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Implementing the nationally described space standard: regulating housing in a devolved planning system

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ABSTRACT

The English housing crisis of the twenty-first century is creating intense demand for new housing, especially in London and the core cities. This is manifest in densification, verticalisation, and the increasing provision of homes smaller than was the case in the late twentieth century. While this might be seen as a positive development from an environmental perspective, with smaller homes theoretically more resource- and energy-efficient than their larger counterparts, the increasing number of very small homes raises concerns about the liveability of this accommodation for occupants. In this context, the Nationally Described Space Standard introduced in 2015 provides a basis for local authorities to impose minimum space standards for different types of property, but these are merely guidelines within a planning system that exhibits a high level of legal flexibility, and devolved local power. Noting that not all English local authorities have implemented the NDSS, the paper explores the varied emphases in local authority policy documents concerning the need for space standards, concluding that planning policies addressing domestic dimensionality are the outcome of a negotiated inter-legality between national guidelines and local contingencies.

KEYWORDS

Small homes; Nationally Described Space Standard; space standards; domestic space; housing guidelines

Introduction

In 1929, the Congress of Modern Architecture (CIAM), inspired by the writings of Le Corbusier, proposed a 'dwelling for minimal subsistence'. This *existenzminimum* housing was a proposed solution to the inter-war housing crisis, based on the assumption that the accommodation shortage could be solved through the construction of housing a fraction of the size of the bourgeois family home. Here, the belief was that a person's biological needs could effectively be met by a home of minimal dimensions, while their social needs would be fulfilled in the neighbourhood spaces beyond (i.e. in community centres, parks and recreational spaces). Deploying design principles matched to the nuclear family structures of the industrial age, the minimal home was intended to provide a model for European post-war housing, with some of the design features espoused by

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CIAM (e.g. the Frankfurt unit kitchen developed by Ernst May and Greta Schütte-Lihotzky) becoming standard in the prefabricated and mass constructed housing of the mid-twentieth century. Yet the limited floor space of the *existenzminimum* home – e.g. a two-bedroom flat for a family of four had internal space of just 40 m² – meant this compact-sized home was entirely alien to some national cultures of domesticity. In England, for example, flats became the norm for the delivery of state-subsidised housing in the 1950s and 1960s, but a typical one-bed council flat was rarely smaller than 60 m², a size deemed necessary to allow a childless couple to live comfortably (Boughton 2018). Based on consideration of the space needed to conduct ‘normal’ household activities, the official guidelines offered by Parker Morris (1961) concluded that a two-bedroom flat for a couple with a child should be at least 69.7 m² (with an additional 3.3 m² of internal or external storage space).

But in the twenty-first century, English policy-makers’ attitudes to smaller homes are changing. There is now the belief that building more small homes – as opposed to fewer average-sized or larger ones – is a necessary response to the increasing demand for affordable accommodation, especially in London and expensive core cities. Central to this move towards densification was the white paper *Our Towns and Cities* (2006), which encouraged housebuilding on brownfield land to protect greenfield sites. Following this, there has been a discernible move away from the construction of larger ‘family’ homes on free-standing plots towards inner city ‘micro-apartments’ and studios mainly marketed to ‘young, urban professionals’. This is a population for whom the promise of a life in a high-amenity, job-rich city seemingly is thought to matter more than the provision of internal space (Clinton 2018). But even suburban homes are getting noticeably smaller: an analysis from LABC Warranty (2018) found new homes being built in the 2010s were on average 32% smaller than the those built in the 1970s: not only has the average number of bedrooms dropped (from 3.50 in 1974 to 2.95 in 2018), but living room size also decreased, on average, from 25 m² to 17 m². The implication is that average housing size is declining across a range of accommodation types, despite countervailing tendencies such as the emergence of very large ‘millionaire mansions’ in elite residential districts (see Burrows *et al.* 2022, Hubbard 2025).

Many commentators have welcomed the proliferation of small homes, arguing they promote affordable, compact, and sustainable living (McKinlay *et al.* 2019; Cohen, 2020). But while the increased supply of smaller homes appears an efficient use of both space and energy, and a potential solution to housing shortage (Kichanova 2019, Centre for Cities 2019), not all are enamoured: some commentators suggest shrinking housing dimensionality is more about maximising developers’ profits rather than promoting sustainability or affordability (Nethercote and Horne 2016, Bergan and Power 2024). Such critique is particularly pronounced in the English context: for example, Harris and Nowicki (2020) argue that the promotion of micro-living in London’s overheated property markets makes a virtue of necessity, with the general unaffordability of larger homes a hollow justification for the production of smaller ones. Moreover, during the COVID-19 crisis, the shortcomings of smaller homes were starkly exposed: under lockdown, many became only too-aware of the limitations of smaller homes for combining sleeping, washing and eating alongside home-working or home-schooling (Tunstall 2015, Preece *et al.* 2021; Hubbard *et al.* 2021). Such evident shortcomings drew attention to the importance of housing

dimensionality in the maintenance of positive mental and physical health (Kearns 2022), with very small homes often characterised by a lack of privacy, insufficient storage space and lack of room for socialising (Jacoby and Alonso 2022). Additionally, emerging evidence suggests smaller homes may offer poor thermal comfort, limited air circulation and high levels of internal air pollution (Cheshmehzangi 2021, Varaden *et al.* 2024).

In this context, there remains a need for further research on the pros and cons of building smaller homes (see Cohen 2021). But even if this research reaches a consensus that there are certain minimal housing sizes that need to be maintained, what should be done about this? What policies, laws and regulations are needed to ensure minimum space standards are implemented and enforced? Here, it is notable that the role of regulation in influencing home size in England has been little studied in recent times (though see the important work of Özer and Jacoby 2022, which we build on here).¹ Generally – and increasingly since the deregulation of the Thatcher era – market standards have tended to reign, with English housebuilders tending to construct the type of housing they think people are prepared to buy. Clifford (2021) hence notes a general governmental reluctance to either *monitor* or *enforce* national space standards (c.f. the legally-enshrined minimum space standards written into building regulations in many other nations in Europe). Yet this has changed in recent times, with the introduction of the Nationally Described Space Standard (NDSS) in 2015 seemingly signalling a more proactive role for the state in influencing the size of domestic properties in England: theoretically, the NDSS provides a benchmark that can be used by local authorities to refuse planning permission for any home falling below recommended national minimums.

