

# Review of Research on Housing and Wellbeing

By Lisa Glass, Shelter Scotland

## Introduction

This paper aims to summarise some of the existing evidence on the links between housing and the eight specified areas of wellbeing. It focuses on research findings rather than speculative think pieces or policy statements. It also seeks to identify causal links, where this is possible, rather than merely associations and correlations.

In preparing this summary, we have primarily drawn on existing research reviews although we have tried to supplement this with more recent Scottish data and studies where these are available. The various research reviews we have consulted have generally focussed on research undertaken throughout the UK and we think this is potentially relevant to the links that may exist in Scotland. We have not drawn on research undertaken outside of the UK unless this is specifically mentioned.

For the purposes of this review of research, we have used the eight specific types of wellbeing initially identified as relevant by the Commission notwithstanding that the main report has grouped some of these for editorial reasons. These eight types of wellbeing are:

1. Housing as 'home'
2. Neighbourhood quality
3. Health
4. Education
5. Employment
6. Income
7. Environmental sustainability
8. Community safety

This paper reviews the research evidence on the impact of housing (defined broadly to include housing services and access to housing as well as bricks and mortar) on wellbeing. There is varying research evidence available in each of these respective areas, with some having more in depth and extensive research than others. In many cases, there is also a problem of separating out the impact of housing from other confounding factors, notably poverty and deprivation, which often come hand in hand with poor housing.

## 1. Housing as 'home'

Understandings of 'home' are complex and multi-dimensional. By nature the experience of what makes a house a home to someone is highly subjective. A recent study explored the relationship people have to 'home', and what characteristics constitute home<sup>1</sup>. In the

---

<sup>1</sup> As opposed to a place, or a residence from the past.

subjective understanding of home, when viewed as an existing residence<sup>2</sup> 'home' was found to be critical to personal and emotional support, given its place as a haven offering comfort, warmth, relaxation, nourishment, retreat, sanctuary as well as peace and quiet.

The study found that the concept and experience of 'home' is deeply personal and highly emotional, and as such is critical to each individual's understanding of themselves and their quality of life. What also emerged from this study was the depth of insight offered by participants in respect of health, both physical and mental, with the home's role in meeting self-fulfilment and self-development emphasised. Security and safety also featured, as did engagement with the natural environment, but both features were less pronounced among participants in the research than the personal understandings of home that led to a sense of wellbeing.

Further qualitative research demonstrates that perception of what makes a house a home is connected to the sense of control a person has over their surroundings. This may be related to tenure, or ownership structures, or to other factors such as the suitability of the house to meeting the person's needs. Research for the Scottish Government in 2002<sup>3</sup> found that tenants in the PRS expressed their dissatisfaction with the fact that their accommodation 'did not constitute a home'. The perceptions (and reality) of insecurity among private renters plays a role in how private renters think about where they live. A lack of control over their living environment such as a reluctance to decorate or make improvements to the property because any added value would go to the landlord also plays a role. The research found that many tenants also felt that their landlord might not grant them permission to decorate and therefore did not ask.

## **2. Housing and neighbourhood quality**

### **External appearance of housing**

Housing contributes to the external appearance of the neighbourhood, and as such visual blights of poorly landscaped gardens and bin stores can affect neighbourhood quality. One such example is empty homes: attempts to quantify this effect have found an 18% drop in sale value for properties neighbouring a house that is empty<sup>4</sup>.

### **Planning and design of housing and estates**

Housing that is well located, i.e. accessible to employment, shops, schools and other local facilities, adds to the quality of a neighbourhood. The Young Foundation, drawing ideas and examples from a review of evidence about what makes communities sustainable, looked at several examples from around the world where poorly designed housing developments resulted in a lack of social sustainability and, ultimately, the expensive demolition or regeneration of estates, for example Fountainwell Place in Glasgow, and the Heygate Estate in Elephant and Castle, London<sup>5</sup>. The report highlights several design points that resulted in isolated residents and the creation of 'dead' spaces where antisocial behaviour flourished. A

---

<sup>2</sup> Home Not Housing – Engaging with Wellbeing Outcomes, Scottish University Insight Institute <http://www.scottishinsight.ac.uk/Programmes/Wellbeing2014/HomenotHousing.aspx>

<sup>3</sup> Houston, D, Barr, K and Dean, J Research on the Private Rented Sector in Scotland, Department of Urban Studies, University of Glasgow 2002

<sup>4</sup> A survey by Hometrack 2003, [www.hometrack.com](http://www.hometrack.com)

<sup>5</sup> Caistor-Arendar, L., Bacon, N., Woodcraft, S., Hackett, T. (2011) Design for Social Sustainability, <http://youngfoundation.org/publications/design-for-social-sustainability/>

result of this is that such estates (and in some cases their tenants) gain a poor reputation, leading to increased requests to transfer and refusals of offers to take up tenancies. This in turn leads to unlettable houses – resulting in visual problems of unkempt properties as highlighted above.

