

Design For All – A Place To Call Home

An investigation into the health, social and economic impacts of homelessness and precarious housing, along with strategies for how to build affordable and sustainable dwellings for those in the UK in greatest need: a review of literature and projects.



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Executive Summary

With one of the world's least affordable housing markets and the highest rate of homelessness in Europe, urgent action is required to address the UK's spiralling housing crisis, underpinned by effective leadership from government. Our aim is to transform how social-rent and affordable housing is provided and to show how targets can be met by building high-quality, sustainable and socially balanced communities.

Cautious estimates of **300,000 homeless people, including 120,000 children and 5,000 rough sleepers** in the UK today most likely undercount the true numbers who endure roofless-ness (rough sleepers), houseless-ness (temporary places to sleep such as shelters), insecure housing (sofa surfing, threat of eviction), and inadequate housing (poor quality, often extremely overcrowded).

Our calculations of the **costs incurred by homelessness**, of at least **£6.5 billion annually**, and of the **net savings through provision of social/affordable housing, of around £1.5 billion annually**, are also likely to be under-estimates. This is because of **the added beneficial impacts on economic growth and productivity; employment and disability benefits; acute and chronic health; the criminal justice, health and care systems; educational attainment and life chances**. At present we do not have the data to quantify or monetise such impacts precisely enough.

Our report demonstrates that addressing the housing crisis improves the lives of everyone, with benefits accruing fastest for the most vulnerable on lowest incomes. We do so by summarising the evidence about **physical/mental health and wider social impacts**, by calculating the **economic costs and savings** from ending homelessness, and by highlighting **the best exemplars of recent social/affordable housing** which could be scaled nationally.

With some of the finest architects, engineers, housing directors, public health specialists, housebuilders, educationalists and creative powers, Britain's community of makers, thinkers, designers and doers should be mobilised to put social and affordable housing at the top of their societal agendas.

In this report, we are thus proposing a **transformative national housing plan** that seeks to resolve, once and for all, the UK's housing crisis through policy changes that require an **additional £4 billion of Exchequer subsidy** to provide around **72,000 extra dwellings each year, built largely by local authorities**. We call for collaborative strategic initiatives to investigate innovative design solutions for a new generation of **high-quality, low-energy social/affordable homes for both new and retrofit housing** which use new technologies to deliver the scale of output needed and to achieve Net Zero Carbon construction.

Our twelve specific recommendations are as follows:

- 1/ A broader and longer-term economic vision is needed for housebuilding.
- 2/ Health benefits, NHS savings etc must be factored into housing evaluations.
- 3/ A differential housing policy is required for the UK's diverse regions.
- 4/ Right-to-Buy should end in England for all future social-rent dwellings.
- 5/ Tenure-blind social mixing is vital in new social/affordable housing schemes.
- 6/ Fixed requirements must be set to ensure housing design quality.
- 7/ Passivhaus standards must be adopted to cut operational carbon.
- 8/ Initiatives are needed to expand 'Green Skills' training in housebuilding.
- 9/ Local authority participation in housebuilding has to be majorly revived.
- 10/ Local authorities need to have greater financial flexibility over housing.
- 11/ Retrofitted social/affordable homes should be encouraged by VAT exemption.
- 12/ Special extra measures are needed for rural social/affordable homes.

Chapter 1

Introduction

There is a housing crisis in the UK today.

Its most evident symptom is the number of citizens classified as homeless – whether that means enduring rooflessness (rough sleepers), houselessness (living in shelters, hostels, bed-and-breakfasts, squats, other temporary accommodation), insecure housing (sofa-surfing, at threat of eviction), or inadequate housing (poor quality, often extremely overcrowded).¹ Obtaining precise figures is extremely difficult, yet a cautiously indicative estimate is that in 2022 across the UK there were around 300,000 homeless people, of which some 120,000 were children and 5,000 were rough-sleepers.² There are also other signs of housing crisis including

the difficulty in providing keyworkers with dwellings close to their workplaces, or in constructing genuinely affordable homes for young people to rent or buy – a situation especially acute in rural areas, city centres, holiday locations and former industrial towns now economically blighted.

As to the causes of homelessness, there are several contributory factors. One chronic problem in the UK today is the cost of rental accommodation, which is the highest it has ever been, following a 5.3% increase in the year up to July 2023 (the largest annual percentage rise since the data series began in 2016).³ Mortgage levels are at their highest for two decades, meaning that about 40%

Fig (opposite).
Derelict housing
[Courtesy of: Nicholas Jewell]



of adults now find it difficult to afford their rent or mortgage payments, up from around 30% in August 2022, with 1-in-20 saying that they are currently behind on payments.⁴ Given the UK's cost-of-living squeeze the situation is likely to worsen in coming years. As one consequence, the number of people in England now living in temporary accommodation has increased by 74% over the last decade, with two-thirds of families having been so for over a year – showing that it is becoming less and less 'temporary'.⁵

However, we believe that there need not be a housing crisis in the UK today.

Our nation possesses the resources, skills and mechanisms to obliterate housing need if we choose to apply ourselves concertedly to the problem. It is therefore the intention of this report both to highlight the negative consequences if the UK continues to fail to tackle its housing crisis, and to propose achievable policies for how it might do so.

Two headline points need to be made at the outset to explain how this report is framed:

i/ Rather than envisaging a single national housing policy, as in the past, and because of the wide variation in land values across the UK and the devolution of housing powers to Wales, Scotland and Northern Ireland, what is needed today is a **differential housing policy** that can enable different regions – and different parts of those regions – to select targets and approaches which best suit their conditions.

ii/ Private housebuilders cannot be relied upon to meet the UK's demand for social/affordable dwellings – although there is potential for them to contribute, as will be mentioned. Instead, and alongside the current provision by housing associations and

other registered providers, **local authorities** will need once more to supply a sizeable proportion of new dwellings to remedy the UK's housing crisis.

To make its case, this report builds upon previous investigations into the need for social/affordable housing in the UK, such as those published independently in 2020 by the Royal Institute of British Architects (RIBA), UK Collaborative Centre for Housing Evidence (CACHE), Shelter, and Joseph Rowntree Foundation.⁶ Here, as well as providing our own recommendations, we adopt a broader tack that does not address housing need solely by itself. Our first section thus examines the relationship of poor health and wellbeing to substandard housing, which in turn is creating enormous expense for the National Health Service, and which will inevitably have adverse long-term impacts on children's health, education and future employment opportunities. The second section of our report delves into macro-economics

to discover the sheer financial waste to the UK economy of having so many citizens either homeless or in precarious housing – a situation being steadily intensified by rising inequalities of wealth. Our third section then turns to architecture and planning to examine ways to provide new-build and retrofitted dwellings in the UK that can meet the environmental target of Net Zero Carbon in construction and operation. We conclude by listing 12 specific and feasible recommendations for addressing the UK's housing crisis, in the hope that things can improve significantly.

In focussing on how to eradicate homelessness, we realise that there are many other issues which we have not covered in this report – e.g. the links between poor housing and race/ethnicity, the need for specialised dwellings for people with physical or neurological disabilities and for older people. These issues are obviously crucial, and we hope that further studies will be able to bring them more directly

into the frame, as addition to our more general investigation of how to build better social/affordable housing for the UK. Similarly, our report's emphasis on practical changes for the UK's housing sector means that it does not grapple with larger questions of political economy such as government fiscal policy, land taxation, banking reform, housing benefits, inflationary pressures, immigration policy, energy supply reform, etc. Again, we leave those to others to address.⁷ One issue that we have deliberately avoided is immigration into the UK, which is a national policy decision that extends beyond the field of housing: for this report we take a 'colour blind' approach that sees the need to house everyone with requisite dignity, irrespective of their background or race/ethnicity.

All discussions about housebuilding rightly stress the need for clarity and consistency in terminology. For this report, we therefore use the term **social-rent** to describe housing in perpetuity that is let to tenants of local authorities/

housing associations/other registered providers at rents that are typically estimated as about 50-60% of local market-rent levels; **affordable-rent** describes partially-discounted dwellings by these same providers, typically let at around 80% of market-rent levels; **affordable-sale** are schemes by these providers, or private housebuilding companies, through arrangements such as shared ownership, at around 80% of market-sale figures; while **market-rent** and **market-sale** refer to full-price dwellings by these providers, or, most usually, by private housebuilding companies and developers.

Our intention is for this report to be seen as an inclusive, pragmatic proposal. While acknowledging the very strong political disagreements on how to tackle the UK's housing crisis, such differences do not preclude cross-party support for action to be taken. We are also fully aware of the diverse pool of expertise within the UK housing sector. Indeed, we acknowledge this report draws readily on much of what others such as

Shelter, Crisis or the Joseph Rowntree Foundation have suggested already. Not possessing the financial accounts/modelling software/Treasury calculations etc to allow us to go into ultra-precise analysis, we have instead chosen to adopt a broad-brush approach that combines macro-economics, public health and architecture/planning to propose a route to be taken by politicians, local authorities, housing associations, other registered providers, private housebuilders, developers and landowners. Above all our aim is to set out a vision and a will to provide more, and better, social and affordable housing for the UK.



Chapter 2

Population Health

Living in unstable and precarious housing is a well-established determinant of poor health outcomes and excess mortality.⁸ In England, the Department for Levelling Up, Housing and Communities (DLUHC) directly acknowledged the impacts on health in its 2022 White Paper:

‘Poor housing quality, overcrowding and a reliance on temporary accommodation for vulnerable families also contribute to unnecessarily poor health and quality of life for many.’⁹

Housing precariousness brings other adverse consequences, for example with

respect to employment opportunities and academic achievement. Moreover, the UK Collaborative Centre for Housing Evidence (CaCHE) highlights that better-quality dwellings and greater housing security and affordability is vital if we want to tackle some of the structural drivers of health inequality.¹⁰ Children living in temporary accommodation often experience serious health and educational inequalities – and indeed a 2023 survey carried out by Shelter showed that, of people living in temporary accommodation in England, around 66% reported it had a negative impact on their physical and mental health, 57% felt it was adversely affecting their children’s physical and mental health, and 39% stated that it makes it

Fig (opposite).
Rough sleeping, London

harder for them to access healthcare appointments for them and their children.¹¹

Hence this first section of the report specifically focusses on three important questions related to population health. What are the impacts of homelessness and precarious housing on physical health, mental health and wider social factors? Which are the most common themes that act as barriers or facilitators to improved health outcomes? And, from these realisations, what are the implications to be drawn for UK housing policy and practice?

a/ Research methods used in this section

Our research began by conducting an umbrella review – i.e. a systematic review of other scholarly reviews – of the impact of precarious housing upon health and wider social factors such as crime, education and employment.

As such, we systematically searched through a number of databases for reviews, meta-analyses, and narrative, realist and rapid studies that were published between 2013–23. Data were extracted using an adapted JBI Data Extraction Form and was critically appraised for quality using the relevant JBI tools and analysed thematically. This involved coding the respective texts, developing descriptive themes, and from that generating analytical categories.

At the initial stage, 126 reviews were identified which included research covering a 38-year period from 1985 until 2021. After eliminating duplications and excluding articles which did not meet the standard JBI inclusion criteria, 24 reviews remained. JBI analysis rated 18 of these reviews as being at low-risk of bias, while the other 6 were of moderate-risk of bias.¹² In total, the 24 reviews included in our analysis contained 674 primary studies between them.

Almost all the primary studies discussed in these 24 reviews had been conducted in high-income countries. Only those reviews which included at least one UK study were included in our analysis. Around two-thirds of the 24 reviews consisted only of observational studies – using qualitative research methods such as interviews, focus groups, together with quantitative surveys, cross-sectional, case-control or cohort studies. There were however seven mixed-method reviews which, while also largely observational, also included some randomised control trials. Most of the primary studies focused on people who were experiencing homelessness, although some looked more widely at unstable housing, those who were marginally housed, or those at risk of or recently evicted. The sum of respondents in the primary studies ranged from 366 up to 6,066,891 people, with an average of 391,980 per study. When assessing across the three key domains that we identified – i.e. **physical health, mental health**, and those **social indices** (e.g. employment) impacting on

people's health – a total of nine reviews concentrated on physical health only; five looked at a combination of physical/mental/social factors; five studied mental health only; four examined social factors only; and just one a combination of physical/mental health. A summary of review characteristics is shown in Fig. 1, additional information is given in Fig. 2.

b/ The effects on population health

From our analysis, four key themes were identified to describe the ways in which homelessness and precarious housing impacts the most on health outcomes. Each theme will be described in turn through the three defined domains of physical health, mental health and social indices:

i. Engendering turbulent lifestyles

Unstable housing disrupts lives to such a serious extent that those affected are sometimes reduced to prioritising survival. The seriousness of this phenomenon is reflected in its inclusion

Figure 1: PRISMA Flow Diagram of review process

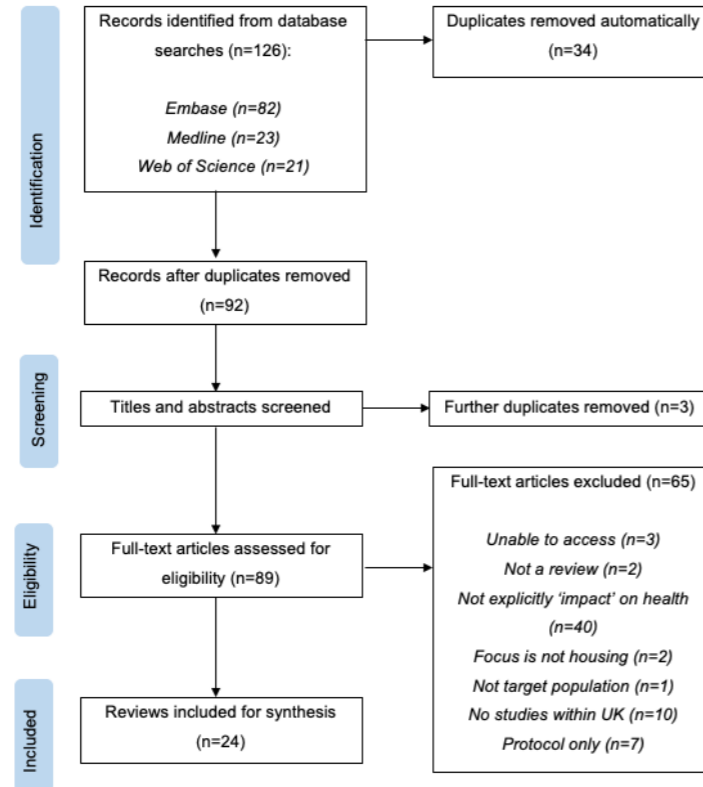


Fig. 1:
PRISMA Flow Diagram of
review process

[Courtesy of: Kerry Littleford]

as a theme in nine of the included reviews, along with sub-themes such as competing priorities, forgetfulness, lack of time, enabling of risky behaviours, and inadequate medical provision (e.g. delayed care).