This paper aims to critically examine the role of the NDSS in influencing home size in England, noting that space standards are not hard and fast building regulations but optional guidelines that can be adopted by local authorities if they feel it necessary. This discretion is a core characteristic of the English planning system, which exhibits a high level of expediency and flexibility in relation to the formulation of local land use policies: as Harris (2010) notes, central government generally seeks to distance itself from the direct operation of the planning system and grants local authorities considerable discretion in terms of day-to-day planning and development control. Accordingly, in this paper we examine the consequences of this regionally variegated and variable adoption of the space standard across England. We do this by, firstly, compiling quantitative evidence using data from Energy Performance Certificates to explore whether the Nationally Described Space Standard has been associated with increased housing size in different towns and cities, giving us insight into the role of regulation in influencing domestic dimensionality in England. Following this, we examine the variable adoption of the Nationally Described Space Standard at a sub-national level, conducting a qualitative analysis of local authority policy documents concerning their decisions around whether to adopt the Nationally Described Standard. Central to this paper, then, is an attempt to address a pressing empirical puzzlement: why have some local authorities adopted these guidelines, whilst others have not? Throughout, our discussion is guided by the precepts of *legal geography*, an approach which considers the imbrication of the social and spatial, particularly the ways that the law is enacted

and enforced in different ways across space and place, leading to differential outcomes, experiences and inequalities (Robinson and Graham 2018, Harris 2023). However, we begin by outlining the context that led to the introduction of the *national* space standard in 2015.

Planning regulation and the nationally described space standard

Politically, domestic space standards have always been a terrain where different ideologies have clashed, with various lobbies arguing for, and against, the need for minimal standards (Carr 2017). In England, concerns with internal housing space initially emerged in the context of late Victorian anxieties about the consequences of overcrowding for the population's physical health, especially its role in the transmission of infectious diseases such as cholera, typhus and tuberculosis (see Tunstall 2015). The 1918 Tudor Walters Report established the first widely-adopted minimum internal housing space standards in England, recommending floorspace minimums of '855 square feet [80 m^2] for a three-bedroom non-parlour house (without a separate sitting room) and 1,055 square feet [98 m^2] for the parlour type, with a separate sitting room and upstairs W.C' (cited in Park 2018). These standards, which guided municipal house-building in the inter-war period, were nonetheless relaxed after World War II in the rush to replace homes lost to aerial bombardment and to meet post-war need (Carr 2016), before the 'Parker Morris' (1961) report *Homes for Today and Tomorrow* offered standards more suited to the era of modern, mass-produced housing (Clifford and Ferm 2021). These standards drew on anthropomorphic data determining the minimum space needed to use and move furniture, and whilst these standards have been retrospectively depicted as exercising a form of 'biopolitical' control over working-class populations (Hollow 2010), they were relatively generous, and widely-adopted across the private and public sector: they were later metricated and made mandatory in New Towns.

However, the Parker Morris standards were abandoned following the 1980 *Government, Planning and Land Act*, part of the Thatcherite deregulation of planning (Clifford and Ferm 2021). Here, faith was placed in the ability of the market, rather than the state, to deliver the quality and quantity of housing required to meet housing need. Yet despite this, national housebuilders became increasingly parsimonious, with the internal floor space of new private homes in the 1980s and 1990s shrinking at a faster rate than for housing association properties. The outcome was a surge of small homes: Drury and Somers (2010) estimated 75% of privately-built one-bedroom flats and 91% of two-bedroom flats built in London in the early twenty-first century were below the Homes and Communities Agency standards recommended for subsidised housing. Likewise, a 2009 Commission for Architecture and the Built Environment (CABE) report – *Space in New Homes: what residents think* – helped establish the idea that 'rabbit hutch homes' were becoming the new normal. Their survey, based on 2,500 private dwellings built 2003–2006, found that many new homes were failing to provide enough space for 'everyday activities': almost 50% of their respondents reported insufficient space for children to play safely, 57% reported lacking storage space, 47% lacked sufficient space for furniture, while 37% stated they did not have enough space to entertain guests. CABE chief executive Richard Simmons argued the research brought into question 'the argument that the market will meet the demands of people living in private housing

developments’, concluding ‘we need local planning authorities to ensure much higher space standards before giving developments the go-ahead’.²

In response, the-then London Mayor, Ken Livingstone commissioned a study with a view to recommending minimal useable internal areas: with the resulting 2010 *London Housing Design Guide* stipulating minimum floorspace for homes of different storeys, bedrooms and occupants, with figures in excess of those in the 1961 Parker Morris guidance (Morgan and Cruickshank 2014). These new planning guidelines for the London boroughs hence responded to anxiety about ‘shrinking’ homes in the capital, but it became evident that ‘family’ housing in more suburban locations beyond the capital was also sometimes falling well short of the stipulated guidelines. For example, a RIBA (2015) report suggested 50% of homes on new housing estates nationally were below the new London standards, with Barratt homes 6.7 m² smaller and Persimmon homes on average 10.8 m² too small.³ While officially-defined ‘overcrowding’ remained low (2.7% of households in 2007/08 rising to 2.9% in 2014/15) several commentators concluded that a *national* space standard was needed to reduce the spectre of future overcrowding, with the number of rooms per person (a standard measure of statutory overcrowding) arguably less relevant than *floorspace* per person (Lloyd and Gleeson 2022).

The government’s *Housing Standards Review* (2013) accordingly mooted a national standard based on the GLA (2010) guidelines. Rejecting the incorporation of space standards into mandatory building regulations the government proposed they would be incorporated within what has, since 2010, become an increasingly localised and ostensibly place-sensitive system of local authority planning (Sturzaker and Gordon 2017). This *de facto* devolution was justified by the government on the basis that it is the local planning system that best responds to local contingencies – albeit this seemingly undermines any notion of *national* policy. This contradiction was directly confronted in the government consultation on housing standards:

We believe that it is right that local communities and neighbourhoods have the ability to shape the nature of new development in their local areas. However, a proliferation of localised and varying space standards creates a potentially significant barrier to the delivery of housing. We will therefore develop a new national standard – not a Building Regulation – which will offer a consistent set of requirements with regard to the internal area of new homes.⁴

Even so, in responding to this consultation some architects claimed the introduction of any space standard would restrict their creativity, and most national housebuilders were firmly opposed to the idea (suggesting that minimum house size needs to be defined in the context of different land markets, given land is cheaper in some locales than others) (Hubbard 2023).

