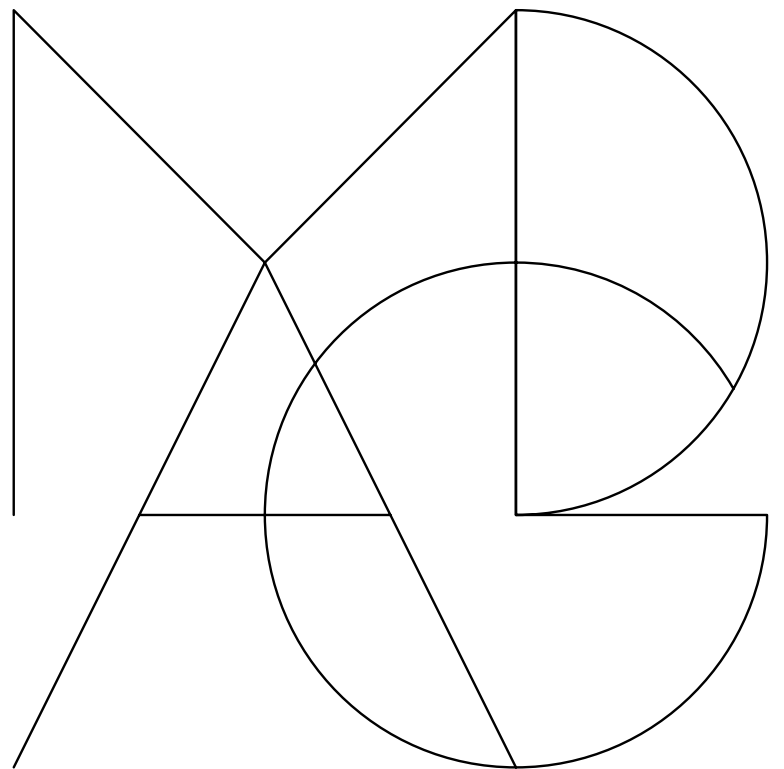


Mayor's Design  
Advisory Group

Growing London





*Growing London:  
Defining the future form of the city*

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# A great city's future

*Foreword by Daniel Moylan, chairman of the Mayor's Design Advisory Group.*

By 2030 one and a half million people – almost as many as currently live in Birmingham – will be added to the 8.5 million living here in London. Accommodating that growth in a way that allows the city and its people to thrive and prosper will be extraordinarily challenging. Only if we think long term and plan ahead will we make a success of it.

Parliament has placed the Mayor of London squarely at the heart of getting this right, through the Mayor's statutory strategic responsibilities for the city's spatial development and its transport and environmental planning. With a new Mayor due to be elected in May 2016 and a new London Plan and other strategies to be produced, this is the moment to build on the work of the past and to shape this great city for its future.

Over the last year, members of the Mayor's Design Advisory Group, representing a range and diversity of views, have been working on four topics identified as crucial to getting the strategy right. They are *Growing London*, *Public London*, *Ageing London* and *Shaping London*. Together these reports form the *Good Growth Agenda*.

This publication, *Growing London*, goes to the heart of the question: what London will look and feel like as it grows physically to accommodate a population of ten million and rising. Where are the new homes to go? At what densities will people live? How will the transport network connect them to the wide range of opportunities that only a city

can offer? These are challenging questions, but they are urgent. This document offers proposals as to the right way forward.

## The Good Growth Agenda

*Essay by Peter Murray, MDAG member, and Patricia Brown, MDAG Deputy Chair*

London is growing. Birth rates are on the up, Londoners are living longer and are requiring places in which to live that match their active lifestyles. At the same time, more people want to come here, work here, and stay here.

The capital has experienced periods of rapid growth before. The population grew from 1 million in 1800 to 6.5 million a century later - an increase of around 140 people a day. The result was a city of great grandeur but also one of squalor, overcrowding and poor health. In the first three decades of the 20th century, the population continued to increase to a peak in 1939 of 8.61 million. This growth was largely accommodated by the development of the suburbs, supported by the expanding transport infrastructure. The resultant sprawl of 'Metro-land' spread out into the Home Counties and hugely increased the capital's footprint.

London's population has now surpassed 1939 levels, and is continuing to rise. For the first time, the majority of this growth is planned to be absorbed within London's boundaries, constrained as it is by an extensive Green Belt.

As a result, we have to make better use of the land we have available. We have to develop more densely, and we need to do so within the context of the existing urban fabric and communities. To absorb this growth in population within the fixed area of London will be no mean task. The physical

impacts will be highly evident and ubiquitous – on the ground, underground and on the skyline.

The impact on London of building homes for nearly 70,000 more people and of accommodating 34,000 new jobs each year is huge. It will affect its built form, its infrastructure, its streets and transport systems, as well as its health and education services.

We have to build around 50,000 new homes per annum over 20 years – even more if we are to make up for the historic shortfall – and space for more than eight Canary Wharfs' worth of jobs, as well as schools, health facilities, shops and cultural centres.

So, how do we create a London of the future that we will still want to live in? How do we make sure that growth delivers a high quality environment that does not feel alien to London, or to Londoners? What are the key design issues that must be addressed if we are not to emulate the rookeries of the Victorians, the sprawl of the 1930s or the monocultural estates of the post war era? How, indeed, do we get what we are calling 'good growth'?

We believe that 'good growth' results in an inclusive city that is a pleasant place to work, visit or stay. It delivers a balanced mix of young and old, of housing tenures, of jobs. It enriches the city's great public and civic spaces both internal and external. It allows for vitality and change, building on the 'London-ness' that is a crucial part of the capital's character and enduring appeal. Finally, 'good growth' provides the kind of integrated infrastructure and services that enable Londoners to lead fulfilled lives.

Through this series of reports – the Good Growth Agenda – we set out the key challenges

and opportunities that result from London's dramatic growth. We promote a vision and a series of recommendations - to help support and shape the physical growth that is planned for London to continue to be a thriving and great capital city. We hope this opens up an inclusive debate about how we best achieve good growth.

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# Introduction

*Growing London* is a study of the physical implications of London's growth: *the what, the where, and the how.*

The report looks at the key challenges London faces to accommodate a rapidly growing population, the opportunities presented by changes to the way we live and work, and the impact all of this might have on the form development will take in the future. Within this wide and complex subject, this report focuses on what the Mayor has the power to influence. It is intended to help inform changes to the London Plan, identify areas for research, and suggest investment priorities for the Mayor.

*Sections 1 and 2* consider *what* London needs to provide in order to accommodate projected growth. These sections focus on the delivery of housing, the need for places of work and the type of development Londoners want. *Sections 3 to 5* focus on *where* growth may be accommodated, including making better use of our existing building stock, and improving our understanding of the availability of land in London. And finally, *sections 6 to 9* set out *how* this can be done, by addressing challenges to do with density, infrastructure, tall buildings, planning policy and building management.

Where and how we manage London's growth will be the greatest determinant of the city's form.

The London Plan has a clear approach to accommodating growth within London's boundaries, in areas of high accessibility and good social infrastructure, over the next decade. Over the



longer term, the London Infrastructure Plan 2050 and work being undertaken by the Outer London Commission shows that there are alternative scenarios which would have varying impacts on the city's built form. These can be broken down into two groups: those that bring forward additional land (possibly in the wider South East, or through selective Green Belt release); and those based on intensifying the use of land in London's built area (through densification, Opportunity Areas, imaginative use of publicly owned land, and consolidation of industrial land).

This is an unprecedented opportunity to shape the future of London. So now is the time to ask: what kind of city do we want?

The policy decisions made now will, collectively and cumulatively, have tangible and lasting consequences for the way London looks, feels and works in the future. They will affect how far the city grows up or out; whether densities are more concentrated or distributed; how the character of London is preserved or altered; and how much we build anew or work with what we've got. All of these factors also have implications for the affordability of the city, and ultimately who London is for. This is an unprecedented opportunity to shape the future of London. So now is the time to ask: what kind of city do we want?

In the face of both a backlog of undersupply and a surge in housing demand, London will need to

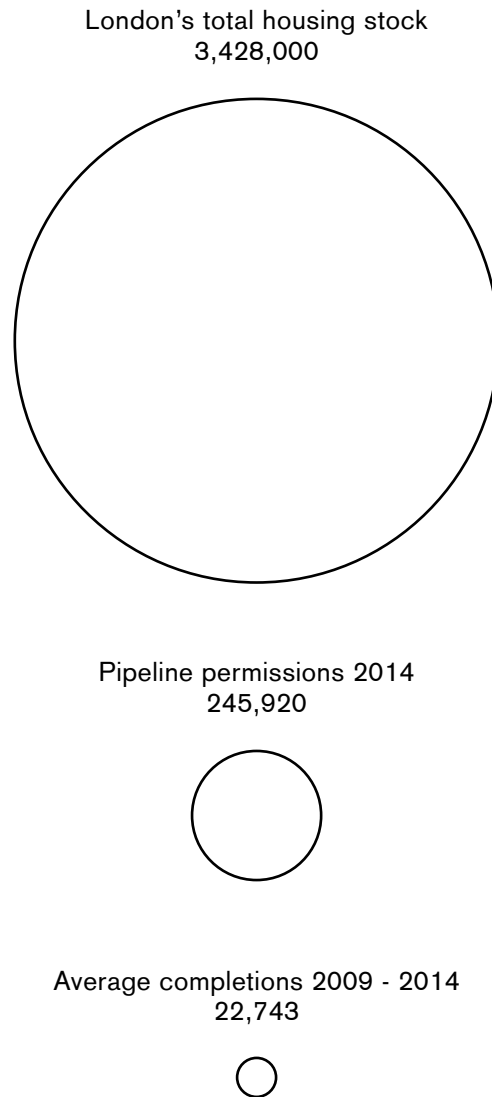
see the delivery of more housing, by more actors, in more places – and quicker. Put simply, over the next ten years we need to build at least double the number of homes built over the last ten years.