Another means of analysing the effect of housing on neighbourhood quality have been through looking at the efficacy of community regeneration projects, for example the New Life for Urban Scotland initiative<sup>6</sup>. This project targeted regeneration in four areas, and lasted over a decade. During the life of the project, resident satisfaction with their neighbourhood increased by 27%, as did the image of the estates from the view of external residents and businesses. The effect of the programme on employment was mixed, with employment rates rising in two of the areas, remaining constant in one and falling in another. Population retention was highlighted as important to the success of the projects as often when people became employed they left the areas, and were replaced with workless households, hampering the regeneration effort. However, an overview of the impact of regeneration has found the evaluations of initiatives have been poor and inconclusive as a result of poor quality baseline assessments of indicators<sup>7</sup>.

### **The impact of housing policy on neighbourhood quality through sense of community and ownership**

Housing policy has sought to increase community empowerment to enable effective control over the local neighbourhood by local residents. A strong sense of community contributes to the wellbeing of residents and the local neighbourhood as a whole. There is some evidence that suggests that it can take up to 15 years before local social networks develop fully<sup>8</sup>. The local wellbeing project in England argues wellbeing is higher where residents can influence decisions affecting their neighbourhood, where residents have the confidence to exercise control over local circumstances, and among people who have regular contact with their neighbours<sup>9</sup>.

One frequent aim of housing policy has been to create more mixed tenure communities, to counteract some of the concentrations of deprivation and associated negatives with exclusively social rented communities. The evidence on the social benefits of mixed tenure communities, in terms of increasing social cohesion, having 'role models' available for poorer households and reducing social exclusion, has been inconclusive<sup>10</sup>. However there have been some noted wellbeing-related benefits of mixed tenure communities – better services and amenities, a reduction in crime and stigma and increased satisfaction with the neighbourhood<sup>11</sup>. A further study into the benefits of mixed communities concluded that much of the positive findings around reduced stigma and residents having a 'broader

---

<sup>6</sup> Tarling, R., Hirst, A., Rowland, B., Rhodes, J., Tyler, P. (1999) An Evaluation of the New Life in Urban Scotland Initiative - Research Findings

<sup>7</sup> Robertson, D. Regeneration and Poverty in Scotland: Evidence and Poverty Review

<sup>8</sup> Caistor-Arendar, L., Bacon, N., Woodcraft, S., Hackett, T. (2011) Design for Social Sustainability, <http://youngfoundation.org/publications/design-for-social-sustainability/>

<sup>9</sup> Hothi, M., Bacon, N., Brophy, M. and Mulgan, G. (2008) Neighbourliness + empowerment = wellbeing: Is there a formula for happy communities?, London: Young Foundation cited in Caistor-Arendar, L., Bacon, N., Woodcraft, S., Hackett, T. (2011) Design for Social Sustainability

<sup>10</sup> Scottish Government (2010) What does the literature tell us about the social and economic impacts of housing?

<sup>11</sup> Tunstall, R. and Fenton, A. (2006) In the Mix: A Review of Research on Mixed Income, Mixed Tenure and Mixed Communities. A joint publication from Housing Corporation, Joseph Rowntree Foundation and English Partnerships.

outlook', may be attributed to children attending schools with other pupils from mixed backgrounds<sup>12</sup>.

### 3. Housing and Health

There is wide acceptance in the literature of the correlation between poor housing and poor health. Often there are other confounding factors such as high unemployment and deprivation, however in many cases causal links have been found between housing and health notwithstanding that other factors might also be involved. Possible causal links have been identified stemming from the internal environment of the house (for example dampness, household design leading to accidents), the way the house is occupied (such as overcrowding, stress relating to tenancy) or the wider physical and social environment (including stigma of certain housing, neighbourhood design)<sup>13</sup>.

Attempts to quantify the monetary costs of poor housing have estimated it at over £600m per year to the NHS in England<sup>14</sup>. Poor childhood housing has been linked to increased morbidity and mortality in adulthood<sup>15</sup>, and a longitudinal study using data from the British Household Panel Survey showed worsening housing conditions are independently associated with health deterioration, whilst improvements to housing can help mitigate this<sup>16</sup>. A systematic review of housing improvement and health gain looked at studies from the last 100 years from around the world including studies from the UK and other parts of Europe<sup>17</sup>. The authors found investment in housing does have the capacity to improve health, most notably when improvement programmes are targeted at those with poor health and inadequate housing conditions, in particular relating to warmth in the home.

A 2002 study examined the literature around housing and health, finding a significant relationship between poor housing and mental health at both an individual premises level and a community level<sup>18</sup>. The study also concluded poor housing would be significantly detrimental to the health of those already suffering from mental illness.

