GREATER**LONDON**AUTHORITY

[redacted]

Our Ref: MGLA220120-0887

18 February 2020

Dear [redacted]

Thank you for your request for information which the Greater London Authority (GLA) received on 21 January 2020. Your request has been dealt with under the Environmental Information Regulations (EIR) 2004.

You requested information relating to the Strategic Housing Land Availability Assessment (SHLAA) for the new London Plan put out to public consultation between 23 November 2016 and 20 January 2017.

Our response to your request is as follows:

1. *Any reports, emails or memorandums relating to the consultation*

Please see the attached Draft SHLAA methodology report and all the emails relating to the consultation are attached. There are no records of memorandums relating to the consultation

2. *Information showing the form and extent of the public consultation, including evidence of distribution by paper or in electronic form and where the document for consultation was published, together with evidence of the date on which it was published or sent where such evidence is available.*

The consultation on the SHLAA methodology was a targeted technical consultation with key stakeholders, and the methodology was not published on our website. It was circulated by email and explained during stakeholder meetings.

Details of all London Plan specific evidence base engagement (including those related to the SHLAA) can be found in the Mayor's responses to the Panel's Preliminary Questions (Mayor of London, Sept 2018) in particular the answer to PQ9 on page 50. This document can be downloaded from https://www.london.gov.uk/sites/default/files/mayors_responses_to_panels_preliminary_questions.pdf

Consultation emails (see consultation emails sent in answer 1) were send to all of London's Local Planning Authorities and

- Barton Willmore
- Bracknell Forest BC
- Cambridgeshire CC
- Central Bedfordshire Council
- Chelmsford City Council
- Dartford BC
- East Herts DC
- Environment Agency
- Essex CC
- Gravesham BC
- Hampshire CC
- Hertfordshire CC
- Historic England
- Home Builders Federation
- Hyde group
- Just Space
- Kent CC
- London Councils
- London First
- London Forum
- London Tenants Federation
- Luton BC
- National Housing Federation
- Norfolk CC
- Oxfordshire CC
- Planning Advisory Service
- Reigate & Banstead BC
- RICS
- Royal Borough of Windsor & Maidenhead
- South Bucks DC
- South Cambs DC
- Southend-on-Sea BC
- Southern Housing
- Surrey CC
- Surrey Heath BC
- Thurrock Council

3. *Feedback received in writing to the consultation, together with the names of all public and corporate bodies that responded*

The responses received have previously been released and published on the GLA's disclosure log:

https://www.london.gov.uk/about-us/governance-and-spending/sharing-our-information/freedom-information/foi-disclosure-log/eir-draft-shlaa-methodology-consultation

Please note that some individual names are exempt from disclosure under Regulation 13 (Personal information) of the EIR. This information constitutes as personal data which is defined

by Article 4(1) of the General Data Protection Regulation (GDPR) to mean any information relating to an identified or identifiable living individual. It is considered that disclosure of this information would contravene the first data protection principle under Article 5(1) of GDPR which states that Personal data must be processed lawfully, fairly and in a transparent manner in relation to the data subject.

4. *Alterations to the SHLAA that were made as a result of the consultation with evidenced justification for such changes*

Please see the Final SHLAA methodology report

5. *Reports, emails, memoranda and minutes of meetings relating to the consultation and decisions made as a result of the consultation*

We do not hold information in scope of your request other than the Draft SHLAA methodology consultation report and emails sent in answer 1.

If you have any further questions relating to this matter, please contact me, quoting the reference MGLA220120-0887.

Yours sincerely

[redacted]
Information Governance Officer

If you are unhappy with the way the GLA has handled your request, you may complain using the GLA's FOI complaints and internal review procedure, available at:
https://www.london.gov.uk/about-us/governance-and-spending/sharing-our-information/freedom-information

Attached in order (PDF)

Draft methodology

Final methodology

Emails

Email attachments (except the methodology document above)

Draft SHLAA Methodology

This paper outlines the proposed methodology for the next SHLAA. Boroughs and other stakeholders should provide feedback and comments on the draft methodology by 20th January. Consultation responses should be sent:

By email to - LondonSHLAA@london.gov.uk

By post to - [redacted]
Greater London Authority
City Hall
The Queen's Walk, London SE1 2AA

1 Introduction

1.1 In line with national planning policy and guidance, the next London Plan will need to be informed by a Strategic Housing Land Availability Assessment (SHLAA). The purpose of the SHLAA is to identify the amount of housing capacity in London that is suitable, available and achievable during the plan period in order to address housing need. The study will cover a 25 year period from 2016 to 2041 and will inform the housing targets in the London Plan. This will be supported by a separate viability assessment. The draft methodology is structured as follows:

- Section 1 provides an introduction and sets out the context to the SHLAA study
- Section 2 summarises the density estimates proposed for the SHLAA
- Section 3 explains the probability based approach applied to 'potential' large sites and explains how planning policy, environmental and delivery constraints will be applied in the study
- Section 4 sets out the range of potential scenarios that will be tested in the study
- Section 5 sets out the approach to small sites and long term vacant homes

Sources of capacity

1.2 The study will draw on the following sources of capacity:

- **Approvals** – net housing provision from London's pipeline of large sites with planning permission (0.25ha or larger), identified in the London Development Database (LDD). This takes into account any housing completions undertaken on sites where development has already commenced. It will also include non-self contained housing (eg accommodation for students and specialist housing for older people).
- **Allocations** - large sites which are allocated or informally identified for housing/mixed use redevelopment (0.25ha or larger) – these sites have been provided to the GLA by boroughs.
- **Potential sites** - other potential large sites (0.25ha or larger) which are currently in the SHLAA system or have been identified through the call for sites or through GLA/TfL development capacity studies in opportunity areas and associated with transport schemes. In addition, boroughs will be able to add new large sites and edit site polygons drawing on their local knowledge.

- **Small sites** - annual trends in conventional housing completions on small sites under 0.25ha in size (2004/5 – 2014/15), taking into account potential for these trends to be increased through changes to planning policy and scenario testing.

Project timescales for the SHLAA

1.3 To inform the draft London Plan the SHLAA needs to be completed by summer 2017, with initial results finalised by ~~the~~ June. In order to meet this deadline it is necessary to:

- carry out site assessment and borough one to one meetings between February and May
- undertake various scenario tests alongside the site assessment process
- finalise and write up the SHLAA document by the end of August 2017

Background and context to the study

1.4 The next housing need assessment (SHMA) is likely to show a higher overall housing requirement due to faster household population growth and worsening housing affordability. Initial GLA estimates suggest this could result in an annual housing requirement of between 55,000 and 65,000 homes, with affordable housing need likely to comprise more than half of this figure. Indicative results from the SHMA are likely by March to inform the Full Review of the London Plan. The final SHMA and SHLAA studies will be published alongside the Draft London Plan in Autumn 2017.

1.5 The NPPF requires that plans meet the full, objectively assessed need for market and affordable housing as far as consistent with the policies set out in the Framework[1]. The SHLAA plays an important role in understanding the extent to which London has the land capacity to meet its objectively assessed housing need, taking into account the range of economic, environmental and social policy objectives and an understanding of potential deliverability constraints.

1.6 The proposed methodology for the new ~~SHMA~~ SHLAA broadly follows the same approach as the previous SHLAA which was found sound during the Further Alterations to the London Plan Examination in Public (EiP) and at previous London Plan EiPs. Further refinements are suggested to the SHLAA methodology in this paper. These aim to ensure potential housing capacity is not being under-estimated, while understanding the competing land use priorities and without undermining the overall robustness of the SHLAA. This follows a detailed review of the previous SHLAA methodology in light of national guidance and the site assessment process.

1.7 The SHLAA system has been designed to ensure there is sufficient flexibility to enable different policy options to be modelled and tested to inform the Full Review of the London Plan, taking into account various policy scenarios. This includes:

- different scenarios in terms of industrial land release (see below)
- the impact of key transport infrastructure schemes on housing capacity, land uses and potential densities, including Crossrail 2, the Bakerloo line extension and other potential transport schemes and potential station intensification areas (see pages 22-23)
- the potential for existing trends in housing completions on small sites to increase by enabling additional housing intensification on available small/infill sites and within the existing housing stock, for example through suburban intensification, through

[1] NPPF paragraph 47

changes to planning policy and other potential planning mechanisms, eg brownfield/small sites registers and permission in principle. The methodology for undertaking this assessment will be shared with boroughs at a later date and discussed in more detail (see pages 23-24).

- the potential for additional housing intensification in town centres and out of town retail locations, taking into account town centre health check findings and other evidence on retail demand (see page 20)

Industrial land research

1.8 The NPPF recommends undertaking review of employment land alongside SHLAA housing capacity studies to ensure evidence is fully integrated[2]. Having published an Industrial Supply Study in 2016, the GLA is currently undertaking an Industrial Land Demand Study. This will update the London Plan annual benchmarks and borough classifications for industrial land release for 2015-2041 and will feed into the final assumptions made in the SHLAA and housing targets.

1.9 The industrial demand study will consider the potential impacts on London's economy and sustainability of different policy scenarios, such as:

- an **industrial supply-led scenario**: i.e. what would be an appropriate quantum, mix and location of industrial provision within London/wider south east property market areas to service London's needs
- an **infrastructure-led scenario**: this would consider the level of industrial land release that might be needed to deliver Crossrail 2 and the Bakerloo Line Extension.
- a **tipping point scenario**: exploring the maximum quantum of industrial land that could be released without significant adverse impact on the London economy.
- a **trend-based scenario**: this scenario would assume that recent trend rates of industrial land release continue at around 100ha per annum

1.10 In addition, the study will also consider the scope for intensification and co-location of some industrial activities with other uses (including residential) and the potential for the wider south east to accommodate some of London's demand for industrial land. The demand study should be finalised in the New Year and an appropriate scenario or combination of scenarios will be carried forwards as the basis for the new London Plan. This will be informed by the housing capacity findings in the SHLAA.

1.11 Consequently, the housing capacity estimates on industrial sites in the SHLAA will need to be closely monitored and potentially revisited during the SHLAA study in order to align the SHLAA with the preferred approach to industrial land release in the new London Plan. This will ensure that housing targets reflect the level of industrial land release that is considered appropriate in each borough and should provide additional certainty for Local Plan preparation.

Confidentiality – potential sites

1.12 Site specific information on all 'potential' sites in the SHLAA will remain confidential, as the SHLAA provides an aggregate, probability based estimate of the potential housing capacity on these types of sites. Specifically identifying potential sites might undermine

[2] NPPF paragraph 161

current uses, pre-empt the statutory planning making/decision making process, and affect land values which could compromise wider planning objectives.

1.13 Consequently, it is for each borough to determine whether information on potential sites should be made publicly available at site level, eg in terms of their Local Plans, housing trajectories and brownfield registers. As part of the study the GLA will only publish information about sites with planning approval or which are already publicly identified as suitable for housing, eg Local Plan allocations. These approved and allocated sites will be published on the London Datastore on the Mayor of London website[3].

The GLA's call for sites

1.14 In line with national planning guidance, the GLA has carried out a call for sites, jointly with boroughs. This was advertised on the GLA website, through direct mail outs to stakeholders, coverage in London First's industry newsletter and through boroughs' websites. Approximately 1,300 sites have been submitted through the call for sites. The exercise has also provided an appreciation of land owners and developers aspirations for those sites and their views on deliverability, constraints and phasing which can feed into site assessments.

1.15 The call for sites data has now been digitised by GLA officers and will be shared with boroughs in GIS format along with supporting representations and documents which have been provided by stakeholders. A number of boroughs are also undertaking their own call for sites processes and this information should be fed into the SHLAA, with boroughs able to add extra sites to the SHLAA system.

2 Density estimates

2.1 Density estimates for sites with planning permission are based on the approved net residential density in LDD.

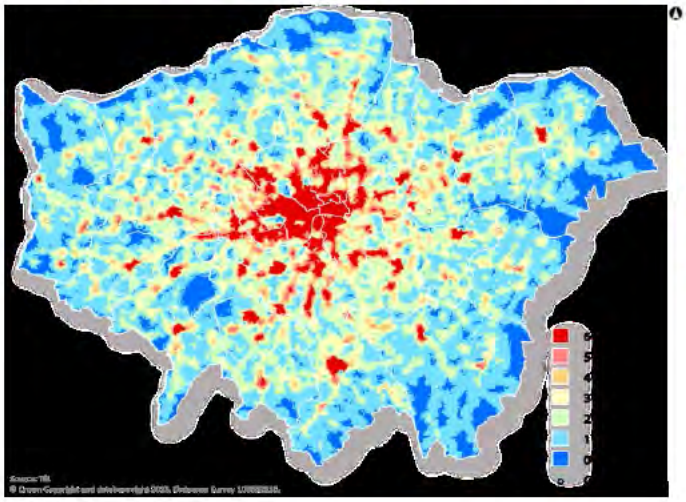
2.2 Density estimates for allocated and potential sites will be derived from the London Plan density matrix, with estimates set to the top of the relevant density range in town centres and higher assumptions applied in opportunity areas to reflect density trends and their strategic importance in terms of housing delivery.

2.3 The London Plan density matrix is based on the setting\character of an area and the Public Transport Accessibility Level (PTAL). To reflect this, the system will use GIS data for PTAL and character settings in order to assign density estimates to sites. The following maps will be used in the SHLAA:

- PTAL maps 2011, 2021, 2031 which reflect committed transport schemes – therefore the assumed phasing and delivery timescales for a site will impact the PTAL and density assumed
- An updated character settings map prepared by ARUP as part of the GLA's density research. This relies on 2011 census data and updated town centre boundaries. A 1km 'networked buffer' from town centre boundaries is applied in the map to reflect actual walking distances. The criteria and thresholds used to define settings on the character map are set out below:

[3] https://data.london.gov.uk/

Setting	Attributes	
	Housing stock[4]	Proximity to town centre
Central	>75% flats	1km of International, Metropolitan or Major town centre boundary
Urban	>75% flats and terraced housing	1km of District town centre boundary
Suburban	All other areas	All other areas
An area only needs to fulfil one of these criteria to be classified as 'central', 'urban' or 'suburban'		



2.4 The London Plan density matrix sets out density ranges for different PTAL levels (0 to 1; 2 to 3; and 4 to 6) and character settings (suburban, urban and central) and sub-divides broad ranges into those based on habitable rooms per unit. The matrix is shown in Appendix A.

2.5 Default density assumptions proposed for the SHLAA are set out below, which would apply to all large sites depending on their location, character setting and PTAL. As density assumptions are based on PTAL levels, the density estimates will depend on the phasing of a site and will reflect how PTAL levels change over time, as committed transport schemes are delivered – eg Crossrail 1. For example, housing capacity likely to come forward in phase 2 and 3 of the SHLAA (2021-2029) will be based on the PTAL map for 2021; capacity in phase 4 (2029 to 2034) will be based on the PTAL map for 2031. Phasing periods are set out in Table 10 (page17).

Standard density assumptions

2.6 Standard density assumptions in the SHLAA are based on the high point in the 3.1 to 3.7 habitable room per unit range in the matrix, taking into account PTAL and character setting (see Table 1). This seeks to ensure that the SHLAA estimates reflect the need to optimise development whilst allowing for a broad range of housing typologies appropriate to the location and a range of unit sizes including family sized homes. It also ensures that the SHLAA does not under-estimate potential housing capacity, taking into account trends in residential densities on large sites.

[4] Derived from census data

Table 1 - Standard density assumptions

PTAL	0 - 1	2 - 3	4 -6
Suburban	65	80	115
Urban	80	145	225
Central	100	210	355

Density assumptions in town centres

2.7 In town centres, densities are set at the top of the relevant density range (see Table 2). All town centres are considered to be either urban or central, reflecting the notes to density matrix in the London Plan (see Appendix A).

Table 2 - Town centre density assumptions

PTAL	0 - 1	2 - 3	4 - 6
Suburban	-	-	-
Urban	95	170	260
Central	110	240	405

Density assumptions in opportunity areas

2.8 Different density assumptions are applied in opportunity areas to reflect their importance in terms of the delivery of new development in London and to ensure that the SHLAA does not under-estimate the potential housing capacity in these locations (see Table 3). These assumptions are set out below and assume that:

- sites with suburban settings could potentially be developed at urban densities
- sites with urban settings could potentially be developed at central densities
- sites with central settings could potentially be developed at central+ densities. These are set above the relevant maximum range in the density matrix

Table 3 - Opportunity area density assumptions

PTAL	0 - 1	2 - 3	4 - 6
Suburban	80	145	225
Urban	100	210	355
Central	250	350	450

2.9 These density estimates allow for a broad range of housing typologies and sizes to be provided and are set below the average density of approvals on large sites in opportunity areas in order to not over-estimate potential densities. These trends are shown in Table 4 below.