London needs to build between 49,000 new homes per year (over 20 years) and 62,000 new homes per year (over 10 years) to meet demand.<sup>1</sup>

Many are quick to blame the planning system for the relatively slow pace of development, when in fact there is currently approval for approximately 246,000 homes, and each year approvals are given for an average of 59,000 homes.<sup>2</sup> Planning is clearly not the main barrier to delivering the homes London needs, although, as this report will go on to suggest, good planning is certainly part of the solution.

An average of 59,000 new homes are approved every year and there are currently 246,000 approvals in the pipeline, but we only build an average 23,000 homes per year.<sup>3</sup>

*We are currently only delivering a small proportion of London's planning permissions, which in turn represent a fraction of London's total housing stock.<sup>4</sup>*



## Issues and recommendations

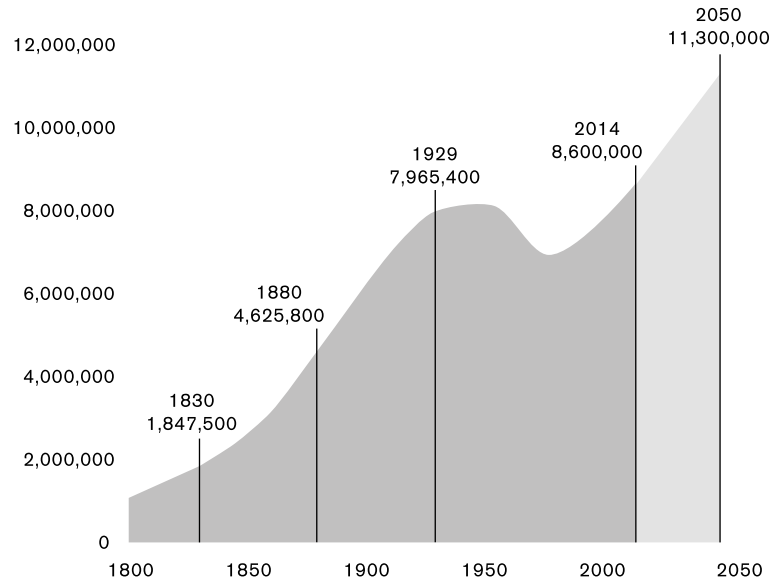
### 1. The homes and jobs we need

London faces an unprecedented challenge of accommodating significant growth within its existing footprint. The current pattern of development is focused on brownfield land in areas of high transport accessibility, and involves relatively little residential demolition. Compared to the land-take of previous waves of London's growth, which have involved greenfield development or large-scale demolition, delivering large numbers of new homes and jobs with more limited land availability is resulting in a new generation of super-sized developments that are taller and denser than ever before.

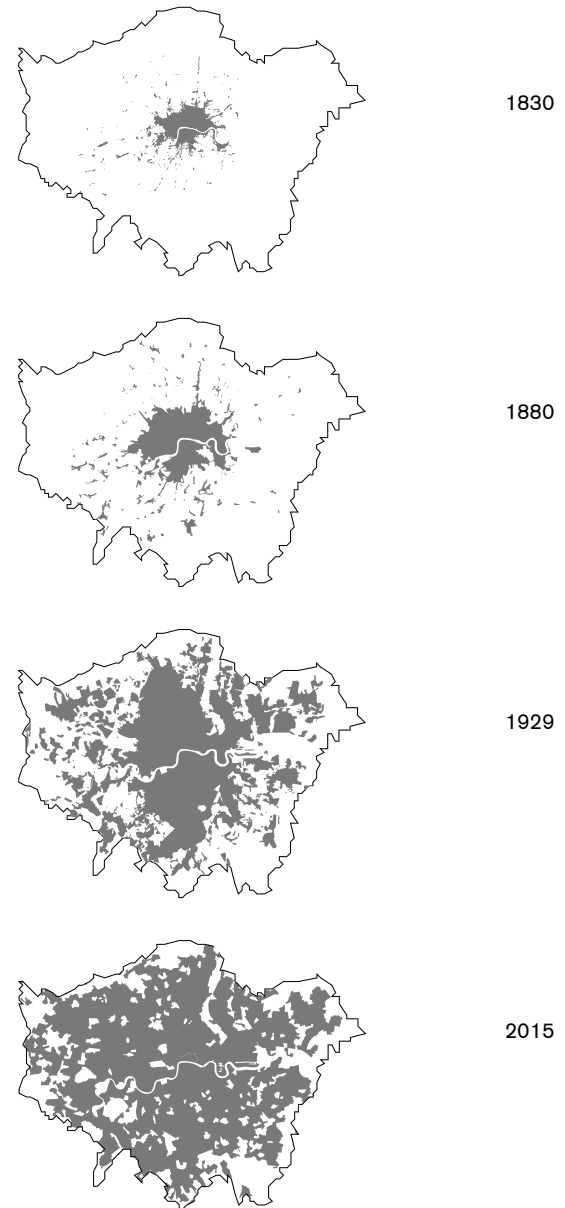
33 developments in the pipeline feature density levels of over 1,000 units per hectare.<sup>5</sup>

Larger developments delivered by single housebuilders can be slow to finance, gain planning consent, build and sell. If not masterplanned and designed sensitively, larger sites can also result in a loss of London's characteristic fine grain and diverse appearance. Development on such sites should be encouraged to provide a greater mix of housing tenure and types, including private rented sector, and affordable rent and sale, for a range of residents like students, families and older people, at a variety of price points.

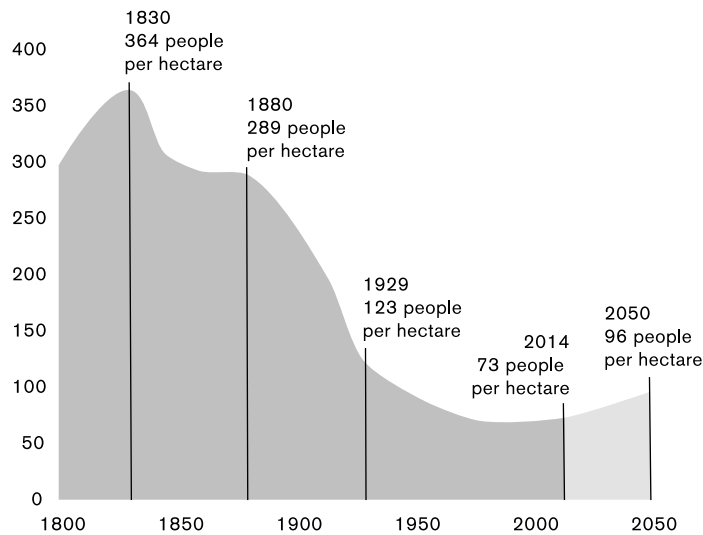
After a mid-20th century decline, London's population is expanding as fast as any period since 1800.<sup>6</sup>



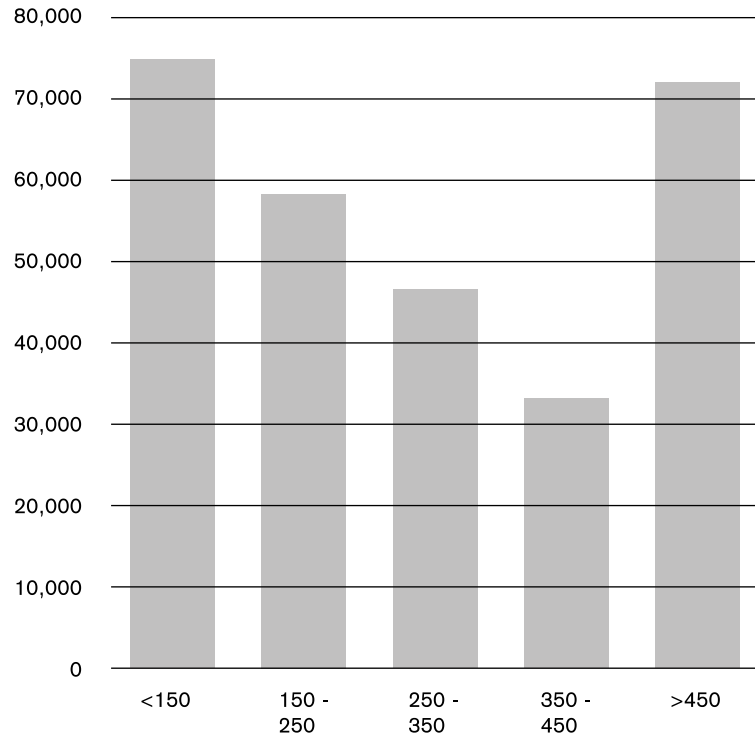
London has historically grown by expanding its footprint, however the majority of future growth is planned to be contained within the parameters set by the Green Belt.<sup>8</sup>



London's housing density is on the rise, but remains almost five times lower than the 1830 peak.<sup>7</sup>