Adverse physical health outcomes include higher incidence of mortality, HIV, Hepatitis C (HCV), frailty, falls and other accident rates, and poorer nutritional intake. For example, homeless people have a mortality rate six times that of their comparison groups and were about 15 times more likely to die from either accidents or intentional self-harm.¹³ In addition, homeless individuals aged 50–60 years exhibited symptoms associated with very old age, including frailty and cognitive impairment compared to those who were more stably housed.¹⁴

HIV and HCV acquisition among those who inject drugs and are exposed to unstable housing or recent homelessness had a 1.55 times greater risk of HIV acquisition and a 1.65 times

greater risk of HCV acquisition than those who were stably housed.¹⁵ This is linked to stress surrounding their precarious living circumstances, whilst the pervasiveness of drugs in the social environment were found to considerably amplify drug use and high-risk behaviours. These high-risk behaviours also affect nutritional intake, with one review noting that poor nutrition in homeless populations was compounded by the high prevalence of smoking and substance use, which in turn impacted on mental wellbeing.¹⁶

Prioritisation of basic needs also results in less timely use of health services which is likely to contribute to poorer health outcomes. For example, homeless people attend emergency departments more frequently than non-homeless.¹⁷ Homeless people have less access to palliative care and find it more difficult to re-enter or secure loving relationships with friends and family for support at their end of life.¹⁸ Longer wait times for HCV screening and treatment was found to be secondary to the transiency

First Author (year)	Precarious housing definition	Range (years) of studies	Number of studies	Number of studies in UK (%)	Types of studies	Interventional (I), Observational (O) or Mixed Methods (MM)	Physical health, mental health or social factors?	Quality appraisal score (0-11)
Ady (2021)	The situation of an individual, family, or community without stable, permanent, appropriate housing or the immediate prospect, means and ability of acquiring it. Including unsheltered, emergency sheltered, provisionally accommodated, and those at risk of homelessness	1988-2020	93	2 (2%)	Cohort studies, cross-sectional studies, case-control studies, RCT, systematic reviews,	MM	physical health	8
Ahilan (2023)	ETHOS criteria: Adults experiencing homelessness, including: rooflessness, houselessness, living in insecure housing, living in inadequate housing	2019-2021	83	21 (25%)	Quantitative cross-sectional, observational studies, case reports	O	physical health	10.5
Al-shakarchi (2019)	Unsheltered, homeless, unstable housing, marginally housed.	1985-2016	17	1 (6%)	Case-control and cohort	O	physical health	8
Anum (2021)	Lacking access to adequate housing, or unstable housing, or without fixed housing	2017-2020	37	6 (16%)	Longitudinal and cross-sectional	O	physical health	8.5
Bashir (2021)	Homelessness for the sake of this study was defined at two points. The first is initial homelessness (IH), defined as complete lack of housing or marginal housing (inadequate or transitional housing), on or up to 30 days prior to committal/reception to a jail or a prison. The second is homelessness upon discharge from incarceration	1992-2018	18	1 (6%)	Quantitative studies including observational, cohort and cross-sectional	O	social factors	5.5
Brown (2021)	Homelessness involves living between shelters, in the homes of friends, on the streets, in emergency accommodation and in boarding houses without a private bathroom and security of tenure	2008-2019	13	2 (15%)	Cross-sectional and case study	O	mental health	9
Cush (2020)	ETHOS criteria: Adults experiencing homelessness, including: rooflessness, houselessness, living in insecure housing, living in inadequate housing	2001-2020	38	9 (24%)	Qualitative including interviews and focus groups, surveys, critical reviews, policy commentary,	O	physical health, mental health, social factors	7
Deutscher (2023)	Homeless people	2011-2021	8	2 (25%)	Surveys	O	social factors	9
Easton (2022)	Homeless Persons; Transients and Migrants; Homeless Youth;	2002-2021	24	3 (13%)	Qualitative studies	O	social factors	7

Fig. 2:
Characteristics of Included Studies - further details

[Courtesy of: Kerry Littleford]

Erns (2015)	Varied living situations including unsheltered (e.g. living on the streets), emergency sheltered, provisionally accommodated and those at risk of homelessness	1997-2012	11	1 (9%)	Interventional and observational studies including case-control, cross-sectional.	MM	mental health	7
Fomaro (2022)	Sleeping rough, unstably housed, lacking access to suitable housing, lacking nighttime residence, rooflessness or lacking shelter	2015-2021	10	N/A	Observational (cross-sectional, case control and cohort) and RCTs	MM	physical health, mental health	8.5
Gutwinski (2021)	ETHOS criteria: Adults experiencing homelessness, including: rooflessness, houselessness, living in insecure housing, living in inadequate housing	2008-2021	39	7 (18%)	Observational studies	O	mental health	8.5
Hodgson (2013)	Homelessness was defined in a number of different ways including homeless shelters, living in temporary accommodation (sup-ported housing or staying with friends), street homeless, or in a shelter, or 'runaways'	2000-2012	46	2 (4%)	Cross-sectional, longitudinal, literature reviews, population study and retrospective study	O	mental health	5.5
Huang (2021)	Absolutely homeless, precariously housed, living on the streets, living in supported accommodation	2014-2021	6	2 (33%)	Cross-sectional, case control, RCT	MM	physical health	9
Hudson (2013)	Homeless individuals as living on the street, using temporary accommodation or hostels.	2005-2016	13	1 (8%)	Qualitative research	O	physical health	8.5
Kaur (2021)	Homeless and vulnerably housed refugees / asylum seekers / irregular (undocumented) migrants of high-income countries	2007-2020	18	1 (6%)	Qualitative studies	O	physical health, mental health, social factors	8.5
Liu (2021)	Individuals experiencing homelessness, defined as being unsheltered or emergency sheltered according to the Canadian Definition of Homelessness, predominantly adults	1995-2021	29	1 (3%)	Observational studies	O	physical health, mental health, social factors	11
Marshall (2020)	People currently experiencing homelessness including in shelters	1994-2017	15	4 (27%)	Qualitative studies	O	social factors	9.5
Paisi (2022)	ETHOS criteria: Adults experiencing homelessness, including: rooflessness, houselessness, living in insecure housing, living in inadequate housing	2005-2020	12	5 (42%)	Quantitative and qualitative studies including an RCT	MM	physical health	9
Paisi (2019)	People experiencing homelessness including rough sleeping, shelters, supported accommodation, squatting and sofa-surfing	1995-2017	28	28 (100%)	Quantitative, qualitative and mixed methods	MM	physical health	10
Paisi (2021)	ETHOS criteria: Adolescents and adults experiencing homelessness, including: rooflessness, houselessness, living in insecure housing, living in inadequate housing	1994-2019	23	2 (9%)	Qualitative and mixed methods	MM	physical health	9.5
Rosenthal (2019)	All definitions of homelessness with the exception of 'rough sleeping' variations were utilised in the search to avoid missing any potential studies and included temporary or insecure accommodation, shelters, bed-and-breakfast, council housing	1989-2019	29	8 (28%)	Cross-sectional, case studies, case reports,	O	physical health, mental health, social factors	8
Stone (2019)	Definitions of homelessness ranging from absolute homelessness to recently rehoused, or in insecure or unsuitable accommodation	2007-2017	40	9 (23%)	Cross-sectional, interviews, systematic reviews, surveys/assessments	O	mental health	7
Sundin (2015)	Adult individuals who were currently experiencing, or who had previously experienced, homelessness	1990-2013	24	2 (8%)	Interviews, questionnaires, psychometric instruments	O	physical health, mental health, social factors	8

RCT: Randomised Control Trial

of homelessness, rendering it harder to remember and attend appointments.¹⁹

Homeless people are less likely to access dental, sexual and reproductive health services because of their need to prioritise securing accommodation, to manage their daily living expenses, and to meet immediate needs (e.g. finding food) above other aspects such as for example oral health.²⁰ These findings reflect Maslow's theory of the 'Hierarchy of Needs' which states that physiological needs like food, shelter and water must be satisfied before humans will attend to other issues such as health or employment.²¹

In terms of mental health outcomes, stable housing improves depression and reduces the psychological stress associated with homelessness amongst older adults compared with those who remain homeless.²²

When it comes to social indices, the focus of homeless people on the hierarchy of needs was a common theme

across two reviews when exploring employment opportunities. By spending so much time engaged in activities such as moving around to find places to sleep depending on changes in weather, maintaining their personal safety and locating food, there is little opportunity to engage in activities such as training or employment.²³ However, another review found that homeless persons do demonstrate resilience and many older homeless adults show some pride in having survived the harsh realities of street life, drawing upon these experiences as a source of agency when they are considering potential future direction in their lives.²⁴

ii/ Bi-directional relationships

The presence of bi-directional relationships was a theme in nine reviews, with physical health in childhood being one that was commonly examined. One review found substantially higher prevalence estimates of adverse childhood experiences for those who were homeless – i.e. among the general

population, prevalence of exposure to one such experience is estimated at 38–39% of people, and prevalence of exposure to four or more experiences being 3–5% of people, whereas among the homeless population these figures are estimated at 89.8% and 53.9% respectively.²⁵ That review demonstrated that adverse childhood experiences are common risk factors for being homelessness or in poor health, whilst being homeless was also a risk factor for children being affected by such experiences. Similarly, a review undertaken in the USA, Australia and UK found that, for those experiencing homelessness, the average prevalence of childhood physical abuse was 37%, compared to between 4–16% in the general populations.²⁶ These findings are in line with previous research which shows childhood physical abuse is a risk factor for homelessness, with younger homeless people potentially more likely to have left parental or non-parental care to escape abuse or neglect.

Some research also suggests that young people experiencing adverse experiences risk poor academic achievement at school, leading to difficulties in finding employment in adulthood and, in turn, a higher incidence of homelessness.

There is likewise a bi-directional relationship with mental health, including on intellectual disability, memory impairment, mental disorders, psychiatric problems and cognitive impairment.²⁷ One review found that the risk factors that predispose people with intellectual disability to homelessness were factors caused or exacerbated by intellectual disabilities such as mental health issues, challenging behaviours, or bereavements of a family member/ carer.²⁸ The loss of a family member or carer also leads to an increased risk of homelessness for older people with intellectual disabilities compared to the general population. Multiple issues were identified that contributed to and led to homelessness for people with intellectual disabilities, the most

common being significant education deficit, active mental illness, substance misuse, challenging behaviour, and relationship breakdown. In addition, cognitive impairment, including memory deficits, can interfere with an individual's ability to function independently in the community, which increased the risk of becoming and remaining homeless.²⁹

A strong bi-directional relationship between homelessness and substance abuse is explained by alcohol and drug use being coping strategies for those in precarious housing, whilst substance abuse and other psychiatric disorders often precede the onset of homelessness.³⁰ Alcohol abuse has also emerged at earlier ages compared with non-homeless populations, suggesting that substance use might contribute to the deterioration of an individual's housing situation. A review of the role of psychopathology in youth homeless found a similar reciprocal relationship, whereby psychopathology often precedes homelessness and can prolong episodes of homelessness,

whilst homelessness in turn appears to both compound psychological issues and increase the risk of psychopathology occurring.³¹ The review also found a strong link between psychopathology and youth homelessness, including conduct disorder, major depression, psychosis, mania, hypomania, suicidal thoughts or behaviours, PTSD, and attention deficit/hyperactivity disorder. Cognitive impairment is overrepresented in the homeless population largely due to relationship breakdowns and the struggles of maintaining employment and housing, whilst being homeless is a risk factor for an increased likelihood of assault and mental health problems leading to sustaining a traumatic brain injury or developing alcohol-related brain damage.³²

As to social indices, bi-directional relationships have been reported with respect to incarceration and gambling. Thus, 64% of homeless incarcerated persons had their first episode of homelessness between the ages of 13–19 years, whilst 39% with no clear plans

for accommodation on discharge from prison had never been homeless prior to incarceration.³³ With respect to the prevalence of gambling and gambling disorder, 10% of homeless people have been found to be affected, compared to 2.6% of the UK general population.³⁴ Furthermore, gambling is frequently reported to be a key contributing factor to homelessness – partially through financial problems and social isolation, whilst homelessness might also contribute to or maintain gambling disorder, as a coping mechanism that provides distraction, a sense of meaning, or a warm place to be.

iii. Inappropriate levels of service provision

Service provision which does not meet people's health and social needs was a theme in eight reviews, with sub-themes such as lack of trust, poorly trained professionals, lack of specialist provision, inappropriate environments and restrictive barriers (i.e. requiring proof of address to access services). This theme particularly impacted older homeless

adults, children under five years old and migrants.

