longitudinal study of 5000 people by Culhane et al. (2002) where before placement in supportive housing, people with severe mental health issues used average of \$40,449 per person per year, and placement was associated with a reduction in service use to \$16,282 per housing unit per yr. H	\$640 per person/year financial proxy: reduced spend on health services for ‘heavy users’ after moving into public housing (Ravi and Reinhardt, 2011) p. 3. \$4,846 per person/year direct calculable government health care cost savings associate with reduced health service use following public housing entry (Wood, Flatau et al., 2016) p.6.			Health data linkage service (e.g. WA Telethon Kids Institute Developmental Pathways Project).	F
	Health service use differentials	(MacLennan, 2008) p.49; In a Housing Check up survey administered voluntarily to 1,360 clients at the Children’s Hospital of Eastern Ontario in April 2005 (representing a 25 percent response rate), newcomers disproportionately reported living in crowded conditions. (M)				Hospital and Health Department records e.g., Emergency Dept Info System. Hospital Morbidity Data System. Mental Health Info System.	
	Decrease in hospitalisation & emergence admissions	(MacLennan, 2008) p.57; Impacts of supportive housing on individuals who had previously been homeless and suffered from severe mental disorders, compared to those who remained unassisted living on the streets and using the emergency shelter system. The study tracked almost 5,000 individuals between 1989 and 1997 and their use of public shelters, public hospitals, Medicaid-funded services, veterans’ inpatient services, state psychiatric inpatient services, state prisons, and city jails. The research documented significant reductions in shelter use, hospitalizations (regardless of type), length of stay per hospitalization, and time incarcerated. Prior to placement in supportive housing, homeless people with severe mental illness used an average of \$40,449 per person per year in such services (in 1999 dollars). Placement in supportive housing was associated with a reduction in service use of \$16,282 per housing unit per year, adjusting for concurrent changes in the controls’ service use patterns—two and one half times less expensive than the costs for those who were homeless.	CA\$148.00 Average cost of emergency room visit avoided as vulnerably housed move into stable housing. Affected 278,231 people (Zon, Molson et al., 2014) p.34. See (New Economy, 2015) for various fiscal values of A&E services.			Emergency Dept Info System. Hospital Morbidity Data System. Mental Health Info System.	

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		(Wood, Flatau et al., 2016) p.6; Reduction in health service use for tenancies sustained between 1-4 years - incl. emergency Dept presentation, staying overnight, fewer ICU presentations. (R)					
	Increased life expectancy	(MacLennan, 2008) p.55; Many on- and off-reserve Aboriginal peoples live in abject poverty and poor health. Poor housing is a symptom of that poverty. Life expectancy among Aboriginals is much lower than other Canadians, and the rates of suicide, substance abuse, injury, disease, infant mortality, and family violence are much higher. Molougney, see section 6.1.					
	Lower incidence of medical needs	(MacLennan, 2008) p.57; Homeless people had a much higher risk than the general population for many chronic conditions, including respiratory diseases, arthritis, rheumatism, high blood pressure, asthma, epilepsy, and diabetes (Ambrosio et al., 1992).	CBA See (New Economy 2015)for service costs (fiscal values) associated with medical care.				
Improved medical access	People deferring recommended treatment due to financial barriers	(MacLennan, 2008) p.54; High shelter costs constrain access, since lower-quality housing may be lower cost and lower-income marginalized households household cannot afford good-quality housing, while high shelter costs crowd out other expenditures such as food and can therefore lead to poor nutrition and related health effects. (Phibbs and Young, 2005) p.i; Improved access to medical resources.	CA\$3,570 Increased ability to pay for health and medical related expenses per assisted household in 2006. Affected 308,267 people. (Zon, Molson et al., 2014) p.36			AURIN: Public Health Information Development Unit, (2014): SD Access to Services, Financial and Transport Barriers. NSHS – Self reported benefits gained by tenants living in social housing (enjoy better health; have better access to services).	
	Treated prevalence rates for mental illness	(Wood, Flatau et al., 2016) p.6; Significant reduction in proportion of people accessing psychiatric and mental health services after one year of tenancy. (R)	CBA See (New Economy, 2015) for service costs (fiscal and economic values) associated with treatment for mental health disorders.			NSHS – Self reported benefits gained by tenants living in social housing (enjoy better health; have better access to services).	
Active and healthy living (NSW)	Adequate physical activity	(Kearns, Petticrew et al., 2008a) p.14; Better physical functioning in houses rather than flats. (M) (Kearns, Petticrew et al., 2008a) p.36; Rehousing to a house was associated with better walking habits, as was rehousing that provided more suitable internal dwelling space. (M) (Australian Institute of Health and Welfare (AIHW), 2015) ‘Physical inactivity is an important modifiable risk factor associated with several potentially preventable chronic diseases that are prevalent in the Aboriginal and Torres Strait Islander population. These diseases include cardiovascular disease, cancer, stroke, hypertension and diabetes (AIHW, 2012; Gray et al., 2013; Wilmot et al.,				For example, State and Territory based Health Department Population annual surveys. Available on internet. http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.18 Physical activity	

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
Improved Productivity		2012)'. (The Scottish Government, 2011a) p.18; Access to outdoors in home and neighbourhood – impact on mental wellbeing of child. (R) (Phibbs and Young, 2005) p.i; Extra income, which means they can participate in illness prevention programs such as joining a gym and getting more exercise. (Moloughney, 2004) p.18; (also relevant to other sections in the Health Domain); The interaction between variables, such as exposure to physical hazards, lack of opportunity for safe or accessible outdoor play/physical activity, chronic financial pressures, exposure to violence/crime, lack of community connectedness; all interrelate, particularly for vulnerable populations, such as Indigenous, seniors, homeless people etc., and make research and/or interventions highly complex.					
	Amount of trees in street	(Kearns, Petticrew et al., 2008a) p.23; Worsening in outlook correlated with worsening in wheezing. (M)				Survey (2014) Available by suburb @ http://202020vision.com.au/media/7141/final-report_140930.pdf	
	Access to public transport					AURIN MeteroARIA. Public Transport Authorities. NSHS – Proximity to facilities and services (public transport).	
	Having a corner store					AURIN - Public Health Information Development Unit, (2014): SD Access to Services, Financial and Transport Barriers. NSHS – Proximity to facilities and services (shops and banking).	
	Access to green space	(Kearns, Petticrew et al., 2008a) p.16; Worsened physical function without a garden. (M) (The Scottish Government, 2011a) p.24; Access to good quality, safe outdoor green and play spaces – impact on child health and well-being. (R)				For example, WA DoP and Infrastructure spatial files. NSHS – Proximity to facilities and services (parks and recreational facilities).	
	Participating in sport at least once per month			£428 (Fujiwara, 2014)			
Improved Productivity	Levels of physical activity	(Kearns, Petticrew et al., 2008a) p.14; Better physical functioning in houses rather than flats. (M)				http://www.aihw.gov.au/indigenous-data/health-performance-	