Table 4 - Average density trends in opportunity areas - approved large sites (0.25 hectares and more) between 2004-2016

PTAL	0 - 1	2 - 3	4 - 6
Suburban	83	204	337
Urban	150	226	329
Central	406	363	453

2.10 Where sites are in town centres as well as opportunity areas the opportunity area density will apply.

Borough amendments to density estimates

2.11 Boroughs will be able to adjust the density assumptions on all potential and allocated sites where they consider the density should be different to the system estimate. Changes in density would normally only be where boroughs have undertaken a detailed site appraisal or design-led exercise to establish a more appropriate density estimate for a site, or where boroughs are involved in emerging masterplanning work or pre-application discussions with a landowner or developer on a site, which would suggest the use of an alternative density assumption.

2.12 Reductions in density estimates would need to be clearly justified in terms of specific sites constraints (eg an identified heritage asset) which would reduce the density likely to be achieved on site and could not be mitigated or resolved through good design, eg stepping down building heights along the edge of a site. Local infrastructure capacity is considered through the constraint testing process (see delivery constraints), so will not be used as a reason for reducing the density estimate for a site.

2.13 In the 2013 SHLAA around a third of sites had their initial densities amended, with 70% reduced and 30% increased. In the next SHLAA, changes in density will be scrutinised

closely by GLA officers, taking into account trends in approvals and completions on broadly comparable sites/locations in London.

2.14 Boroughs would also be able to amend the land use mix assumed on a site, which will reduce the net residential site area accordingly. However, boroughs will not be able to change the character settings in the system which will remain fixed to ensure consistency of the underlying data in the system.

OAPF capacity studies

2.15 To support a number of Opportunity Area Planning Frameworks (OAPFs) the GLA in partnership with the relevant boroughs has undertaken more detailed design-led development capacity studies. These typically identify the potential for development to come forward at higher densities than the estimates relied on in the SHLAA. GLA officers will share these findings with relevant boroughs to ensure that the density estimates and land use assumptions feed into the SHLAA and to align the study with OAPFs being prepared. Boroughs will be encouraged to amend the default density assumptions in the SHLAA so that they reflect those being used in OAPF development capacity studies.

LSE density model update

2.16 The GLA is currently working with the London School of Economics (LSE) and Transport for London (TfL) to further develop a model for assessing potential residential densities across London. This model considers various characteristics[5] to estimate site density having statistically analysed the significance of each characteristic in influencing density using completed developments between 2008 and 2015. Whilst the model is not currently operational for use in the SHLAA, it may be used to benchmark or scenario test the housing capacity assumptions following the site assessment process.

3 Constraints testing process – 'potential sites'

3.1 The methodology for assessing housing capacity on 'potential' sites in the SHLAA is specifically tailored to suit London's highly pressurised and unpredictable land market where 98% of housing is delivered on brownfield sites and where significant amounts of future capacity comes forward on 'potential' sites which are currently in other active land uses. On aggregate, this approach provides a robust method of estimating potential housing output in London that is more sophisticated than traditional 'windfall' estimates based on trends in completions. This is because it takes into account potential capacity but also considers the various site specific planning, environmental and delivery constraints and how these may affect the rate of housing completions without assuming every individual site will come forward for development.

3.2 The overall amount of achievable and deliverable housing capacity on 'potential' large sites will be estimated using a probability based approach. This assigns a probability score (%) to each potential site based on the number and severity of identified planning policy, environmental and delivery constraints. These are set out below in Table 5:

[5] PTAL, job accessibility, distance to centre, population density, suburban character, central character, opportunity/intensification areas, town centres.

Table 5 – constraint categories

Planning policy constraints	• Designated open space • Strategic Industrial Land (SIL) • Locally Significant Industrial Locations (LSILs) • Non designated industrial sites which boroughs wished to retain • Safeguarded Wharves
Environmental Constraints	• Flood Risk • Aircraft noise pollution • Health and Safety Executive consultation zones • Pylons
Delivery constraints	• Land ownership • Local Infrastructure • Contamination

Probability based approach

3.3 The same "constraints model" approach as in previous SHLAA studies will be used to provide an estimate of housing capacity on potential sites. This constraints model works in the following way:

- sites are assigned a notional density, based on the residential site area and a density estimate
- where a site is expected to be mixed use, boroughs can adjust the land use assumptions for each site, which amends the net residential site area
- the system then assigns a probability estimate of a site coming forwards for development based on the number and severity of policy, environmental and delivery constraints affecting it. These constraints are set out in Table 5 and are identified using GIS data and local knowledge through the site assessment process.
- the lowest percentage probability score across the three constraint categories – planning policy, environmental and delivery constraints – is applied to the notional density in order to provide a 'constrained housing capacity estimate' for the site in question. The probability score also impacts the assumed phasing period for a site.
- For example, if a site has a notional capacity of 100 units and an 80% probability of coming forward for development, the constrained housing capacity is assumed to be 80 units.

Illustrative example:

Allocated sites

3.4 In previous SHLAAs, allocated sites were also subject to the same constraint testing process as 'potential sites', with probability based constrained housing capacity estimates provided. However, this under-estimates the potential for housing delivery on these sites and does not reflect their formal planning status as sites that are considered suitable for residential and mixed use development. In the 2017 SHLAA it is proposed that housing capacity on allocated sites is based on notional housing capacity estimates in order to better reflect the higher likelihood of housing being delivered and also to ensure that the most realistic level of capacity is assumed. This would apply to all sites allocated for residential or mixed use development in an adopted DPD or informally identified in an SPD.

3.5 Constraints affecting allocated sites will be identified in the SHLAA system using GIS information and local knowledge and the probability scores would be recorded in order to inform the phasing assumptions used in the system. Boroughs will be able to adjust the land use mix and phasing assumptions for each site. Where allocations are for alternative uses, eg school sites, boroughs will need to amend the land uses accordingly.

Planning policy constraints

3.6 The approach to planning policy constraints is set out below in Table 6, with further detail provided in the supporting text below. Assumptions on industrial land will need to be monitored and potentially revisited in order to reconcile SHLAA with the approach taken in the London Plan in terms of industrial land release, taking into account the findings of the industrial demand study. However, as a starting point for the assessment boroughs should follow the approach outlined below in Table 6.

Table 6 – Planning policy constraints

Ref	Constraint	Source	Categories	Default probability assumption	Borough editable
1	Designated open space	GIS constraint layer	Yes or no	0% probability - unsuitable	Yes
2	Strategic industrial location (SIL)	GIS constraint layer	Yes or no	0% probability – unsuitable ✞	Yes
3	Safeguarded Wharves	GIS constraint layer	Yes or no	0% probability - unsuitable	Yes
4	Locally Significant Industrial Sites (LSIS) designated in a Local Plan	GIS constraint layer	Restricted	40% probability	Yes
			Limited	50% probability	
			Managed	60% probability	

5	Non-designated industrial/employment site protected by Local Plan policies	GIS constraint layer	Restricted	45% probability	Yes
			Limited	55% probability	
			Managed	60% probability	
✞ All sites earmarked for release in the industrial supply study should be assessed as potential sites as a starting point (see paragraph 3.14 and Figure 1). This overall quantum of industrial release may need to be revisited at a later date following the demand study. ǂ Borough classifications for industrial land release – restricted, limited or managed – will be updated once the GLA Industrial Demand Study is finalised.					

Designated Open space

3.7 The Mayor has been clear that he wants to protect the Green Belt and other designated green spaces in London[6]. All designated open space will be classified as 'unsuitable' by the system and deemed to have a zero per cent probability for development. This includes the following designations:

- Green Belt
- Metropolitan Open Land
- Sites of Special Nature Conservation Interest and Sites of Special Scientific interest
- Other protected public or private open space identified on a borough proposals map (eg parks and squares)

3.8 Boroughs will also be able to classify other protected public or private open space identified on a borough proposal map as unsuitable (0% probability) where the system has not identified in the GLA's open space constraint layers. Where boroughs are considering de-designating open space in the system this would need to be discussed with GLA officers as part of the SHLAA process, taking into account the strong strategic presumption against development on these types of sites.

Designated industrial land

3.9 As a starting point for the SHLAA study, the approach to industrial land in the SHLAA broadly follows the approach taken in the previous SHLAA and is summarised below.

3.10 Strategic Industrial Land (SIL) will be automatically classified as unsuitable (0% probability) by the system. However, boroughs will be given the option to change this default assumption on a case by case basis. Where sites are considered as potential sites boroughs would be able make provision for employment uses as part of the assumed land use mix for a site.

3.11 For locally significant industrial sites (LSIS), the SHLAA methodology assigns a notional probability estimate which is based on borough classifications for industrial land release in the London Plan (restricted, limited and managed):

- sites within a 'restricted' borough are assigned a lower probability of 40%
- sites with a 'limited' borough are assigned a probability of 50%
- sites with a 'managed' borough are assigned an increased probability of 60%

3.12 This approach reflects the fact that the stock of locally designated industrial sites has reduced at a higher rate (23%) compared to SIL (5%). However, boroughs will be able to alter this notional probability assumption, for example where they consider that LSIS

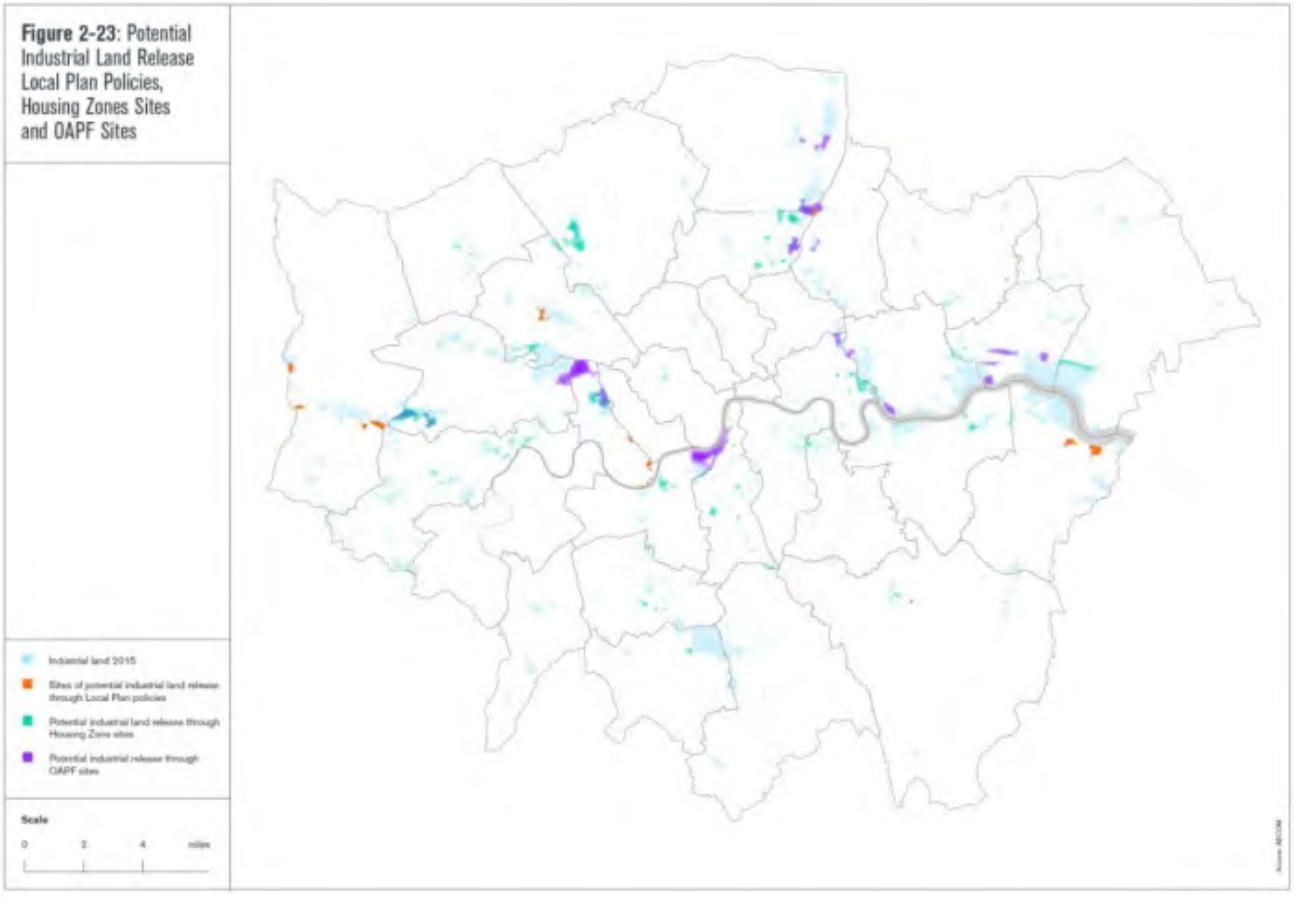
[6] Mayor of London, A City for all Londoners, page 19

sites should be protected based on local evidence (eg an up to date Employment Land Review); or where they consider that LSIS sites should be released for residential or mixed use development. **These default percentage probability assumptions are a starting point for the SHLAA study and may need to be revisited following the GLA's Industrial Land Demand Study.**

3.13 A broadly similar approach is taken for other non-designated industrial land protected by borough Local Plan policies, with probability estimates 5% higher in 'restricted' and 'limited' boroughs and the same estimate for 'managed' boroughs (see Table 6).

3.14 All designated and non-designated industrial sites that (including SIL and LSIS sites) that are earmarked for release in Local Plans, Opportunity Area Planning Frameworks (OAPFs) and Housing Zones should be classified as 'potential sites' so that boroughs fully assess the other site constraints and likely phasing of development, as well as the potential density and land use mix. These sites were mapped as part of the GLA Industrial Supply Study based on information available in Autumn 2015 and are shown in Figure 1. The SHLAA system will automatically classify these sites as potential sites. Figure 1 will be updated to reflect emerging proposals in the London Riverside OAPF and Old Kent Road AAP. **This overall quantum of industrial release may need to be revisited at a later date depending on the findings of the industrial demand study and the approach of the London Plan.**

Figure 1 – Potential industrial land release in the development pipeline, Local Plans, OAPFs, Housing Zones



Safeguarded wharves

3.15 Safeguarded wharves will automatically be assigned a zero probability to reflect their planning status in the current London Plan. Site specific assumptions in the SHLAA will be revisited if necessary to reflect any emerging amendments to London Plan policy. Where there is already an agreed plan for the consolidation and relocation of a safeguarded wharf use (eg through an OAPF or Local Plan) boroughs will be able to amend these default assumptions and consider the wharf in question as a potential site.

Environmental constraints

3.16 GIS layers will also be used to identify environmental constraints including flood risk, aircraft noise pollution contours, pylons and Health and Safety Executive (HSE) consultation zones. These constraints are classified as low, medium or high. The impact of each constraint category on the site probability is shown in Table 7 below.

3.17 Individual environmental constraint scores combine to provide an overall cumulative environmental constraint estimate. For example, if a site is classified as `medium' for flood risk, and aircraft noise and 'low' for pylons and HSE consultation zones, then the site's overall environmental constraint probability estimate will be 80%.

Table 7 – Environmental constraints

Ref	Constraint	Source	Categories	Impact on probability	Borough editable
6	Flood risk	GIS constraint layer and borough knowledge from SFRAs	Low - Areas in Zone 3 benefiting from flood defences	Reduces probability by 5%	Yes
			Medium - areas in Zone 3 not benefiting from flood defences	Reduces probability by 10%	
			High - Zone 3b	Site considered unsuitable (0% probability)	
7	Aircraft noise pollution	GIS constraint layer	Low - below 63 Db	No impact on probability	Yes
			Medium - above 63 Db	Reduces probability by 10%	
			High - above 69 Db	Site considered unsuitable (0% probability)	
8	Pylons	GIS constraint layer	Low - none present	No impact on probability	Yes
			Medium - site intersects with pylon	Reduces probability by 10%	
9	Health and Safety Executive consultation zones	GIS constraint layer	Low – No HSE Zone or Outer Zone	No impact on probability	Yes
			Medium – Middle Zone	Reduces probability by 10%	
			High – Inner Zone	Site considered unsuitable (0% probability) †	

† Where Gas holder sites have been submitted through Call for sites by landowners these sites would not be considered unsuitable and should be assessed as potential sites. This effectively 'turns off' HSE constraints on these sites (see para 3.~~17~~19 ~~8~~20).

3.18 Low and medium flood risk categories are based on the Environment Agency flood risk data for rivers and sea. Areas in high risk - Zone 3b – have been collated from borough level Strategic Flood Risk Assessments (SFRAs). Boroughs are encouraged to review this data and amend site constraints where they have undertaken an SFRA and the level of flood risk is shown to differ from that presented in the SHLAA constraint layer. Site boundaries can also be amended where necessary.

3.19 HSE consultation zones cover gasholders and hazardous installations. The HSE's planning advice[7] does not in principle advise against residential development in the outer and middle zones but does advise against residential development in principle within inner zones, so this is reflected in the probability assumptions in Table 7. However, gasholder sites can also be remediated to enable development and National Grid has a programme of remediating and regenerating gas holders to enable development.

3.20 Twenty gas holder sites have been submitted through the call for sites by National Grid and St William, which are considered developable in the short to long-term period by the landowners. HSE zone constraints will be 'turned off' where sites have been put forwards by National Grid/St William in the Call for Sites. Boroughs will then need to assess these sites as potential sites and consider the likely phasing and lead-in times that should be applied, taking into account the information provided by landowners through their Call for Sites submission.

