## **Rabbit Hutch Homes**

The growth of micro-homes

**By Colin Wiles** 

For the Intergenerational Foundation



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The Intergenerational Foundation (www.if.org.uk) is an independent, non-party-political charity that exists to protect the rights of younger and future generations in British policy-making. While increasing longevity is to be welcomed, our changing national demographic and expectations of entitlement are placing increasingly heavy burdens on younger and future generations. From housing, health and education, to employment, taxation, pensions, voting, spending and environmental degradation, younger generations are under increasing pressure to maintain the intergenerational compact while losing out disproportionately to older, wealthier cohorts. IF questions this status quo, calling instead for sustainable long-term policies that are fair to all – the old, the young, and those to come.

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#### **Foreword**

Housing is one of the most visible forms of intergenerational unfairness facing our society today. We don't have enough of it in some parts of Britain. We aren't building or updating and replacing enough of it. We use what we have increasingly inefficiently so that a greater and greater proportion of rooms are not much used within what we have. Older generations have too much of it and younger generations need more of it. While older generations are increasingly under-occupying their suburban homes, and a few are buying more and more holiday homes, younger generations are increasingly likely to rent over-occupied homes squeezed into city centres; or have to mortgage themselves to the hilt to live in often substandard property. The United Kingdom can now claim the dubious title of having the smallest rooms, and the second smallest homes, to be found across all of Europe.

We need to increase the supply of new housing by 300,000 homes each year through a mixture of using what we have more efficiently and building more; and we need to do this for at least the next ten years unless there is net-emigration. So where will these new homes come from? Thanks to high land values, unimaginative planning practices, and land-banking stifling the supply of new developments, micro-homes have been seen as part of the solution, with their number increasing five-fold between 2013 and 2018.

Increasing the supply of housing should bring with it a duty to ensure that the new homes built – whatever their size – are decent, affordable and safe. Can we really say that about the many new micro-homes being built? Where an extra window or good ventilation is seen as a luxury? Are we willing to accept that the footprint is so small it is impossible to entertain friends – or even a partner? This is not just a London phenomenon: the last two years have seen significant numbers of micro-homes built in the North West, the South East, and Yorkshire and Humber.

As this paper by the Intergenerational Foundation makes plain, we need to call time on quick-profit-seeking speculative developments of rabbit hutch homes. We need to tighten, not loosen, permitted development rights for homes converted from offices or business use and ensure that developers are made to abide by the Nationally Described Space Standard, in order to better protect younger and future generations, many of whom are driven by an aspiration to have a home of their own, like generations before, but are now being targeted by clever and slick marketing techniques. And we need to use what we already have so much more carefully and efficiently, rather than think that we can carry on as we are but provide a micro-home to divert attention from so much that is more and more under-used or empty for much of the year.

## **Danny Dorling**

Halford Mackinder Professor of Geography at the School of Geography and the Environment at the University of Oxford

## **Executive summary**

This report explores the intergenerational and other fairness implications of very small homes. The main findings of the report are:

- The number of micro-homes is on the increase and many are much smaller than the government's recommended minimum: some are as small as 8.3 square metres.
- The number of homes smaller than 37 square metres has increased fivefold: from 2,139 in 2013 to 9,605 in 2018.
- Micro-homes are predominantly marketed to young people and are some of the smallest in Europe, and they are often occupied by couples.
- Per square foot, micro-homes are much more expensive whether to buy or to rent.
- The number of micro homes has also increased due to a relaxation of planning laws allowing offices to be converted into flats with almost automatic planning consent
- The growth of tiny homes is symptomatic of wider failures in housing policy characterised by inadequate
  housing investment, rising under-occupation by older generations, the high cost of land, and land-banking
  by housebuilders.
- There are indications that micro-homes may be damaging the wellbeing of younger people.
- The new government should urgently review housing standards and the planning regime around microhomes.

#### 1. Introduction:

## Are micro-homes a solution to the housing crisis?

The Intergenerational Foundation has published many reports detailing the extent of the housing crisis in recent years, showing how it affects younger people in particular. The inequalities in equity and wealth between the generations, and our fundamental failure to build sufficient homes to meet the needs of a growing and ageing population, have been well documented.

In 2018, according to ONS statistics, almost 3.4 million individuals aged from 20 to 34 lived at home with parents, a 24 per cent increase over the past decade. Young people are struggling to enter the housing market, whether to rent or to buy. Raising the money to fund a deposit is one of the biggest obstacles to buying a home. As a result, the average age of first-time buyers has increased from 25 to 33 in the last twenty years.

In 2018 162,000 homes were built in England. Even the present government has now accepted that the country needs to build 300,000 homes a year. Over recent years numerous proposals have been put forward to "solve" the housing crisis. These stories appear in the press with tedious regularity – building on the green belt, building above railway lines, building above car parks, building on all brownfield land, restricting immigration, turning offices into homes, and so on. The truth is, of course, that no single solution will solve the crisis. Only concerted action across many fronts will do so.

One of the latest manifestations of this trend is the proposal that building very small homes, commonly referred to as "micro-homes", is somehow a solution to the crisis.

"Micro-homes could solve London's housing crisis:" BBC, 21 January 2019

"Will these £40,000 micro-homes solve the housing crisis? Britain's first mini village of single person properties inspired by layout of luxury yachts and first-class plane cabins is on its way." *Daily Mail*, 24 October 2018

"London needs micro-homes to solve the housing crisis." City AM 21 January 2019

This report considers whether micro-homes do indeed offer a solution to the housing crisis, particularly for the "pricedout" generation. It looks at the historical background of space standards in UK housing, the increase in provision of micro-homes and the policy implications for housing in the long term.

## 2. Definitions and terminology

The defining characteristic of micro-housing is size, but there is no consensus about how small a dwelling has to be to be a micro-home. Should larger dwellings, but which contain a larger number of people also be included? For example, a 60m² flat containing 4 people is arguably worse than a 30m² flat containing one person. In the former each occupant has half as much space than in the latter. However, this reflects occupancy rather than actual space. There will always be overcrowded dwellings so long as the housing crisis persists. For the purposes of this report, therefore, we define micro-homes as any property that has an internal floor area of less than 37m², the government's minimum standard for a 1-bed 1-person flat, regardless of how many people are in occupation.

The literature reveals a range of terms used to describe very small homes, including: micro, tiny, mini, minim, compact, small and nano, all prefixed to house, housing, home and in a few cases, flat or apartment. "Tiny homes" has a specific meaning, describing eco-conscious dwellings that reflect the desire of their owners to live a more resource-efficient and low-impact lifestyle – and usually custom-designed or self-built rather than mass-produced and will not be further discussed here.

For this report the term micro-home is therefore used to encompass all forms of dwellings of less than 37m² in the UK.

### 3. Space and quality standards in the UK

In order to understand the recent increase in the number of micro-homes it is important to understand how the policy debate about the size and quality of homes has developed over the past century.