#### The internal environment of the home

There are some widely accepted causal links between the internal environment of the home and health. Radon found in buildings has been linked to lung cancer, and the effects of carbon monoxide levels and high lead levels in water due to contamination from lead pipes and tanks have been proven<sup>19</sup>. A series of Scottish studies in the 1980s highlighted the relationship between dampness and mould and respiratory problems in both adults and

---

<sup>12</sup> Allen, C., Camina, M., Casey, R., Coward, S. and Wood, M. (2005) *Mixed Tenure, Twenty Years On: Nothing out of the Ordinary*. York: Joseph Rowntree Foundation, cited in Scottish Government (2010) *What does the literature tell us about the social and economic impacts of housing?*

<sup>13</sup> Scottish Government (2010) *A select review of literature on the relationship between housing and health*

<sup>14</sup> Nicol, S. et al., (2011) *Quantifying the cost of poor housing*, Building Research Establishment press, cited in Parliamentary Postnote 371, January 2011, *Housing and Health*

<sup>15</sup> Marsh et al (1999) cited in Scottish Government (2010) *A select review of literature on the relationship between housing and health*

<sup>16</sup> Pevalin et al 2008, cited in Scottish Government (2010) *A select review of literature on the relationship between housing and health*

<sup>17</sup> Thomson H, Thomas S, Sellström E, Petticrew M., *Housing Improvements for Health and Associated Socio-Economic Outcomes: A Systematic Review*, Campbell Systematic Reviews 2013:2

<sup>18</sup> Page, A. (2002) *Poor housing and mental health in the UK: changing the focus for intervention*, vol 1 (1), *Journal of Environmental Health Research*

<sup>19</sup> Wilkinson, D. (1999) *Poor housing and ill health: a summary of research evidence*. The Scottish Office

children<sup>20</sup>. Some suggestion has been made of the lack of ventilation as we move towards more energy efficient homes, alongside the impact on internal air quality resulting from changes in modern practices on drying laundry inside (including heightened moisture, mould spores and chemicals from fabric softeners) and subsequent health risks in relation to asthma and eczema. Recommendations on a change in building standards have been borne from this<sup>21</sup>. Using data from the Scottish House Condition Survey 2002, another study found that tenure and dwelling type were significant predictors of child and adult respiratory problems<sup>22</sup>. The longevity of time in substandard accommodation is important too – 25 per cent of children who persistently lived in this type of poor accommodation had a long-standing illness or disability compared to 19 per cent who lived in it for a short-term basis<sup>23</sup>.

Given the difficulties in separating the effects of housing with other confounding variables, much of the research has focused on tracking health before and after improvements to housing. In a systematic review of intervention studies in the USA, physical housing improvements were found to benefit general, mental & respiratory health, if housing was substandard initially<sup>24</sup>. The ongoing GoWell programme, which began in 2006, tracks the effects of neighbourhood regeneration and housing investment in several Glasgow communities on the health and wellbeing of the residents using a variety of research methods. In their initial conclusions housing improvements tracked in the programme had a small benefit on resident's mental health in the short term. The external appearance of the home, the front door, and the feeling that home gives a sense of control and personal progress were linked to a higher mental wellbeing score. Associations were stronger where the environmental characteristics listed above were classed as being 'very good' rather than just 'good'<sup>25</sup>.

The suitability of the home for residents with specific needs is also an area where health and housing interlink. A social return on investment analysis on the Care and Repair West Lothian (CRWL) service, which helps older people or people with disabilities live comfortably and safely in their own homes, found for every £1 invested in CRWL there was a social return of £4.53 – calculated by the cost of a range of outcomes relating to improving resident health including reduced falls and accidents as a result of their work<sup>26</sup>. Similarly, a study in Argyll in 2005 by ODS consulting concluded that £430,000 of expenditure on Care and Repair services created savings of some £600,000 in community care services as well as meeting a wide range of other objectives<sup>27</sup>. Using the same principles and framework of social return on investment, a study on the impact of two Shelter Scotland housing support services in Dumfries<sup>28</sup> and South Lanarkshire<sup>29</sup> found that for every £1 spent, an overall

---

<sup>20</sup> Wilkinson, D. (1999) Poor housing and ill health: a summary of research evidence. The Scottish Office

<sup>21</sup> Menon, R. and Porteous, C. (2013) Design Guide: Healthy Low Energy Home Laundering

<sup>22</sup> Housing and Health in Scotland (2002), cited in Scottish Government (2010) What does the literature tell us about the social and economic impact of housing?

<sup>23</sup> Barnes M., Butt S., and Tomaszewski W. (2008) NatCen The Dynamics of Bad Housing: The impact of bad housing on the living standards of children

<sup>24</sup> Thomson, H., Thomas, S., Sellstrom, E, and Petticrew, M. (2009) The Health Impacts of Housing Improvement: A Systematic Review of Intervention Studies from 1887 to 2007, *Am J Public Health, 99 (Suppl 3): S681-S692*

<sup>25</sup> Egan, M., Tannahill, C., Bond, L., Kearns, A. and Mason, P., March 2013, The links between regeneration and health: a synthesis of Go Well research findings

<sup>26</sup> Care & Repair West Lothian (January 2013), Social Return on Investment (SROI) Analysis: An evaluation of social added value for Horizon Care and Repair West Lothian

<sup>27</sup> Argyll and Bute Care and Repair – Evaluating and Enhancing the Impact on Health. ODS Consulting August 2005

<sup>28</sup> Haldane Associates, November 2011, 'More than housing' An evaluation of the Shelter Housing Support service in Dumfries and Galloway, using the principles and framework of Social Return on Investment

value of £8 and £9 was generated respectively. This amount was based on the value to the client themselves and other stakeholders, and included but was not exclusive to health services, including savings to other services such as social work.