Delivery constraints

3.21 For all potential sites boroughs will be able to use their local knowledge and Land Registry data to identify potential delivery constraints. These include land ownership, local infrastructure and contamination. Boroughs will be able to classify constraints as either low, medium or high. Low level constraints have no impact on site probability. Medium constraints reduce the probability of a site being developed by 10%. High level constraints reduce the probability by 20%.

Table 8 – Delivery constraints

Ref	Constraint	Source	Categories	Impact on probability
10	Land ownership	2016 Land Registry Data	Low	No impact on probability
			Medium	Reduces probability by 10%
			High	Reduces probability by 20%
11	Local infrastructure	Borough knowledge, Infrastructure Delivery Plans	Low	No impact on probability
			Medium	Reduces probability by 10%

[7] Health and safety executive, planning methodology, decision matrix - http://www.hse.gov.uk/landuseplanning/methodology.htm

			Low	No impact on probability
12	Contamination	Borough knowledge	Medium	Reduces probability by 10%

3.22 The system will be automatically set the constraint level for each category as low by default and the expectation is that boroughs will need to amend this where necessary to reflect known site constraints. The option to select high level constraints will only apply to land ownership as this constraint is considered to have a more significant impact on the probability and deliverability of development, whereas local infrastructure and contamination issues can be more easily mitigated through the delivery of development and enabling works on site.

3.23 As with policy and environmental constraints, individual delivery constraint scores are combined to provide a cumulative probability score. For example, if a site scores 'high' for land ownership, 'medium' for local infrastructure and 'low' for contamination its overall probability score for delivery constraints will be 70%.

3.24 Boroughs will not be able to set the constraint level to 'unsuitable' (0% probability) for any delivery constraints as they are all considered to be capable of being addressed during the course of the SHLAA period (2016 to 2041). As with all other sites, boroughs will be able to amend the phasing assumptions to reflect the lead-in times considered necessary in order to address identified delivery constraints. These assumptions will be scrutinised by the GLA.

3.25 In the previous SHLAA 400 sites were classified as unsuitable due to ownership, a quarter of which were located in town centres. This potentially underestimates the potential for mixed use development in these key growth locations. In addition, a further 30 sites were classified as unsuitable due to infrastructure and contamination constraints.

3.26 The benefit of following the above approach is that delivery constraints are registered and tracked and, following the SHLAA, boroughs and the GLA can further analyse the particular constraints and consider what interventions or mechanisms might be conducive and effective in order to bring a site forward or accelerate its development (eg Housing Zone designation and interventions, CPO).

Overcoming constraints

3.27 National Planning Practice Guidance on undertaking SHLAAs states that where constraints have been identified, local planning authorities should consider what action would be required to address or overcome these constraints and what impact this might have on housing delivery[8]. For example, this could include resolving fragmented land ownership, investing in new infrastructure, remediating contaminated land or reviewing and amending planning policy designations.

3.28 To address this requirement, the SHLAA system will prompt boroughs to consider whether it is possible to overcome any identified planning policy, environmental or delivery constraint, drawing on the list of mitigation measures/options outlined below. Where boroughs consider this would be achievable and select this option, the system 'turns off' the selected constraint. Selecting this option will therefore reset the overall

[8] DCLG, Planning Practice Guidance, Paragraph: 022 Reference ID: 3-022-20140306

probability score for the site in question. Alternatively, boroughs may consider it more suitable to amend a site boundary, so that it does not include a particular constraint where the overlap with this constraint is only on part of the site.

Table 9 – Potential options to overcome constraints

Policy Constraints	Potential mitigation/avoidance measures
Strategic Employment Location (SIL)	– De-designate SIL (where justified by other circumstances) – Allow mixed-use development, including employment provision and office or industrial workspace – Re-provide SIL elsewhere through a land swap
Locally significant industrial site (LSIL)	– De designate LSIL (where justified by other circumstances) – Allow mixed-use development
Other Protected Industrial Site	– De designate protected site (where justified by other circumstances) – Allow mixed-use development
Environmental Constraints	**Potential mitigation/avoidance measures**
Aircraft Noise Pollution	– Design mitigation measures for proposed residential development (eg. assume higher levels of sound insulation on all units)
Flood Risk	– Provide set-back on-site / develop only part of the site – Provide effective flood mitigation measures on-site, eg SUDs – Provide less sensitive land uses at ground level (eg commercial, parking) and reduce density – Provide other off-site flood mitigation measures to improve resilience to flooding
Pylons	– Pylon under grounding (funded by development) – Pylon under grounding (not able to be funded by development) – Pylon re-routing
Health and Safety Consultation Zones	– Develop part of site and reduce site boundary or net residential area – Remediate site
Delivery Constraints	**Potential mitigation/avoidance measures**
Ownership	– Fragmented land ownership assembled / acquired by landowner/developer over time – Compulsory purchase of site – Acquisition of site by developer and the relocation of existing business or land use – Joint venture between existing business and developer to accommodate mixed use development and housing
Local Infrastructure	– Provide enhanced public transport infrastructure – Minor changes to local road network – Provide additional utilities services

	– Require contribution to social infrastructure provision
Contamination	– Decontaminate land (funded by development) – Decontaminate land (may require funding) – Develop only part of site

Phasing of sites

3.29 The phasing of a site is informed by the status of development (approval, allocated, Potential, etc), its size and type and judgements around the feasibility and viability of the site. This study is divided into five phases by financial year, these are shown below on Table 10. Phase 1 is the preliminary phase; from the date of the study to the year the new London Plan is expected to be adopted (2019), phases 2, 3 and 4 are five year phases, with the final phase a seven year phase to take the assessment to the end of the plan period.

Table 10 – SHLAA phasing periods

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Start	April 2016	April 2019	April 2024	April 2029	April 2034
Finish	March 2019	March 2024	March 2029	March 2034	March 2041
Years	3	5	5	5	7

3.30 The system will generate default phasing based on the status of an individual site and its probability for development. Boroughs will be asked to check the phasing of every site (including approvals) to ensure that realistic but ambitious phasing is assumed. Boroughs will be able to refine default phasing assumptions where necessary to reflect anticipated lead-in times and build out rates, drawing on local knowledge. As a starting point, the following system defaults are suggested:

- sites with planning permission on which development has started are allocated to phase 1 (2016 to 2019)
- all other sites with planning permission but where development has not started are allocated to phase 2 (2019 to 2024)
- Potential/allocated sites that have a 100% probability are allocated to phase 2 (2019 to 2024)
- Potential/allocated sites with probability of less than 100% but greater or equal to 60% are allocated to phase 3 (2024 to 2029)
- Potential/allocated sites with probability less than 60% are split between phase 3 and 4 (2024 to 2034)
- Capacity on 'low probability' sites is split between phases 3, 4 and 5 (2024 to 2041)

3.31 In addition to this and to ensure capacity from individual large sites is spread realistically across phasing periods, the system will set defaults for the maximum amount of housing capacity that can be assigned to each phasing period from an individual large site. These 'caps' are set at an optimistic level for very large sites and are expected to provide an indicative guide and starting point. Boroughs will be able to amend phasing assumptions based on local knowledge.

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
2,000	3,000	3,000	3,000	4,000

Housing targets

3.32 Housing targets in the London Plan have historically been set as minimum 10 year targets, with annual monitoring targets provided. Boroughs are expected to roll forward their annual monitoring targets beyond this period (London Plan Policy 3.3D). However, the SHLAA study will explore the scope for the London Plan to provide longer 15 year minimum targets which would better align with the typical horizons for Local Plan.

3.33 It will also explore whether it would be more appropriate for annual monitoring targets to be based on five year phasing periods (see below), with average annual figures provided for each phase, rather than a 10 year average. This more trajectory based approach might better reflect the phasing and delivery of sites and ensure that the Government's proposed 'delivery test'[9] is applied in a fair and reasonable manner in terms of annual housing delivery targets.

Phase 2	Phase 3	Phase 4
2019 - 2024	2024 - 2029	2029 – 2034
Annual average target	Annual average target	Annual average target

Excluded sites

3.34 Only those potential sites considered to have a zero chance of coming forward for housing development during the plan period. To be excluded, sites will need to fall into the following categories:

- New build housing completed (since 2003) where additional housing development is improbable during the plan period.
- Recently completed new build development (since 2010) in the following uses: retail; office; industrial; storage and distribution; hotel; care home; hospital; education; or assembly and leisure. This will be informed by London Development Database information.
- Office sites in defined commercial core areas within the City of London and north of Isle of Dogs.
- High value business parks (eg Chiswick, Bedfont Lakes).
- Sites which include a listed building or scheduled monument where development or intensification is unlikely - before selecting this option, boroughs will need to first consider the potential for sympathetic enabling development around the site; the potential intensification 'behind the façade'; or change of use to residential, where applicable.
- Primary and secondary schools

[9] See – NPPF consultation 2015 (page 14) - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/488276/151207_Consultation_document.pdf and The Spending Review and Autumn Statement 2015 (HM Treasury) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/479749/52229_Blue_Book_PU1865_Web_Accessible.pdf (page 41)

- Site in strategic operational use for transport, waste or utilities infrastructure which are expected to continue to be in that use over the plan period so redevelopment is considered improbable. This exclusion is for sites that contain strategic infrastructure such as airports, railways, sewerage treatment works, waste sites and associated depots that are in operational use and have no potential of becoming redundant or being relocated over the plan period. A substantial number of operational infrastructure sites have been submitted by public sector land owners and utility providers through the Call for Sites. This includes Transport for London, Network Rail, Thames Water, NHS Property Services and other Government departments. These sites should not be excluded by boroughs based on the fact that they are currently in operational infrastructure use and should be considered as 'potential' sites.

- Strategic cultural/tourist venues and civic buildings which have a zero chance of coming forward for redevelopment or change of use during the Plan period to 2041 – further guidance on this criteria will be set out in the SHLAA guidance notes

3.35 Where boroughs have a programme in place for delivering housing on school sites these sites should be included in the SHLAA.

Low probability sites

3.36 Low probability status was added to the 2013 SHLAA to address the number of potential sites being excluded from previous SHLAA studies, but which should have been given a housing potential as evidence shows that they do come forward for housing in some circumstances.

3.37 Where boroughs chose to classify a site as 'low probability' it is considered to have an 8% probability of delivering housing. This probability estimate was established following a review of the number of planning permissions granted on sites excluded in the 2004 SHLAA. A more recent review of sites excluded in the 2009 SHLAA has shown that this estimate continues to provide an appropriate assumption based on planning approvals (2009-2015), even where school sites are removed.

3.38 For boroughs to re-classify a potential site as 'low probability', this site in question must meet the criteria below:

- A high value retail/leisure/ office[10] development completed before 2010 where there is a low probability of additional housing development before 2041
- Further education site or hospital with no planned redevelopment before 2041
- The site is an area of private/mixed tenure housing in multiple ownership with no known plans for redevelopment
- Social housing estate with no planned intensification programme up to 2041
- New build housing completed before 2003 where there is a low probability of additional housing development
- Other reasons where necessary –these will be scrutinised by the GLA.

3.39 Capacity from low probability sites is allocated to the later phases of the SHLAA - phases 3, 4 and 5. For the new SHLAA this would mean this capacity is spread between the period 2024 to 2041.

[10] Note that different low probability assumptions are used for offices – see 'offices' para 3.43-44

3.40 Through the Call for Sites a number of large out of town retail sites were put forward by landowners, eg supermarkets. Where a site in one of these uses is suitable for housing and has been put forward as part of the call for sites it should be considered as a potential site and not a low probability site, given that the landowner has expressed an interest in accommodating additional housing/mixed use development on the site in question.

3.41 Other retail, leisure and office sites should also not be automatically assigned with 'low probability' status unless it is clear that the nature of the existing business/land use means that there is a low probability of housing being delivered during the period of the London Plan. Where boroughs consider that housing could be accommodated on sites during the plan period (2019-2041) they should assess sites as 'potential sites' and adjust the phasing accordingly.

Town centres

3.42 Town Centre Health Check data, particularly that showing the level of vacant or surplus retail/commercial floorspace and other indicators, eg heritage should be used by boroughs to provide an indication of where additional residential and mixed use development might be accommodated. Through the site assessment process, the GLA will work with relevant boroughs to ensure that the potential sites have been identified and the long-term capacity for development has been proactively considered.

Offices

3.43 This section summarises the approach to offices in the SHLAA. Offices will be automatically considered as potential sites in the SHLAA system but boroughs will be allowed to exclude the following types of office sites:

- offices in tightly defined commercial core areas of the City and Canary Wharf – this precise area will be agreed with the relevant boroughs prior to the SHLAA being undertaken
- recently completed offices (since 2010)
- offices in high value business parks (eg Chiswick, Bedfont Lakes)

3.44 For offices in other locations boroughs will be given the option to assign 'low probability' status to these sites. The probability assumption used will vary depending on a site's location:

- within the CAZ, core areas of the City Fringe OAPF, within an adopted Article 4 Direction area a lower probability assumption of 5% will apply – this reflects the stronger planning protections for offices which apply in these locations.
- outside these locations a higher 10% probability is assumed – this reflects permitted development rights (which have been made permanent) and higher numbers residential units approved on office sites since these rights were introduced.

3.45 Boroughs should consider office sites as potential sites if they consider that they are likely to come forward as housing during the Plan period. Sites should only be assigned low probability status where a borough considers that the probability of housing being delivered prior to 2041 is low. Existing approvals for office to residential development will be used as approved sites where these are 0.25 hectares and more in size.

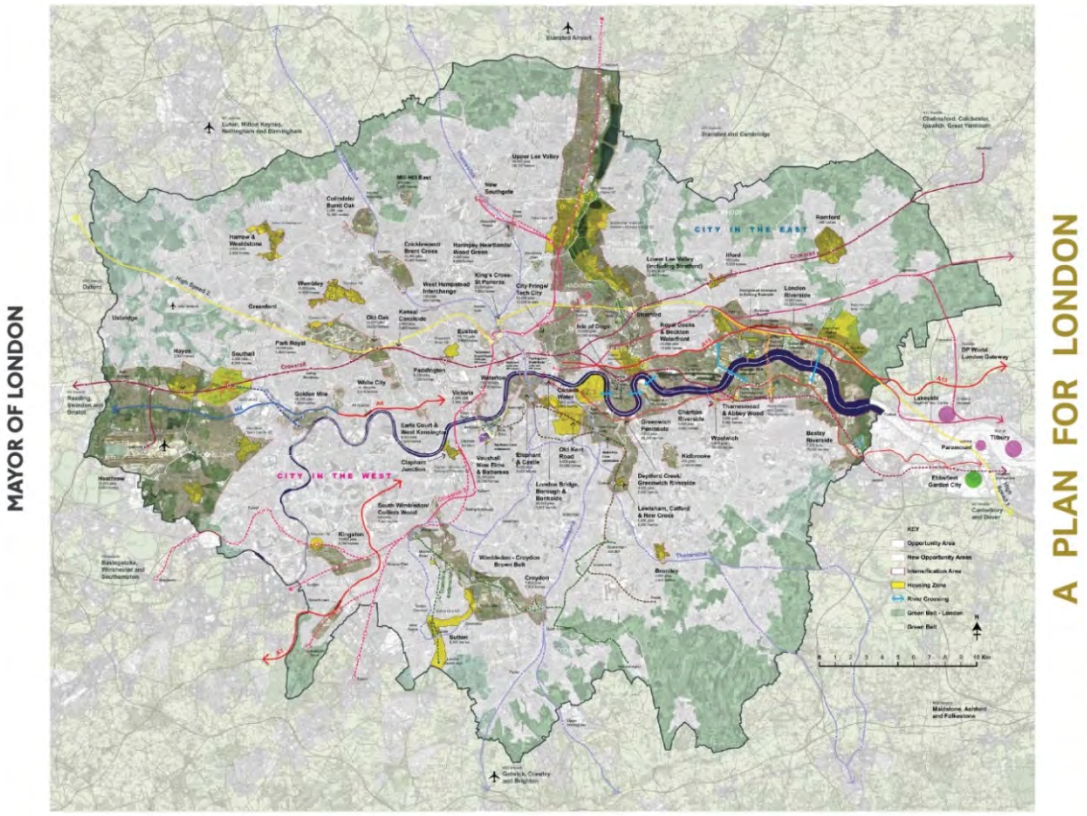
Estate regeneration schemes

3.46 Boroughs are able to include large sites included in an estate regeneration programme. As these sites include existing residential dwellings, the SHLAA system allows boroughs to amend net additional housing figures included in the system and by phasing period in order to take into account demolitions and build out rates over time.

Emerging opportunity areas

3.47 In addition to the 38 opportunity areas formally identified in the London Plan, a number of emerging opportunity areas being considered and are identified in 'a City for all Londoners'[11] These include:

- Greenford
- Hayes - already within Heathrow OA
- the Golden Mile/Great West Corridor
- Kingston (three broad areas including Kingston town centre/Norbiton/New Malden, Tolworth and Chessington)
- Romford
- Wood Green / Haringey Heartlands
- Clapham Junction
- New Southgate
- Wimbledon – Croydon Brown Belt



3.48 For the next SHLAA it is recommended that these locations should all be considered as emerging opportunity areas. The boundaries for these emerging opportunity areas are subject to change and will be uploaded onto the borough webmap prior to the site assessments commencing to allow boroughs to review and suggest amendments to the

[11] Mayor of London, A City for all Londoners, page 25, Map 3

boundaries where appropriate. As with many existing opportunity areas, a number of these areas are expected to deliver significant employment growth, alongside housing, and this should be recognised in the site specific land use assumptions in the SHLAA.