But this debate goes back even further. Following the Great Fire of London in 1666, which destroyed much of the City of London, Parliament swiftly passed several London Building Acts that required new houses to be made of brick and stone, in order to limit the spread of fire. Thatched roofs were banned and windows were to be recessed by four inches in order to prevent fire spreading across stone or brick facades. Parapets were required in order to stop fire spreading into roof timbers (houses can often be dated by the presence or lack of these features). In the nineteenth century Building Acts specified the minimum height of rooms, the thickness of walls and the placing of chimneys. The 1875 Public Health Act required new homes to be self-contained, with sanitation and water provided. The Act required local authorities to implement "bye-laws" to make the width of streets a minimum of 36 feet and to provide at least 150 square feet of space behind houses. Other requirements covered the height of rooms, and the disposition of windows.

But it was the Addison Act of 1919, responding to the Tudor Waters report of 1918 and the desire to build "Homes for Heroes" after the horrors of the First World War, that set out the first comprehensive code for room sizes and the quality to be attained in new homes. For example, new homes should have three bedrooms. A "non-parlour" house should be 79.4 square metres (m²) and a parlour house 98m². A parlour was a third downstairs room defined as "a quiet room for reading, writing, a sick relative or formal entertaining of non-family visitors". It was provided in addition to the multipurpose living/dining/kitchen and the scullery, where washing took place. In a 3-bed non-parlour house the bedrooms should be 14m², 9.3m² and 6 m².

The 1935 Housing Act attempted to deal with overcrowding by setting a "room standard" to define overcrowding:

"...wherever there are so many people in a house that any two or more of those persons, being ten or more years old, and of opposite sexes, not being persons living together as husband and wife, have to sleep in the same room."

Children under ten were not counted and "a room" meant any room normally used as either a bedroom or a living room, or even a kitchen if it could take a bed. The Act also set out a permitted number of people for each property and the number of people that could occupy each room, dependent on its size.

During the interwar years space standards for new homes were slowly relaxed. Parlours were cut and baths were often placed in kitchens rather than a separate bathroom.

Again, following the Second World War, an attempt was made to improve housing standards. The 1949 Housing Manual required a wider variety of dwelling types, with close attention paid to internal layout and the grouping of houses. A 1-bed 1-person flat should be a minimum of 27.9m² and a 3-bed 5-person two-storey house should range from 83.6 m² to 88.3m². Three-storey houses should have added space requirements.

During the 1950s these space standards were reduced, particularly storage and circulation space. In 1958 the Macmillan government, as a way of cutting costs, introduced the smaller "People's House" and a new subsidy system that favoured flats over houses.

In 1961 the Ministry of Housing and Local Government published "Homes for Today and Tomorrow", commonly known as the Parker Morris report. The standards set out in the report were underpinned by a functional analysis of space needs in the home and described, often in paternalistic terms, the space required for a comfortable family life.

"Coming back from shopping loaded up, Mother needs space to put the pram and the shopping and elbow room to take the children's outdoor clothes, and somewhere convenient to put them...When Father makes or repairs something, he needs to be out of Mother's way in the kitchen and where he will not disturb sleeping children" and so on.

Based on this analysis, the Ministry of Housing published design standards in 1968 setting out the following internal floor requirements (square metres).

**Table 1: Ministry of Housing space standards (1968)** 

Parker Morris	1 person	2 people	3 people	4 people	5 people	6 people
Dwelling Type						
3-storey house					93.8	97.5
2-storey house				74.3	84.5	
(centre terrace)						92.0
2-storey house				71.5	81.8	
(semi/end terrace)						
Flat	29.7	44.6	56.7	69.7	79.0	86.4
Bungalow	29.7	44.6	56.7	66.8	75.2	83.6
Storage						
Houses	2.8	3.5	4.1	4.6	4.6	4.6
Flats and maison-	0.7 (1.8)	0.9 (1.8)	1.1 (1.8)	1.4 (1.8)	1.4 (1.8)	1.4 (1.8)
ettes						

(Figures in brackets are requirements for external storage).

Note that the smallest home allowed under Parker Morris was 29.7m<sup>2</sup> for a 1 person flat or house. This was almost 2m<sup>2</sup> larger than a 1-person flat in the 1949 manual, but also required additional internal storage space of 0.7m<sup>2</sup> and 1.8m<sup>2</sup> externally.

In 1983, as building by housing associations overtook local authority building, the Housing Corporation, responsible for funding social housing, relaxed these space standards and prioritised cost and numbers over quality.

The Planning and Land Act of 1980, brought in by Margaret Thatcher's government, abolished the Parker Morris standards altogether. Only a few years after the abolition of the standards, research showed that more than half of new housing association stock was below Parker Morris standards, and that the smallest dwellings were in the private sector.<sup>1</sup>

Between 1980 and 2008 space and quality standards were revised upwards and downwards in a haphazard way by various bodies, and different standards were applied across the country.

The housing crash of 2007-8 was a turning point. Thousands of small flats built during the boom years became hard to sell. Developers tried to off-load them on housing associations, but they were rebuffed because they were simply too small for the people that were on council waiting lists.

London's Mayor Ken Livingstone (2000-2008) commissioned a review of housing standards. Early evidence presented to this review found that, in London, "...space standards were below the European average; indeed UK standards appear to be near the bottom of the range" and found that the differences between space standards in public and private provision were greater than anywhere else in Europe.

When Boris Johnson became London's Mayor in 2008, work on standards continued and the London Housing Design Guide was published in 2010 by the Greater London Assembly. It was initially for homes built on GLA land, but the Mayor expressed the wish that it should be extended to all new housing, public and private.

The guide required 50m² for a 1-bed 2-person flat and 86 m² and 96m² for a 3-bedroom 5-person flat or house, respectively.

In 2015, concerned by the spread of local housing standards and the confusion about exactly what was required (described as "plandemonium" at the time), and in response to house builders' complaints about the proliferation of "red tape" across the country, the government consulted on the issue and then introduced a unified Nationally Described Space Standard (NDSS) to cover the whole country and all tenures.

However, the NDSS is optional and is subject to testing through the local plan process. A Local Authority must carry out a viability assessment to justify the policy and it cannot be implemented where the viability of development is compromised.

<sup>&</sup>lt;sup>1</sup> Karn V. and Sheridan L. (1994) *New Homes in the 1990s: A study of design, space and amenity in the housing association and private sector production.* York: Joseph Rowntree Foundation

At the end of 2019 only around half of all local authorities in England had an up-to-date, approved local plan. This means that the NDSS has a limited reach in terms of enforcing minimum space standards in new homes across the country.