In terms of physical health, barriers to optimal health for under-5s experiencing homelessness or living in temporary accommodation include difficulty navigating the health care system, long wait times, lower availability of appointments, lack of coordinated care, restrictive age cut-offs for infant services, and lack of specific services such as trauma counselling or drug treatment support for their parents and carers.³⁵

Inadequate management of HIV has been demonstrated to result in significant downstream healthcare costs as well as preventable patient suffering.³⁶ Likewise, one review of poor dermatological conditions among homeless people found a disproportionately higher prevalence when compared to the general population. This was found to be caused by fewer diagnostic investigations, less interventions, and fewer recommendations for follow-

up, despite the same dermatologists treating both groups.³⁷ Three times higher cardiovascular disease morbidity and mortality among the homeless was in part explained by the majority of interventions provided in primary care which is often reported to be inaccessible to those who do not live in stable accommodation.³⁸ This is partly explained as secondary to health care workers displaying 'unwelcoming attitudes'. Similarly, homeless people requiring palliative care reported environments in which they do not feel accepted and comfortable, a lack of relevant training amongst health care professionals' and a lack of options which resulting in homeless people dying in unacceptable circumstances, including on the streets.³⁹ Poor coordination of care between hospitals and community partners for homeless people has also been highlighted.⁴⁰

When it comes to social indices, homeless migrants often report racism and xenophobia from both health and social services.⁴¹ They are often

unaware of the existence of support services, or find them difficult to access and navigate, although community advocates are reported to be helpful. Asylum seekers were particularly fearful of accessing services that might affect their legal status. A review of under-5s found that early childhood education and care improves long-term health outcomes, compared to other periods in life, if it is able to deliver services designed to foster health and wellbeing, social and emotional development, and cognitive learning skills.⁴²

iv. Problems caused directly by inadequate housing itself

Inadequate housing and its health implications was a theme in six reviews, with sub-themes such as exposure to extreme weather, overcrowding, lack of hygiene, lack of privacy, poor quality facilities, unsafe living environments, and living amid unhealthy behaviours such as substance abuse or spread of infection.

Placing under-5s in temporary or insecure accommodation that is poor

quality or overcrowded has an adverse impact on their physical health and wellbeing as well as on that of their caregivers.⁴³ For example limited access to food storage and cooking facilities reduces the daily intake of key nutrients (Vitamins A, C, D3, E, calcium and magnesium).⁴⁴ Theft of food in shared kitchens and interpersonal conflict between users causes many to avoid these shared spaces.⁴⁵ These factors compound lack of choice in food options, often resulting in poor physical health alongside tensions in how to meet their basic needs.

Dermatological conditions are also exacerbated amongst homeless people in poor or overcrowded situations due to the lack of hygiene and regular bathing facilities, causing a higher prevalence of ectoparasitic infections. Homeless people also have a higher prevalence of malignant/pre-malignant lesions compared to the general population. This is reported to be secondary to less knowledge about or ability to protect themselves from excessive sun,

including via access to sun protection.⁴⁶ In addition, having to live in congregate housing had negative impacts on HCV because living in a hostel with others who are actively using drugs increases susceptibility to resuming drug use.⁴⁷

As to mental health, living in poor and precarious dwellings is associated with depression in 30% of homeless mothers, and it was found also that 20% of homeless children had signs of possible mental health disorders.⁴⁸ Homeless migrants report their housing options to be unsafe and poorly managed, whilst younger migrants in particular felt their accommodation to be strict, controlling and in some cases dangerous.⁴⁹ This then leads onto a deterioration of their mental health generally.

c/ Implications for future housing policy and practice

Homelessness or living in precarious housing thus worsens physical and mental health outcomes, as well as

intensifying associated social problems such as unemployment, poor education, gambling disorders and substance abuse. These relationships are bi-directional, being compounded by the ways that housing and health are also influenced by race, gender, socio-economic circumstances, language of origin, trauma history, and number of children in a family.⁵⁰ Social stigma – exemplified by discrimination, disrespect and disempowerment – further worsens the life chances of those who are affected.⁵¹ Although there are as yet no long-term UK surveys of the health, welfare and economic impacts of homelessness, it is also plausible to assume that evidence of profound adverse consequences for children will translate into future problems for their health, their employment prospects, and the nation's economy.

Although the research that we examined in this section of the report is necessarily observational, making it difficult to draw causal inferences or eliminate potential biases,⁵² it is notable that some data

show that moving people into stable housing reduces hospitalisation rates, improves mental wellbeing, and lowers the spread of disease and infection. Moreover, the provision of stable housing and temporary recuperation units during the Covid-19 pandemic demonstrated that solutions can be rapidly found and are highly effective.⁵³

Finally, broad initiatives such as the 'Housing First' models adopted in the USA, Canada, Finland, France and Australia, or else the 'Everyone In' campaign in England, which provided temporary accommodation for over 33,000 people by November 2020, have highlighted the benefits of addressing homelessness as a multi-component strategy. This includes, for example, removing eligibility requirements around substance treatment and providing trauma-informed support alongside decent housing to improve health and engagement with services.⁵⁴

This section describes comprehensive evidence that the health effects of living precariously can be longstanding and serious, involving all sectors of the healthcare system. Proper accommodation is a human right and one of the fundamental physiological needs of survival, which if left unsatisfied leads to negative impacts further up the hierarchy of needs.⁵⁵ Hence the issue is not just about bricks-and-mortar but affects society more broadly. However, to our knowledge, the appropriate data are unavailable to calculate the costs of these health problems to the wider UK economy. With that in mind, the next section of this report looks into the macro-economic consequences of homelessness and precarious housing to demonstrate the financial waste which compounds the physical and mental health problems discussed here.

Chapter 3

Macro-Economics

As mentioned, homelessness describes multiple forms of housing circumstances which result in not only personal costs to the individuals who are enduring it, but also significant costs to society and public expenditure. The causes of homelessness include interrelated and reinforcing structural factors, including affordability, housing supply, unemployment, as well as individual factors such as physical and mental ill health, and experiences of violence. This complex aetiology means that tackling these issues requires careful interventions, with a clear identification of needs, funds and actions.⁵⁶

What this section will do is to examine the demonstrable costs incurred by

300,000 homeless persons across the UK, estimated by Shelter to be equivalent to around 1-in-200 people.⁵⁷ While many are in temporary accommodation arranged by local authorities or social services, there are noticeable signs that the situation is deteriorating. For example, the Department for Levelling Up, Housing and Communities (DLUHC) released homelessness statistics for England for Autumn 2022 that showed a 26% increase of people sleeping rough, the first reported increase since 2017.⁵⁸ It is also important to note official statistics about the 'hidden homelessness' of those living in precarious, substandard housing. According to the Office for Health Improvement and Disparities, in England in 2021/22 there was – on

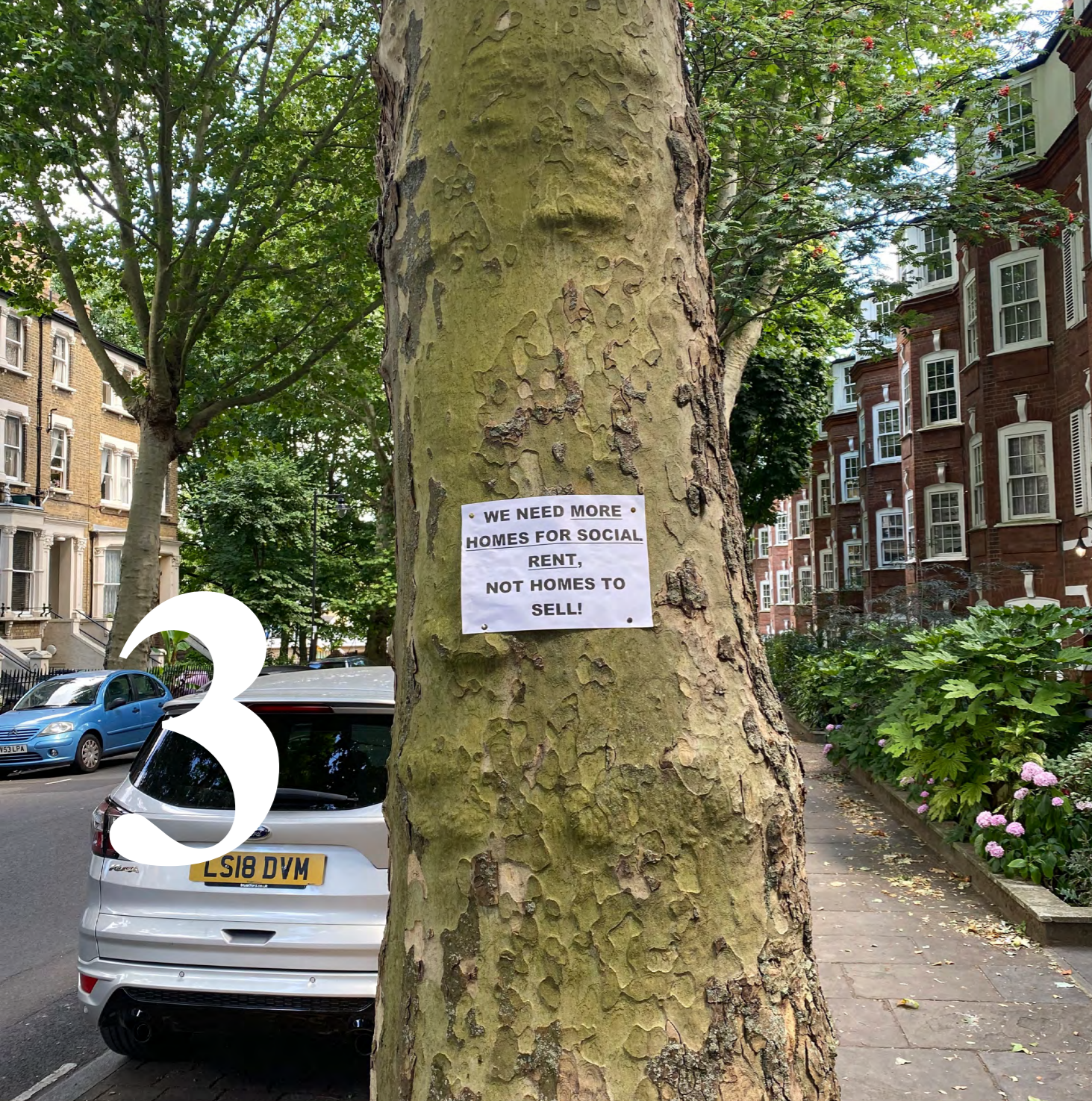


Fig (opposite).

An impromptu protest sign pinned to a tree in Pemberton Gardens, London N19

[Courtesy of Murray Fraser]

top of the 0.4% of all households (total count of 95,673) recorded in temporary accommodation and thus overtly homeless – a combined total of 1.17% of all households who were owed a duty under the Homelessness Reduction Act (total count of 278,110), with this figure also including 1.44% of all households with dependent children (total count of 93,310).⁵⁹

a. Research methods

We conducted a rapid evidence synthesis of relevant published literature in main databases and of grey literature through broad sweep searches on Google and Google Scholar, reviews of Gov.uk publications, and publications from third sector organisations working in the area of homelessness. All databases were searched for literature published from 2010 up to July 2023. A total of 650 studies and reports were initially identified. After excluding duplicates and articles which did not meet our aims, in addition

to identifying further studies during review of references, a final total of 43 articles were included in our review. We critiqued all the evidence included for methodological robustness, with particular reference to limitations and assumptions. Data extracted from evidence included authorship, year, findings, strengths, limitations, and any biases.

Cost data were summarised for each domain and the cost calculated per individual in the year of publication of the research. These costs were compared to costs of a 'homed' population as an unmatched comparator group taken from literature, to calculate net costs for that cost domain for that year. Costs were then adjusted to costs in June 2023, using the Bank of England's inflation calculator. Due to the need to be able to accurately cross-check the evidence, we decided to limit our initial calculations to England: thus, the estimated number of homeless people cited in the aforementioned Shelter report, based on 2022 statistics,

was multiplied by cost per person, to calculate the total cost for each cost domain, as well as the overall net cost of homelessness.

Shelter's figures for homelessness in England were used instead of those given in official statistics from the Department for Levelling Up, Housing & Communities because the latter tend to refer to households (and different compositions of households) instead of individual numbers of adults and children. Additionally, the DLUHC statistics are not suitable for calculating the numbers of people who are rough sleepers or in the 'hidden homeless' groups such as those who are sofa-surfing. We thus intend our findings to describe the costs for all kinds of people that are experiencing different types of homelessness and precarious housing – while recognising that these individuals are not a homogenous group and so costs may vary between different types of homelessness.

b. Economic impacts of homelessness

In 2012, a review by what was then the Department for Communities and Local Government highlighted the different sectors of cost impacts associated with homelessness to public expenditure.⁶⁰ More recently, the Department for Work and Pensions has listed the costs of benefit payments, housing benefits and administrative costs to local authorities. Evidence suggests that providing temporary housing can also result in additional costs for local authorities that exceed the amounts they are given to pay housing benefits, and that they often incur additional costs from homelessness prevention and other functions. In addition, although healthcare systems and criminal justice systems have costs associated with all citizens, there is increased frequency of contact and higher cost-per-contact associated with homeless people. Furthermore, homelessness is associated with increased need for mental health and drug/alcohol services.⁶¹

This section of our report hence offers an updated analysis of evidence and literature about the macro-economic costs of homelessness. In particular, it highlights the four domains of costs identified by the Department for Communities and Local Government in 2012, and in subsequent reviews of the economic impacts of homelessness by the Department of Work and Pensions, Ministry of Justice, NHS/healthcare services, and local authorities.⁶² Increasing evidence suggests that homeless people experience a worsening of health and wellbeing over time, increasing the costs associated with meeting their needs – emphasising the potential economic benefit for society for early intervention and homelessness prevention.