4 Scenario testing

4.1 Given the likelihood that the next SHMA will identify a higher level of housing need than the previous 2013 SHMA study, scenario testing is likely to play an important role in providing the evidence for and testing various policy options for meeting the housing need identified. Unlike during the Further Alterations to the London Plan, the new London Plan is a Full Review and provides the opportunity to test a wider range of potential policy scenarios and options in terms of meeting housing need and balancing this requirement against other important planning policy objectives, such as maintaining the provision of employment land.

4.2 In addition, the delivery of key items of transport infrastructure, for example in relation to Crossrail 2 and the Bakerloo Line Extension, will clearly have a significant impact on the delivery, density and phasing of development, as well as land use more generally. The associated housing and employment growth in these key transport corridors is likely to feature as a key policy area for the next London Plan.

4.3 Scenario testing will therefore be undertaken with Transport for London and relevant boroughs in order to assess the impact of these schemes in helping to meet housing need through unlocking additional supply. This will also be important in supporting the business case of individual schemes. Such schemes include:

- Crossrail 2
- The Bakerloo Line extension
- the extension of Crossrail 1 from Abbey Wood
- the proposed Metroisation of south London suburban rail network (improved suburban rail services)
- DLR extension to Thamesmead
- further extension of the proposed Bakerloo Line extension to Hayes
- Sutton Tramlink Extensions

4.4 The final number of schemes examined will depend on resources and the likelihood of schemes being delivered during the London Plan timescales. The methodology and approach to be taken on these transport corridors will need to be explored in more detail with relevant boroughs during the SHLAA project. This may involve reconsidering potential sites which have been considered unsuitable in the core SHLAA study, but which could come forward if new infrastructure was delivered and land use designations reconsidered, eg industrial land. It will also consider whether sites could come forward at higher densities. The SHLAA system has been designed to ensure there is sufficient flexibility to enable different scenarios to be modelled and tested and for the system rules to be amended.

4.5 Other scenario tests which may also need to be tested in the SHLAA study include:

- The potential for increased development and higher residential densities within ‘station intensification areas’ and within 1km of town centres
- the various industrial land release scenarios described in paragraph 1.7
- the potential for suburban intensification

- housing zones and new opportunity areas to be identified in the London Plan

Reasons to delete large sites

- The site is less than 0.25 hectares
- The site was loaded in error, for example a road or waterbody (note that the study aims to assess all potential housing sites. This category should only be used for sites genuinely loaded in error). In addition, boroughs should amend site boundaries where necessary to remove roads or waterbodies or other features that cannot be built on.

5 Sources of capacity outside the large site system

Small sites

5.1 As in the 2013 SHLAA, a trend based approach will be used for small sites under 0.25ha. Data from the London Development Database on housing completions from 2004 to 2015 will be analysed and an annual average assumption produced for each borough. This time series will essentially cover a number of market cycles, which should mean the trend based assumptions provide a realistic average for over the plan period and fully take into account local constraints such eg heritage and the availability and viability of sites.

5.2 Trend based assumptions on small sites will be based on net conventional housing completions on sites under 0.25ha in size. This will include new build development, change of use and conversions. Trends will therefore take into account change of use from office to residential.

5.3 The NPPF states that historic windfall delivery rates should not include development on residential gardens[12]. To address this requirement, the previous SHLAA methodology removed 90% of housing completions on garden land. This amounted to approximately 5% of housing delivery on small sites during the timescale examined (2004 – 2011).

5.4 For the next SHLAA study, both options will be tested (with and without housing completions on garden land). This will allow alternative policy approaches to be effectively tested and considered, taking into account the particular local circumstances and housing pressures experienced in London.

5.5 As stated above, additional scenario testing on small sites will also be undertaken to explore the potential for trends in housing completions in terms of delivery and density to be increased as a result of planning policy changes in the London Plan and Government reforms, for example, the scope for suburban intensification and whether the use of brownfield/small sites registers and permission in principle might increase housing delivery. The methodology and approach to scenario testing small sites 'windfall' assumptions will be developed in more detail at a later date and will be shared with boroughs for comment.

5.6 All small site data will be supplied to boroughs in order for them to check the data for accuracy and anomalies. This data will be provided to boroughs prior to Christmas.

[12] NPPF, paragraph 48

Non-self contained housing developments

5.7 Housing approvals in the SHLAA system will include net housing provision from non-self contained residential schemes with planning permission where sites are 0.25ha and more in size. This includes student accommodation, specialist housing for older people and also other non-self contained shared living schemes, normally in sui generis use. Some SHLAA sites may be particularly suitable for student housing given their location and setting, and this can be considered by boroughs when assessing potential housing capacity/density.

Vacant homes

5.7 The 2013 SHLAA included an estimate for the number of long-term vacant homes expected to return to use between 2015 to 2025. This was based on the expectation that the number of long-term vacant homes will reduce to 0.75% of the total housing stock over this period.

5.8 Since 2004 the overall number of long-term vacant homes in London has reduced by half and now accounts for only 0.6% of the total housing stock, with variations at a borough level. Data on long-term vacancy suggests that this is now a local issue for a number of boroughs and not necessarily a strategic issue for the SHLAA to consider in detail, with only 8 boroughs below the previous benchmark (0.75%) used in the previous SHLAA and all but three boroughs below the current London Plan target of 1%.

5.9 To inform the methodology for the new SHLAA study, GLA officers have run two tests – one assumes that the number of long-term vacant homes would return to 0.5% of the current housing stock; and another based on the 0.75% figure used in the previous SHLAA. These findings are presented in Appendix B. Following the same methodology as the 2013 SHLAA would result in targets only being applied to 8 boroughs. Using an alternative benchmark of 0.5% would result in targets being applied in 15 boroughs. There are also a number of other issues to consider:

- whilst long-term vacant homes returning to use have made an important contribution to overall housing completions over the past 10 years, data returns show lumpy and unpredictable patterns which have resulted in negative returns for three of the last 10 years, which can have significant monitoring impacts locally
- the extent that this can be counted as new supply is questionable
- the data used to monitor vacant homes relies on Council tax records, so trends may illustrate how homes are being classified for Council tax purposes, rather than whether or not homes are actually occupied and the same home could be re-classified a number of times.

5.10 Whilst the number of empty homes will continue to be a key Mayoral priority and addressed by policies in the London Plan and Housing Strategy, as well as targeted local interventions, it is recommended that this issue is not considered in the next SHLAA or in terms of monitoring forthcoming targets in the next London Plan.

5.11 As part of consultation on the SHLAA the GLA officers are keen to hear from boroughs on how the Mayor's strong commitment to reducing and bringing back into use the number of long-term vacant homes should be addressed through the London Plan and other non-planning initiatives.

Appendix A – London Plan density matrix

Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
Suburban	150–200 hr/ha	150–250 hr/ha	200–350 hr/ha
3.8–4.6 hr/unit	35–55 u/ha	35–65 u/ha	45–90 u/ha
3.1–3.7 hr/unit	40–65 u/ha	40–80 u/ha	55–115 u/ha
2.7–3.0 hr/unit	50–75 u/ha	50–95 u/ha	70–130 u/ha
Urban	150–250 hr/ha	200–450 hr/ha	200–700 hr/ha
3.8 –4.6 hr/unit	35–65 u/ha	45–120 u/ha	45–185 u/ha
3.1–3.7 hr/unit	40–80 u/ha	55–145 u/ha	55–225 u/ha
2.7–3.0 hr/unit	50–95 u/ha	70–170 u/ha	70–260 u/ha
Central	150-300 hr/ha	300–650 hr/ha	650–1100 hr/ha
3.8–4.6 hr/unit	35–80 u/ha	65–170 u/ha	140–290 u/ha
3.1–3.7 hr/unit	40–100 u/ha	80–210 u/ha	175–355 u/ha
2.7–3.0 hr/unit	50–110 u/hr	100–240 u/ha	215–405 u/ha

Notes to Table 3.2

Appropriate density ranges are related to setting in terms of location, existing building form and massing, and the index of public transport accessibility (PTAL). The setting can be defined as:

Central – areas with very dense development, a mix of different uses, large building footprints and typically buildings of four to six storeys, located within 800 metres walking distance of an International, Metropolitan or Major town centre.

Urban – areas with predominantly dense development such as, for example, terraced houses, mansion blocks, a mix of different uses, medium building footprints and typically buildings of two to four storeys, located within 800 metres walking distance of a District centre or, along main arterial routes

Suburban – areas with predominantly lower density development such as, for example, detached and semi-detached houses, predominantly residential, small building footprints and typically buildings of two to three storeys.

Appendix B – vacant potential approaches

	Current total housing stock	Long-term vacant homes 2015	Long term vacants as a % of total stock	Option A - reduce vacants to 0.75% of current housing stock - potential annual target	Option B - reduce vacants to 0.5% of current housing stock - potential annual target
City of London	6,230	44	0.71%	0	1
B&D	73,180	202	0.28%	0	0
Barnet	145,270	1,249	0.86%	11	35
Bexley	97,000	395	0.41%	0	0
Brent	115,600	405	0.35%	0	0
Bromley	136,860	696	0.51%	0	1
Camden	101,650	1,138	1.12%	25	42
Croydon	152,520	1,022	0.67%	0	17
Ealing	130,530	667	0.51%	0	1
Enfield	123,800	817	0.66%	0	13
Greenwich	106,880	504	0.47%	0	0
Hackney	106,750	1,037	0.97%	16	34
H&F	85,270	267	0.31%	0	0
Haringey	106,640	852	0.80%	3	21
Harrow	88,410	97	0.11%	0	0
Havering	100,260	499	0.50%	0	0
Hillingdon	107,460	463	0.43%	0	0
Hounslow	98,790	403	0.41%	0	0
Islington	100,760	953	0.95%	13	30
K&C	86,540	1,289	1.49%	43	57
Kingston	66,410	180	0.27%	0	0
Lambeth	136,260	1,142	0.84%	8	31
Lewisham	122,820	725	0.59%	0	7
Merton	82,710	510	0.62%	0	6
Newham	108,810	1,318	1.21%	33	52
Redbridge	102,650	267	0.26%	0	0
Richmond	83,780	370	0.44%	0	0
Southwark	128,360	930	0.72%	0	19
Sutton	81,240	551	0.68%	0	10
Tower Hamlets	110,790	666	0.60%	0	7
Waltham Forest	100,310	419	0.42%	0	0
Wandsworth	138,840	263	0.19%	0	0
Westminster	121,120	575	0.47%	0	0
TOTAL	**3,454,490**	**20,915**	**0.61%**	**152**	**384**

Final SHLAA Methodology

1 Introduction

This document outlines the final methodology for the 2017 London Strategic Housing Land Availability Assessment (SHLAA), which has been updated following the 8 week public consultation between 23 November 2016 and 20 January 2017.

1.1 In line with national planning policy and guidance, the next London Plan will need to be informed by a Strategic Housing Land Availability Assessment (SHLAA). The purpose of the SHLAA is to identify the amount of housing capacity in London that is suitable, available and achievable during the plan period in order to address housing need. The study will cover a 25 year period from 2016 to 2041 and will inform the housing targets in the London Plan. This will be supported by a separate viability assessment. The draft methodology is structured as follows:

- Section 1 provides an introduction and sets out the context to the SHLAA study
- Section 2 summarises the density estimates proposed for the SHLAA
- Section 3 explains the probability based approach applied to 'potential' large sites and explains how planning policy, environmental and delivery constraints will be applied in the study
- Section 4 sets out the range of potential scenarios that will be tested in the study
- Section 5 sets out the approach to small sites and long term vacant homes

Sources of capacity

1.2 The study will draw on the following sources of capacity:

- **Approvals** – net housing provision from London's pipeline of large sites with planning permission (0.25ha or larger), identified in the London Development Database (LDD). This takes into account any housing completions undertaken on sites where development has already commenced. It will also include non-self contained housing (eg accommodation for students and specialist housing for older people).
- **Allocations** - large sites which are allocated or informally identified for housing/mixed use redevelopment (0.25ha or larger) – these sites have been provided to the GLA by boroughs.
- **Potential sites** - other potential large sites (0.25ha or larger) which are currently in the SHLAA system or have been identified through the call for sites or through GLA/TfL development capacity studies in opportunity areas and associated with transport schemes. In addition, boroughs will be able to add new large sites and edit site polygons drawing on their local knowledge.
- **Small sites** - annual trends in conventional housing completions on small sites under 0.25ha in size (2004/5 – 2014/15), taking into account potential for these trends to be increased through changes to planning policy and scenario testing.

Project timescales for the SHLAA

1.3 To inform the draft London Plan the SHLAA needs to be completed by summer 2017, with initial results finalised by June. In order to meet this deadline it is necessary to:

- carry out site assessment and borough one to one meetings between February and mid May

- undertake various scenario tests alongside the site assessment process
- finalise and write up the SHLAA document by the end of August 2017

Background and context to the study

1.4 The next housing need assessment (SHMA) is likely to show a higher overall housing requirement due to faster household population growth and worsening housing affordability. Initial GLA estimates suggest this could result in an annual housing requirement of between 55,000 and 65,000 homes, with affordable housing need likely to comprise more than half of this figure. Indicative results from the SHMA are likely by March to inform the Full Review of the London Plan. The final SHMA and SHLAA studies will be published alongside the Draft London Plan in Autumn 2017.

1.5 The NPPF requires that plans meet the full, objectively assessed need for market and affordable housing as far as consistent with the policies set out in the Framework[1]. The SHLAA plays an important role in understanding the extent to which London has the land capacity to meet its objectively assessed housing need, taking into account the range of economic, environmental and social policy objectives and an understanding of potential deliverability constraints.

1.6 The proposed methodology for the new SHLAA broadly follows the same approach as the previous SHLAA which was found sound during the Further Alterations to the London Plan Examination in Public (EiP) and at previous London Plan EiPs. Further refinements are suggested to the SHLAA methodology in this paper. These aim to ensure potential housing capacity is not being under-estimated, while understanding the competing land use priorities and without undermining the overall robustness of the SHLAA. This follows a detailed review of the previous SHLAA methodology in light of national guidance and the site assessment process.

Confidentiality – potential sites

1.7 Site specific information on all 'potential' sites in the SHLAA will remain confidential, as the SHLAA provides an aggregate, probability based estimate of the potential housing capacity on these types of sites. Specifically identifying potential sites might undermine current uses, pre-empt the statutory planning making/decision making process, and affect land values which could compromise wider planning objectives.

1.8 Consequently, it is for each borough to determine whether information on potential sites should be made publicly available at site level, eg in terms of their Local Plans, housing trajectories and brownfield registers. As part of the study the GLA will only publish information about sites with planning approval or which are already publicly identified as suitable for housing, eg Local Plan allocations. These approved and allocated sites will be published on the London Datastore on the Mayor of London website[3].

The GLA's call for sites

1.9 In line with national planning guidance, the GLA has carried out a call for sites, jointly with boroughs. This was advertised on the GLA website, through direct mail outs to stakeholders, coverage in London First's industry newsletter and through boroughs' websites. Approximately 1,300 sites have been submitted through the call for sites. The

[1] NPPF paragraph 47
[3] https://data.london.gov.uk/

exercise has also provided an appreciation of land owners and developers aspirations for those sites and their views on deliverability, constraints and phasing which can feed into site assessments.

2 Density estimates

2.1 Density estimates for sites with planning permission are based on the approved net residential density in LDD.

2.2 Density estimates for allocated and potential sites will be derived from the London Plan density matrix, with estimates set to the top of the relevant density range in town centres and higher assumptions applied in opportunity areas to reflect density trends and their strategic importance in terms of housing delivery.

2.3 The London Plan density matrix is based on the setting\character of an area and the Public Transport Accessibility Level (PTAL). To reflect this, the system will use GIS data for PTAL and character settings in order to assign density estimates to sites. The following maps will be used in the SHLAA:

- PTAL maps 2015, 2021, 2031 which reflect committed transport schemes – therefore the assumed phasing and delivery timescales for a site will impact the PTAL and density assumed
- An updated character settings map prepared by ARUP as part of the GLA's density research. This relies on 2011 census data and updated town centre boundaries. A 1km 'networked buffer' from town centre boundaries is applied in the map to reflect actual walking distances. The criteria and thresholds used to define settings on the character map are set out below:

Setting	Attributes	
	Housing stock[4]	Proximity to town centre
Central	>75% flats	1km of International, Metropolitan or Major town centre boundary
Urban	>75% flats and terraced housing	1km of District town centre boundary
Suburban	<75% flats and terraced housing	All other areas
An area only needs to fulfil one of these criteria to be classified as 'central', 'urban' or 'suburban'		

2.4 The London Plan density matrix sets out density ranges for different PTAL levels (0 to 1; 2 to 3; and 4 to 6) and character settings (suburban, urban and central) and sub-divides broad ranges into those based on habitable rooms per unit. The matrix is shown in Appendix A.

