



# WHEN BROWNFIELD ISN'T ENOUGH

---

STRATEGIC OPTIONS FOR  
LONDON'S GROWTH

In partnership with

Shelter

© 2016 Quod and Shelter

All rights reserved. No part of this document may be reproduced without permission from Quod or Shelter.

This report has been prepared by Quod and Shelter, to encourage public debate about the housing in London and to encourage action by the new Mayor. This report is not designed to provide advice, and should not be used or relied on for purposes other than public debate.

Published 2016

To download a copy of this report, visit the Shelter policy library at:

[http://england.shelter.org.uk/professional\\_resources/policy\\_and\\_research/policy\\_library](http://england.shelter.org.uk/professional_resources/policy_and_research/policy_library)

Alternatively you can download the report here:

<http://www.quod.com/brownfield-not-enough>

Shelter helps millions of people every year struggling with bad housing or homelessness through our advice, support and legal services. And we campaign to make sure that, one day, no one will have to turn to us for help.

We're here so no one has to fight bad housing or homelessness on their own.

Shelter  
88 Old Street  
London EC1V 9HU

Shelter is a registered charity in England and Wales (263710)

Quod Limited is registered in England at  
Ingeni Building  
17 Broadwick Street  
London  
W1F 0AX

Registered No. 7170188

## Image acknowledgements

Contains OS data © Crown copyright 2015

Contains National Statistics data © Crown copyright and database right 2015

Map data © OpenStreetMap contributors

Contains Environment Agency information © Environment Agency

Contains data © Directorate-General Enterprise and Industry (DG-ENTR), Directorate-General for Regional Policy.



When brownfield isn't enough	4
Brownfield redevelopment	6
Why brownfield cannot deliver all London's housing	10
Tall buildings	13
Green belt	17
Garden cities or new towns	20
Estate redevelopment or infill	24
Increasing density in the suburbs	27
New transport for new homes	31
High density town centres	34
The alternatives?	37
Don't try this at home	40
Conclusion	43

# WHEN BROWNFIELD ISN'T ENOUGH

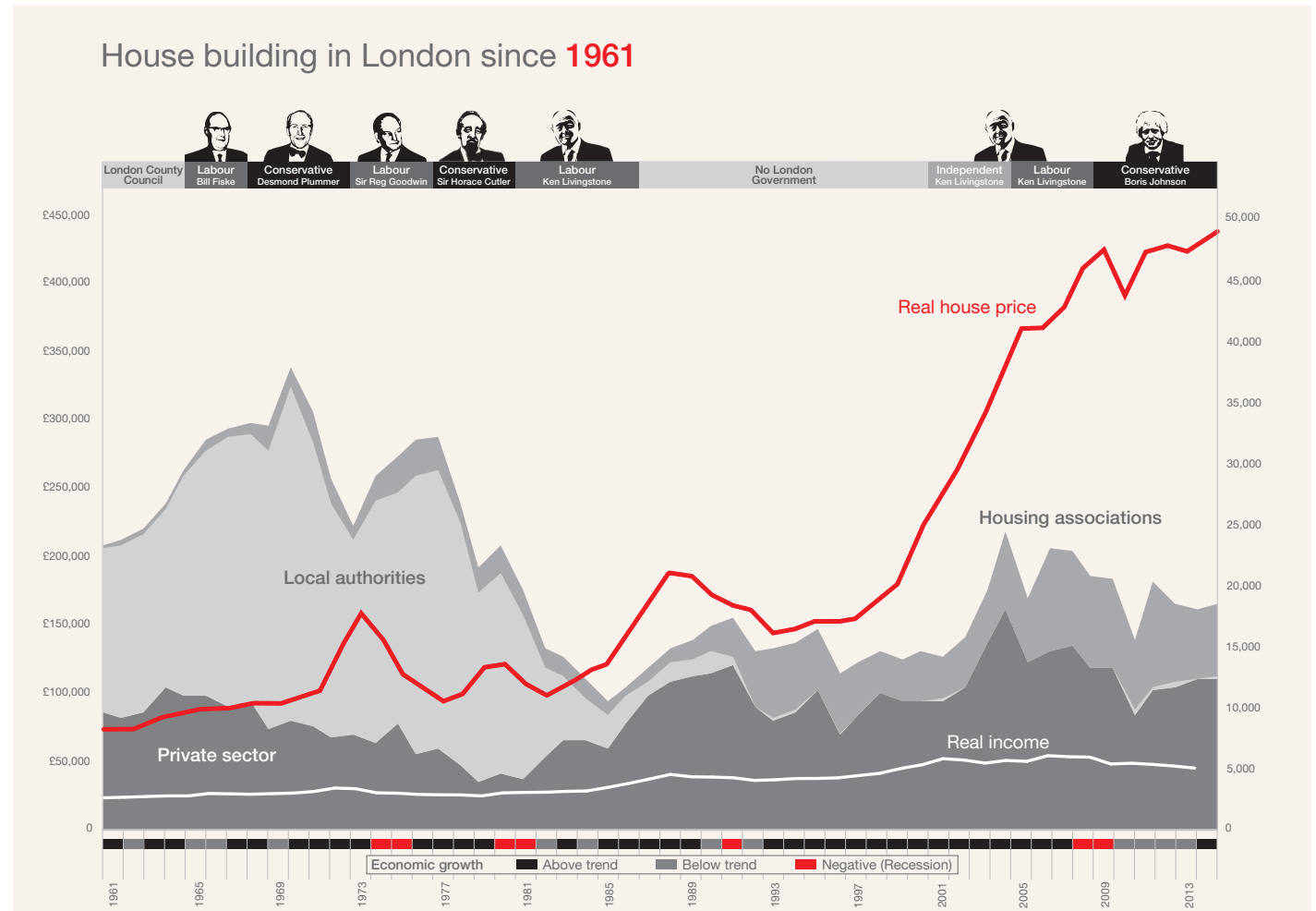
## STRATEGIC OPTIONS FOR LONDON'S GROWTH

### Executive Summary

Housing is the most pressing issue that London faces. Businesses, public services and Londoners themselves are all suffering the consequences of an affordability crisis that means the average London home now costs more than 12 times the average London wage.<sup>1</sup>

This has a real economic and human cost, with increasing numbers of Londoners struggling with rent, bringing up families in cramped conditions, or even at risk of homelessness.

London needs to build more homes. The capital's population is expected to grow by nearly a million in the coming decade and the Mayor's own detailed assessment suggests that 50,000 - 60,000 new homes per year will be required to meet London's growing need and address the backlog of under-supply over the next two decades. For many years, we have failed to build even half that number.<sup>3</sup>



<sup>1</sup> The Guardian, Revealed: the widening gulf between salaries and house prices, 2 September 2015, based on Land Registry and HMRC data.

<sup>2</sup> GLA, The London Plan, March 2015 (p.26); GLA, The London Strategic Housing Market Assessment, 2013. The SHMA assesses that if London is to meet its long term housing requirement over twenty years then the figure is 48,840 homes per year, but if it is to meet need within a decade then the annual requirement is 62,000.

<sup>3</sup> DCLG, Live Table 253. London completions in 2014/15 were 18,260.



# WHEN BROWNFIELD ISN'T ENOUGH

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

For whoever becomes Mayor in 2016, housing will be their most important challenge. If they serve at least two terms, as both the previous Mayors have done, then they will have almost a decade to turn-around the capital's ability to build enough homes. To meet London's housing need that means delivering almost half a million homes during their Mayoralty.

The scale and importance of this challenge is clear, but so is the fact that there are no easy choices left. This is especially true when we consider the options for *where* new homes should be built.

Brownfield is of course the first place to look, but it is no silver bullet. London does not have vast swathes of vacant brownfield waiting to be used – almost all of London's brownfield is already in use, or is already part of plans for new housing.

The choices are therefore hard, and will mean changing existing land uses, and also using land that has never been developed before. A critical part of the new Mayor's job will be to show leadership on these difficult choices.

In this paper we consider the main options facing London. **An element of most, or even all, of these is likely to be needed if London is to meet its housing challenge:**

- Brownfield redevelopment
- Tall buildings
- Greenbelt
- Garden Cities
- Estate redevelopment
- Adding density to the suburbs
- Transport corridors
- High density town centres
- Other options?

All these strategic options for London's growth have advantages and limitations, and none is easy or quick. Many of these options have a lot of capacity in the long term, but limits on how quickly they can deliver it. **So the new Mayor needs to focus not only on how much housing can be delivered in principle, but also how quickly it can be built in practice.** Building enough new homes over the next decade will mean being open to what all these options can provide, not pinning our hopes on just one or two.

Many of these ideas are already being considered by the GLA as part of the London Plan process. **The first important thing the new Mayor must do is to keep all the options open and resist the urge to rule things out – the fewer options we leave ourselves, the greater the pressure on those that remain.** The new Mayor must consider all the difficult choices and trade-offs these options present, which will be needed to get things moving faster.

**Any credible candidate for Mayor must have a strategy for where London's half a million homes should be built. Otherwise, the capital's most pressing issue will not only fail to get better, it will get far worse.**



# BROWNFIELD REDEVELOPMENT

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



# BROWNFIELD REDEVELOPMENT

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

For much of the last 20 years brownfield land has been a priority for development. Brownfield is rightly one of the first solutions most people suggest for London's housing, as it reduces pressure on greenfield land. But the reality of "brownfield" is less well understood, and in practice it is not a quick solution.

The popular image of empty, unused ex-industrial or government land is misleading. There is practically no significant "derelict" land in London, and when we talk about "brownfield" what we really mean is simply any land that's previously been developed. And about two-thirds of that already has housing on it (although the formal definition of brownfield was recently changed to exclude gardens).

Of the rest, most is used for transport (including 15,000 km of roads), town centres and vital urban infrastructure like schools and hospitals. That leaves about 9% of London, which is essentially "employment land". This is used for

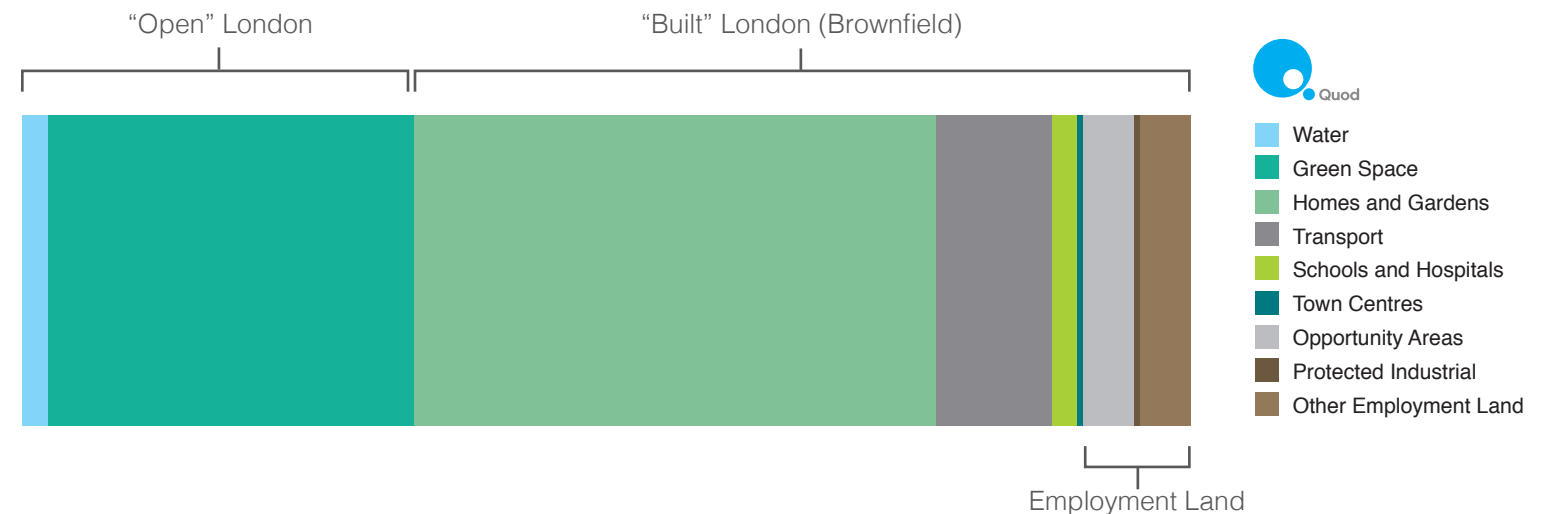
all sorts of things – light industry, distribution depots, leisure, retail warehouses, sewage works.