HEALTH AND WELL-BEING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		(Australian Institute of Health and Welfare (AIHW), 2015) 'Physical inactivity is an important modifiable risk factor associated with several potentially preventable chronic diseases that are prevalent in the Aboriginal and Torres Strait Islander population. These diseases include cardiovascular disease, cancer, stroke, hypertension and diabetes' (AIHW, 2012; Gray et al., 2013; Wilmot et al., 2012). (The Scottish Government, 2011a) p.24; Access to good quality, safe outdoor green and play spaces – impact on child health and well-being. (R)				framework/ Measure 2.18 Physical activity	
	Number of fresh food outlets	(Australian Institute of Health and Welfare (AIHW), 2015) 'Many of the principal causes of ill-health among Aboriginal and Torres Strait Islander peoples are nutrition-related diseases, such as heart disease, type 2 diabetes and renal disease. While a diet high in saturated fats and refined carbohydrates increases the likelihood of developing these diseases, regular exercise and intake of fibre-rich foods, such as fruit and vegetables, can have a protective effect against disease (Wang et al., 2014). The National Health and Medical Research Council revised their Australian Dietary Guidelines in 2013. The guidelines specify recommendations for adequate minimum daily intake of fruit and vegetables according to age and sex' (NHMRC, 2013; ABS, 2013).				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.19 Dietary behaviours.	
Access to fresh food / better nutrition	Number of fast food outlets	(Kearns, Petticrew et al., 2008a) p.36; Relocation may prompt the maintenance of a healthy diet. (Australian Institute of Health and Welfare (AIHW), 2015) see above indicator.				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.19 Dietary behaviours.	
Relief from health problems	Relief from problems connected with: arms, legs, hand, feet, back			£1,306 (Fujiwara, 2013) p.33.		Self-report prevalence data e.g. State and Territory based Health Department - Population annual surveys. Available on internet. NSHS – Self reported benefits gained by tenants living in social housing (enjoy better health; have better access to services).	
	Relief from chest/breathing problems, asthma, bronchitis	(Kearns, Petticrew et al., 2008a) p.36; Gains in internal dwelling space were associated with a lower incidence of wheezing; and worsening in outlook correlated with worsening in wheezing. Rehousing may therefore have		£2,230 (Fujiwara, 2013) p.33.		As above	

HEALTH AND WELL-BEING DOMAIN

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		<p>contributed to improvements in respiratory and skin conditions, though we cannot be certain of this. (M)</p> <p>(MacLennan, 2008) p.49; Crowding and disrepair and childhood asthma. (M) p.54; Respiratory ailments in children.</p> <p>(The Scottish Government, 2008) p.5; Good Places Better Health link</p> <p>(Carter and Polevychok, 2004), p15; Access to higher quality housing linked to reduction in respiratory disorders from mould, cold, environmental contaminants, air quality issues, etc. p. 25; Children's socio-emotional health is strongly associated housing quality; those in poor quality housing score worse on outcome measures such as aggression, respiratory disorders, property offences and overall health.</p>					
	Relief from heart/blood pressure or blood circulation problems			£1,546 (Fujiwara, 2013) p.33.		As above	
	Relief from stomach/liver/kidneys or digestive problems			£6,039 (Fujiwara, 2013) p.33.		As above	
	Relief from depression, anxiety		\$1,588,519 Improved mental health of children (Increased confidence and strengthened relationships with family, school etc.) (VWHA (Kliger, Large et al., 2011)) p.6.	£43,453 (Fujiwara, 2013) p.33. £36,766; £11,819 for youth (Trotter, Vine et al., 2014).		As above	
	Relief from alcohol or drug related problems	<p>(Kearns, Petticrew et al., 2008a) p.36; With residential change people may be more prepared to make a 'fresh start' re smoking; People who reported a worsening of outlook or view were more likely than others to be smokers at Wave 3, but also more likely to be thinking of quitting; Reported improvements in the dwelling fabric were associated with better drinking outcomes. (M)</p> <p>(Wood, Flatau et al., 2016) p.6; Significant reduction in the proportion of people with prescriptions for opioid dependence.</p> <p>(Australian Institute of Health and Welfare (AIHW), 2015) 'Excessive consumption of alcohol is associated with health and social problems in most populations. Long-</p>	\$760,000 Avoided costs due to reduced drug/alcohol use over 20 yr period (reduced or eliminated need for drug treatment/counselling and rehabilitation) (VWHA (Kliger, Large et al., 2011)) p.4.	£24,257 (Fujiwara, 2013)p.33 £26,124 (Trotter, Vine et al., 2014) p.14.		<p>As above</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.16 Risky alcohol behaviour & Measure drug use inhalants.</p>	

HEALTH AND WELL-BEING DOMAIN

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		term excessive alcohol consumption is a major risk factor for conditions such as liver disease, pancreatitis, heart disease, stroke, diabetes, obesity and cancer (AHMAC, 2015). It is also linked to social and emotional wellbeing, mental health and other drug issues (NHMRC, 2009). Where mothers have consumed alcohol during pregnancy, babies may be born with Foetal Alcohol Spectrum Disorders (FASD) (Research TIfCH, 2009)' & drug and other substance use is a contributing factor to illness and disease, accident and injury, violence and crime, family and social disruption and workplace problems (SCRGSP, 2014a). Estimates of the burden of disease and injury in Aboriginal and Torres Strait Islander peoples attribute 3.4% of the total burden to illicit drug use (Vos et al., 2007).					
	Relief from migraine or frequent headaches			£3,626 (Fujiwara, 2013) p.33.		As above	
	Relief from health problems that limit daily activities			£10,220 (Fujiwara, 2013) p.33.		As above	
	Relief from health problems that limit amount or type of work			£2,354 (Fujiwara, 2013) p.33.		As above	

HOUSING DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
Access to secure housing (WA)	Security of tenancy	(Bridge, Flatau et al., 2003), p. ii; By providing security of tenure and hence a stable learning environment that is believed to foster child development. (R) (Carter, Polevychuk et al., 2009) Doesn't really discuss security of tenancy, rather things put into place to enable immigrants/refugees to afford rents. (Moloughney, 2004) p.15; Homeowners generally had better health than renters (due to higher security of tenure). (Parsell, Petersen et al., 2015) p.60; Tenants in Common Ground (Brisbane) extremely satisfied with how settled they feel in their current housing (tenants make up about 50/50 previously homeless and low income).	Reduction in tenancy termination: Cost of move £1100 per household (GVE)			Housing providers. NSHS – Self reported benefits gained by tenants living in social housing (feel more settled).	
	Number of moves pre- and post-tenancy	(The Scottish Government, 2011a) p.24; High numbers of household moves – problems accessing schools, poor school performance and behavioural problems in children.				Housing providers. Linked Data (e.g. Telethon Kids WA, HILDA).	
Ability to maintain tenancy (WA)	Proportion of tenants in rent arrears at any time					Housing providers. NSHS – Self reported benefits gained by tenants living in social housing (be able to manage rent/money better).	
	Reduction in neighbourhood disruption					Housing providers. Police records.	
	Reduction in evictions	Parsell et al., (2015) p.83; Had an 89% record in sustained tenancies (excluding those who were deceased, and moved to relatives or other supported accommodation).	CBA Average fiscal cost of a complex eviction - fiscal value £7,276 (New Economy, 2015)			Data potentially available through Disruptive Behaviour records and STEP records (RUAH).	
Appropriate targeting of housing and assistance (NSW & WA)	Number/ proportion of successful exits	See also; (Canada Mortgage and Housing Corporation (CMHC), 2011); (Phibbs and Young, 2005). (Carter, Polevychuk et al., 2009) p.315-318; Refugees wish to leave the more affordable inner city because of crowding, crime, unsuitable housing (small apartments) for family size, etc., but difficult to transition due to affordability issues, and lack of good employment for refugees. Also house owners in high mortgage stress. Nonetheless, there was significantly higher mobility in this sector than other groups; the majority moving out of the inner city into more desirable areas in terms of space, safety, proximity to employment etc. Others were trying to				Housing providers.	