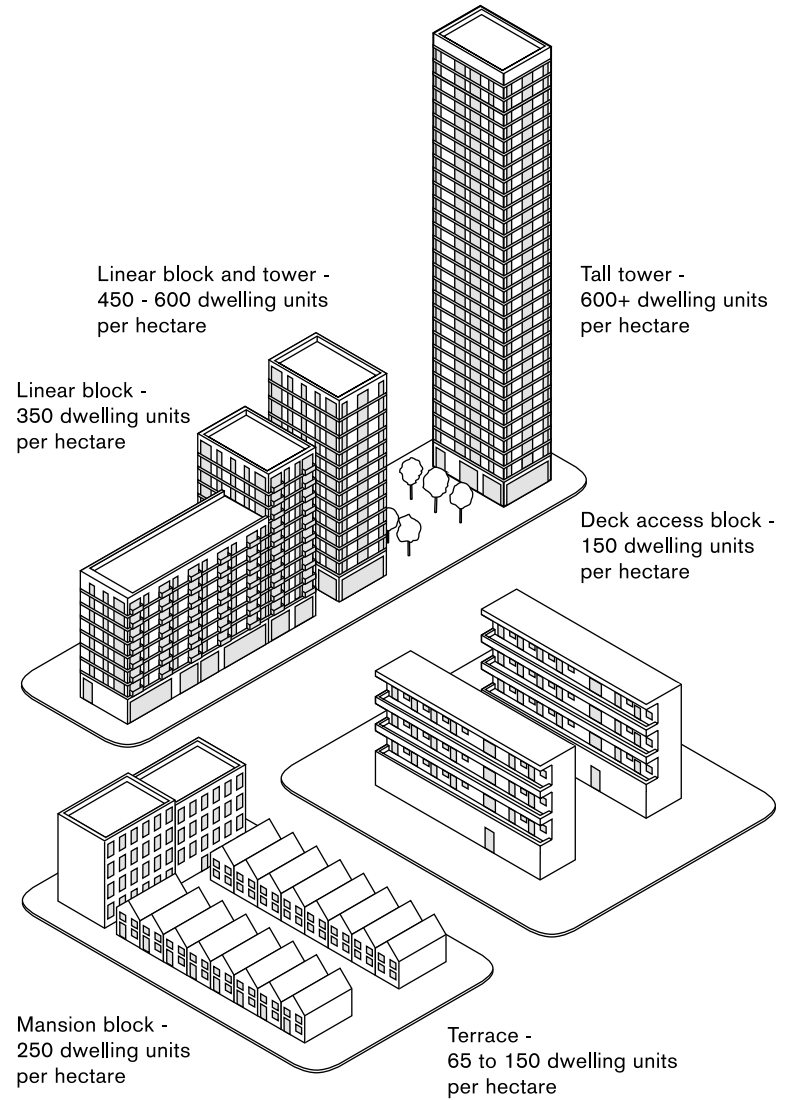


Over a quarter of London's development pipeline is above the maximum density set by the London Plan Density Matrix.

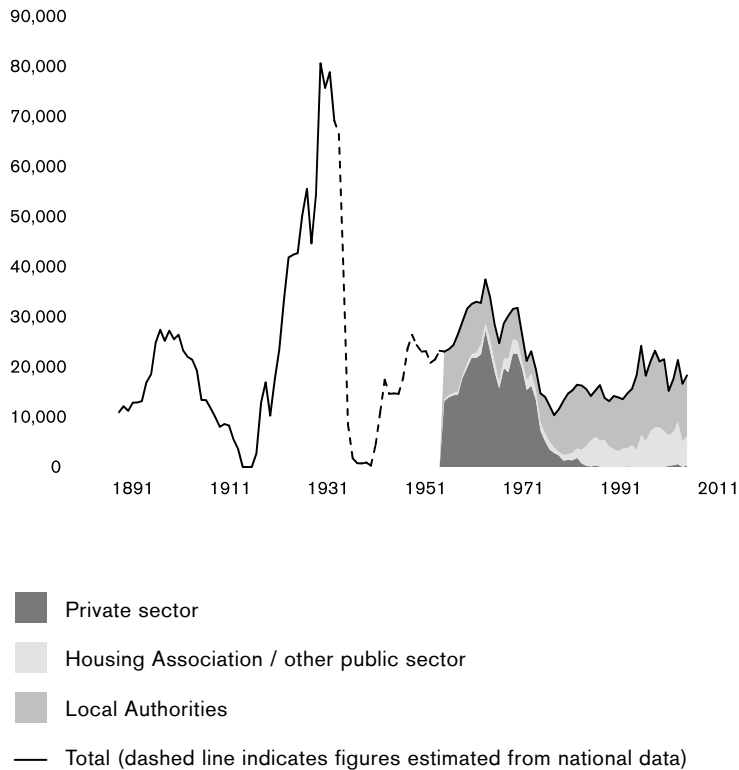


Pipeline dwelling units by density

Density typically corresponds with building typologies.



The peak of post-war housebuilding in London was largely delivered by the public sector.<sup>9</sup>



Diversifying the offer can help to increase the pace of delivery. Large, publicly owned sites being sold to the market could be parcelled up and made available to smaller housebuilders, which could generate a greater degree of design variation, innovation and mix of tenures.

With many large housebuilders having few incentives to expand their capacity, supporting smaller developers into the market could be one way to increase housing output.<sup>10</sup> Encouraging development on smaller infill sites through the London Land Commission could bolster that effort. Further research would provide a better understanding of how to support the growth of the smaller housebuilders. Measures to achieve this could include the identification of small development sites, simpler and quicker disposal processes for publicly owned land, access to finance, and greater skills training to improve the labour market.

Given that delivery now needs to exceed the levels of the 1960s and 70s, local authorities must again be seen as part of the solution.

The public sector is also key. Looking back at London's track record of housebuilding, the only time since the establishment of the Green Belt that housing delivery approached the levels now required was in the mid 1960s and 70s when the public sector built approximately three-quarters of all homes.<sup>11</sup> Given that housebuilding now needs to exceed the levels of the 1960s and 70s, which the

private sector and housing associations are unlikely to deliver on their own, local authorities must again be seen as part of the solution.

The public sector is estimated to own 40 per cent of land that is suitable for development.<sup>12</sup> This landholding not only presents the opportunity for greater certainty over delivery, but for capturing the increase in value brought about by granting planning permission and/or building on the land, which could fund yet more housing or critical infrastructure.

Of the 26,843 homes built in London in 2014-15,<sup>13</sup> approximately 310 were delivered by local authorities.<sup>14</sup>

Local authorities may well be best placed to deliver certain types of housing, including larger family and social rented units, and take a longer-term and wider, place-based approach to achieving greater design quality. Unlike in the 1960s and 70s, however, significant Government funding is not available to fund such initiatives. Some local authorities have found creative ways to finance and deliver new housing, by making the most of recent reforms of housing finance arrangements, exploiting landholdings and cross-subsidy opportunities from mixed-tenure developments, investing employee pension funds, and establishing joint venture and Council Owned Companies.

However substantial barriers remain to councils delivering at scale. These include a lack of in-house delivery skills and capacity (see *Good*

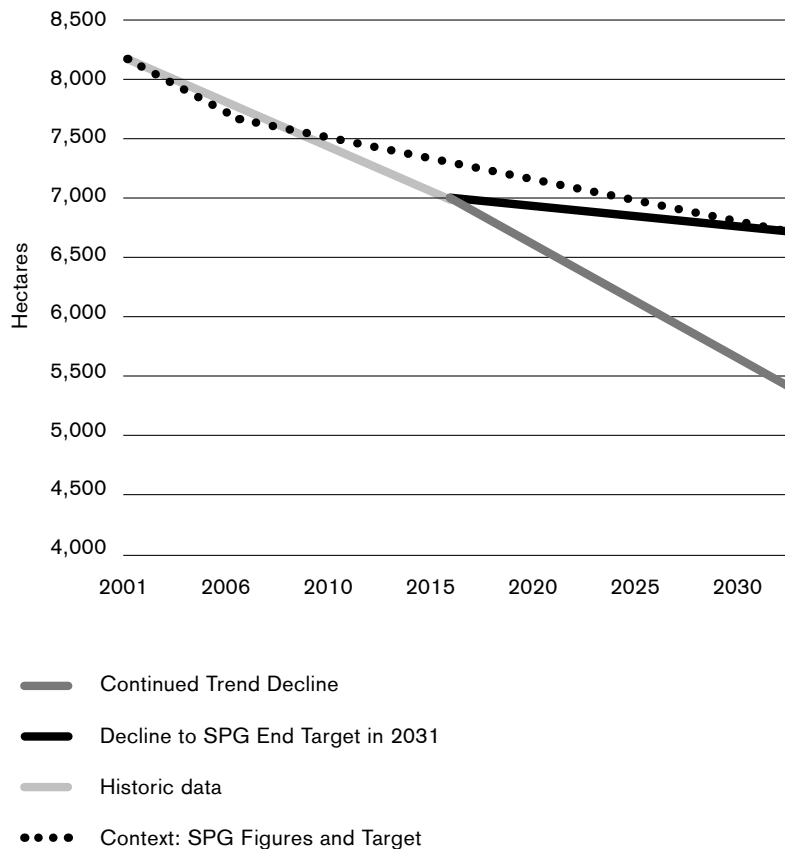
*Growth Agenda 4: Shaping London*); the need for better understanding of development finance and risk; differing interpretations of constraints on procurement and the disposal of public land; the complexity of estate regeneration due to fragmentation of ownership; and, despite some new flexibilities, Housing Revenue Account borrowing caps imposed by Government.

Council-led housing delivery will need support from the Mayor to overcome these barriers and make a meaningful contribution to the number of new homes in London. A new generation of public sector delivery will also need to learn lessons from past generations of council housing. Large single-tenure developments are no longer desirable nor viable. A portfolio approach across smaller parcels of land can balance tenures and values over the longer-term by cross-subsidising schemes that require net investment with schemes that generate profits, similar to the model of London's Great Estates.<sup>15</sup> This in turn would support more mixed and balanced communities.

### *Working London*

In the case of employment, the London Plan anticipates that there could be another 861,000 jobs in London by 2036<sup>16</sup> – the equivalent of more than eight Canary Wharfs. Around a third of these jobs – some 280,000 – are expected to be concentrated in the Central Activities Zone, where employment densities are already very high.<sup>17</sup> In the rest of London, though, particularly in town centres and industrial areas, space for business is often in direct competition with housing,

London's industrial land is being released at a significantly higher rate than set out in the London Plan.<sup>18</sup>



which tends to command the highest prices and receives policy preference. The creation of new spaces for employment activity needs to be prioritised alongside housing to provide a healthy mix of employment, limit displacement of existing businesses out of London, respond to new working patterns, and ensure that those new jobs for Londoners emerge.