To build housing on this land means removing something else first. That can and should be done in many places, but it is slow, difficult and expensive. It may mean finding a new place for existing uses, decontaminating land, and building new stations or other infrastructure.

This painstaking land-use change is happening in many places already – what scope is there for more to be done?

About half of non-housing brownfield land that is currently in employment uses – the half that is most suitable for redevelopment – is already earmarked for change in the Mayor's Opportunity Areas. Tens of thousands of homes are being built in places such as Kings Cross, Stratford and Nine Elms. This is already part of London's current land supply.

If brownfield is to deliver more on top of these Opportunity Areas, some very difficult choices need to be made. Getting more out of brownfield is not an "easy option," and if brownfield is our only option it is highly unlikely that London will be able to build enough new homes quickly enough.



# BROWNFIELD REDEVELOPMENT

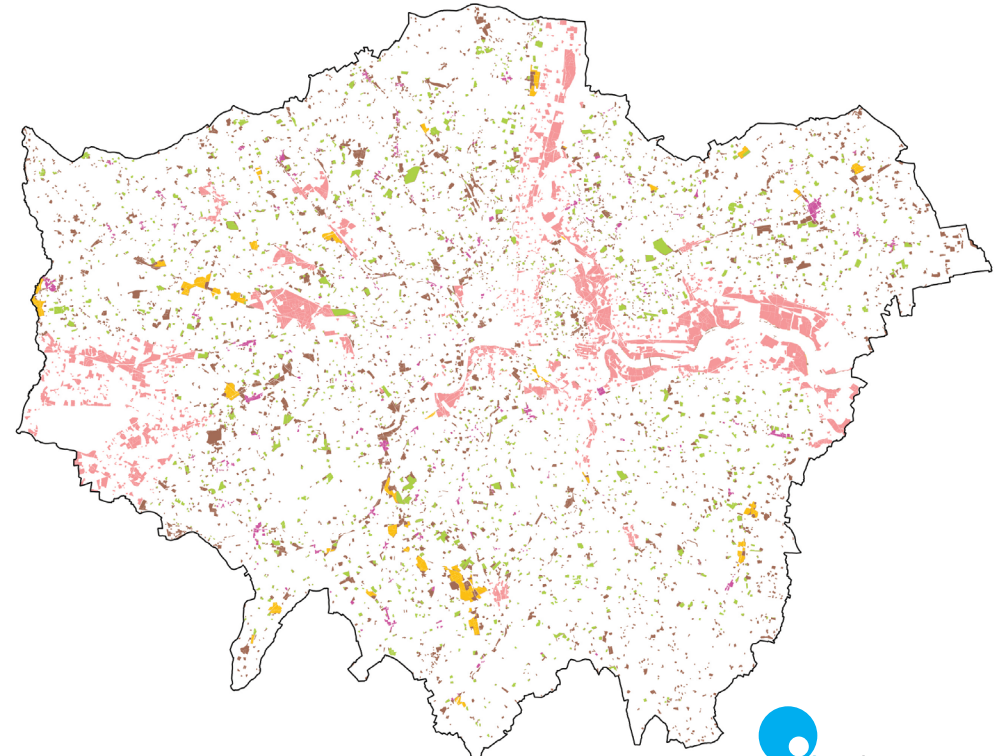
## STRATEGIC OPTIONS FOR LONDON'S GROWTH

**Maps:** All land is used for something in London



Land Use Type

- Homes/Mixed
- Airports/Railways
- Other Developed Land
- Green Spaces
- Water



Brownfield Categories

- Schools, Hospitals & Cemeteries
- Protected Industrial
- Opportunity Area
- Town Centre
- Other Employment Land



## BROWNFIELD REDEVELOPMENT

### STRATEGIC OPTIONS FOR LONDON'S GROWTH

To maximise the contribution brownfield can make we will need to look at faster release of Strategic Industrial Land, which is currently protected in the London Plan for employment uses. Converting more Strategic Industrial Land into housing will mean finding somewhere else for those uses to go. Increasingly the demand is for distribution centres rather than manufacturing, and some of these depots may be better suited to larger sites near the strategic road network. One possibility is to release some Green Belt land not for housing, but for new distribution centres, thereby freeing up more accessible employment land in London for housing development.

The second requirement to make the best use of employment land is to remove the barriers that make it so slow to develop. Land assembly and contamination are often problems, so too is the need for transport infrastructure. High density housing needs high capacity public transport,

and it is often major public investment in public transport that finally unlocks the development potential of brownfield sites. Without public investment, many major brownfield sites are not viable.

Finally we need to look more openly at a mix of uses. Many industrial sites are protected for employment uses only, but mixed-use development can actually increase the number of jobs on brownfield sites. While traditional manufacturing did not mix well with homes, many of today's occupiers of "industrial" land – from leisure facilities and retail warehouses to self-storage – could well co-exist with homes next door or above.

We cannot carry on as we are and expect housing delivery to double. We have to change things if we want enough homes. The level of housebuilding we need now has only been (briefly) achieved twice in the past – once through major public investment in council housing, and once through major expansion on greenfield land.

Throughout London's history, the private sector has never built more than **18,000** homes a year on brownfield land.





# WHY BROWNFIELD CANNOT DELIVER ALL LONDON'S HOUSING

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



# WHY BROWNFIELD CANNOT DELIVER ALL LONDON'S HOUSING

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

Brownfield has long been the priority for London, and that must continue, including public sector land. But any attempt to rely on brownfield alone is doomed to fail, not simply because there is too little capacity, but because delivery is too slow.

This is not the result of developers deliberately sitting on viable planning consents without building as many of these sites have been through multiple owners (public and private) who have tried and failed, before eventually finding a workable solution. Experience shows that major brownfield regeneration can take decades of planning together with major public sector investment in transport.

This is best understood with some examples:

### 1. KINGS CROSS

One of the most successful current brownfield developments is creating an outstanding new piece of London. This is an exemplar development that is transforming the area and will, when complete in 2020, provide 2,000 new homes and many new jobs.

But this success comes after a very long journey. This will be 35 years after the GLC's draft action plan for redevelopment of the redundant railway lands. Renewal of Kings Cross only really took off after the £6bn Channel Tunnel rail link to St Pancras opened.

### 2. BATTERSEA

Another part of London being transformed by development, the power station and wider Vauxhall/ Nine Elms area are expected to deliver 20,000 homes by 2030, nearly 50 years after the power station closed. TfL's backing for the £1bn extension of the Northern Line has been crucial to the momentum the area now has.



### 3. ROYAL DOCKS

The docks closed 35 years ago, and millions of pounds were invested in over 5km of new dual carriageway, new bridges and eight new stations on the Docklands Light Railway. Some major private sector investment was secured, including London City Airport and the Excel Exhibition Centre, but relatively little housing – in the first 30 years the ward gained only 2,800 households.

In 2018 the area will get a new station as part of the £15bn Crossrail 1 line, and a new Thames crossing is also proposed at Silvertown. With this new investment, the GLA expects another 11,000 new homes by around 2030 – 50 years after the docks closed.

# WHY BROWNFIELD CANNOT DELIVER ALL LONDON'S HOUSING

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

Not all brownfield development takes decades, some smaller sites can take only a few years, but generally the easiest sites have already been developed, and where sites haven't been redeveloped it is because there are barriers.

These can include:

- Bringing together a site in multiple ownership
- Relocating existing users
- Decontaminating land
- Building the infrastructure (including transport)
- Designing, consulting and securing planning permission
- Development itself

Every one of these stages can take years of careful work, and many may never be viable without major public sector investment, or powers such as compulsory purchase.

All this hard work must be done, and will eventually bring great benefits, but it cannot deliver homes as fast as London needs them.

### ADVANTAGES

- Brownfield development is popular with the public, at least as a general principle (although often less so in practice).
- Brownfield already gives us much of our current housing supply and can deliver major transformative developments.



### DISADVANTAGES

- London's brownfield is generally not vacant, but already has uses that must be moved or combined with homes.
- Brownfield land is slow and expensive to redevelop, and often requires additional transport investment to be viable. It is not an easy option.

### CHOICES FOR THE MAYOR

- Brownfield, particularly the Opportunity Areas, will be central to any future Mayor's programme. So the question is how much further can that go? How dense and high can these sites build? Should lots more employment land be released and how? Will the Mayor invest more money in making brownfield housing happen?