HOUSING DOMAIN

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		<p>move, but had not yet found suitable alternatives (ie., affordable) and also due to a lack of information on housing choice, and difficulties dealing with private sector (real estate agents, banks etc.).</p> <p>(Moloughney, 2004) see sections 6.1 etc. for discussion health impacts of housing/neighbourhoods.</p> <p>(Parsell, Petersen et al., 2015), p.27; Refer to literature citing the success of supported housing models in achieving housing retention rates of >85% for people with mental illness and/or chronic homelessness, and this can be sustained for up to 5 years. R. p.61; Tenants strongly satisfied, good 5 year retention rates. P.81; Very few exits due to issues such as poor fit or bad behaviour, and these mostly involved only one transfer (and one returned to Common Ground).</p>					
	Mobility between affordable options – pathways out of subsidised housing					Housing providers.	
	Degree of flexibility in assets over time					Housing providers.	
	Proportion of various housing tenure arrangements/ options	(Parsell, Petersen et al., 2015), multiple pp; Common Ground combination of housing and on-site access to assistance, strongly positive response by tenants.				NSHS – Amenity (Modification for special needs). Housing providers.	
Appropriate dwelling provision (NSW & WA)	Needs met in terms of size and type of household	<p>(Kearns, Petticrew et al., 2008b) p.29; Suitability of dwelling space.</p> <p>(Kearns, Petticrew et al., 2008a) p.23; Gains in internal dwelling space were associated with a lower incidence of wheezing. (M)</p> <p>(Kearns, Petticrew et al., 2008a) p.12; The physical size and quality of the homes that individuals live in influence their physical and mental health, space for learning, and other contributors to well-being. (M)</p> <p>(Australian Institute of Health and Welfare (AIHW), 2015) ‘Housing circumstances including overcrowding, tenure type and homelessness have potential impacts on health. The effects of overcrowding occur in combination with other environmental health factors such as poor water quality and sanitation, which are associated with</p>				<p>State and Territory based Housing Authorities - data on under and over occupancy.</p> <p>AURIN - ABS (2011): SA1-based B02 Selected Medians & Averages as at 2011-08-11.</p> <p>AIHW http://www.aihw.gov.au/indigenous-data/health-performance-framework/ </p>	

HOUSING DOMAIN

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		<p>increased risk of transferring infectious diseases, recurrence/exacerbation of chronic infections such as otitis media and exposure to hazards such as smoking indoors as well as increased risk of injury within the home’ (Bailie & Wayte, 2006; Nganampa Health Council, 1987; Department of Family and Community Services, 2003).</p> <p>(MacLennan, 2008) p.48-49; Impacts of crowding and housing disrepair have been noted on a range of health, education, and behavioural outcomes. (R) p.50; Higher physical quality in the residence’s interior and exterior, and in that of the overall neighbourhood, were significantly correlated with fewer behaviour problems—the residence interior had the strongest effect. In sum, housing and neighbourhood physical quality accounted for at least 8 percent (and up to 26 percent) of the variance in children’s socio-emotional health. (M)</p> <p>(The Scottish Government, 2011a) p.17; Level of overcrowding/privacy control – impact on mental well-being for child. p.18; Access to outdoors in home and neighbourhood – impact on mental wellbeing of child. p.25; Fewer resources generally mean that there is less time for parents to take children to green, blue and place spaces – impact on child health and wellbeing. (R)</p>					
	Dwellings available to meet cultural needs of households	<p>(Australian Institute of Health and Welfare (AIHW), 2015) ‘Aboriginal and Torres Strait Islander Australians have long sought health outcomes encompassing the physical, social, cultural and emotional elements of life. This includes the ability to live proudly and freely as Aboriginal and Torres Strait Islander Australians. Functioning is about the things people achieve or experience, consistent with their account of wellbeing. The conversion of capabilities into functioning is influenced by the values and personal features of individuals, families and communities and by the environment in which they live. Hence it is likely that different cultures will give greater or lesser priority to different aspects of functioning’ (OATSIH, 2004).</p> <p>(Kearns, Petticrew et al., 2008b) p.29; Access to garden</p>		No garden £783 (Fujiwara, 2013) p.25.		AIHW 2015 Measure 1.13 Community connectedness; 2.01 Housing & 2.02 Access to functioning housing with utilities http://www.aihw.gov.au/indigenous-data/health-performance-framework/	
	Dwellings available to meet locational needs of households	(Pawson, Milligan et al., 2015) p.54; Closer to school / facilities / public transport (L-M); Better location / access. (L)				AIHW 2015 Measure 1.13 Community functioning & 2.01 Housing http://www.aihw.gov.au/indigenous-data/health-performance-framework/	

HOUSING DOMAIN

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						data/health-performance-framework/ AURIN – (NB. Metro only) University of Adelaide - Australian Population and Migration Research Centre, (2015): SA1 Metro ARIA 2014 for Australian Capital City Urban Centres. Housing providers – some providers (e.g., WA) allow tenants apply to live in a particular region and the policy is to match a tenant with their preferred region.	
	Dwellings have universal design features					Housing providers - properties are usually modified according to tenant need. Disability which requires home modifications is flagged in data. NSHS – amenity – modifications for special needs.	
	Dwellings available to meet support/ disability needs	(Pawson, Milligan et al., 2015) p.54; More suitable home. (L-M)				Housing providers (as above). AIHW 2015 Measure 1.14 Disability http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Future NDIS data. NSHS – amenity – modifications for special needs.	
Effective service provision (NSW & WA)	Proportion of those deemed to be in need compared to number of people/ households being assisted						
	Waiting list times					Housing providers	
	Maintenance expenditure per social housing dwelling	(MacLennan, 2008) p.54; Poor-quality and substandard housing undermines health; p.58; Results of these studies show that while socio-economic disadvantage makes the largest relative contribution to the explanation of both violent and property crime rates, disadvantage is followed in importance by the relative contribution of the condition of housing in the neighbourhood, indicated by the proportion of dwellings in need of major repairs. As the proportion of dwellings in need of major repair increases, so do the violent and property crime rates net of the other variables in the		Damp £1,068; Poor lighting £1,044; Condensation £645; Rot £598 (Fujiwara 2013) p.25	(National Affordable Housing Consortium 2015) Pathway beyond NRAS ‘NAHC tenants, Jacqui and Luke, a young couple looking for their first home to rent together. They came across NRAS on realestate.com by chance and felt “very fortunate” when they were accepted to rent a brand new	Housing providers, e.g. SA Government – Social Housing Stock NSW – Social Housing Dashboard.	

