

Flat Britain

The urban density gap and how to close it

Maurice Lange, Anthony Breach and Luka Kovacevic
November 2025



About Centre for Cities

Centre for Cities is a research and policy institute dedicated to improving the economic success of UK cities and large towns.

We are a charity that works with local authorities, business and Whitehall to develop and implement policy that supports the performance of urban economies. We do this through impartial research and knowledge exchange.

For more information, please visit www.centreforcities.org/about

About the authors

Maurice Lange, Analyst m.lange@centreforcities.org

Anthony Breach, Director of Policy and Research a.breach@centreforcities.org

Luka Kovacevic, Researcher l.kovacevic@centreforcities.org

Acknowledgements

The authors would like to thank Claire Kent, Amy Burbidge, Garry Hall, Hanna Szymborska, Nicole Harrison, Chris Wilkinson, Paul Lecroart, David Joyce, Paul Rickard, Isabelle Hosford, Robin McGrenary, George Payiatis, Robert Kwolek and Tom Noble for their thoughts and guidance which helped immensely with the work.

The analysis, views and recommendations in the report are Centre for Cities' only.

Partnerships

Centre for Cities is always keen to work in partnership with like-minded organisations who share our commitment to helping cities to thrive, and supporting policy makers to achieve that aim.

As a registered charity (No 1119841) we rely on external support to deliver our programme of quality research and events.

To find out more please visit: www.centreforcities.org/about/partnerships

00

Executive summary

Britain needs more homes – and it needs them in its cities. The housing crisis, inefficient urban transport, and the underperformance of major urban economies all point in the same direction: higher-density urban development is essential for national prosperity.

Yet despite the clear economic and political case for densification, it remains unclear where British cities should grow more densely and which building types can deliver this at scale.

This report draws on a new Centre for Cities dataset to answer the question: *‘Where should British cities increase density, and how?’*

Findings

1. Britain faces a major urban density gap – especially in its biggest cities.

British cities are significantly less dense than comparable cities in France and Japan.

- **At least 2.3 million homes are missing from British cities** compared with their French and Japanese counterparts.
- **Half of the country’s urban density gap** arises in Britain’s 12 largest cities outside London.
- Among Britain’s biggest cities, the deficits are stark:
 - Manchester: **236,000 fewer homes** than Lyon
 - Birmingham: **228,000 fewer homes** than Fukuoka
 - Leeds: **250,000 fewer homes** than Marseille
 - Bristol: **31,000 fewer homes** than Nantes
 - Edinburgh is the exception, performing on par with Bordeaux and Kumamoto.
- London accounts for a quarter of the gap, despite being Britain’s densest city. It is far less dense than Paris and other very large international cities.

- If London's urban core (Zones 1 – 3) density matched Paris, **the capital would have 500,000 more homes.**

2. The urban density gap is widening big cities.

Over the last decade, slow construction in British urban cores has generated **more than one-sixth of today's total density gap** with France and Japan.

3. City centres alone cannot fix the problem.

More high-rise development is needed in city centres but on its own it will not close the density gap. Most of the deficit comes from low density neighbourhoods across the wider urban core, not from the central business districts.

4. Urban Britain is missing mid-rise housing.

The main issue is the absence of mid-rise (4 – 9 storey) apartment buildings across urban cores.

- High-rises and terraced houses deliver density in some UK areas, but there is limited scope to expand them widely.
- In France and Japan, mixed neighbourhoods of mid-rise flats and houses deliver much higher overall densities.

What needs to change?

1. Prioritise densification in Manchester, Birmingham, Leeds, and London.

Closing the national density gap depends on transforming the urban cores of Britain's largest cities.

2. Make it far easier to build mid-rise housing.

- Enable large-scale construction of mid-rise flats across big city urban cores.
- Support infill development and raise demolition and redevelopment rates in low density areas.
- Target improvements beyond the traditional city centre boundary.

3. Accelerate national planning reform.

- A flexible zoning system should be seriously considered to shift the burden of proof towards supporting densification.
- Current proposals – including Brownfield Passports, planning committees, and site-

threshold rules – require bold, pro-density reform and implementation.

- Reverse or remove anti-supply measures to support urban housebuilding.

4. Mayors and local authorities should focus on the entire urban core.

- Move beyond a narrow focus on ‘allocated sites’ which constrains densification.
- Deploy existing tools more effectively: Local Development Orders, Mayoral Development Orders, and strong design guides.

5. Expand public-sector intervention to unlock land and redevelopment.

- Densification is currently most successful on larger sites requiring public land assembly, remediation, or coordination.
- Government should prioritise the recent announcements on New Towns in Leeds and Manchester and provide more funding for brownfield remediation and development.

Britain cannot solve its housing crisis or realise the economic potential of its big cities without embracing urban density. This means building more homes – particularly mid-rise homes – across the urban cores of the big cities and London, supported by ambitious planning reform and active public-sector leadership.

01

Introduction

There are lots of reasons to think increasing the density of British cities would be beneficial.

First, Britain faces a severe housing shortage. Research has shown that compared to other Western European countries the UK is missing at least 4.3 million homes.¹ Adding homes in urban areas would help close the gap.

Second, larger, denser cities are generally more productive.² Higher densities bring more people within walking distance of public transport, increasing access to jobs and opportunities.³ More people sharing land, infrastructure and ideas increases specialisation and innovation in the local economy which increases productivity. As big British cities have a productivity gap compared to those in other G7 countries, increasing their density is a key lever for improving national economic performance.⁴

Third, there is a long-standing political consensus in Britain to make efficient use of urban land. The “brownfield first” approach requires a major role for densification to meet housing need, alongside any urban expansion that may be necessary.

These rationales are accepted by Government. Policymakers are introducing measures to make it easier to build in cities, such as the forthcoming ‘Brownfield Passports’ and the recent ‘emergency measures’ to help housebuilding in London. The previous Government implemented an ‘urban uplift’ of 35 per cent higher housing targets in urban local authorities and London.⁵

But urban housebuilding is challenging in Britain. Half of all suburban neighbourhoods in England add fewer than one house per year.⁶ Britain’s unusually restrictive and uncertain

1 Watling, S & Breach, A (2023) [The housebuilding crisis: The UK’s 4 million missing homes](#). Centre for Cities

2 On economic effects of density, see: Ahfeldt, GM & Pietrostefani, E (2019) [The economic effects of density: A synthesis](#). Journal of Urban Economics. 111. 93-107.

3 Rodrigues, G & Breach, A (2021) [Measuring up: Comparing public transport in the UK and Europe’s biggest cities](#). Centre for Cities

4 Breach, A & Swinney, P (2024) [Climbing the Summit: Big cities in the UK and the G7](#). Centre for Cities. North American cities have low density cities but are built around extensive urban motorway networks that are largely absent in Britain.

5 MHCLG (2025) [Brownfield Passport: Making the Most of Urban Land](#).

MHCLG (2025) [Support for housebuilding in London](#).

MHCLG (2021) [Government response to the local housing need proposals in “Changes to the current planning system”](#)

6 Breach, A & Magrini, E (2020) [Sleepy suburbs: The role of the suburbs in solving the housing crisis](#). Centre for Cities.

planning system appears to be a key factor that makes densification difficult.⁷

To understand where and how cities should densify, the report uses a newly constructed dataset which combines census, survey, administrative, and satellite data to compare housing density in cities in Britain, France and Japan at the neighbourhood level (see Appendix 1 for a full methodology). It explores how density varies within residential areas of the ‘urban core’ which covers most of the city but excludes the outer suburbs and urban expansions (see Box 1).

The report is organised as follows: Section 2 identifies and quantifies the ‘density gap’. Section 3 shows how this density gap has changed over time. Section 4 uses data and case studies of Birmingham, Lille and Sendai to pinpoint the housing typologies used in dense locations in each country. Section 5 sets out why policy makes densification challenging in British cities. Section 6 provides a counterfactual showing how many homes British big cities are missing compared to their international peers due to the density gap. Section 7 sets out what needs to change to increase densities in British cities.

Box 1: Defining and measuring density, and other definitions in this report

The question of how to measure density is not trivial. The report focuses on housing and its distribution in space by measuring ‘housing per residential built-up hectare’, or simply, ‘housing density’. It focuses directly on questions relating to residential built-form – how it differs within and between cities, how it has evolved over time, and the policy questions which affect it.⁸

The report does not address two related but separate issues:

- Whether land within cities not currently used for housing, such as industrial or commercial land, or parks or golf courses, should be used for housing.
- How housing stock is occupied, i.e. how unused rooms, second homes or short-term lets augment the relationship between housing and population density.

Both are important issues, with implications for the distribution of a city’s population, which is the main determinant of positive economic outcomes.⁹ But both issues are impacted by separate policy questions to those which determine housing density, so are outside the scope of the report.

Measuring ‘housing density’:

Housing density is measured in floorspace per hectare, to account for differences in house size within and between countries. Floorspace is estimated in every half-

⁷ Breach, A (2024) [Restarting housebuilding I: Planning reform and the private sector](#). Centre for Cities.

⁸ Housing per residential hectare is also a standard density measure used in the UK planning and housebuilding industries.

⁹ Duranton, G & Puga, D (2020) [The Economics of Urban Density](#). Journal of Economic Perspectives. 34, 2. 3-26.

For an interesting discussion of how density might be modelled from a person-perspective, see: Plane, DA & Mu, W (2021) [A people-based density perspective on physical/virtual world spaces in the microcosmic city](#). Land Use Policy. 111.

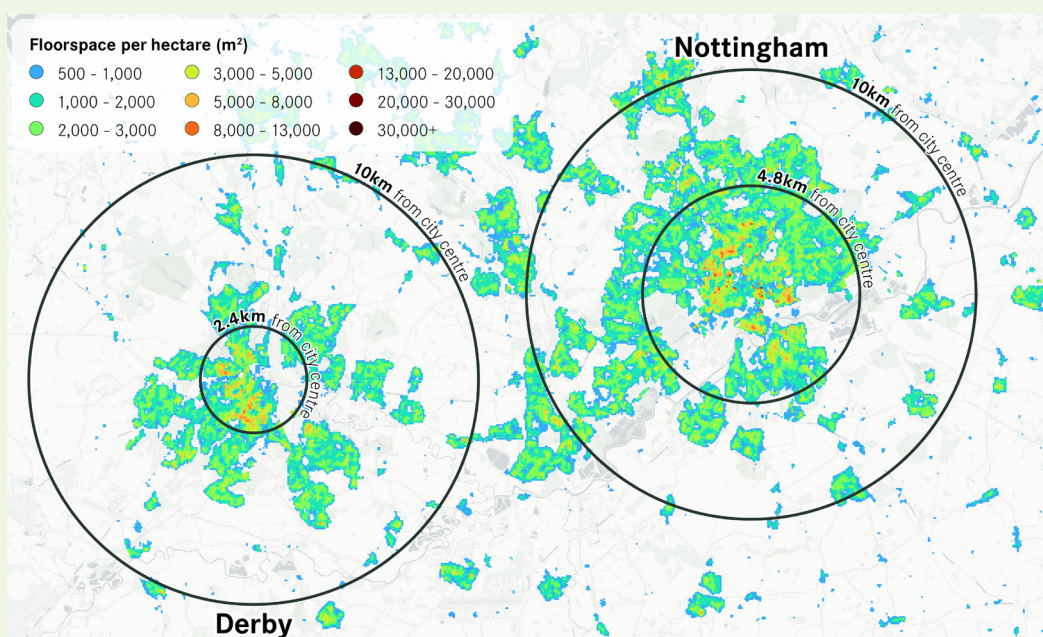
hectare square across the countries studied, using a combination of census, survey, administrative and satellite data. See Appendix 1 for the full methodology.

The charts in the report convert floorspace into ‘Equivalent British dwellings’ by dividing floorspace by the average British dwelling size at the given i) distance from the city centre and ii) city size.¹⁰ This conversion maintains comparability of numbers between countries but presents data in terms used by planners and housebuilders.¹¹

City sizes:

City sizes are defined as the number of people in their commuting area, using the OECD’s Functional Urban Area definition.¹² These are slightly larger areas than Centre for Cities’ Primary Urban Area definition, meaning population figures do not exactly match the Centre for Cities Data Tool. The city size categories are mega cities (10-20 million); very big cities (3.5-10m); big cities (0.9-3.5m); medium cities (0.3-0.9m); small cities (0.1-0.3m).¹³ The cutoffs put British cities in the same categories as in other Centre for Cities research.

Figure 1: Housing density in Derby (medium city, left) & Nottingham (big city, right), urban core threshold and 10km radius



10 For example, if the hectare square is between 2-3km from the city centre of a big city, and we identify 3500m² of floorspace in that square, then that floorspace total is divided by 85.3 (the average floorspace for dwellings located between 2 and 3km from the city centre of one of Britain’s twelve big cities) to give 41.03 equivalent British dwellings per hectare.

11 All maps and Figure 15 use floorspace per hectare and do not convert to equivalent units

12 Dijkstra, L, Poelman, H & Veneri, P (2019) [The EU-OECD definition of a functional urban area](#). OECD Regional Development Working Papers 2019/11.

13 There are no very big cities in Britain. Data on very big cities in Japan fits the trends observed in this paper on increasing density with city size.

The ‘urban core’ and the rest of the functional urban area:

The report focuses on the part of the city which is mostly housing – referred to as the ‘urban core’.¹⁴ This distinction enables a focus on the existing residential built-up area – where most housing development would involve regeneration or infill, rather than greenfield development. The urban core should not be confused with the city centre, or central business district, as it covers a much larger area of the city – as can be seen in Figure 1.

The urban core is defined consistently between cities in the same size category. The threshold is set at the radius distance from the city centre at which less than 70 per cent of the land in the average British city has housing identified on it. Urban core thresholds are: Mega cities: 13.6km; big cities: 4.8km; medium cities: 2.4km; small cities: 1.9km.

Country selection:

France and Japan were selected as the comparator countries for the research as they are similarly sized unitary G7 economies, with comparable national-level population densities, and have distinct built environments in their cities.¹⁵ Both countries were also the subject of Centre for Cities’ recent research on international planning systems.¹⁶

14 This distinction between urban core and the rest of the functional urban area is common practice in economic geography, though methodologies for defining it vary. Our method is analytically similar (though simplified by using circular thresholds and focused on housing prevalence rather than population density) to that used in: OECD (2013) *OECD Regions at a Glance 2013*, OECD Publishing.

15 Population densities in people per square kilometre: Britain: 283. France: 122. Japan: 337.

16 See: Lange, M & Kovacevic, L (2025) [Planorama: How the English planning system can learn from abroad](#). Centre for Cities. Germany, the other subject of that research, was not included as the neighbourhood-level data required is not available.