# TALL BUILDINGS

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



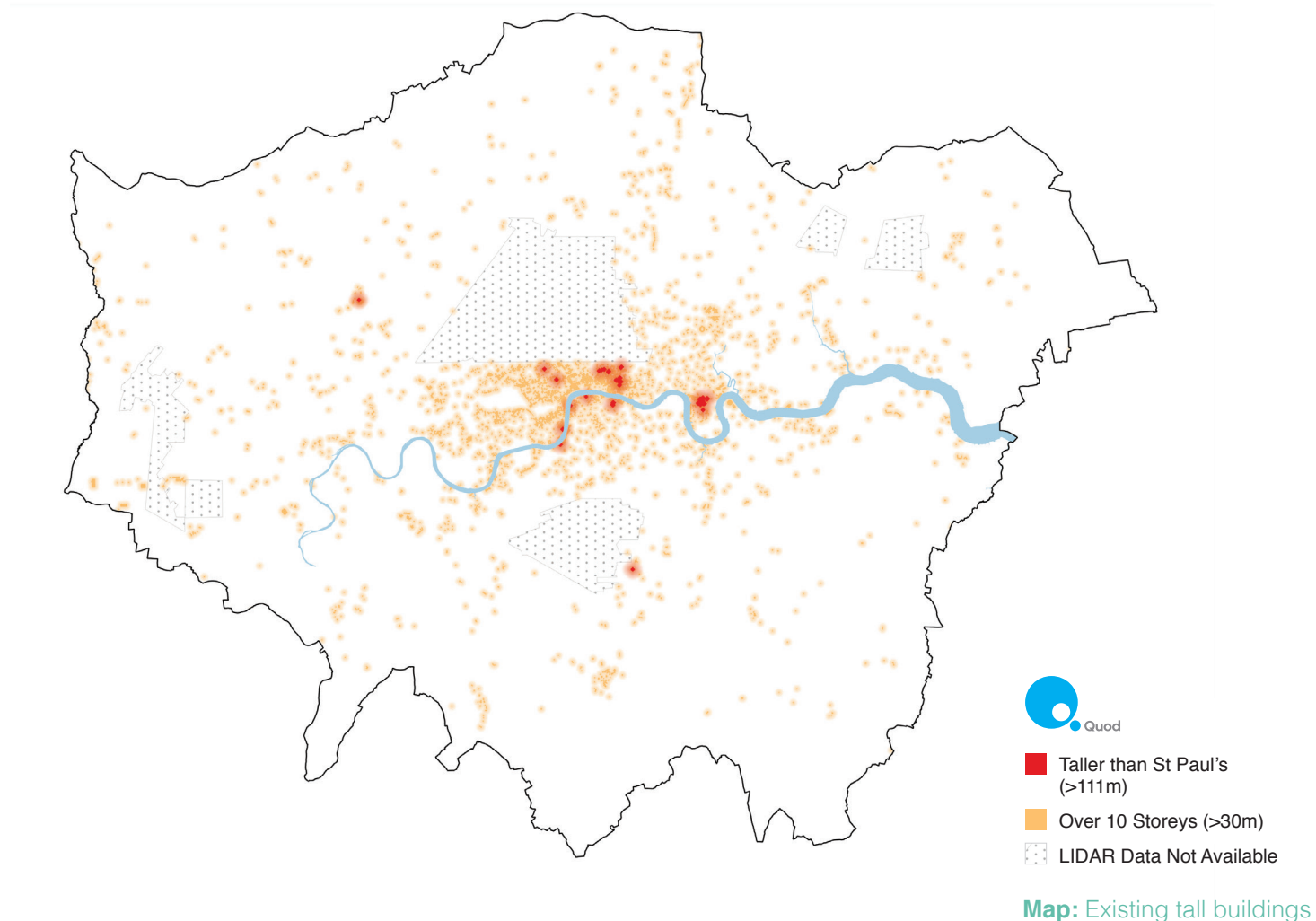
# TALL BUILDINGS

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

Other world cities have delivered huge housing capacity through height, with hundreds or even thousands of tall buildings. London already has two prominent clusters of very tall buildings, in the City and Canary Wharf, and is expecting to increase the number significantly in the coming decade. And at the other end of the scale, adding height might be as modest as rising just a few storeys above existing homes.

London is not the low-rise suburban city of our imagination. Even beyond the existing and emerging clusters of towers, a view across London is almost always peppered with taller buildings of different kinds – from council-built social housing, to suburban office blocks. Nearly half of all England's high-rise apartments are in London. That's 28,000 London homes on the 10th floor or higher, of which 43% are in outer London<sup>5</sup>.

For most parts of the city, the era when the tallest building was the local church passed generations ago. Around two thirds of Londoners already have at least one tall building in their own neighbourhood<sup>6</sup>.



<sup>4</sup>There are 263 towers of 20 storeys or more planned in London, according to New London Architecture, 2015

<sup>5</sup>Valuation Office Agency, Council Tax Property Attribute Data, 2010.

<sup>6</sup>Tall defined as at least 30m (approximately 10 storeys) – which is the normal trigger for planning referral to the Mayor. Neighbourhood defined as within 800m or 10 minutes walk. Based on Quod analysis of Environment Agency LIDAR data and Census 2011 population data.

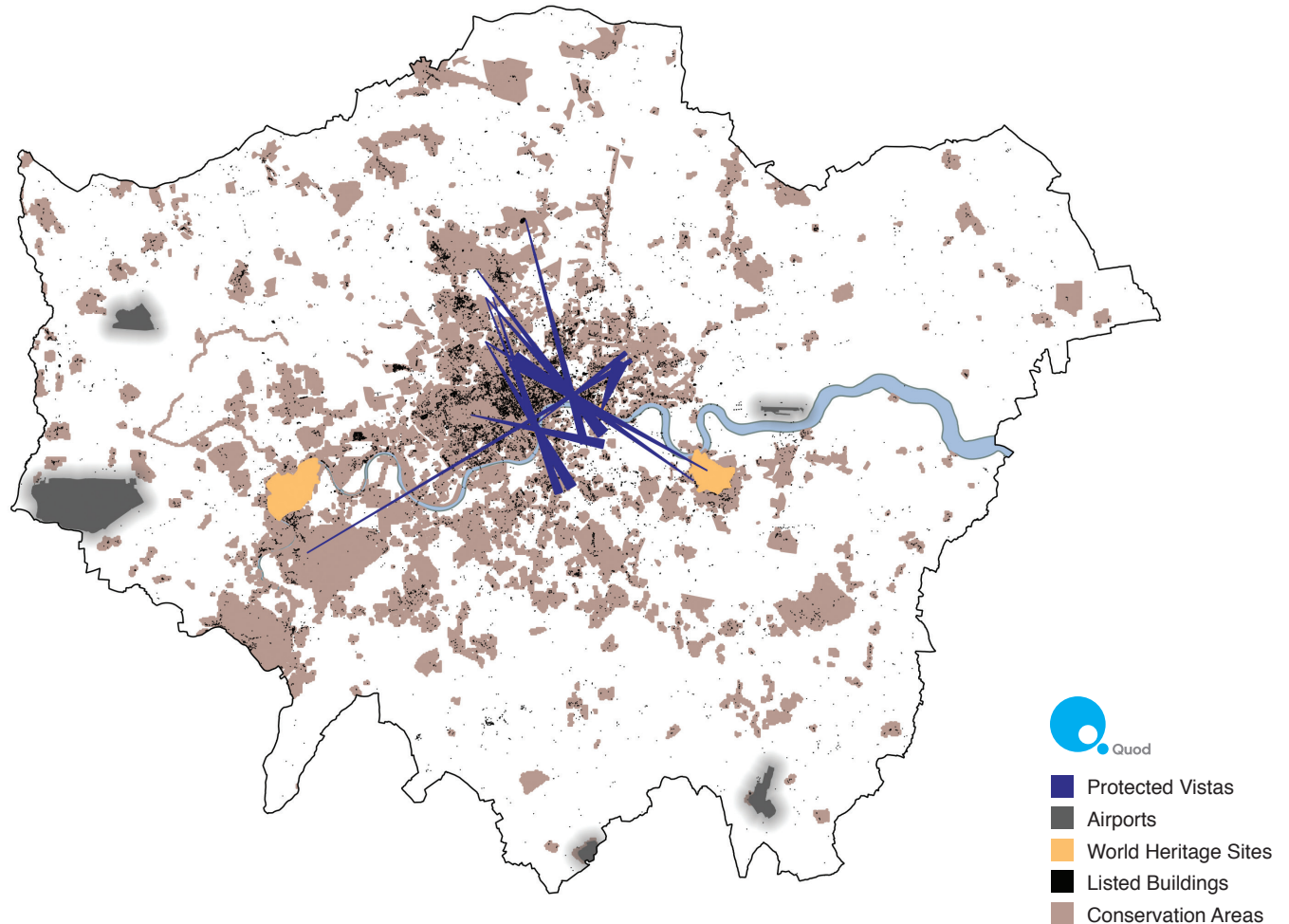
# TALL BUILDINGS

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

Mid-rise and taller buildings are not new, even in outer London, and accepting more high-quality taller buildings is one way that more homes could be built.

The visibility of new towers like the Shard belies the difficulties in building upwards in London. Planning policy protects a range of strategic views, particularly of St Paul's and Parliament, and these corridors criss-cross much of central London.

Even outside these corridors, proposals for taller buildings may be blocked for their effect on the character and setting of listed buildings, world heritage sites, and conservation areas – which between them cover a fifth of Greater London, including a majority of Inner London. And of course London's five airports and aerodromes have essential height restrictions that extend many miles around. Even where building height is not directly constrained by policy, rules on density can effectively limit heights.



1/2

of all England's  
high-rise apartments  
are in London.

Map: Constraints on tall buildings in London

Some of these constraints on height must remain, but there are policy choices to be made about where and how they are applied that could have a big overall effect on what can be built.

Good design is essential to make density work well, and tall buildings do not automatically equate to high density – 1960s-style towers surrounded by grass were sometimes a less efficient use of land than more traditional terraced streets. However there are limits to how much housing can be delivered with low-rise streets. Without towers, Opportunity areas like Vauxhall Nine Elms Battersea would contribute far fewer new homes.

The question for the new mayor will be how many other areas could support taller buildings, and where to strike the balance between protecting the current skyline and allowing a change in heights.

### ADVANTAGES

- Allowing taller buildings is a cross-cutting means of increasing the number of homes on any particular development, and increases the potential of all the other housing options.



### LIMITATIONS

- Towers are not suitable everywhere, and not everyone wants to live in a tower. For many families traditional housing will continue to be a strong preference.

### CHOICES FOR THE MAYOR

- How high should London go? Any change will come from the detail of planning policy around height and density, and the location of protected views and clusters of towers. It will also come from how these are implemented and the decisions made on individual planning applications, where the Mayor has considerable power to influence how tall London grows.