2.5 Default density assumptions proposed for the SHLAA are set out below, which would apply to all large sites depending on their location, character setting and PTAL. As density assumptions are based on PTAL levels, the density estimates will depend on the phasing of a site and will reflect how PTAL levels change over time, as committed transport schemes are delivered – eg Crossrail 1. For example, housing capacity likely to come forward in phase 2 and 3 of the SHLAA (2021-2029) will be based on the PTAL

map for 2021; capacity in phase 4 (2029 to 2034) will be based on the PTAL map for 2031. Phasing periods are set out in Table 10 (page17).

Standard density assumptions

2.6 Standard density assumptions in the SHLAA are based on the high point in the 3.1 to 3.7 habitable room per unit range in the matrix, taking into account PTAL and character setting (see Table 1). This seeks to ensure that the SHLAA estimates reflect the need to optimise development whilst allowing for a broad range of housing typologies appropriate to the location and a range of unit sizes including family sized homes. It also ensures that the SHLAA does not under-estimate potential housing capacity, taking into account trends in residential densities on large sites.

Table 1 - Standard density assumptions

PTAL	0 - 1	2 - 3	4 -6
Suburban	65	80	115
Urban	80	145	225
Central	100	210	355

Density assumptions in town centres

2.7 In town centres, densities are set at the top of the relevant density range (see Table 2). All town centres are considered to be either urban or central, reflecting the notes to density matrix in the London Plan (see Appendix A).

Table 2 - Town centre density assumptions

PTAL	0 - 1	2 - 3	4 - 6
Suburban	-	-	-
Urban	95	170	260
Central	110	240	405

Density assumptions in opportunity areas

2.8 Different density assumptions are applied in opportunity areas to reflect their importance in terms of the delivery of new development in London and to ensure that the SHLAA does not under-estimate the potential housing capacity in these locations (see Table 3). These assumptions are set out below and assume that:

- sites with suburban settings could potentially be developed at urban densities
- sites with urban settings could potentially be developed at central densities
- sites with central settings could potentially be developed at central+ densities. These are set above the relevant maximum range in the density matrix

Table 3 - Opportunity area density assumptions

PTAL	0 - 1	2 - 3	4 - 6
Suburban	80	145	225
Urban	100	210	355
Central	250	350	450

2.9 These density estimates allow for a broad range of housing typologies and sizes to be provided and are set below the average density of approvals on large sites in opportunity areas in order to not over-estimate potential densities. These trends are shown in Table 4 below.

Table 4 - Average density trends in opportunity areas - approved large sites (0.25 hectares and more) between 2004-2016

PTAL	0 - 1	2 - 3	4 - 6
Suburban	83	204	337
Urban	150	226	329
Central	406	363	453

2.10 Where sites are in town centres as well as opportunity areas the opportunity area density will apply.

Borough amendments to density estimates

2.11 Boroughs will be able to adjust the density assumptions on all potential and allocated sites where they consider the density should be different to the system estimate. Changes in density would normally only be where boroughs have undertaken a detailed site appraisal or design-led exercise to establish a more appropriate density estimate for a site, or where boroughs are involved in emerging masterplanning work or pre-application discussions with a landowner or developer on a site, which would suggest the use of an alternative density assumption.

2.12 Reductions in density estimates would need to be clearly justified in terms of specific sites constraints (eg an identified heritage asset) which would reduce the density likely to be achieved on site and could not be mitigated or resolved through good design, eg stepping down building heights along the edge of a site. Local infrastructure capacity is considered through the constraint testing process (see delivery constraints), so will not be used as a reason for reducing the density estimate for a site.

2.13 In the 2013 SHLAA around a third of sites had their initial densities amended, with 70% reduced and 30% increased. In the next SHLAA, changes in density will be scrutinised closely by GLA officers, taking into account trends in approvals and completions on broadly comparable sites/locations in London.

2.14 Boroughs would also be able to amend the land use mix assumed on a site, which will reduce the net residential site area accordingly. However, boroughs will not be able to change the character settings in the system which will remain fixed to ensure consistency of the underlying data in the system.

OAPF capacity studies

2.15 To support a number of Opportunity Area Planning Frameworks (OAPFs) the GLA in partnership with the relevant boroughs has undertaken more detailed design-led development capacity studies. These typically identify the potential for development to come forward at higher densities than the estimates relied on in the SHLAA. GLA officers will share these findings with relevant boroughs to ensure that the density estimates and land use assumptions feed into the SHLAA and to align the study with OAPFs being prepared. Boroughs will be encouraged to amend the default density assumptions in the SHLAA so that they reflect those being used in OAPF development capacity studies.

LSE density model update

2.16 The GLA is currently working with the London School of Economics (LSE) and Transport for London (TfL) to further develop a model for assessing potential residential densities across London. This model considers various characteristics[5] to estimate site density having statistically analysed the significance of each characteristic in influencing density using completed developments between 2008 and 2015. Whilst the model is not currently operational for use in the SHLAA, it may be used to benchmark or scenario test the housing capacity assumptions following the site assessment process.

[5] PTAL, job accessibility, distance to centre, population density, suburban character, central character, opportunity/intensification areas, town centres.

3 Constraints testing process - 'potential sites'

3.1 The methodology for assessing housing capacity on 'potential' sites in the SHLAA is specifically tailored to suit London's highly pressurised and unpredictable land market where 98% of housing is delivered on brownfield sites and where significant amounts of future capacity comes forward on 'potential' sites which are currently in other active land uses. On aggregate, this approach provides a robust method of estimating potential housing output in London that is more sophisticated than traditional 'windfall' estimates based on trends in completions. This is because it takes into account potential capacity but also considers the various site specific planning, environmental and delivery constraints and how these may affect the rate of housing completions without assuming every individual site will come forward for development.

3.2 The overall amount of achievable and deliverable housing capacity on 'potential' large sites will be estimated using a probability based approach. This assigns a probability score (%) to each potential site based on the number and severity of identified planning policy, environmental and delivery constraints. These are set out below in Table 5:

Table 5 – constraint categories

Planning policy constraints	• Designated open space • Strategic Industrial Land (SIL) • Locally Significant Industrial Locations (LSILs) • Other protected industrial/employment sites • Safeguarded Wharves
Environmental Constraints	• Flood Risk • Aircraft noise pollution • Health and Safety Executive consultation zones • Pylons
Delivery constraints	• Land ownership • Local Infrastructure • Contamination

Probability based approach

3.3 The same "constraints model" approach as in previous SHLAA studies will be used to provide an estimate of housing capacity on potential sites. This constraints model works in the following way:

- sites are assigned a notional density, based on the residential site area and a density estimate
- where a site is expected to be mixed use, boroughs can adjust the land use assumptions for each site, which amends the net residential site area
- the system then assigns a probability estimate of a site coming forwards for development based on the number and severity of policy, environmental and delivery constraints affecting it. These constraints are set out in Table 5 and are identified using GIS data and local knowledge through the site assessment process.
- the lowest percentage probability score across the three constraint categories – planning policy, environmental and delivery constraints – is applied to the notional

density in order to provide a 'constrained housing capacity estimate' for the site in question. The probability score also impacts the assumed phasing period for a site.

- For example, if a site has a notional capacity of 100 units and an 80% probability of coming forward for development, the constrained housing capacity is assumed to be 80 units.

Illustrative example:

Allocated sites

3.4 In previous SHLAAs, allocated sites were also subject to the same constraint testing process as 'potential sites', with probability based constrained housing capacity estimates provided. However, this under-estimates the potential for housing delivery on these sites and does not reflect their formal planning status as sites that are considered suitable for residential and mixed use development. In the 2017 SHLAA it is proposed that housing capacity on allocated sites is based on notional housing capacity estimates in order to better reflect the higher likelihood of housing being delivered and also to ensure that the most realistic level of capacity is assumed. This would apply to all sites allocated for residential or mixed use development in an adopted DPD or informally identified in an SPD.

3.5 Constraints affecting allocated sites will be identified in the SHLAA system using GIS information and local knowledge and the probability scores would be recorded in order to inform the phasing assumptions used in the system. Boroughs will be able to adjust the land use mix and phasing assumptions for each site. Where allocations are for alternative uses, eg school sites, boroughs will need to amend the land uses accordingly.

Planning policy constraints

3.6 The approach to planning policy constraints is set out below in Table 6, with further detail provided in the supporting text below. Assumptions on industrial land will need to be monitored and potentially revisited in order to reconcile SHLAA with the approach taken in the London Plan in terms of industrial land release, taking into account the findings of the industrial demand study. However, as a starting point for the assessment boroughs should follow the approach outlined below in Table 6.

Table 6 – Planning policy constraints

Ref	Constraint	Source	Categories	Default probability assumption	Borough editable
1	Designated open space	GIS constraint layer	Yes or no	0% probability - unsuitable	Yes
2	Strategic industrial location (SIL)	GIS constraint layer	Yes or no	0% probability – unsuitable ✞	Yes
3	Safeguarded Wharves	GIS constraint layer	Yes or no	0% probability - unsuitable	Yes
4	Locally Significant Industrial Sites (LSIS) designated in a Local Plan	GIS constraint layer	Restricted	40% probability	Yes
			Limited	50% probability	
			Managed	60% probability	
5	Other protected industrial/employment	GIS constraint layer	Restricted	45% probability	Yes
			Limited	55% probability	
			Managed	60% probability	

✞ All sites earmarked for release in the industrial supply study should be assessed as potential sites as a starting point (see paragraph 3.14 and Figure 1). This overall quantum of industrial release may need to be revisited at a later date following the demand study.

ǂ Borough classifications for industrial land release – restricted, limited or managed – will be updated once the GLA Industrial Demand Study is finalised.

Designated Open space

3.7 The Mayor has been clear that he wants to protect the Green Belt and other designated green spaces in London[6]. All designated open space will be classified as 'unsuitable' by the system and deemed to have a zero per cent probability for development. This includes the following designations:

- Green Belt
- Metropolitan Open Land
- Sites of Special Nature Conservation Interest and Sites of Special Scientific interest
- Other protected public or private open space identified on a borough proposals map (eg parks and squares)

[6] Mayor of London, A City for all Londoners, page 19

3.8 Boroughs will also be able to classify other protected public or private open space identified on a borough proposal map as unsuitable (0% probability) where the system has not identified in the GLA's open space constraint layers. Where boroughs are considering de-designating open space in the system this would need to be discussed with GLA officers as part of the SHLAA process, taking into account the strong strategic presumption against development on these types of sites.

Designated industrial land

3.9 As a starting point for the SHLAA study, the approach to industrial land in the SHLAA broadly follows the approach taken in the previous SHLAA and is summarised below.

3.10 Strategic Industrial Land (SIL) will be automatically classified as unsuitable (0% probability) by the system. However, boroughs will be given the option to change this default assumption on a case by case basis. Where sites are considered as potential sites boroughs would be able make provision for employment uses as part of the assumed land use mix for a site.

3.11 For locally significant industrial sites (LSIS), the SHLAA methodology assigns a notional probability estimate which is based on borough classifications for industrial land release in the London Plan (restricted, limited and managed):

- sites within a 'restricted' borough are assigned a lower probability of 40%
- sites with a 'limited' borough are assigned a probability of 50%
- sites with a 'managed' borough are assigned an increased probability of 60%

3.12 This approach reflects the fact that the stock of locally designated industrial sites has reduced at a higher rate (23%) compared to SIL (5%). However, boroughs will be able to alter this notional probability assumption, for example where they consider that LSIS sites should be protected based on local evidence (eg an up to date Employment Land Review); or where they consider that LSIS sites should be released for residential or mixed use development. **These default percentage probability assumptions are a starting point for the SHLAA study and may need to be revisited following the GLA's Industrial Land Demand Study.**

3.13 A broadly similar approach is taken for other non-designated industrial land protected by borough Local Plan policies, with probability estimates 5% higher in 'restricted' and 'limited' boroughs and the same estimate for 'managed' boroughs (see Table 6).

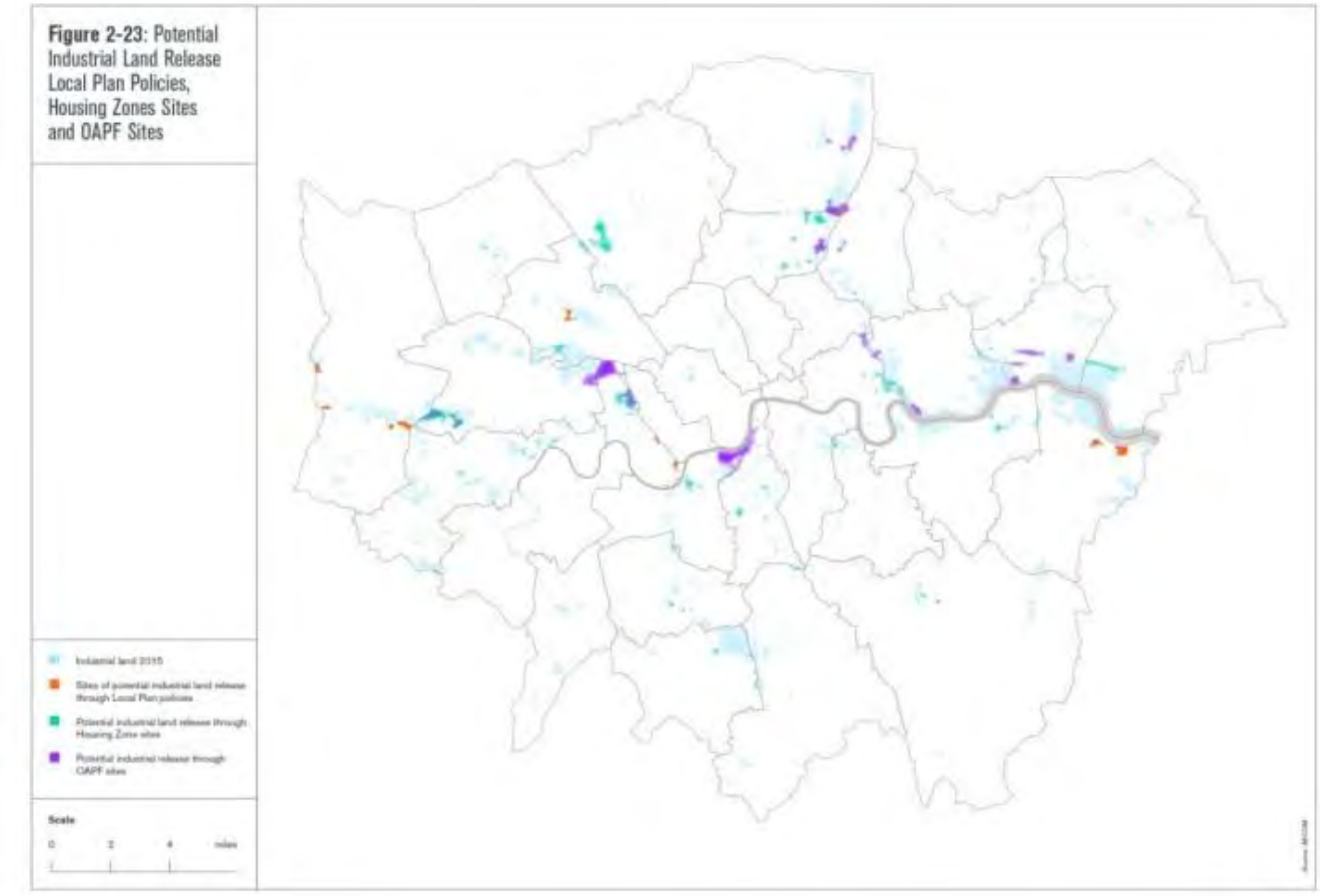
Altering default capacity assumptions on LSIS sites

3.13a Where boroughs consider that LSIS sites should be safeguarded up to 2041 would not come forwards for mixed use development during the SHLAA timescales they will be able to amend the housing capacity assumptions in the system. This will need to be justified based on an up by an up to date local employment land study. In order to amend the housing capacity assumed on these sites, a borough will need to amend the land use assumptions by either amending the phasing (eg assuming housing is not deliverable during phases 1-4 of the SHLAA) or by setting the housing to a lower or zero level in the mixed use section of the site assessment area. This is explained in the guidance notes. A similar approach may be taken on other protected industrial/employment sites. As with LSIS sites this will need to be robustly evidenced and will be scrutinised by GLA officers.