With London making a net contribution of £34bn to the Exchequer in 2014 (21 per cent of the total UK tax take), its economy must be given the space it needs to thrive.<sup>19</sup>

There are approximately 975,000 small and medium sized enterprises (SMEs) in London.<sup>20</sup> They comprise 99.8 per cent of all businesses, provide over half of London's jobs and nearly half of London's business turnover.<sup>21</sup> While some of these businesses are high-value and able to pay for premium workspace, and others primarily exist online, many still rely on the availability of mid-level and lower cost office, retail, studio and workshop space to make their businesses work.

Much of this lower value workspace is located in and around our high streets and town centres, and in industrial areas. From 2008 to 2013, though, 405,800 square meters (sqm) of storage, distribution and industrial floorspace was lost from our larger town centres alone (net loss).<sup>22</sup> The extent of the reduction of all such space in places that fall outside the medium to large centres, including hundreds of neighbourhood and local centres and undesignated high streets, is unknown. What we can be sure of, is that the continuation of Permitted Development rights for the conversion of retail and office to residential is exacerbating the situation.

London Councils estimate that 834,000 sqm of office space were lost through permitted development in London between May 2013 and April 2015.<sup>23</sup>

The story in industrial areas is even more pronounced. London currently has approximately 7,000 hectares of industrial land. The London Plan indicates that, given a net decline in demand, there is scope to release 740 hectares between 2011 and 2031, an average of 37 per year. Despite this benchmark, we are currently releasing approximately 100 hectares per year. If a similar rate of release is maintained, the target release to 2031 will be reached by around 2018.<sup>24</sup>

While industrial areas are important for employment, they are also significant for servicing and supporting the wider London economy. Changes in distribution methods may mean some of the larger, land-hungry logistics uses with low employment densities can be relocated further out around the M25, if congestion impacts can be managed through new consolidation centres. However, smaller production and prototyping businesses benefiting from the skills and inventiveness of London's creative and technology sectors require a wide range of lower-value workspace to start and grow. This older, scruffy stock continues to be lost, and cannot be re-provided at equivalent low values in new buildings. In order to support this sector, we need to ensure the continued use, adaptive reuse and intensification

of existing buildings, as well as the provision of affordable workspace.

Between September 2011 and September 2014, the number of manufacturing jobs in London rose by 15%, the fastest growth rate in Britain despite the current release of industrial land.<sup>25</sup>

Advances in technology are continuing to change the nature of industry in London and our patterns of work. These changes are challenging traditional assumptions about 'dirty' industrial uses being a 'bad neighbour', or needing certain types of accommodation, like single-storey sheds or large yards. There is potential here for new, innovative typologies to emerge that test higher densities, sharing facilities, or different mixes of use.



## ***Recommendations***

**To deliver the homes and jobs Londoners need, the Mayor should:**

- 1a. Strengthen the London Plan policy promoting mixed and balanced communities to encourage a greater variety of housing types and tenures on large sites, including PRS, student and all other forms of specialist housing.**
- 1b. Use the London Land Commission to parcel up large, publicly owned sites into smaller plots for development within agreed timescales, without compromising density, making them available to smaller housebuilders that demonstrate a high quality design and a varied housing offer.**
- 1c. Smaller housebuilders should be supported to make a larger contribution to London's housing output by improving access to small infill sites, making the disposal process of publicly owned land simpler and quicker, using simplified planning policy and tailored development management procedures such as Planning in Principle to de-risk the planning process, and making more finance available.**
- 1d. Work with boroughs to support a new generation of public sector housebuilding through direct delivery, similar to the model of London's Great Estates, by**

**establishing a network to share knowledge of how to overcome barriers and build delivery skills and capacity.**

- 1e. Research the impact of Permitted Development rights for the conversion of office or other commercial uses to residential in London on the number and types of jobs lost, quality of housing provided, and infrastructure costs. Use findings to support local authorities using Article 4 directions where appropriate.**
- 1f. Include policies in the London Plan to ensure that the development of industrial land is informed by a detailed understanding of existing uses and users. Ensure evidence to demonstrate that industrial land is genuinely surplus to requirement is robust, including evidence of rent levels and marketing activity over several years and consultation with existing or previous users. Where new jobs are planned for an area, particularly through Opportunity Area Planning Frameworks, a detailed rationale should be required to ensure the right kinds of spaces are provided.**
- 1g. Champion the creation of affordable workspaces in new developments, and require their provision through policy in the London Plan. Develop a framework to define affordable workspace and eligibility criteria for access, which may include start-ups, social enterprises and artists.**

**1h. Pilot how light industry, including small-scale manufacturing and digital fabrication, might be incorporated in new residential areas and developments outside areas currently designated for industrial uses. This could include a programme of capital investment to support innovative building typologies and development models that successfully mix diverse uses.**

## 2. Ensuring Londoners are getting the development they want

Public opposition to new development can be a major barrier to growth. A lack of local support can result in significant uncertainty, delays and additional costs for developers. At the same time, the failure of developers to adequately engage with local communities and businesses can breed distrust of development that presents a greater obstacle for future schemes.

Public engagement in development needs to become less reactive, earlier in the process and more accessible, transparent, and representative.

At its worst, this is a vicious circle that consumes the efforts of both local communities and developers in opposition to each other. But at best, redirecting those efforts to meaningfully and transparently involve Londoners in shaping developments will result in higher quality and more deliverable developments that are welcomed by the communities around them. For this to happen, public engagement in development needs to become less reactive, earlier in the process and more accessible, transparent, and representative.

Public interest and participation in the planning process tends to increase the nearer an application

is to determination – the more tangible the proposals, the more tangible the opposition, or support. However, this runs counter to the best time to influence a planning application – the more finalised the scheme, the less prepared the developer is to amend it. Consultation towards the end of the process is thus necessarily more reactive, and therefore antagonistic. Efforts need to be made to move public engagement further upstream, so that it can inform the principles of development before they are fixed.

The requirements for planning submissions involve extensive, comprehensive and detailed information on proposals, including accurate visual representations. However, the resolution of this information is often 'lost in translation' when it comes to formal public consultation. The standard formats of the A4 site notice and online planning database are inadequate at communicating the key characteristics of a scheme to a non-professional audience, and can present a barrier to the involvement of those without special interest or expertise. More accessible standard formats are needed.

### *A clearer picture*

A lack of clarity over what is being proposed can lead to misinformation, which obscures well-informed decision-making. This is particularly true of the non-physical aspects of planning applications, such as planning obligations and affordable housing contributions, usually captured under Section 106 agreements. Greater transparency over these arrangements (and the viability appraisals that

underpin them) would help the public assess and appreciate the benefits of growth, for example contributions to local infrastructure. (See also *section 6 Delivering the infrastructure for good growth*).

Surveys of public attitudes to growth show that people's concerns and priorities for new development are heavily influenced by their own life stages.<sup>26</sup> Younger people prioritise jobs; family-age people prioritise education and affordable housing; older people prioritise health. However, the demographics of those who respond to consultations on planning policies or applications are rarely representative of wider residential and business communities, or the future residents of a development. There will always be a degree of resistance to development and change; the question is how this can be expressed constructively to shape development, and how it can be balanced by a more objective representation of broader opinion. There is, therefore, the potential to use technology to develop alternative consultation methods to capture the voice of the 'silent majority', and help make long-term strategic decisions in the interests of all Londoners.

## ***Recommendations***

To better engage Londoners in the planning process, the Mayor should:

- 2a. Work with boroughs to pilot a new London standard for Planning Notices, which are more publicly accessible, and visually communicative. This could potentially be aligned with a virtual London planning model (see also recommendation vii a).**
- 2b. Use technology to develop research-led models of public engagement that offer a more balanced and representative sample of local opinions, and establish more objective evidence on public attitudes to growth and priorities for new development (for example, through Talk London).**
- 2c. Work with boroughs to make London's planning framework (including the London Plan, Supplementary Planning Guidance, and Local Plans) more engaging and accessible to the public. This could be done, for example, by removing any duplications of London Plan policy in Local Plans, and through online platforms to communicate place-based policies.**

## **3. Identifying where London's growth will go**

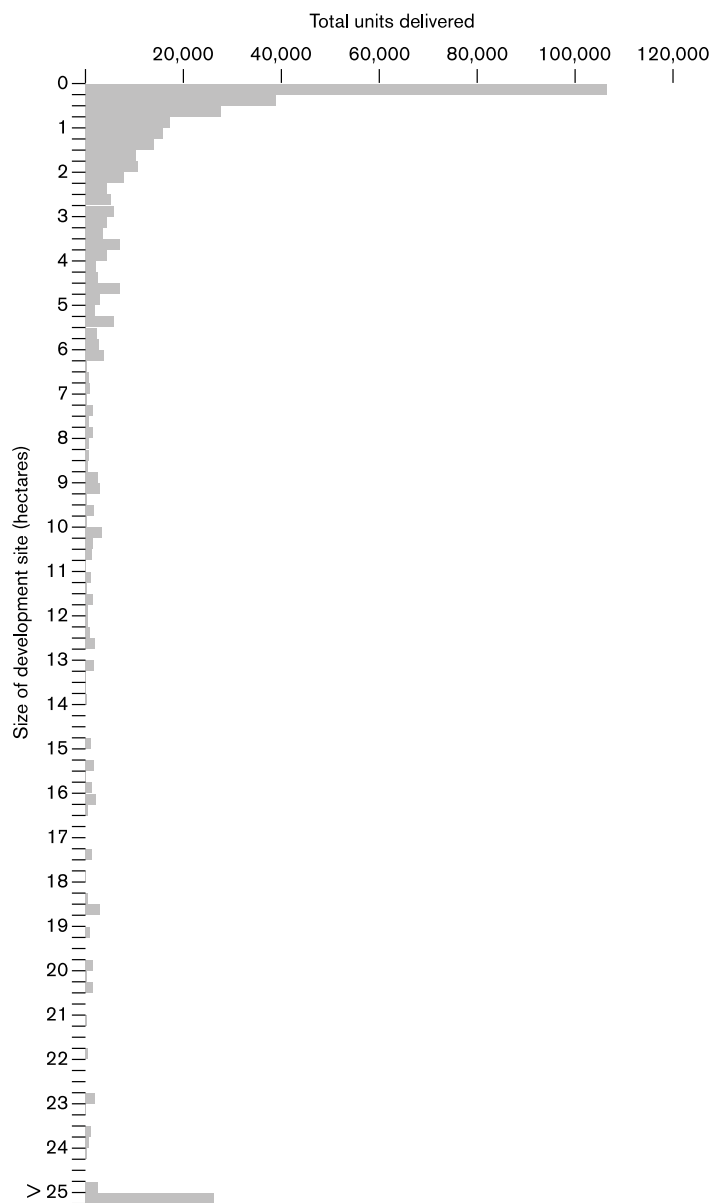
The quantum and type of land available to accommodate London's growth is a key factor in the form in which development will take. However, it is clear that the challenge of accommodating this growth within London's boundaries will not be met by any one type of land alone. Instead, we need to focus on how *all* of London's land can play its part in accommodating growth – from town centres to suburbs; large estates to small infill sites; from inner London to its outer fringes; on public and private land, and on large sites, as well as small.