02

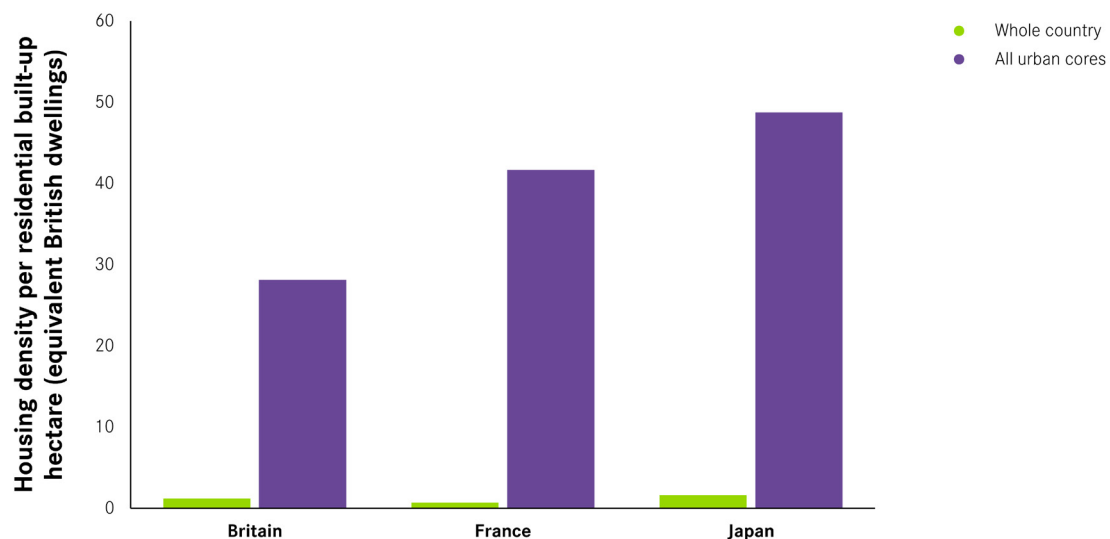
British cities have a density gap

Commentary often refers to Britain, and particularly England, as a dense country. At a national level this is broadly true – Britain is nearly twice as dense as France and much denser than the US, Canada and Australia.

When it comes to the density of cities, **British cities are clearly less dense than those in France or Japan**, as Figure 2 shows. While national housing densities are similar between Britain, France and Japan, average housing densities across the urban cores of French and Japanese cities are 48 and 73 per cent higher respectively than in British cities.¹⁷

Figure 2: Housing density in British cities in much lower than in France and Japan

Average housing density, whole country and all urban cores, in Britain, France and Japan, 2020/22



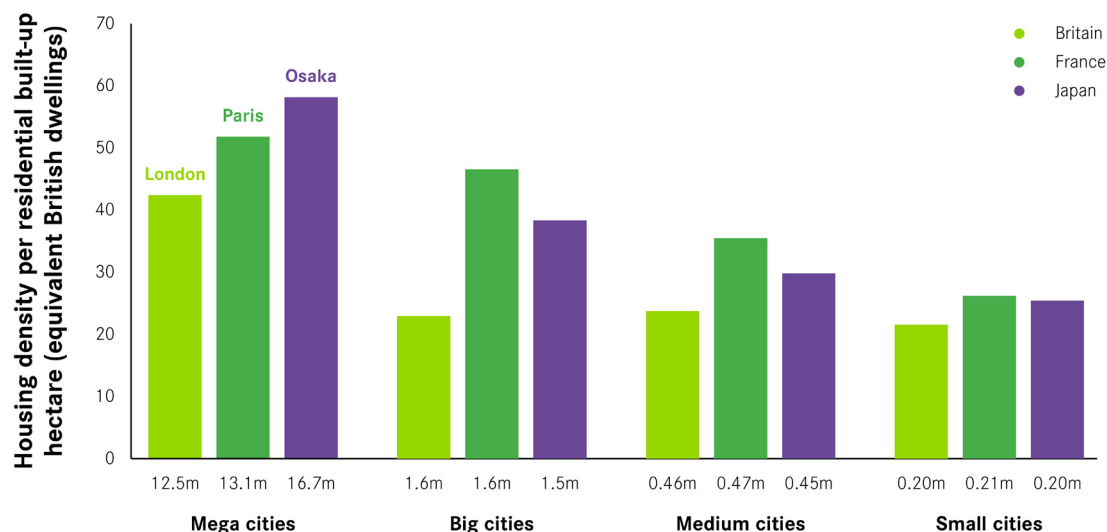
Sources: Centre for Cities international residential densities dataset (see Appendix 1)

¹⁷ This is calculated by taking the average housing density across all urban cores. This means this figure partly reflects the distribution of cities between city-size categories and urban core thresholds for the same, as well as density within cores. Tokyo's urban core is taken to be the first 20km from the city centre.

This pattern repeats across cities of all population sizes. Figure 3 shows that British cities are less dense than their peers of a similar sized population in France and Japan.¹⁸

Figure 3: The clearest density gap is in the UK's bigger cities

Average housing density in urban cores, by city size in Britain, France and Japan, 2020-22



Sources: Centre for Cities international residential densities dataset (see Appendix 1)

Figure 3 also shows that France and Japan conform to the urban economic theory that cities get denser as they get larger.¹⁹ But in Britain, this does not happen outside of London. British big cities have the same density as that of medium and small cities.

This means the biggest density gap with France and Japan is in Britain's big cities.

The urban cores of French big cities are on average twice as dense as British equivalents while Japanese cities are two-thirds denser.

Britain's biggest big cities have the biggest density gaps

Britain's biggest big cities like Manchester and Birmingham are no denser than smaller big cities like Leicester and Cardiff. As Figure 4 shows, this is very different to the French and Japanese experience, where bigger big cities (like Lyon) are denser than smaller big cities (like Nantes).²⁰

British big cities share near identical densities and have the built form of large towns. This

¹⁸ Note that the patterns for France and Japan differ between Figures 2 and 3. Individually, big, medium, and small French cities are denser than their Japanese equivalent (Figure 3). But as Tokyo, Osaka and Nagoya are so large and dense, and there are more other big cities in Japan, national average housing densities for Japanese urban cores are higher than across French urban cores. This shows the importance of looking by city and within cities to understand patterns of urban density.

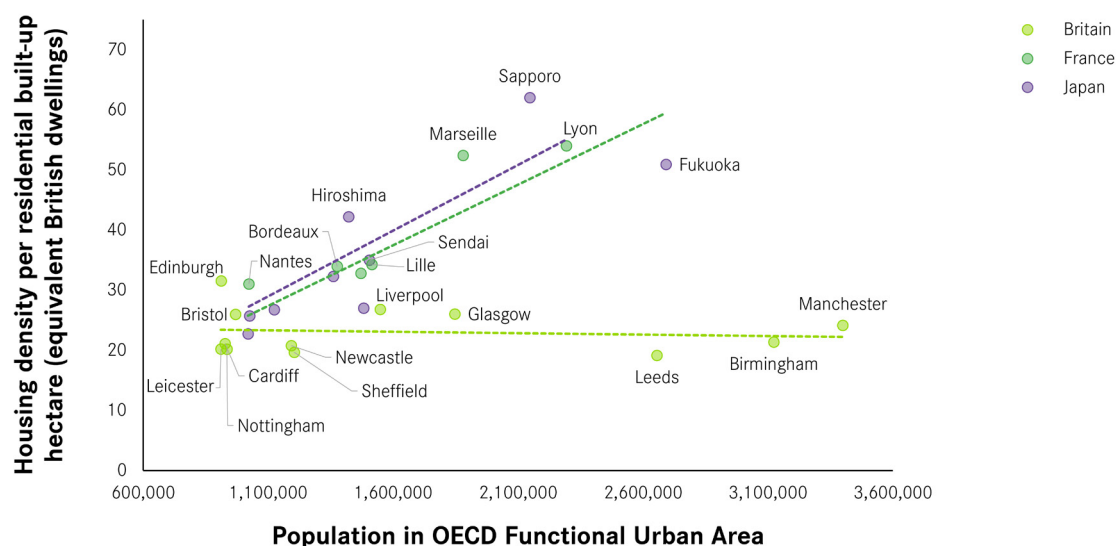
¹⁹ Urban economic theory predicts that density should increase toward the city centre, and that larger cities should be denser than smaller ones at the same distance from the city centre, holding travel costs constant. See: Duranton, G & Puga, D (2015) [Chapter 8 – Urban Land Use](#) – in Duranton, G, Henderson, VJ & Strange, WC (2015) *Handbook of Regional and Urban Economics*, Vol 5. P467-560.

²⁰ The 'big' city threshold is to a degree arbitrary and using Nottingham as the threshold means the fact there are more French and Japanese medium cities just below the threshold is not reflected in Figure 4. If cities with FUA population over 600,000 are included in this same chart, the trendlines for Japan and France would shift upwards, leaving Edinburgh as the only British city denser than the French and Japanese trend given its population size. Bristol moves below both the French and Japanese trendline, and the British trendline also shifts downward slightly.

replicates previous Centre for Cities research which found a similar pattern using different methods.²¹

Figure 4: The density gap is largest in the biggest big cities

Average housing density in urban core vs FUA population size, big cities in Britain, France and Japan, 2020/22



Sources: Centre for Cities international residential densities dataset (see Appendix 1)

There is a density gap across all parts of the urban core

The density gap is concentrated in British big cities' urban cores – the inner-city areas as distinct to the outer suburbs and commuter towns.

The maps in Figure 5 show density by residential neighbourhood in selected big cities in Britain, France and Japan.²² Across the inner circles containing the urban cores British cities are clearly less dense.²³

British cities do have 'spikes' of higher density housing within their urban cores. Manchester city centre's high-rises, and dense areas of post-war social housing and terraced housing can be seen in the orange and red areas in Figure 5. But most housing in their urban cores is lower density.

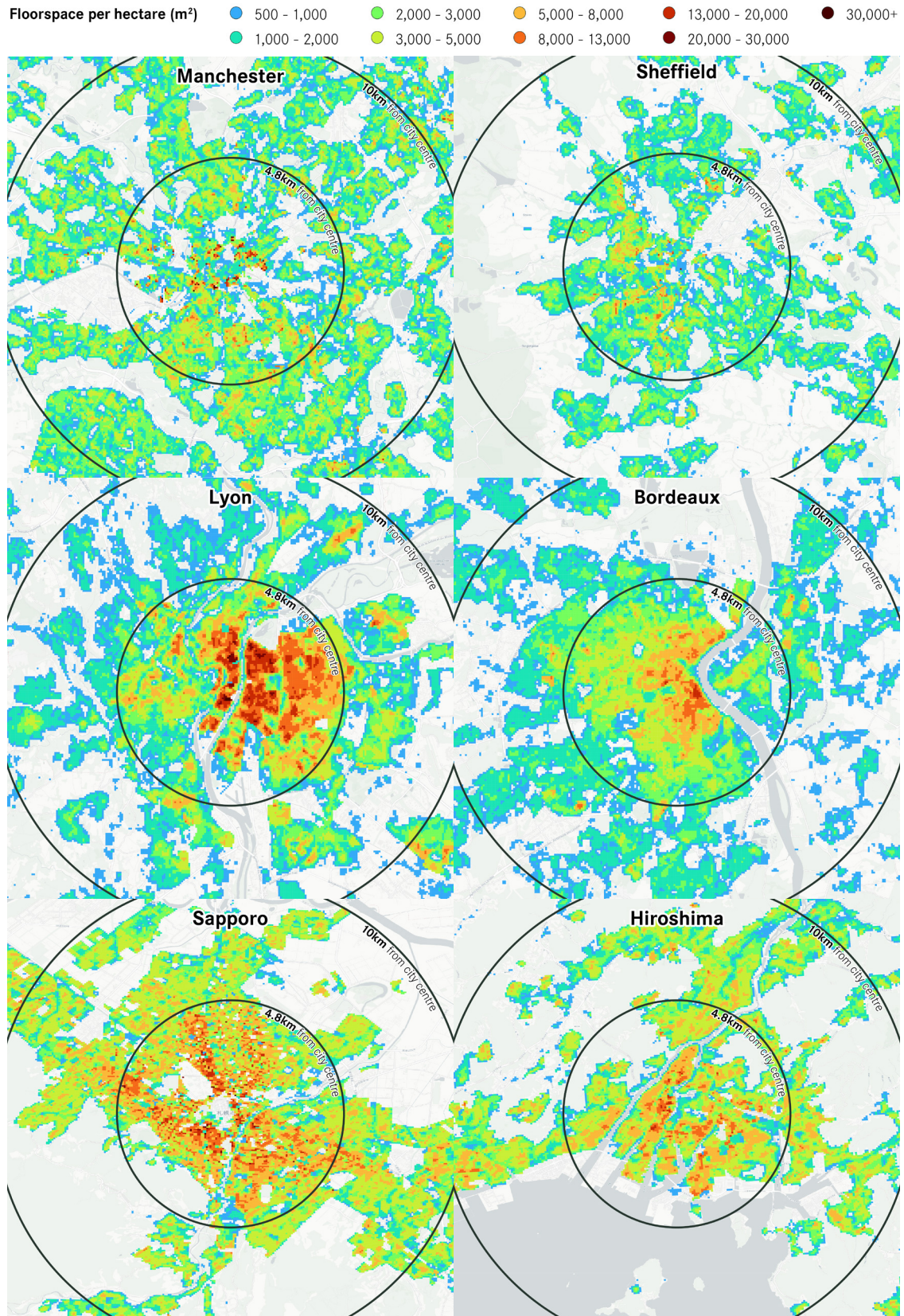
French cities, in comparison, have very dense city centres and are denser across most of their urban core, but have much lower density outer suburbs. Japanese cities do not have the concentrated density seen in France, but they are still denser than British cities, rarely having lower than 'medium' density (yellow) areas across their urban core. The built form which comprises this density is explored in Section 4.

21 Rodrigues, G & Breach, A (2022) [Mapping the 30-minute city: How easily can people reach the city centre? Ten case studies comparing the public transport networks and urban form of UK and Western European cities](#). Centre for Cities.

22 This data will be released for all cities by Centre for Cities in a forthcoming data tool.

23 The sea and rivers, large parks, exclusively commercial and industrial areas, countryside, and mountains are depicted as blank and excluded from these maps and all analysis in this report.