Industrial sites already earmarked for release

3.14 All designated and non-designated industrial sites that (including SIL and LSIS sites) that are earmarked for release in Local Plans, Opportunity Area Planning Frameworks (OAPFs) and Housing Zones should be classified as 'potential sites' so that boroughs fully assess the other site constraints and likely phasing of development, as well as the potential density and land use mix. These sites were mapped as part of the GLA Industrial Supply Study based on information available in Autumn 2015 and are shown in Figure 1. The SHLAA system will automatically classify these sites as potential sites. Figure 1 will be updated to reflect emerging proposals in the London Riverside OAPF and Old Kent Road AAP. **This overall quantum of industrial release may need to be revisited at a later date depending on the findings of the industrial demand study and the approach of the London Plan.**

Figure 1 – Potential industrial land release in the development pipeline, Local Plans, OAPFs, Housing Zones



Safeguarded wharves

3.15 Safeguarded wharves will automatically be assigned a zero probability to reflect their planning status in the current London Plan. Site specific assumptions in the SHLAA will be revisited if necessary to reflect any emerging amendments to London Plan policy. Where there is already an agreed plan for the consolidation and relocation of a safeguarded wharf use (eg through an OAPF or Local Plan) boroughs will be able to amend these default assumptions and consider the wharf in question as a potential site.

Environmental constraints

3.16 GIS layers will also be used to identify environmental constraints including flood risk, aircraft noise pollution contours, pylons and Health and Safety Executive (HSE) consultation zones. These constraints are classified as low, medium or high. The impact of each constraint category on the site probability is shown in Table 7 below.

3.17 Individual environmental constraint scores combine to provide an overall cumulative environmental constraint estimate. For example, if a site is classified as `medium' for flood risk, and aircraft noise and 'low' for pylons and HSE consultation zones, then the site's overall environmental constraint probability estimate will be 80%.

Table 7 – Environmental constraints

Ref	Constraint	Source	Categories	Impact on probability	Borough editable
6	Flood risk	GIS constraint layer and borough knowledge from SFRAs	**Low** – all other areas	No impact on probability	Yes
			Medium - Areas in Zone 3 with flood defences	Reduces probability by 5%	
			High - areas in Zone 3 without flood defences	Reduces probability by 10%	
			Unsuitable - Zone 3b	Site considered unsuitable (0% probability)	
7	Aircraft noise pollution	GIS constraint layer	Low - below 63 Db	No impact on probability	Yes
			Medium - above 63 Db	Reduces probability by 10%	
			High - above 69 Db	Site considered unsuitable (0% probability)	
8	Pylons / High voltage power lines	GIS constraint layer	Low - none present	No impact on probability	Yes
			Medium - site intersects with pylon	Reduces probability by 10%	
9	Health and Safety Executive consultation zones	GIS constraint layer	Low – No HSE Zone or Outer Zone	No impact on probability	Yes
			Medium – Middle Zone	Reduces probability by 10%	
			High – Inner Zone	Site considered unsuitable (0% probability) †	

† Where Gas holder sites have been submitted through Call for sites by landowners these sites would not be considered unsuitable and should be assessed as potential sites. This effectively 'turns off' HSE constraints on these sites (see para 3.19-20).

3.18 Low and medium flood risk categories are based on the Environment Agency flood risk data for rivers and sea. Areas in high risk - Zone 3b – have been collated from borough level Strategic Flood Risk Assessments (SFRAs). Boroughs are encouraged to review this data and amend site constraints where they have undertaken an SFRA and the level of flood risk is shown to differ from that presented in the SHLAA constraint layer. Site boundaries can also be amended where necessary.

3.19 HSE consultation zones cover gasholders and hazardous installations. The HSE's planning advice[7] does not in principle advise against residential development in the outer and middle zones but does advise against residential development in principle within inner zones, so this is reflected in the probability assumptions in Table 7. However, gasholder sites can also be remediated to enable development and National Grid has a programme of remediating and regenerating gas holders to enable development.

3.20 Twenty gas holder sites have been submitted through the call for sites by National Grid and St William, which are considered developable in the short to long-term period by the landowners. HSE zone constraints will be 'turned off' where sites have been put forwards by National Grid/St William in the Call for Sites. Boroughs will then need to assess these sites as potential sites and consider the likely phasing and lead-in times that should be applied, taking into account the information provided by landowners through their Call for Sites submission.

Delivery constraints

3.21 For all potential sites boroughs will be able to use their local knowledge and Land Registry data to identify potential delivery constraints. These include land ownership, local infrastructure and contamination. Boroughs will be able to classify constraints as either low, medium or high. Low level constraints have no impact on site probability. Medium constraints reduce the probability of a site being developed by 10%. High level constraints reduce the probability by 30%. Boroughs can also classify sites as low probability where there are substantial land ownership issues that are unlikely to be resolved before 2041.

Table 8 – Delivery constraints

Ref	Constraint	Source	Categories	Impact on probability
10	Land ownership	2016 Land Registry Data	Low	No impact on probability
			Medium	Reduces probability by 10%
			High	Reduces probability by 30%
11	Local infrastructure	Borough knowledge, Infrastructure Delivery Plans	Low	No impact on probability
			Medium	Reduces probability by 10%
			High	Reduces probability by 20%

[7] Health and safety executive, planning methodology, decision matrix - http://www.hse.gov.uk/landuseplanning/methodology.htm

			Low	No impact on probability
12	Contamination	Borough knowledge	Medium	Reduces probability by 10%

3.22 The system will be automatically set the constraint level for each category as low by default and the expectation is that boroughs will need to amend this where necessary to reflect known site constraints. The option to select high level constraints will only apply to land ownership as this constraint is considered to have a more significant impact on the probability and deliverability of development, whereas local infrastructure and contamination issues can be more easily mitigated through the delivery of development and enabling works on site.

3.23 As with policy and environmental constraints, individual delivery constraint scores are combined to provide a cumulative probability score. For example, if a site scores 'high' for land ownership, 'medium' for local infrastructure and 'low' for contamination its overall probability score for delivery constraints will be 70%.

3.24 Boroughs will not be able to set the constraint level to 'unsuitable' (0% probability) for any delivery constraints as they are all considered to be capable of being addressed during the course of the SHLAA period (2016 to 2041). As with all other sites, boroughs will be able to amend the phasing assumptions to reflect the lead-in times considered necessary in order to address identified delivery constraints. These assumptions will be scrutinised by the GLA.

3.25 In the previous SHLAA 400 sites were classified as unsuitable due to ownership, a quarter of which were located in town centres. This potentially underestimates the potential for mixed use development in these key growth locations. In addition, a further 30 sites were classified as unsuitable due to infrastructure and contamination constraints.

3.26 The benefit of following the above approach is that delivery constraints are registered and tracked and, following the SHLAA, boroughs and the GLA can further analyse the particular constraints and consider what interventions or mechanisms might be conducive and effective in order to bring a site forward or accelerate its development (eg Housing Zone designation and interventions, CPO).

Overcoming constraints

3.27 National Planning Practice Guidance on undertaking SHLAAs states that where constraints have been identified, local planning authorities should consider what action would be required to address or overcome these constraints and what impact this might have on housing delivery[8]. For example, this could include resolving fragmented land ownership, investing in new infrastructure, remediating contaminated land or reviewing and amending planning policy designations.

3.28 To address this requirement, the SHLAA system will prompt boroughs to consider whether it is possible to overcome any identified planning policy, environmental or delivery constraint, drawing on the list of mitigation measures/options outlined below. Where boroughs consider this would be achievable and select this option, the system 'turns off' the selected constraint. Selecting this option will therefore reset the overall

[8] DCLG, Planning Practice Guidance, Paragraph: 022 Reference ID: 3-022-20140306

probability score for the site in question. Alternatively, boroughs may consider it more suitable to amend a site boundary, so that it does not include a particular constraint where the overlap with this constraint is only on part of the site.

Table 9 – Potential options to overcome constraints

Policy Constraints	Potential mitigation/avoidance measures
Strategic Employment Location (SIL)	– De-designate SIL (where justified by other circumstances) – Allow mixed-use development, including employment provision and office or industrial workspace – Re-provide SIL elsewhere through a land swap
Locally significant industrial site (LSIL)	– De designate LSIL (where justified by other circumstances) – Allow mixed-use development
Other Protected Industrial Site	– De designate protected site (where justified by other circumstances) – Allow mixed-use development
Environmental Constraints	**Potential mitigation/avoidance measures**
Aircraft Noise Pollution	– Design mitigation measures for proposed residential development (eg. assume higher levels of sound insulation on all units)
Flood Risk	– Provide set-back on-site / develop only part of the site – Provide effective flood mitigation measures on-site, eg SUDs – Provide less sensitive land uses at ground level (eg commercial, parking) and reduce density – Provide other off-site flood mitigation measures to improve resilience to flooding
Pylons	– Pylon under grounding (funded by development) – Pylon under grounding (not able to be funded by development) – Pylon re-routing
Health and Safety Consultation Zones	– Develop part of site and reduce site boundary or net residential area – Remediate site
Delivery Constraints	**Potential mitigation/avoidance measures**
Ownership	– Fragmented land ownership assembled / acquired by landowner/developer over time – Compulsory purchase of site – Acquisition of site by developer and the relocation of existing business or land use – Joint venture between existing business and developer to accommodate mixed use development and housing
Local Infrastructure	– Provide enhanced public transport infrastructure

	– Minor changes to local road network – Provide additional utilities services – Require contribution to social infrastructure provision
Contamination	– Decontaminate land (funded by development) – Decontaminate land (may require funding) – Develop only part of site

Phasing of sites

3.29 The phasing of a site is informed by the status of development (approval, allocated, Potential, etc), its size and type and judgements around the feasibility and viability of the site. This study is divided into five phases by financial year, these are shown below on Table 10. Phase 1 is the preliminary phase; from the date of the study to the year the new London Plan is expected to be adopted (2019), phases 2, 3 and 4 are five year phases, with the final phase a seven year phase to take the assessment to the end of the plan period.

Table 10 – SHLAA phasing periods

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Start	April 2017	April 2019	April 2024	April 2029	April 2034
Finish	March 2019	March 2024	March 2029	March 2034	March 2041
Years	2	5	5	5	7

3.30 The system will generate default phasing based on the status of an individual site and its probability for development. Boroughs will be asked to check the phasing of every site (including approvals) to ensure that realistic but ambitious phasing is assumed. Boroughs will be able to refine default phasing assumptions where necessary to reflect anticipated lead-in times and build out rates, drawing on local knowledge. As a starting point, the following system defaults are suggested:

- sites with planning permission on which development has started are allocated to phase 1 (2016 to 2019)
- all other sites with planning permission but where development has not started are allocated to phase 2 (2019 to 2024)
- Potential/allocated sites that have a 100% probability are allocated to phase 2 (2019 to 2024)
- Potential/allocated sites with probability of less than 100% but greater or equal to 60% are allocated to phase 3 (2024 to 2029)
- Potential/allocated sites with probability less than 60% are split between phase 3 and 4 (2024 to 2034)
- Capacity on 'low probability' sites is split between phases 3, 4 and 5 (2024 to 2041)

3.31 In addition to this and to ensure capacity from individual large sites is spread realistically across phasing periods, the system will set defaults for the maximum amount of housing capacity that can be assigned to each phasing period from an individual large site. These 'caps' are set at an optimistic level for very large sites and are expected to provide an indicative guide and starting point. Boroughs will be able to amend phasing assumptions based on local knowledge.

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
2,000	3,000	3,000	3,000	4,000

Housing targets

3.32 Housing targets in the London Plan have historically been set as minimum 10 year targets, with annual monitoring targets provided. Boroughs are expected to roll forward their annual monitoring targets beyond this period (London Plan Policy 3.3D). However, the SHLAA study will explore the scope for the London Plan to provide longer 15 year minimum targets which would better align with the typical horizons for Local Plan.

3.33 It will also explore whether it would be more appropriate for annual monitoring targets to be based on five year phasing periods (see below), with average annual figures provided for each phase, rather than a 10 year average. This more trajectory based approach might better reflect the phasing and delivery of sites and ensure that the Government's proposed 'delivery test'[9] is applied in a fair and reasonable manner in terms of annual housing delivery targets.

3.33a Clarification – no decision has yet been made in terms of the housing targets in the new London Plan and this matter will be the subject of further discussion with boroughs and formal public consultation, taking into account the findings of the SHLAA.

Phase 2	Phase 3	Phase 4
2019 - 2024	2024 - 2029	2029 – 2034
Annual average target	Annual average target	Annual average target

Excluded sites

3.34 Only those potential sites considered to have a zero chance of coming forward for housing development during the plan period. To be excluded, sites will need to fall into the following categories:

1. New build housing where additional housing development is improbable during the plan period.

2. Recently completed new build development in the following uses: retail; office; industrial; storage and distribution; hotel; care home; hospital; education; or assembly and leisure.

3. Safeguarded office sites in defined commercial core areas within the City of London and north of Isle of Dogs.

4. Safeguarded high value business parks/office sites

5. The site is an area of private/mixed tenure housing in multiple ownership with no known plans for redevelopment

[9] See – NPPF consultation 2015 (page 14) - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/488276/151207_Consultation_document.pdf and The Spending Review and Autumn Statement 2015 (HM Treasury) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/479749/52229_Blue_Book_PU1865_Web_Accessible.pdf (page 41)

6. Primary and secondary schools

7. The site includes a listed building or other designated heritage asset where development or intensification is highly unlikely due to harm to or loss of heritage asset

8. The site is in strategic operational use for transport, waste or utilities infrastructure which are expected to continue to be in that use over the plan period so redevelopment is considered improbable (note: this should not include call for sites submitted by landowners).

9. Strategic cultural/tourist venues or civic buildings which have a zero chance of coming forward for redevelopment or change of use during the Plan period to 2041 – further guidance on this criteria will be set out in the SHLAA guidance notes

3.35 Where boroughs have a programme in place for delivering housing on school sites these sites should be included in the SHLAA.

3.35a Exclusion reason 8 is for sites that contain strategic infrastructure such as airports, railways, sewerage treatment works, waste sites and associated depots that are in operational use and have no potential of becoming redundant or being relocated over the plan period. A substantial number of operational infrastructure sites have been submitted by public sector land owners and utility providers through the Call for Sites. This includes Transport for London, Network Rail, Thames Water, NHS Property Services and other Government departments. These sites should not be excluded by boroughs based on the fact that they are currently in operational infrastructure use and should be considered as 'potential' sites.

Low probability sites

3.36 Low probability status was added to the 2013 SHLAA to address the number of potential sites being excluded from previous SHLAA studies, but which should have been given a housing potential as evidence shows that they do come forward for housing in some circumstances.

3.37 Where boroughs chose to classify a site as 'low probability' it is considered to have an 8% probability of delivering housing, (apart from those marked 5% and 10% below). This probability estimate was established following a review of the number of planning permissions granted on sites excluded in the 2004 SHLAA. A more recent review of sites excluded in the 2009 SHLAA has shown that this estimate continues to provide an appropriate assumption based on planning approvals (2009-2015), even where school sites are removed.

3.38 For boroughs to re-classify a potential site as 'low probability', this site in question must meet the criteria below:

1. High value retail, leisure, commercial development where there is a low probability of additional housing development before 2041
2. Low probability office site within the CAZ, core areas of the City Fringe Opportunity Area or an Article 4 Direction area (5% probability)
3. Low probability office site where permitted development rights do currently apply (10% probability)
4. Further education site or hospital with no planned redevelopment before 2041

5. Social housing estate with no planned intensification programme up to 2041
6. Social infrastructure or community use where there is a low probability of additional housing delivery before 2041
7. Substantial land ownership issues mean that there is a low probability of redevelopment before 2041
8. Other reasons where necessary – these will be scrutinised by the GLA.

3.39 Capacity from low probability sites is allocated to the later phases of the SHLAA - phases 3, 4 and 5. For the new SHLAA this would mean this capacity is spread between the period 2024 to 2041.

3.40 Through the Call for Sites a number of large out of town retail sites were put forward by landowners, eg supermarkets. Where a site in one of these uses is suitable for housing and has been put forward as part of the call for sites it should be considered as a potential site and not a low probability site, given that the landowner has expressed an interest in accommodating additional housing/mixed use development on the site in question.

3.41 Other retail, leisure and office sites should also not be automatically assigned with 'low probability' status unless it is clear that the nature of the existing business/land use means that there is a low probability of housing being delivered during the period of the London Plan. Where boroughs consider that housing could be accommodated on sites during the plan period (2019-2041) they should assess sites as 'potential sites' and adjust the phasing accordingly.

Town centres

3.42 Town Centre Health Check data, particularly that showing the level of vacant or surplus retail/commercial floorspace and other indicators, eg heritage should be used by boroughs to provide an indication of where additional residential and mixed use development might be accommodated. Through the site assessment process, the GLA will work with relevant boroughs to ensure that the potential sites have been identified and the long-term capacity for development has been proactively considered.

Offices

3.43 This section summarises the approach to offices in the SHLAA. Offices will be automatically considered as potential sites in the SHLAA system but boroughs will be allowed to exclude the following types of office sites:

- offices in tightly defined commercial core areas of the City and Canary Wharf – this precise area will be agreed with the relevant boroughs prior to the SHLAA being undertaken
- recently completed offices (since 2010)
- offices in high value business parks (eg Chiswick, Bedfont Lakes)

3.44 For offices in other locations boroughs will be given the option to assign 'low probability' status to these sites. The probability assumption used will vary depending on a site's location:

- within the CAZ, core areas of the City Fringe OAPF, within an adopted Article 4 Direction area a lower probability assumption of 5% will apply – this reflects the stronger planning protections for offices which apply in these locations.