Unlike the housing boom of the 1930s, when over 500,000 homes were built on greenfield land in outer London,<sup>27</sup> most of London's area is now built up. This means that new housing is largely within the context of existing development, more directly affecting the character of local places and their infrastructure. It is therefore more important than ever that we ensure that growth enhances the experience of London through a careful and collaborative planning effort.

Since 2006 an average of 97% of London's annual housing development has been on brownfield land.<sup>28</sup>

The Strategic Housing Land Availability Assessment (SHLAA)<sup>29</sup> currently identifies over 5,000 sites adding up to 8,000 hectares of developable land.

While large developments play an important role in providing homes, sites smaller than 0.25 hectares will make a significant contribution through infill development, as well as conversions and extensions of existing buildings.



The deliverability and capacity for growth of these sites, however, is variable. Only a proportion of these sites will come forward for delivery at a given time. Many are in areas of Public Transport Accessibility Level (PTAL) 2 or less (where 6 is the best and 0 the worst), whereas others are in parts of London that can support high-density development. This means that an even distribution of density cannot be assumed.

The SHLAA identifies capacity for 470,000 new homes in London over the next 20 years. However, whilst the SHLAA process provides a very useful tool to understand the availability of land in London and its potential capacity, it does not provide a comprehensive figure for the amount of land available for development in London. It does not quantify the contribution of sites smaller than 0.25 hectares, other than broad brush assumptions based on historic trends, nor does it account for the fact that Opportunity Area Frameworks often identify over three times the capacity of homes in the same area. A more precise approach to identifying sites across London would give a clearer picture of the development possibilities.

### *Town centres first*

The London Plan identifies town centres, with their access to transport and local services, as ideal locations for growth. In fact, town centres are thought to have capacity for at least 154,000 homes.<sup>30</sup> Research has shown that increasing the density on identified sites and improving the chances of sites in multiple ownership coming forward, could create the capacity for another

64,000 homes in and around town centres over ten years.<sup>31</sup>

London Plan Policy 2.15 encourages boroughs to coordinate the development of London's network of town centres so that they provide the main foci beyond the Central Activities Zone for commercial development and intensification, including residential development. The character and capacity of London's town centres varies greatly, however. London Plan policy should be adapted to recognise this variation, and ensure any new development accommodates a mix of uses that contributes to the social and economic health of the area.

81% of housing capacity is within town centres and their immediate surrounds.<sup>32</sup>

Furthermore, town centres, with smaller sites in multiple-ownership, can be amongst the trickiest of areas to intensify. The complexity of successful town centre development, combined with the scale of intensification required, demands a coordinated approach to bring forward development; a sensitive approach to design; a plan for social and transport infrastructure; and a plan for the local economy.

### *Outer London and beyond*

There is also great potential for housing in the low-density areas of outer London that are more accessible by public transport – a new generation of

'Metro-lands'. According to one piece of research, if just 10 per cent of semi-detached housing were redeveloped at double their current density, 20,000 new homes per year over 15 years could be supplied.<sup>33</sup> Yet we know that, broadly, people in Outer London tend to resist local development more than those in the centre.<sup>34</sup> The SHLAA does not currently reflect the full potential of these types of sites - just 0.08 per cent of SHLAA sites are in accessible suburban areas.<sup>35</sup> The Mayor should therefore investigate how development, in suburban areas of higher accessibility and outside of local designations such as conservation areas, could be made more popular and provide guidance on how it is designed and implemented.

Of course not all growth associated with London will occur within its boundaries. The London Infrastructure Plan 2050 anticipates that growth in the wider South East of England is likely to occur along existing or planned transport corridors such as London-Stansted-Cambridge-Peterborough, Crossrail 1 and a potential extension into Kent, Crossrail 2, and additional rail capacity released by High Speed 2. Increasing the density of less dense areas near public transport or in established town centres to 100 units per hectare could potentially accommodate an additional one million people in the areas surrounding London.<sup>36</sup> Whilst outside of the scope of this report, the Mayor's Design Advisory Group supports the Mayor's continuing work with sub-regional partnerships, local authorities and agencies in the wider South East to coordinate development along growth corridors, as described in the London Plan.<sup>37</sup>

## ***Recommendations***

To identify where London's growth will go, the Mayor should:

**3a. Support boroughs in their identification of developable and deliverable land to provide more precise and realistic understanding of London's land availability. This may include producing guidance as to how they:**

- Can better account for land in town centres which needs to be assembled
- Include land in areas of high accessibility in suburban areas which might already have low density development
- Continue to review land in the Green Belt which is well served by social and transport infrastructure, in accordance with existing policy
- Recognise the potential of smaller and dispersed sites to provide substantial aggregate quantity of development

**3b. Support boroughs to produce growth plans for town centres with high potential for growth outside Opportunity Areas that:**

- Set out the best option for growth, having considered several scenarios
- Visualise the preferred option with a three-dimensional spatial plan
- Set out a strategy for social and transport infrastructure and economic growth

- Support the proposal with a business plan, strategy for implementation including site assembly, design guidance and development briefs

**3c. Create policy that encourages the intensification of accessible areas of London's 'Metro-lands' and produce design and implementation guidance, as well as incentives, for this to be delivered.**

#### 4. Making better use of what we have

Fewer new homes have been built in London in the last decade than were built in the 1960s or 1970s. However, London's net housing stock is actually growing at its fastest rate since the war. This is because we are making more intensive use of the building stock we already have by demolishing less, and converting more.

From 1971-81, around 280,000 new homes were built in London, but the net increase in stock was only 110,000.<sup>38</sup>

Housing completions are often held up as the measure of success in meeting housing need, but conversions of houses into flats and non-residential buildings into homes are the unsung heroes of housing supply over the past decade.

Only 193,000 new homes were built from 2001-11, but the net increase was 270,000.<sup>39</sup>

The more efficient the use of the housing stock we already have, the less need there will be to increase densities of new development and impact on the



form of London. For example, converting just 1 per cent of the 1.61 million unconverted detached, semi-detached and terraced houses into flats could add approximately 24,000 homes to London's net housing stock – half of the new homes needed every year - with limited, or no physical impact on built form.<sup>40</sup>

Between 2010/11 and 2012/13 a net 4,940 homes were created through conversions (3,300 existing homes turned into 8,240 new ones).<sup>41</sup>

### *Making the conversion*

Capacity for significant housing growth already exists, and much of it is underused. Around 730,000 of London's existing homes have two or more spare bedrooms – almost a quarter of all households in the capital. Around 85 per cent of these are owner-occupiers; eight per cent are private renters, and seven per cent are in social housing. Under-occupation is more common amongst older people whose children may have left home – known as 'empty nesters'. However, this too varies by tenure.<sup>42</sup>

Potential barriers to the conversion of houses into smaller units include policies in certain areas seeking to protect the provision of family homes. Outside of these constraints, there are a number of existing voluntary schemes to reduce under-occupancy by

providing support and incentives to social tenants who wish to downsize. This could mean money, in some cases. Many boroughs run schemes to support under-occupying social tenants through cash incentives (typically £500-£2,500 per bedroom) and providing free assistance with moving house. The Mayor also runs two housing mobility schemes for social tenants in London – Housing Moves and Seaside & Country Homes.

68% of older homeowners (over 55 years) in England live in a home that has at least two spare bedrooms, whereas the figure is 19% for social tenants.<sup>43</sup>

Initiatives to make more efficient use of council and housing association stock are perhaps simplest to implement, but are unlikely to unlock significant numbers of new homes. The greatest spare capacity lies in owner-occupied detached, semi-detached and terraced houses, but there are relatively few schemes on offer for private market residents looking to downsize. The London Borough of Redbridge's FreeSpace scheme offers owner-occupiers a 'down-letting' service, providing assistance with renting a smaller home in return for letting their original home through the council.

There is potential for a similar, London-wide 'down-letting' scheme to unlock far greater numbers of homes, providing it is voluntary, presents an attractive package of incentives, and offers a wide

choice of more suitable and accessible alternative accommodation. Supporting the provision of desirable new housing options that encourage older people to move on their own terms is vital, and is covered in more detail in MDAG's *Good Growth Agenda 3: Ageing London*.

### *Out of office*

London's total office stock is around 26.6m sqm,<sup>44</sup> with a projected need for an additional 3.9m sqm (net) by 2031.<sup>45</sup> However the way Londoners work is changing rapidly, and so are the demands on London's office space. Businesses are shifting towards more flexible working patterns and distributed working. Self-employment is higher than at any point since records began, and higher in London than anywhere else in the UK.<sup>46</sup> In turn, offices have evolved from cellular space to open plan, to hotdesking, and now increasingly co-working. The London Enterprise Panel's London Open Workspaces Map lists the locations and services of over 330 incubators and co-working spaces, as well as artists' studios and maker-spaces.