Table 2: NDSS standards<sup>2</sup>
Minimum gross internal floor areas and storage (m<sup>2</sup>)

Number of bedrooms (b)	Number of bed spaces	1-storey dwellings	2-storey dwellings	3-storey dwellings	Built-in storage
	(persons)				
1	1p	39 (37)*			1.0
	2p	50	58		1.5
2	3р	61	70		2.0
	4p	70	79		
	4p	74	84	90	
3	5p	86	93	99	2.5
	6р	95	102	108	
	5p	90	97	103	
4	6р	99	106	112	
	7p	108	115	121	3.0
	8p	117	124	130	
	6р	103	110	116	
5	7p	112	119	125	3.5
	8p	121	128	134	
6	7p	116	123	129	4.0
	8p	125	132	138	

<sup>\*39</sup>m² with bath/37m² with shower

The smallest home permitted under the NDSS is 37m<sup>2</sup>, for a 1-person 1-bedroom home with a shower, rather than a bath. This is larger than the standard under both the 1949 Manual and Parker Morris (27.9m<sup>2</sup> and 29.7m<sup>2</sup> respectively).

However, it should be noted that existing dwellings are not covered by the NDSS standard and neither are new homes created in existing buildings under Permitted Development Rights, where properties are converted from office or business uses to residential – see Chapter 6 below.

<sup>&</sup>lt;sup>2</sup> Department for Communities and Local Government (2015) *Technical housing standards – nationally described space standard*. London

#### 3.1 Space standards - summing up

So far as it is possible to make comparisons, the table below shows the specified size standards (in square metres) for three typical dwelling types over the past century.

Table 3: Size standards for three typical dwellings over time

	Addison Act	Housing Manual	Parker Morris	NDSS
	1919	1949	1968	2015
1-bed 1-person flat	-	27.9	29.7	
			+2.5 storage	37
			(internal & external)	
1-bed 2-person flat	-	32.5 – 46.5	44.6	50
			(+2.7 storage)	
2-bed 4-person house	-	69.7 – 74.3	71.5 – 74.3	79
2-storey				
3-bed 5-person house	79.4 or 98*	83.6 – 88.3	81.8 – 84.5	93
2-storey				

<sup>\*</sup>with/without a parlour

To some extent, progress over the last century has been patchy. Some standards have advanced, others have regressed. The size standard for the smallest homes has increased, but the 93m² required for a 3-bedroom/5-person house under NDSS is smaller than the 98m² for a 1919 parlour house.

The overall conclusion of this brief review of space standards is that governments and policy-makers have, over the past century, rarely been able to reach any clear consensus about how large our homes should be. National events, and macro-economic and political changes have all affected standards. In the last century, at the end of each World War a sense of optimism coupled with a belief that the population deserved a better life ("Homes fit for Heroes") led to standards improving, but over time – and particularly during times of housing crisis – these standards ebbed downwards.

As we shall see in the following chapters, today is no different. At a time of severe housing crisis, new homes are now being created that are significantly smaller than the NDSS standards of 2015 and significantly smaller than the vast majority of homes that were built over the past century.

## 4. Are UK homes the smallest in Europe and becoming smaller?

A 2014 Cambridge University study by Malcolm Morgan and Heather Cruickshank quoted in "One Hundred Years of Space Standards" by Julia Park³ found that the average newly-built UK home was 76m², compared to 137m² in Denmark. Looking at the entire housing stock, the UK averaged 85m² and only Portugal has smaller homes at 83m².

The largest homes were in Denmark at 108.9m² and UK rooms were the smallest in Europe at 16.3m² – whereas rooms in Danish homes were 29.4m².

However, these figures have been queried by some researchers, who claim that they relate to old data, from 1996. For example, James Gleeson, who tweets and blogs as @geographyjim, used data from the English Housing Survey of 2014/15 and found that the average size of homes built since 2005 is 87m², compared to 94m² across the stock as a whole. Neal Hudson of Savills⁴ found that the average dwelling size in England was 92.3m² compared to 106.7m² in the Netherlands and 115.6 m² in Denmark. He concluded that there had been a decline in size over time in the size of English houses. The average size of homes built prior to 1919 was 102m² falling to 83.9m² for homes built between 1981 and 1990. But after 1990, the average size of new homes increased to 91m². So the data appear to show that the average size of homes has fallen over time with a slight increase in recent years.

However, there is unanimity that houses in the UK are some of the smallest in Europe, and, as we show in Chapter 5 below, the number of very small homes being built and converted from existing buildings has been increasing.

The most recent English Housing Survey<sup>5</sup> also shows a large variation in size between tenures, as shown below. One quarter of social rented homes are less than 50m<sup>2</sup> in size (because this sector is dominated by flats and also includes smaller dwellings for people with special needs, sometimes with shared amenities.) Only 3 per cent of owner-occupied homes are as small.

<sup>&</sup>lt;sup>3</sup> Park J. One Hundred Years of Housing Space Standards: What now? [Accessed 7/1/2020]: http://housingspacestandards.co.uk/

<sup>&</sup>lt;sup>4</sup> Nudson N. (2015) Housing market note [accessed 7/1/2020]: http://pdf.savills.com/documents/20150506SizeMatters.pdf Savills

<sup>&</sup>lt;sup>5</sup> Department for Communities and Local Government (2015) *English Housing Survey* [accessed 7/1/2020]: https://www.gov.uk/government/collections/english-housing-survey

Table 4: Usable floor area, by tenure, 2015

M <sup>2</sup>	owner-occupied %	private rented %	local authority %	housing association %
<50	3.0	16.1	23.4	25.9
50 to 69	13.8	31.7	32.8	30.6
70 to 89	29.8	29.6	33.9	31.4
90 to 109	19.7	12.5	7.3	8.6
110 or more	33.8	10.2	2.6	3.5

Historical analysis of the English Housing Survey also shows that the proportion of small homes that are constructed varies over time, as shown at Appendix 1. This reveals a significant increase in small homes constructed in the 1980s when Parker Morris space standards were abolished. The period also saw a housing boom when many small homes were built by speculative developers prior to the crash of 1988.

The UK remains an anomaly within the European Union as the only member state without statutory universal minimum space requirements for all new housing.

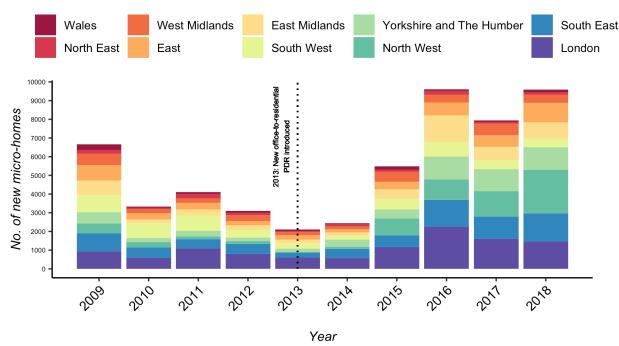
## 5. The growth of micro-homes

In recent years the number of new micro-homes has increased. Analysis of Energy Performance Certificate (EPC) data, which provide details of the size of all new homes in England and Wales, shows that the number of homes that were smaller than  $37m^2$  increased from 2,139 in 2013 to 9,605 in 2018, a close-to-fivefold increase. This will include newly built homes as well as new homes that are created from existing properties (whether commercial or domestic) that did not exist previously. The graph below shows that the numbers, having fallen between 2009 and 2013, picked up significantly after Permitted Development Rights (PDR) were introduced in 2013. The impact of PDR on micro-home development is discussed in greater depth in Chapter 6. below. It is notable that micro-home development is not just a London phenomenon. The last two years have seen significant numbers being provided in regions across England and Wales, with the North West, the South East outside London and Yorkshire and Humber leading the way.