HOUSING DOMAIN

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		model. (Bridge, Flatau et al., 2003) p. v; Poor quality construction and lack of regular maintenance, specifically bad plumbing, poor drainage, lack of insulation and poor ventilation negatively impact on mortality and morbidity; and negatively impact mental health and wellbeing. (R)			NRAS unit with affordable rent, a well-designed floor plan and a low maintenance yard.		
	Maintenance wait times, responsiveness	(Australian Institute of Health and Welfare (AIHW), 2015) 'Children who live in a dwelling that is badly deteriorated have been found to have poorer physical health outcomes and social and emotional wellbeing compared with those growing up in a dwelling in excellent condition' (Dockery et al., 2013).				AIHW Measure 2.02 Access to functioning housing with utilities http://www.aihw.gov.au/indigenous-data/health-performance-framework/ NSHS - Proportion of tenants satisfied with services provided by housing organisation, by Indigenous status, prior homelessness, number of structural problems, and dwelling utilisation – structural problems.	
	Vacancy rates/ appropriate utilisation of housing e.g. singles not living in 3 bed houses.					State and Territory-based Housing Authority databases.	
	Tenant empowerment e.g. (involvement in admin & maintenance)	(MacLennan, 2008) p.60; Three components of social capital—basic participation in tenant associations, tenant pro-social norms, and a building's formal organization—are related to reducing various types of crime in the buildings under study 6 to 12 months after social capital is measured. The effectiveness of social capital is related to alternative ownership structures, building characteristics, and housing policy.					
	Tenant satisfaction	(Phibbs and Young, 2005) p. ii; People reported they felt safer and more secure in their public housing dwellings because they now had better security in their dwelling; increase in self-esteem reported by some respondents meant they wanted to work on their career. (Parsell, Petersen et al., 2015) p.3; Post occupancy 'Tenants report overwhelmingly high rates of satisfaction with multiple dimensions of their housing, including: suitability for needs; privacy; affordability of rent; size of unit; design of building, condition of unit; location, access to amenity, and communal areas.' AUS				NSHS	
People who were homeless or at	Number of households assisted in	(MacLennan, 2008) p.57; Homeless people had a much higher risk than the general population for	CBA - Homelessness application - average one-off			State and Territory-based Housing Authority databases.	

HOUSING DOMAIN

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risk of homelessness achieve sustainable housing and social inclusion (WA)	social housing who were homeless or at risk of homelessness at the time of allocation	many chronic conditions, including respiratory diseases, arthritis, rheumatism, high blood pressure, asthma, epilepsy, and diabetes (Ambrosio et al., 1992).	and on-going costs associated with statutory homelessness - fiscal value £2,724 per incident (New Economy, 2015) CBA - Homelessness advice and support - cost of a homelessness prevention or housing options scheme that leads to successful prevention of homelessness - fiscal value £699 per incident (New Economy, 2015)				
	Number of households assisted in social housing that were homeless or at risk of homelessness at the time of allocation and sustain their tenancy for 12 months or more.	(Parsell, Petersen et al., 2015) pp.70+; Long term retention of tenants (5 years plus) who were previously homeless.	CBA - Rough sleepers - average annual local authority expenditure per individual - fiscal value £8,605 per yr.			State and Territory-based Housing Authority databases.	
	Number of SHS clients who were primary homeless or in crisis/ short term accommodation who had house/flat accommodation with tenure after support.		CBA Temporary accommodation - average weekly cost of housing a homeless household in hostel accommodation - fiscal value £117 (New Economy, 2015).			State agencies and crisis housing providers.	
Indigenous people have improved amenity and reduced overcrowding (WA)	Proportion of Indigenous households living in overcrowded conditions (including in remote and discrete communities).	(Australian Bureau of Statistics (ABS), 2016) 'In 2014–15, the proportion of Aboriginal and Torres Strait Islander people aged 15 years and over who were living in a dwelling that was overcrowded (requiring at least one more bedroom) was 18.4%, down from 24.9% in 2008 and 25.7% in 2002. Between 2008 and 2014–15 there were significant improvements in both remote areas (down 10.3 percentage points) and non-remote areas (down 4.3 percentage points)'. (Australian Institute of Health and Welfare (AIHW), 2015) 'Overcrowding and insecure housing tenure is also associated with stress and adverse educational opportunities for students such as educational continuity, school attendance and attainment (Dockery et al., 2013; Taylor & Edwards, 2012). However, the presence of more people in a household may decrease social isolation, which				AURIN- University of Canberra - National Centre for Social and Economic Modelling, (2011): SA2 Social Indicators for the Indigenous Population (Synthetic estimate) 2011. State and Territory-Based Housing Authority Databases. (Australian Institute of Health and Welfare (AIHW) 2015)Measure 2.01 Housing http://www.aihw.gov.au/indigenous-data/health-performance-framework/	

HOUSING DOMAIN

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		could have a positive impact on health’ (Greenop & Memmott, 2014). (Kearns, Petticrew et al., 2008a) p.23; Gains in internal dwelling space were associated with a lower incidence of wheezing; p.29; suitability of dwelling space. (MacLennan, 2008) p.12; The physical size and quality of the homes that individuals live in influence their physical and mental health, space for learning, and other contributors to well-being. p.48-49; Impacts of crowding and housing disrepair have been noted on a range of health, education, and behavioural outcomes. p.50; Higher physical quality in the residence’s interior and exterior, and in that of the overall neighbourhood, were significantly correlated with fewer behaviour problems—the residence interior had the strongest effect. In sum, housing and neighbourhood physical quality accounted for at least 8 percent (and up to 26 percent) of the variance in children’s socio-emotional health. p.55; Many on- and off-reserve Aboriginal peoples live in abject poverty and poor health. Poor housing is a symptom of that poverty. ...overcrowding is widespread and acute, affecting as much as 70 percent of the population in some Inuit communities. ... between 27 and 34 percent of all Aboriginal peoples are in core housing need as defined by CMHC. The health and social consequences are profound. Life expectancy among Aboriginals is much lower than other Canadians, and the rates of suicide, substance abuse, injury, disease, infant mortality, and family violence are much higher					
	Proportion of Indigenous households owning or purchasing a home	(Australian Institute of Health and Welfare (AIHW), 2015) ‘Overcrowding and insecure housing tenure is also associated with stress and adverse educational opportunities for students such as educational continuity, school attendance and attainment.’ (Dockery et al., 2013; Taylor & Edwards, 2012).				(Australian Institute of Health and Welfare (AIHW), 2015) Measure 2.01 Housing. AURIN: University of Canberra - National Centre for Social and Economic Modelling, (2011): SA2 Social Indicators for the Indigenous Population (Synthetic estimate) 2011. IBA (Indigenous Bank of Australia) Housing purchase assistance programmes e.g., WAHA -Keystart	
	Contribution of housing development						

HOUSING DOMAIN

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	to GDP						
	Degree of flexibility in assets over time						
Efficient asset management (WA)	Financial security enough to have insurance home contents						
Insurance cover							