Figure 5: High and medium densities are rare in British big cities, but commonplace within big cities in France and Japan, selected cities

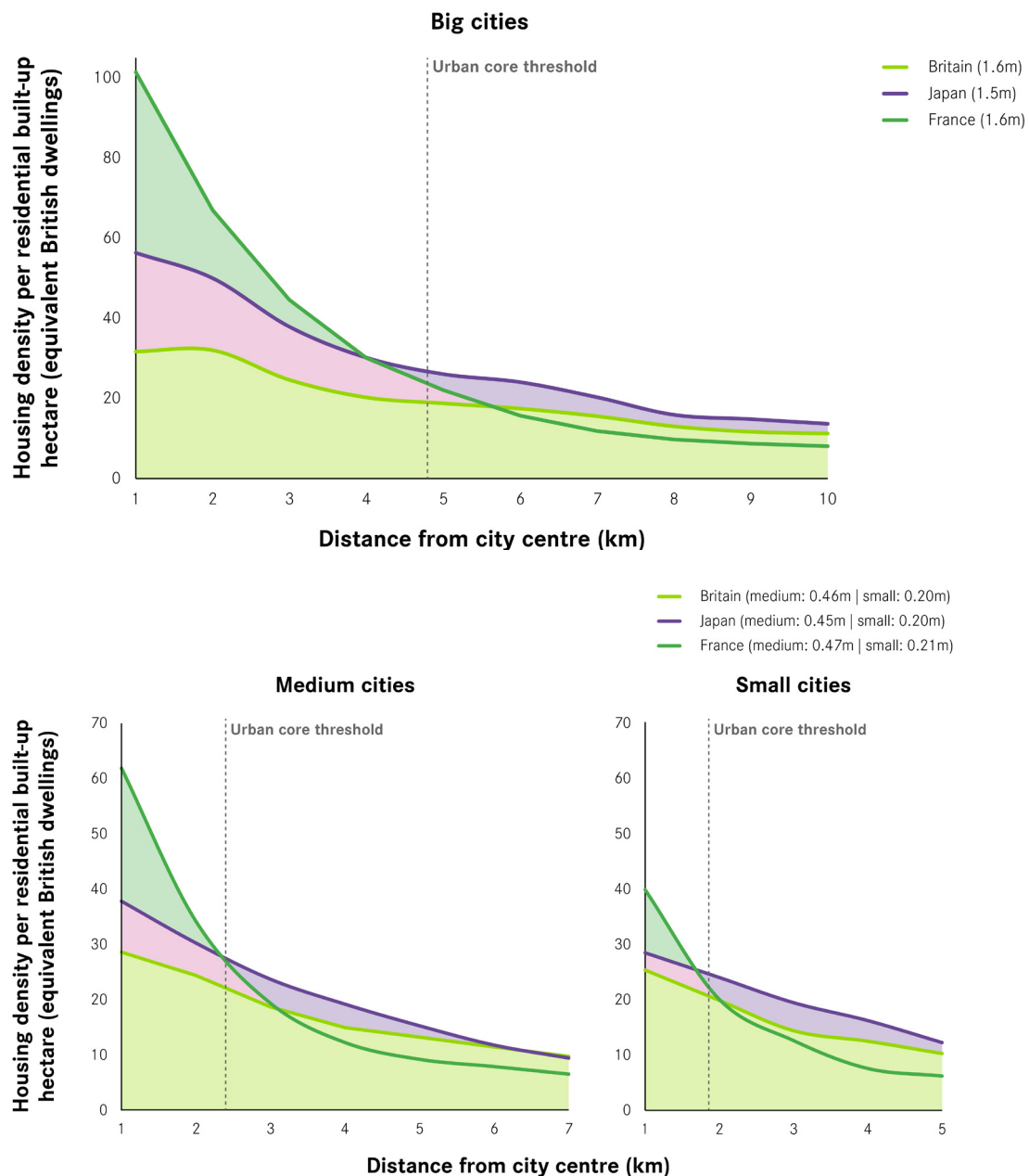


Sources: Centre for Cities international residential densities dataset (see Appendix 1)

The data used to construct the maps is presented in chart form in Figure 6 to show the ‘density gradient’ – the average density of residential areas at different distances from the city centre – for each city size in each country.

Figure 6: British cities are flatter than their international peers

Average residential density by distance from city centre, 2020/22



Sources: Centre for Cities international residential densities dataset (see Appendix 1)

Locations closer to city centres tend to be more valuable and worth sharing among more people. This means the density gradient should slope downwards from left to right. As Figure 6 shows, while this is the case for French and Japanese cities, British cities have a much flatter density gradient, because their urban cores are much less dense.

Big, medium and small cities have similarly steep slopes within each of the three countries. **But Britain's big cities have the biggest density gaps** due to a low 'peak' and low density across larger urban cores. This also extends to London in comparison to other mega cities (see Box 2).

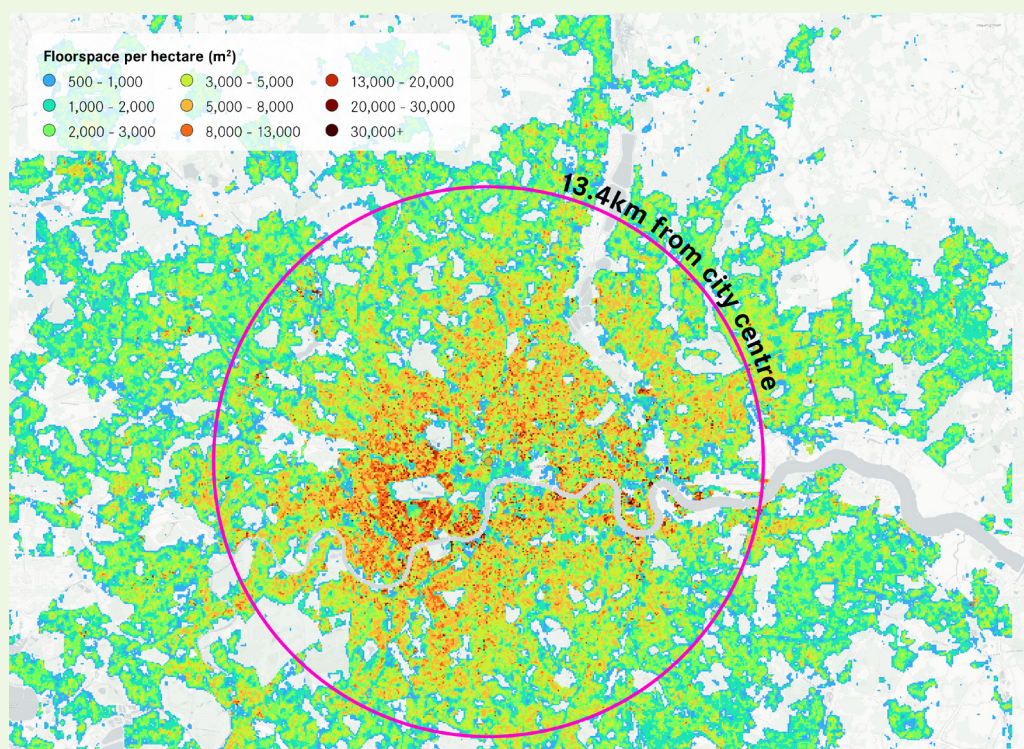
While British cities have low density across their urban cores, they are denser further out, particularly compared to French cities. This implies that, while the outer suburbs and urban extensions might be able to achieve higher densities in some locations (e.g. near stations), their potential for widespread densification is likely limited.²⁴

Box 2: Density in London

London is the densest British city by far. Its urban core is twice as dense as the average British big city urban core. But, as Figure 7 shows, higher densities in London are relatively 'patchy', with much of London's urban core covered by low to medium densities (greens and yellows), interspersed with higher-density building (oranges and reds).

The average produced by this mixture of densities places London near the bottom of the 'mega cities' group, as Figure 8 shows.

Figure 7: Housing densities in London are high for a British city, but high densities are patchy

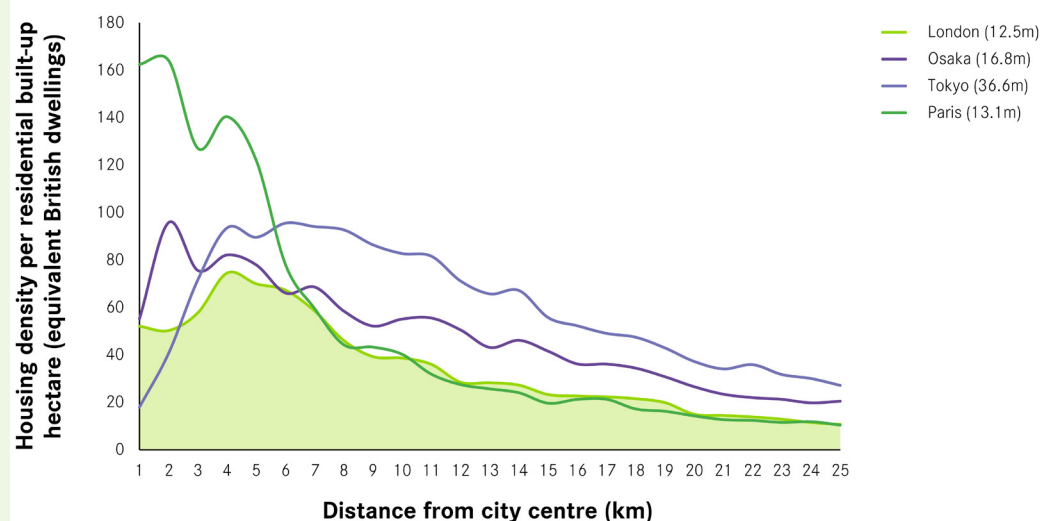


Sources: Centre for Cities international residential densities dataset (see Appendix 1)

²⁴ The density of new urban extensions and transit-oriented development will be studied in a second paper drawing on this dataset, to be published next year.

Figure 8: London is low density by mega-city standards

Mega cities and Tokyo average residential density by distance from city centre, 2020/22



Sources: Centre for Cities international residential densities dataset (see Appendix 1)

The densification of the capital's urban core is an important local and national policy goal. Addressing the housing costs of the country's most productive big city and allowing it to grow matter for everyone, not just Londoners.

French and Japanese cities offer different routes to achieving higher densities. London could be more like Paris, adding significant density across Zones 1 and 2, or it could be more like Osaka, spreading additional density across its urban core and further out. Evidence from Croydon (discussed in Box 5) suggests the latter option alone is economically possible but politically challenging, and it would likely take city-wide coordination through the new London plan to set-out a consistent approach to increasing density in London.

City centres are less important than the wider urban core

The difference in density gradients is at its greatest in city centres and the 1 km immediately adjacent to them, as Figure 6 shows. But this is not where the density gap – where the most homes are missing – is largest. City centres have a small land area that can only ever have a limited number of homes.

Compared to the average French city, the average big city in Britain is missing 23,000 houses in the first kilometre band around the city centre. The gap increases to 33,000 in the second kilometre and 32,000 in the third. Even though the difference in average density is smaller in these bands, because they have a much larger land area than the city centre it means they are missing more homes.²⁵

²⁵ Japanese equivalents are 9,000, 19,500, and 24,000. These lower densities are accompanied by denser neighbourhoods than France beyond kilometre three, and further beyond the urban core.

This means the most important drivers of the density gaps are the low densities of the wider urban core, up to 5 kilometres from the city centre, rather than the city centre itself.

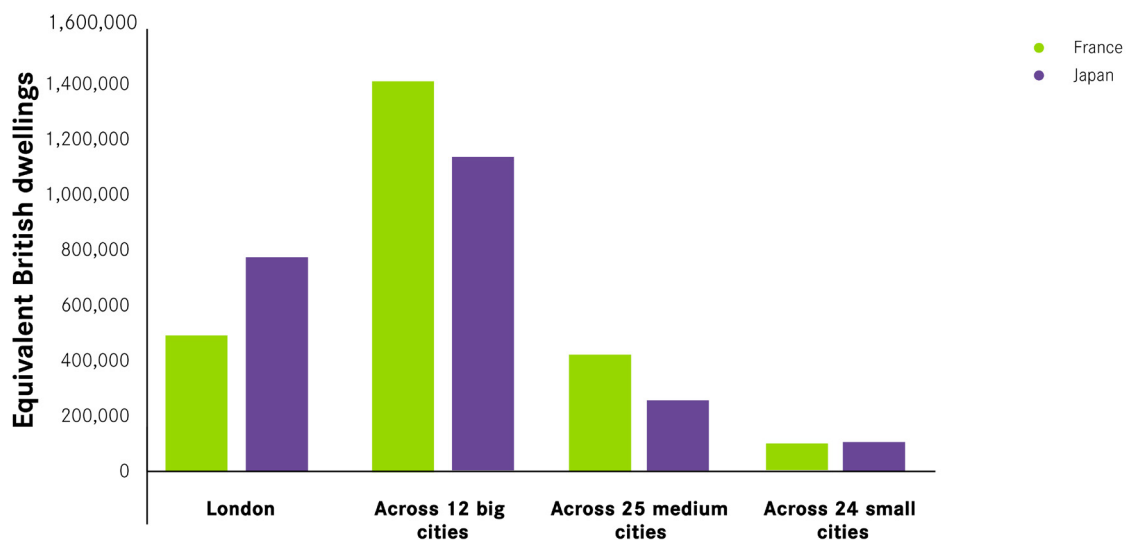
Britain's cities are missing over 2 million homes across their urban cores

If the urban cores of the 62 biggest British cities and large towns were as dense on average as comparable French or Japanese cities, they would have 2.4 or 2.3 million more homes, respectively.

Most the missing homes are in Britain's biggest cities outside the capital. As Figure 9 shows, even though there are only 12 big cities, compared to 25 medium sized cities and 24 small cities, they are responsible for 58 per cent of the gap with French cities (1.4 million homes), and 50 per cent of the gap with Japanese cities (1.1 million homes).

Figure 9: Over one million homes are missing from the urban cores of Britain's big cities

Total number of additional homes if built at the density of similar sized cities in France or Japan



Sources: Centre for Cities international residential densities dataset (see Appendix 1)

London also has a large density gap. Its urban core is missing 500,000 homes compared to Paris and almost 800,000 compared to Osaka.²⁶ The capital's low densities are a fifth of the national gap with French cities, and a third of the national gap with Japanese cities. But most of Britain's low-density urban neighbourhoods are not in London.

As the density gap is biggest in Britain's big cities, the rest of the report mostly focuses on them.

²⁶ Note that the sample size of comparison cities for big, medium and large cities is larger than it is for London, which we compare to just one other mega city for each country. Ideally this comparison would be made amongst more mega-cities to be more confident in the 'missingness' of London's homes, but data limitations mean we cannot do this.

03

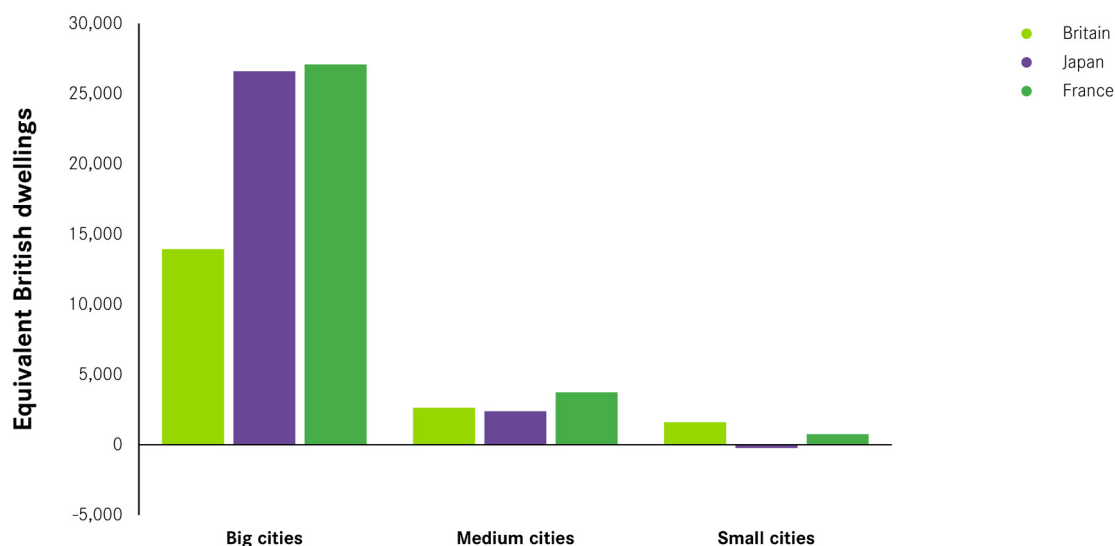
The big city density gap is growing

One response to the density gap in Britain's big cities is that it is historical – French and Japanese big cities were built more densely in the past. And if British cities are now building more homes in their urban cores, the density gap will disappear over time.

The opposite is true. The density gap is getting wider. As Figure 10 shows, British cities built far less in their urban cores than French and Japanese cities during the 2010s.