## Fuel poverty

There is relatively little research on the health effects of fuel poverty, but for some time information has been collected showing a higher death rate in the winter months, though interpretation of this is problematic<sup>30</sup>. A 2001 study in England however, published by the Joseph Rowntree Foundation, did make a direct connection between housing quality and the risk of winter mortality, finding vulnerability to winter deaths was higher in people in poorly heated homes<sup>31</sup>.

One way to determine the health effects of fuel poverty has been to look at interventions and identify whether there were any subsequent improvements in health of those affected. A 2010 review of research based on three UK, one New Zealand and one U.S.A. study concluded it was hard to identify health impacts of tackling fuel poverty given their modest nature, and the methodological limitations in the studies reviewed. For physical health, effects were restricted to adult perceptions of physical wellbeing and were not, at the time of publication, trackable at a clinical level. For infants, more significant effects were identified in relation to hospital admission rates, weight gain and the developmental status of the infant as rated by the primary caregiver. Finally, like with other wellbeing findings, improvements in mental health were found<sup>32</sup>.

## Other factors

Looking wider than the internal specifics of the home, several other aspects have been found to impact mental wellbeing. The Glasgow Centre for Population Health in 2013, highlighted the impact of excessive and persistent noise causing sleep disturbance and annoyance, leading to poor mental health, and that in contrast neighbourhoods that were quiet and peaceful could improve mental wellbeing<sup>33</sup>.

High rise housing has a particularly bad impact on the mental wellbeing of mothers with young children<sup>34</sup>, with the Scottish Health, Housing and Regeneration Project – a longitudinal study – noting slight improvements being found to health after moving from a flat to a house<sup>35</sup>. Stress caused by insecurity of tenure, repairs issues, concerns around relocations and stigma associated with certain housing<sup>36</sup>, as well as having a lack of control

---

<sup>29</sup> Haldane Associates, July 2013, 'More than housing' An evaluation of the Shelter Housing Support service in South Lanarkshire, using the principles and framework of Social Return on Investment

<sup>30</sup> National Records of Scotland, Winter mortality in Scotland 2012/13

<sup>31</sup> Wilkinson P, Armstrong B, Landon M, Stevenson, S., Pattenden, S., McKee, M. and Fletcher, T. (2001) *Cold Comfort: The Social and Environmental Determinants of Excess Winter Deaths in England, 1986-1996*, Bristol: Policy Press for the Joseph Rowntree Foundation.

<sup>32</sup> Thomson et al (2003), cited in Liddell, C. and Morris, C. Energy Policy 38 (2010) 2987-2997, Fuel Poverty and human health: A review of recent evidence

<sup>33</sup> Glasgow Centre for Population Health (2013) The built environment and health: an evidence review

<sup>34</sup> Evans, G., Wells, N., & Moch, A. (2003). Housing and mental health: A review of the evidence and a methodological and conceptual critique. *Journal of Social Issues*, 59(3), 475–500.

<sup>35</sup> Scottish Government (2010) A select review of literature on the relationship between housing and health

<sup>36</sup> Evans, G. W. (2003) The built environment and mental health. *Journal of Urban Health* 80 , pp. 536-555. cited in Scottish Government (2010) A select review of literature on the relationship between housing and health

over the housing environment, especially when relating to safety, have also been linked to poor mental health<sup>37</sup>.

## **Homelessness**

The health effects of homelessness, an extreme form of housing need, are widely accepted. A longitudinal study in Glasgow conducted a five year study of two age and sex matched cohorts from the homeless and non-homeless population and concluded that being homeless had an independent impact on mortality rate<sup>38</sup>. Homeless individuals, after taking into account age, sex and previous hospitalisation, had a mortality risk 1.6 times higher than local non-homeless residents.

A recent and ongoing Scottish study on the link between health and homelessness compares hospital data within Fife with data gathered from the council homeless register between 2006 and 2013<sup>39</sup>. The study found higher attendance at A&E amongst the homeless population: in 2013 the rate of attendance was 460 per 1000 of the population for homeless males compared with 169 per 1000 in the control population, and data for females followed a similar pattern (397 compared with 141 per 1000). In addition there was a higher emergency admission rate (244 compared with 64 per 1000) and multiple emergency rate (38 compared with 10 per 1000) within the homeless population, and admissions relating to self-harm were 4 times higher. With regard to specific services there were proportionally more admissions relating to alcohol and drug misuse in the homeless population, as well as a higher obstetric and psychiatric admission rate. There are also higher 'did not attend' rates amongst the homeless population which has a clear cost implication for health services.

## **4. Housing and education**

Housing which is secure and provides adequate space for learning and study is more likely to contribute to positive educational outcomes. Most research on this subject focuses on school-based education. Educational attainment can be influenced by school and non-school factors, including teachers, facilities, the ethos and management of the school in the former, and gender, parental interest in education, and social class in the latter. Housing can impact on both of these spheres<sup>40</sup>.