- outside these locations a higher 10% probability is assumed – this reflects permitted development rights (which have been made permanent) and higher numbers residential units approved on office sites since these rights were introduced.

3.45 Boroughs should consider office sites as potential sites if they consider that they are likely to come forward as housing during the Plan period. Sites should only be assigned low probability status where a borough considers that the probability of housing being delivered prior to 2041 is low. Existing approvals for office to residential development will be used as approved sites where these are 0.25 hectares and more in size.

3.46 Where there is robust evidence of demand and where office sites would be safeguarded and therefore not likely to come forward for development or change of use between now and 2041 boroughs may categorise these as excluded. This can be done using excluded reasons 2, 3 or 4 (depending on the location and age of the office building in question). Where excluded reason 4 is used boroughs will need to provide notes to justify why zero probability is being assumed.

Estate regeneration schemes

3.46 Boroughs are able to include large sites included in an estate regeneration programme. As these sites include existing residential dwellings, the SHLAA system allows boroughs to amend net additional housing figures included in the system and by phasing period in order to take into account demolitions and build out rates over time.

Emerging opportunity areas

3.47 In addition to the 38 opportunity areas formally identified in the London Plan, a number of emerging opportunity areas being considered and are identified in 'a City for all Londoners'[11] These include:

- Greenford
- Hayes - already within Heathrow OA
- the Golden Mile/Great West Corridor
- Kingston (three broad areas including Kingston town centre/Norbiton/New Malden, Tolworth and Chessington)
- Romford
- Wood Green / Haringey Heartlands
- Clapham Junction
- New Southgate
- Wimbledon – Croydon Brown Belt

3.48 As with many existing opportunity areas, a number of these areas are expected to deliver significant employment growth, alongside housing, and this should be recognised in the site specific land use assumptions in the SHLAA. For the SHLAA these locations are all be considered as emerging opportunity areas for the purpose of estimating residential densities. These densities can be edited by boroughs. The boundaries for these emerging opportunity areas are subject to change and this will be reflected where appropriate through the site assessments and any final capacity assumptions.

[11] Mayor of London, A City for all Londoners, page 25, Map 3

Gypsy and traveller accommodation

3.49 Through the SHLAA system and individual site assessments boroughs are able to and encouraged to identify sites suitable for gypsy and traveller accommodation, or parcels of large sites in order to take account of the range of housing needs and reflect London Plan and National planning policy and guidance. This can be done by editing the density estimate for a site and providing notes to that effect.

4 Scenario testing

4.1 Given the likelihood that the next SHMA will identify a higher level of housing need than the previous 2013 SHMA study, scenario testing is likely to play an important role in providing the evidence for and testing various policy options for meeting the housing need identified. Unlike during the Further Alterations to the London Plan, the new London Plan is a Full Review and provides the opportunity to test a wider range of potential policy scenarios and options in terms of meeting housing need and balancing this requirement against other important planning policy objectives, such as maintaining the provision of employment land.

4.2 In addition, the delivery of key items of transport infrastructure, for example in relation to Crossrail 2 and the Bakerloo Line Extension, will clearly have a significant impact on the delivery, density and phasing of development, as well as land use more generally. The associated housing and employment growth in these key transport corridors is likely to feature as a key policy area for the next London Plan.

4.3 Scenario testing will therefore be undertaken with Transport for London and relevant boroughs in order to assess the impact of these schemes in helping to meet housing need through unlocking additional supply. This will also be important in supporting the business case of individual schemes. Such schemes include:

- Crossrail 2
- The Bakerloo Line extension
- the extension of Crossrail 1 from Abbey Wood
- the proposed Metroisation of south London suburban rail network (improved suburban rail services)
- DLR extension to Thamesmead
- further extension of the proposed Bakerloo Line extension to Hayes
- Sutton Tramlink Extensions

4.4 The final number of schemes examined will depend on resources and the likelihood of schemes being delivered during the London Plan timescales. The methodology and approach to be taken on these transport corridors will need to be explored in more detail with relevant boroughs during the SHLAA project. This may involve reconsidering potential sites which have been considered unsuitable in the core SHLAA study, but which could come forward if new infrastructure was delivered and land use designations reconsidered, eg industrial land. It will also consider whether sites could come forward at higher densities. The SHLAA system has been designed to ensure there is sufficient flexibility to enable different scenarios to be modelled and tested and for the system rules to be amended.

4.5 Other scenario tests which may also need to be tested in the SHLAA study include:

- The potential for increased development and higher residential densities within ‘station intensification areas’ and within 1km of town centres

- the various industrial land release scenarios described in paragraph 1.7
- the potential for suburban intensification
- housing zones and new opportunity areas to be identified in the London Plan

Reasons to delete large sites

- The site is less than 0.25 hectares
- The site was loaded in error, for example a road or waterbody (note that the study aims to assess all potential housing sites. This category should only be used for sites genuinely loaded in error). In addition, boroughs should amend site boundaries where necessary to remove roads or waterbodies or other features that cannot be built on.

5 Sources of capacity outside the large site system

Small sites

5.1 As in the 2013 SHLAA, a trend based approach will be used for small sites under 0.25ha. Data from the London Development Database on housing completions from 2004 to 2015 will be analysed and an annual average assumption produced for each borough. This time series will essentially cover a number of market cycles, which should mean the trend based assumptions provide a realistic average for over the plan period and fully take into account local constraints such eg heritage and the availability and viability of sites.

5.2 Trend based assumptions on small sites will be based on net conventional housing completions on sites under 0.25ha in size. This will include new build development, change of use and conversions. Trends will therefore take into account change of use from office to residential.

5.3 The NPPF states that historic windfall delivery rates should not include development on residential gardens[12]. To address this requirement, the previous SHLAA methodology removed 90% of housing completions on garden land. This amounted to approximately 5% of housing delivery on small sites during the timescale examined (2004 – 2011).

5.4 For the next SHLAA study, both options will be tested (with and without housing completions on garden land). This will allow alternative policy approaches to be effectively tested and considered, taking into account the particular local circumstances and housing pressures experienced in London.

5.5 As stated above, additional scenario testing on small sites will also be undertaken to explore the potential for trends in housing completions in terms of delivery and density to be increased as a result of planning policy changes in the London Plan and Government reforms, for example, the scope for suburban intensification and whether the use of brownfield/small sites registers and permission in principle might increase housing delivery. The methodology and approach to scenario testing small sites 'windfall' assumptions will be developed in more detail at a later date and will be shared with boroughs for comment.

5.6 All small site data will be supplied to boroughs in order for them to check the data for accuracy and anomalies. This data will be provided to boroughs in February.

[12] NPPF, paragraph 48

Non-self contained housing developments

5.7 Housing approvals in the SHLAA system will include net housing provision from non-self contained residential schemes with planning permission where sites are 0.25ha and more in size. This includes student accommodation, specialist housing for older people and also other non-self contained shared living schemes, normally in sui generis use. Some SHLAA sites may be particularly suitable for student housing given their location and setting, and this can be considered by boroughs when assessing potential housing capacity/density.

Vacant homes

5.7 For the reasons outlined in the draft methodology, assumptions about the number of vacant homes returning to use will now not be included in the SHLAA study. However, the number of empty homes will continue to be a key Mayoral priority and addressed by policies in the London Plan and Housing Strategy, as well as targeted local interventions, it is recommended that this issue is not considered in the next SHLAA or in terms of monitoring forthcoming targets in the next London Plan.

[redacted]

From: [redacted]
Sent: 23 November 2016 18:01
To: [redacted]@lbbd.gov.uk'; [redacted]@barnet.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@brent.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]Enfield.gov.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@lbhf.gov.uk'; [redacted]@kingston.gov.uk' [redacted]@wandsworth.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@hillingdon.gov.uk'; [redacted]; [redacted]@hounslow.gov.uk' [redacted]islington.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@rbk.kingston.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lewisham.gov.uk' [redacted]merton.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@SOUTHWARK.GOV.UK'; [redacted]@sutton.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted] walthamforest.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@londonlegacy.co.uk'; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]@westminster.gov.uk'; [redacted]@islington.gov.uk' [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]@towerhamlets.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@londonlegacy.co.uk'; [redacted]: WCC; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]; [redacted]@islington.gov.uk'
Subject: Draft SHLAA methodology
Attachments: Draft SHLAA methodology.docx

Hello

Please find attached the draft methodology for the new London SHLAA.

We are now carrying out consultation on the draft approach for 8 weeks until **20th January.**

Please provide any feedback to - LondonSHLAA@london.gov.uk

If anything isn't clear in the document (or wasn't clear in my presentation today), please contact me by email or phone for clarification.

Just so everyone is aware, the additional SHLAA meeting scheduled for 1st December will cover the same presentation and is with our Strategic Housing Market Partnership Group. So there's no need for the same people to attend twice.

Regards

[redacted]
Senior Strategic Planner
GREATERLONDONAUTHORITY

[redacted]@london.gov.uk
[redacted]

[redacted]

From: [redacted]
Sent: 23 November 2016 18:07
To: [redacted]@lbbd.gov.uk'; [redacted]@barnet.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@brent.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]lbhf.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@hillingdon.gov.uk'; [redacted]@hounslow.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lewisham.gov.uk'; [redacted]@merton.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@sutton.gov.uk'; [redacted]walthamforest.gov.uk'; [redacted]@wandsworth.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@londonlegacy.co.uk'; [redacted]@merton.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@Enfield.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@southwark.gov.uk'; [redacted]'; [redacted]@merton.gov.uk'
Subject: Maps from today's SHLAA presentation
Attachments: A2 Map-01.jpg; Fig 2-23 Potential Industrial Land Release Local Plan Policies, Housing Zone Sites and OAPF Sites.jpg

Here are the 2 maps in my presentation at higher resolution.

We will **put up the emerging Opportunity Area boundaries onto the webmap shortly.**

[redacted]

[redacted]

From: [redacted]
Sent: 23 November 2016 18:11
To: [redacted]@lbbd.gov.uk'; [redacted]@barnet.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@brent.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@lbhf.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@hillingdon.gov.uk'; [redacted]@hounslow.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lewisham.gov.uk'; [redacted]@merton.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@sutton.gov.uk'; [redacted]@walthamforest.gov.uk'; [redacted]@wandsworth.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@londonlegacy.co.uk'; [redacted]@merton.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@Enfield.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@southwark.gov.uk'; [redacted]'; [redacted]@merton.gov.uk'
Subject: RE: Maps from today's SHLAA presentation
Attachments: SHLAA presentation 23 Nov.pdf

Here is the presentation too.
Thanks
[redacted]

From: [redacted]
Sent: 23 November 2016 18:07
To: [redacted]@lbbd.gov.uk'; [redacted]@barnet.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@brent.gov.uk'; [redacted]bromley.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@lbhf.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@hillingdon.gov.uk'; [redacted]@hounslow.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]lewisham.gov.uk'; [redacted]@merton.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@sutton.gov.uk'; [redacted]@walthamforest.gov.uk'; [redacted]@wandsworth.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]londonlegacy.co.uk'; [redacted]@merton.gov.uk'; [redacted]; [redacted]@lambeth.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]bromley.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@Enfield.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@southwark.gov.uk'; [redacted]@merton.gov.uk'
Subject: Maps from today's SHLAA presentation

Here are the 2 maps in my presentation at higher resolution.

We will put up the emerging Opportunity Area boundaries onto the webmap shortly.

[redacted]

[redacted]

From: [redacted]
Sent: 23 November 2016 18:20
To: [redacted]@londoncouncils.gov.uk'; [redacted]@bartonwillmore.co.uk'; [redacted]@hbf.co.uk'; [redacted]@rics.org'; 'london_forum@[redacted]'; [redacted]@ucl.ac.uk'; [redacted]'; [redacted]@housing.org.uk'; [redacted]@shgroup.org.uk'; [redacted]@hyde-housing.co.uk'; [redacted]@hyde-housing.co.uk'; [redacted]@hyde-housing.co.uk'; [redacted]@thetec.co.uk'; [redacted]@gmail.com'; [redacted]@londontenants.org'; [redacted]@english-heritage.org.uk'; [redacted]@HistoricEngland.org.uk'; [redacted]@environment-agency.gov.uk'; [redacted]'; [redacted]@ucl.ac.uk'; [redacted]@local.gov.uk'; [redacted]@londonfirst.co.uk'
Subject: Draft London SHLAA housing capacity study methodology
Attachments: Draft SHLAA methodology.docx

Hello

Ahead of our meeting on 1 December on the next London Strategic Housing Land Availability Assessment (SHLAA), please find attached the draft methodology proposed for the study.

We are now carrying out consultation on the draft approach for 8 weeks until **20th January.**

Please provide any feedback to - LondonSHLAA@london.gov.uk

During the meeting I will provide a summary presentation of the approach.

Regards

[redacted]
Senior Strategic Planner
GREATERLONDONAUTHORITY
[redacted]@london.gov.uk
[redacted]

[redacted]

From: London SHLAA
Sent: 28 November 2016 12:18
To: [redacted]@londoncouncils.gov.uk'; [redacted]'; '[redacted]'; [redacted]'; [redacted]'; [redacted]@bedford.gov.uk'; [redacted]@scambs.gov.uk'; [redacted]@eastherts.gov.uk'; [redacted]@essex.gov.uk'; [redacted]@chelmsford.gov.uk'; [redacted]@norfolk.gov.uk'; [redacted]@thurrock.gov.uk'; [redacted]@cambridgeshire.gov.uk'; [redacted]@centralbedfordshire.gov.uk'; [redacted]@centralbedfordshire.gov.uk'; [redacted]@essex.gov.uk'; [redacted]@hertfordshire.gov.uk'; [redacted]'; [redacted]@luton.gov.uk'; [redacted]@southend.gov.uk'; [redacted]@westsuffolk.gov.uk'; [redacted]@westsuffolk.gov.uk'; [redacted]@bracknell-forest.gov.uk'; [redacted]@dartford.gov.uk'; [redacted]@hants.gov.uk'; [redacted]@kent.gov.uk'; [redacted]@Oxfordshire.gov.uk'; [redacted]@SouthBucks.gov.uk'; [redacted]@surreycc.gov.uk'; [redacted]@surreyheath.gov.uk'; [redacted]@gravesham.gov.uk'; [redacted]@medway.gov.uk'; [redacted]@oxfordshire.gov.uk'; [redacted]@chiltern.gov.uk'; [redacted]@westberks.gov.uk'
Subject: Draft London SHLAA methodology - consultation
Attachments: Draft SHLAA methodology .pdf

Hello

The GLA is undertaking informal consultation on the draft methodology for the next London Strategic Housing Land Availability Assessment (SHLAA). The SHLAA study will inform the new London Plan.

Comments can be made on the proposed SHLAA methodology (attached) by **20th January.** Comments should be sent to:

Email - LondonSHLAA@london.gov.uk

Post - [redacted]
Greater London Authority
City Hall
The Queen's Walk, London SE1 2AA

The final SHLAA study will be published alongside the draft London Plan which is due in Autumn 2017.

Regards

[redacted]
Senior Strategic Planner
GREATERLONDONAUTHORITY
[redacted]@london.gov.uk
0207 983 [redacted]

[redacted]

From: London SHLAA
Sent: 01 December 2016 13:51
To: [redacted]@lbbd.gov.uk'; [redacted]@lbbd.gov.uk'; [redacted]@barnet.gov.uk'; [redacted]@Barnet.gov.uk'; [redacted]@Barnet.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@brent.gov.uk'; [redacted]@brent.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@Enfield.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@Enfield.gov.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@lbhf.gov.uk'; [redacted]@lbhf.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@hillingdon.gov.uk'; [redacted]@hillingdon.gov.uk'; [redacted]@hounslow.gov.uk'; [redacted]@hounslow.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lewisham.gov.uk'; [redacted]@lewisham.gov.uk'; [redacted]@merton.gov.uk'; [redacted]@merton.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@SOUTHWARK.GOV.UK'; [redacted]@southwark.gov.uk'; [redacted]@southwark.gov.uk'; [redacted]@sutton.gov.uk'; [redacted]@sutton.gov.uk'; [redacted]@sutton.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted]@walthamforest.gov.uk'; [redacted]@walthamforest.gov.uk'; [redacted]@walthamforest.gov.uk'; [redacted]@wandsworth.gov.uk'; [redacted]@wandsworth.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]westminster.gov.uk'; [redacted]@londonlegacy.co.uk'; [redacted]@londonlegacy.co.uk'; [redacted]
Subject: Draft London SHLAA methodology
Attachments: Draft SHLAA methodology (updated).docx

I am re-circulating this to all borough officers on our SHLAA database, to ensure everyone has received it.

Consultation on the draft methodology closes on 20th Jan.