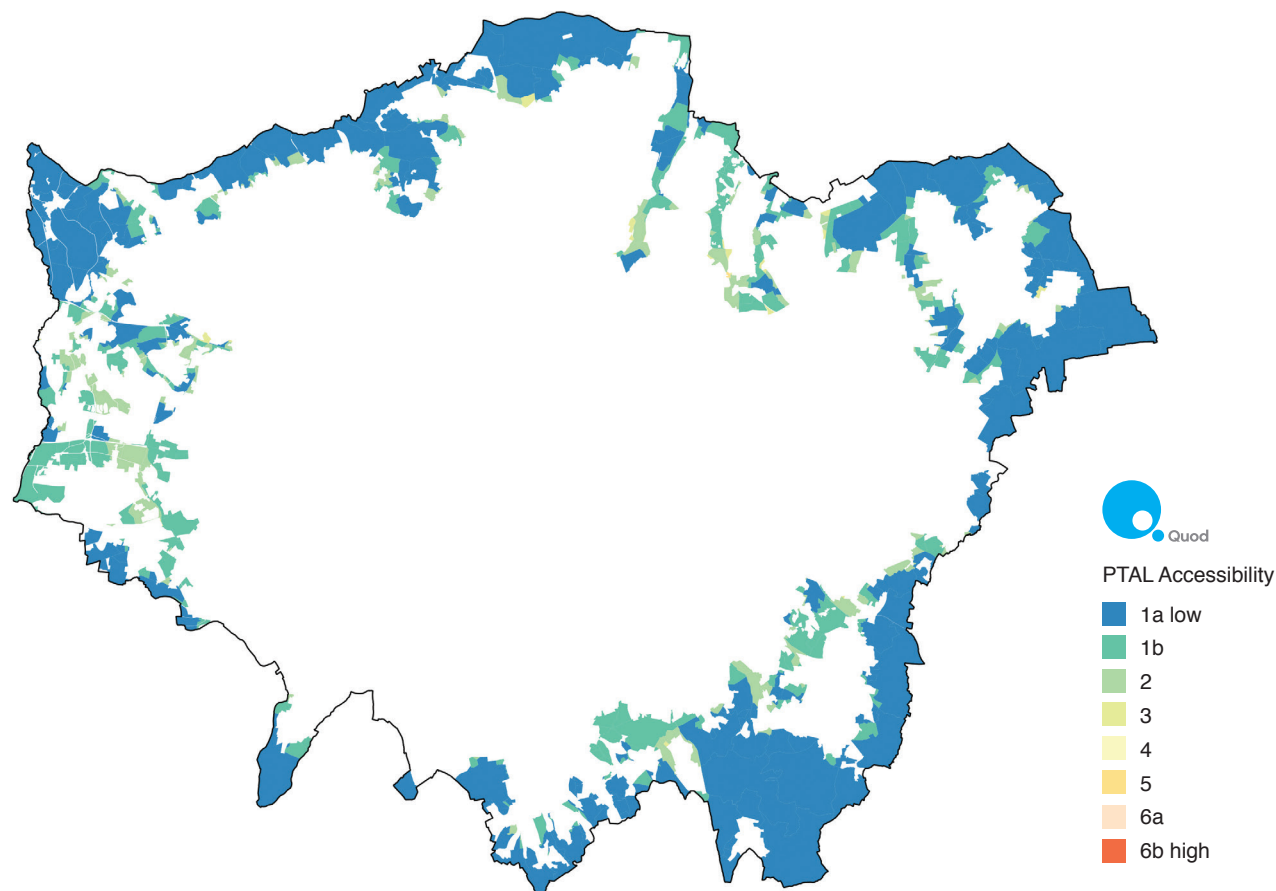
# GREEN BELT

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH

Cities can grow either by becoming denser or larger – by intensifying the built-up area or extending it. Increasing density may not be enough on its own, but there is a surprising amount of farmland within London, if the mayor decides the city should grow that way too. That would mean persuading the London boroughs to release some of the Green Belt for growth.

The full London Green Belt, extending into the wider South East of England, is huge. It covers four times as much land as the built-up area of London.<sup>7</sup> Even within the Greater London boundary 22% of all land is designated as Green Belt. Fourteen London boroughs have more land designated for Green Belt than with homes on.<sup>8</sup>

Parts of the Green Belt are of great value and must remain fully protected, but the designation does not imply beauty, public access or biodiversity – only a fifth of London's Green Belt has an environmental status or is accessible to the public as green space. Rather the Green Belt is intended specifically to prevent London growing outwards into the countryside or enveloping surrounding towns.<sup>9</sup>



**Map:** Green Belt in London, and public transport accessibility (PTAL)

<sup>7</sup>The London boroughs cover 157,215 hectares of which 22% is greenbelt land. GLA, Housing in London 2014 and London First, The Green Belt, 2014. That means there are 128,865 hectares in London that are non-Green belt. As of March 2014, the full Metropolitan Green Belt cover 514,060 hectares (areas of designated greenbelt land, gov.uk), which is 3.98 times as much.

<sup>8</sup>Quod and London First, Green Belt: A Place for Londoners, 2014.

<sup>9</sup>HM Government, National Planning Policy Framework, 2011.



Before the metropolitan Green Belt was established London saw unprecedented rates of development. Almost one in five of London's current homes were built in a single ten-year period just before the Second World War<sup>10</sup>. A much smaller and more controlled release of appropriate bits of Green Belt could be an effective way to deliver substantial numbers of new homes.

Some parts of the Green Belt are more accessible than others, but it includes many areas close to existing stations. Realising the potential of other areas may require investment in new infrastructure.

There is a legitimate debate about whether London's Green Belt could be better managed, ensuring the protection of beauty and public access as well as providing new homes. The new Mayor will need to take a pragmatic rather than absolutist view.

### ADVANTAGES

- The Green Belt covers more land than any other option identified, and could potentially deliver homes faster than some other options.
- The lower cost of Green Belt land means there is more potential uplift that could be used to fund infrastructure and affordable homes.



### LIMITATIONS

- There is widespread public support for Green Belt protection, even if that is not matched by public awareness of the extent and nature of the Green Belt.
- An effective mechanism is needed to ensure the uplift in land values triggered by release from the Green Belt really does deliver the infrastructure.

### CHOICES FOR THE MAYOR

- Should any of the Green Belt change? Such change could come through individual borough-level Green Belt reviews, but the Mayor can choose to encourage these through leadership and by the distribution of housing targets set in the London Plan.

<sup>10</sup> GLA, Housing in London, 2014 – tables on housing stock by decade.



# GARDEN CITIES OR NEW TOWNS

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH

Letchworth  
Garden City

Welcome to the World's First Garden City  
Twinned with Kristiansand  Chagny  Wissen 



# GARDEN CITIES OR NEW TOWNS

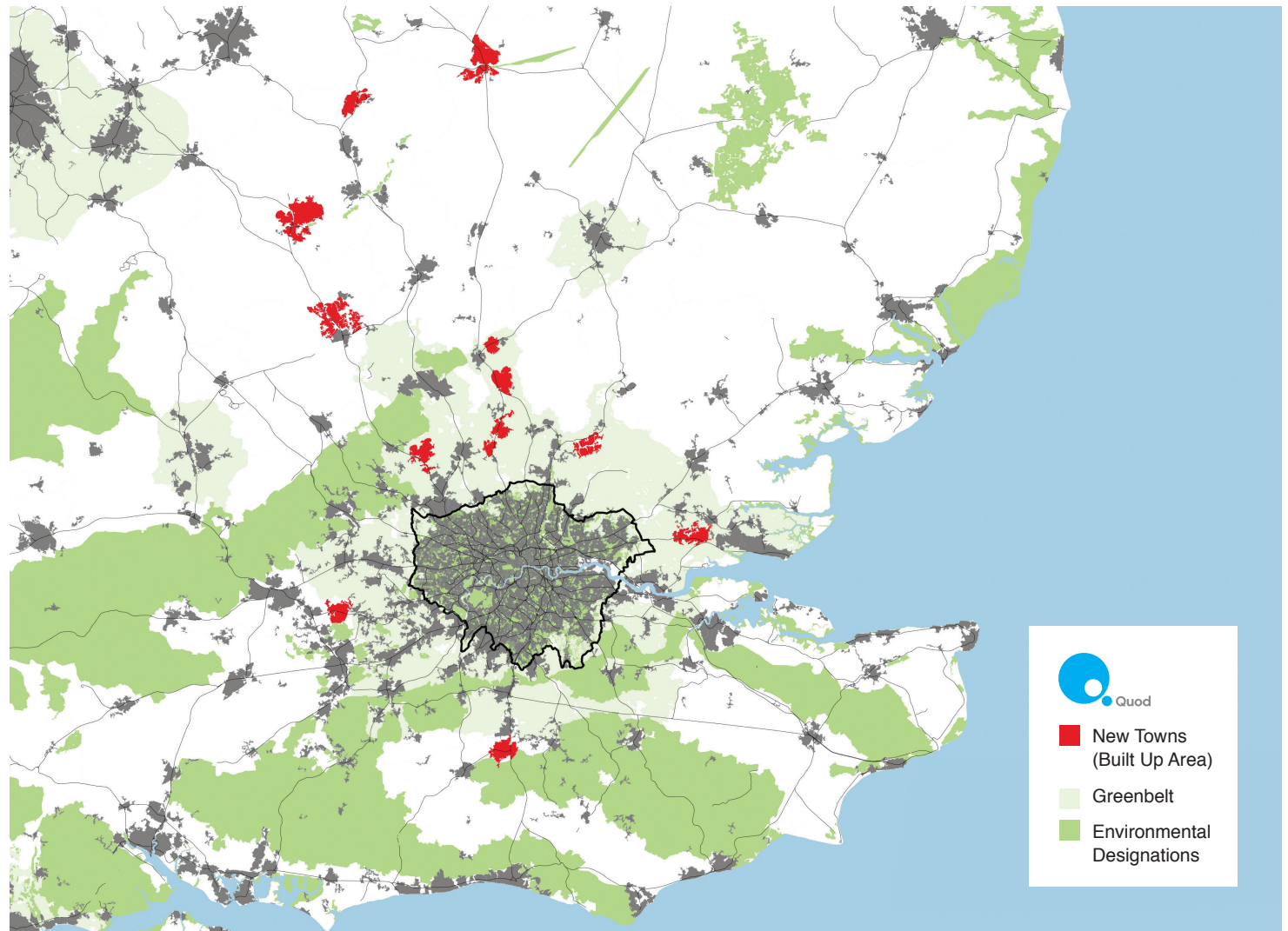
## STRATEGIC OPTIONS FOR LONDON'S GROWTH

As the capital struggles to meet its housing needs, one strategic option is to displace some of that growth into new settlements outside London.

These settlements might be satellites to the city (with most workers commuting back in), or they might be more self-sustaining, providing the majority of their own employment (as the earliest garden cities were originally intended to be).

There are nine new towns or garden cities within about 30 miles of London – in and around the Green Belt – that function largely as London overspill/commuter settlements. The oldest, Letchworth and Welwyn were established in 1903 and 1910 respectively, while the rest were allocated shortly after the Second World War.

Others, including Milton Keynes, Northampton, Peterborough and Corby – established from 1950 to 1968, are larger and intended to be more independent of London, lying up to 75 miles from the city.



Map: Existing garden cities and new towns near London (in red)

## GARDEN CITIES OR NEW TOWNS

### STRATEGIC OPTIONS FOR LONDON'S GROWTH

Between them, the population of all thirteen of these new towns today is about the same as the last 12 years of London growth. Every year London has added population equivalent to a town the size of Crawley, Basildon or Stevenage.

Meeting London's growth through new towns would not reduce the need for land, just displace it. And it would require a lot of land – the urban areas of the thirteen new towns in red in the previous map have a combined population about 15% of London's, but take up an area equivalent to more than 25% of Greater London. And given that the regions around London have their own housing shortfalls to deal with, new towns would have to deliver a lot before they started to significantly relieve London's pressures.

New Town or Garden City	Date Designated	Population 2011	Area (hectares)	Density (people per hectares)
Crawley	1947	107,000	2,400	44
Bracknell	1949	77,000	2,100	38
Basildon	1949	107,000	2,600	42
Harlow	1947	82,000	1,900	44
Hemel Hempstead	1947	95,000	2,300	40
Hatfield	1948	38,000	800	49
Letchworth Garden City	1903	33,000	1,000	34
Welwyn Garden City	1920	48,000	1,400	35
Stevenage	1946	90,000	2,200	42
Milton Keynes	1967	172,000	4,600	38
Peterborough	1967	162,000	4,400	37
Corby	1950	55,000	2,000	28
Northampton	1968	215,000	5,700	38
<b>Total</b>		<b>1,281,000</b>	<b>33,100</b>	<b>39</b>
<b>London</b>		<b>8,250,000</b>	<b>129,500</b>	<b>64</b>

Table: Built-up area

In 2014, a team led by Shelter was the runner-up in the Wolfson Economics Prize, which was launched to answer the question: “**how would you deliver a new garden city that is visionary, economically viable and popular?**” Shelter's proposal was for a new garden city in Medway, Kent which would provide homes and services for up to 40,000 people and could be built within 15 years. The city could be linked into London Kings Cross within 45 minutes by an upgrade to an existing freight rail line, but was also designed to create local employment.