### **Internal characteristics of the home**

In general terms, poor housing can affect education in terms of tiredness and lowering attention levels<sup>41</sup>: overcrowding and living in a noisy environment have been associated with poor sleep patterns<sup>42</sup>, and there is evidence linking fuel poverty interventions to

---

<sup>37</sup> Page, A. (2002) Poor housing and mental health in the UK: changing the focus for intervention, vol 1 (1), Journal of Environmental Health Research

<sup>38</sup> Morrison, D.S, Homelessness as an independent risk factor for mortality: results from a retrospective cohort. University of Glasgow, 2009.

<sup>39</sup> Hamlet, N. (2015) unpublished

<sup>40</sup> Scottish Government (2010) What does the literature tell us about the social and economic impact of housing?

<sup>41</sup> Scottish Government (2010) A thematic review of literature on the relationship between housing, neighbourhoods and schools

<sup>42</sup> Fabian Society, 2006 as cited in Griggs, J. and Walker, R., The costs of child poverty for individuals and society: a literature review, October 2008, Joseph Rowntree Foundation

improvements in children's school attendance<sup>43</sup>. For example, in a study undertaken in Cornwall the installation of central heating into damp, unheated bedrooms of children aged 9 to 11 helped to reduce school days missed for asthma<sup>44</sup>.

Specifically, overcrowding is an oft-quoted characteristic of the home thought to have an impact on education. Research by the Housing Corporation suggested over a quarter of school children lack sufficient space at home in which to do their homework, and that 8% of children living in substandard accommodation lose out on a quarter of their schooling – which is linked specifically to overcrowding and living in cold or damp conditions<sup>45</sup>. Analysis of the National Child Development Study found children in overcrowded homes have also been found to miss more school for medical reasons<sup>46</sup>.

## **Wider environment**

Some research has been done looking at the wider housing situation and impacts on children. Haurin, Parcel and Haurin (2001) found that children on homeowners performed better at school<sup>47</sup>, in line with the findings of Bramley and Karley's (2007) study which looked at school attainment in England and Scotland, and found tenure effects at both primary and secondary school, mainly at the small neighbourhood level. However this does not discount for poverty or income levels<sup>48</sup>. Bramley and Karley suggest that the positive impact of home ownership could be because of social capital or stability of address, and conversely that children not in home ownership families are more likely to have greater mobility which can have a negative effect on attainment<sup>49</sup>.

## **Homelessness**

In a similar vein, homelessness can impact on education through the disruption caused by transferring between and travelling to schools<sup>50</sup> - homeless children are two to three times more likely to be absent from school than other children due to the disruption caused by

---

<sup>43</sup> Liddell, C. and Morris, C. Energy Policy 38 (2010) 2987-2997, Fuel Poverty and human health: A review of recent evidence

<sup>44</sup> Somerville M, Mackenzie I, Owen P and Miles D, Housing and health: does installing heating in their homes improve the health of children with asthma? Public Health, 114 (6), 434-439, 2 000.

<sup>45</sup> Shelter, state of the nation 2006

<sup>46</sup> Essen J, Fogelman K and Head J, Children's housing and their health and physical development, *Child: care, health and development*, 4, 357-369, 1978 .

<sup>47</sup> Haurin, Donald R., Toby L. Parcel, and R. Jean Haurin (2001) The Impact of Homeownership on Child Outcomes. Low Income Homeownership Working Paper Series. Joint Center for Housing Studies, Harvard University, cited in Scottish Government (2010) A thematic review of literature on the relationship between housing, neighbourhoods and schools

<sup>48</sup> Bramley, G., & Karley, N. K. (2007). Homeownership, poverty and educational achievement: School effects as neighbourhood effects. *Housing Studies*, 22(5), 693-721 cited in Scottish Government (2010) A thematic review of literature on the relationship between housing, neighbourhoods and schools

<sup>49</sup> Bramley, G., & Karley, N. K. (2007). Homeownership, poverty and educational achievement: School effects as neighbourhood effects. *Housing Studies*, 22(5), 693-721 cited in Bramley, G. & Besemer, K. (2011) Indicators of Access to Cultural Resources, Education and Skills for the PSE Survey

<sup>50</sup> Power A., Richardson I., Seshimo K. and Firth, K. (1995) A Framework for Housing in the London Thames Gateway. London: London School of Economics. cited in Scottish Government (2010) What are the social and economic impacts of housing

moving into and between temporary accommodation<sup>51</sup>. A Shelter study found 2 out of 5 families studied had to move school when becoming homeless, and homeless children in temporary accommodation missed an average of 55 school days, equivalent to a quarter of the school year, as a result of moves into and between temporary accommodation<sup>52</sup>. In addition, children who are homeless are more likely to have behavioural problems such as aggression, hyperactivity and impulsivity which can negatively affect attainment at school<sup>53</sup>.