Looking beyond the emerging open workspace sector, London's existing office stock has the potential to be put into far more productive use. Surveys of office utilisation rates show that desks are on average unoccupied for 62 per cent of working hours - not to mention evenings and weekends.<sup>47</sup> New services such as ShareDesk, NearDesk and Hubble now allow landlords and tenants to list underoccupied space on an hourly, daily or monthly basis, much like Airbnb for offices.

Greater sharing of London's existing office stock can increase the availability of start-up space to support new and emerging economic sectors, reduce the need for new workspace, and generate secondary benefits from the 'cross-pollination' of business activities.

## *Recommendations*

To unlock existing capacity for homes and jobs, the Mayor should:

- 4a. **Include a policy in the next iteration of the London Plan that encourages the conversion of houses to flats in appropriate locations, where the resulting units would comply with housing standards.**
- 4b. **Implement a voluntary, London-wide housing mobility scheme to support the owner-occupiers of under-occupied properties to downsize.**
- 4c. **Encourage owners to put underoccupied or unused office space into more productive use through incentives such as broadband vouchers or rate relief.**

## 5. Rethinking how we manage density of development

London's overall density has varied over time. Today we live at a density of 73 people per hectare. A hundred years ago there were 196 people per hectare in London, and a hundred years before that there were 297.<sup>48</sup> If London had the same density today as in 1815, its current footprint could accommodate nearly 35 million people. London's density also varies across the city. According to the LSE, London's peak residential density is 271 people per hectare. This is less than a third of New York's peak density of 585 people per hectare, and less than one sixth of Hong Kong's 1,111 people per hectare.<sup>49</sup>

We need to better understand how we can ensure that quality of life is maintained in these very high densities.

While the measure of people per hectare is a useful way to understand actual occupation densities, the London Plan uses two principal measures to plan new development: number of units (dwellings) per hectare and the number of habitable rooms per hectare. The number of units per hectare, in particular, has a direct relationship to building types. A density range of 65 to 150 units per hectare, for example, would typically take the form of a terraced house, while a density of 450 units per hectare and above would normally result in a tower. Some argue

Densities can be measured in a number of ways - dwelling units, habitable rooms, people - and at different scales - city-wide, neighbourhood, site.

#### City density London

73 People per hectare

53 Habitable rooms per hectare

21 Dwelling units per hectare



#### Neighbourhood density Islington

180 People per hectare

378 Habitable rooms per hectare

180 Dwelling units per hectare

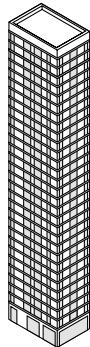


#### Site density Arrowhead Quay

Unknown People per hectare

2,700 Habitable rooms per hectare

1,389 Dwelling units per hectare



that development in London should not exceed 350 units per hectare, a density which can still be achieved through a perimeter block.<sup>50</sup> However, imposing a cap at that level would reduce London's planning pipeline by at least 35,600 homes.

Applying a cap on densities of 350 units per hectare would reduce London's pipeline of development by at least 35,600 homes.

Density is critical to accommodating the homes London needs, making the most of the infrastructure we already have and creating sustainable places to live. This was a fundamental principle in the Urban Task Force's 1999 report *Towards an Urban Renaissance*, which advocated compact urban developments based on a commitment to excellence in urban design and transport infrastructure. The Sustainable Residential Quality Density Matrix was introduced into the London Plan to ensure that the density of development being built across London reflected this. The Density Matrix sets out density guidance according to public transport infrastructure and place setting. Whilst the matrix has been a useful tool to guide development densities over the last decade, nearly half of all developments proposed last year were well above the thresholds set out in the matrix.<sup>51</sup> We are now building at densities higher than ever before.

Many of these high density developments include tall buildings. As well as understanding the visual and microclimatic implications of tall buildings, as set out

in *section 8* of this report, we also need to consider how we accommodate social infrastructure, such as schools, shops, open spaces; what the cumulative impact on servicing these new densities are, including waste collection and deliveries; and aspects relating to maintenance and life costs of very dense development, as explored in *section 6*. We need to better understand how we can ensure that quality of life is maintained at these very high densities.

### *A fresh look at density*

Whilst there is plenty of guidance and experience on how London should plan and design at densities of up to the top range of the Density Matrix of 405 units per hectare, there is very little to guide us beyond that. With developments being proposed in London reaching densities over 3,000 units per hectare, policies need to be updated and research undertaken to better understand the challenges and opportunities of building at such high densities.

The way in which density is measured also needs to be reassessed. Measuring density on a site-by-site basis provides a limited understanding of the impact that individual densities will have on an area. For example, the Density Matrix does not take into account the existing density of a particular area, the intensity of use of its infrastructure, or the cumulative impact that other development will have on it. So whilst an area may be of particularly low density and have a surplus of transport infrastructure, this will not be reflected in the potential density of a site. The result can be that schemes do not optimise the full extent of an area's capacity for growth.

Relating density to Public Transport Accessibility Levels (PTAL) have been fundamental to ensuring sustainable patterns of development in London. However PTAL alone are a relatively simplistic measure of a place's capacity for density. They do not take account of other modes of transport such as walking and cycling, the capacity of local social infrastructure, such as shops, healthcare, education and open spaces and access to local employment. This results in developments not necessarily optimising local infrastructure. The London Plan recommends use of the Access To Opportunities and Services (ATOS) tool to better understand what services are accessible by foot and cycling in a local area. The use of more sophisticated tools such as ATOS should be extended and built into the Density Matrix.

A key component of the Density Matrix is the categorisation of 'setting' into Central, Urban and Suburban. The definitions of these conflate subjective ideas of character areas with proxies for social infrastructure and facilities, such as distance from a town centre. As such, it is rarely referred to and is not generally considered useful. Additional measures of density could describe the built form, massing, and permeability predominant in an area.

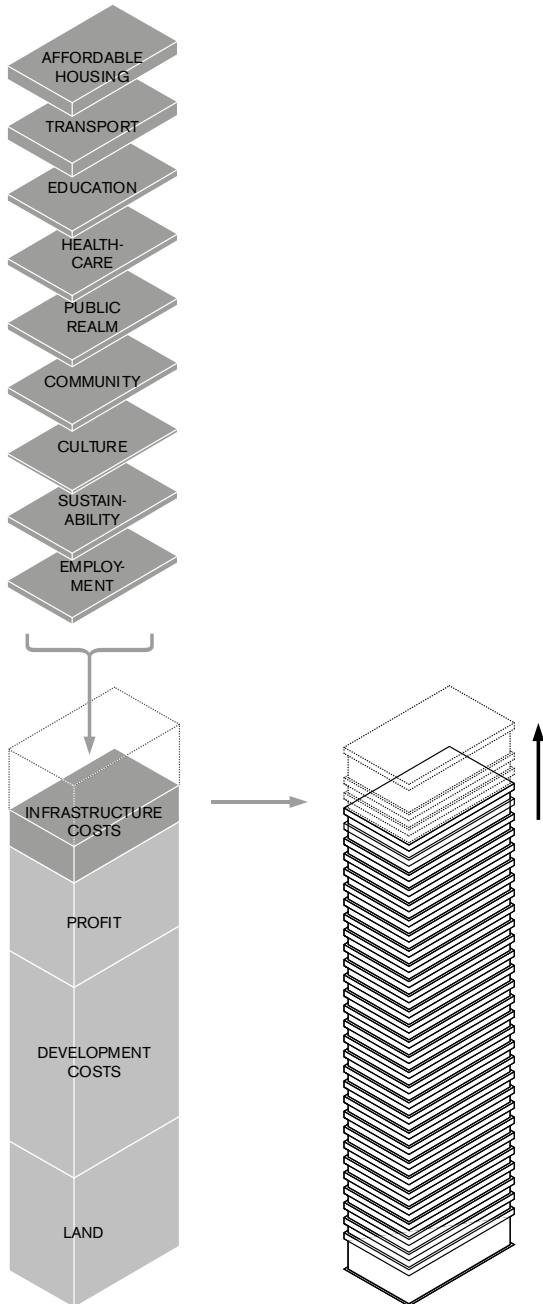
## ***Recommendations***

To ensure high density development is appropriately located, and of a high quality, the Mayor should:

- 5a. Undertake further research to better understand the challenges with developments whose densities go beyond those envisaged in the Density Matrix, with particular regard to servicing and waste, social infrastructure and quality of life indicators.
- 5b. Redesign the Density Matrix to:
- measure the impact of development on the cumulative density of a neighbourhood, rather than only focusing on an individual site, and developing a standardised way of doing this;
  - incorporate other measures of infrastructure beyond PTAL to better reflect the levels of social infrastructure and employment in an area;
  - replace Urban, Central and Suburban categories with a more nuanced measure to establish settings;
  - take into account the occupation density of the wider area.
- 5c. Introduce a tiered level of planning requirements that increases in stringency for developments that go beyond established density ranges. This could include requiring applicants for such

schemes to demonstrate that they have investigated alternative massing options, have been reviewed by an approved Design Review panel, comply with new Mayoral guidance on designing for high density, and have submitted detailed information on materials, detailing, management and maintenance. (See also *Good Growth Agenda 4: Shaping London recommendation 3b*)

*Funding public infrastructure through private development contributes to increasingly high development densities.*



## 6. Delivering the infrastructure for good growth

The London Infrastructure Plan 2050 estimates that the total bill for delivering and maintaining the infrastructure needed to accommodate London's growth from 2016-2050 will be £1.3 trillion.<sup>52</sup> On the basis of current levels of public sector investment in infrastructure, this would leave a funding gap of £173 billion - or approximately £400 per capita, per year. The London Infrastructure Plan highlights that reduced public expenditure on infrastructure, including cuts in Government grants for affordable housing, transport and education, will not keep pace with projected levels of growth in London.