Other finalists in the Prize showed a broad range of locations where new garden cities could be built within commuting distance of London (the ‘arc of opportunity’) – or, in the case of the winner URBED, how existing cities could be expanded with new sustainable urban extensions in their Green Belts.



# GARDEN CITIES OR NEW TOWNS

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

Building garden cities or new towns beyond London's boundaries would of course be outside of the Mayor's planning authority, although the Mayor could be involved in negotiating or even funding them. Unlike other strategic options explored in this paper, garden cities would therefore rely heavily on either national government intervention to designate sites, or willing local authorities in the South East of England.

### ADVANTAGES

- Garden cities would not require land within London's boundaries, meaning that the potential area in which to search for appropriate sites is much greater.
- If garden cities displace population and employment growth, rather than become purely commuter towns, then they reduce the pressure on other potentially tricky land options for London, such as brownfield regeneration.



### LIMITATIONS

- The Mayor has no strategic authority to build garden cities, but would rely on the government or willing local authorities.
- The planning and build out rate of new settlements is slow, so this option is unlikely to provide a large number of new homes quickly. A new town of 40,000 to 60,000 would only represent the equivalent of one year's housing need in London and would likely take decades to build.

### CHOICES FOR THE MAYOR

- Is London willing and able to make the hard choices needed to meet need within its boundaries? If not what can or will the Mayor do to encourage new or existing towns around London to take up that demand?



# ESTATE REDEVELOPMENT OR INFILL

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



# ESTATE REDEVELOPMENT OR INFILL

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

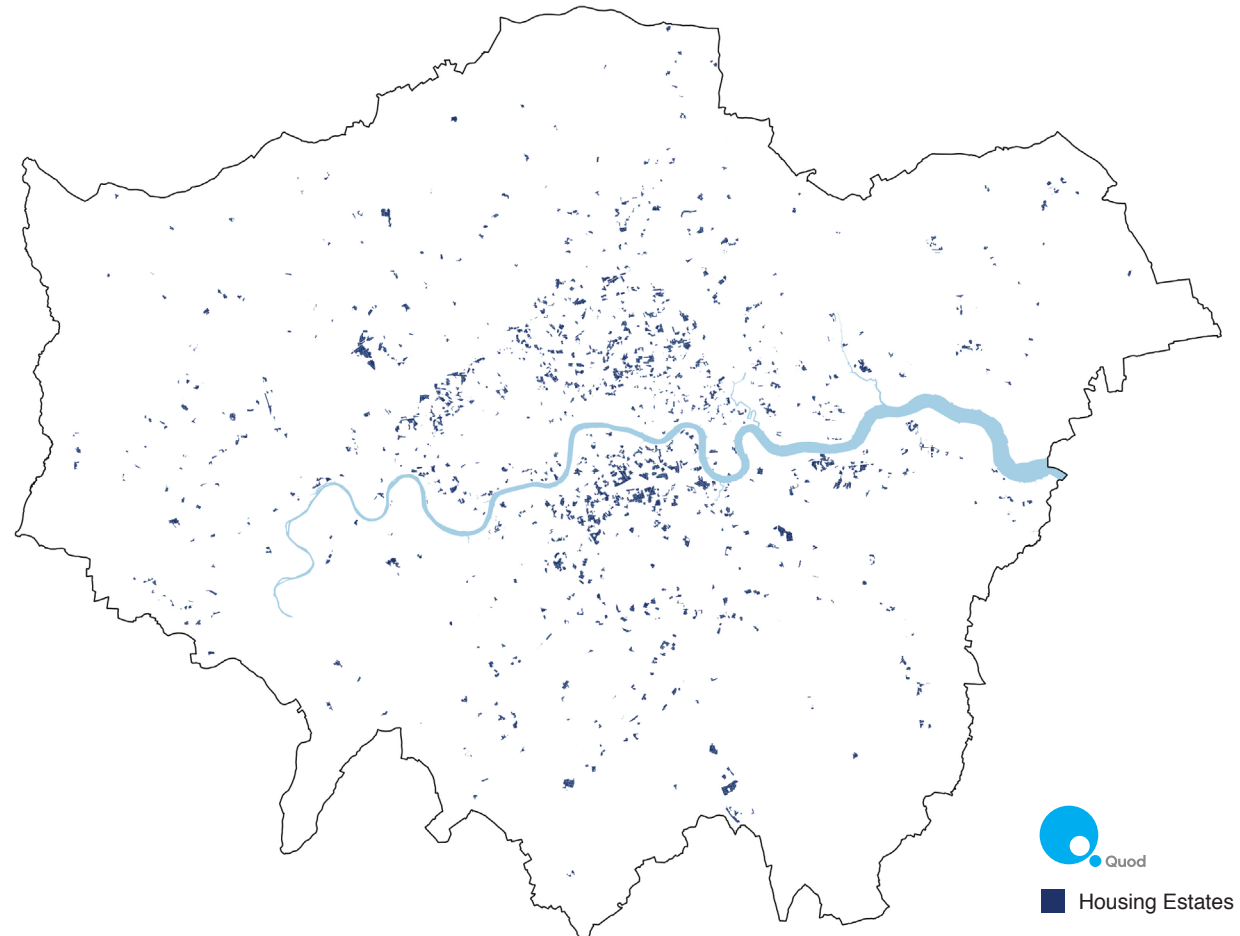
Inner London is relatively low density compared to its recent past, and while no-one wants a return to overcrowded slums, there is a lot of potential to improve the density of some housing estates, adding new homes – either by selective infill or more comprehensive redevelopment.

Councils in London own around 25-30% of land within their boundary, with some like Islington and Southwark owning 40% or more.<sup>11</sup> The redevelopment of council estates at higher densities could therefore be a way to put more homes into London's existing boundaries in a coordinated and systematic manner, while also tackling problems of ageing social housing stock.

Lord Adonis has promoted the idea of “City Villages” taking the place of post-war housing estates, doubling the density in the process. As the map shows, these estates are concentrated in the ring of inner London where public transport is good and demand for housing is very high.

The Government too has taken an interest, with David Cameron recently announcing a £140m fund to help regenerate 100 estates across the country.

However estate redevelopment is not a quick or easy solution. Good estate renewal takes many years (decades even) and a great deal of co-operation and effort. It also requires significant investment.



**Map:** London Housing Estates (Areas with more than two-thirds social housing)

<sup>11</sup> Adonis essay in IPPR, City Villages, 2015



# ESTATE REDEVELOPMENT OR INFILL

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

Challenges include finding accommodation for existing tenants whose homes need to be demolished, and reducing the number of times that people have to move as the estate is remodelled. Community infrastructure also needs to be planned alongside the redevelopment – many estates include schools or health centres that need to be rebuilt without disruption to users.

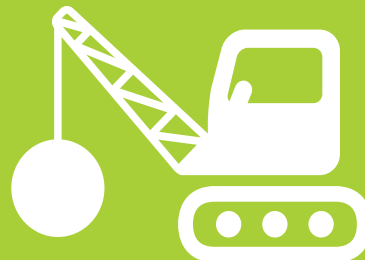
Estate renewal is therefore a very complex and lengthy design exercise, and extensive consultation and involvement of local residents will be needed in both planning and implementation.

The viability of estate redevelopment is often very challenging too, because the new homes need to also pay for the re-provision of old homes. Costs and delays are added by the need for compulsory purchase powers, to re-purchase leaseholds sold under “right-to-buy”.

So while there is potential, estate redevelopment is no silver bullet. Some of the most high profile estate redevelopment schemes in London have taken 15 years or more from conception to the first home being built, and such schemes have often been controversial with local residents. Major estate renewal schemes have often required tens of millions of pounds of public support before they can succeed.

### ADVANTAGES

- Councils are major landowners in London, much of it in housing estates. Redeveloping their land already used for homes at higher densities is a way to systemically increase housing supply.

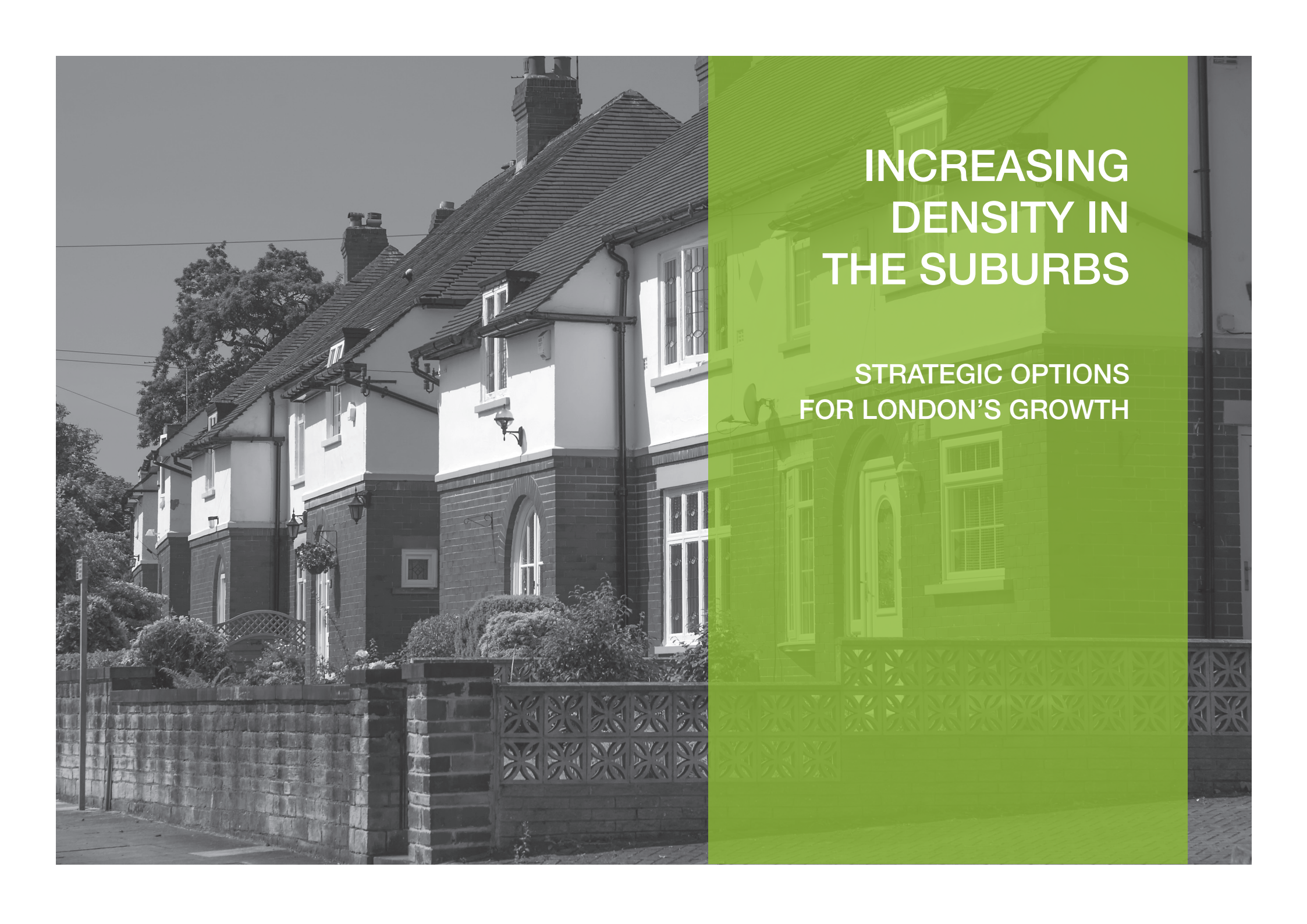


### LIMITATIONS

- Estate redevelopment is difficult to do well and takes many years if not decades to deliver, suggesting that this will not be a way to quickly increase supply.