Chart 1: The number of houses under 37m<sup>2</sup> developed each year, by region



#### How many homes of under 37sqm are being developed per year by region?



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Source: DCLG Energy Performance Certificate Open Data

Several developers have entered the market in recent years to build micro-homes, often aimed at Millennials using slick marketing techniques. Some examples:

- Inspired Homes. At the Old Bakery, Deptford, a scheme where 1-bedroom flats of 30m² are priced at £332,500, and at Foundry Luton where 30m² flats are priced at £165,000.
- In July 2019 Vale of Aylesbury Housing Trust obtained planning permission for a development of micro-homes
  at Gatehouse Road in Aylesbury. 16 homes of 26.2m² will be built using shipping containers. The 1-bedroom
  studios will be rented out as social housing or student accommodation.
- iKozie is building 16 micro-homes in Worcester. They have a footprint of 17.5m² and five will be rented to people on the city's housing list. They were inspired by yacht interiors and first-class airline suites.
- Developer U+I plan to build hundreds of homes with a floor space of just 24m<sup>2</sup>.
- The company Micro-House builds prefabricated wooden homes ranging from 9m² costing £14,300 to 42.5m² at £47,000. This does not include land and installation costs.

Developers have cleverly marketed micro-homes as a lifestyle choice for younger people, citing factors such as the lower eco-footprint of micro-homes, claiming that people need less space now due to technological changes (storage of data in the cloud for example), and that we all need to declutter our lives.

"Hallway-free, open-plan interiors make the most of every inch of space, so you live smarter."

#### **Inspired Homes Foundry Luton**

"Apt is a new concept of living. Maximising space by minimising the things you don't need."

Apt Living

"Connect in spaces designed to bring incredible people together. Our community might just contain your next friend, lover or mentor...We believe in caring for our environment to ensure our cities can sustain us into the future."

#### The Collective

"The Joy of Well Living. A nourishing home that grounds you. Time shared with awesome people. The gentle flow of new ideas and fresh-thinking that elevates everything. A life tuned into the magic of the city; that's a life well-lived. Balancing the growing need for both privacy and community; for meaningful exchanges and generous individual space...a space that nurtures, a community that energises and a transformational home that connects you to you. Welcome home!"

Mason & Fifth

#### 5.1 Co-housing work/live schemes

Another recent development has been the growth of co-housing live/work schemes. These are somewhat similar to the traditional YMCA model, albeit provided on a for-profit basis, with small studio or bedsitting rooms in buildings that contain communal areas where residents can meet their neighbours, with opportunities for activities and working spaces.

The Collective is one of the largest co-housing providers. It has plans to build over 7,000 homes in New York, London and Germany. One scheme is the Oak Collective in West London (Ealing), which contains over 500 ensuite and studio rooms (the former share a kitchenette with a neighbour, the latter have their own kitchenette). The smallest are  $11m^2$  – less space than a typical budget hotel room. The weekly rent for a 1-person studio with ensuite and a shared kitchenette ranges from £250 to £290 inclusive of all bills, dependent on whether you stay for 12 months or 4 months (a shorter stay means a higher rent). That means a resident could be paying over £15,000 a year for their accommodation.

In the borough of Ealing the local housing allowance rate for shared accommodation (defined as any property where a claimant has the sole use of a bedroom, but shares at least a living room, kitchen or bathroom) is £113.86 per week or £5,920 per annum, and only people under the age of 35 are entitled to the shared accommodation rate in any case. This is the maximum that would be eligible for housing benefit. This means that residents of the Oak Collective occupying a studio would not be able to cover the full cost of their rent from housing benefit by a considerable margin, effectively excluding anyone dependent upon benefits.

The Collective believes that its tiny rooms are balanced by the generous communal areas. We spoke to a former employee who had a fairly positive view of the scheme. The communal areas included reception rooms, cafés, workspaces and spaces for activities such as pilates and yoga. Some residents were divorced women in the 40 to 60 age range, and there had been some good examples of intergenerational friendships. Managers could monitor the electricity consumption within the accommodation and thereby work out if any residents were spending excessive amounts of time in their rooms and failing to join in with communal activities (shades of Big Brother?). However, it was felt that the impacts upon well-being and mental health of the co-living approach were generally positive.

Reza Merchant, the founder and CEO of The Collective states that, had they designed a conventional apartment block, there would be "a fraction of the number of people" in the building. The co-living model means that well over 100 extra rooms could be provided, bringing in a significant stream of additional rental income (as much as £1.35 million a year, assuming a 10 per cent vacancy rate). The model therefore makes good business sense for the developer and appears to offer some benefits to residents at the cost of cramped rooms. Whether the communal areas and activities will be provided in the longer term remains to be seen, and this is clearly a sector where both local and national government should pay attention to future management arrangements, including the rents being charged.

It was reported that only around 15 per cent of residents used the communal workspaces for their employment.

## 6. Planning changes have also boosted the number of microhomes

In 2013, the government introduced a temporary extension of "permitted development rights" in England (PDR). This has allowed thousands of micro-homes to be converted from office and business premises. The philosophy behind this change was the notion that "red tape" was holding back development and that relaxing the planning rules would allow developers to provide many more homes.

For planning purposes, properties are split into four main classes:

- Class A shops and other retail premises such as restaurants and bank branches
- Class B offices, workshops, factories and warehouses
- Class C residential uses
- Class D non-residential institutions and assembly and leisure uses

Each class is split into a number of subclasses. PDR allowed developers to switch from one subclass to another without permission, and in certain cases, from one class to another. One of the most controversial of these was the conversion of commercial and office buildings to residential uses (B to C) without the need to apply for planning permission. The Town and Country Planning (General Permitted Development) (England) Order 2015 made this permanent and allowed developers to convert offices to Residential – so-called "Office to Resi". Some areas – such as National Parks, Areas of Outstanding Natural Beauty and conservation areas – are excluded, but in 2017/18, 29,720 new dwellings were created from Office to Resi out of a total of 222,190 net additions - 13.4 per cent of the total. Not all of these are micro-homes, but some are smaller than 9m². They are often in unsuitable locations next to polluted major roads and industrial units, distant from amenities such as doctors, shops and schools. The flats are exempt from the NDSS space standards and developers also bypass any requirement to provide affordable homes.

Some examples of homes created under Office to Resi:

Specialist Office to Resi developer Apt Living is converting a large block at Great West Road, Kew Bridge, into 274 flats. A 1-bed flat of 33.5m² is priced at £309,000 and a studio of 33.4m² £295,000. There are some community facilities.