The underlying cause of this worsening problem for homeless people is the growing disparity of wealth in the UK. For many households today, their income levels compared to high costs of private sector housing is an impenetrable barrier in accessing

secure homes through the commercial housing market at the necessary quality standards. There is a stark inequality in housing costs incurred by the poorest and richest members of the UK's working-age population. In England, between 1994/95 and 2017/18, the proportion of the poorest fifth of its working-age population who spent more than one third of their income (inclusive of housing benefit) on their housing rose from 39% to 47% – yet only 3% of England's richest fifth were spending more than one-third of income on housing in 2017/18, little changed from 1994/95.⁶³

c. Benefits deriving from social/affordable housing

An LSE report in 2018 into *The Cost of Homeless Services in London* noted that boroughs viewed the use of private-rent accommodation to rehouse people as unsustainable in the long-term due to high rents, insecure tenure, and poor property conditions.⁶⁴ However, some

also consider it to be the only way for households to move out of temporary accommodation. The only effective remedy is investment in new social/affordable housing, which also stimulates economic growth and reduces the burden of costs to the taxpayer – while also increasing confidence through countercyclical investment.⁶⁵ Providing social/affordable housing thus not only helps homeless families and individuals to overcome barriers and mitigate social, economic and health risks, but also contributes to economic growth through multiple mechanisms (Fig. 3):

i. Increasing economic return through rising land values

The DLUHC's Affordable Homes Programme (AHP) in England provides funding by allocating grants to housing providers (often housing associations) to subsidise the cost of delivering social/affordable homes. Distribution of these funds is delegated to the Greater London Authority in London and to Homes England for the rest of the country.⁶⁶ Problems with this programme

will be discussed later in this report, but here it is worth noting that a review of Value for Money (VfM), by using a Benefit Cost Ratio (BCR) calculation, is part of bid assessments, weighing potential economic gains against the cost of providing dwellings. The BCR score thus included benefits from increased housing, the distributional benefit of wealth transfer to lower-income individuals and families from the taxpayer, and health benefits from a reduction of homelessness. Monetised economic benefits are calculated using an estimation of Land Value Uplift (i.e. the difference between the value of the new land use compared to its previous use value), representative of the net private benefits of housing development and the economic efficiency gained through converting land.⁶⁷ Economic modelling conducted by DLUHC calculated an expected return of £2.70 of benefits from each £1 spent on housing, 89% of which is attributable to rising land values.⁶⁸

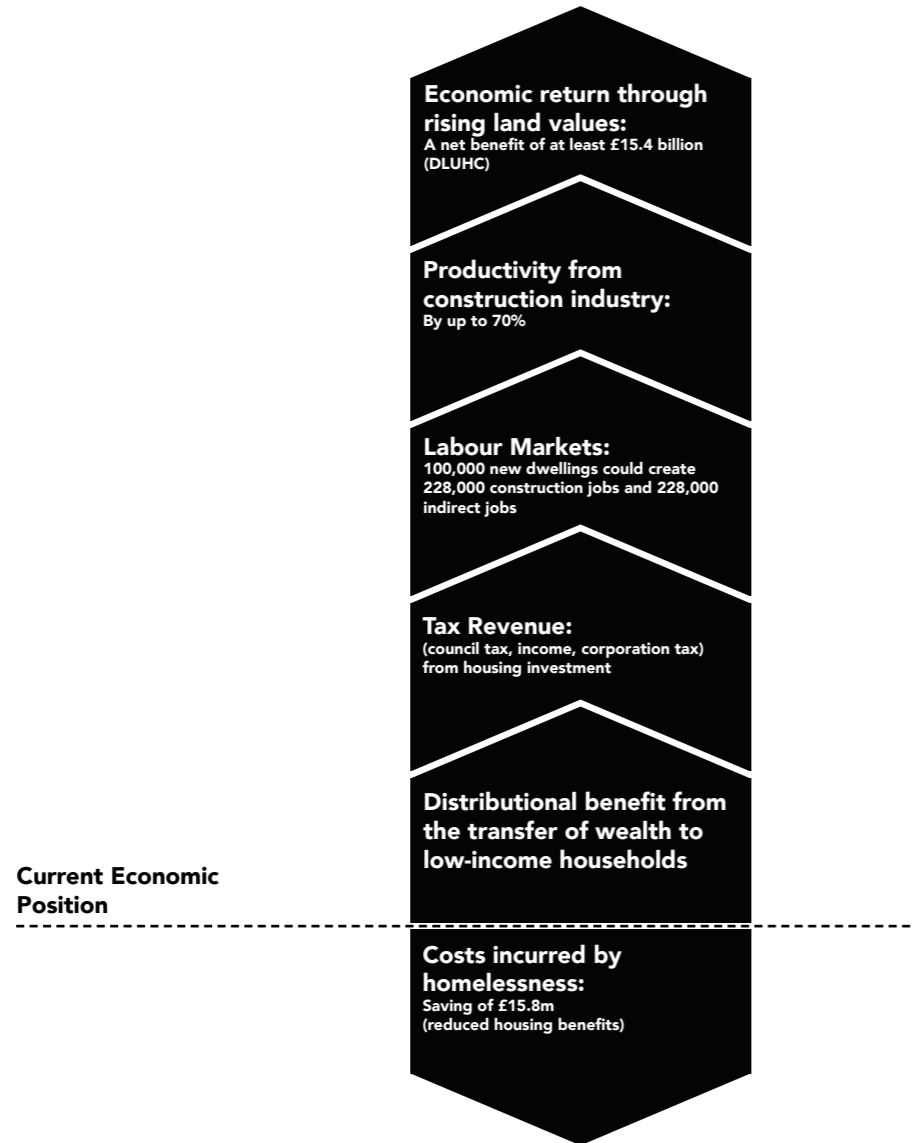


Fig. 3:
Benefits of social/affordable housing

[Courtesy of: Elena Pizzo/Nicholas Jewell]

The DLUHC's 'Scoping Report for the Evaluation of the Affordable Homes Programme 2021–2026' provides a further description of their Value for Money evaluation.⁶⁹ The ex-ante cost benefit analysis for the Affordable Homes Programme expects a net benefit of £15.4 billion (89% coming from Land Value Uplift), a net cost of £9.1 billion, and with an overall BCR of 2.7. By region and tenure, this is being tracked through the National Audit Office's analysis of DLUHC documents (Fig. 4). However, using Land Value Uplift to measure private benefits is limited by the need to rely on secondary data, plus it can be difficult to calculate the impact of residential land use separate from other land value factors, particularly in London, which is the region which creates the greatest economic benefit – mainly because of higher Land Value Uplift.

Yet what this governmental analysis also shows is that, in terms of tenure, providing homes for rent offers higher economic benefit compared to those

for home ownership, largely due to the higher Land Value Uplift, and to a smaller extent in some areas, savings in housing benefit achieved by moving claimants from private-rented to social-rented accommodation. And notably, according to the DLUHC's business case economic modelling, social-rent housing has the highest Benefit Cost Ratio (3.4) when compared to other forms of tenure under the Affordable Homes Programme, with the BCR being notably higher in London than in other English regions. Furthermore, the DLUHC has quantified welfare savings, demonstrating that increased provision of social-rent homes in London results in significant savings on future housing benefit costs. It determined that, over a 30-year repayment period, 69% of grant funding needed to build a social-rent home is recouped by housing benefit savings – a proportion that rises to 110% over 60 years in London, demonstrating clearly the long-term cost-effectiveness of building social-rent dwellings. However, it is also recognised that new homes for social rent results in formation

Area	Social rent & specialist housing CBR	Affordable rent CBR	Affordable home ownership CBR	Whole programme CBR
London	5.0	-	4.3	4.8
North East	1.5	1.5	1.2	1.4
North West	1.9	1.9	1.5	1.8
Yorkshire & the Humber	1.8	1.8	1.5	1.7
East Midlands	1.8	1.9	1.5	1.7
West Midlands	2.2	2.3	1.9	2.1
East of England	2.8	2.8	2.5	2.7
South East	2.7	2.6	2.5	2.6
South West	2.2	2.2	1.9	2.1
Whole programme	3.4	2.2	2.5	2.7

Fig. 4: Cost-benefit ratios according to area and tenure. Taken from the NAO analysis of the DLUHC benefit-cost ratio for the 2021 Affordable Homes Programme, according to type of home and region.

[Courtesy of: Elena Pizzo/Varthami Kirupanandan]

of new additional households. In some areas of England, this will increase future housing benefit costs, exceeding potential savings from lower rents.⁷⁰

ii. Providing preventative spending benefits by decreasing costs incurred by homelessness

Wider societal benefits and externalities also result from good quality social/affordable housing. Given that it involves providing homes at rents at lower than market rates, the amount of housing benefit claimed by households is duly reduced, leading to long-term savings for the Exchequer.⁷¹ If all 580,000 tenants living in private-rented sector accommodation across England, Scotland and Wales were moved into social housing, this would result in a saving of £15,871,179 inflated to 2023 prices (although overall net saving will be dependent on costs of building these homes).⁷² In 2020, a report for the Joseph Rowntree Foundation modelled the savings generated by social-rent housing, suggesting that if 90,000 social-rent homes could be

created in England each year through the Affordable Homes Programme between 2021/22 and 2025/26 – with an assumption that 72% of these are rented by households receiving housing benefit – then (at 2020 prices) the English bill for housing benefit alone would be reduced by £3 billion over a 5-year period, and £30 billion over a 30-year period.⁷³ Furthermore, the 29th Report on the AHP since its inception in 2015 noted further wider financial savings for the government such as reduced local authority spending on temporary accommodation and on the costs of adult social care – although as there are no precise ways to monetise these aspects, they could not be included in its economic modelling.⁷⁴

iii. Boosting productivity and outputs from the construction industry

The National Housing Federation's campaign, 'Homes at the Heart of a Stronger Economy', notes that, based on figures published in 2019 by the House of Commons, the construction sector is responsible for 6% (equivalent to £117

billion) of the UK economy output.⁷⁵ Their report argued that investment in social/affordable housing could improve construction industry productivity by up to 70%, directly and through indirect methods such as improving the supply chain, thereby positively impacting households and the UK economy.

iv. Distributional benefit

In terms of gains from the transfer of wealth to low-income households from the taxpayer, the Treasury's *Green Book* shows there are higher social values from financial benefits received by lower-income households as opposed to higher earners, due to the diminishing marginal utility of income. Therefore, increased spending on social/affordable housing increases distributional benefit.⁷⁶

v. Sustaining labour markets

Stable and affordable housing can serve as an anchor in local communities for keyworkers on lower wages, thus attracting and maintaining a mix of workers, and increasing regional

productivity.⁷⁷ Housing investment itself obviously creates jobs directly via the construction sector, and indirectly for those working in supply chains. In 2019, the construction industry accounted for 2.4 million, around 7%, of UK jobs. The construction industry has a higher percentage of self-employed workers, some 36%, when compared to other sectors, and the Joseph Rowntree Foundation has stressed the potential vulnerability of construction sector jobs to economic downturns – pointing out that during the COVID pandemic, in June 2020, 1.5 million construction workers were reliant on government support.⁷⁸ Investing in housing thus has a positive impact on jobs in the construction sector, with Savills having estimated back in 2010 that 228,000 direct jobs and 228,000 indirect jobs could be created from erecting 100,000 new dwellings.

To cite one case study, in 2016 the *Peabody Business Case for Affordable Housing* identified the main occupations of residents of social-rent housing

and estimated their direct economic contribution to London. By using sum of earnings to approximate gross value added (aGVA) and then estimating the ratio between aGVA and total labour costs per industry, Peabody estimated the contribution made by the Household Reference Person (i.e. the highest earner in a household).⁷⁹ They found that social housing residents contributed £15.3 billion to London's economy, with some £2 billion from the construction industry alone. At the time of their report, one-third of ambulance workers, care-related workers, and police officers lived in social-rent housing. The report noted the increasing divide between salaries of keyworker jobs and housing costs, particularly in Inner and Outer London. This 2016 report compared median London earnings with average rents, concluding that only three boroughs had affordable one-bedroom flats for rent. High housing costs were leading to reductions in the availability of keyworkers due to longer commuting times, leading to increased turnover (the Department of Transport has estimated

that commuters assign a monetary value of £1,000 per year to every increase of 10 minutes lost on daily journeys). Although the Peabody analysis if anything underestimates the economic contribution of social-rent housing, since it focuses only on the main household earner, it undoubtedly demonstrates the benefits of social-rent housing and dwellings for key workers in preserving a healthy labour mix. Other sources likewise show that a larger labour pool and lower commuting times have positive results for productivity in the national economy.⁸⁰

vi. Shorter lag between investment and impact in housing investment

After planning approval has been granted, the lag in terms of stimulation of economic growth is often shorter than a year for housing projects, which is far better when compared to investment in other public infrastructure such as roads or railways.⁸¹

vii. Housing investment has the potential to generate significant tax revenue

Any investment in housing results in increased revenue through council tax, income tax and corporation tax. This also applies to social/affordable housing, with each new home adding directly to local authority income through council tax, as a further benefit.⁸²

While the above analysis is admittedly based just on statistics from England, it would seem that similar findings can be seen in the other 'home nations'. For example, in the 2020 report by the UK Collaborative Centre for Housing Evidence (CaCHE) and Housing Associations Charitable Trust (HACT), titled *The Impact of Social Housing: Economic, Social, Health, and Wellbeing*, the positive economic impacts of investment in Scottish social/affordable housing were outlined in some detail.⁸³ For its evidence, it used data based upon the 15,562 new homes built in Scotland in 2014 to calculate the resulting benefits.