## 5. Housing and employment

### Housing costs

Evidence on housing costs strongly suggests that rent levels impact on financial work incentives for tenants, which contribute to unemployment and poverty traps<sup>54</sup>. The higher the rent, the more a household receiving housing benefit needs to earn before they begin to see an increase in their disposable income. The rent trap scenario is particularly problematic in temporary accommodation<sup>55</sup> which, in general, is much more expensive than any other type of accommodation.

### House building and employment

There are several models which estimate the economic benefit of house building on local economies.

The construction sector in Scotland, as reported in the Cambridge Centre for Housing and Planning Research, has large absolute multipliers compared to other sectors. They state that based on the 2004 input-output tables it has a type 2 output multiplier – i.e. one that adds the induced effects of those earning from these type impacts then spending on other sectors' goods and services, of 1.88 and equivalent employment and income multipliers of 1.93 and 1.91 respectively<sup>56</sup>. Models for house building in the UK have estimated that 200 new jobs are created for every 100 homes built<sup>57</sup>. And the construction industry highlights that house building usually employs low skilled workers who are at risk of unemployment<sup>58</sup>.

### Routes out of homelessness and into employment

No one intervention in itself is effective in securing positive outcomes – including employment – for formerly homeless people. However, evidence does suggest that secure and settled accommodation is a necessary factor in securing employment for homeless

---

<sup>51</sup> Vostanis P, Grattan E, Cumella S and Winchester C, Psychosocial functioning of homeless children, *Journal of the American Academy of Child and Adolescent Psychiatry*, 36 (7), 88 1-88 9, 1997; Vostanis P and Cumella S, Homeless children: problems and needs, 1999.

<sup>52</sup> Mitchell F, Neuburger J, Radebe D and Raye A, Living in limbo: survey of homeless households living in temporary accommodation, Shelter, 2004.

<sup>53</sup> Shelter (2007)

[https://england.shelter.org.uk/\\_data/assets/pdf\\_file/0016/39202/Chance\\_of\\_a\\_Lifetime.pdf](https://england.shelter.org.uk/_data/assets/pdf_file/0016/39202/Chance_of_a_Lifetime.pdf)

<sup>54</sup> Tunstall, R., Bevan, M., Bradshaw, J., Croucher, K., Duffy, S., Hunter, C., Jones, A., Rugg, J., Wallace, A. and Wilcox, S. 'The links between housing and poverty', April 2013. Joseph Rowntree Foundation

<sup>55</sup> Shelter (2006) Chance of a lifetime: the impact of bad housing on children's lives

<sup>56</sup> Gibb, K. Housing and employment, April 2014 <http://www.housingandwellbeing.org/documents>

<sup>57</sup> DCLG, 2011 as cited on p 62, JRF, 'The links between housing and poverty', 2013

<http://www.jrf.org.uk/sites/files/jrf/poverty-housing-options-full.pdf>

<sup>58</sup> LEK, 2009 as cited on p 62, JRF, 'The links between housing and poverty', 2013

<http://www.jrf.org.uk/sites/files/jrf/poverty-housing-options-full.pdf>

households. This in itself is not enough – other factors such as low educational attainment, limited work experience, discrimination and criminal records act as barriers to employment<sup>59</sup>. The Housing First model is one type of intervention which offers some positive evidence for permanent housing's role in securing employment for formerly homeless people<sup>60</sup>.

## Tenure

Some research points towards the roles that the relative flexibility of different tenure types play in relation to peoples' ability to take up employment. Oswald argues that the flexibility has a significant impact on employment levels. He argues that the UK would see higher levels of employment if more people rented in the private sector – a more flexible housing option than homeownership<sup>61</sup>.

## 6. Housing and income

Housing which is 'affordable', i.e. does not cost an excessive proportion of household income, reduces the risk of poverty and financial hardship.

### Housing costs to income

There are contrasting views amongst economists about how best to understand affordability: as a housing cost to income question, in terms of residual income after housing costs (appropriately adjusting for household type, size and circumstance), or assessing when households have enough income to no longer require housing benefit support. Wilcox and Pawson have constructed a regional affordability index over time using mix adjusted house prices for first time buyers and regional household earnings data (higher scores measure greater unaffordability). The model assumes an 82% loan to house price ratio and is based on average mortgage lender rates. A standard 25 year repayment mortgage is assumed. This synthetic index is set at 100 for 1994. The UK index peaked in 2007 at 200.9 and has since fallen back to 137.5 in 2011. Scotland's comparable figure peaked at 166.7 in 2007 before falling back to 105.7 in 2011<sup>62</sup>.