At Westgate House in Ealing almost 300 flats will be created from the conversion of a large office block by Galliard Homes. Typical studio flats of 33m<sup>2</sup> are priced at £325,0000. The block is next to the infamous Hanger Lane gyratory system.

At Newbury House in Redbridge 60 studios have been created in a former office block on the edge of the A12, one of the most polluted roads in London. The single person studios range from 13m<sup>2</sup> to 15.6m<sup>2</sup> and the doubles from 14.7m<sup>2</sup> to 23.5m<sup>2</sup>. 48 are single-aspect and 24 of them face north and so will have no sun. The flats are rented and in 2018 44 of the 60 occupants were in receipt of housing benefit totalling £61,289, an average of £157.91 per week per property.<sup>6</sup> This indicates that the block is occupied by vulnerable tenants.

In Bermondsey, Developer Mason & Fifth has converted a commercial block into 28 rooms, with a communal "wellness pavilion" for yoga, pilates and meditation. Residents will have the option to use an in-house chef. Each room is around 16m<sup>2</sup>, with a kitchenette and an ensuite. Inclusive rents start at £1,650 per month or £19,800 per year.

At Terminus House in Harlow a nine-storey office block above five floors of car parking has been converted to 200 flats. There are 26 flats on a typical floor with a single long corridor. They range in size from 18m<sup>2</sup> to 20m<sup>2</sup>. The flats are used to house homeless, often vulnerable people. A report to Harlow Council identified problems of anti-social behaviour and a constant police presence at the block.7

One of the more extreme recent examples of Permitted Development Rights is in Watford, where a single-storey industrial building at 1, Wellstones was converted into 15 flats of which seven have no windows. The flats will range in size from 16.5m<sup>2</sup> to 21m<sup>2</sup>. There is no parking at the scheme and residents will not be allowed to apply for a residents' parking permit.

Watford Council sought to block the conversion, noting that the flats "would not provide any meaningful outlook, daylight or even appropriate ventilation", and that the upper floors "would have no means of escape in case of fire" and "the oppressive environment would have a serious impact on the health of future occupiers."

But this was rejected by a government-appointed planning inspector who decided that none of the council's objections were relevant to the PDR. He said that "living without a window would not be a positive living environment", but the creation of "cramped living environments with poor outlook and the lack of windows" was irrelevant because the PDR made no mention of these matters.

Many PDR conversions are in blocks on noisy and polluted streets, few have any open or amenity space and many involve flats accessed off long corridors with little or no natural light. This means that many of the homes will be single aspect. Facing north means no sun and facing south means no escape from the sun (when it shines).

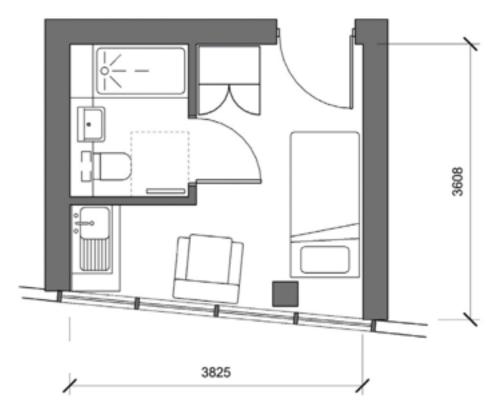
7 Ibid.

<sup>&</sup>lt;sup>6</sup> Levitt Bernstein (2019) Why the government should end permitted development rights for office to residential conversion [accessed 7/1/2020]: https://www.levittbernstein.co.uk/site/assets/files/3256/end-pdr-for-office-to-resi.pdf

As an illustration of how cramped some of these homes are, the plans below show a typical home at Newbury House compared to the NDSS minimum of 37m<sup>2</sup>. The NDSS property is small, but it is liveable for a single person.

There is space to eat at a table, to cook, to store belongings and to have a friend to stay; in other words, to live a relatively normal life. The Newbury House studio, by contrast, is smaller than most hotel rooms with nowhere to cook or prepare food, to have friends to stay, to have a relationship, or to store clothes and belongings properly.

Figure 1: Newbury House: 13 square metres



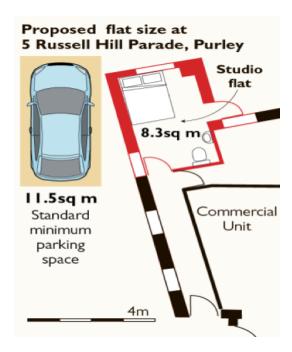
NDSS: 37 square metres

The smallest dwelling that we have been able to identify under PDR to date is only 8.3m², in Russell Hill Parade in Purley (See Figure 3). This is smaller than the 11.5m² required for a standard parking space. The plans show a double bed, a sink and a WC, with no cooking, showering or storage facilities. It would be stretching the definition used in this report to describe this as a "home". It is little better than a prison cell and sleeping in the same room as a WC. should be regarded as completely unacceptable in any civilised society.

Figure 2: NDSS: 37 square metres



Figure 3: Smallest dwelling identified under Permitted Development Rights (PDR)



The government's National Planning Policy Framework (NPPF)<sup>8</sup> requires that "Planning policies and decisions should ensure that developments...create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users...and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."

Paragraph 50 of the NPPF deals with "Delivering a wide choice of high-quality homes", and states:

"To deliver a wide choice of high-quality homes, widen opportunities for home ownership and create sustainable, inclusive and mixed communities, local planning authorities should:

- plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes);
- identify the size, type, tenure and range of housing (our emphasis) that is required in particular locations, reflecting local demand..."

The provision of micro-homes via Permitted Development Rights is clearly speculative, uncontrolled and unplanned and therefore is in clear contradiction of the planned approach to the "size, type, tenure and range of housing" set out in the NPPF. It also contradicts the requirements in the NPPF that homes should be safe and promote health and well-being.

In addition, in July 2019 the government published Creating Space for Beauty by its own Building Better, Building Beautiful Commission. The Commission was established to "tackle the challenge of poor-quality design and build of homes and places across the country and help ensure as we build for the future we do so with popular consent."

The use of Permitted Development Rights appears to be in direct conflict with these government policies. In many cases, Office to Resi is creating tomorrow's slums today: ugly, unsafe, unplanned, low-amenity homes that are bad places to live and injurious to mental and physical health. Permitted Development Rights should be scrapped and all conversions from Office and Business premises to residential should be subject to the normal development control process. This will allow local elected representatives to scrutinise plans and do what is best for their communities, in accordance with national policies and standards.

<sup>&</sup>lt;sup>8</sup> MHCLG (2019) Revised National Planning Policy Framework [accessed 7/1/2020]: https://www.gov.uk/government/collections/revised-national-planning-policy-framework

#### 7. Who lives in micro-homes?

Obtaining information on the occupants of micro-homes is difficult. The English Housing Survey<sup>®</sup> in 2015/16 carried out a sample survey of 11,924 households that included analysis of homes of less than 50m<sup>2</sup>. These amounted to 2.31 million dwellings or 9.7 per cent of England's housing stock. The mean size of these homes was 41.37m<sup>2</sup>, so only 4.37m<sup>2</sup> larger than our definition of micro-homes. The smallest home in the sample was 9.62m<sup>2</sup>.