What is revealed by this information is that investing in social/affordable housing brings sustainable, long-term increased revenues and cost savings to the Exchequer, certainly when compared to current high-cost, short-term mechanisms such as temporary accommodation. Of course, the prevention of homelessness is not cost-free, and remedies such as social/affordable housing incur expense.

However, 63% of respondents in a 2016 Crisis research project, published under the title of *Better Than Cure?*, believed that support in accessing housing would have helped prevent them becoming homeless.⁸⁴ Crisis's report estimates that for a year, if their homelessness had been prevented, 65% of those affected would have contributed to a reduction in state expenditure, and just 35% would have cost the state more – a saving equivalent to £9,266 per homeless person at 2016 prices. Furthermore, it points out that the cost of exiting homelessness may be higher than the cost of preventing it in the first place, due to increased risk of long-term

health and wellbeing problems of being homeless.

d. Cost-benefit evaluation of building social/affordable housing

Every member of the UK public incurs governmental expenditure in their day-to-day life, which is compensated by tax revenue generated from that individual. However, whenever an individual loses their home, they are at risk of additional costs. This is worsened by the length of time it takes them to get out of homelessness – e.g. of the 86 people interviewed for Crisis's 2016 report, the average time each had been homeless was 1,500 days, around four years of their lives.⁸⁵

Cost-benefit analysis is always a complex task. This section uses the best available data to model the costs of homelessness, adjusting previous costing estimates for 2023 prices. However, there are clear challenges such as limitations in evidence, lack

of longitudinal data about costs given that there are no large representative data-sets, and difficulties in identifying variations in costs between different homeless groups.⁸⁶ The actual costs of homelessness are far-reaching, with often estimates of costs falling short of reality. Assumptions needed to be made in the methodology employed here, such as assuming that 'no-fixed-abode' individuals are homeless. Records in public databases are inconsistent or incomplete, for example, often not including those in precarious housing or living in hostels. There is hence a real need for better data collection and quantification and sharing about the impacts on homelessness, including the costs it incurs.

Nonetheless, our analysis offers a useful estimate of the costs of homelessness in England, while noting that costs in some areas of England, such as London, are higher than others, and that costs are not uniformly distributed amongst the diversity of different homelessness experiences.⁸⁷ Our estimate cannot take

Summary of net annual costs due to homelessness for adults, calculated in 2023 prices.

Cost Category	Net Cost per person per year (inflated 2023 GBP)	Annual Costs (GBP)*
Homeless Service Use	6,550	973,723,000
NHS Service Use	1,348	200,393,680
Mental Health Service Use	657	97,669,620
Drug & Alcohol Service Use	413	61,396,580
Criminal Justice System	2,218	329,727,880
Unemployment/lost output cost to the economy	15,264	810,085,208
Wellbeing loss due to homelessness**	9,757	-
Total Cost		2,472,995,967 (including economic output loss)

*assuming population size of 148,660

**not included in overall costings as individual cost, not cost to Exchequer

Summary of net annual costs due to homelessness for children, calculated in 2023 prices.

Cost Category	Net Cost per person per year (inflated 2023 GBP)	Annual Costs (GBP)*
Educational Attainment	26,194	3,215,601,634
NHS Service Use	277	34,004,797
Mental Health Service Use	433	53,155,513
Criminal Justice System	71	8,716,031
Benefits	229	28,112,269
Social Services (Cost of Children in Care due to homelessness)	-	178,896,766
Total Cost		3,518,487,010

*assuming population size of 122,761

Fig. 5:
Summary of net annual costs due to homelessness for adults and children in England

[Courtesy of: Elena Pizzo/Varhami Kirupandan]

into account the costs associated with people who endure homelessness at different ages, due to the limitations in longitudinal data – although data from Crisis does suggest that some homeless people ‘age in place’, experiencing a decline in health and wellbeing, and increasing their costs over time.⁸⁸ It is also difficult to identify the divide between causal and consequential factors, such as the links between drug and alcohol abuse or mental illness, with homelessness. The comparator group here is an assumption of the ‘homed’ population used in previous studies, not a group of matched individuals.⁸⁹ Therefore, we cannot say with total certainty what proportion of additional costs in these sectors are a result of homelessness, or what costs would be incurred regardless. Furthermore, the costs do not consider the proportions of the homeless population which we were UK residents, as opposed to say EU or non-EU nationals, who may well have varying costs.⁹⁰ And as mentioned, there is also a problem in how to incorporate reliable data from Scotland, Wales and

Northern Ireland into that for England, although it is clear that what is available from the other ‘home nations’ confirms the same picture.

What is thus clear is that sustained, repeated homelessness has a significant impact on government expenditure, as can also be found in other countries (for example, research from 1990s America demonstrated that 10% of its homeless population then used 50% of emergency accommodation bed spaces each year).⁹¹ Therefore, based on recent estimates of children and adult homeless in England, adjusted for 2023 prices, our calculation is that the **net annual cost for homelessness is between £5.18bn and £6bn a year in England alone** (Fig. 5): proportionately high figures can equally be assumed for Scotland, Wales and Northern Ireland, **which means that the cost to the UK altogether can be estimated as being at least £6.5 billion annually.** If anything, this figure is an underestimation of the costs of homelessness, given that there are many aspects which we could not incorporate

financially into our calculations. For instance, the presence of 'visible homelessness' may have a direct impact by deterring investors or tourists, reducing a city's commercial activity. Also important is that homelessness carries a deep personal cost for the individuals who endure it, which can be long-term, distressing and marginalising.⁹² What it means is that there is an undoubted financial cost associated with homelessness, plus a real human cost to those being caught up in it. Finally, we were unable to estimate the crucially important lifetime costs associated with the impact of homelessness on children's health, employment opportunities, and future incomes because such long-term data have not yet been collected.

e. The pressing need for increased housing subsidy

From these figures on the economic cost of homelessness, and the cost benefit analysis of providing social-rent dwellings, there is a clear need to build

sufficient social/affordable housing across the UK. This will obviously require substantial levels of state subsidy to provide what current government terminology calls 'grant-funded' dwellings. Here is it worth describing the current state of affairs in terms of providing social/affordable housing in the four 'home nations'.

In England, the policy is being pursued, as noted, through the Affordable Homes Programme 2021–2026 which is overseen by the Department of Levelling Up, Homes and Communities (DLUHC). A revealing and highly critical examination of the programme was carried out by the House of Commons Public Accounts Committee in December 2022. Their report noted that the Affordable Homes Programme had been started through initial iterations (based on specific funding periods) in 2015 and 2016–2021 which, once construction work is fully completed, will have provided 206,000 grant-funded homes – i.e. at an average of 35,000 dwellings per annum. More pertinent, however, is the 2021–2026

iteration of the Affordable Homes Programme, which was allocated £11.4 billion for the period up to 2032 to deliver 180,000 grant-funded homes, a target however subsequently reduced to 157,000 grant-funded homes – i.e. 23,000 fewer dwellings. It is part of the steady decline started by the 'austerity' measures introduced by Conservative governments from 2010 which led to the proportion of new grant-funded homes in England being built for social-rent dropping from around 64% to only 14% by 2014 and further since then.⁹³

And what this effectively means today is that the current Conservative government – whose manifesto pledge was for 300,000 houses being built each year in England across all categories of dwellings – is only providing just over £1 billion a year towards social/affordable housing in England, resulting in only 15,000 grant-funded homes annually. Not only is this far below what is required to address the UK's worsening housing crisis, but even within the DLUHC's allocation there is

a major problem. Of these envisaged 157,000 grant-funded dwellings in England up to 2032, only 33,500 will be social-rent homes that those on lowest incomes can afford – despite the DLUHC itself calculating that dwellings built for this sector have the highest Benefit Cost Ratio. Allocating just 20% of the Affordable Homes Programme as social-rent dwellings, equivalent to around 3,000 new units per annum, is hence the biggest single failure of current governmental policy (although it should also be noted that the DLUHC faces serious problems in meeting its intended targets for rural homes and supported-care dwellings). As the House of Commons sub-committee observed about the influence of Conservative ministers over the AHP:

'There is a clear demand for more social homes for rent, a tenure which is the only real affordable option for many people. Homes for social rent provide the highest value for money, but it is a ministerial

decision that half of homes to be built under the 2021 Programme are for ownership rather than rental. And yet the Department has not calculated potential savings from reducing the number of people in temporary accommodation which is costly to the taxpayer.⁹⁴

Due to historical differences and partial devolution in recent decades, there are more effective and collectivised housing policies in Wales, Scotland and Northern Ireland. The Welsh Government has from 2019 operated the Social Housing Grant scheme for local authorities and housing associations, delivering about 1,500 social/affordable dwellings a year (out of around 5,000 houses per annum in Wales) – it also runs specific schemes such as the Innovative Housing Programme as an attempt to speed up construction time. In Scotland, local authorities and housing associations provide almost 10,000 social/affordable dwellings annually, around half of the

20,000 houses built there each year. In Northern Ireland work is done via the Northern Ireland Housing Executive, which funds social/affordable housing through housing associations (but not local authorities) under the Social Housing Development Programme, typically delivering around 1,500 new homes a year (out of around 7,000 houses built in the province annually). Crisis notes that of the UK's 312,810 affordable homes delivered between 2017–22, only 23% (70,800 units) were for social-rent and that the rate of their provision varied dramatically: i.e. only 12% of 'affordable' homes were for social-rent in England, compared to 68% in Scotland and 79% in Wales.⁹⁵

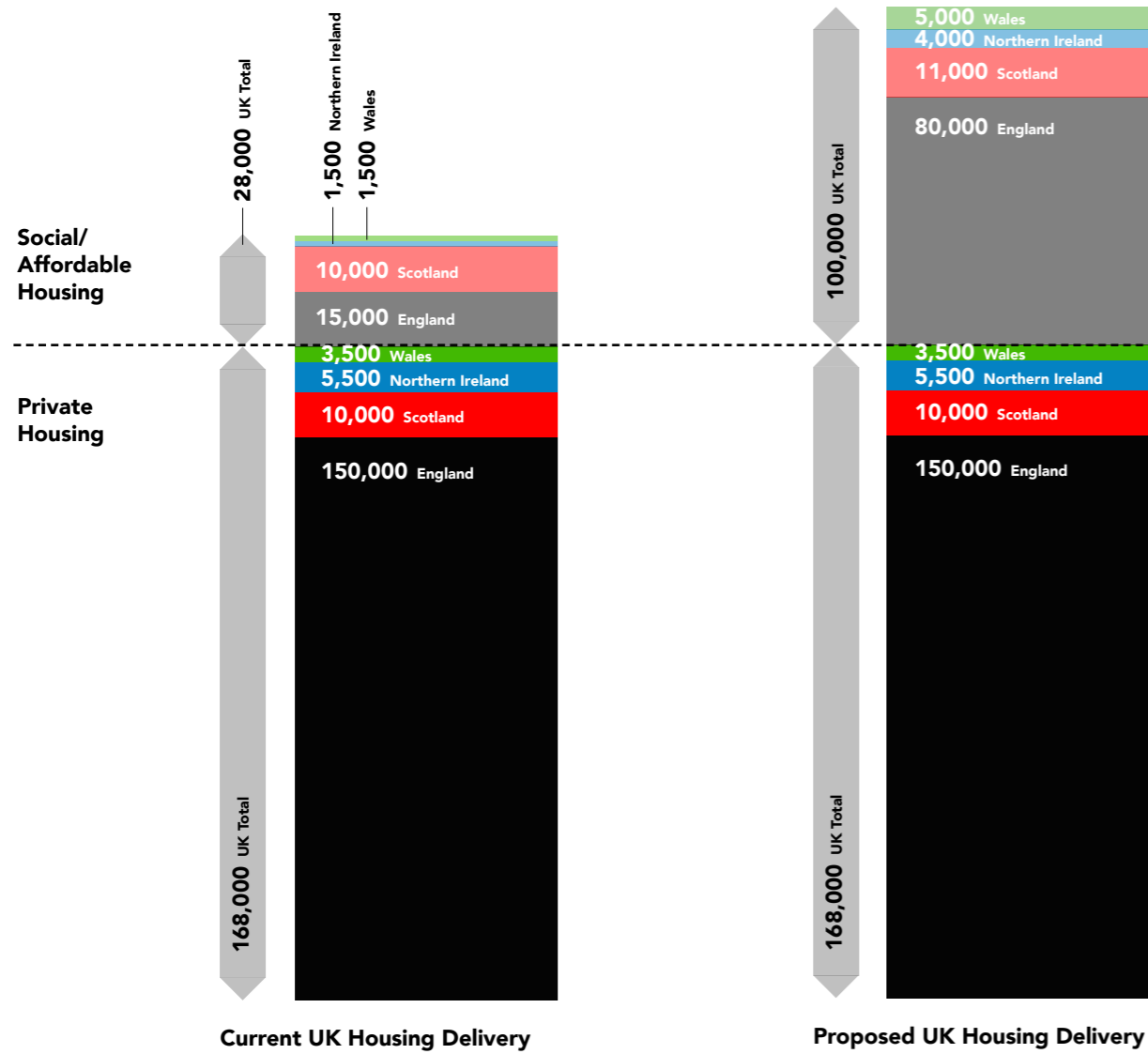
Yet even if the other 'home nations' are faring better than England, they too would clearly benefit from an increase in social/affordable housing, especially in areas with higher indices of social deprivation.⁹⁶ A further cause for variation across the UK is the Right-to-Buy policy which allows council tenants to buy their home at a discount. That

policy ended in Scotland in July 2016 and in Wales in January 2019, whereas in Northern Ireland it is much restricted by no longer applying to housing association dwellings and by capping the maximum discount at just £24,000 – compared to England, where there is a huge discount of up to 70%, with caps at £96,000 nationally and £127,900 in London. Since the 1980s, Right-to-Buy has transferred almost 2,000,000 English council homes into private ownership, roughly 50,000 homes per year. In recent years, the demand for Right-to-Buy in England has withered away notably, yet nonetheless the worry for local authorities of having their new dwellings sold off at massive discount, and being unable to allocate sales money for further homes, has proved a serious deterrent. The problem is currently slightly alleviated by a temporary ruling that local authorities can reuse all Right-to-Buy receipts for housing re-investment, but what is actually needed – even if still left available to pre-existing tenants – is for the policy to be ended in England for all new social-rent dwellings

completed after a certain date, say 1st January 2025. Given that there are now shared ownership schemes on offer, they can effectively replace the Right-to-Buy scheme while providing greater controls for local authorities in retaining their housing stock.