### CHOICES FOR THE MAYOR

- How much should estate redevelopment be expected to contribute to London's housing needs? Councils and Housing Associations will lead the process, but can the Mayor contribute more financially to ensure better and quicker results?

A black and white photograph of a row of suburban houses, likely in London. The houses are two stories high, with white upper floors and dark brick lower floors. They have gabled roofs with multiple chimneys. In the foreground, there is a stone wall and a decorative metal fence. The right side of the image is covered by a semi-transparent green overlay, which contains the title and subtitle text.

# INCREASING DENSITY IN THE SUBURBS

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH

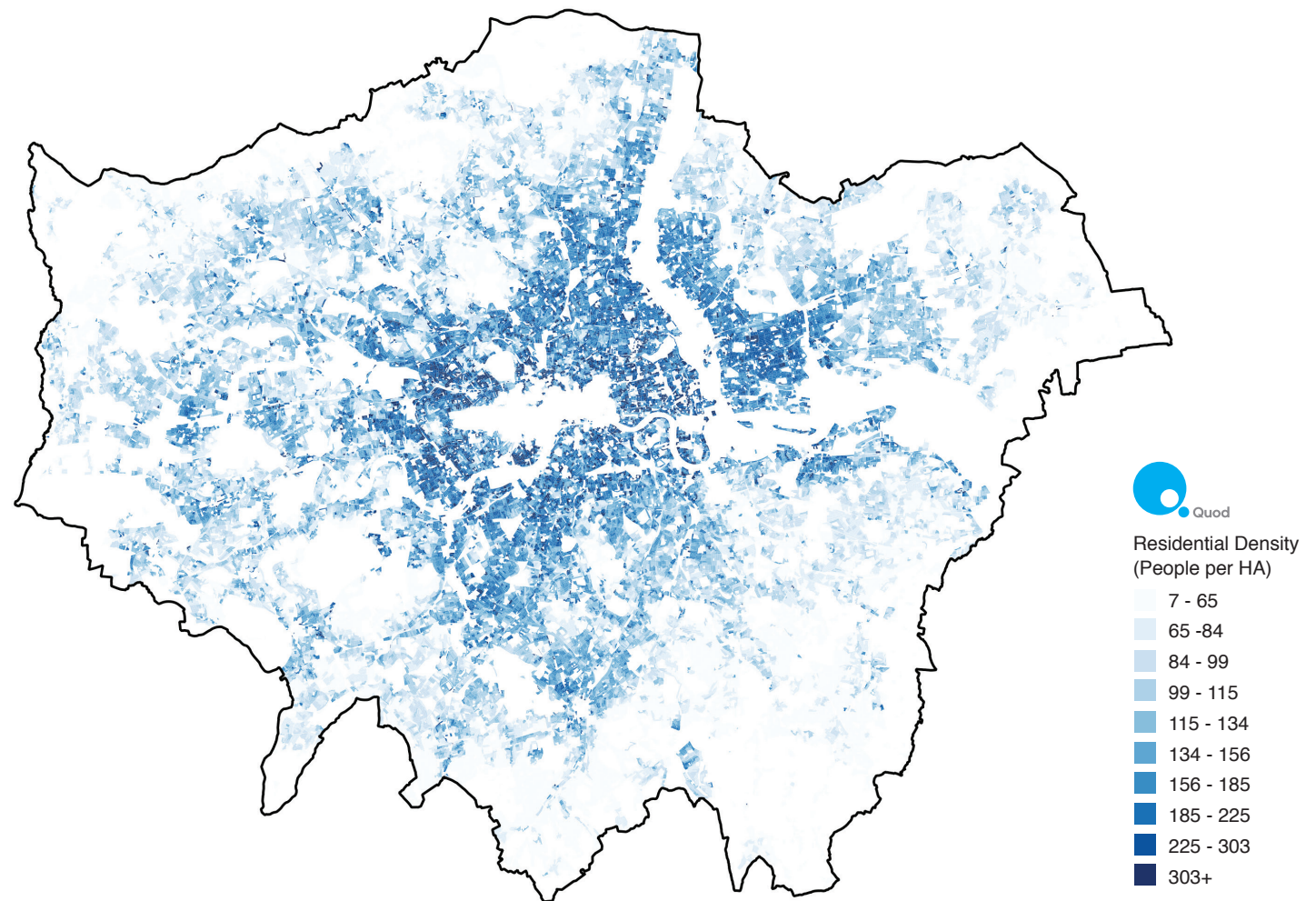


# INCREASING DENSITY IN THE SUBURBS

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

London's average population density is around 113 people per hectare (when you exclude the land that people don't live on at all – such as the parks, reservoirs and industrial areas). That's equivalent to a two story terraced street with small gardens front and back.

Currently one in five of us live at about half that average density – equivalent to detached homes with sizeable gardens. That 20% of London's population occupies 40% of London's residential land. If the number of homes in these low density suburbs could be incrementally increased by 10% (still well below the current average London density), it would deliver around 75,000 homes.



Map: Population density of residential land in London



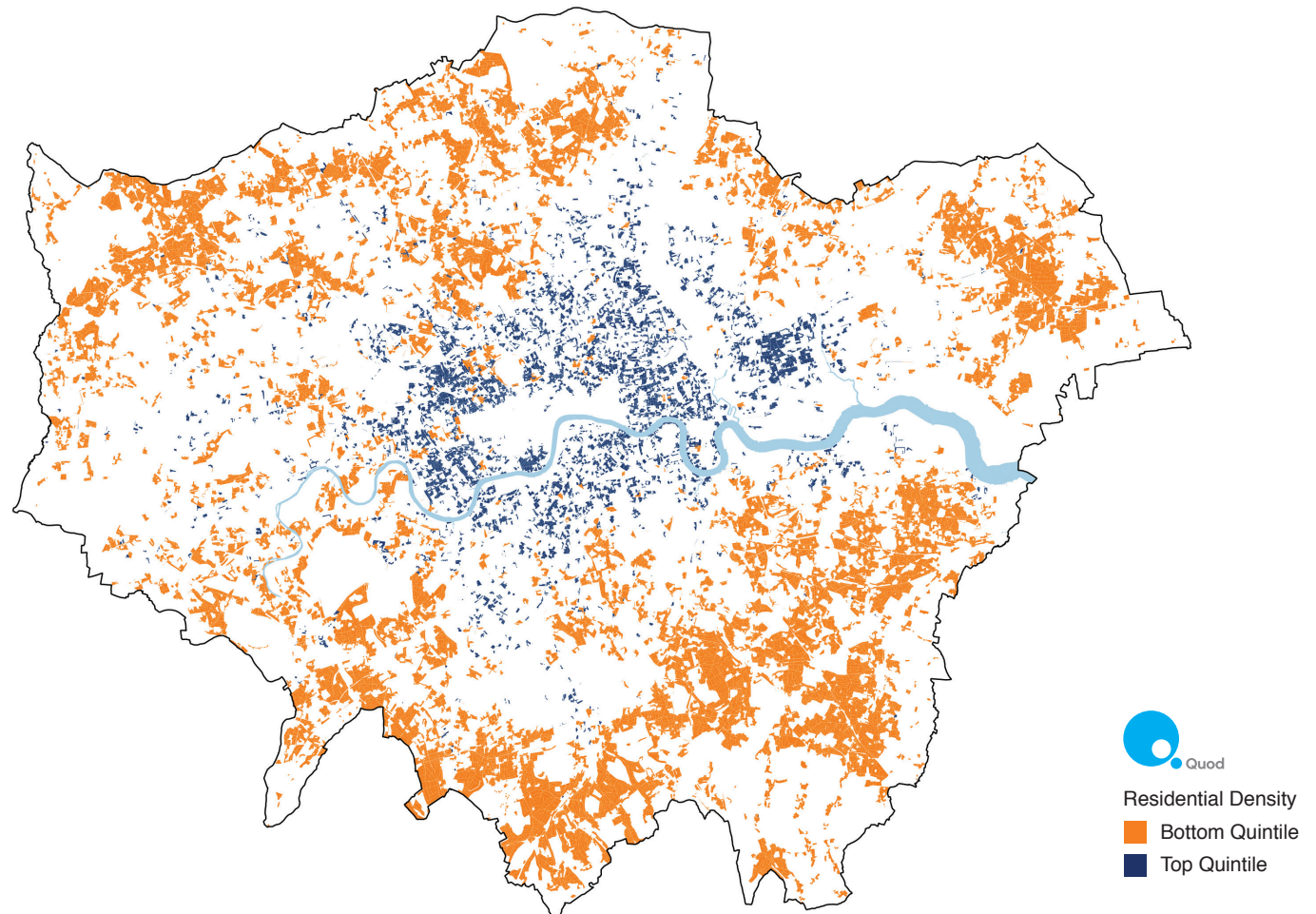
# INCREASING DENSITY IN THE SUBURBS

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

The blue and orange areas of London housing in this map each contain 20% of the capital's population. But the low density orange areas account for 40% of London's residential land, while the blue high density housing occupies just 7%.

Clearly, the majority of this capacity is in the outer London suburbs, places like Bromley, Bexley and Croydon in the south and those such as Hillingdon and Harrow in the north.

While Londoners as a whole are generally supportive of new housebuilding, research has found outer Londoners much less supportive.<sup>12</sup> Such attitudes may make it hard to add density to the suburbs quickly, and fragmented private land ownership means comprehensive change is not easy.



**Map:** Top and bottom quintiles of population by residential density

<sup>12</sup> Shelter and MPC, Addressing our housing shortage: engaging the silent majority, 2015.

# INCREASING DENSITY IN THE SUBURBS

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

One way low density housing can accommodate more people is by subdivision. Already many new homes are added every year by converting houses into flats. But there are limits to how much this can achieve. Ultimately it doesn't create any additional living space for London's growing population, and reduces the number of family homes.

To go further and fit more people into suburbs sustainably without reducing quality will mean actually building new homes. The idea of gradual, incremental "Sprawl Repair" has been gaining traction in some North American cities, and in London similar ideas have been considered by the GLA's "Superbia" research<sup>13</sup>. Small infills, extensions and replacements can over time gradually increase density, and this can benefit existing residents, supporting local services and creating more walkable, liveable neighbourhoods.<sup>14</sup>

### ADVANTAGES

- Large parts of London are low density, so there is a big opportunity – even a very small trend towards "densification" across such a wide area could deliver significant numbers of homes.
- Slightly denser suburbs would mean more evenly distributed growth, and reduce pressure for ultra-high densities in other areas.