Out of the total English housing stock of 23.7 million homes 21,000 had an area of less than 20m² and 199,000 had a floor area below 30m².

Out of the 2.31 million homes below 50m<sup>2</sup> 22 per cent were located in London. Almost 50 per cent were found in just three regions: London, the South East and the North West. In terms of age, the people living in these small homes were at each end of the age profile. One in four (25.2 per cent) were aged between 16 and 34, and 26.95 per cent were aged over 65. Overall, 44 per cent were aged over 55. 80 per cent of these smaller homes were rented, 35 per cent in the private rented sector and 45 per cent in the social rented sector.

Around 40 per cent of people living in these homes had lived there for less than two years. This suggests a high degree of "churn" and that people living in smaller homes see them as a stepping stone to something better, and were not inclined to put down roots. This confirms one of the key points made in this report (see Chapter 8) that micro-homes do not engender community stability.

The average rent being paid across all sectors by Millennials living in smaller homes was £177.66 per week or £9,328 a year. About 44.5 per cent were spending less than 30 per cent of their total weekly income on rent while 21.2 per cent were spending over 50 per cent of their weekly income on rent. In addition, over a quarter of the small homes occupied by Millennials were non-decent.

The survey also found that smaller properties cost more per square metre. Among all Millennials who rent any size of property, only 7.3 per cent paid above £300 per square metre per year, but this rises to 17.5 per cent among those occupying the smaller homes. This confirms the findings in Chapter 8 that micro-homes cost more per square metre than larger homes and therefore represent poor value for money, whether rented or purchased.

In conclusion, although this survey does not strictly cover our report definition of micro-homes, the findings do indicate that about one quarter of those people living in smaller homes are aged from 16–34, that a higher proportion of smaller homes are non-decent, and that they represent poor value for money compared to homes across the range.

<sup>&</sup>lt;sup>9</sup> MHCL (2017) *English Housing Survey* [accessed 7/1/2020]: https://www.gov.uk/government/statistics/english-housing-survey-2015-to-2016-headline-report

## 8. Micro-homes: are they sustainable?

The National Planning Policy Framework describes sustainable development at a high level as "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

It describes three overarching objectives in planning for new homes: economic, social and environmental.

The social objective aims to: "support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being."

The environmental objective aims to: "contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

In terms of the social objective, do micro-homes meet the needs of present and future generations? Clearly, the discussion in previous chapters has identified that many micro-homes do not meet the needs of their occupants in terms of living a "normal" life. In terms of affordability, which is a key element of social sustainability, it would be hoped that micro-homes offered and developed for market sale or rent would be cheaper than larger properties. A *Which?* review of micro-homes found that London properties smaller than  $37m^2$  cost just £279,000, according to Land Registry data, less than half the average price of a London home sold in the same period (£580,000).<sup>10</sup> However, price growth for these properties was 6.9 per cent, compared to 8.7 per cent for larger homes, and the price per square metre was higher than for larger homes.

In addition, for rental properties, occupants are also paying more per square metre. The English Housing Survey<sup>11</sup> found that among all Millennial households who rent, only 7.3 per cent paid above £300 per square metre per year, but this rose to 7.5 per cent for those living in micro homes.

This means that smaller homes equate to higher profits for developers and creates inflationary pressure in the rest of the market. The unintended consequence of micro-housing development is that it perpetuates rather than tackles housing affordability problems.

In terms of the environmental objective in the NPPF, on the face of it, micro-homes are compact forms of housing which would be assumed to have a lower eco-footprint than larger homes. But the sector is very varied, ranging from low-carbon and eco-conscious stand-alone dwellings made with innovative materials at one end, to shoe-box bedsit or studio flats created from the conversion of existing offices and commercial buildings at the other. The former are likely to

<sup>&</sup>lt;sup>10</sup> Calver T. (2017) "The 30 sqm squeeze: would you buy a 'micro-home'?" Which? [accessed 7/1/2020]: https://www.which.co.uk/news/2017/08/the-30-sqm-squeeze-would-you-buy-a-micro-home/

<sup>&</sup>lt;sup>11</sup> Op.cit.

have a low carbon footprint, but the latter are likely to have poorer standards of insulation and energy efficiency.

There are also issues to be considered about the location of homes, and whether they generate additional journeys by car or other forms of transport. We have already discussed the fact that many of the micro-homes created through Office to Resi are located adjacent to major roads or are in unsuitable locations.

In discussing the sustainability of micro-homes, there are also wider issues at stake. We have little information about the people living in micro-homes and their satisfaction with their properties. However, access to adequate space is seen a basic prerequisite for a decent quality of life. In its 2011 study *The Case for Space*<sup>12</sup> the Royal Institute of British Architects (RIBA) described how the space available in a home will impact upon food preparation, waste recycling and disposal, storage, the "feel" of the space, how furniture can be used and arranged, socialising with guests and friends, privacy, space for studying and leisure, and whether the space is adaptable to meet changing needs. RIBA described how space, or lack of it, can affect well-being, the educational outcomes of children, and public health costs, as well as the moulding of personal relationships and social interactions.

The RIBA report includes a survey carried out by The Commission for Architecture and the Built Environment (CABE)<sup>13</sup> of residents in new homes. This revealed that just under half of respondents (48 per cent) said that they had no space to entertain visitors and 35 per cent that they had inadequate food preparation space. Given that the average newbuild home in the UK is 76m² (see Chapter 3), this finding will be even more pronounced for those living in micro-homes.

Overcrowding and inadequate space are among the 29 "Housing Health and Safety Rating System" hazards identified by the Building Research Establishment (BRE) as contributing to the costs to the NHS. Using data from the English Housing Survey and a detailed cost analysis model, the BRE estimated that the cost of overcrowding on the NHS was £21.8 million per year.

The report stated that: "The total cost [to society of poor housing in England] is some £600 million per year in terms of the savings in the first year of treatment costs to the NHS if the hazards were removed, or at least reduced to an acceptable level. The full costs to society are estimated to be some £1.5 billion per year."<sup>14</sup>

Residents of new homes in the CABE research also complained about space in terms of flexibility – being able to change the layout of the room or use a space for a different purpose if needs change. It is normal for people to use their homes in a flexible way – adapting spaces from one activity (e.g. working) to another (e.g. preparing food, or socialising), but in micro-homes this will be difficult if not impossible.