SOCIAL DOMAIN

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Social wellbeing relating to tenure/ housing choice (NSW &WA)	Satisfaction	(Pawson, Milligan et al., 2015) p.54; More suitable home. (M) (Carter, Polevychuk et al., 2009) p315-8; Despite issues with the inner city location of most affordable housing, residents relatively satisfied with their housing with the metrics for this improving over the 3 year period of the study. Notwithstanding this, satisfaction with condition and repairs did not increase, likely due to greater awareness of desirable standards of maintenance. Also, many moved from the inner city to more desirable accommodation (and if not, wanted to). (Canada Mortgage and Housing Corporation (CMHC), 2011) CMHC, p.5 refers to satisfaction as a subjective measure and says that this varies widely between individuals, but is correlated with individual level indicators of social capital and supports feelings of empowerment (and housing dissatisfaction is correlated with poor psychological wellbeing). Also relevant to satisfaction (or not) with many factors relating to the surrounding neighbourhood, such as environmental quality, greenspace, traffic, crime, levels of density etc. Also, on p.23, state that increasing levels of satisfaction are related to self-esteem and other psychosocial factors. Parsell et al. 2014 multiple pp; Significant tenant satisfaction with housing at Common Ground (90%) with positive metrics on most aspects (except exposure to drunkenness in foyer).				NSHS – Tenant satisfaction (multiple indicators measured e.g., structural problems, dwelling utilisation).	
	Feeling in control of life	(Kearns, Petticrew et al., 2008b) p.15; Sense of control; p.23 psychosocial benefits. (M) (Pawson, Milligan et al., 2015) p.54; Happier more stable environment; Increased independence / control over circumstances. (M)					
	Ability to decorate home	(The Scottish Government ,2011a) P.17; Ability to personalise space – impact on mental wellbeing of children.					
	Ability to age in place						
Social capital and cohesion (NSW & WA)	Connection to local labour markets	See also (Spence, 1993); (Hay, 2005); *(Bridge, Flatau et al., 2003; Fujiwara, 2013; Fujiwara, 2014) (MacLennan, 2008) p.12; The neighbourhood context that the household chooses jointly with housing may also influence health, learning, safety, and economic		£2,457 Able to obtain advice locally (Trotter, Vine et al., 2014) p.14.		NSHS – Influences on current employment situation of social housing respondent (qu include option that there are now jobs where you live).	

SOCIAL DOMAIN

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		linkages. (M) (Carter and Polevychok, 2004) p.24; North End Housing project in Winnipeg used local labour to address local housing needs and created local ownership. Attracted approx. 4 mill community funding, paid over \$1 mill in wages and benefits, creating 34 staff years, trained 19 employees (70% indigenous) and 60% previously convicted of a crime; and also resulted in a spinoff company, Inner City Renovations, which now works throughout the city. Therefore, housing can develop skills, address other community needs (i.e. crime prevention) and focus on youth builder programs. (H) (Canada Mortgage and Housing Corporation (CMHC), 2011) CMHC, p42; Homeowners have better labour market outcomes, with incentives for greater household participation in the labour force (to pay the mortgage). Nothing directly about participation in local labour markets (other than at a city scale). (Fujiwara, 2013), p38; Local decisions on housing can impact local employment markets.					
	Diversity score						
	Proportion of social housing	(Parsell, Petersen et al., 2015), p.79; Neighbours apparently quite happy with Common Ground (all declined to be interviewed bar 1, who was not concerned). It is hypothesized that if they were unhappy, they would want to have a say.				State and Territory-based Housing Authority databases.	
	Quality of local education, health, shopping, and social activities	(Pawson, Milligan et al., 2015) p. 54; Closer to school / facilities / public transport. (L) (Australian Institute of Health and Welfare (AIHW), 2015)				NSHS – Proximity to services. http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 1.13 Community Functioning.	
	Community perceptions - accepting of people from diverse backgrounds	(MacLennan, 2008) p.51; More cohesive neighbourhood to be strongly associated with better child outcomes in three areas— lower conduct disorder scores, lower hyperactivity scores, and lower emotional disorder scores—while neighbourhood problems raised these scores. (Bridge, Flatau et al., 2003) p.viii; The social capital mediation model posits that social capital adds value to housing policies, i.e. it makes them more effective. The evidence reviewed offers some support for this model.					

SOCIAL DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
	Quality and variety of interaction in the local community (e.g. leading to business innovation)	(Kearns, Petticrew et al., 2008c) p.27; Perceived improvements in dwelling privacy and quiet, and in terms of neighbourhood infrastructure and services were strongly related to an enhanced sense of community empowerment – such changes engendered an increased sense of control among residents. (MacLennan, 2008) p.50; Higher physical quality ... of the overall neighbourhood, were significantly correlated with fewer behaviour problems ... In sum, housing and neighbourhood physical quality accounted for at least 8 percent (and up to 26 percent) of the variance in children’s socio-emotional health. (M)				NSHS – Satisfaction with amenities.	
	Opportunities to participate in art and cultural activities	(Australian Institute of Health and Welfare (AIHW), 2015) ‘Aboriginal and Torres Strait Islander Australians have long sought health outcomes encompassing the physical, social, cultural and emotional elements of life. This includes the ability to live proudly and freely as Aboriginal and Torres Strait Islander Australians. Functioning is about the things people achieve or experience, consistent with their account of wellbeing. The conversion of capabilities into functioning is influenced by the values and personal features of individuals, families and communities and by the environment in which they live. Hence it is likely that different cultures will give greater or lesser priority to different aspects of functioning’ (OATSIH, 2004).				AIHW http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 1.13 Community Functioning AURIN – LGA attended local arts and cultural event last 3 months (Melbourne only).	
Social empowerment	Opportunity to have a say in important issues	(MacLennan, 2008) p.60; Three components of social capital—basic participation in tenant associations, tenant pro-social norms, and a building’s formal organization—are related to reducing various types of crime in the buildings under study 6 to 12 months after social capital is measured. The effectiveness of social capital is related to alternative ownership structures, building characteristics, and housing policy.					
	Voting rates in local government areas					ABS 1370.0 - Measures of Australia's Progress, 2010 (Voter turnout).	
	Tenant empowerment (involvement in admin and maintenance)	(Ravi and Reinhardt, 2011) p. 3; Greater tenant empowerment allows CH residents to have more control of their residential and personal lives. AUS (Pawson, Milligan et al., 2015) AUS p.54; Increased		£8,116 active in tenants group (Trotter, Vine et al., 2014) p.15. UK	(Churches of Christ Housing Services 2016) – p. 27 Robyn’s story ‘Personally, I really enjoy being in TAG. It’s a group thing, its	AHURI Final Report No 257.	