However, 80% of responses to the Government’s consultation supported the introduction of a national standard, with the Nationally Described Space Standard duly introduced in 2015. The new standard defined housing floorspace minima according to type of property and anticipated resident numbers, following the GLA (2010) model. These state a dwelling with two or more bedspaces should have at least one double (or twin) bedroom; that a single bedroom should have an internal area of at least 7.5 m² and be at least 2.15 m wide, and areas with headroom of less than 1.5 m should not be counted

within the calculation of floor space unless used for storage.⁵ The NDSS also stipulates minimum floor-to-ceiling height, with 2.3 m headspace required for at least 75% of the internal area. The latter reminds us that internal space is not just about area but *volume*, with the space standards constituting an example of ‘volumetric regulation’ (McNeill 2020). This noted, the absolute minimum internal floor space in the NDSS is 37 m² for a one-bed/one-person dwelling with shower, 50 m² for a one-bed/two-person dwelling and 70 m² for a 2-bed/3-person dwelling (figures rising when accommodation is over 2/3 storeys, allowing for stairs or lifts). Further, single bedrooms must be at least 2.15 m wide and have a minimum area of 7.5 m², while double (or twin) bedrooms must have a minimum area of 11.5 m² and be at least 2.75 m wide.

Has the nationally described space standard improved house size?

Since 2015, the NDSS has provided a basis for regulating internal space in accommodation of all tenure types⁶ across England.⁷ Yet at the same time, the housing crisis has become more acute, especially in London and the South-East. Despite house prices falling in 2023 for the first time in decades, rents in the private rental sector (PRS) have increased by as much as 20% year-on-year since 2015, with the average renter in the PRS in London spending over 45% of their income (after tax) on housing.⁸ Noting such rising rentals and demand for more affordable properties, many national housebuilders appear to have continued to focus on the production of smaller homes rather than larger ones: likewise, individual landlords have often subdivided existing properties, converting ‘average sized’ family homes into flats and studios to maximise the number of units within a given property (Bibby *et al.* 2021).

Confirming these trends, and exploring whether the existence of the NDSS has made any significant impact on the overall number of small homes since its introduction, is notoriously difficult. Online listings (Zoopla etc) routinely contain information on gross internal floorspace, and often include a floorplan, but this data is not readily available *en masse*, and estate agent measurements can be erroneous. In contrast, the more reliable data on home size in the annual English Household Survey is based on relatively small samples of 6,000 homes nationally. Even the national Census of Population only records the number of rooms, not house or room dimensions. As such, Energy Performance Certificates provide one of the only reliable indicators of domestic floorspace, and are accessible for every home in Britain that has been built, sold or rented since 2010, a total of over 21 million records in total, accounting for c. 15 million individual properties. As well as information on internal floor area, EPCs contain information on energy ratings, housing type (e.g. flat, semi-detached, detached dwelling), as well as address information that allows linkage to other residential datasets (including Price Paid Data from the Treasury, allowing calculation of prices of homes per square metre).

Our initial work using EPCs to study the geographies of small homes focussed on London (Hubbard 2023). Here, we were not able to conclude how many of London’s near four million homes are below the NDSS minima as that would require a careful scrutiny of each and every address to ascertain if the property is spread over several storeys, whether it provides single or double bedrooms, and so on. The NDSS implies all these factors must feed into any planning decision about whether a property is permissible ‘with reference to the living condition of future occupants’ (to cite a key phrase used in

development control case officers' reports). But while a property-by-property analysis of four million properties in London is not possible, we were able to use methods of data matching to identify the how many properties are below the lowest possible size for a home in the NDSS (i.e. 37 m² for a one-bed, one-person flat with shower). Here we found significant numbers of homes below this threshold even though the NDSS is written into the London Plan and hence applies to all 32 boroughs. Notable hotspots included prime London (i.e. the City, Westminster, Kensington and Chelsea), but also some outer boroughs including Croydon (with over 9,000 sub-37 m² homes). Moreover, we found the proportion of small homes appeared to rise after the adoption of the NDSS, from a low of just over 4% of EPCs issued in London in 2014 to approximately 8% in 2021, with a large percentage being new-build properties in the rental sector or older properties which had undergone conversion.

One explanation for the persistence of sub-standard-sized housing post-2015 is the use of 'Permitted Development Rights' (PDR). Introduced in 2013, these allow developers to sidestep formal planning permission when converting commercial or retail premises to residential use, a deregulatory gesture by the Coalition government intended to speed up the supply of new homes. It is thought a high proportion of PDR conversions led to very small homes (Ferm *et al.* 2021), with examples subsequently presented as evidence of the shortcomings of *laissez-faire* planning. For example, an office block converted under PDR next to the A12 trunk road in East London made national headlines for offering single-aspect flats of just 13 m² (Jones 2018). Another in Watford offered windowless 16 m² studio-flats (Park 2017). In the light of such outcomes, from 2021 it became necessary for commercial properties being converted to residences to meet the NDSS.⁹

This implies planning regulation is important in ensuring certain standards of housing size are maintained, and that allowing developers to sidestep development control processes entirely might result in dangerously sub-sized housing. But, perhaps surprisingly, it appears the vast majority of very small homes developed in London post-2015 were not PDR developments (Hubbard 2023), even though all London boroughs were obliged by the London plan to implement the NDSS. The fact that national guidelines have been introduced but sub-standard-sized sizes homes are still being approved in the capital indicates the apparent failure of the NDSS to guarantee *national* housing minima are met locally. But this is explicable if we remember NDSS are guidelines, not hard-and-fast rules, with internal property space still treated as a subjective design issue in the English planning system (Clifford 2021). This means that is possible for a planning authority to determine a scheme is of good design quality even if it does *not* meet the minima in the NDSS: as Ozer and Jacoby (2022) stress, not all very small flats designed for single occupation may be unsuitable for human habitation, and might meet the needs of their occupants, particularly if located in proximity to open green spaces, as well as spaces such as bars, cafes, libraries and gyms, where there is potential to socialise with others. As such, London boroughs can still approve new housing below the NDSS if they feel it helps fulfil local housing needs.

This points to a seeming contradiction: anxiety about shrinking homes led to the introduction of a new space standard in 2015, yet substandard-sized homes are still being granted planning permission in the capital. But this is not just in London. Özer and Jacoby's (2024) analysis of nearly 153 affordable housing developments in 93 different

English local authorities shows that while most flats (around 70% in their sample) meet NDSS, there are many which do not, with *most* affordable properties designed for four people (with two or three bedrooms) falling below the NDSS. Here, the implication is that planning authorities sometimes consider the addition of new homes for local populations more important than the maintenance of the space standard per se.

Who has adopted the nationally described space standard?