Figure 10: The density gap is getting wider, particularly in the big cities

Average increase in density 2010/11–2020/22, in urban cores, per city, by city size, in Britain, France and Japan



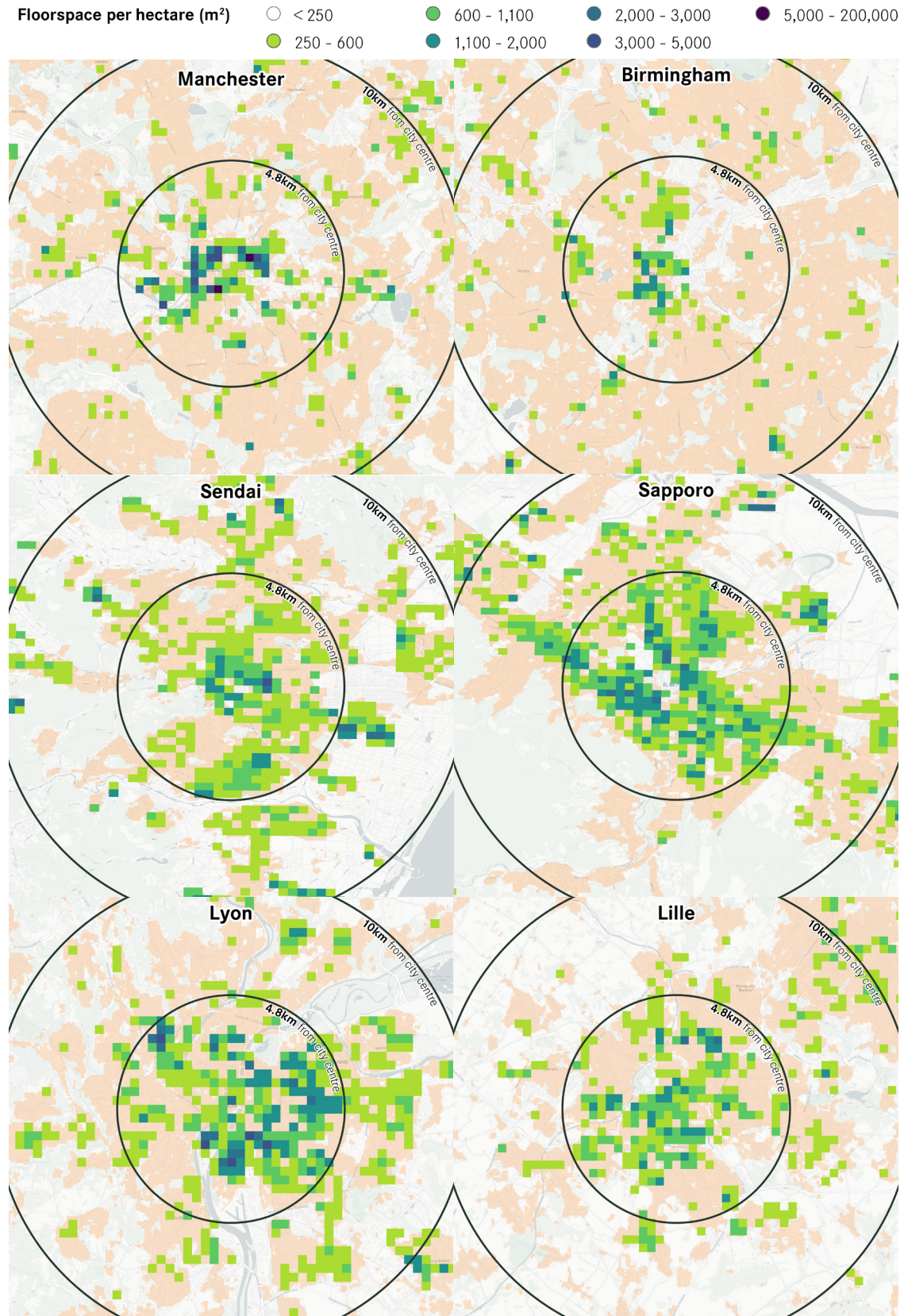
Sources: Centre for Cities international residential densities dataset (see Appendix 1)

More than a sixth of the big cities' total density gap has appeared over the past decade due to these low housebuilding rates.

The relatively slow densification of Britain's big cities aligns with other evidence suggesting that housebuilding in Britain's cities is particularly difficult compared to greenfield

Figure 11: British big cities build in far fewer neighbourhoods

Net change in average residential density, 12 hectare squares, selected cities.



Sources: Centre for Cities international residential densities dataset (see Appendix 1)

development, and that responsiveness of building rates to price signals is lower than in other countries.²⁷

Beyond the city centre, the built form of British cities is dormant

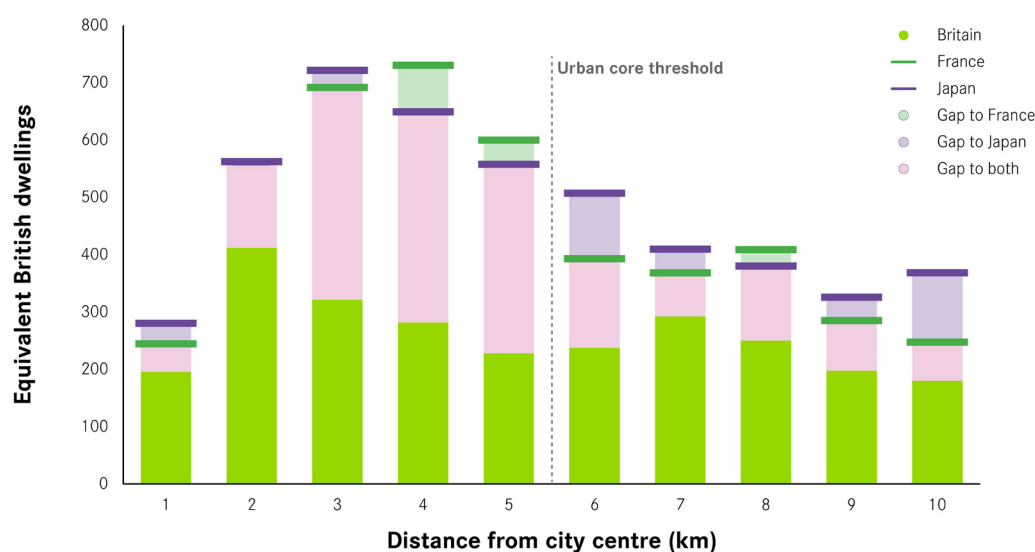
The density gaps in Britain's big cities are widening because far fewer neighbourhoods within the urban cores are building homes compared to French and Japanese cities. As the distribution of green and blue squares in Figure 11 shows, the big increases in density in British cities are concentrated within city centres, often where major public sector led urban regeneration has taken place.

Across the wider urban core, which has the biggest number of missing houses, most neighbourhoods have built almost nothing – the pink residential built-up footprint is free of any green or blue squares which indicate increasing densities.²⁸ This contrasts to the patterns seen in Japan and France, where the largest, fastest growing big cities (Lyon and Sapporo) have added housing across their entire urban cores – green and blue squares cover most of the urban core residential footprint.

The different levels of average net change in density by distance from the city centre and by country are shown in Figure 12. British city centres have built almost as much as those in Japan and France, but between kilometres two and six the average French and Japanese big city has been building roughly twice as many homes, increasing to almost three times the British level in the fifth kilometre band.

Figure 12: British urban cores build much less than their peers

Average increase in number of homes by distance from city centre, big cities, in Britain, France and Japan (equalised to British urban footprint), 2010/11-2020/22



Sources: Centre for Cities international residential densities dataset (see Appendix 1)

27 Drayton E, Levell P, and Sturrock D (2024), [The Determinants of Local Housing Supply in England](#), Institute for Fiscal Studies, IFS Working Paper 24/35

28 This corroborates Centre for Cities research on UK cities' 'sleepy suburbs', which found that over half of all LSOA areas in UK cities had added fewer than 1 additional home per year between 2011 and 2019.

Breach, A & Magrini, E (2020) [Sleepy suburbs: The role of the suburbs in solving the housing crisis](#), Centre for Cities. Similar patterns are observed in other countries with housing shortages in cities – see: Romen, I (2018), [America's New Metropolitan Landscape: Pockets Of Dense Construction In A Dormant Suburban Interior](#), Buildzoom (Accessed November 2025)

British big cities have lots more old housing because they build less

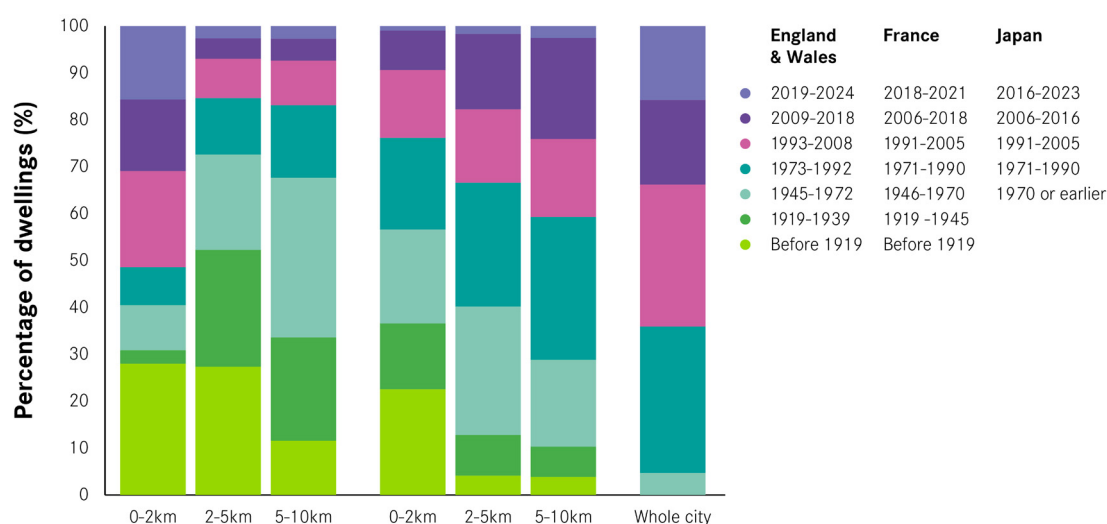
While detailed data on changes to density is not available before 2010, housing stock age data suggests a longstanding trend of Britain's urban residential areas not changing once they are built.

The housing stock in British big cities is much older overall than in similar cities in France and Japan, as shown in Figure 13. Close to their city centres (0-2km), British housing stock is younger than that in French cities, reflecting recent city centre building seen in Figure 11's maps. But further out in French cities much more of their stock was built in the 1970s-1990s and 2010s.²⁹ Housing is especially old in British big cities in the 'rest of urban core' (2 – 5km), where over half of all stock was built before 1939, compared to just 10 per cent in French big cities.

Granular data is not available for Japan, but city level data shows that the entire built form is the product of more recent building than in either France or Britain – very few buildings survive from before the 1970s.

Figure 13: British cities are stuck at their historic densities

Age of housing stock, by distance from city centre, big cities in England & Wales, France and Japan



Sources: [ONS](#), [INSEE](#), [e-Stat](#)

The lack of change seen in British cities is linked to extremely low demolition rates, as discussed in Box 3. More frequent demolition of older housing stock enables more newer, denser housing to be added in the urban core.

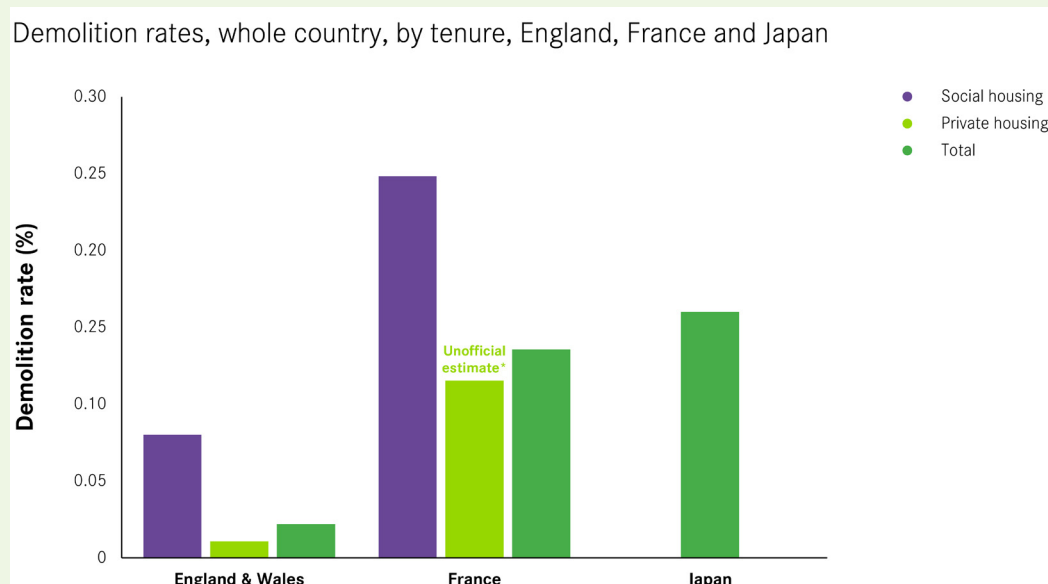
²⁹ Note slight differences in time periods for stock age between countries. Recent French building appears low because it only covers three years from 2018 to 2021 – the majority of building captured in the density change data in Figures 10-12 is reflected in the 2006-2018 time period. Note also that while density change data presented above is in absolute terms, stock age is presented in relative terms. Where French and Japanese cities are already denser (near their city centres), even if they have built more than British cities, it will appear as a smaller proportion of overall stock because lots of housing already exists in that location. British city centres have lots of young housing stock, starting from a very low base.

Box 3: Achieving denser urban cores require more demolition

Increasing density in existing residential areas can be achieved through infill development and extending existing buildings, though the land available to do this inherently reduces over time. The other way to densify residential areas is by knocking down existing buildings and replacing them with new ones.

Demolitions are much less common in England than in France or Japan, as shown in Figure 14.³⁰ While comparable city-level data is not available, Figure 14 shows national level total residential demolition rates are eight times higher in Japan than they are in England. France demolishes private housing at roughly ten times the rate of England.³¹

Figure 14: France and Japan demolish more houses than England and Wales



Sources MHCLG Table 120, [Union Habitat](#), [SDES](#), [e-Stat](#)

England's low residential demolition rate is part of the reason why its urban stock is so old. Demolition rates will need to increase if densities are to increase in the urban cores. This is especially the case for private demolitions, as much of the existing low-density stock in British urban cores is privately owned.

As discussed in Section 5, there are policy reasons why demolition is rare in British cities, but as evidence from Croydon (Box 5) suggests, the recycling of residential land can be made easier.³²

30 This was not always the case – large-scale clearances of poor-quality stock were a key part of efforts to improving housing conditions in the post-war period – but demolitions have declined continuously since then. It is worth noting that demolitions are currently one-third of what they were even twenty years ago.

Lin, X (2024) [Starting again: Demolitions in the post-war period and lessons for today](#). Centre for Cities

31 Figures for private housing demolitions in France are estimates derived from land taxation records. See: Verley, G (2025) [Entre apparitions et disparitions, quel est le poids de la restructuration du parc ancien sur l'offre totale de logements?](#) Politique du logement.

Also note that higher social housing demolition rates in France are matched by much higher new build rates – which added a net average of 42,000 new social homes per year over the last 10 years, accounting for demolitions and sales to residents. See: L'Union Sociale Pour L'Habitat (2024) [Les Hlm en chiffres. Edition 2024](#).