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OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		independence / control over circumstances. (M)			nothing separate. I get personal fulfilment out of going along.'		
	Membership of local organisations and decision-making bodies			£1,850 member of social group; £ 1,773 regular attendance at voluntary or local organisation (Trotter, Vine et al., 2014)p.15		ABS - 4159.0 - General Social Survey: Summary Results, Australia, 2010 (community participation).	
Reduced delinquency and recidivism	Avoided cost of corrections	<p>(Orr, Feins et al., 2003) p.x1; No significant differences in self-reported or index of behavioural issues; but there was a significant reduction in the frequency of arrests for violent behaviour for all groups, and particularly girls from 15-19. On the other hand, there were <i>increases</i> in the proportion of boys from 12 – 19 for property crime, marijuana smoking etc. This is hypothesised to be from better policing in the new areas, and possible disruptive impacts of moving on boys.</p> <p>(MacLennan, 2008) p.52; Notes that behaviour problems increase as the neighbourhood quality decreases. The impacts are more noted in girls than boys. Also, 'behaviour problems were higher when children lived in neighbourhoods with fewer affluent residents, high unemployment rates, and low social cohesion—even after controlling for family socioeconomic factors, maternal distress, poor social support, and poor health.'</p> <p>(Kliger, Large et al., 2011), Table on p.4, states that avoided cost of corrections (cost of prison stay for 3 months) is \$1,781,250. All women in the Cairnlea study had had periods of prison time (sometimes on and off) and had often exited to previous (negative) houses with DV, alcohol, drugs, etc. These women had managed to clean up due to being in safe housing without having to, for example, go back to a violent or drug addicted partner.</p> <p>(Australian Institute of Health and Welfare (AIHW), 2015) 'Indigenous Australians experience higher rates of arrest and incarceration than non-Indigenous Australians. Imprisonment impacts on family, children and the broader community. It can increase stress, affect relationships and have adverse employment and financial consequences' (AHMAC, 2015).</p>	<p>\$1,781,250 Avoided costs of corrections over 20 year period (VWHA (Kliger, Large et al., 2011)) p.4. AUS</p> <p>CA\$9,514 The cost of an average 'stay' in a correctional facility is estimated at \$142/day for 67 days (2010 study). Affected 20,717 people. (Zon, Molson et al., 2014) p.37. CAN</p> <p>CBA Crime - average cost per incident of crime, across all types of crime (fiscal, economic and social values) - fiscal value crime - average cost per incident of crime, across all types of crime (fiscal, economic and social values); econ. value £736; social value £1,795 (New Economy, 2015). UK</p>	£3,684 never arrested – youth (Trotter, Vine et al., 2014)p.14. UK		<p>WA Dept of Corrective Services (WADoC) Rate of Return for adults and young people.</p> <p>ABS working with corrective services agencies to explore ways to improve prisoner flow data (Steering Committee for the Review of Government Service Provision, 2016).</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.11 Contact with the criminal justice system.</p>	

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OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
	Adult imprisonment	(Australian Institute of Health and Welfare (AIHW), 2015) see above indicator.	CBA 'Offender, prison average cost across all prisons, including central costs (costs per prisoner per annum)' Fiscal value £34,840 (New Economy, 2015). UK			State and Territory based correction authorities - Daily average prisoner population imprisonment rates RoGS (aboriginality available). http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.11 Contact with the criminal justice system.	
	Juvenile detention	(Carter and Polevychok, 2004) p.25; Adequate housing related to reduction in juvenile aggression, property offences, etc. (M).	Costs associated with a teenager involved in criminal behaviour (without a custodial sentence) £13,000 per incidence (GVE) CBA youth offender, average cost of a first time entrant (under 18) to the criminal justice system in the first year following the offence. Fiscal value £3,620 (New Economy, 2015).			State and Territory based correction authorities - Daily average detainee population imprisonment rates RoGS (aboriginality available).	
Reduced drug and alcohol dependence (WA)	Avoided costs	(Kearns, Petticrew et al., 2008a) p.36; With residential change people may be more prepared to make a 'fresh start' re smoking; people who reported a worsening of outlook or view were more likely than others to be smokers at wave 3, but also more likely to be thinking of quitting; reported improvements in the dwelling fabric were associated with better drinking outcomes. (Fauth, Leventhal et al., 2004), p.2277; Stayers had reduced levels of alcohol abuse symptoms, but there was no relationship with mental health or drug abuse. p.2278; Reduction in alcohol abuse might also have been due to neighbourhood effects, as this was less likely to be sanctioned in higher income neighbourhoods. (Kliger, Large et al., 2011) See section 8.4.1. for dollar figure on avoided cost.	CBA alcohol misuse - estimated annual cost to the NHS of alcohol dependency, per year per dependent drinker fiscal value - £2,015 Social value - £1,565 (New Economy, 2015) CBA drugs misuse - average annual savings resulting from reductions in drug-related offending and health and social care costs as a result of delivery of a structured, effective treatment programme. Fiscal value - £3,727; economic value - £9,234; social value - £3,933 (New Economy, 2015)				
Improved family relationships (WA)	Decrease in child protection notifications	(Australian Institute of Health and Welfare (AIHW), 2015) 'Child protection services receive and assess allegations of child abuse and neglect, and/or harm to children and young people; provide and refer clients to family support and other relevant services; and intervene to protect children' (AIHW, 2014).				AURIN (indigenous only) University of Canberra - National Centre for Social and Economic Modelling, (2011): SA2 Social Indicators for the Indigenous Population (Synthetic estimate) 2011.	

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OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		Aboriginal and Torres Strait Islander children are over-represented in the child protection system. The reasons for this are complex, and include the intergenerational effects of separation from family and culture, and the relative socioeconomic disadvantage of Indigenous Australians' (HREOC, 1997; Stanley et al., 2003).				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.12 Child Protection	
	Engagement with family	(MacLennan, 2008) p.50; Family functioning is correlated with homeownership. P.52; Significant variation in education outcomes related to between family differences (such as parental education, rental housing, etc.). p.50; Inadequate housing as a contributing factor in 18 percent of cases where children are placed in care, arising from difficulties paying rent, eviction, transience, shelter living, overcrowding, and living in housing below standards. p.51; Return to their parents' home was delayed by housing problems. (Carter and Polevychok, 2004), pp.25/26; Inadequate housing is a contributory factor in placing children in care; including the return home for a child due to housing conditions. It is not a given that safe and accessible housing will prevent children coming into care, but will likely reduce numbers and have flow-on impacts such as improved physical and mental health, and wellbeing.					
	Recorded incidents of family violence					AURIN (indigenous only) University of Canberra - National Centre for Social and Economic Modelling, (2011): SA2 Social Indicators for the Indigenous Population (Synthetic estimate) 2011.	
	Decrease in apprehended violence orders						
Reduced crime (NSW & WA)	Reduction in arrest rates	(Australian Institute of Health and Welfare (AIHW), 2015) 'Indigenous Australians experience higher rates of arrest and incarceration than non-Indigenous Australians. Imprisonment impacts on family, children and the broader community. It can increase stress, affect relationships and have adverse employment and financial consequences' (AHMAC, 2015). See also (Anderson, Charles et al., 2003); (Fauth, Leventhal et al., 2004); (MacLennan, 2008); (Kling,				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.11 Contact with criminal justice system	