As well as the evident discretion available to local authorities in terms of the material weight they can give to the space standard in given situations, the fact that some local authorities have chosen not to adopt the space standard at all means they may have little ability to refuse permission for any home they regard as too small. This can be illustrated with reference to the neighbouring cities of Portsmouth and Southampton on the south coast, where housing markets are similar (populations: 252,000 and 208,000 respectively, average monthly rent for a one-bed property £878 and £848 respectively in June 2025): the former has adopted the NDSS and has a much lower proportion of new sub-37 m² flats since 2010 (c. 8%) than Southampton (c. 13%), which has not. Likewise, in their sample, Özer and Jacoby (2024, p. 620) reported a significant association between the adoption of the NDSS by a local authority and compliance with the recommended gross internal area for different types of accommodation. This suggests local authorities who have chosen *not* to adopt the Nationally Described Space Standard in their Local Plan are less able – or willing – to maintain the space standard. This is not to say that planners cannot cite lack of space as a material consideration in the determination of planning applications, but that they are unlikely to win an appeal made by a developer against refusal of planning permission on that basis: while the Planning Inspectorate has not been consistent in the weight it puts on the NDSS in appeal cases, it appears that many inspectors suggest it cannot be a relevant consideration if the local authority has not adopted the NDSS or referred to it in their local plan (Hubbard 2023).

This begs the question as to why some local authorities have not adopted these standards: after all, they offer local authorities the flexibility to refuse new development if they consider it under-sized. Figure 1 shows evident geographic disparity in terms of whether, and when, the NDSS was adopted. This updates the data presented by Özer and Jacoby (2022) by reviewing current planning documents to identify adoption status across English local authorities. Although we do not have information for all, we were able to collect data on 320 local planning authorities across England (including all London boroughs) and identified 163 local authorities that had adopted the standard as of 2025.¹⁰ Additionally, we derived a general measure of the building density in each local authority from the Global Human Settlement Layer (GHSL) data, a satellite-imagery derived dataset that quantifies the proportion of land covered by buildings ('built-up density') in each local authority. From this, we sought to extend current understanding of where and when NDSS has been adopted.

Figure 1 shows the spatial and temporal distribution of NDSS adoption. Panel A shows the spatial distribution of NDSS adoption as of June 2025. The map shows clear spatial clustering, with local authorities with large urban centres appearing more likely to have adopted space standards than peripheralized and rural areas (a notable exception being the largely rural county of Cornwall, where concerns around smaller housing coalesce

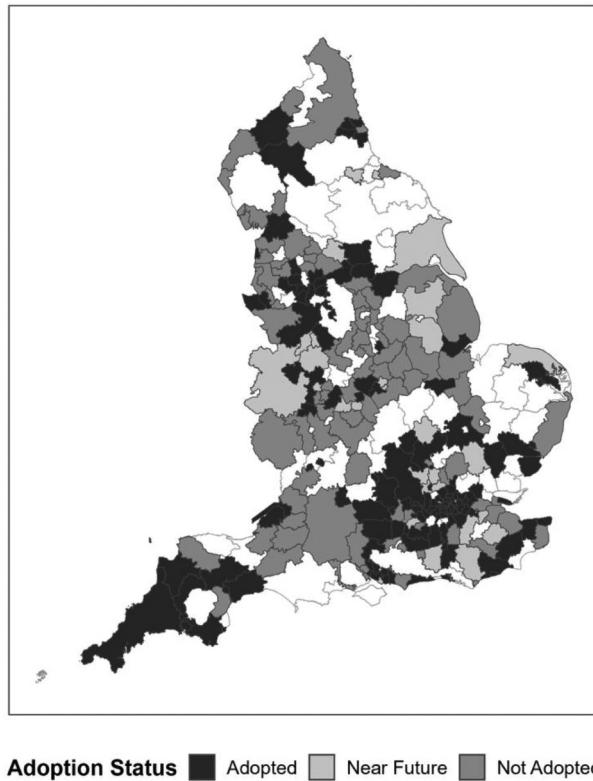


Figure 1. National described space standards adoption by local planning authorities in England (2025).

around their use for tourist or seasonal accommodation rather than housing permanent residents. As such, NDSS adoption is notably clustered in London, the South East, the North West, West Yorkshire and urbanised parts of the north Midlands. This geographic pattern is confirmed by a measure of spatial clustering known as Moran's I, which indicates whether similar values (in this case, NDSS adoption) occur near each other. A positive Moran's I value of 0.26 suggests clustering at a high level of statistical significance ($p < 0.0001$). In other words, it appears that local planning authorities are more likely to adopt NDSS if neighbouring authorities have done so, albeit there are exceptions where neighbouring authorities with similar housing markets have taken different approaches (e.g. the aforementioned Southampton and Portsmouth contrast).

Secondly, we sought to confirm whether adoption of the NDSS is related to the level of urbanisation. We used GHSL data to derive the built density of each of the local authorities and then designate it as either 'rural' or 'urban'. Figure 2 shows that urban local authorities (i.e. those with the highest building density) are more likely to have adopted NDSS, with almost 70% of 'urban' areas having adopted the NDSS. On the other hand, rural areas are typically less likely to have adopted the NDSS, with only 34% adoption overall. These findings support the idea that the adoption of NDSS may be driven by shortage of development land and the demand for housing in urban areas.