Other attributes of a home, however good they might be, will not compensate for a lack of space. Having adequate space is also the most efficient way of increasing choice and flexibility, allowing people to stay in their home for

<sup>&</sup>lt;sup>12</sup> RIBA (2011) *The Case for Space: The size of England's new homes* [accessed 7/1/2020]: https://www.architecture.com/-/media/gathercontent/space-standards-for-homes/additional-documents/ribacaseforspace2011pdf.pdf

<sup>&</sup>lt;sup>13</sup> CABE and English Partnerships, led by the Housing Associations Charitable Trust (2009) *Space in New Homes: What residents think* [accessed 7/1/2020]: https://webarchive.nationalarchives.gov.uk/20110118105129/http://www.cabe.org.uk/files/space-in-new-homes.pdf and *Resident Satisfaction with space in the homes* [accessed 7/1/2020]: https://www.designcouncil.org.uk/sites/default/files/asset/document/space-in-new-homes-residents.pdf

<sup>&</sup>lt;sup>14</sup> Op.cit.

longer and to develop stable relationships with their neighbours and their wider communities. A lack of space adds to dissatisfaction and will tend to lead to a high turnover of residents, as described in Chapter 9.

Storage is also a key issue. Several sources point to dwindling or absent storage space in new housing; for example, the CABE reports document that 57 per cent of respondents said that they have less than sufficient storage in the home.

The result of a lack of storage space is a tendency for under-occupation, with households routinely compensating for the lack of storage with a spare bedroom. So, building smaller homes has a counter-intuitive impact on the wider housing market, as it causes people effectively to consume more housing than they need, as people are forced to buy an extra bedroom when all they really need is extra storage space. This adds to structural problems within the UK housing stock and worsens affordability problems across the board. In micro-homes, the design and inclusion of storage is even more important if these homes are to work as permanent places to live and not just temporary residences.

Aside from issues of space and storage, the literature also reveals some common complaints about noise and privacy in high-density development. The CABE reports found that acoustic privacy, hearing and being heard through party walls and floors, overlooking and visual privacy were all particular issues in high-density developments.

Finally, the available research reveals a strong preference among residents to have access to a private outside space. CABE found that more than 75 per cent of people preferred a private garden to a communal one – a desire common to all life stages and dwelling types.

In terms of social interaction and community stability, more dense forms of housing seem to be better for social interaction, simply because there are more neighbours to meet and a higher chance of bumping into people. However, this effect falls where there are over 120 dwellings per hectare (dph), perhaps because of the greater anonymity of a crowd. Co-housing or co-located forms of housing are specifically designed to facilitate sharing between residents, and social interaction is higher in communities where residents can make use of local facilities, and a sense of belonging is likely to be higher in these settings because of the shared facilities. But for smaller homes in rural or low-density urban settings the opportunity for social interaction will be lower, and the risk of isolation higher. Length of residency is also a factor in social interaction and community stability and, since the residents of micro-homes tend to stay for shorter periods of time, it means that they are less likely to develop social networks or contribute to stable communities.

Drawing together the evidence that is available suggests that the social and environmental sustainability credentials of micro-homes are rather mixed. On the positive side, some micro-homes will have a lower eco-footprint, and, for co-housing type projects at high densities the levels of immediate social interaction can be relatively high. On the negative side, the limited amount of internal space affects the ability of residents to live well, to socialise within their home, and to store their belongings.

<sup>&</sup>lt;sup>15</sup> Bramley G. et al. (2010) Chapter 5 "Social Accepability" from *Dimensions of the Sustainable City.* Springer London: https://www.springer.com/gp/book/9781402086465

Lack of space affects flexibility, and living in small flats is associated with higher rates of turnover, concern about privacy and overlooking, and reduced feelings of belonging and place attachment. This has negative impacts upon health and well-being and will represent a cost to the National Health Service. Although micro-homes have a lower unit price, they are more expensive per square metre, both to rent and buy, with the result that they contribute to house price inflation and reduce affordability.

However, we reiterate that we need to know more about who is living in micro-homes and how the size, location and amenities of their homes impacts upon their health and general well-being. More research is required in this area.

# 9. Micro-homes are a symptom of wider failures in planning and housing policy

As mentioned above, many commentators claim that micro-homes could "solve" the housing crisis. A report by the Adam Smith Institute in January 2019<sup>16</sup> argued that micro-homes could expand choice for young professionals, improve affordability and help tackle London's housing crisis. The report argues that many young people are forced to commute long distances due to the high cost of housing in London. It points out that over the past 20 years, London's population has grown by 25 per cent, but the number of homes by only 15 per cent and that, by 2025, 3.5 million Londoners will be living in rented housing, with 79 per cent of the adults who moved to London in the last year renting. Micro-homes, the report argues, would enable land to be used more efficiently, and that Londoners were "comfortable with living in smaller apartments" (although no evidence was provided) and that micro-homes were "smart, modern, custom-designed units" which were "often accompanied by communal amenities such as games rooms and open living spaces". However, the report also described micro-homes as a "policy shortcut", and acknowledged that "Excessive regulations, planning restrictions and the NIMBY mindset are all responsible for London's housing shortage, and all of them must be addressed in due course."

This is undoubtedly true.

The key message from Chapter 3 of this report is that in times of housing crisis, housing standards are put under pressure. Today is no different. Rather than addressing the real problem – under-supply and restrictive planning policies – policy-makers often adopt a kneejerk response that seeks a magic bullet. What is needed is a fundamental shift of policy that prioritises long-term investment in affordable homes, a reform of planning policies and a more efficient use of land.

Taking London as an illustration, between 1939 and 1989 London's population fell by 2 million to 6.4 million, but within the next twenty years it is likely to reach 10 million. And yet the capital's metropolitan footprint was set in 1965 when the Greater London Council and the 33 London Boroughs were created. That means around three and a half million extra people being crammed into the same area. It means people fighting for space, whether it is road or pavement space, space on public transport, in hospitals and health centres, in clubs and pubs and restaurants, and above all in the capital's homes.

London is surrounded by a tightly controlled metropolitan Green Belt of 513,860 hectares, which is over three times larger than the Greater London metropolitan area of 156,900 hectares. However, 19 of London's 33 boroughs also contain Green Belt land – in total 22 per cent of the Greater London area is Green Belt. Of this, 60 per cent is within 2 kilometres of a rail or tube station.

<sup>&</sup>lt;sup>16</sup> Kichanova V. (2019) *Size doesn't matter: Giving a green light to micro-homes*, for Adam Smith Institute [accessed 7/1/2020]: https://static1.squarespace.com/static/56eddde762cd9413e151ac92/t/5c41d02f0ebbe8aa256c361c/1547817061183/Size+Doesn% 27t+Matter+%E2%80%94+Vera+Kichanova.pdf

Many commentators have called for a review of the use and purposes of the Green Belt, in order to build more homes. Across the country, Green Belt accounts for 13 per cent of our total land mass and yet its purpose (to prevent sprawl, to stop settlements merging into one another and to preserve the setting of towns) is often misunderstood by the wider public. Much Green Belt land is not of high amenity value nor is it accessible to the public, and Green Belt land is not required to achieve either objective. In fact, less than one quarter (22 per cent) of London's Green Belt has an environmental designation or allows public access.