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OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		Ludwig et al., 2005); (Ludwig, Duncan et al., 2001); (Phibbs and Young, 2005) not causal but associated. (Carter, Polevychuk et al., 2009) only discuss crime/arrests as impacting refugees and not a reduction in arrest rates for the target population. (Canada Mortgage and Housing Corporation (CMHC), 2011) p.39; Cites Ludwig 2001, in that moving families from low to higher income areas reduces rates of juvenile arrests.					
	Recorded offences against property	(MacLennan, 2008) p.59; Refers to reduction in overall crime, particularly property crime, by the use of urban design (reduction in derelict and unmaintained building, bad traffic planning and poor lighting). Bad design does not cause crime, but increases the possibility of successful crimes. Also, p.60, a study in NY of 487 buildings, showed that improvement in social capital, such as participation in tenants' associations and fostering pro-social norms, is related to reductions of crime in buildings. R (Fauth, Leventhal et al., 2004), p.2272; Adults who moved were exposed to less crime than those who stayed.					
	Recorded offences against people						
	House thefts avoided costs						
	Assault avoided costs						
Monitoring and antisocial behaviour (NSW & WA)	Reduction in report rates and arrest rates	(Australian Institute of Health and Welfare (AIHW), 2015) 'Indigenous Australians experience higher rates of arrest and incarceration than non-Indigenous Australians. Imprisonment impacts on family, children and the broader community. It can increase stress, affect relationships and have adverse employment and financial consequences' (AHMAC, 2015).	Average costs of anti-social behaviour £4950 per incident. (GVE) CBA anti-social behaviour further action necessary (cost of dealing with incident) fiscal value £673 (New Economy, 2015).			http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.11 Contact with the criminal justice system.	
Reduced exposure to household violence (NSW & WA)	Perception of safety - household level	(Phibbs and Young, 2005) p. ii; People reported they felt safer and more secure in their public housing dwellings because they now had better security to their dwelling. Parsell et al. 2015, pp.61-63; 90% of tenants feel a sense of security due to the presence of an onsite 24 concierge, some use this to restrict unwanted visitors by family and others (especially Indigenous).	CBA 'domestic violence - average cost per incident (fiscal, economic and social values) Fiscal value - £2,836; economic value - £1,692; social value - £7,803 (New Economy, 2015).			NSHS – Safety/security of home.	

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OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
Increased access to support services through fixed address (NSW & WA)	Ability to get help quickly	Also see Parsell et al. 2015, p.61, etc.				AURIN: Torrens University Australia - Public Health Information Development Unit, (2014): SD Access to Services, Financial and Transport Barriers.	
Neighbourhood safety (NSW & WA)	Perceptions of safety	<p>(MacLennan, 2008) CAN p.50-51; Various indicators for impact on children on quality of neighbourhood. (R)</p> <p>(Phibbs and Young, 2005) AUS p. ii; People also felt more secure because they thought they were living in a safer neighbourhood.</p> <p>(Orr, Feins et al., 2003) p.152; Noted a decrease in psychological distress in teenaged girls (anxiety, depression etc.) and attributed this to the perceptions of increased safety in the new areas. L</p> <p>(Australian Institute of Health and Welfare (AIHW), 2015) 'Experiencing threats of violence, being in an environment where personal safety is at risk, or in a social setting where violence is common, has negative health effects (AHMAC, 2015). The level of violence experienced by Indigenous Australians is also experienced in the context of colonisation, discrimination and subsequent markers of disadvantage such as low income, unemployment, lack of access to traditional lands and substance use (Day et al., 2013). Safe communities are places in which people are more likely to experience empowerment, security, pride, wellbeing and resilience' (AHMAC, 2015).</p> <p>See also: (Anderson, Charles et al., 2003); (Carter, Polevychuk et al., 2009); (Katz, Kling et al., 2001); (Partnership for America's Economic Success (PAES), 2008).</p>		£5,340 Police doing a good job; £11,873 Not worried about crime (Trotter, Vine et al., 2014) 14. UK	<p>(Churches of Christ Housing Services 2016) p.16; Nic's Story 'I feel safe here. I've got no problems and I get on pretty well. I've got a balcony that looks down the road and you can just see the city from here. It's good.'</p> <p>and</p> <p>p. 51; Lydia's story 'Having this unit has made it easy for me in terms of affordability and safety as well. At my previous place, the police were there all the time'.</p>	<p>- AURIN Torrens University - Public Health Information Development Unit, (2014): SLA11 Community Strength.</p> <p>Crime statistics available from police and ABS.</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.10 Community Safety: drawn from -</p> <ul style="list-style-type: none"> · Australian Aboriginal and Torres Strait Islander Social Survey. · National Hospital Morbidity Database. · National Mortality Database. · National Homicide Monitoring Program. · National Aboriginal and Torres Strait Islander Social Survey. <p>NSHS – Safety/security of neighbourhood.</p>	
	Living in a safe area	<p>(Kearns, Petticrew et al., 2008c) p.34; Sense of safety. (M)UK</p> <p>(Kearns, Petticrew et al., 2008a) p.14; Improved physical function in areas of reduced crime. (M) UK</p> <p>(Australian Institute of Health and Welfare (AIHW), 2015) see above indicator.</p>		<p>£650 (Fujiwara, 2013) p.34. UK</p> <p>£6,500 - regeneration of local area (Fujiwara, 2013) p.34. UK</p>		<p>AURIN - Torrens University Australia - Public Health Information Development Unit, (2014): SD Community Strength.</p> <p>http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.10 Community Safety.</p>	

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OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
		(MacLennan, 2008) p.58; QUALYI The methodology normally includes estimating the emotional and physical, lost output (productivity and unemployment), and health costs of crimes (Brand and Price, 2000). CAN See also (Bridge, Flatau et al., 2003). AUS (Fujiwara, 2013), p34; ‘...living in a safe area life satisfaction increases by 0.029, which has a value of about £650 per annum per person. HA initiatives that help to improve local area safety will have a value to society.’				NSHS – Safety/security of neighbourhood.	
	Crime levels	(MacLennan, 2008) p.58; Disadvantage is followed in importance by the relative contribution of the condition of housing in the neighbourhood, indicated by the proportion of dwellings in need of major repairs. As the proportion of dwellings in need of major repair increases, so do the violent and property crime rates net of the other variables in the model. p.59; The links between crime and community geography and infrastructure have elevated quality of life concerns to the forefront of crime prevention efforts. (Carter and Polevychok, 2004), p.25 (etc.); Adequate housing (as well as housing projects aimed at empowering offenders) leads to reduction in arrests for aggression, property offences, and reduced rates of recidivism.				As above	
	Number of break-ins					Police records	
	Road safety					Police records	
	Exposure to violence	See crime levels	Proxy - number of times victimised in own neighbourhood in last 12 months (Fauth et al.)			Police records	
Quality of Neighbourhood (new outcome)	Cohesiveness	(MacLennan, 2008) p.50-51; Various indicators for impact on children on quality of neighbourhood. (R) (The Scottish Government, 2008) p.51; Educational attainment - significance may be explained not only by homeownership as a tangible asset, but also as an important investment in locale, ‘accompanied by concern for neighbourhood quality and processes’. p.4; Reduction in alienation and threatening environment.				-AURIN, University of Adelaide - Australian Population and Migration Research Centre, (2015): SA1 Metro ARIA 2014 for Australian Capital City Urban Centres. Local government authorities	