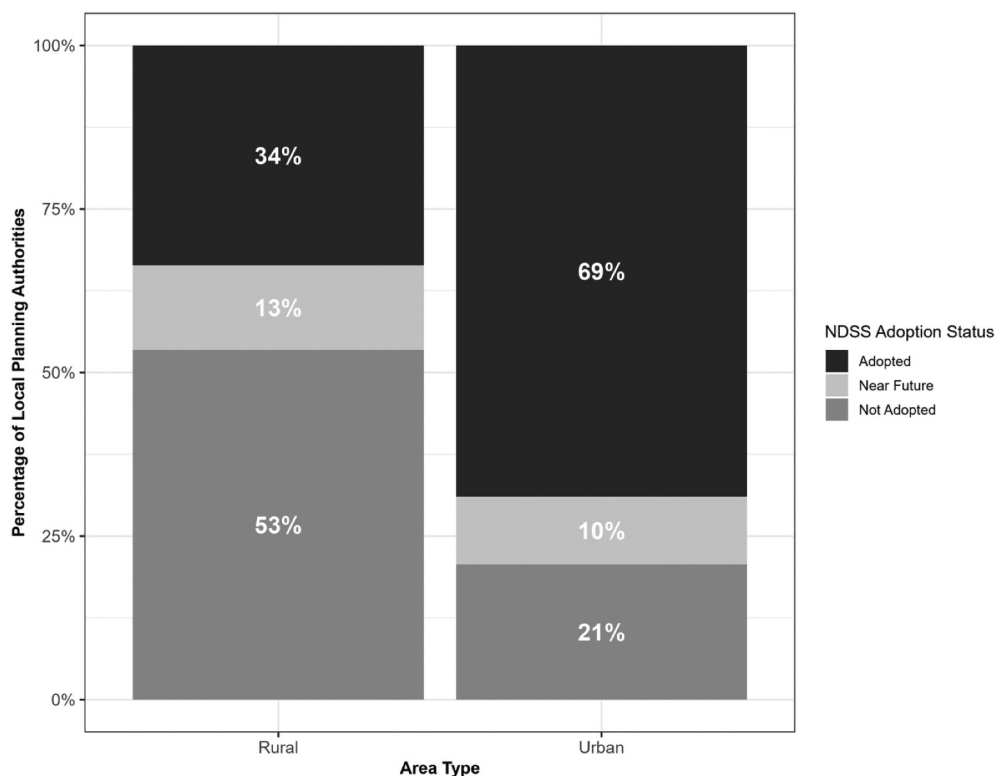


Figure 2. National described space standards adoption across urban/rural authorities.

Thirdly, we considered how the relationship between built-up density and adoption developed through time. [Figure 3](#) illustrates the relationship between urbanisation and timing of NDSS adoption. Authorities with a higher built-up density (i.e. more urban) tended to adopt the NDSS earlier, while those with lower built-up density (more rural) generally adopted later or have yet to adopt. The correlation between built-up density and year of adoption is moderately negative, reinforcing the view that more urban authorities tended to have adopted the NDSS sooner, presumably because of a perceived need to prevent the multiplication of smaller properties. The Moran's I statistic for the year of adoption (0.25, $p < 0.001$) again suggests that authorities tend to adopt NDSS at a similar time to their neighbours, suggesting that regional dynamics and a policy diffusion process may influence when adoption occurs.

In summary, NDSS adoption appears strongly associated with urbanisation: urban authorities are more likely to adopt space standards, and to have adopted these earlier. Secondary to this, the clustering of adoption across both space and time suggests that regional factors and policy diffusion may also contribute to the pattern of adoption of the NDSS. While such factors begin to explain why some local authorities have adopted, and others have not, it is important to note that neighbouring local authorities with similar population and housing density will not always act in the same way. Returning to the examples of Portsmouth and

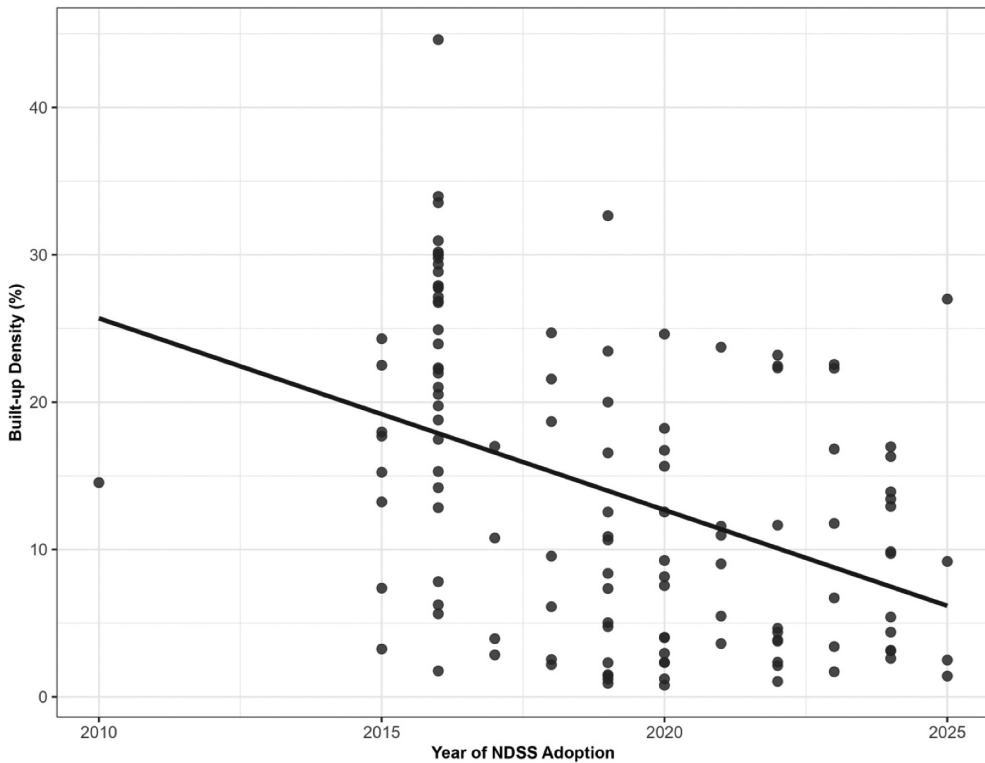


Figure 3. Built-up area density vs year of NDSS adoption.

Southampton, for example, there are few clues in the local authority population density (49 vs 52 people per square kilometre respectively) that might help explain why the former has adopted the NDSS but the latter has, as yet, not formally done so. Clearly, a fuller explanation needs to consider the rationales offered for the adoption of the NDSS by local authorities, and particularly their assessment of recent, and future, housing needs.

Why do local authorities adopt the nationally described space standard?

In the next two sections we move on to analyse how various local authorities have sought to make decisions about whether to adopt the NDSS or not via a qualitative analysis of the policy documents that provide rationales for the adoption (or not) of the space standard. In the analysis that follows we draw out some of the recurrent themes that arose across different local authorities, which allows us to provide greater depth in understanding around the justifications as to why some local authorities have adopted the NDSS whilst others have not. In sum, 194 documents were examined – including design guides, local plans and housing needs assessments – across local authorities which had or had not adopted the space standard.

Planning Practice Guidance at a national level suggests that any adoption of the NDSS must consider three issues: need, viability and timing.¹¹ Here, *need* is defined relative to the number, size and type of dwellings currently being built on the land within a local authority's jurisdiction, requiring local authorities to explore the potential impacts of adopting the NDSS on meeting demand for particular forms of housing. *Viability* considers the impact of building either larger or smaller dwellings on the same land, particularly the idea that some schemes might be financially unviable if builders cannot extract maximum value from the scheme by 'cramming' more housing in. Finally, *timing* concerns the idea that a sensible transitional period might be needed following adoption of the NDSS to enable developers to factor any additional cost of meeting the space standard into future land acquisitions.