Private sector development is increasingly expected to help fill this infrastructural funding gap through the Community Infrastructure Levy (CIL)<sup>53</sup> and S106 planning obligations.<sup>54</sup> To ensure that this additional burden on private developments does not render schemes unviable, the National Planning Policy Framework requires the costs of any requirements such as affordable housing, standards or infrastructure 'provide competitive returns to a willing landowner and willing developer to enable the development to be deliverable.'<sup>55</sup>

### *Public and private*

This system gives local authorities a mechanism to secure the necessary contributions to fund public infrastructure, and gives private developers the security that their schemes will remain deliverable. However, where public infrastructure requirements

challenge the deliverability of a scheme, something has to give. In this situation, it can be in the interests of both the local authority and the developer to increase the density of a scheme to generate more cross-subsidy, reduce the level of affordable housing provision where there is no fixed requirement, or a combination of both. This way, the local authority benefits from infrastructural funding and the delivery of regeneration, and the private developer benefits from competitive returns and the delivery of associated infrastructure which enhances their scheme.

If you were designing the system for funding public infrastructure through development again, you wouldn't start from here.

Whilst in some cases higher densities are desirable to make the most of existing infrastructure and support sustainable travel patterns, in other cases an unintended consequence of this trade-off can be a drive towards higher densities, a push for higher-priced private housing to balance the viability, or a reduction of on-site affordable housing. These trade-offs are affecting the form of London, and our ability to build mixed and balanced communities. As was said at one of the roundtable discussions that informed the *Good Growth Agenda* series, if you were designing the system for funding public infrastructure through development again, you wouldn't start from here.

Getting the provision of public infrastructure right is critical to gaining public support for new

development. The results of a Greater London Authority (GLA) survey<sup>56</sup> of public attitudes to growth listed housing affordability, health services and waiting times, and public transport as Londoners' top three concerns about growth. The same survey found that around a quarter of Londoners think that new development will not deliver this necessary infrastructure. Greater transparency and accountability over S106 agreements and the viability appraisals that underpin them would help reconcile this mismatch between communities' demands from new developments and the reality of what infrastructure they can deliver.

Reforms to the system of planning obligations should be based on the general principle that all beneficiaries should pay for infrastructure in proportion to how much they benefit. This would involve capturing the uplift in value of existing residential property generated by new infrastructure, which in turn would allow improvements to the infrastructure of areas with a lack of provision without relying on new development.

Finally, we need to harness technology to make sure that the provision of infrastructure not only keeps up with demand, but anticipates and manages it. The London Infrastructure Mapping Application is being developed to bring together information from a range of sources allowing infrastructure providers to forecast growth, plan investment and coordinate delivery. This should be complemented by smarter use of the infrastructure we already have by managing demand over time, for example through incentives and dynamic pricing.<sup>57</sup>



## *Recommendations*

To improve the provision of public infrastructure through private development, the Mayor should:

- 6a. **Issue new guidance on planning obligations (S106 and CIL), including viability appraisals, to ensure consistency, transparency, fairness and responsiveness to changes in market values over time. This should also take into account cumulative impacts of development on existing infrastructure, and coordination of new infrastructure provision across multiple schemes. A transparent and easy-to-understand summary of S106 heads-of-terms should be included as part of, or as an appendix to, all mayoral Stage 2 Planning reports.**
- 6b. **Investigate longer-term and more proportionate mechanisms for financing public infrastructure through the London Infrastructure Plan, in consultation with the London Infrastructure Board.**
- 6c. **Implement innovative measures to make more efficient use of existing infrastructure (e.g. public transport) by managing demand and shifting patterns of behaviour (e.g. commuting peaks), as identified in the London Infrastructure Plan 2050.**

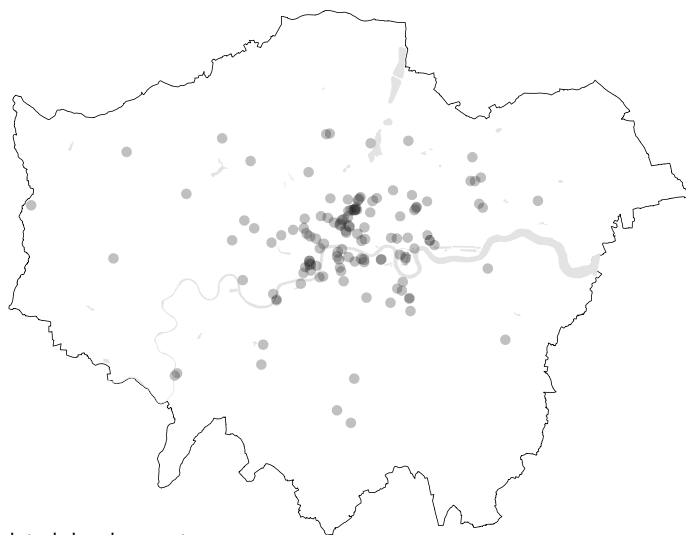
## 7. The place of tall buildings in London

London's skyline has evolved dramatically over history, punctuated by structures that express changing social and economic values: Wren's spires and the dome of St Paul's; the chimneys of Victorian industry; the modular towers of post-war social housing; office blocks in the City and Canary Wharf in the '80s and '90s. And now, primarily residential-led mixed-use development, dotted across the city.

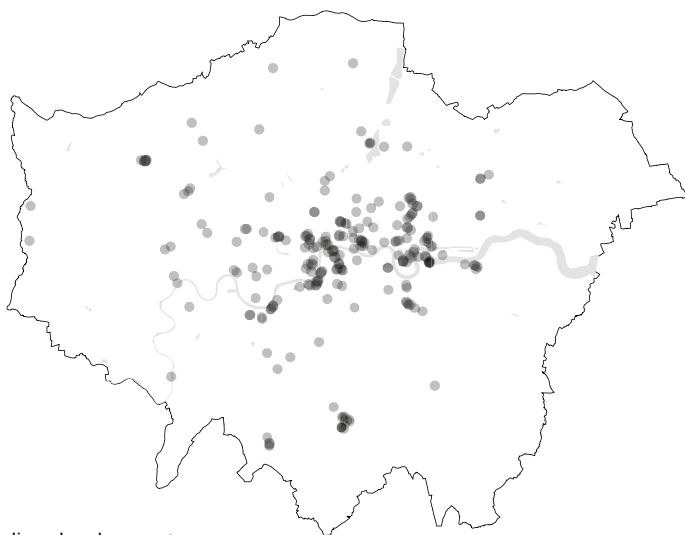
Having a 'feedback mechanism' in which we can collect data to assess the predominant typologies and their overall quality would allow officers to have a more in-depth understanding of how policies affect urban form.

How tall is tall? There is no universal definition for what constitutes a tall building. The Mayor defines tall buildings in his London Plan as buildings "that are substantially taller than their surroundings, cause a significant change to the skyline or are larger than the threshold sizes set for the referral of planning applications to the Mayor." New London Architecture used the benchmark of 20 storeys tall in its research with GL Hearn, which revealed that 263 buildings of that scale are in the pipeline for the capital. As discussed in *section 5*, densities over

*While high density developments - over 450 dwellings per hectare - have tended to be concentrated in inner London, many are now being planned in the outer boroughs.*



Completed developments  
over 450dph (April 2009 -  
March 2014)



Pipeline developments  
over 450dph  
(March 2014)

450 units per hectare tend to result in tall buildings typologies.

Tall buildings remain one of the most high-profile and contested aspects of planning in London today. Last year there were 85 planning applications with tall buildings proposed across London. Of these, 79 were approved, the majority within Opportunity Areas, the CAZ, town centres and areas with high public transport accessibility levels, in accordance with the criteria in London Plan Policy 7.7.

### *Going public*

Public discussion around tall buildings is polarised, with some schemes attracting vocal opposition. However, a survey of public attitudes to growth carried out by the GLA showed that fewer than 10 per cent of Londoners consider the height of buildings as being a major concern. Whether widespread or not, the level of opposition does highlight issues over how policy and the assessment of tall buildings in London is communicated.

There is a plethora of policy on tall buildings across London, from non-statutory building height strategies, Area Action Plans, Supplementary Planning Documents, Local Plans, the London Plan, the London View Management Framework (LVMF) and the World Heritage Sites SPG. These policies usually set out where tall buildings should or should not be located, how tall buildings should be, architectural quality and requirements for addressing microclimatic issues associated with them. This multitude of guidance paints an unclear picture of current tall buildings policy across London and should be consolidated to both improve developer

certainty and public understanding of where tall buildings may or may be not acceptable.

Given the impact and number of tall buildings proposed across London, policy needs to be strengthened. Further research is needed to better understand and communicate the cumulative visual impacts these buildings have, develop better understanding of their impact on microclimate, the importance of ground floor uses, as well as better understand their social impact, in terms of social infrastructure, energy and waste management. This is explored further in *section 6* of this report, on density.

The process of assessing applications for tall buildings would also benefit from greater transparency and accessibility. Proposals are generally accompanied by in-depth assessments of their visual impact, commissioned from specialist consultancies, which use three-dimensional models to illustrate views specified by development management planners. However, the reports outlining these assessments are not easily accessible to the general public, and can be one of hundreds of different documents listed online. A more visually accessible medium for assessing and commenting on applications would help create a more informed and open discussion around proposals for tall buildings.