32 It is worth noting that there are legitimate reasons to prioritise refurbishment or extending existing buildings over demolition and replacement to minimise carbon emissions in some circumstances. However, given that whole-life cycle carbon emissions tend to be lower for those living in cities (and often for new build homes vs older ones), there is an environmental argument for demolition and densification, especially when the net gain in housing is large. For discussion of environmental case for building at higher densities in cities, see: Avison, Z & McKelvie, E (2023) [Build up: The environmental case for new homes in sustainable locations](#). Green Alliance

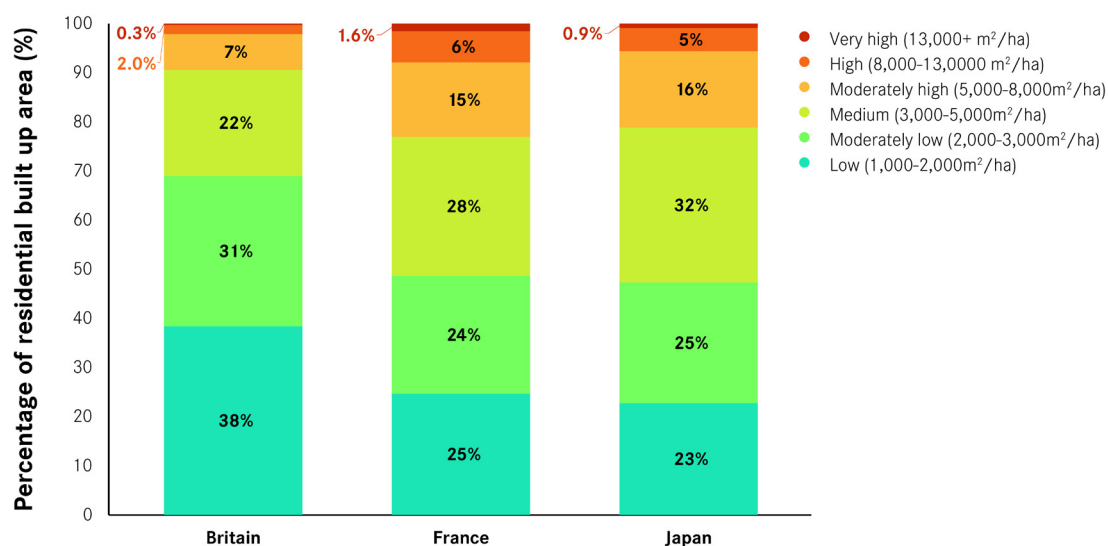
04

British cities need more mid-rise housing to close the density gap

French and Japanese big cities' urban cores are more similar to each other than they are to British big cities. Figure 15 shows that just over half of urban core neighbourhoods (51 and 53 per cent respectively) in French and Japanese cities are 'medium' density or higher.³³ By contrast, less than a third (31 per cent) of neighbourhoods are in Britain's big cities.³⁴

Figure 15: Most residential areas in British cities are built at low densities

Percentage of residential built up hectares built at low and high densities, big city urban cores, in Britain, France and Japan (2020/22)



Source: Centre for Cities international residential densities dataset (see Appendix 1)

The moderately high- and high-density neighbourhoods (the two orange colours in Figure 15) together account for over two thirds of the density gap in each country's urban cores

³³ The biggest difference is that French urban cores have twice as many very high density neighbourhoods as Japanese urban cores – but this is from a very low base and concentrated in the city centre.

³⁴ The word 'neighbourhoods' is used for communication purposes here. Figure 15 shows proportion of half-hectare squares that are a given density.

compared to their British peers. Despite their differences (notably twice as many very high-density (red) neighbourhoods in French urban cores than in Japanese urban cores) French and Japanese cities offer a shared lesson for what is missing from the built environment of British cities.

The following compares three different typologies of built form in moderately high to very high-density neighbourhoods – high-rise buildings, neighbourhoods with dense street patterns, and mixed suburban neighbourhoods – to show their different roles and limitations, and what British cities are lacking.

High-rises do not drive high density in France or Japan

Figure 16 shows three high-rise buildings in Birmingham, Lille and Sendai – in this case, more than 12 storeys high. These can be found in some of the very densest (red) neighbourhoods in each city, but they are not particularly common in any of the big cities in the three countries.

Their relative rarity in French and Japanese cities suggests that it is not a lack of high-rise buildings that is driving most of the density gap with British cities.

In Britain, high-rise buildings are a larger component of new supply in big city centres. Despite Britain's average low densities, they often seem to reach heights that are uncommonly high in comparison to French and Japanese high-rise buildings. This makes sense – if the rest of the urban core is not providing new housing, the locations that can build must overcompensate and provide as much density as possible.

Terraced housing is dense but has limits

Terraced housing is a typical typology in Britain and appears in France to a lesser extent. In both countries, it produces urban areas of high density. Figure 17 compares three neighbourhoods with a dense street pattern and smaller dwellings.

More terraced housing would lead to denser British cities. But there are two barriers to achieving this.

First, British terraced houses 'cap out' at relatively low potential density. The densest terraced neighbourhoods in Britain are comparable to dense neighbourhoods in France and Japan, but they typically achieve this with small, two-storey houses with back-to-back gardens.

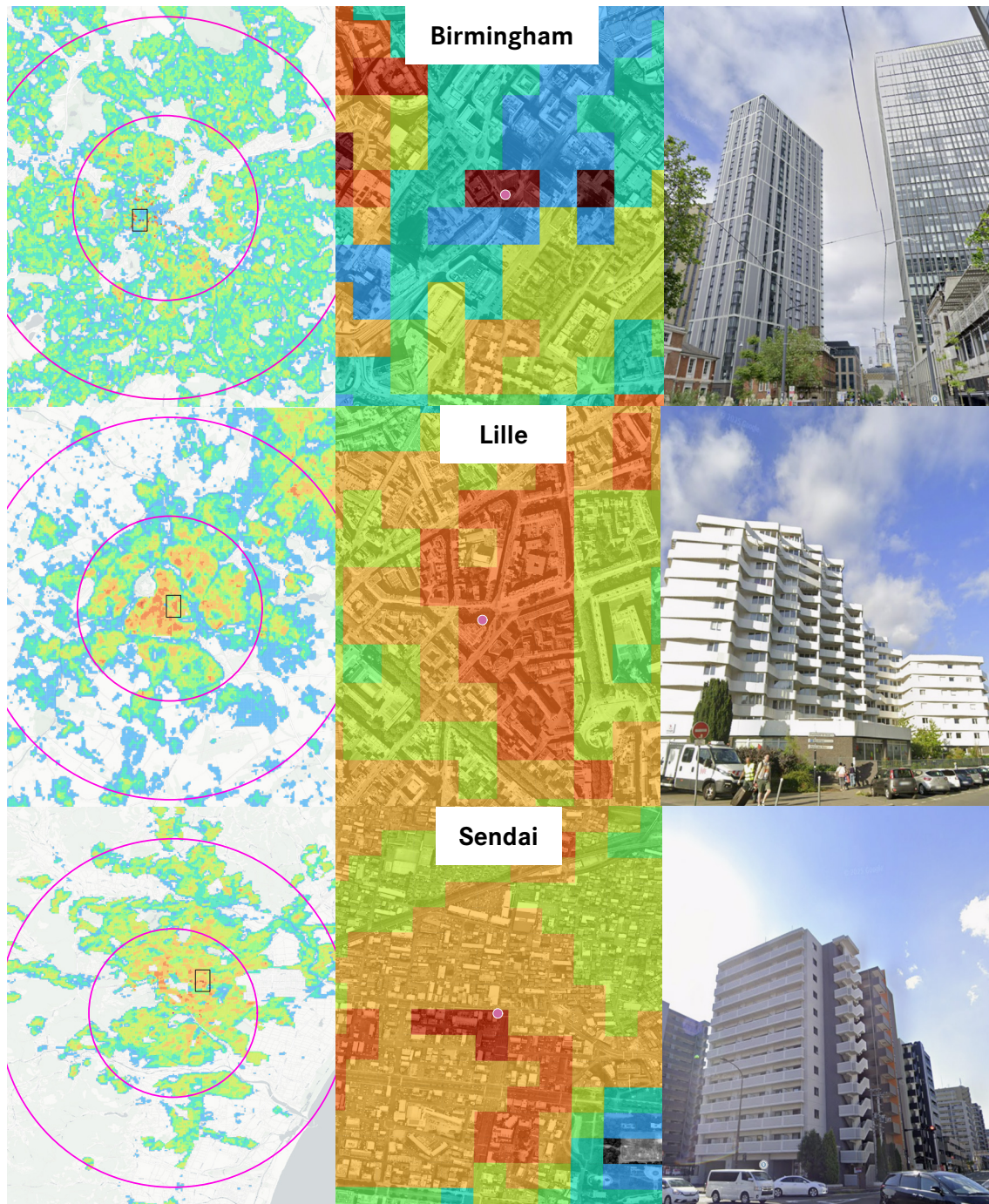
In France, terraced neighbourhoods tend to have a much wider mix of heights, ranging from two to five storeys. This taller terraced stock is actually a type of small apartment building.³⁵

Second, most terraced housing in Britain and France was built before the widespread adoption of cars. Terraced housing creates a problem for cars as higher densities quickly increase demand for parking. The need to provide separate parking areas presents a sharp land-use trade-off as terraced housing relies on a dense street pattern to achieve its high densities.³⁶

³⁵ Examples of British terraced housing doing the same are very rare. See: Lange, M (2024) Designing density: How to increase the supply of housing in existing residential areas. Centre for Cities.

³⁶ This does not mean terraces plus parking isn't possible – further out from the urban core and to achieve higher densities in low-rise towns, it is a reasonable way to boost densities. See: Homes England (2025) Car Parking & Cycle Storage: What Works Where.

Figure 16: High rises in British cities are very dense



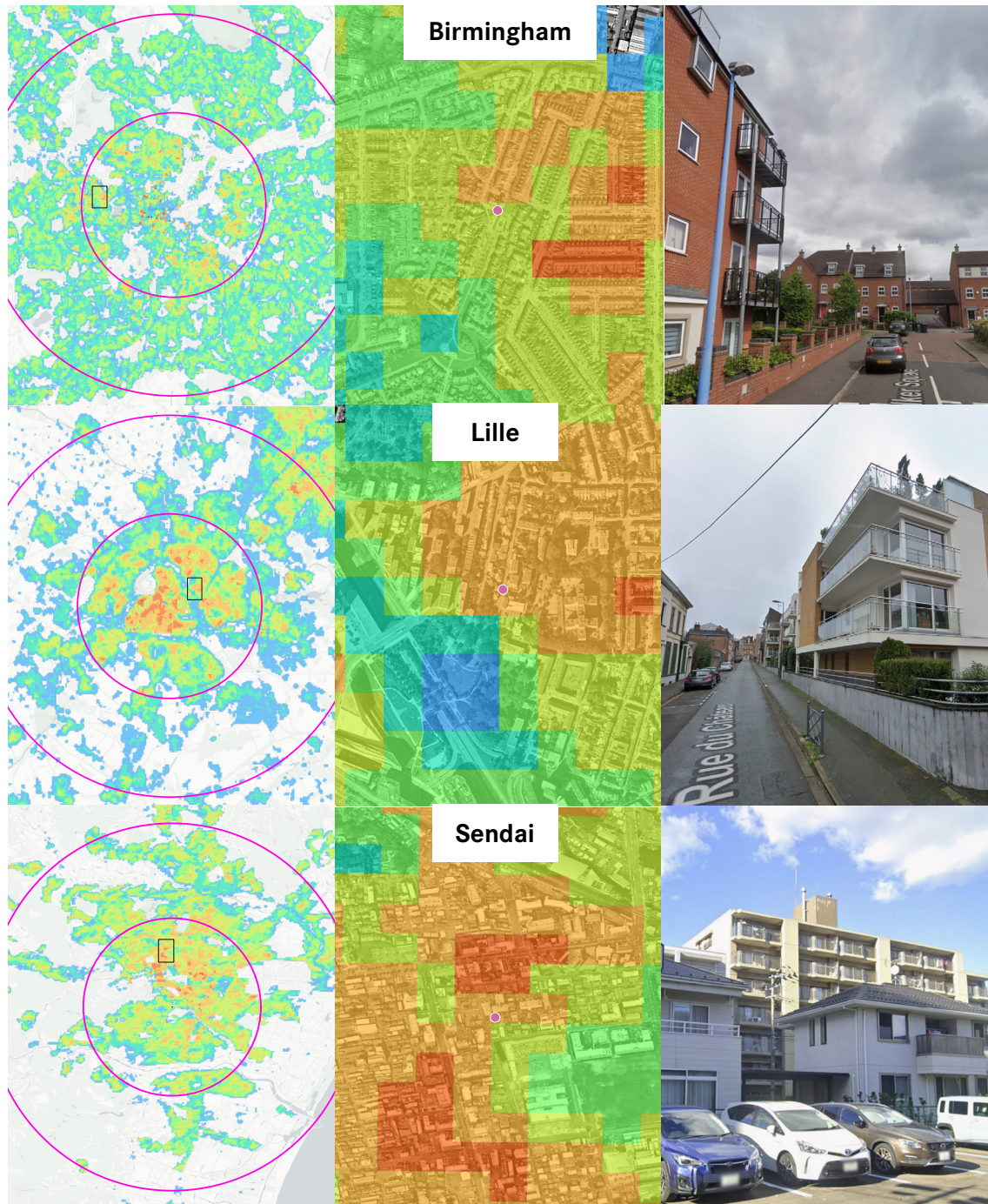
Centre for Cities international residential densities dataset (see Appendix 1)

Figure 17: Terraced housing in Britain is relatively dense but pre-dates the car



Centre for Cities international residential densities dataset (see Appendix 1)

Figure 18: Mixed neighbourhoods are much rarer in British cities



Centre for Cities international residential densities dataset (see Appendix 1)

Japanese cities do not have terraced housing outside of a few historic areas, but they do often achieve similar densities through detached houses. These neighbourhoods manage the problems above by making two different choices on the land-use trade-offs.

First, there is no street parking. Under Japanese law all vehicles must be parked on private land overnight. This keeps the streets clear and allows for a very dense street pattern. Second, the need to store cars on their own land means that most Japanese households either have a very small or no garden.

This suggests that even though the cities in all three countries have neighbourhoods with dense street patterns, there are real limits to the density these forms can achieve.

Mid-rise buildings are mostly missing from Britain's urban core

In French and Japanese cities, mid-rise housing, such as that shown in Figure 18, is common throughout the urban core and is often mixed with lower rise houses. Mid-rise typically refers to buildings between four and nine storeys high.³⁷

By contrast, this mixed built form is not typical in the urban cores of most British cities. Much more common are low density neighbourhoods composed entirely of semi-detached or detached houses, which usually only appear towards the outskirts of French and Japanese cities.

Some older mid-rise flats do exist on older social housing estates. But newer mid-rise flats amongst houses, as shown in the example in Figure 18, are uncommon and where are often part of an estate regeneration scheme. Most other mid-rise housing is typically student or retirement housing or otherwise located in city centres.

The missing mid-rise is the key reason why British urban cores are less dense than French and Japanese peers.