### Poverty and tenure

Another approach is to look at poverty rates in different tenures<sup>63</sup>. Between 2002/03 and 2012/13, the total number of people in poverty fell by 230,000. However, the decrease was tenure specific with a fall of 280,000 and 90,000 in the social rented and owner occupied sectors respectively. In contrast, the number of people in poverty in the private rented sector rose by 140,000 – the vast majority of which was made up of working age adults. This can partly be attributed to changes in the relative size of the sectors, with the rate of poverty in

---

<sup>59</sup> pp57-58, JRF, 'The links between housing and poverty', 2013 <http://www.jrf.org.uk/sites/files/jrf/poverty-housing-options-full.pdf>

<sup>60</sup> Shelter, Housing First – a good practice guide, 2008 [http://england.shelter.org.uk/professional\\_resources/policy\\_and\\_research/policy\\_library/policy\\_library\\_folder/housing\\_first\\_-\\_a\\_good\\_practice\\_briefing](http://england.shelter.org.uk/professional_resources/policy_and_research/policy_library/policy_library_folder/housing_first_-_a_good_practice_briefing)

<sup>61</sup> The Housing Market and Europe's Unemployment: A Non-Technical Paper, 1999, Andrew J Oswald, Department of Economics, University of Warwick <http://www.andrewoswald.com/docs/homesnt.pdf>

<sup>62</sup> Wilcox, s and Pawson, H (2013) *UK Housing Review 2013* at <http://www.york.ac.uk/res/ukhr/ukhr13/index.htm>

<sup>63</sup> Kenway P., Bushe S., Tinson A. and Born, T., (2015) Monitoring poverty and social exclusion in Scotland 2015, Joseph Rowntree Foundation

the private rented sector staying static at around 35 per cent whilst the rate in the social rented sector fell from 50 to 33 per cent.

In the last decade<sup>64</sup> though rent as a share of income in the social rented sector has remained at around 18 per cent. In the private rented sector it rose from 20 to 24 per cent<sup>65</sup>. The poorest fifth in all tenures spend the highest proportion of their income on housing costs – 24 per cent of income compared to an average of 9 per cent<sup>66</sup>.

For all tenures, housing costs can push individuals over the threshold into poverty. This concept of ‘housing cost induced poverty’ is useful for fully understanding the numbers of people in poverty – a proportion that Joseph Rowntree Foundation claims has increased over the past two decades<sup>67</sup>. A recent Scottish Government report by the Communities Analytical Services<sup>68</sup> looked at depth of poverty in Scotland, defining households and individuals as in relative, severe and extreme poverty and looking separately at poverty rates before and after housing costs. In 2012/13, 510,000 individuals (10%) lived in severe poverty before housing costs, rising to 710,000 (14%) after housing costs were taken into account. In the private rented sector, 38 per cent are in poverty after housing costs are paid, compared to 18 per cent before<sup>69</sup>. Low rents such as those in the social rented sector can reduce the extent of housing cost induced poverty; however despite the often lower rents, 43 per cent of social renters are living in poverty after housing costs have been paid (compared to 29 per cent before).

Whilst poverty rates are highest in the social and private rented sectors, owner occupiers in fact make up over half of all those in poverty in the UK before housing costs are taken into account. However, because of the proportion of owner occupiers living without a mortgage, housing costs are low and therefore after these are taken into consideration owner occupiers make up just over a third (37%) of all households in poverty. largely because of the proportion of owner occupiers who live without a mortgage. If home value was included in measures of household income for homeowners, the proportion in poverty would reduce further<sup>70</sup>.

## 7. Housing and environmental sustainability

Good design and construction of new housing and improvement insulation and heating systems for existing housing can help minimise housing’s environmental impact.

Like other consumer goods, housing requires energy and other resources which are in short supply. There is, therefore, a need to measure the impact of policies and programmes designed to minimise the environmental impact of housing.

---

<sup>64</sup> For which data is available, i.e. 2002/03 to 2012/13

<sup>65</sup> Kenway P., Bushe S., Tinson A. and Born, T., (2015) Monitoring poverty and social exclusion in Scotland 2015, Joseph Rowntree Foundation

<sup>66</sup> Aldridge, A. and Kenway, P. April 2014, Referendum briefing: Housing and low income in Scotland, Joseph Rowntree Foundation

<sup>67</sup> Tinson A., Kenway P., Bushe S. and MacInnes T. November 2014, Poverty and the cost of living: an evidence review, Joseph Rowntree Foundation

<sup>68</sup> Scottish Government, March 2015, Severe Poverty in Scotland, <http://www.gov.scot/Resource/0047/00473036.pdf>

<sup>69</sup> Tunstall R., Bevan M., Bradshaw J., Croucher K., Duffy S., Hunter C., Jones A., Rugg, J., Wallace, A. and Wilcox, S. February 2013, The links between housing and poverty, Joseph Rowntree Foundation,

<sup>70</sup> Joseph Rowntree Foundation February 2013, The links between housing and poverty, <http://www.jrf.org.uk/sites/files/jrf/poverty-housing-options-summary.pdf>

The annual inventories of greenhouse gas emissions provide the basis for quantifying environmental impacts of different sections of the economy in Scotland<sup>71</sup>. These have been prepared on an annual basis for the years 1990 to 2012 to date and they are compiled in line with international guidance from the Intergovernmental Panel on Climate Change (IPCC). As there a number of greenhouse gases, these are weighted in the overall total according to the severity of their impact on climate change and the figures are expressed in terms of tonnes of carbon dioxide equivalents.