### DISADVANTAGES

- Change will be slow, and hard to deliver, other than in a gradual and piecemeal way.
- Dispersed growth can make it difficult to plan investment in infrastructure and schools.
- Need to avoid densification through overcrowding.

### CHOICES FOR THE MAYOR

- Incremental local change will only happen with leadership from the boroughs. Can the new Mayor use guidance, persuasion or financial incentives to accelerate this?

<sup>13</sup> Supurbia, HTA in collaboration with the Deputy Mayor for Housing, 2014

<sup>14</sup> Tacheiva, Sprawl Repair Maniel 2nd ed, 2013; Talen, Retrofitting Sprawl, 2015





# NEW TRANSPORT FOR NEW HOMES

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



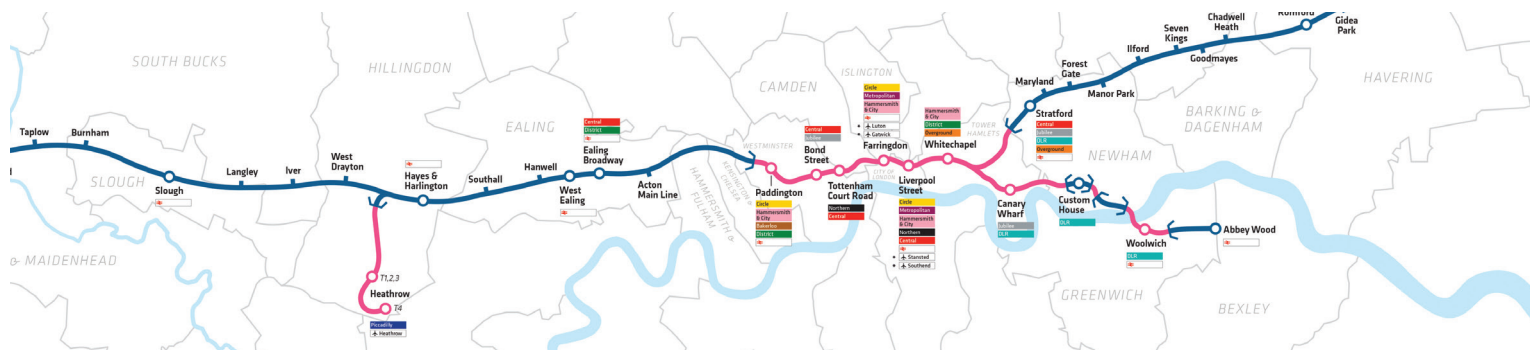
# NEW TRANSPORT FOR NEW HOMES

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

When London's population was static or falling, new rail projects were designed with congestion relief, regeneration and jobs in mind. This is changing, and when Crossrail 1 opens in 2018 it will be the last of that generation. From now on, rail in London is increasingly being planned on the basis of how much housing it can deliver.

This is simply a return to a long tradition, including the capital's greatest ever housebuilding boom: the "Metroland" developments of the 1930s, which had new commuter Tube lines at its heart.

Crossrail route map



The next 15 years or so, could see huge investment, ranging from the local to the national:

- **Crossrail 1:** due to open in 2018
- **The Northern Line extension to Battersea:** due to open by 2020
- **Barking Riverside extension:** proposed to open in 2021
- **High Speed 2 and Old Oak Common:** first phase due in 2026
- **Crossrail 2:** which could open around 2030
- **The Bakerloo line extension:** proposed for around 2030

Better transport connections to London's jobs markets raises land values and makes housing viable where it wasn't before, making higher densities sustainable. There is clearly potential for more transport-led housing development: TfL has estimated that Crossrail 2 could unlock an additional 200,000 new homes in London and the South East.

Few other options could deliver so many homes, but the timescales are very long. Rail schemes cannot be planned and delivered within a four year Mayoral term, and any additional schemes planned now will do nothing to relieve the current shortage of homes.

But that does not mean that the next Mayor should do nothing. They can:

- Look again at existing schemes, particularly Crossrail 1, to see whether more housing could be planned around the stations
- Vigorously push on with schemes in planning, such as Crossrail 2, so that the pipeline of future investment is maintained
- Take bold decisions on the routing of these schemes to maximise the housing potential

# NEW TRANSPORT FOR NEW HOMES

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

Projects such as Crossrail 1 and 2, and the upgrades to Thameslink do not just affect London, but reach out into the wider South East. The full housing potential of such regional railways cannot be realised without re-examining existing constraints on land use such as industrial designations and the Green Belt. The Mayor can direct transport investment towards those areas most willing to accept growth, and most able to deliver the housing London needs.

### ADVANTAGES:

- Transport corridors are the backbone of any major future extension of a city. Workers will only move where there is access to jobs. Major transport investment can deliver many new homes.
- Transport infrastructure can be partly funded by housing.



### DISADVANTAGES:

- London's existing major schemes, such as Crossrail, have already been factored into the city's growth. The next generation of major schemes are over a decade away.
- Further rail schemes will be needed, but will take too long to solve the housing shortage the new Mayor will face in their own term of office.

### CHOICES FOR THE MAYOR:

- Planning new railways may be of more benefit for the Mayor's successor, so an enlightened long-term view is needed. And when taking forward schemes started by their predecessors, the new mayor may need to push forward hard decisions on Strategic Industrial Locations and Green Belt if the housing is to materialise.



# HIGH DENSITY TOWN CENTRES

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



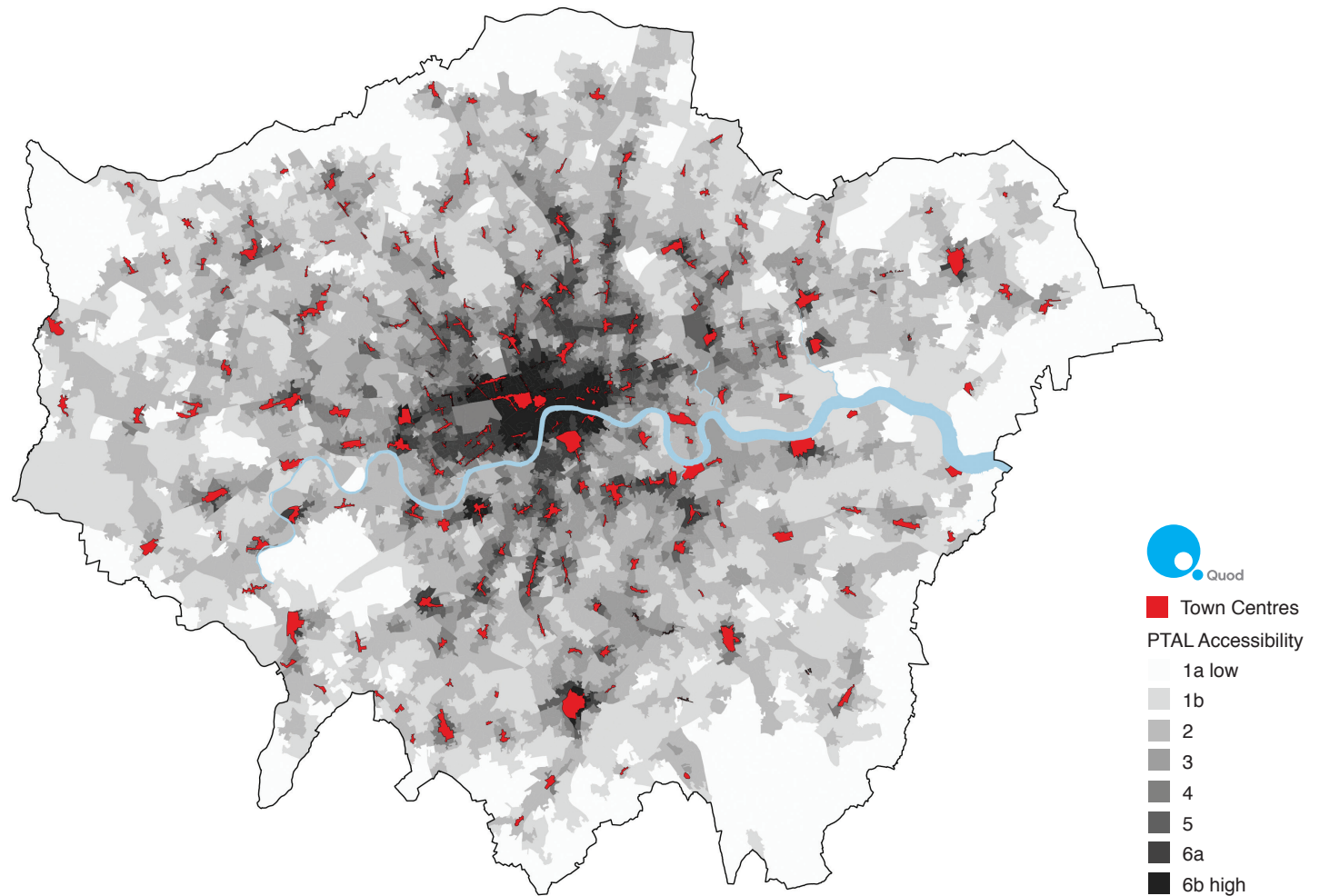
## HIGH DENSITY TOWN CENTRES

### STRATEGIC OPTIONS FOR LONDON'S GROWTH

Town centres are both a need and an opportunity. At one end of the scale, the larger centres are thriving, while at the other, some local convenience shops are also reviving. But between these extremes are many smaller suburban town centres struggling to survive our changing shopping habits.

Some will be saved by retail investment, but other may need to find a different future, and could come find new life from housing. As the GLA has noted these places are often ideal locations for homes – with an established range of services, jobs and public transport, and often some large landowners (making redevelopment simpler).

The London Plan lists over 220 town centres. Their suitability and capacity for housing will vary hugely, but just 100 additional homes in each would deliver the equivalent of a whole new Opportunity Area such as Old Oak, Stratford or Battersea.



**Map:** Town centres and public transport accessibility (PTAL)

# HIGH DENSITY TOWN CENTRES

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

The GLA's own assessment is that large sites in and around town centres could deliver over 15,000 new homes a year<sup>15</sup>. However, despite policy encouragement, residential re-development of outer-London town centres has been slow to materialise. Firstly, there is an understandable reluctance to accept a shift away from employment uses – even more so now that councils keep any growth (or losses) in business rates.

Secondly, policies intended to promote family housing may not work well when applied rigidly to locations more suitable for younger adults and older people.

Thirdly, there can be a reluctance to accept taller residential buildings in the heart of a lower-rise suburban community.

### ADVANTAGES:

- Town centres are attractive and sustainable places for housing growth, as they are already supplied with jobs, services and transport.

### DISADVANTAGES:

- Shifting town centres towards housing can be controversial, and under new business rate rules may be costly to the council.
- Redevelopment of existing retail may only be viable if tall buildings are allowed.

### CHOICES FOR THE MAYOR:

- Should family housing requirements be relaxed in high density town centre locations? How can boroughs be persuaded and incentivised to allow such change?



<sup>15</sup> GLA, Accommodating Growth in Town Centres, 2014.



An aerial photograph of London, showing the River Thames, the London Eye, and various city buildings. A large green rectangular overlay covers the right side of the image, containing white text. The text is arranged in two main sections: a large title at the top and a subtitle below it.