British cities need more mid-rise flats

Houses make up between 70 and 85 per cent of all residential areas in the urban cores of English and Welsh big cities, as Figure 19 shows. Scottish big cities are notably different.³⁸

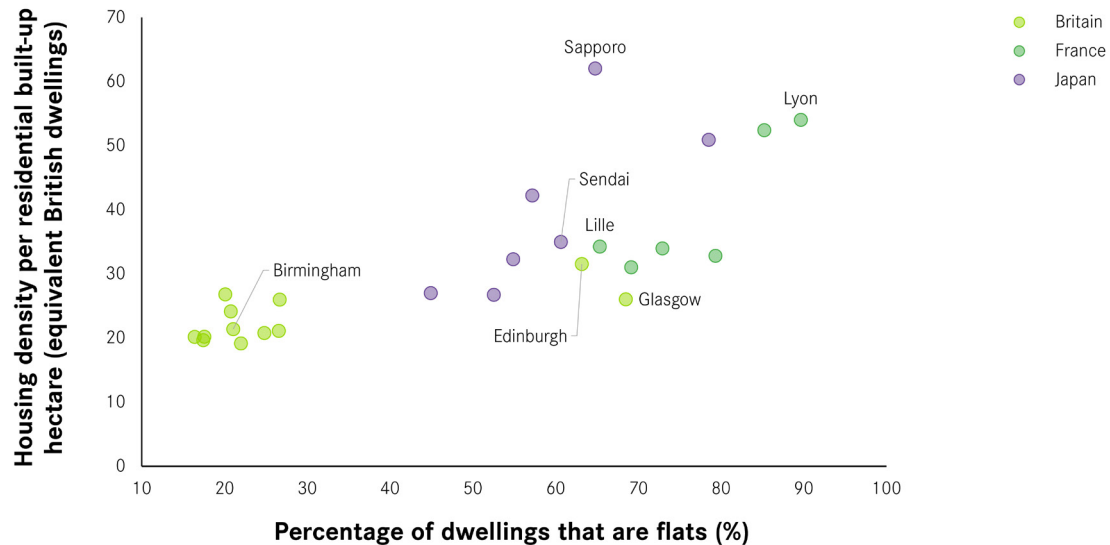
Big cities in France and Japan make extensive use of flats. Houses are present throughout their cities, but flats help increase average densities wherever they are located. They also seem to serve a wider range of household types than in England and Wales – Box 4 discusses the potential demand for living in flats in British cities.

³⁷ Though mid-rise is sometimes also extended upward to include ten or twelve storeys, we use this definition as it is consistent with typologies found in France and Japan. It is also similar to that used in the new London Plan consultation but extends lower to include the kind of short apartment building enabled by the Croydon SPD, discussed in Box 5. See: Greater London Authority (2025) [Towards a new London Plan](#).

³⁸ It appears this is a key reason that Edinburgh is Britain's densest big city, while Glasgow's dense tenement areas are counterbalanced by very low-density housing elsewhere in the urban core.

Figure 19: Higher average housing densities cannot be achieved without flats

Share of dwellings are flats vs average housing density in urban core, big cities, 2020-22



Sources: ONS; Scotland Census; INSEE; e-Stat; Centre for Cities international residential densities dataset (see Appendix 1) Note: Geography of dwelling type and density data is not a perfect match. Dwelling type uses administrative data, covering the whole city, so likely underestimates the percentage of dwellings that are flats in the inner city.

The presence of mid-rise flats mostly explains how French and Japanese urban cores achieve high densities. Mid-rises cost less to build per square metre than high-rises and are likely to be less politically contentious. They do not require changes to the street pattern to the same degree as terraced housing and so can be more easily slotted into existing built-up areas.

Box 4: Do British people live in flats?

One question facing densification is whether there is demand to live in the flats required to achieve it. A policy effort to densify will fail if people are not actually prepared to live in flats. Worries from policymakers and developers may be reasonable – families with children may have a strong preference to live in a house rather than a flat.

Figure 20 compares the demographics of people who live in houses and flats in big cities in the three countries.

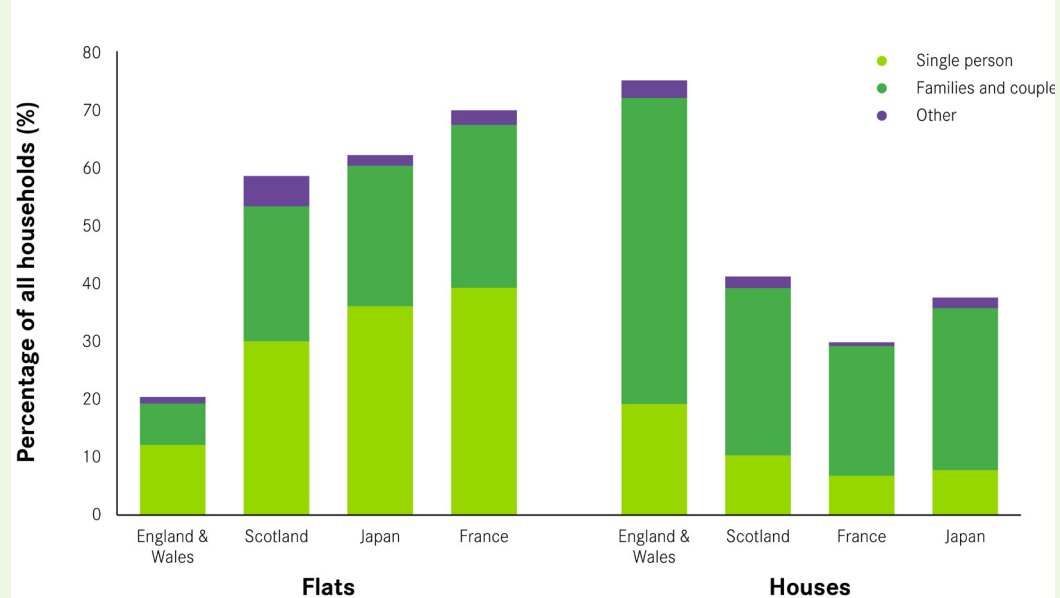
This shows two things: First, a smaller share of single people and families live in flats, and a larger share of single people live in houses in big cities in England and Wales. This suggests there could be some latent, unfilled demand from families and especially single people for living in flats in England and Wales. (Interestingly this is not the case in Scotland's big cities which have patterns more like French and Japanese big city dwellers).

Second, more households in other countries are single people. This suggests that, as other research has shown, a lack of flats impedes the creation of single-person households in England and Wales. Building more flats for single households in big cities

would likely mean fewer adults living with their parents or in houseshares.³⁹

Figure 20: Unusually few families and single people live in flats in England and Wales

Big city households, by type, by accommodation type, in England & Wales, Scotland, Japan and France



Sources: [INSEE](#), [ONS](#), [Scotland's Census](#), [e-Stat](#). Note: France estimates only, UK flats includes conversions.

39 See: Meen, G & Whitehead, C (2020) Influences on Household Formation and Tenure. - in Understanding Affordability: The Economics of Housing Markets. Bristol University Press

05

Achieving densification is difficult in Britain

Densification requires policies that encourage mid-rise building across British urban cores, including in existing residential areas.⁴⁰ But the current policy environment is not set up to deliver this. **Policies that restrict the amount of developable land and policies that limit the scope for change in the built form** make achieving densification of Britain's big cities more difficult.

The British planning system reduces the amount of land available for development

As discussed in previous Centre for Cities research, the British case-by-case discretionary planning system is unusually restrictive compared to France and Japan's spatial, rules-based zoning systems.⁴¹

The British system focuses on a much smaller amount of land than the French and Japanese zoning systems. Change is planned for on 'allocated sites' which are almost always locations not currently used for housing – typically ex-industrial or commercial brownfield, greenfield locations, or council estates undergoing regeneration.⁴²

This sets two implicit expectations – first, that these sites will change substantially and deliver most of the new housing the local area needs, and second, that everywhere else will not see significant change.

Though the British planning system does not technically prohibit change outside of allocated sites, the limited amount of "windfall development" outside of them is evidence that it serves to suppress it. Case-by-case decision-making makes the planning process more uncertain, especially outside of allocated sites, and risky. In this context, low-density proposals are often

40 Planning and other regulations are central to explaining low densities in British cities. However, it is worth noting that densities can be indirectly or unintentionally affected by other public policies. For example, transport networks influence where developers want to develop. Equally, incremental redevelopment could be made more challenging by policies supporting home ownership and the fragmented landownership which results.

41 Lange, M & Kovacevic, L (2025) [Planorama: How the English planning system can learn from abroad](#). Centre for Cities.

42 Or if they are already used for housing, they are disproportionately on existing publicly owned land where regeneration of social housing is expected.

the most rational choice for developers.⁴³

Britain's high-risk planning environment is also inherently hostile to the kinds of small-scale builders most likely to take on infill and redevelopment projects needed to densify existing residential areas.

The French and Japanese zoning systems do two things differently. First, all urban neighbourhoods have a zone and its rules applied to them. As applications that comply with the rules are granted planning permission, **the area of potentially developable land is much larger under their zoning systems than it is in Britain.**

Second, their zoning systems manage the politics of densification by applying different rules to different neighbourhoods. The rules of a zone can permit anything from zero change to significant redevelopment, but this choice is made explicitly, at the plan-making stage, rather than development by development.

By design the French and Japanese zoning systems can allow new mid-rise housing across a much wider area of the city than the British system, while still blocking densification in places where it is unacceptable.

Policies that discourage change in the built form block densification

Alongside limiting developable land, there are rules and processes that reduce the ability of British cities to change their built form. Combined with discretionary decision-making, these make it harder to build mid-rise even when the principle of development is accepted on a site. These include:⁴⁴

Area-based character assessments. The idea that cities should increase density over time is fundamentally at odds with urban planning policies which require new housing to be in keeping with its surroundings. These are prevalent throughout the British planning system, and it is still common for planning applications in cities to be refused on the grounds of “overdevelopment”. While designations such as Conservation Areas intentionally reduce change in the built environment, the requirement to build in line with existing character is a much more broad-based constraint on densification.

Parking & outside amenity requirements. British local plans often require all developments, regardless of location, to provide space for cars, and/or minimum garden sizes.⁴⁵ The result is that proposals for flats are often refused, even in areas within the urban

43 The alternative strategy is to apply for a bold, spike in density where the reward (a tall, high value building) is high enough to offset the risk involved in applying for it. Mid-rise isn't worth the risk.

44 Other examples include sightlines (most famously, those to St Paul's Cathedral in London) and general height restrictions. The current 10-unit threshold for distinguishing between small and large sites also poses problems for medium-sized development – for more see: Curtis, R (2025) Raising the Barriers – in The Road to a Proportionate System: Reigniting the SME Renaissance. Pocket Living.

45 Where parking is judged to be required, Homes England has recommended that ‘central’ developments provide roughly 0.5 spaces per dwelling, and ‘urban’ provide less than one. They also note that the use of land for parking can be made more efficient by moving from an ‘allocated’ (spaces per house) to ‘unallocated’ (general spaces) or a ‘hybrid’ (max 1 space allocated per house) approach. Integral garages (garages within houses), as often seen in Japan, are also another option to reduce street-space used by cars. See: Homes England (2025) Car Parking & Cycle Storage: What Works Where.

core of big cities with good public transport access and accessible parks.⁴⁶

Anti-supply measures. Regulations – including minimum space standards, overheating requirements, dual staircase rules, the Building Safety Regulator, and Biodiversity Net Gain – all make urban housebuilding harder without achieving their original intended goals. Some have particular implications for mid-rise development – for example, rules that kick in at 18 metres (six storeys) make densification more expensive, and developers are starting to build at lower heights just to avoid dealing with those costs.⁴⁷

Changes to rules in the current system can help densification, but introducing and retaining them is difficult

Policy’s role in blocking densification can be seen in the rare instances where the planning system’s underused zoning-type tools have been deployed.⁴⁸

As Box 5 shows, the most prominent use of these tools for densification – the Croydon Suburban Design Guide – did work. The construction of new housing increased considerably because the definition of developable land was expanded to the whole borough, and the rules to allow change in the built environment were relaxed.

Despite their success, these piecemeal tools struggle to substantially and permanently expand the amount of developable land as long as the rest of the system remains intact.

Box 5: Introducing rules-based planning enabled densification in Croydon

In 2019, Croydon Council in South London introduced a borough-wide Supplementary Planning Document (SPD). It provided design guidelines for building on garages and small empty plots across all of Croydon, as well as for demolishing existing semi-detached and detached properties to replace them with small blocks of flats, so long as they looked like suburban houses.⁴⁹

The SPD represented a rare example of ‘up-zoning’ using the tools available to British planners.⁵⁰ It went far beyond the level of specificity usually provided in local plans, for example by setting out examples of acceptable developments, specifying light and overlooking angle requirements and giving example materials to be used (see Figure 21).

46 For example, in Bootle, 4 kilometres from Liverpool City Centre, in an area surrounded by houses, Sefton Council rejected a proposal which included 41 townhouses, a 4-storey block apartment block and a 4-storey care facility on grounds of ‘overdevelopment’, inadequate parking, inadequate garden spaces, and queries over large vehicle access to hub building. The first three grounds are examples of those which actively inhibit densification. See: Tague, N (2022) [Safe heads to inquiry over Bootle plan](#). Place North West. (Accessed Nov 2025)

Hatmaker, J (2022) [Safe Regeneration loses £33m Bootle appeal](#). Place North West (Accessed Nov 2025)

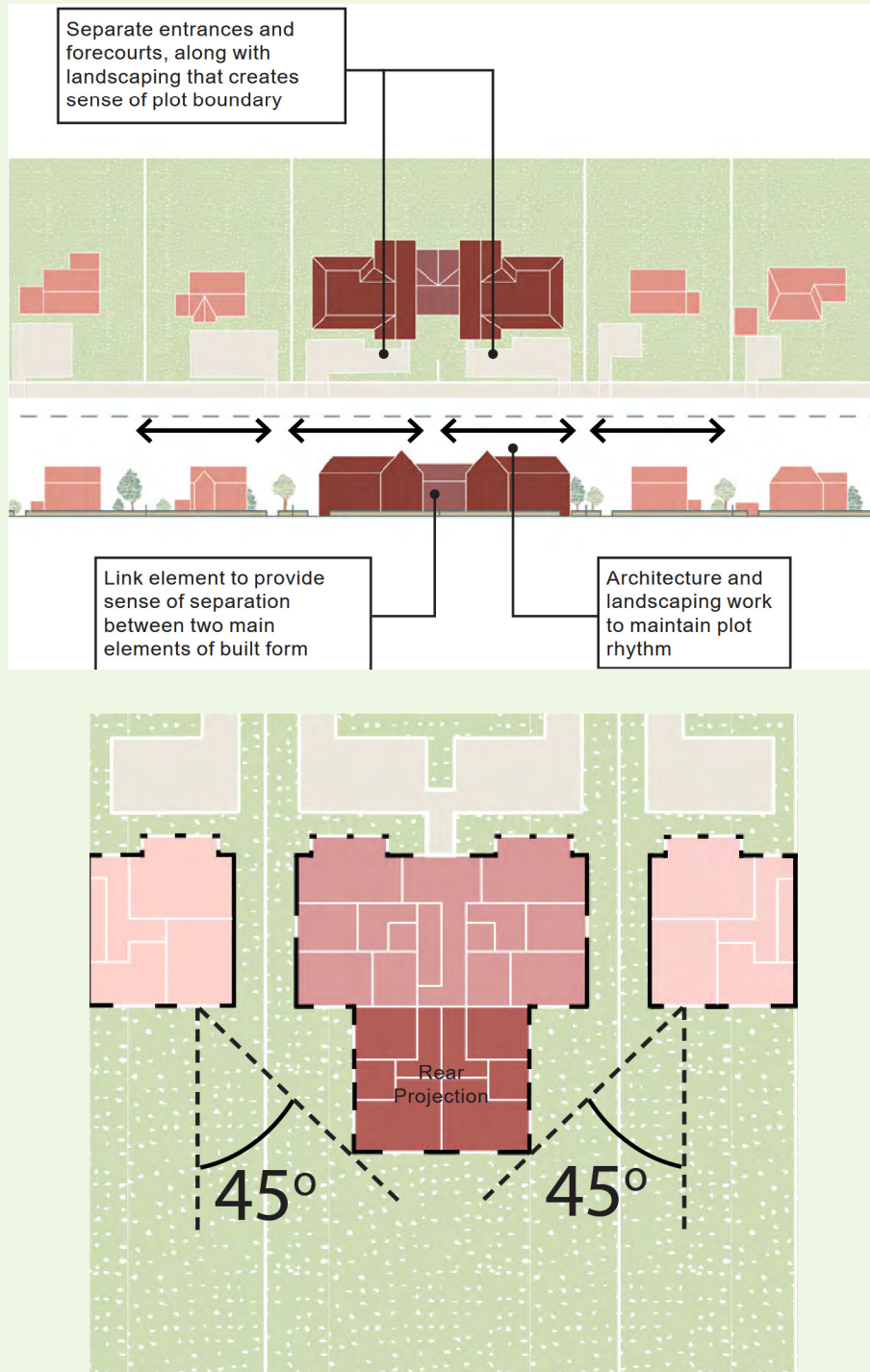
47 Breach, A (2025) [Breaking the Bottlenecks: Reforming ‘anti-supply measures’ to support urban housebuilding](#). Centre for Cities

48 For example, Local & Mayoral Development Orders, Simplified Planning Zones and various uses of Supplementary Planning Documents.