Our call for a curb on Right-to-Buy on all new social-rent dwellings after a specified date should be seen against a picture in which – due to the results of that policy and also the demolition of tower blocks and other dwellings – there has been an estimated net loss of 165,000 social-rent dwellings in England over the past decade, even if one allows for the fact that there has been some new provision by, for example, housing associations.⁹⁷ Therefore we are in a situation, certainly in England at least, where the housing crisis for those on lowest incomes is progressively getting worse each year.

What this shows is that, irrespective of regional variations within the UK, the current level of provision of social/



affordable housing is insufficient and that policy needs to change substantially. This is why – because of the financial waste explained in this section – our recommendation is a four-fold increase in the amount of governmental housing subsidy across the UK, with by far the steepest increase being needed in England. Indeed, our proposal is that England’s ratio of social/affordable housebuilding should rise more to the kind of level seen for instance in Scotland. Altogether, this would mean that the combined UK subsidy figure increases steadily up to £5 billion annually over the next five years or so, and then remains at that level, such that around 72,000 additional social/affordable dwellings can be built each year across the UK over and above the current level of about 28,000 units – thereby providing approximately 100,000 new dwellings annually across the UK in addition to the typical 150,000 homes annually by private housebuilders and developers (Fig. 6). An explanation of how these housing figures should pan out is given in the next section.

In view of the fact that the UK government’s annual spend is currently just over £1.1 trillion, the additional subsidy we are suggesting is just 0.45% of that total sum. While it is of course extremely difficult to determine conclusively the overall net savings from ending homelessness, because of challenges in monetising the multiple long-term impacts of homelessness and potential increases in housing benefit payments in some areas, it is nonetheless manifest that there is an even greater cost associated with homelessness, in the order of £6.5 billion per year for the UK – not to mention the very real human cost endured by those who experience it. Set against that sum, our call for an extra £4 billion in state housing subsidy each year could return a substantial annual saving to the Exchequer while also improving the health, wellbeing and life opportunities of millions of British people.

Fig. 6 (opposite): Illustration of existing and proposed UK housing delivery (opposite)

[Courtesy of: Nicholas Jewell]

Chapter 4

Architecture/Planning

Having set out the public health and macro-economic arguments for addressing the UK's housing crisis, this third section of the report explores the architectural and planning potentials for tackling the housing crisis.

Our view is that the UK already possesses successful examples of how to provide new-build and retrofitted housing at affordable levels and which also meet the latest demands for sustainable construction. Hence, there is no need for us to invent new methods: what is required now is to scale up the best precedents. Given the need in the UK for a differential housing policy to tackle various housing problems in the different socio-economic conditions in

the four 'home nations', then providers should have flexibility in choosing the methods and models which work best for them.

This section of the report will first refer briefly to the research methods and to the available knowledge on the subject, yet without attempting to provide any comprehensive literature review. Next, it will highlight some historical parallels that remain informative for us in the UK today. The third part proposed the spatial and sustainability standards that should be used for all future social/affordable homes, whether new-build or retrofit. Next, it will suggest a schedule for how an expanded housebuilding programme might be organised. The

Fig (opposite).
Agar Grove, London. MAE
Architects
[Courtesy of: Jim Stephenson]



final part then discusses the different kinds of dwellings that are needed across the UK, citing the best recent or current projects to demonstrate how it can be done.

a/ Research methods

We employed a slightly different research method for this architecture/planning section, operating two main lines of inquiry. Firstly, in terms of studying the existing literature about the subject, we found it less helpful in our case to try to carry out a systematic survey rather than simply identifying the key, reliable reference sources. After all, it soon became evident that the UK possesses a huge wealth of housing experts and publications, whether about historical or contemporary conditions. Significant producers of research are Crisis, Shelter, Joseph Rowntree Trust, and the UK Collaborative Centre for Housing Evidence headed by Glasgow University – alongside numerous other universities, organisations and

pressure groups. In regard to housing design there is a unique and excellent guidebook which covers all dwelling types, edited by David Levitt and Jo McCafferty.⁹⁸ It hence seemed futile to try to describe all the reports, essays, books and documents written on the topic, as opposed to identifying the specific information or data from those texts to cite at certain points.

As our second line of inquiry, we carried out a series of qualitative interviews (both in-person and online) with a range of pertinent specialists involved in UK housebuilding. Although we could not of course talk to everyone in the field, we did manage to engage with an excellent spectrum which included architects, planners, housing officers and providers, developers and environmental specialists.⁹⁹ Our list of interviewees was strengthened by also being able to talk to many planning and environmental experts at our home institution, the Bartlett Faculty of the Built Environment, UCL, a world-leading academic institution in the subject. Otherwise, our

process for selecting the interviewees was determined by identifying the most innovative and promising schemes for social/affordable dwellings over the last 5 years or so, or still on the drawing board, and contacting those concerned. It meant our sample was focused on England rather than the other 'home nations', but in the knowledge that architectural/planning issues would have a great deal in common across the UK.

b/ Useful historical and present-day data

There is a common and understandable tendency when writing about UK housing to point to other countries that are presented as doing things better. Thus, in the literature there is much to read about international parallels and divergences, such as the fact that Vienna City Council alone continues to build around 10,000 new social/affordable units a year – part of a longstanding urban tradition extolled in Liane Lefaivre's book, *Rebel Modernists*.¹⁰⁰ Although this kind of comparative

analysis is helpful, we decided to refrain here from suggesting direct extrapolation from places like Austria, Germany or Sweden simply because the UK's conditions are so utterly different. Instead we have concentrated on how to deal with actual realities within the four 'home nations', which each share common links yet also notable differences in their housing histories. With this in mind, some statistics did emerge from our literature survey and interviews which seemed particularly useful in thinking about what a revived social/affordable housing programme could look like.

The UK's current population is 67.33 million, which is broadly 82% urban and 18% rural (except in Northern Ireland where the latter figure doubles). These people live in just under 30 million dwellings. Around 64% of citizens are in owner-occupied housing, the same proportion as France or Sweden, yet slightly higher than in Germany. Around 18% of UK people are in social-rent accommodation whereas the remaining

18% are renting from private landlords. Of the UK's total of 5.27 million social-rent dwellings, around 35% (1.84 million units) were built by local authorities and 65% (3.43 million units) by housing associations or other registered providers. Today, only about 6% of the UK's housing stock is local authority accommodation, far lower than a peak of about 40% in the late-1970s.

If we focus on England to examine its typical historical level of housebuilding since the Second World War, the official data reveals – as graphically displayed in a diagram by Shelter (Fig. 7) – that the 'normal' level of production by private housebuilders and developers is consistently around 150,000 units annually. Housing associations and other registered providers are currently delivering around 15,000 new social/affordable units per year, and therefore – if the current government hopes to achieve its stated goal of 300,000 units annually in England – then the 'missing quota' can only realistically be provided by local authorities. The peak of the

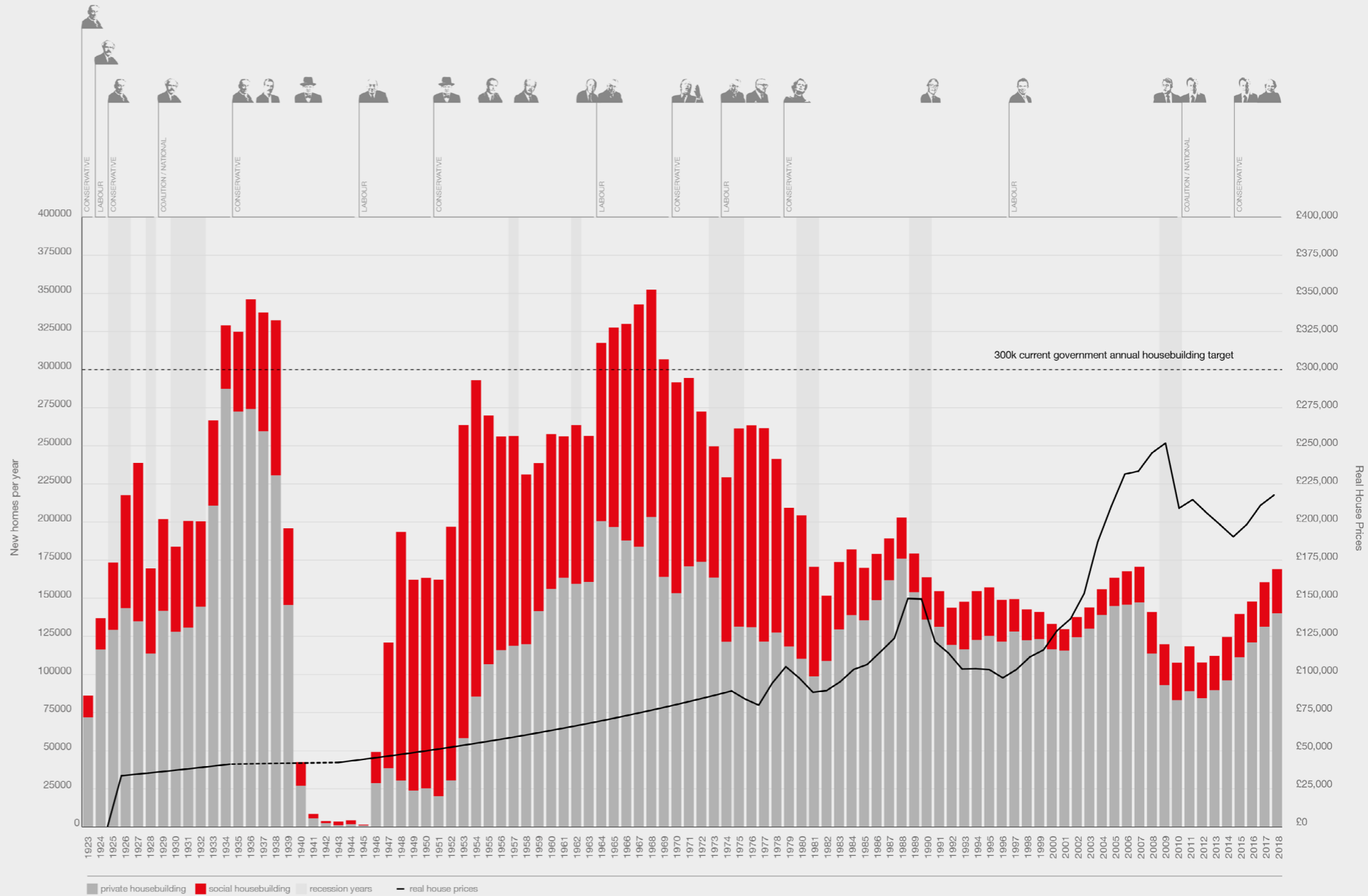


Fig. 7 (opposite): Illustration of private and social housebuilding since the Second World War

[Courtesy of: Shelter]

UK's local authority housebuilding was in 1969–70, when 135,000 dwellings were built in England (out of a total of 185,000 across the UK). It seems unrealistic to expect this level of provision today given that the capacity of local authorities has been so eroded, so it seems more sensible to imagine instead an annual target figure of 230,000 units per year in England – made up of the 150,000 units typically expected from private housebuilders and developers, and 80,000 social/affordable dwellings by local authorities, housing associations and other registered providers. A further 20,000 social/affordable units per year should be distributed amongst the other 'home nations', as will be explained later in this report.

The existing literature and relevant specialists point out that the UK's private housebuilders and developers – which tend to specialise in executive homes and luxury dwellings – generally find themselves unable to provide social-rent housing due to their requirement for profit margin. This is

also often a problem whenever private housebuilders and developers attempt to build affordable-sale dwellings, with many would-be purchasers finding that they do not meet the earnings threshold to do so.¹⁰¹ Given this limited scope for private housebuilders and developers to provide social/affordable housing, it might seem obvious simply to exclude them from this report but during the course of our research we did come across some potential for them to contribute, even if on a relatively restricted scale, as again will be noted later.

c/ Housing quality and standards

Before looking at the proposed social/affordable housing programme for the UK, it is important to set out aspects relating to the quality and standards of new dwellings, which will also obviously involve regional differences and indeed variations within regions.