# THE ALTERNATIVES?

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



The options in this report are not mutually exclusive, and indeed many are mutually dependent – making better use of town centres usually needs taller buildings, and changing industrial land to residential may depend on new rail infrastructure.

Ultimately they are all about how we use London's land, and they boil down to variants of three choices:

- Building more on the existing land
- Changing land to residential from other uses
- Bringing new land into development

There are no magic solutions that avoid these three options. Ideas that sometime make the press such as “floating homes” or “container homes” are of marginal relevance at best, and mean nothing without land.

Prefabrication is also suggested as a solution. Off-site manufacture of housing has great potential for speeding up construction, and potentially overcoming some of the supply constraints that are

also limiting housing delivery. However it does not in itself do anything to alter the need for land, which is by far the greatest challenge in the medium to long term.

Better use of public land is also touted as a solution. Public land is important, and must certainly contribute, but it is not distinct from the options set out above. In fact it is almost certainly part of all of them. And it will not be quick.

Nationally, the Government has sold off land for 110,000 homes in the last five years, and so far it is estimated that only 2% of those homes have been built, 9% started, and another 9% granted planning permission<sup>16</sup>. More will come over time, but it illustrates that public land in itself is no quick-fix.

**“only 5% of the land is identified as vacant”**

The London Land Commission has identified 40,000 parcels of public land in London (the vast majority of them owned by the boroughs), and believes that ultimately these could deliver 130,000 new homes, which would be a very valuable contribution. But the LLC database also illustrates well how difficult it may be to actually deliver on these sites, as only 5% of the land is identified as vacant (most is “unknown”) and the register includes many occupied sites, ranging from City Hall itself, to the Natural History Museum.

Of the land with an identified use about 40% is currently for employment (shops, offices, industry), a similar proportion is schools, hospitals, police stations and other public services, while the remainder is mostly transport and utilities. There is undoubtedly great scope for redevelopment, intensification and change of use on public land in London, and the GLA is right to push this forward. But it will not on its own solve the crisis.

The public sector has often been slower to make best use of its land, so could potentially deliver more in future, particularly affordable homes. But using public land encounters all the same dilemmas about change of use, height, and infrastructure that other land faces: in fact, all of the issues discussed in this report apply equally to public and private land.

“Land-banking” is also sometimes suggested as a blockage on development that could potentially be reduced by encouraging planning consents to be built out faster. Certainly build-out rates can be slow on some very large sites (see box on Brownfield delivery) and measures that supported faster delivery would be welcome. However there is no consensus on how or even whether this could be achieved, and in too many cases the barriers to faster delivery are real, and expensive to overcome.

<sup>16</sup>Daily Telegraph, 27 January 2016

## THE ALTERNATIVES?

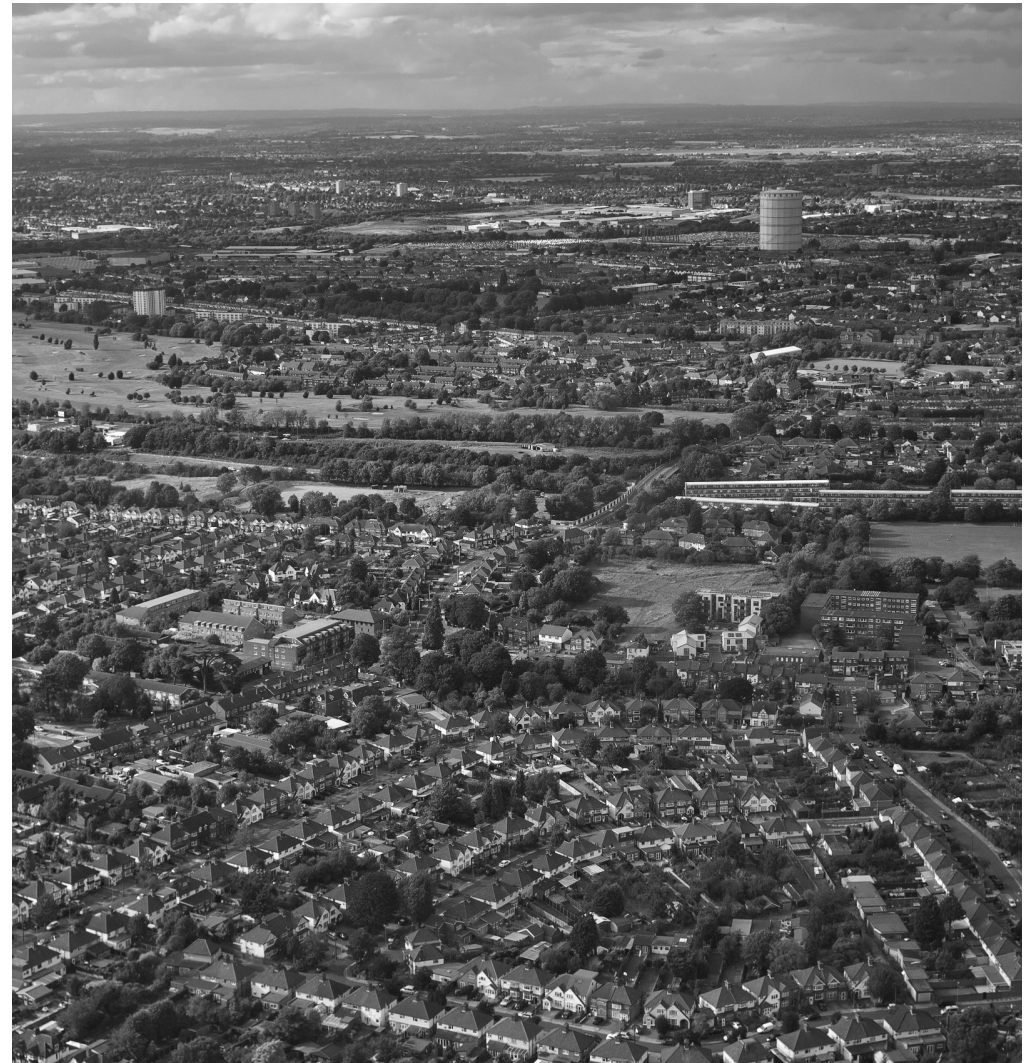
### STRATEGIC OPTIONS FOR LONDON'S GROWTH

But what about empty homes? The idea of “buy-to-leave” investors leaving homes vacant has attracted media attention, but it is likely that this phenomenon is very localised and of limited relevance to the overall London market. Savills estimated that in 2013/14 non-resident overseas investors accounted for just 7% of the London residential market and that “the vast majority were buying properties to rent out”.<sup>17</sup>

More significant might be the number of long term empty homes in London's mainstream housing market – and this has seen a steep decline over the last decade. According to DCLG figures, long term (6 months or more) vacant stock in the capital halved from 2004 to 2014, from around 40,000 units to around 20,000. Long term vacant homes now represent just 0.6% of the stock.<sup>18</sup> Finding ways to reduce empty homes further is obviously welcome, but it will not solve London's housing needs.

“Long term vacant homes now represent just 0.6% of the stock.”

Overall, the conclusion has to be that if London is to meet its housing needs, there is no undiscovered short cut that provides an easy alternative to the options covered in this report.



<sup>17</sup> Savills, London's overseas buyers have been overstated, 2014.

<sup>18</sup> DCLG Live Tables on Vacant Stock.





# DON'T TRY THIS AT HOME

STRATEGIC OPTIONS  
FOR LONDON'S GROWTH



### Why there can't be just a single solution to London's housing shortage

GLA figures suggest London completed around 24,700 homes a year in the last decade, while the GLA Strategic Housing Market Assessment found we need up to 50,000 a year to meet growth. What would it take to double the number of homes a year built?

However we do it, it will not be easy, but every option that is scaled back, or ruled out altogether makes the challenge even harder. Here we look at how impossible it would be to try to rely on one option only to give us those extra 25,300 homes a year (over and above our current housing supply).



#### BROWNFIELD

The five new London neighbourhoods planned as part of the Olympic legacy will add up to 6,800 homes. It was one of the largest planning applications London has ever seen. We would have to clear enough industrial land to add the equivalent of another project of this scale **every three months**, to meet the housing shortfall on brownfield. As explained in the report, the time taken to deliver brownfield makes this kind of scenario impossible.



#### HEIGHT

A new 50 storey tower every three days (in addition to current plans), would be enough to fill the housing shortfall. This would be both practically and politically impossible.



#### GREEN BELT

At average London densities, it would take around 560 hectares of new housing land a year to fill the gap in supply. Over eight years – two Mayoral terms – that would mean 13% of the Green Belt within Greater London (or 0.8% of the wider Metropolitan Green Belt). This would significantly change London's footprint and require a major change to policy.



#### GARDEN CITIES

Milton Keynes is the most successful new town, and at its peak in the 1980s it built nearly 2,700 homes a year. We would need nearly ten new Milton Keynes around London, all building at that rate, to fill all of London's housing supply gap. This would dwarf all previous New Town programmes.



#### ESTATE REDEVELOPMENT

If we were to fill the entire housing gap by rebuilding run-down social housing estates at twice their current density, it would mean demolishing over 25,000 existing homes a year, or 7% of London's post-war council estates. As this report makes clear, estate redevelopment done well takes time, and so this pace of change is difficult to conceive.



#### DENSIFYING SUBURBS

40% of London's housing land is low density suburbs, which over time can have new homes added. If you filled the housing supply gap by demolishing individual houses and replacing each one with three new homes, you'd need to do this to nearly 13,000 homes a year. That's equivalent to buying, demolishing and rebuilding every semi-detached home sold in outer London every year.



### TRANSPORT CORRIDORS

It is estimated that Crossrail 2 could deliver 200,000 homes over the course of the next few decades. To fill the current housing delivery shortfall in this way alone we would need a new scheme on the scale of Crossrail 2 every eight years or so, at a cost of £30bn a time.



### HIGH DENSITY TOWN CENTRES

London has 221 town centres. To fill the gap in housing supply just through these would mean every town centre adding housing equivalent to a 50-storey towers every other year.

**NONE OF THE SCENARIOS WILL HAPPEN, AND NOR SHOULD THEY.**

None of these solutions can solve London's housing problems on their own. The point is be realistic about the scale of the need, and to recognise the difficulties we will face in meeting it if we start to rule out options, and put too much faith in fewer of the easier solutions. Take a bit of each of these, however, and we can tackle the housing shortage without going to extremes.

## STRATEGIC OPTIONS FOR LONDON'S GROWTH

All these strategic options for London's growth have advantages and limitations, and none are easy or quick. Many of these options have a lot of capacity in the long term, but limits on how quickly they can deliver it. **So the new Mayor needs to focus not only on how much housing can be delivered in principle, but also how quickly it can be built in practice.**

Building enough new homes over the next decade will mean being open to what all these options can provide, not pinning our hopes on just one or two. Every option we rule out altogether makes a difficult task even harder.

There are other potential constraints on housing, including skills, infrastructure and regulation – but the most fundamental problem is land.

Any credible candidate for Mayor must have a strategy for where London's half a million homes should be built. Otherwise, the capital's most pressing issue will not only fail to get better, it will get far worse.





  
CITY OF LONDON  
SCHOOL



In partnership with  
**Shelter**