URBAN (REGIONAL / COMMUNITY) AMENITY DOMAIN

OUTCOMES	INDICATORS	Attribution references Nature of attribution	ROI Element 1 Social Return on Investment (SROI)	ROI Element 2 Well-being valuation (WV) Per person per year	ROI Element 3 Narrative (incl. supported housing)	Indicative Data Examples	Product- ivity
Place making (NSW)	Number of outdoor café seats					Local government authorities (e.g. outdoor dining license).	
	Amount of open space	(The Scottish Government .2011a) P.17; Space to play – impact on mental well-being for children.				Local government authorities. AURIN / GIS queries (for per capita open space levels divide by population density).	
	Number of public places	(Parsell, Petersen et al., 2015) pp61+; Common Ground has a number of shared communal places within the building, and most tenants (of those who use these spaces) report very high levels of satisfaction; using these for socialising, bbqs, computer facility access, entertainment etc.				Local government authorities. NSHS – Location (proximity to facilities and services – parks and recreational facilities).	
	Appearance of public areas	(Kearns, Petticrew et al., 2008c) p.11; Link made with use of local amenities. (M)				NSHS – Satisfaction with location (parks and recreation).	
Neighbourhood resources (resident satisfaction) (NSW)	Satisfaction with garbage collection						
	Satisfaction with recreational facilities	(The Scottish Government, 2011a) P.17; Space to play – impact on mental well-being for children. (Parsell, Petersen et al., 2015), pp 71+; Tenants highly satisfied with (organised) recreational facilities and activities within the building.				NSHS – Location (proximity to facilities and services) rated by tenants as important to the household – parks and recreational facilities.	
	Satisfaction with medical facilities					NSHS – Location (proximity to facilities and services) rated by tenants as important to the household – emergency services, medical services and hospitals.	
	Satisfaction with transport options	(Pawson, Milligan et al., 2015) p.54; Closer to school / facilities / public transport. (L)				NSHS – Location (proximity to facilities and services) rated by tenants as important to the household – public transport.	
	Satisfaction with schools standard/ options	(Pawson, Milligan et al., 2015) p.54; Closer to school / facilities / public transport. (L)				NSHS – Location (proximity to facilities and services) rated by tenants as important to the household – education / training facilities.	
Socialising on most days of the week (NSW)	Number of acquaintances	(Kearns, Petticrew et al., 2008c) p.19; Link made with neighbouring behaviours. (M) (Parsell, Petersen et al., 2015), p71+; Common Ground has high levels of socialising with many tenants saying that other tenants are their main friends, with 43% having between 2 and 10 friends in the building and 17% having more than 10 friends. Only a minority reported having no friends or not socialising within the building.		£3,000 (Fujiwara, 2013). UK		NSHS – Self reported benefits gained by tenants living in social housing (feel part of the local community).	
Regeneration of the local area	Number of commercial activities	See also (Fujiwara, 2013); (MacLennan, 2008).		£6,500 (Fujiwara, 2013). UK			

(NSW & WA)	Quality of neighbourhood (new indicator)	<p>(The Scottish Government ,2008) p.4; Contribution of neighbourhood to mental health. p.5; Good Places Better health program. p.16; In relation to mental health and well-being, managers will be better equipped to ensure regeneration projects can create positive environments in terms of noise, litter, access to greenspace, access to culture, safe street, opportunities for play, increased opportunities for active travel, reduced isolation, improved community cohesion.... p.21; Role of regeneration of area, place making, opportunity for physical activity, clean attractive environments, well used accessible greenspace, quiet environments, safe streets, active travel opportunities, opportunities for play on improved mental wellbeing.</p> <p>(The Scottish Government, 2011a) p.20; Noise sourced such as aircraft and road noise – impact on child health and mental wellbeing.</p>		£1,747 Good neighbourhood (Trotter, Vine et al., 2014). UK		-AURIN, University of Adelaide - Australian Population and Migration Research Centre, (2015): SA1 Metro ARIA 2014 for Australian Capital City Urban Centres.	
				£6,500 Regeneration of local area (Fujiwara, 2013). UK		State and Local government planning authorities.	
Community identity and image	Number of community facilities	(Australian Institute of Health and Welfare (AIHW), 2015) – ‘Connection to family and community, land and sea, culture and identity has been identified as integral to health from an Aboriginal perspective.’ (NAHSWP 1989). As stated by Anderson (1996:15): ‘Our identity as human beings remains tied to our land, to our cultural practices, our systems of authority and social control, our intellectual traditions, our concepts of spirituality, and to our systems of resources ownership and exchange. Destroy this relationship and you damage—sometimes irrevocably—individual human beings and their health.’ ‘Ongoing access to traditional lands also offers socio-political, economic and environmental benefits (Weir et al., 2011). Access to traditional lands is not only a determinant of health in remote contexts where Indigenous Australians are more likely to have ownership and control over their Country; it is also a determinant of health for those living in non-remote and urban areas’.				AURIN MeteroARIA http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.14 Indigenous people with access to their traditional lands.	
	Number of sporting facilities					AURIN MeteroARIA	
Noise	Number of trees in the area	(The Scottish Government, 2011a) p.26; Issues with vehicle routs on children’s health and wellbeing.					
Culture, heritage and identity	Number of heritage sites	(Australian Institute of Health and Welfare (AIHW); 2015) see <i>Number of community facilities</i> indicator above.				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.14 Indigenous people with access to their traditional lands.	
Urban design (NSW & WA)	Number of intersections per km2	(The Scottish Government, 2011a) p.26; Issues with vehicle routs on children’s health and wellbeing.				Alternative: AURIN walkability index	
	Access to (public) transport	(Australian Institute of Health and Welfare (AIHW), 2015).				AURIN – MeteroARIA	

		<p>‘Transport is a key enabler for access to health care, goods and services and supports Indigenous Australians in maintaining cultural obligations to travel to family commitments (Helps et al., 2010). Indigenous Australians face various barriers to accessing appropriate health care including logistics, cost and reliability of transport options. These challenges have a broader impact on social and economic circumstances of both health consumers who need to travel significant distances while unwell, along with carers who support attendance at services for antenatal care, young children, people with a disability, or people suffering from chronic health conditions, mental health or substance use issues (Lee et al., 2014). Limited or no public transport options significantly impact on the capacity to access specialist health care, particularly for patients with chronic health conditions (Teng et al., 2014) or requiring birthing services (Parker et al., 2014) in rural and remote areas’ (Kelly et al., 2014).</p> <p>(MacLennan, 2008) p.14; Residents of high-density environments choose to reside in these areas because of their desire for a more pedestrian and transit-oriented lifestyle (Filion et al., 2006). (L-M)</p>				http://www.aihw.gov.au/indigenous-data/health-performance-framework/ Measure 2.13 Transport	
	Mix of land use					AURIN (or other GIS data source). Local and state government planning authorities.	
	Number of jobs and residents per ha					AURIN - ABS BO1 Population Density by SA1; AURIN - University of Canberra - National Centre for Social and Economic Modelling, (2011): SA2 OECD Indicators: Employment 2011.	
	Density levels					AURIN - ABS BO1 Population Density by SA.	
	Productivity benefit of walkable environment	(Kearns, Petticrew et al., 2008a) p.14; Improved physical function in areas of reduced crime. (M)					

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