49 Croydon Council (2019) [Suburban Design Guide Supplementary Planning Document](#). (Accessed November 2025).

50 Lange, M (2024) [Designing density: How to increase the supply of housing in existing residential areas](#). Centre for Cities

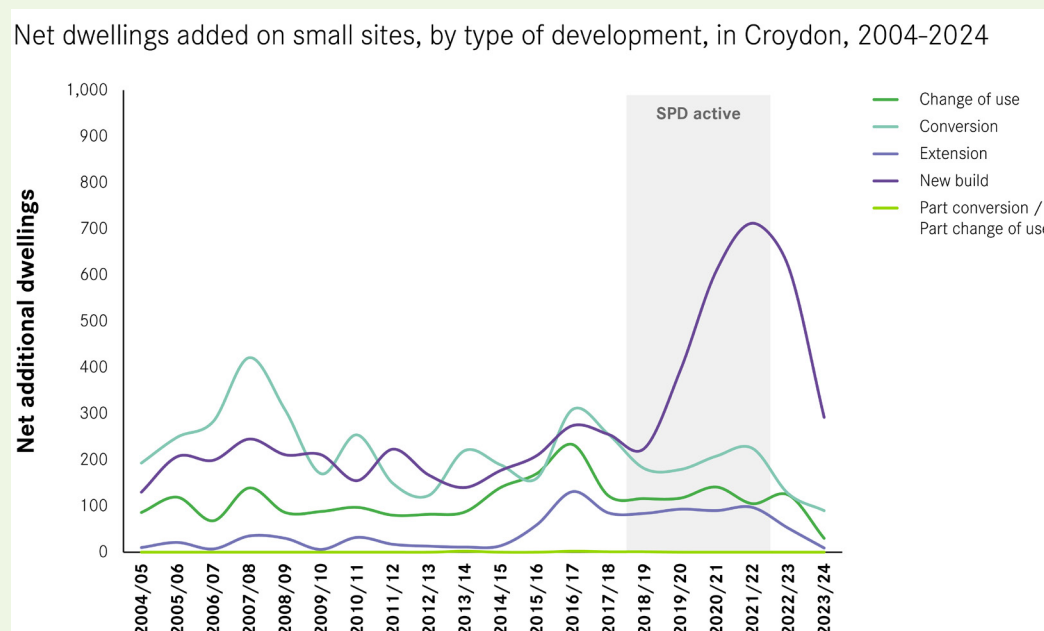
Figure 21: Examples of ‘rules’ provided by the Croydon Supplementary Planning Document 2



Source: London Borough of Croydon

The effect was an immediate boost to new build housing on small sites in Croydon. As can be seen in Figure 22, the three years from 2020 to 2023 saw net additional dwellings delivered on small sites from new builds increase by 290 per cent.

Figure 22: Small site new building increased by 300 per cent in Croydon when the SPD was active



Sources: GLA planning data

Most of these units were on sites where a three-storey block of flats was built following the demolition of one detached house, which is exactly what the SPD permitted. There is a simple lesson – eliminate planning risk for a given typology where there is demand for it, and it will be built.⁵¹

But the Croydon story is also a lesson in the challenges of introducing rules into a system which broadly does not expect them. Croydon going it alone prompted a political backlash, with both Labour and Conservative candidates to be the next Croydon mayor pledging to scrap it in 2022. It was subsequently repealed, and building has returned to lower rates.

Introducing a more rules-based planning system was a success in Croydon, but that it ultimately struggled politically should be an impetus for introducing it in a more systematic way.⁵² The next London plan could go some way to achieving this, by both ‘spreading the load’ between more boroughs and by specifying priority locations for densification, such as those near train stations.⁵³

51 It is also likely that, had the SPD been implemented over the whole of outer London the effect would have been larger overall, but more diffuse given there is only so much demand for the type of building produced.

52 Evidence of the effectiveness of rules-based planning reform will be explored further in forthcoming Centre for Cities research, due for publication early 2026.

53 The draft plan London Plan included proposals to require local authorities to plan to significantly increase delivery across small sites, including by specifying they should have a presumption in favour of sites smaller than 25 units within 800m of train stations. The final version of the London Plan kept the former, but, crucially, removed the content on presumption in favour of development. Mayor of London (2017) [The London Plan: The Spatial Development Strategy for Greater London. Draft for Public Consultation](#). (Accessed November 2025)

The Government is trying to introduce more rules into the British planning system to make densification in cities easier, for example through the new ‘Brownfield Passports’ which will be underpinned by new National Development Management Policies (NDMPs).⁵⁴

These changes will make the British system more rules-based and will encourage densification. But they will struggle to fully emulate the way the French and Japanese zoning systems expand the supply of developable land in their cities. As nationally defined policies in the discretionary system, if they are defined too boldly, they will likely result in some poor outcomes and political backlash (and likely repeal), and if defined too timidly their impact will be limited.

⁵⁴ At the time of writing, no public announcements on Brownfield Passports have been made since February 2025. It seems likely they will comprise a nationally defined set of location types (for example, high street or corner plots near to train stations) on which a given level of intensification (for example, up to a given height) should be deemed acceptable. MHCLG (2025) [Brownfield Passport: Making the Most of Urban Land](#). For more discussion of virtues of this approach vs zoning, see: Breach, A & Lange, M (2025) [What the Government should put in a second planning bill](#). Centre for Cities

06

What closing the density gap would mean for British cities

The urban density gap is large. Between 2.4 and 2.3 million homes are missing from British cities due to their low density compared to French and Japanese cities. London and the next 12 biggest cities are responsible for between 79 and 84 per cent of the total urban density gap.

Closing this gap will require policy to prioritise the cities with the biggest gaps and biggest potential to absorb more housing.

The biggest cities outside London have very large density gaps

The size of the density gap varies between the big cities. Figure 23 pairs each British big city with its French and Japanese equivalents, based on population.⁵⁵ It sets out the number of houses each currently has in its urban core, alongside the number of houses it would have if it was as dense as its French and Japanese equivalents.

The three biggest big cities – Manchester, Leeds and Birmingham – have the biggest urban density gaps. Manchester has 236,000 homes fewer than Lyon, Birmingham has 228,000 fewer than Fukuoka, and Leeds has 250,000 fewer than Marseille in their urban cores.

In contrast, some smaller big cities have much smaller density gaps, or none. Liverpool's density gap with Sendai is 48,000. Bristol's density gap with Nantes is 31,000. Edinburgh has a density gap of 16,000 with Bordeaux and is denser than Kumamoto.

London is not included in Figure 23 due to its size, even though it comprises a considerable share of the national density gap. But as a share of the existing stock in London, the capital's density gap is much closer to some of the smaller big cities.

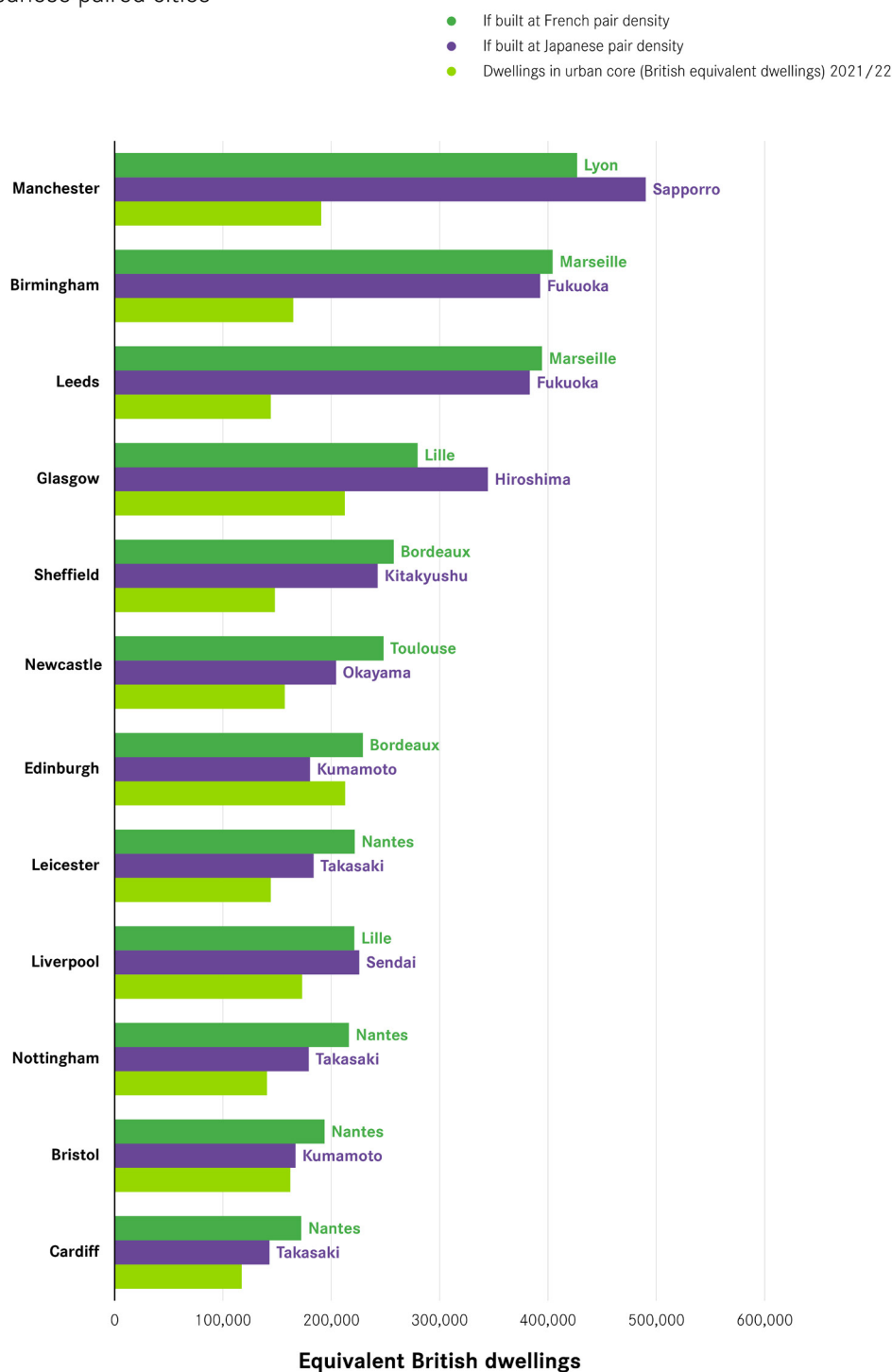
Increasing London's density in its urban core to that of Paris would require a 22 per cent increase in stock (492,000), and to Osaka a 35 per cent increase (775,000). By contrast, increasing Manchester's urban core to Lyon's density would require a 124 per cent increase

⁵⁵ Based on OECD Functional Urban Area.

in homes, and Leeds to Fukuoka a 166 per cent increase. This reflects the considerable (if still internationally low) density of London, compared to the very low density of other British big cities.

Figure 23: Closing the density gap in Britain's biggest cities is the biggest challenge

Number of British equivalent dwellings, actual 2021/22, and if built at density of French and Japanese paired cities



Source: Centre for Cities international residential densities dataset (see Appendix 1)

Urban housebuilding would need to increase by ten times in some big cities to close the density gap quickly

The size of the challenge can be illustrated by comparing the missing dwellings to recent average urban core housebuilding in each city.

The biggest of the big cities would need to significantly increase their urban housebuilding to match the current density of their French and Japanese equivalent cities. Table 1 shows that for Manchester to close its average density gap in 25 years, housebuilding in the urban core would have to quadruple, and in 10 years increase by ten times. For Leeds, closing the gap in 25 years requires housebuilding to increase by eight times, and in 10 years, almost nineteen times.

London stands out for having both a very large density gap in absolute terms and a smaller density gap in relative terms. At current housebuilding rates, it is on track to reach the present-day average density of Paris and Osaka in 30 years (though its recent collapse in housebuilding presents a challenge to this timeline). Doing so within 10 years would require housebuilding in the capital's urban core to triple.

Other big cities that are already dense, such as Edinburgh and Bristol, have already closed their density gap or could do so quickly with a relatively small increase in housebuilding.

In some cities achieving very large increases in housebuilding would be impossible without significant public support. In Leicester, for example, low density in its urban core likely reflects currently low levels of demand to live there. Expecting, or encouraging Leicester to increase its levels of urban housebuilding 30-fold, in the absence of demand, is not sensible.

As housebuilding in French and Japanese big cities will continue over this period, these estimates should be considered conservative relative to the actual current and future gaps.

Table 1: The size of the prize and how long it would take to get there with status quo housebuilding

British city	French pair	Japanese pair	Dwellings in British city urban core, 2021 (British equivalent dwellings)	Average density gap (British equivalent dwellings)	Annual net additional dwellings to close average 2021 density gap, 25 years	Annual net additional dwellings to close average 2021 density gap, 10 years	Average annual net additional dwellings, urban core (2011-2021/22)
Edinburgh	Bordeaux	Kumamoto	213,000	-8,500	0	0	1,300
Bristol	Nantes	Kumamoto	162,000	18,500	740	1,850	500
Cardiff	Nantes	Takasaki	117,000	40,500	1,620	4,050	200
Liverpool	Lille	Sendai	173,000	50,500	2,020	5,050	400
Nottingham	Nantes	Takasaki	141,000	56,500	2,260	5,650	1,100
Leicester	Nantes	Takasaki	144,000	59,000	2,360	5,900	200
Newcastle	Toulouse	Okayama	157,000	69,000	2,760	6,900	600
Glasgow	Lille	Hiroshima	212,000	100,500	4,020	10,050	1,100
Sheffield	Bordeaux	Kitakyushu	148,000	102,500	4,100	10,250	1,500
Birmingham	Marseille	Fukuoka	165,000	233,500	9,340	23,350	1,100
Leeds	Marseille	Fukuoka	144,000	245,000	9,800	24,500	1,300
Manchester	Lyon	Sapporro	191,000	267,500	10,700	26,750	2,600
London	Paris	Osaka	2,200,000	634,000	25,360	63,400	21,400

Source: Centre for Cities international residential densities dataset (see Appendix 1)

07

What needs to change

Addressing Britain's urban density gap needs to be an important national and city policy goal. Given the scale of the challenge, national and local policy responses will need to be of a similar scale.