Number of bedrooms (b)	Number of bed spaces (persons (p))	Minimum gross internal floor areas and storage (sqm)			
		1 storey dwellings	2 storey dwellings	3 storey dwellings	Built in storage
1b	1p	39 (37)*			1
	2p	50	2b	2b	1.5
2b	3p	61	1b	1b	2
	4p	70	1b	1b	
3b	4p	74	1b	1b	2.5
	5p	86	1b	1b	
	6p	95	1b	1b	
4b	5p	90	1b	1b	3
	6p	99	1b	1b	
	7p	108	1b	1b	
	8p	117	1b	1b	
5b	6p	103	1b	1b	3.5
	7p	112	1b	1b	
	8p	121	1b	1b	
6b	7p	116	123	129	4
	8p	125	132	138	

*Where a studio / one-bedroom one-person one-bedspace (i.e. one single bedroom) dwelling has a shower room instead of a bathroom, the floor area may be reduced from 39 sqm to 37 sqm, as shown bracketed.

Fig. 8:
Greater London Authority
Internal Space Standards for
New Housing
[From The London Plan]

Firstly, and in general terms for laying out housing schemes, a density spectrum of 50-80 dwellings per hectare (20-32 per acre) appears to work well in most suburban or semi-rural areas – as seen for example in recent schemes by Mikhail Riches Architects for City of York Council as described in the final part of this section. However, for larger UK cities, with fewer sites available and higher land costs, projects need to increase even up to 150 dwellings per hectare (48 per acre) in the densest urban areas, as is being easily achieved by Peter Barber Architects for projects in London which are also mentioned later on. At the other end, rural densities clearly need to be far lower: indeed, in some cases it is often hard to even talk about density if just a small handful of dwellings are being built.

Secondly, in terms of internal requirements for social/affordable housing, all new schemes should adopt the Greater London Authority's internal space standards (Fig. 8) as set out in the London Plan.¹⁰² These room sizes are totally sufficient for future social/

affordable housing in the UK and offer the best guide to use as a beneficial updating of the much-praised 1960s Parker Morris standards.

Thirdly, and more complex, is the question of sustainability standards, which as many commentators have pointed out need to be subdivided into two strands:

i/ **Built carbon** created by new dwellings, an issue which can only be majorly reduced if one retrofits existing blocks rather than demolishing them – as will be noted later with Mikhail Riches Architects' Phase 2 refurbishment of Sheffield's iconic Park Hill Estate (Fig. 9).

ii/ **Operational carbon** as an incurred deficit for the long period over which a dwelling is inhabited, and which becomes therefore the prime target for achieving Net Zero Carbon in housing projects. What this also means is that all of a scheme's energy requirements have to be provided through on-site renewable sources.

Both strands are vital, although it is operational carbon that has to be cut the most to mitigate the effects of climate change. When building new homes, this is best achieved by an 80% reduction in energy consumption made possible through Passivhaus design and construction techniques. In summary, Passivhaus is a German whole-building housing system that relies upon super-insulated exterior walls and roofs, a largely airtight external envelope plus mechanical ventilation to reduce heat loss through air flows, alongside associated techniques such as orientating main rooms in a southerly-facing direction and supplying dwellings with energy from air-source heat pumps, photovoltaic panels and efficient heat recovery.¹⁰³ Passivhaus also offers a fully certified, sophisticated method which is not limited to new-build homes. Thus, retrofit projects can adopt the Passivhaus EnerPHit system, proven to cut domestic energy consumption by 50-80%.¹⁰⁴ This correlates with findings by Mikhail Riches that carefully inserted insulation and new double-glazed

windows on Passivhaus principles is making enormous reductions for the retrofitted Park Hill Phase 2, where a flat now requires just 15% of the operational carbon needed to run it in the original 1960s scheme (Fig. 10).¹⁰⁵

Passivhaus design and construction however costs a little more than standard methods, yet the cost difference is only 10% extra according to the architects and housing officers that we interviewed who are using that system. In turn, Passivhaus then delivers more robust construction; higher quality of labour skills; major cuts in operational carbon, and hence the erasure of any prospect of fuel poverty for inhabitants. Hence, a 10% increase seems minor compared to the gains: i.e. healthy houses at social-rent levels that are environmentally beneficial for the planet, and which mean that residents need never be concerned again about national/global impacts on fuel prices.

Some argue that all that needs to be specified is a Passivhaus-level of

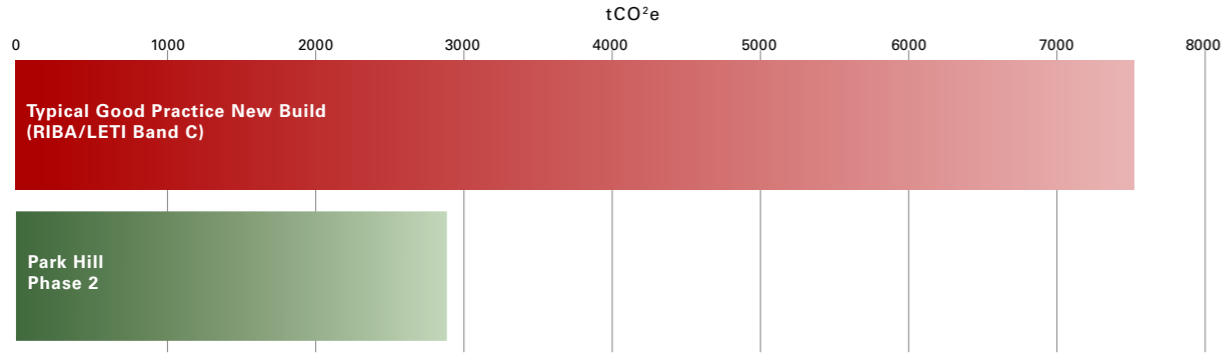


Fig. 9: Reductions in embodied carbon at Park Hill through the adoption of Passivhaus construction

[Courtesy of: Mikhail Riches Architects/Expedition Engineering/Useful Simple Trust]

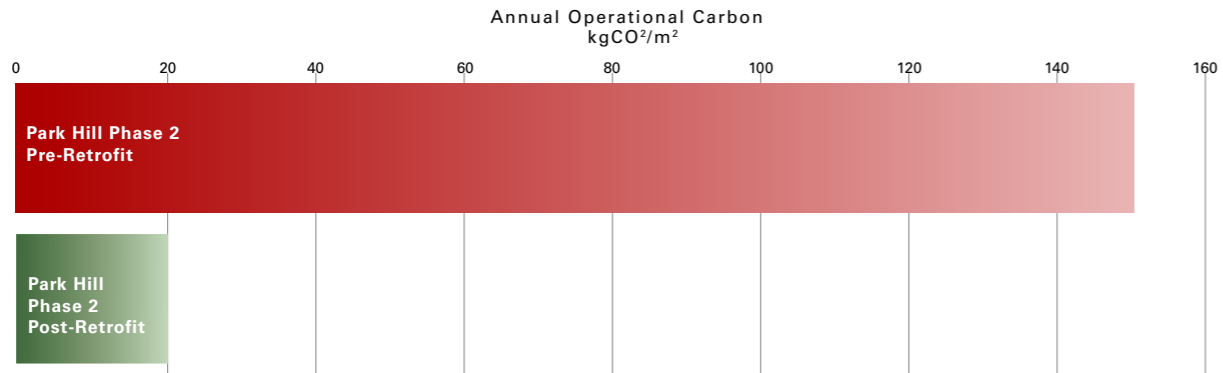


Fig. 10: Reductions in operational carbon at Park Hill through the adoption of Passivhaus construction

[Courtesy of: Mikhail Riches Architects/Expedition Engineering/Useful Simple Trust]

construction, as opposed to it having to be the fully certified Passivhaus system itself, since that would enable cost savings. However, it was notable that the architects and housing officers we interviewed who favour the system are not at all swayed by this argument, on the grounds that if one does not adhere to the full Passivhaus certification then it can lead to loopholes and scrimping that undermine the whole benefit of the system. Given the sad history of failures in supervision and certification in UK housebuilding, from the Ronan Point collapse in 1968 through to the 2016 Grenfell Tower fire, it is thus our recommendation that there is an insistence on using the full Passivhaus system for all new and retrofitted social/affordable housing to avoid any such disasters in future.

This move towards the comprehensive adoption of Passivhaus construction for new-build and retrofit would entail a much-needed transformation within the UK's construction industry. It would require governmental financial incentives

to enable all the UK's technical colleges to focus fully on the teaching of 'Green Skills', an educational transformation which is of course already underway in many regions. This would not simply be about training site workers how to build to Passivhaus standards, but also producing experts able to assess and certify the finished dwellings, and then to maintain the dwellings in perpetuity. Although that sounds like a major task, if addressed in the right spirit, this agenda can help technical colleges to define their future role and to create more skilled labour for the UK marketplace. Local authorities could also contribute to resolving the capacity issue by embarking on their own Passivhaus new-build/retrofit initiatives, whether in-house or as arms-length training companies.

It is here that there is a key role for what are called 'Modern Methods of Construction' (MMC). This latest iteration of a 100-year-long dream to rationalise and industrialise the building industry is suffering presently because

of a lack of clarity as to what the term actually refers to. Therefore, to turn MMC into a clear strategy, rather than a vague buzzword, it should be made part of a social/affordable housing initiative that is based upon Passivhaus design and construction, thereby offering an achievable goal. This could include research for example into off-site fabrication of Passivhaus components, helped by AI and Building Information Modelling software to accelerate and reduce the cost of producing social/affordable dwelling. In this way, recent calls to promote the use of AI to help meet the UN's Sustainable Development Goals could be used to address the UK's housing crisis.¹⁰⁶ We thus propose that the goal of MMC should squarely be to eliminate the 10% extra cost that Passivhaus currently entails.

Finally, there is a range of further quality indicators that need to be integrated as essential aspects of social/affordable housing schemes, including:

- Better design of green spaces and the surrounding urban realm, especially in light of a national audit in 2019–20 by the Place Alliance which discovered that the provision and design of public space is far worse in England's most deprived areas, especially on council estates.¹⁰⁷
- Sustainable communal transport systems by local authorities both to encourage cycling and the use of public travel rather than private cars.
- Schools and healthcare facilities must be readily and locally available.
- So too the necessary retail and leisure facilities for residents.
- Proper attention has to be paid to landscape design in general, not least in terms of how these social/affordable housing schemes merge into their local contexts.

d/ Housebuilding programme and targets

Having set out the required standards for new social/affordable housing, this part discusses how the recommended dwellings could be achieved. Many interviewees emphasized the pressing need to reform land policy and ownership in the UK, which is certainly a pressing matter, but it is also such a complex issue that we have left it out of this report so as to focus on how housebuilding can be increased given current conditions.

As mentioned earlier, along with helping housing associations/other registered providers, what is most needed is to empower local authorities to provide the vast bulk of the social/affordable houses needed annually across the UK. Distribution of the increased Exchequer subsidy total for social/affordable housing should of course be allocated in direct relation to the assessed housing need in a locality: as such, negotiation is required with local authorities/housing

associations/other registered providers. While a broad allocation can be established provisionally by population figures, this will then have to be adjusted depending upon factors such as demographic patterns, household types and relative levels of local deprivation.

This clarification being made, our proposal is hence that there should be a further 72,000 integrated social/affordable dwellings built across the UK each year – thus increasing the present figure to make a total of c.100,000 social/affordable homes annually. Regionally, the total should be allocated in this broad manner: England 80,000 units; Scotland 11,000 units; Wales 5,000 units; and Northern Ireland 4,000 units. However, these figures should not be treated as fixed targets which might then be 'failed' to be met, but instead as indicative levels of provision for each part of the UK.

While the most urgent need is for decent housing for those on the lowest incomes, experience suggests that a

greater social mix is desirable to avoid the stigmatisation/ghettoization so common in the past. Yet the relative proportion allocated to different social groups still has to be ambitious. Thus, based on our interviews with those engaged in local authority housebuilding, we recommend a mandatory target in all social/affordable housing projects for 50% social-rent units, 20% affordable-rent or affordable-sale units (e.g. shared ownership), and 30% market-rent or market-sale units. The latter are required to balance the finances for a combined programme that would provide, at a rate of c.50,000 units per year (out of the overall annual total of c.100,000 social/affordable dwellings), a total count of c.250,000 social-rent dwellings over a 5-year period – enough we think to significantly reduce levels of homelessness and precarious housing in the UK. In addition, this combined scheme over the same 5-year period would have created c.100,000 units for affordable-rent or affordable-sale, thereby helping people to get onto the property ladder, as well as c.150,000

market-rent or market-sale dwellings that are available at the best Passivhaus standards.

Our suggestion for an increase up to £5 billion of Exchequer funding is hence needed to subsidise the social-rent and affordable-rent/affordable-sale dwellings within this combined programme, estimated roughly at an average subsidy-per-dwelling of around £75,000 (but in fact higher for the c.50,000 social-rent units being built per annum and lower for the c.20,000 affordable units). The other c.30,000 units annually for market-rent or market-sale would not be subsidised, and instead selling them would help to cross-subsidise the others. Furthermore, these full-cost dwellings could hopefully serve as design models for the homes being erected by private housebuilders and developers.

To achieve this level of upscaling, there will need to be a phased plan over several years to allow the training up in the interim of building workers with Passivhaus knowledge and skills,

spearheaded through the teaching of 'Green Skills' in the UK's technical colleges. Here the expertise of existing bodies such as the longstanding Centre of Alternative Technology in Machynlleth, Wales, which specialises in this kind of Zero Carbon training, could prove invaluable.¹⁰⁸ This phase will also provide a window in which UK governments can fund research into MMC methods to reduce Passivhaus costs. In sum, it constitutes a major initiative, yet the political opportunity is huge. Imagine that a government was able to tell young UK voters, who at the moment seem to face nothing but despair about future housing prospects: 'we will build you attractive modern homes; we will rent them to you at a fair price; they will be environmentally beneficial for the planet; and you needn't ever be concerned about national or global problems wrecking your fuel bills.'