Selective development of the Green Belt, especially near transport hubs, could provide millions of new homes and help to ease pressures on the housing market within London and other cities. The Centre for Cities estimates that if 47,000 hectares of Green Belt and farm land within a ten-minute walk of 1,035 train stations close to major cities was developed for housing it would deliver up to 2.1 million new homes. These would be within 45 minutes by train of jobs in the cities of London, Bristol, Birmingham, Manchester and Newcastle.<sup>17</sup>

Planning policies have also created an unstable land market, with huge disparities between the price of agricultural compared to residential land. The rising price of land is undoubtedly a factor in the rush towards micro-homes. Smaller homes equate to more profit per plot.

Data provided by geographer James Gleeson (@geographyjim) using ONS data illustrates the increase in land costs over the past 60 years. In 2015 the value of the UK's total housing stock was £5.5 trillion but the value of the actual dwelling structures was only £1.8 trillion, leaving a residual land value of £3.7 trillion. This means that two-thirds (67.3 per cent) of the value of an average house is accounted for by the land that it sits upon, and not the bricks and mortar of the house itself. By contrast, in 1957 the residual land value of an average home amounted to only half (52 per cent) of its price.

Alex Morton, former policy advisor to David Cameron, has written about the rising cost of land and the way that this leads to smaller homes:

- "...as the value of land rises homes become smaller and smaller, with developers trying to cram in as many new homes as possible or demolishing homes to make way for flats. The increase in the value of the land also reduces consumer choice, first time buyers are mostly just paying for land with planning permission. Developers can't build more attractive homes even if they want to, as once purchasers have paid for the land they have less to pay for attractive housing on top of it...
- "...developers don't really care about the quality of their new homes above a basic minimum. Because their profits are largely related to their role as land speculators, they focus on this aspect rather than designing and building attractive homes...

"We have yet another failing cycle. Too few homes push up the value of land. This rise in the value of land means worse quality homes, which makes people resist new homes and even more interference by planners in how homes look, making it yet harder to build enough attractive homes." <sup>18</sup>

<sup>&</sup>lt;sup>17</sup> Cheshire P. and Buyuklieva B. (2019) *Homes on the Right Tracks. Greening the Green Belt to solve the housing crisis* [accessed 7/1/2020]: https://www.centreforcities.org/wp-content/uploads/2019/09/Homes-on-the-Right-Tracks-Greening-the-Green-Belt.pdf <sup>18</sup> Morton A. (2012) *Why aren't we building enough attractive homes?* [accessed 7/1/2020]: https://policyexchange.org.uk/wp-content/uploads/2016/09/why-arent-we-building-enough-attractive-homes.pdf

The pressures caused by a dysfunctional strategic planning system and the rising cost of land means more people competing for less space. In these circumstances developers will naturally seek to maximise their profits by building smaller homes to wring as much sellable space out of every square metre of land. But this is a short-term solution that does nothing to tackle the underlying structural problems in the UK housing market.

#### 10. Conclusions

This report has reviewed micro-homes in the UK, providing a brief history of the evolution of space standards over the past century and highlighting the increase in the number of very small homes being built by developers, and converted through Permitted Development Rights. The report has looked at the sustainability aspects of micro-homes.

The report has distinguished between micro-homes provided with few or no communal facilities and co-housing schemes where some recreation and co-working spaces are provided.

The report has highlighted the higher turnover in very small homes and the negative health and well-being aspects that arise from living in very small spaces without room to live a tolerable life, as well as the impact upon community stability. It is likely that this is particularly the case with those very small and unsuitable micro-homes that are being provided through Permitted Development Rights, Office to Residential.

In terms of intergenerational fairness, the literature suggests that around one quarter of all micro-homes are occupied by people in the 16–34 age group and that they are paying more per square metre for their home, whether they rent or buy the property. This impacts upon their ability to save and to make wider consumer choices. But, in terms of micro-homes, there are wider issues at stake than intergenerational fairness alone, as this report has made clear.

Considering the qualities of different types of micro-homes, the picture is mixed. Micro-flats might be more supportive of social capital and interaction, but be worse for resident turnover and measures of privacy. Micro-homes can perform well on energy efficiency and affordability, but might lose out on social interaction where privacy is poor and turnover is high. Internal space within all micro-homes is a serious issue for residents, particularly where there is little or no compensatory communal social space.

Co-housing schemes (some with rooms as small as 11m<sup>2</sup>) have slight advantages over self-contained dwellings without communal space, but there are concerns about whether communal areas will be provided in the long term and not just as an upfront marketing ploy.

Overall the evidence about micro-homes in the UK is currently rather patchy: while there is some information about numbers of new housing being developed and the location of these homes, there is little information about who is living in these homes, or their experiences of micro-homes as places to live. There is a need for further research about the impacts upon those who live in micro homes, in terms of their mental and physical health and their overall well-being.

However, on balance, the available evidence does show that micro-homes are not a solution to the housing crisis and have a negative impact upon affordability, health, community stability, and general well-being. They also represent a short-term, kneejerk reaction to wider problems in the housing market and the planning process, including the rising price of land, a failure to review Green Belts and a failure to invest in genuinely affordable housing over the past forty years.

Some would argue that any home is better than no home, however small. A tiny pod in a shipping container is a better option than living on the streets. But this is a defeatist approach; a race to the bottom is short-sighted. In the end, poor quality housing costs more.

Back in 2009, when the London Design Guide was being introduced, the then Mayor of London called for an end to "Hobbit Homes. He said:

"For too long we have built homes to indecently poor standards – fit neither for Bilbo Baggins nor his hobbit friends – and that is indefensible. The finest city in the world deserves the finest housing for its inhabitants and when we get it wrong it can scar generation after generation."

**Boris Johnson, Mayor of London** 

The words of Boris Johnson. And what is good for London is also good for the rest of the country.

## 11. Report recommendations

We make the following five recommendations to government and policy-makers.

- 1. The NDSS standard of 37m<sup>2</sup> should become a minimum enforceable standard for all new homes, whether newly built homes or those created from conversions of existing buildings. This should be enforced through the planning system.
- Permitted Development Rights for the conversion of Office to Residential conversions should be scrapped.
  Conversions from one use class to another should be subject to the same development control requirements as
  all other planning applications, in accordance with the National Policy Planning Framework and other government
  policy statements and standards.
- 3. Co-housing schemes provided on a for-profit basis should be better regulated by the planning system to ensure that communal spaces are provided in perpetuity as this will help to offset the negative impact of the tiny rooms that are provided.
- 4. Co-housing schemes provided on a for-profit basis should also be regulated to ensure that they are available for rent only, that the rents charged are not excessive, and that the rooms cannot be sold.
- 5. The government should be encouraged to address wider structural issues in the housing market and the planning system, including the need to address the restrictive Green Belts around many of our major cities, the need to invest in genuinely affordable housing, and measures to address the high price of land for residential development.

## Appendix: Dwelling age by banded floor area, 2013