However, the approach taken to assessing local housing needs varies considerably across different local authorities. Some have undertaken desktop reviews of the size of past developments, performed by planning officers, whilst other local authorities have employed independent consultants. In the case of the former, typically a sample of completed homes in the local authority across multiple tenures and locations is reviewed, with the gross internal area of developments assessed from the floorplans submitted with the original planning application (which might of course be slightly different from the development as built because of construction tolerances). The number in this sample varies: for example, just 19 homes were sampled in North West Leicestershire's needs assessment, 10 schemes with 75 homes in North Hertfordshire, 42 developments and 170 floorplans in Colchester, 230 homes in Northampton, 382 homes in 10 schemes in Breckland, 902 dwellings in North Norfolk, and, at the very upper end, 1,544 floorplans in Newcastle, 1,700 in Blackpool, and 3,489 in Birmingham.¹² The extent to which existing housing meets the NDSS is usually reported in terms of the number of homes more than 10% over or 10% under the NDSS minima, indicating some allowance for measuring error. However, some assessments do not refer to planning applications but instead take data from EPC certificates or other sources of data (e.g. Hertsmere Council's 2016 assessment considers 344 developments sold between 2011 and 2015 with reference to Treasury data, while Winchester City Council commissioned a report from consultants who took floorspace data from Rightmove listings). Most assessments consider only gross internal area, but some also considered whether bedroom floorspace was adequate, allowing them to highlight if homes were deficient on one or more of the space standards. However, most stated it was impractical to consider ceiling heights given the limited information on submitted plans, though some (e.g. Wakefield) indicated they only measured developments with cross-sectional plans so they could establish if any of the property was below 1.5 m high, and hence not contributing to the gross internal area. In Wakefield a remarkable 86% of new properties built 2013–2018 did not conform with NDSS, leading the council to recommend adoption of the space standard.¹³ In Blackpool this was even higher: only 3.1% of 1702 houses granted planning permission 2013–2020 met the national space standard.¹⁴

This variation in needs assessment underlines the fact that the government has not provided any clear methodology or criteria for demonstrating the need for the adoption of the NDSS. For some councils, a large proportion of sub-NDSS properties is their justification for adopting the space standard. Yet in other instances, the case for adopting the space standards was not guided by quantitative evidence around a prevalence of sub-

standard-sized homes in the area: instead, adoption of NDSS was seen as *precautionary* – i.e. a way to ensure that homes will continue to be above minimal thresholds. In Winchester, for example, only ‘one one-person and a couple of two-person flats’ were identified as below the NDSS, yet the space standard was still adopted by this Council. But most councils found evidence of sub-standard homes in their local area, and used these as justification for introduction of the national standard, justifying this with reference to the problems of living in very small homes. Our qualitative analysis of local authority rationales in favour of the adoption of NDSS revealed four themes of particular significance, namely: the importance of adequately-sized homes in maintaining the well-being of inhabitants, community cohesion, social resilience and the stability of the housing market.

Well-being

Improving residents’ well-being appears a key justification for the local adoption of the NDSS. In reports, councils cite the potential impacts of small and overcrowded housing on varied aspects of well-being including physical and mental health, relationships with family and friends, and children’s education. For example, Havant District Council justified their adoption of space standards with close reference to their *Havant Healthy Borough Assessment* (2018: 20) which found that ‘smaller homes can ... affect both the physical and mental health of occupants’.¹⁵ South Gloucestershire Council also stress, in their adoption justification, that overcrowding causes ‘a significant increase in the levels of psychological stress’. They additionally dedicate a substantial section of their 2015 *Background Evidence Internal Space and Accessibility Standards for New Dwellings* to the physical health implications of overcrowding, noting ‘an increase in infectious diseases’, negative impacts on growth rates in children, meningitis and increased mortality rates.

The potential impacts of overcrowding on children’s education were also raised as a concern by many councils. Commenting on housing space and occupancy standards, Kearns (2022) notes multiple studies corroborating a negative link between overcrowding and educational attainment, especially for children in secondary education. The argument that small homes provide insufficient space for children to do homework in peace has been an important, and sometimes explicit, justification for the adoption of space standards: for example, South Gloucestershire argues that provision of additional space in houses could improve educational attainment and prevent ‘poor children becoming poor adults’.¹⁶ Likewise, the London Plan acknowledges that overcrowding is having a detrimental impact on children’s educational attainment and advocates improved space standards to remedy this.¹⁷

Community cohesion

In addition to concerns for the wellbeing of individual members of households, many councils express concern about the impact of small homes on interpersonal relationships. For example, in their 2018 justification for adopting space standards, Nottingham City Council considered the importance of adequate space for avoiding ‘potential family tensions’¹⁸ while Wakefield council also noted the importance of space standards in creating ‘a suitable environment for people to ... socialise with their families’.¹⁹ Such

relationship issues also extend to relationships outside the home. A section of *The Housing Standards Review Final Implementation Impact Assessment* (2015) arguing that minimal space standards could reduce anti-social behaviour was frequently cited in justifications, including at length by Birmingham City Council. The referenced passage argues that living in small housing increases the ‘risk of children and young adults being displaced into the external environment where they are more vulnerable to falling into patterns of anti-social behaviour’.²⁰

Also relevant to the theme of community cohesion is the assertion that smaller homes increase the rate of residential ‘churn’ (presumably on the basis that lack of domestic space means occupants will inevitably move on to larger dwellings when they can afford to do so). Chelmsford City Council, for example, argued that bigger homes mean families are less likely to move as their needs evolve, and that ‘the knock-on effect is that this creates more balanced and stable communities’.²¹ The implication is that building adequate and adaptable homes will allow households to settle, get involved in community activities, and develop a greater place attachment. As Kearns (2022: 724) explains, ‘although residential mobility is mostly understood to be a consequence of the family life cycle . . . or changing life-course trajectories, it is clear that space-needs also play an important role’ in how likely families are to ‘stay in a home long-term’.

Resilient futures

Alongside the issue of residential churn is another question; how ‘future-proofed’ is small housing and do small homes provide enough flexibility to meet evolving demands only in relation to personal needs but also changing societal/environmental contexts? Here, some councils were particularly concerned about how well small homes could meet changing family needs, including the need for children to have more privacy as they get older (a cited concern of Canterbury District Council) and the need to store items like prams, toys and bikes (a concern noted in London planning documents). The flexibility of homes for ageing populations was also a key concern for some, including North Norfolk and High Peak. North Norfolk states that ‘size and layout of new dwellings have an important influence on health and well-being as well as future adaptability and with the ageing population in North Norfolk this is an important consideration for the local plan’ (North Norfolk Local Plan 2020: 108).²² High Peak council also considered adoption of the space standard in relation to ‘changes in population structure’ and suggested that bigger homes were more likely to ‘provide flexible, accessible accommodation that is capable of future adaptation’ (High Peak Local Plan, 2016: 118).²³ Here the council notes that the optional technical housing standard for accessibility also helps ensure this adaptability.