## ***Recommendations***

**To clarify and better communicate the potential distribution of tall buildings across London, the Mayor should:**

- 7a. Improve the tools through which planners and the general public can assess the visual impact of taller buildings by commissioning a three-dimensional virtual planning model for London that can be accessed online and easily updated.**
- 7b. Simplify London-wide policies that guide the location of where tall buildings are permitted by reconsidering the criteria set out in Policy 7.7 so that they incorporate the aspirations of the LVMF and World Heritage Sites SPG, and create a definitive, specific and spatial set of criteria as to where tall buildings are and are not acceptable.**
- 7c. Wherever there are plans for clusters or neighbourhoods of tall buildings such as in Opportunity Areas, Planning Frameworks should provide more specific guidance. This guidance will need to be informed by standardised methodologies and tools, compiled through research, for assessing the aggregate visual, environmental and social impacts of such developments.**

## 8. Monitoring the qualitative impacts of planning policies

The form of development in London is the result of a number of different factors, planning policy being only one of them. The policies in the London Plan and associated Supplementary Planning Guidance do not prescribe built form; instead, they set out a range of standards which need to be met by architects and developers, independent of the form development might take.

In designing schemes to be compliant with these standards, architects will often face similar challenges and develop comparable ways of addressing them. In many cases, these lead to specific typologies, which often raise new issues that might be detrimental to their overall quality and may not be anticipated by current planning policy. For example: policies around avoiding north-facing single-aspect units have resulted in some developments being designed as linear blocks oriented north-south, regardless of the existing street pattern. Without intelligent design, growing requirements for bicycle storage can result in an increase in the amount of poor quality street frontage; and requirements for providing private and affordable housing within the same development have resulted in the emergence of the 'poor door' phenomenon.

Whilst in many cases, architects can design schemes which meet all required policies without compromising other aspects which are important to quality of place, in some circumstances, the combined effect of these policies is resulting in development form which is detrimental to the overall

quality of a place. However, we currently do not have a formal way of monitoring and collecting data on this, making it difficult to learn what these unintended consequences may be and how policy should be fine-tuned to avoid them. Furthermore, whilst the impact of London Plan policies and their implementation is monitored through an Annual Monitoring Report which sets out 24 performance indicators, none of these provide an indication of design quality.

### *Fine tuning*

Having a 'feedback mechanism' in which we can collect data to assess the predominant typologies and their overall quality would allow officers to have a more in-depth understanding of how policies affect urban form. In turn, this would allow them to fine-tune policies and standards to ensure that they are leading architects and developers to delivering only the highest quality development. In doing so, policies will evolve over time in response to where the market is failing to deliver, and in some cases they will even become redundant. But above all, they will ensure that the development being proposed in London will always be of the highest quality.

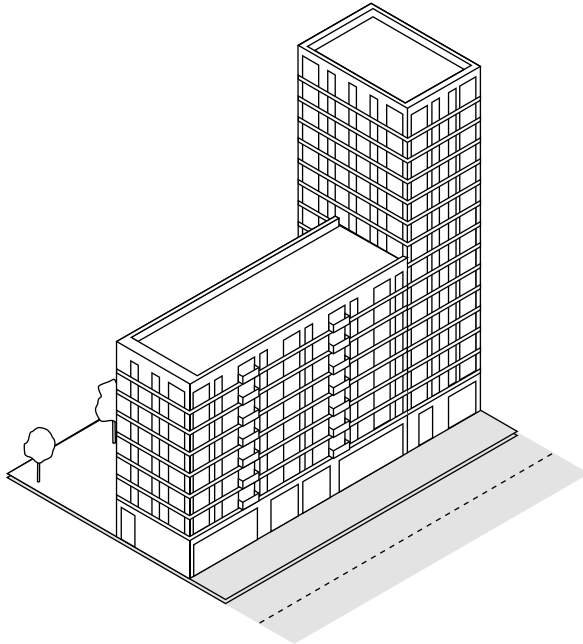
However, policy is only as effective as those implementing it, and as such, it is critical to ensure that planners implementing these policies have a good understanding of the rationale behind them, and how they might have evolved and changed over time. Further discussion and recommendations on the need to have well-resourced and skilled planning departments can be found in *Good Growth Agenda 4: Shaping London*.

### ***Recommendations***

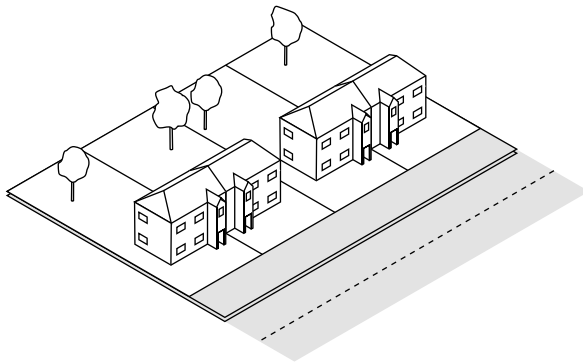
**To ensure that London Plan policies are delivering high quality development, the Mayor should:**

- 8a. Monitor the qualitative and cumulative impact of planning policy by expanding or supplementing the Annual Monitoring Review with qualitative measures and aspects of urban form. This should create data which can be assessed and fed back into a frequent review of planning policies, to ensure they are having the intended consequences on urban form and are creating places people want to live in.**
- 8b. Develop planning guidance that can illustrate typologies and ways in which planning policies can be easily met, so as to provide certainty and clarity to the development industry.**

Higher density development pays for a high proportion of its own facilities through service charges, and contributes a greater council tax income for public infrastructure than suburban housing.



98 council tax payers x £1,298\* = £127,000



4 council tax payers x £1,298\* = £5,000

\*Average Council Tax Band D in London

## 9. Understanding the whole-life management and maintenance costs of buildings

A commonly used rule of thumb is that, for every £1 it costs to design a building, it costs £10 to construct, and £150 to maintain over its whole life.<sup>58</sup> But while design may represent a small proportion of the whole-life cost of a building, it has a fundamental impact on how well the building works and how much it costs over the longer term. It is a similar story at the macro scale. That is, the decisions we make now about the planning and design of the form of London will have exponential and lasting implications for the ongoing affordability and social sustainability of the city.

The development industry, the planning system and the housing market have traditionally tended to focus on immediate capital costs, whether calculating the viability of a scheme, or assessing its affordability. There is little incentive for housebuilders developing schemes for sale rather than retaining a long-term interest to take into account whole-life costs. However, with higher densities to accommodate a growing population, greater consideration needs to be given to management and maintenance costs for the occupiers of new developments.

The increasing density and technical complexity of developments in London is placing additional demands on ongoing management and maintenance. These costs are being passed on to residents through rising service charges, which are becoming an increasingly important factor in the actual affordability of housing, and the feasibility

of integrating and mixing different tenures. The average annual cost of the service charge for new affordable housing in London (excluding heating) is now around £2.90 per square foot. In some cases, service charges are as much as £5 per square foot, which works out as £3,765 a year for a two-bed, four person apartment.<sup>59</sup>

Higher density buildings tend to involve more common spaces and services to manage, more complex technical solutions for elements like lifts, cleaning, security or ventilation to maintain, and building components with different lifecycles that need a sinking fund to cover future replacement. A greater diversity of tenures within single developments or buildings, from market to intermediate to affordable, can also add to the complications and costs of management, and is therefore often not favoured by housing associations seeking to keep down service charges.

### *Design ideals*

Good design at the outset and early engagement with registered providers can reduce ongoing management and maintenance costs, achieve economies of scale, and offer more socially sustainable ways of mixing tenure. Operational considerations should inform every design decision – from typology to tenure mix, urban design to landscaping, architecture to materials, and internal layout to mechanical and electrical engineering.

Further evidence is needed to better inform these decisions and make sure we are not repeating the mistakes of high density housing made in the past. For example, what models of mixing tenures result

in the best balance between affordability and social integration? Tenure blind provision, or ‘pepper potting’, is assumed to be preferable in terms of social inclusion, but can result in increased service charges for affordable tenants. Splitting tenures by core allows for a more flexible approach to service charges, but can attract criticism for the differentiation of market housing and ‘poor doors’.

London policymakers and planners need a more sophisticated understanding of the actual costs of long-term management and maintenance.

How do certain typologies result in a different distribution of management and maintenance costs between local authorities and tenants? Where a residential building fronts directly onto an adopted highway, the council covers the costs of maintaining public space. Where a residential building is accessed off privately owned public space, or communal circulation space, these costs are loaded onto occupiers through the service charge. London policymakers and planners need a more sophisticated understanding of the actual costs of long-term management and maintenance, whether through services charges or council tax.

## ***Recommendations***

**To promote greater consideration of whole-life maintenance and management costs in design, the Mayor should:**

- 9a. Carry out research into the most economically and socially sustainable models of mixing housing typologies and tenures. This should be based on analysis of actual whole-life management and maintenance costs for different typologies and different tenures, including both publicly and privately maintained communal space and shared amenities. Research is also needed to better understand the efficiencies gained from high-density development in management and maintenance of communal parts in comparison to low-density developments where such costs are paid by the public sector.**
  
- 9b. Include more specific guidance on achieving mixed and balanced communities in the next iteration of the London Plan, informed by this research (i.e. where ‘pepperpotting’, separate cores, off-site provision or contributions may or may not be acceptable).**
  
- 9c. Introduce a policy in the next iteration of the London Plan to support securing ring-fenced funding streams for long-term management and maintenance of communal facilities through S106 agreements.**



## Acknowledgements

This Agenda – and its three sister publications Ageing London, Public London and Shaping London – has been prepared by the Mayor's Design Advisory Group (MDAG), working in conjunction with GLA staff and New London Architecture.

MDAG provides a combination of external expertise to the Mayor and GLA Group, engaging in thematic reviews, topic exploration, and place-based design reviews – including longer term involvements in places like Old Oak Common or with programmes such as the 'Mini Hollands. It also provides an advocacy role with regard to London and its significant design community.

New London Architecture (NLA) is an independent forum for discussion, debate and information about architecture, planning, development and construction in the capital. Over a series of months, NLA invited representatives from across the built environment to take part in a series of expert roundtables, which helped to shape the agenda for each paper.

We are grateful to Grosvenor and GL Hearn for supporting these events.

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Session 2

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## Notes

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