Fig. 11:
McGrath Road, London. Peter Barber Architects
(overleaf - left hand page)
[Courtesy of: Morley Von Sternberg]

Fig. 12:
Ordnance Lane, City of York. Mikhail Riches Architects
(overleaf - right hand page)
[Courtesy of: Dare Studio]

f/ Housing types

This final part of our architecture/planning section explains the various types of dwellings that are required while also pointing to recent award-winning examples to demonstrate how they can be built. It is worth stressing that the exemplar schemes we refer to are among the very best social/affordable housing designs being provide anywhere in the world, and thus more than equal to the highest quality state housing ever seen in the UK.

i. New-build social/affordable dwellings in urban areas

For mixed tenure local authority schemes in dense urban areas, a prime example is the ingenious reinvention of back-to-back layouts at McGrath Road in Newham by Peter Barber Architects (Fig. 11).¹⁰⁹ In terms of smaller towns, the Passivhaus scheme at Goldsmith Road in Norwich by Mikhail Riches for Norwich City Council, which rightly won the 2019 RIBA Stirling Prize, has been extensively praised. Mikhail Riches





Fig. 13 (opposite):
Kyna Court, Hemel Hempstead.
RG+P Architects

[Courtesy of: RG+P Architects]

have even improved this model further in their designs for seven sites for City of York Council, two currently under construction, overseen by Michael Jones as Head of Housing Delivery.¹¹⁰ These York schemes, all to Passivhaus standards, will provide 600 houses in total and be enhanced by thoughtful landscaping, plus incentives to embrace cycle-based lifestyles and use local public transport networks (Fig. 12). The City of York Council certainly offers an excellent model for other local authorities to follow. In a Home Counties context, RG+P Architects are working closely with Dacorum Council on reusing brownfield sites in Hemel Hempstead and surrounding districts for inventive infill housing schemes (Fig. 13).¹¹¹ These municipal projects offer a healthy mix of social-rent along with other types of uses in tenure-blind formats, and there is of course the potential for housing associations and other registered providers to do likewise.

While it might seem that private housebuilders and developers cannot

support this task, we were struck by finding at least one company, the Hadley Group, which is already involved in setting up partnerships with local authorities and housing associations in Bristol and Stratford in East London for projects that will deliver a higher than usual proportion of social/affordable dwellings. Hadley is doing so because some of its private investors now prefer sustainable investment which accepts a reduction in financial profit if tangible environmental goals can be met instead. Other housebuilders such as L&G Homes and Vistry Group also state they are keen to be involved in social/affordable housing development, so might there be more of this 'green investment' funding in future?

ii. New-build social/affordable dwellings on brownfield sites within 'Green Belts'

Another promising way for many local authorities to acquire suitable housing sites is to permit a more flexible reuse of disused brownfield sites in 'Green Belt' zones around our cities and towns. Here

it is useful to remember that 'Green Belts' in the UK were created on lands which historically already had some industrial and commercial buildings within their territory, and which remain today. Thus, while it is a common misconception that 'Green Belts' only contain farmland or open leisure spaces, in fact there are numerous now-redundant industrial/commercial sites ripe for redevelopment at no loss to natural amenities. Excellent studies into these 'Green Belt' potentials have been written by Peter Bishop at UCL and by Alan Mace at the LSE.¹¹²

iii. Retrofitting of existing housing

As an ambitious retrofitting of existing 1960s dwellings, Mikhail Riches Architects' aforementioned scheme for Park Hill is both visually stunning and achieves a huge cut in operational carbon.¹¹³ In adopting Passivhaus-level techniques for a derelict social-rent block, it is ground-breaking (Fig. 14). Other excellent models are being provided through 'estate intensification' whereby existing council estates are

remodelled to improve their existing blocks and to insert new dwellings. Designs by Peter Barber Architects at for instance Kiln Place in Gospel Oak, London, offer manifest improvements (Fig. 15).¹¹⁴ There is also a possibility in certain cases to add on 'airspace' rooftop units to existing council blocks, such as Skyroom London is doing to provide much-needed keyworker dwellings.¹¹⁵ However, the most ambitious and notable example of estate intensification is by Mae Architects and Hawkins\Brown Architects on the Agar Grove Estate for Camden Council.¹¹⁶ Its blend of temporarily decanting and rehousing existing tenants, while being able to insert additional social/affordable dwellings as well as market-sale blocks, all to Passivhaus standards, sets the bar for retrofit – not least in the superb redesign of the estate's open leisure spaces (Fig. 16).

In terms of street-based dwellings, there are also innumerable disused Victorian and Edwardian terraces in

Fig. 14 (opposite):
Park Hill, Sheffield. Mikhail Riches Architects

[Courtesy of: Tim Crocker]

Fig. 15:
Kiln Place, London. Peter Barber Architects
(overleaf - left hand page)

[Courtesy of: Morley Von Sternberg]

Fig. 16:
Agar Grove, London. MAE Architects
(overleaf - right hand page)

[Courtesy of: Jim Stephenson]





northern ex-industrial towns which could be advantageously acquired and retrofitted. We believe however that a major economic stimulus is needed to promote retrofit over demolition, and so recommend that the current 20% VAT on building refurbishment should be reduced or, better still, eliminated for all schemes which meet the mandatory minimum of 50% social-rent and 20% affordable-rent/affordable-sale dwellings.

iv. Retrofitting and/or the conversion of non-domestic buildings

A significant further potential for retrofit comes through the reuse of derelict office buildings dating from the 1950s to 70s – i.e. from the era before office floor plates became ultra-deep and thus too difficult to convert. Transforming these older offices into housing units has typically happened in the case of private market-sale housing, such as at Marathon House on London's Marylebone Road, yet there is no reason why it cannot also be used by local authorities, housing associations

and other registered providers, albeit now having to meet the standards of Passivhaus EnerPHit design and construction. Much less successful to date have been efforts to convert shops and other commercial buildings into housing, given the problems of inadequate access and poor daylighting, although sometimes these buildings could potentially be reused in certain circumstances.

v. Rural homes

The DLUHC's Affordable Homes Programme 2021–2026 aims to provide 10% of its 180,000 homes target in English rural areas – i.e. 5,000 new affordable dwellings a year – but in practice Homes England is finding the actual take-up to be dramatically lower, at only around half that figure. The key difficulty is the high cost of acquiring rural land, with landowners usually hoping to sell it off at prices that include a substantial financial uplift as land for housing use. In remedy, what are required are special measures to limit the cost of land for social/

affordable housing schemes by giving stronger powers to local authorities within the land compensation process, thereby enabling them to obtain sites at sums much closer to agricultural use value. It would mean in turn lower buy-out payments to landowners. This state intervention into land sale policy is however essential because of two endemic problems. Firstly, rural housing projects in more remote areas are often so small that it is impossible to achieve any economies of scale in building them; and secondly, while rural planning authorities guide development to allocated sites in larger settlements and often allow 'exceptions' on unallocated sites in villages, the latter often involves tortuous financial negotiations with landowners. It is a stalemate which needs to be broken through government action if the latter genuinely wishes to stimulate rural social/affordable housebuilding.

Indeed, as a concluding point, what is needed now most of all is the political will to put all the elements we have described into place. The opinions of the British general public, with an emphasis on engaging those who are most in housing need, should be consulted for all aspects of the debate and in devising policies and solutions – even in co-designing what is required. With this in mind, we will now end this report by setting out 12 key recommendations for actions that we believe are necessary to tackle the issue of homelessness and to improve the UK's housing stock generally on everyone's behalf.



Fig (opposite).
Goldsmith Street, Norwich.
Mikhail Riches Architects
[Courtesy of: Tim Crocker]

Final Recommendations

a. GENERAL RECOMMENDATIONS

1/ A BROADER AND LONGER-TERM ECONOMIC VISION IS NEEDED FOR HOUSEBUILDING:

Social/affordable housing needs to be treated as a stable investment asset that helps to mitigate national/global economic fluctuations, improve public health and well-being, and reduce the inroads of climate change. UK government figures show that investment in social-rent housing provides the highest cost-benefit return by helping to grow the UK economy while at the same time saving a lot on homelessness expenditure, housing benefits, healthcare costs, etc. We thus recommend that an increased total of £5 billion per year is provided for an enhanced, integrated social/affordable housing programme.

2/ HEALTH BENEFITS, NHS SAVINGS ETC MUST BE FACTORED INTO HOUSING EVALUATIONS:

It is vital always to factor in public health benefits and other financial savings when costing social/affordable housing schemes, and, in response, the UK government must be prepared to offer targeted subsidies and/or tax breaks to help achieve healthcare savings. To aid in this change, there need to be research projects which start to compile long-term longitudinal studies about the impacts of homelessness and precarious housing on people affected, especially children.

3/ A DIFFERENTIAL HOUSING POLICY IS REQUIRED FOR THE UK'S DIVERSE REGIONS:

There needs to be a differential housing policy that allows providers in different regions, and in different parts of those regions, to select the targets and methods which suit them best out of a range of options designed to incentivise action rather than to impose fixed targets. Flexibility should be the key.

4/ RIGHT-TO-BUY SHOULD END IN ENGLAND FOR ALL FUTURE SOCIAL-RENT DWELLINGS:

As a policy for which demand is diminishing to a very low level, yet which is still discouraging local authorities from building new homes, Right-to-Buy should be ended in England for all future social-rent dwellings (albeit remaining available to pre-existing tenants). This policy change will then align England more closely with the rest of the UK. Opportunities to purchase dwellings will still be possible via shared ownership schemes, meaning that Right-to-Buy can now be terminated.

b. RECOMMENDATIONS TO RAISE HOUSING STANDARDS

5/ TENURE-BLIND SOCIAL MIXING IS VITAL IN NEW SOCIAL/AFFORDABLE HOUSING SCHEMES:

A good social spread will reduce stigmatisation or ghettoization and also enable a financially feasible and sustainable tenure mix. The mandatory target for all new social/affordable housing schemes should be set at 50% social-rent, 20% affordable-rent/affordable-sale (including shared ownership, some of which should be allocated for keyworkers), and 30% market-rent/market-sale – with no design difference in the dwellings.

6/ FIXED REQUIREMENTS MUST BE SET TO ENSURE HOUSING DESIGN QUALITY:

Internal space standards for social/affordable dwellings should be set mandatorily at the level of the GLA's London Plan for the whole of the UK, and every new scheme must also be required to include high-quality landscape design along with sufficient spaces for recreation and leisure.

7/ PASSIVHAUS STANDARDS MUST BE ADOPTED TO CUT OPERATIONAL CARBON:

Passivhaus-certified construction is essential to achieve fully testable and robust construction, to severely reduce operational carbon, and to end fuel poverty. Passivhaus EnerPHit methods should be used for retrofitting existing buildings. It is anticipated that the current extra 10% cost for Passivhaus will drop when it is more widely applied, and once MMC techniques can be implemented more effectively.

8/ INITIATIVES ARE NEEDED TO EXPAND 'GREEN SKILLS' TRAINING IN HOUSEBUILDING:

Given the demands of making Passivhaus the mandatory construction standard for new-build and retrofit social/affordable housing, financial incentives must be offered to technical colleges in the UK to switch their curriculums fully over to 'Green Skills' training – both for those who will build these new dwellings and those who will assess/certify/maintain them.

c. RECOMMENDATIONS TO HELP HOUSING DELIVERY

9/ LOCAL AUTHORITY PARTICIPATION IN HOUSEBUILDING HAS TO BE MAJORLY REVIVED:

Our current crisis is to a large extent due to the 'missing' dwellings that were once built by local authorities, and hence the latter need to be enabled and encouraged to step up their share once more to help housing associations/other registered providers. Due to the depletion of local authority funds and staffing, Treasury subsidy will also be needed for instance to recruit housing delivery experts into local authorities, even on a temporary basis – such as on the successful model devised by the Public Practice social enterprise.

10/ LOCAL AUTHORITIES NEED TO HAVE GREATER FINANCIAL FLEXIBILITY OVER HOUSING:

All financial restrictions must be eased on local authorities to enable them to build more social/affordable dwellings by pooling their receipts from Right-to-Buy sales, Section 106 payments, etc. They should also be given greater powers to designate and use 'Green Belt' brownfield sites for social/affordable housing schemes which meet the required sustainability standards.

11/ RETROFITTED SOCIAL/AFFORDABLE HOMES TO BE ENCOURAGED BY VAT EXEMPTION:

To help cut built carbon, retrofit needs to become a significant part of social/affordable housing provision – such as by refurbishing many of the UK's estimated 400,000 empty dwellings, or by converting disused office blocks into dwellings, adding rooftop units, etc. To incentivise retrofit, all grant-funded social/affordable housing retrofit should ideally be VAT-exempted, thereby cutting construction costs by nearly 20% at a stroke.

12/ SPECIAL EXTRA MEASURES ARE NEEDED FOR RURAL SOCIAL/AFFORDABLE HOMES:

In rural areas, new measures are required to make land available for social/affordable housing schemes at reasonable prices. This will have to be done by strengthening compulsory powers to allow local authorities to acquire land at closer to its agricultural use value, thereby limiting the level of compensation paid to landowners.



Fig.
McGrath Road, London. Peter
Barber Architects
[Courtesy of: Murray Fraser]

Endnotes

For a full bibliography see:

<https://www.arc-nt.nihr.ac.uk/research/projects/social-and-affordable-housing-initiative/>

1 - Introduction

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Context

This report launches the Social and Affordable Housing Initiative, a coalition led by UCL, John McAslan + Partners, Olivia Harris (CEO of Dolphin Living) and Adrian Campbell (Director of Changebuilding), to establish impactful strategies to address Britain's housing crisis. The launch event is chaired by Baroness Helena Kennedy at the Royal Society of Arts, on 4 October 2023.

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Design For All - A Place To Call Home

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