In addition to bolstering resilience in the face of England’s ageing population, space standards have sometimes been seen by councils as beneficial in the context of the emerging trend for homeworking which accelerated following the COVID-19 pandemic. East Devon, Dacorum and Mole Valley are all councils claiming the rise of working from home since the pandemic is a justification for the adoption of space standards. For example, East Devon council writes that:

The COVID-19 pandemic from March 2020 increased the number of people working at home ... meaning the proportion of people who did any work from home in the UK increased from 27% in 2019 to 37% in 2020... it seems that a hybrid working approach (a mixture of both office and homeworking) is most likely to continue in the short-term future at least ... Sufficient internal space can facilitate this growing trend (East Devon Local Plan, Nationally Described Space Standards Evidence, 2022: 27–28).²⁴

In the *Greater London Authority Housing Standards Review: Evidence of Need* report, worrying climate projections are also given as a reason for better space standards. The report explains that ‘adequate ventilation is particularly important given the climatic projections that temperatures will increase in the UK’ and refers to the August 2003 heatwave that ‘provided a dramatic example of how vulnerable Londoners are to heat’ (given an estimated 600 Londoners died).²⁵ Adequate space, and in particular adequate ceiling heights, can, as the report outlines, improve air circulation and reduce internal temperatures. Here it is worth noting that the NDSS requirement for ceiling heights of at least 2.3 m was actually a reduction from the previous ceiling height standard of 2.5 m specified in the 2010 London Housing Supplementary Planning Guidance. This reduction was clearly considered a concern as the London Housing Standards Review states that the national standard ‘may not necessarily deliver the benefits associated with the Mayor’s current standard’, especially as ‘*minimum* space standards can often be interpreted by developers as *maximum* standards’.

The stability of the housing market

There are also economic reasons given for the adoption of NDSS by councils, who sometimes suggest that building larger houses can improve the strength of the market because they are more desirable to a wider range of potential buyers than smaller ones, creating certainty for developers. For example, Canterbury District Council argues that ‘smaller properties offer less value for money ... and consequently do not attract the widest range of potential purchasers’ (Canterbury District Adopted Local Plan, 2022: 193).²⁶ They also suggest, without presenting supporting evidence, that smaller properties are more likely to be badly maintained, adversely affecting the value of properties in the local area. The *London Housing Standards Review* similarly recognises the benefit of larger properties for attracting buyers and for bringing certainty to developers:

Space standards can actually help produce a more stable market. Standards provide certainty to developers so they can be sure of the floorspace to be required and the number of units a site could yield and factor this into the gross development values assumed for a site and the potential price paid for the land.²⁷

As suggested by our analysis in the section above, some councils appear to adopt space standards because neighbouring councils have. For example, Gravesham Borough Council, in a *Housing Studies Background Paper* deliberating adoption, note that neighbouring councils in ‘the same Housing Market Area’ have adopted the space standard, meaning that if Gravesham did not this would ‘result in market distortion and unintended consequences such as increased pressure to build higher densities and lower standards in the Gravesham urban area’.²⁸

Why do local authorities not adopt the nationally described space standard?

The above discussion suggests that local planning authorities justify the adoption of the NDSS with reference to a mixture of verifiable evidence concerning past housing trends as well as contestable claims about the potential impacts of small homes on the living conditions of future occupants as well as the community at large. Justifications for *not* adopting the NDSS by local councils are more difficult to ascertain given that the onus is on the councils who *are* adopting to demonstrate need, whereas not adopting comes with no requirement of justification. But some councils – for example, Rutland – have published discussions of space standards as a justification for non-adoption. In other instances, potential reasons for not adopting space standards are listed as counterarguments by local authorities in the context of their decision to adopt.

Mirroring the general opposition of housebuilders to the NDSS, increased housing costs are a cited reason for not adopting the space standard. Rutland Council argue that ‘an extra 10 m² could increase the build cost by £6,320 of which [*only*] 60% could be recovered by the developer through sale prices’, suggesting that space standards could increase costs for both developers and buyers.²⁹ The London plan likewise acknowledges that developers and housebuilders frequently contest space standards on the grounds of reduced profit, but concludes that the market has often not provided adequately-sized housing when left to its own devices, justifying intervention in the market in general terms.

Here, one specific argument against adopting the NDSS is that improved space standards will jeopardise the construction of affordable ‘starter homes’. For instance, in its 2025 assessment of housing needs, Rutland Council suggested that ‘genuine starter homes could [*if NDSS is introduced*] become scarce and increase in price, due to shortage of supply as well as due to increase in size’. On this basis they dismissed the need for adopting the NDSS:

On balance, it is suggested that the optional space standards not be adopted, due to the impact on the lower end of the housing market and due to the relatively low bedroom occupation levels in Rutland. Space standards would increase prices and affect the types of properties offered at the lower end of the market.³⁰

Another contradictory reason given by Rutland Council justifying for non-adoption was that standards are simply not required because of widespread under-occupation. They claim that only 3.8% of households in Oakham parish [*in Rutland*] have over 1.5 people per bedroom, compared with 4.4% in Melton Mowbray, 4.7% in Stamford, 9.7% in Peterborough and an England average of 8.9% - the implication being that requiring bigger rooms (and homes) is simply not necessary if people are living in houses with more rooms than they technically need anyway, with few signs of local overcrowding.

Havant Council’s ‘Specialist Housing Analysis’ report,³¹ however, differs from Rutland’s position by concluding that protecting starter homes is unnecessary given there is little demand for these homes in the borough, noting there is more demand for shared ownership properties because conventional 2 or 3-bed starter homes, typically designed for couples or young families, are out of reach for the average

income and savings of local first-time buyers. Considering demand for particular forms of housing, Havant conclude that the introduction of the space standard *is* justified, but will have negligible impact on housing affordability because there are few homes below the minima in the borough. This implies that building to the national space standard will have only a marginal impact on local build costs, and given this, they conclude there is no real reason *not* to introduce the space standard. Thus, in this instance, a precautionary logic prevails: it is not so much that a local need for improved domestic space is demonstrated, but the general arguments against the regulation of housing size (in terms of potential impact on housing affordability) are dismissed.