The Scottish inventory is subdivided into a number of sectors. One these sectors are the residential sector and this includes the use of gas for space heating and hot water and some equipment in the home. It does not include the use of electricity in the home since the emissions for this are accounted for in that part of the inventory which quantifies emissions from electricity power generation. Nor does it include emissions from the manufacture of bricks, concrete and other materials used in the house building and improvement work and their transport which are included in the relevant part of the industry section of the inventory. As a result the residential sector figures in the inventory underestimate the total emissions resulting from housing in Scotland, but they do indicate trends over time which allow progress towards environmental targets to be monitored. As mentioned in the main part of the Commission's report, residential emissions have fallen by 10.8% from 1990 to 2012.

In some cases, environmental impacts of housing are better quantified using life cycle analysis. This would be the case if a comparison was being made between the environmental impacts of different building techniques or between new building and rehabilitation of existing buildings. Life cycle analysis seeks to assess the full environmental impacts over the life time of the product in question. A full appraisal of the application of life cycle analysis to housing is beyond the scope of this review but the main part of the Commission's report refers to work commissioned by the English Empty Homes Agency which compares the greenhouse gas emissions from new building with those from refurbishing empty homes.

## **8. Housing and Community Safety**

Good housing design and proactive management in partnership with the police, fire and social services can help to reduce crime, antisocial behaviour and dangerous fires.

In the context of community safety most often it is 'traditional' crimes that are referred to, including violence, vandalism, etc, and excluding white collar and other criminal activity such as insurance fraud. Poor and disadvantaged areas do tend to have higher levels of these traditional crimes and some neighbourhood effects have been noted.

### **Housing management and allocation policies**

In 2007, Bottoms analysed UK research finding evidence in a number of studies demonstrating areas of concentrated disadvantage have high offender rates though the evidence was unable to conclude a causal relationship<sup>72</sup>. Instead, other important factors

---

<sup>71</sup> Scottish Greenhouse Gas Emissions 2012, Scottish Government

<sup>72</sup> Bottoms (2007) as cited in Scottish Government (2010) A thematic review of literature on the relationship between neighbourhoods, housing and crime

have been identified for example parenting, and the key role played by the housing market in terms of allocation policies<sup>73</sup>.

The Edinburgh Study of Youth Transitions and Crime, a longitudinal research programme exploring pathways in and out of offending for a cohort of young people, found (albeit weak) impacts of neighbourhoods on delinquent and drug using behaviour<sup>74</sup>. Those who perceived their areas to be poorly controlled by adult residents are more likely to start offending early. Young chronic property offenders are significantly more likely to live in socially disorganised neighbourhoods, which are characterised by frequent population turnover and a high density of young people. These two points have influences on housing policy in terms of concentrating particular groups through allocation policies, and proactive management of areas by housing suppliers.

Another link between housing specifically and community safety is with regard to prison leavers, who are less likely to reoffend where they have secure and stable accommodation to go to – it has been found offenders whose main problem was housing or accommodation were significantly less likely to complete behaviour modification programmes<sup>75</sup>.

### **Housing design and neighbourhood quality**

Housing design can also impact on community safety, following the idea of defensible space and statistical correlations that have been found between certain design features and crime rates, and attempts to design out crime through housing construction, environmental design and street layout<sup>76</sup>.

The New Deal for Communities programme, launched in 1998, gives some evidence for the effect of regeneration within these areas on community safety. Through the life of the programme there was a reduction of total crime rate from 77 per 10,000 to 73, and similar decreases in burglary and theft rates, as well as lower scores on lawlessness and dereliction and fear of crime<sup>77</sup>. The GoWell project, however, found the opposite with declining feelings of safety at night in all areas, and particularly in the Regeneration Areas where the proportion who reported feeling sufficiently safe in 2008 was roughly half that reported in 2006 at the early stages of the regeneration processes<sup>78</sup>. The authors hypothesise that this could be related to the regeneration process arising from a falling population alongside empty buildings waiting demolition. This is in line with findings that the fear of crime, too, is directly associated with perceptions of the physical deterioration of an area of which housing can play a key part<sup>79</sup>.

---

<sup>73</sup> Scottish Government (2010) A thematic review of literature on the relationship between neighbourhoods, housing and crime

<sup>74</sup> McVie, S and Norris, P (2006) The effect of neighbourhoods on adolescent property offending. Report 10 The Edinburgh Study of Youth Transitions and Crime cited in Scottish Government (2010) A thematic review of literature on the relationship between neighbourhoods, housing and crime

<sup>75</sup> Scottish Government (2010) A thematic review of literature on the relationship between neighbourhoods, housing and crime

<sup>76</sup> Jacobs (1961) and Newman (1972) as cited in Scottish Government (2010) A thematic review of literature on the relationship between neighbourhoods, housing and crime

<sup>77</sup> Scottish Government (2010) A thematic review of literature on the relationship between neighbourhoods, housing and crime

<sup>78</sup> GoWell (2010) Progress for People and Places: Monitoring change in Glasgow's communities. Evidence from the GoWell Surveys 2006 and 2008. Glasgow: Glasgow Centre for Population Health.

<sup>79</sup> Painter (1992) as cited in Scottish Government (2010) A thematic review of literature on the relationship between neighbourhoods, housing and crime