Goals

Focus on the big cities

- **Manchester, Birmingham, Leeds, and London have the largest density gaps, so should be the priority for densification.** Densifying big cities is a stronger economic objective for urban housebuilding than 'brownfield first'.
- **Big cities are starting from a lower base than London.** The problem is that outside their city centres, they have the built form of large towns. Many of the big cities face a 'chicken-and-egg' problem, their existing low densities mean the land values needed to finance densification are also relatively low. Government financial support will be needed to help address this issue.
- **London has a large density gap that needs to be reduced but densification alone will not resolve its severe housing crisis.** London's expensive housing means land values are high enough to easily finance further mid-rise densification. London needs to densify to support national economic growth and reduce local housing costs, but the relatively dense urban core suggests a relatively greater role for urban expansion and green belt release than in other cities.
- **In medium and small cities, the benefits of densification will be smaller.** They do have density gaps, and policy in these cities should encourage more efficient use of urban land. But their potential to densify is limited by their smaller size, and lower demand in cities with low land values.

Focus on urban cores, not just city centres

- **City centres cannot be the only dense part of big cities.** In some central locations, British big cities are denser than any neighbourhood in their international peers. But their small area and competition for space from valuable commercial uses limits their ability to compensate for low densities elsewhere.
- **Urban cores – up to 5km from the city centre – should be the priority for densification in big cities.** Policymakers should aim for more parts of their cities to be dense and to offer a mix of housing offers, not least so residents can find housing that suits every stage of their life within the same city.
- **The outer suburbs of big cities have limited potential for densification apart from along transport corridors.** A fast train service into the city centre can justify apartments in the vicinity of a station. But the role of most neighbourhoods in the outer suburbs is to provide suburban housing at a lower cost.

Enable mid-rise developments at scale

- **Mid-rise flats can provide more housing at scale.** Mid-rise housing is better placed to overcome the economic and political constraints of other typologies and can achieve substantially higher densities in neighbourhoods comprised of a mix of houses and flats.
- **Mid-rise flats should be allowed across the urban core, not just in a few allocated sites.** To achieve a large increase in density, mid-rise flats need to be permitted and built at scale, even where they are currently unusual.
- **French and Japanese cities provide plausible approaches.** In Japan, mid-rise apartment blocks are sprinkled amongst individual houses, while France has a more distinct separation street by street between built environments. Adapting Britain's existing urban form will require policymakers to make decisions as to whether a 'sprinkling' or a 'block' approach to mid-rise is more feasible.
- **Demand for new mid-rise housing is outside the control of local policymakers – but they do control the supply of developable land.** If there is no demand or public subsidy, even developable land will not be built on. But if mid-rise is to be delivered across the urban core, it is a necessary pre-condition that policy designates an appropriate amount of developable land.

National Government

Replace the discretionary planning system with a flexible zoning system

- **Britain's unusually restrictive, case-by-case planning system makes densification especially difficult.** The discretionary system has at times delivered considerable numbers of houses on greenfield land and urban extensions. But since

the Town and Country Planning Act 1947 housebuilding within urban areas has been difficult.⁵⁶

- **A zoning system would address many of the challenges to delivering densification.** Zoning would allow local control over what development rules apply to different neighbourhoods. This would enable local politicians to increase the capacity for densification in locations where it would achieve the greatest benefits, while also restricting it in neighbourhoods where densification is less beneficial.⁵⁷

Take bold action on the current planning reform agenda

- **Densification could be made easier through the current system.** Even though the Government has ruled out the introduction of a zoning system, other changes at a national level can help more land be designated as developable and make mid-rise development easier.
- **Brownfield passports should incentivise more densification.** Brownfield passports – national level policies which will increase the likelihood of particular types of development gaining permission – should aim to increase densification by making the system more certain for applicants. The Government should be bold in its planning committee reforms in the Planning and Infrastructure Bill.⁵⁸
- **Site threshold reforms should be used to encourage densification.** Currently, any development above 9 units is considered ‘large’, meaning what are actually very small projects have the same expectations placed on them as much larger projects. The Government should follow through with its proposed site threshold reforms and actively reduce regulatory requirements on medium-sized sites.⁵⁹
- **Anti-supply measures should reduce burdens on urban housebuilding.** These include minimum space standards, overheating requirements, dual staircase rules, the Building Safety Regulator (BSR), and Biodiversity Net Gain (BNG).⁶⁰ The Government is already acting on BNG and overheating (in the ‘emergency measures’ for London) and public debate on the BSR is increasingly recognising the problems with the new building safety regime. Minimum space standards for one-bedroom flats should also be reduced.⁶¹

56 Breach, A (2024), [Restarting Housebuilding I: Planning reform and the private sector](#), Centre for Cities

57 Breach, A (2023), [New Zealand shows how planning reform will end Britain's housing crisis](#), Centre for Cities

58 Breach A (2025), [Reform of Planning Committees](#), Centre for Cities

59 For examples of easy wins, see: Curtis, R (2025) [Raising the Barriers](#) – in The Road to a Proportionate System. Pocket Living.

60 Breach A (2025), [Breaking the Bottlenecks: Reforming 'anti-supply measures' to support urban housebuilding](#), Centre for Cities

61 This would help a range of new, more affordable developments. For example, Centrepoin, the homelessness charity, has been trying to expand its direct delivery of ‘stepping stone’ accommodation, by providing 20 to 25m² rooms. They spent 4 years securing planning permission from one South London borough and have campaigned for a reduction in minimum space standards generally to enable the scale up of their model, and a more broad-based supply of more affordable housing.

Local Government

Metro Mayors

- **Densifying urban cores requires working across the wider city-region, not just specific boroughs.** The metro mayors are best placed to deliver this.
- **New Spatial Development Strategies (SDSs) will give powers to mayors to shape housing supply across city regions.** SDSs should not suppose city centre development or urban expansions are their only options – there should be a specific component focused on the densification of urban cores. Policies proposed in the 2017 draft London Plan and executed in Croydon’s Suburban Design Guide show that this can be achieved. Forthcoming SDSs should lead to more ‘Croydon-style’ policies being enacted in urban cores in the big cities.
- **The English Devolution and Community Empowerment Bill will strengthen Mayoral Development Orders (MDOs).** These will be an important tool enable mayors to grant permission in principle to enable densification. Sufficient Mayoral capacity will be crucial to ensure MDOs are used widely and effectively.
- **Mayors should deepen their role in facilitating densification.** Densification in big cities is currently most successful on larger sites, which has often involved public sector assistance in land assembly and remediation. It is welcome that the Government has announced continued support for this approach and given Mayors more responsibility for using it.⁶²
- **‘New Towns’ in big cities should be the priority projects for Mayors and the Government.** The New Towns taskforce has selected three ‘within-city’ locations for ‘New Towns’, including in Leeds and Manchester.⁶³ These would make a strong contribution to densification in these cities and should be priority locations when the Government is deciding between the twelve sites. Other big cities without designated New Towns should seek to emulate them and support large ‘within-city’ projects of their own.

Local Authorities

- **Many social and economic issues will be difficult for local leaders to solve without densification.** For urban authorities struggling to meet housing targets, deal with high homelessness, and reduce housing costs for their residents, it will be difficult to make progress so long as most of the urban area is not considered developable land, and if any proposed development is expected to replicate its surroundings.
- **There are easy, local level wins to make densification easier.** But this depends on removing policies such as car parking requirements and changing local plans to prioritise densification over existing character in more locations. Policy must

62 MHCLG (2025) [Mayors to lead the charge for thousands of new social homes](#).

63 MHCLG (2025) [New Towns Taskforce: Report to Government](#).

take a broader view of development land and use rules-based powers to deliver densification.

- **Use rules-based tools.** Local Development Orders, Simplified Planning Zones, and various Supplementary Planning Documents including masterplans and Design Guides can all help deliver density.
- **Croydon shows densification is possible when local authorities plan beyond allocated sites.** Local planning authorities should enact similar policies across the urban core.
- **Local authorities should pro-actively support densification by intervening in the land market.** Densification in complex brownfield sites often requires public sector assistance in land assembly and remediation, and councils should facilitate this as much as possible.

08

Appendix: Methodology

This report introduces a novel methodology that integrates census records, household surveys, administrative datasets, and satellite imagery to generate fine-grained, internationally comparable estimates of residential floorspace density.

This approach improves on previous methods, which typically rely on either satellite data alone or direct counts of housing units. By anchoring total housing estimates in verifiable administrative and census data, while using satellite imagery to identify the location of residential buildings, the method resolves inconsistencies caused by varying administrative boundaries across countries.

A key advantage is the ability to exclude non-residential land – such as parks, industrial sites, transport corridors, and other undeveloped areas – from calculations. This produces a more accurate representation of the residential built form of cities. As a result, the dataset supports detailed analysis of urban structure, how cities have evolved over time, and how their physical forms differ across contexts.

The underlying methodology for estimating residential density is explained in Figure 24 and is applied consistently across all countries. The specific data sources used in each case, detailed in Table 2, vary according to availability, quality, and national statistical practices.

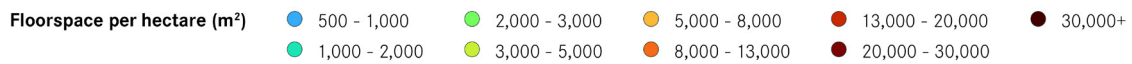


Figure 24: Methodology for producing international residential densities dataset

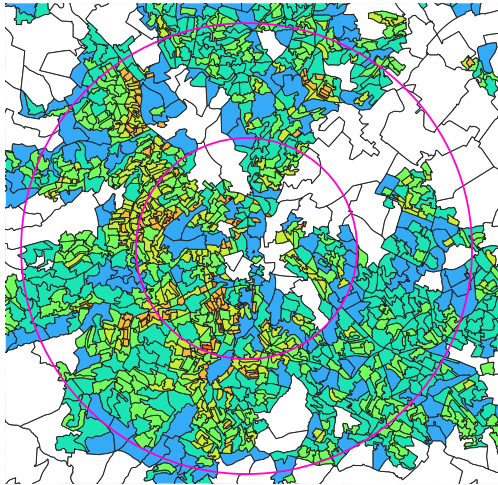


Figure 25: Residential built volume grid

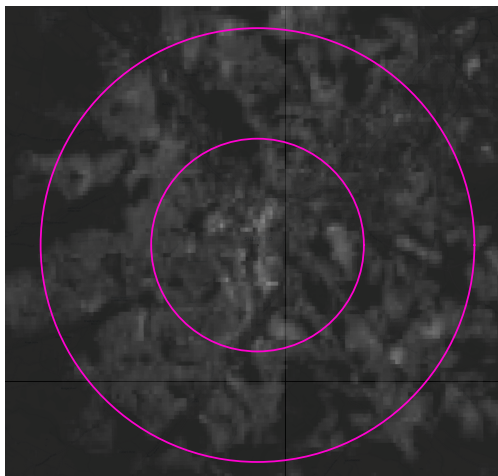
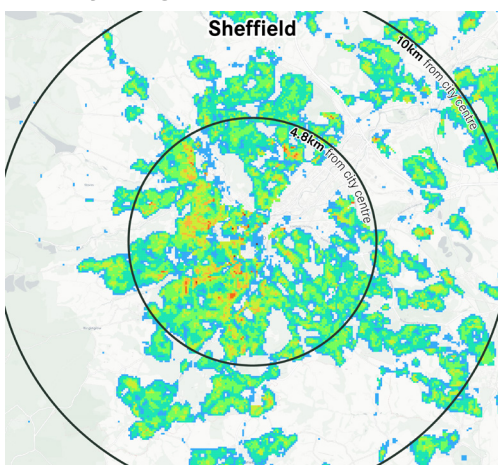


Figure 26: Residential floorspace density on grid



1. Obtain estimates of the total number of housing units (adjusting for vacant dwellings), by type, per small administrative geography.

2. Obtain average floorspace per unit estimates for a geography as close to the geography for housing units as possible. If average floorspace data isn't available at a similar level, use dwelling stock by type (i.e. flats and houses) and average floorspace, by type.

3. Multiply units by type by average floorspace to get total floorspace in that area (Figure 24).

4. Use built volume data from Global Human Settlement database to calculate residential built volume on grid of ~60 m² squares (square sizes vary by latitude), by subtracting non-residential built volume from total built volume (Figure 25).

5. Allocate total floorspace to these small squares. Administrative data is 'shaped' by apportioning it to small squares, according to the residential built volume in that square.

6. Figure 26 shows the result, a fine-grained resolution of residential floorspace densities on a grid which allows comparison between cities across the world.

7. To obtain change over time, satellite squares are aggregated into 5x5 units, resulting in:

- 11 ha squares in Britain
- 13.5 ha squares in France
- 17 ha squares in Japan

Table 2: Housing data sources by country and differences in approach

	Housing Units	Average Floorspace	Notes
Britain	Accommodation types per Output Area / Datazone (Scotland) from 2021 and 2011 Census	Floorspace data from EPC Open Data England & Wales	Average floorspace calculated for houses and flats in LSOAs and applied to Output Areas
	Dwellings per Output Area / Datazone (Scotland) from 2011 and 2021 Census		LSOAs with fewer than 50 houses or flats have EPCs, the average floorspace is dragged towards the national averaged
France	Accommodation types by number of bedrooms per IRIS (statistical area) from 2021 and 2011 Census	Floorspace data from Demandes de valuer foncières (property sales data) per post-code area	Property by type of room only accounts for principal residences, to account for difference estimates are uprated to equate total dwellings
			Where data is missing, the national average is used
Japan	Accommodation types per Census tract from 2020 and 2010 Census	Average floorspace by housing type per municipality from Housing & Land Survey 2023	Where total dwellings exceed total households (Census data), households are uprated proportionally
	Vacancy rates from the 2023 and 2013 Housing and Land Survey		Where floorspace data is missing, averages from 4 nearest neighbours are used instead

Floorspace definitions

Floorspace includes: rooms and other spaces primarily occupied as dwellings, and excludes outbuildings, garages, and spaces shared with other dwellings.

Detailed definitions used for each country can be found using these links: [Britain](#), [France](#), [Japan](#)

Robustness and limitations

Most of the results are driven by underlying administrative data, with the satellite data improving on it.

This approach enables the removal of areas where housing is not present – large parks, wholly commercial or industrial districts, and the edge of cities – in almost all instances. In some cases, satellite data wrongly attributes housing to nearby commercial or industrial sites, leading to very minor underestimates of residential density. The methodology does this consistently between the three countries, so it does not affect the conclusions. In areas where there is a mix of houses and other uses, it is appropriate that this is recorded as low-housing density, even if this means irregular distribution of houses, rather than small residential buildings.

This approach only works effectively for countries with small administrative units. French, Japanese and British administrative units differ slightly in shape and size (including within

countries), but the effects of these differences are minimal and do not impact on the above conclusions.

Germany was discounted from the detailed analysis, because housing data is only available at the city level (or occasionally large administrative units), and the satellite data is not high quality enough to attribute housing to the residential areas only, leading to lower than accurate density estimates and slightly inaccurate geographies.

The robustness of the approach in Britain was tested using Lower Super Output Areas (LSOAs) as well as Output Areas (OAs). Both yielded very similar results when measuring average densities. OAs were preferred as they show more detailed differences between close-by locations.



© Centre for Cities 2025

Centre for Cities

Second Floor

9 Holyrood Street

London SE1 2EL

www.centreforcities.org

Centre for Cities is a registered charity (No 1119841) and a company limited by guarantee registered in England (No 6215397)