Conclusions

As the concept of inter-legality insists, different bodies of law exist at different scales, meaning regulation is a process ‘adopting elements of a dominant legal order, both national and international, and the frames of meaning that constitute these orders, into the practices of a local legal order’ (Hoekema 2005, p. 11). As we have described, this inter-legality is particularly important in the context of space standards. Though decisions about housing development are based on the recommendations of qualified planners – and approved by locally-elected councillors on planning committees, the authority given to local authorities to regulate housing size is delegated by national government, which offers guidance and definitional certainty so that the limits of local powers are clear. But herein lies the issue: the inherent variation between different housing markets in England means that guidelines and norms constructed at a national level do not always seem appropriate when dealing with the situations encountered in given localities. This means that discretion is inherent to the English planning system, with authorities often able to determine which national guidelines are relevant to their local situation.

As we have seen, the NDSS has been taken up with most enthusiasm in London and the Southeast, where small homes seem to be most numerous (and pressure to build more seems to be strongest), but also in the core cities of the North Midlands, North West and West Yorkshire. There are hence discernible regional differences in adoption rates, seemingly tied to population and housing density. Our analysis of Local Plans and Supplementary Planning Documents also found evidence of regional variation in reasons given for adoption. For example, working from home was referenced more often by councils in the south of England, because the South East and London have higher numbers of homeworkers (Nolan *et al.* 2022). Yet some reasons for adoption were relatively unique: London, for example, was the only council that discussed climate change as a motivation for improved space standards, which is logical given the ‘heat island’ effect evident in England’s largest city and concerns about excessive summer heat.

Moreover, some local authorities have yet to adopt the NDSS, and others took many years of deliberation before they conducted an assessment of housing needs to determine whether such powers were required. In some cases this appears to be because local authorities do not see sufficient evidence of homes getting smaller in the local area, but contradictorily do not wish to adopt the new standards lest this impacts on the viability of future development proposals. Yet if the majority of

previous developments have met the space standard, then it seems reasonable to assume the formal adoption of minimum space standards would not have much impact on the viability of future development proposals, suggesting local authorities have little to lose by adopting space standards. The regulation of home size in England is full of inconsistency: guidelines have been developed at a national level but are enforced (or not) locally; local authorities must demonstrate a need before adopting the guidelines, but some who find little evidence of sub-sized homes sometimes adopt the standard anyway; the reasons for non-adoption in some cases are the same as the reasons for adoption in others. The result is a variegated geography, with some local authorities having adopted the NDSS but their neighbours having not. In a context where pressures to build smaller are increasing, and the number of very small homes appears to be increasing even in situations where the NDSS has been adopted (Hubbard *et al.* 2024), this variability raises concerns about both the ability and willingness of some local authorities to promote minimal standards of living.

Overall, our analysis hence shows considerable variation in the conceptualisation, prioritisation and institutionalisation of space standards between English local authorities despite the introduction of the much-vaunted *national* standard in 2015. This is not exceptional: allowing local authorities to have discretion to operationalise space standards as they wish in their local plans is in keeping with the devolved power and expediency integral to the English planning system (Harris 2010). This also confirms Clifford's (2022) view that it is vital to understand planning regulation as decentred, and to see variegated local adoption and enforcement as an inevitable outcome of way planners respond differently to national government policy – not least in a context of austerity where planners and policymakers are generally time and resource-poor (Gray and Barford 2018).

The result is that a property considered inadequate in one city might be approved in another, raising the spectre of territorial injustice across different populations. So even if the overall aim of the NDSS is to have more people living in decent sized homes, there clearly needs to be constant and consistent monitoring of the number of homes across different housing types and tenures that meet the Nationally Described Space Standard in different localities and local authorities, ideally alongside additional scrutiny of the proportion of homes that lack gardens or local green space that might compensate for lack of indoor space. Time-pressed planning officers are unlikely to have time to monitor this, suggesting an enhanced role for 'big data' in assessment of housing adequacy, amenity and affordability. It is only through such monitoring, and associated measurement of residential satisfaction, that we will ultimately be able to draw conclusions about the efficacy of optional space standards as a mechanism for encouraging the development of comfortable, spacious and adaptable homes.

Notes

1. This paper also complements our work on the importance of planning appeals in upholding space standards: see Hubbard (2023).
2. Quoted at <https://www.designcouncil.org.uk/fileadmin/uploads/dc/Documents/no-more-toxic-assets.pdf>.
3. <https://www.architectsjournal.co.uk/news/riba-uk-homes-are-still-too-small>.

4. <https://www.gov.uk/government/consultations/housing-standards-review-consultation>.
5. *Technical housing standards – nationally described space standard*, MCLG, 2015. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1012976/160519_Nationally_Described_Space_Standard.pdf.
6. These standards do not apply to rooms in shared housing, only self-contained accommodation. However, in 2017, the government set out internal area requirements for bedrooms in houses of multiple occupation (HMOs): these stipulate a room for one sleeping adult must be at least 6.51 m², and one used by two sleeping adults cannot be smaller than 10.22 m². A room used by children ten years old and younger cannot be smaller than 4.64 m². See: <https://www.gov.uk/government/publications/houses-in-multiple-occupation-and-residential-property-licensing-reform-guidance-for-local-housing-authorities/houses-in-multiple-occupation-and-residential-property-licensing-reform-guidance-for-local-housing-authorities>.
7. In Wales, all social housing receiving government subsidy has to meet the 2005 *Welsh Government Development Requirements*, updated in 2021 to be consistent with the NDSS. In Scotland, space standards are enforced via the *Building (Scotland) Regulations 2004*, with guidelines for achieving these in the *Building Standards Technical Handbook*, 2022.
8. <https://www.lettingagenttoday.co.uk/breaking-news/2024/10/many-tenants-spend-over-half-take-home-pay-on-rent-new-stats/>.
9. See <https://www.pro-vision.co.uk/pd-and-space-standards/>.
10. Some local authorities are missing as they did not respond to the original Freedom of Information request from Özer and Jacoby, and we were unable to find further information through our subsequent analysis of online documents.
11. Paragraph: 020 Reference ID: 56–020-20150327 <https://www.gov.uk/guidance/housing-optional-technical-standards>.
12. Note not all local authorities detail the methods by which they calculate whether properties are under the NDSS minima, or are explicit about how many floorplans are considered.
13. <https://www.wakefield.gov.uk/media/jekbipkx/136-national-housing-space-standards-need-assessment-for-wakefield-october-2020.pdf>.
14. <https://www.blackpool.gov.uk/Residents/Planning-environment-and-community/Documents/Local-plan-2021/Space-Standards-and-Accessible-Homes-Topic-Paper-Final-Dec-2020.pdf>.
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29. <https://www.rutland.gov.uk/sites/default/files/2025-02/National%20space%20standards.pdf>.
30. Ibid.
31. <https://www.havant.gov.uk/media/7886/download?inline=>.

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