Please send feedback to this email address - LondonSHLAA@london.gov.uk

Thanks

[redacted]
Senior Strategic Planner
GREATERLONDONAUTHORITY
[redacted]@london.gov.uk
0207 983[redacted]

[redacted]

From: London SHLAA
Sent: 05 December 2016 16:09
To: [redacted]@lbbd.gov.uk'; [redacted]@barnet.gov.uk'; [redacted]@bexley.gov.uk'; [redacted]@brent.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@cityoflondon.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@enfield.gov.uk'; [redacted]@greenwich.gov.uk'; [redacted]; [redacted]@lbhf.gov.uk'; [redacted]@haringey.gov.uk'; [redacted]@harrow.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@hillingdon.gov.uk'; [redacted]@hounslow.gov.uk'; [redacted]@islington.gov.uk' [redacted]@rbkc.gov.uk'; [redacted]@kingston.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lewisham.gov.uk'; [redacted]@merton.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@richmond.gov.uk'; [redacted]@southwark.gov.uk'; [redacted]@sutton.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted]@walthamforest.gov.uk'; [redacted]@wandsworth.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@londonlegacy.co.uk'; [redacted]
Subject: Draft Methodology - London Strategic Housing Land Availability Assesssment
Attachments: Draft SHLAA methodology (updated).pdf

Please find attached the draft methodology for the new London Strategic Housing Land Availability Assessment (SHLAA).

In line with national planning policy the SHLAA will inform the new London Plan by identifying the housing capacity that can be brought forwards between 2016 and 2041. This will be supported by a separate viability study and other evidence base documents.

We are now carrying out consultation on the draft SHLAA methodology until 20th January.

The Draft SHLAA methodology was sent to lead borough officers on the SHLAA on 23 November.

Please send comments to - LondonSHLAA@london.gov.uk

Regards

[redacted]
Senior Strategic Planner
GREATERLONDONAUTHORITY
[redacted]@london.gov.uk
0207 983 [redacted]

[redacted]

From: London SHLAA
Sent: 06 December 2016 10:56
To: [redacted]@londoncouncils.gov.uk'; [redacted]@bartonwillmore.co.uk'; [redacted]@hbf.co.uk'; [redacted]@rics.org'; 'london_forum@[redacted]@ucl.ac.uk'; [redacted]@madasafish.com'; [redacted]@housing.org.uk'; [redacted]@shgroup.org.uk'; [redacted]@hyde-housing.co.uk'; [redacted]@hyde-housing.co.uk'; [redacted]@hyde-housing.co.uk'; [redacted]@thetec.co.uk'; [redacted]@gmail.com'; [redacted]@londontenants.org'; [redacted]@english-heritage.org.uk'; [redacted]@HistoricEngland.org.uk'; [redacted]@environment-agency.gov.uk'; [redacted]'; [redacted]@ucl.ac.uk'; [redacted]@local.gov.uk'; [redacted]@londonfirst.co.uk'; [redacted]@harrow.gov.uk'; [redacted]@redbridge.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@Hackney.gov.uk'; [redacted]@lbhf.gov.uk'; [redacted]@lewisham.gov.uk'; [redacted]@lewisham.gov.uk'; [redacted]@newham.gov.uk'; [redacted]@croydon.gov.uk'; [redacted]@havering.gov.uk'; [redacted]@hounslow.gov.uk'; [redacted]@rbkc.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@camden.gov.uk'; [redacted]@lambeth.gov.uk'; [redacted]@lbbd.gov.uk'; [redacted]@Barnet.gov.uk'; [redacted]@southwark.gov.uk'; [redacted]@southwark.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@ealing.gov.uk'; [redacted]@londonlegacy.co.uk'; [redacted]@royalgreenwich.gov.uk'; [redacted]@westminster.gov.uk'; [redacted]@towerhamlets.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@bromley.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@islington.gov.uk'; [redacted]@wandsworth.gov.uk'; [redacted]'; [redacted]; [redacted]; [redacted]@tfl.gov.uk'; '[redacted]'; [redacted]@shgroup.org.uk'
Subject: London SHLAA meeting presentation
Attachments: SHLAA presentation 1 Dec .pdf; Draft SHLAA methodology (updated).pdf

Here is the presentation I gave to the Strategic Housing Market Partnership Group on 1st December, on the proposed draft methodology for the SHLAA.

I also attach the draft methodology report, which you should already have received.

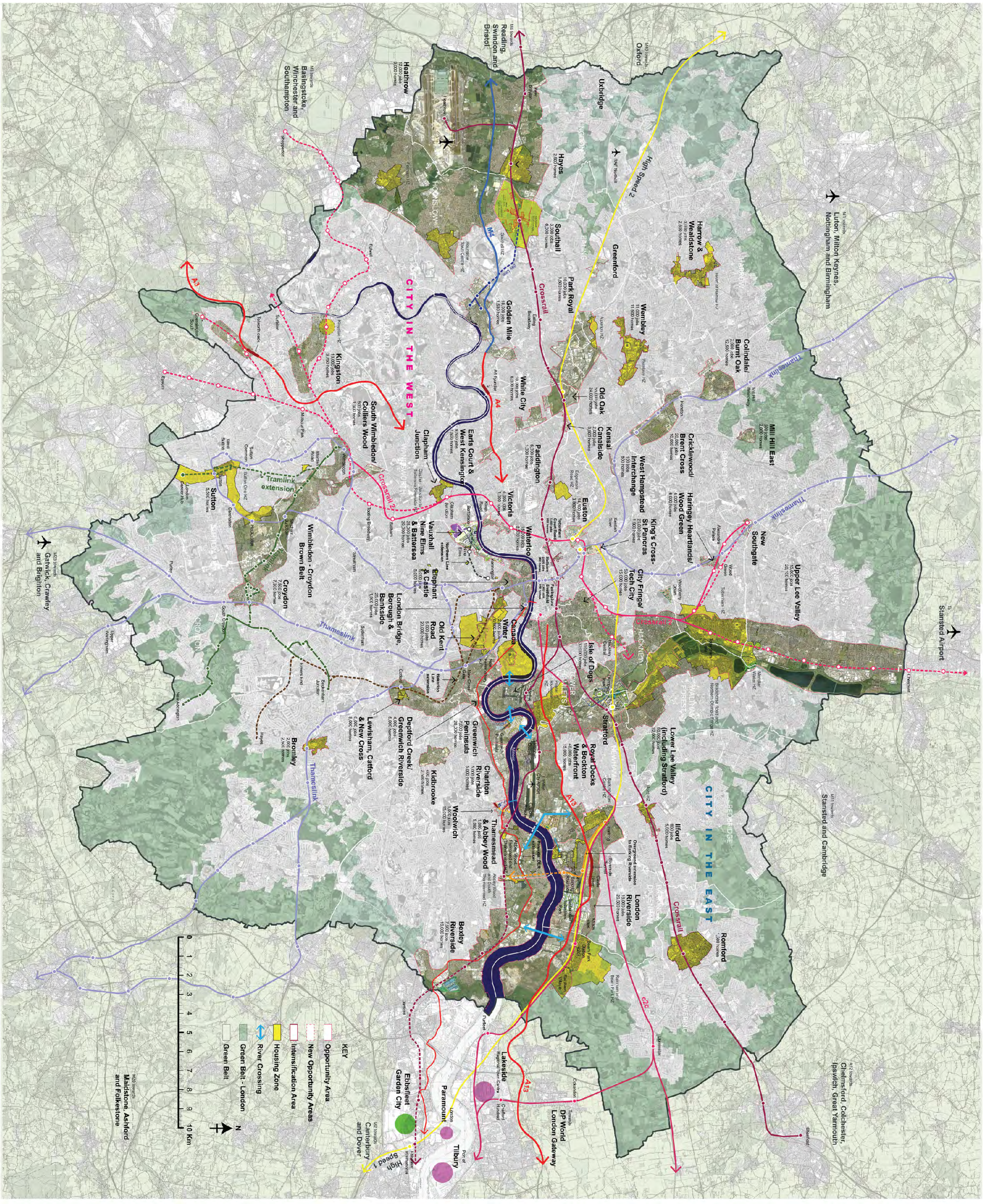
Consultation on the draft methodology closes on 20th Jan.

Please send feedback to this email address - LondonSHLAA@london.gov.uk

Thanks

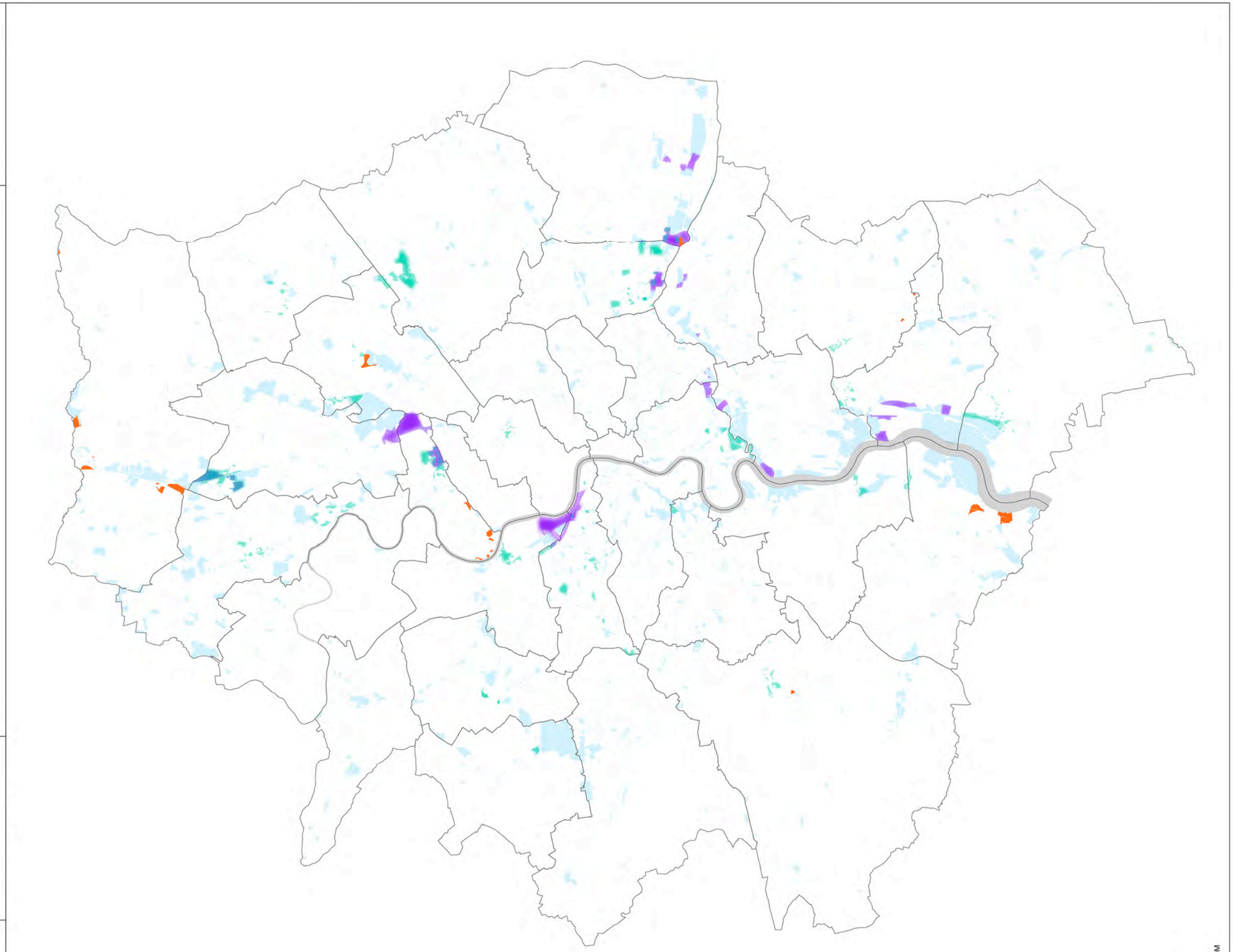
[redacted]
Senior Strategic Planner
GREATERLONDONAUTHORITY
[redacted]@london.gov.uk
0207 983[redacted]

MAYOR OF LONDON



A PLAN FOR LONDON

Figure 2-23: Potential Industrial Land Release Local Plan Policies, Housing Zones Sites and OAPF Sites



- Industrial land 2015
- Sites of potential industrial land release through Local Plan policies
- Potential industrial land release through Housing Zone sites
- Potential industrial release through OAPF sites

Scale

0 2 4 miles

Source: AECOM

MAYOR OF LONDON

Draft SHLAA methodology

[redacted]
Senior Strategic Planner, GLA

Overview

- Summary of draft methodology
  - Density estimates
  - Constraints testing & probability based approach – ‘potential sites’
  - Site allocations
  - Scenario tests
  - Small sites & long term vacant homes
- Context for the SHLAA
- SHLAA project timescales & one to one meetings
- Housing targets

London Plan Timetable

- **Informal consultation** – currently being undertaken - A City for all Londoners, stakeholder workshops (ends 11 Dec)
- **Consultation on Draft London Plan** – Autumn 2017
- **Examination in public** – Summer 2018
- **Adoption** – Autumn 2019

SHLAA study timescales

- **Consultation on draft methodology** – 23rd November to 20th Jan (8 weeks)
- **Site assessments** – February to mid-May 2017
- **Scenario testing** – alongside site assessments
- **Publication of the SHLAA** – Autumn 2017, alongside the Draft London Plan

Site assessments & borough one to one meetings

Boroughs will be allocated deadlines for completing sites assessments so one to one meetings can be staggered:

- Phase 1 - weeks commencing 20th March / 27th March
- Phase 2 - 3rd April / 10th April
- Phase 3 - 17th April / 24th April
- Phase 4 - 1 May / 8th May

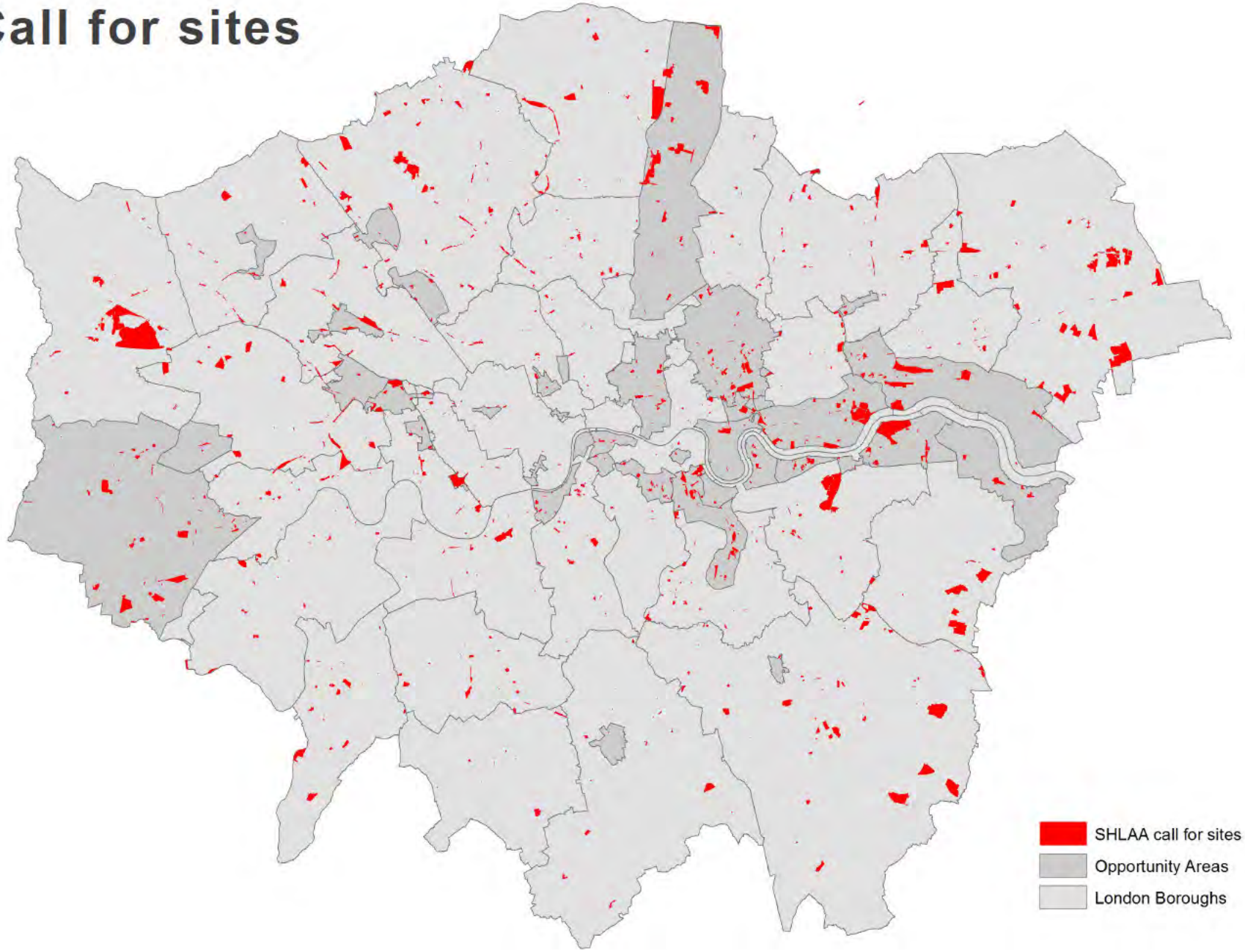
Email broad preferences to – LondonSHLAA@london.gov.uk

Note - this could be subject to change

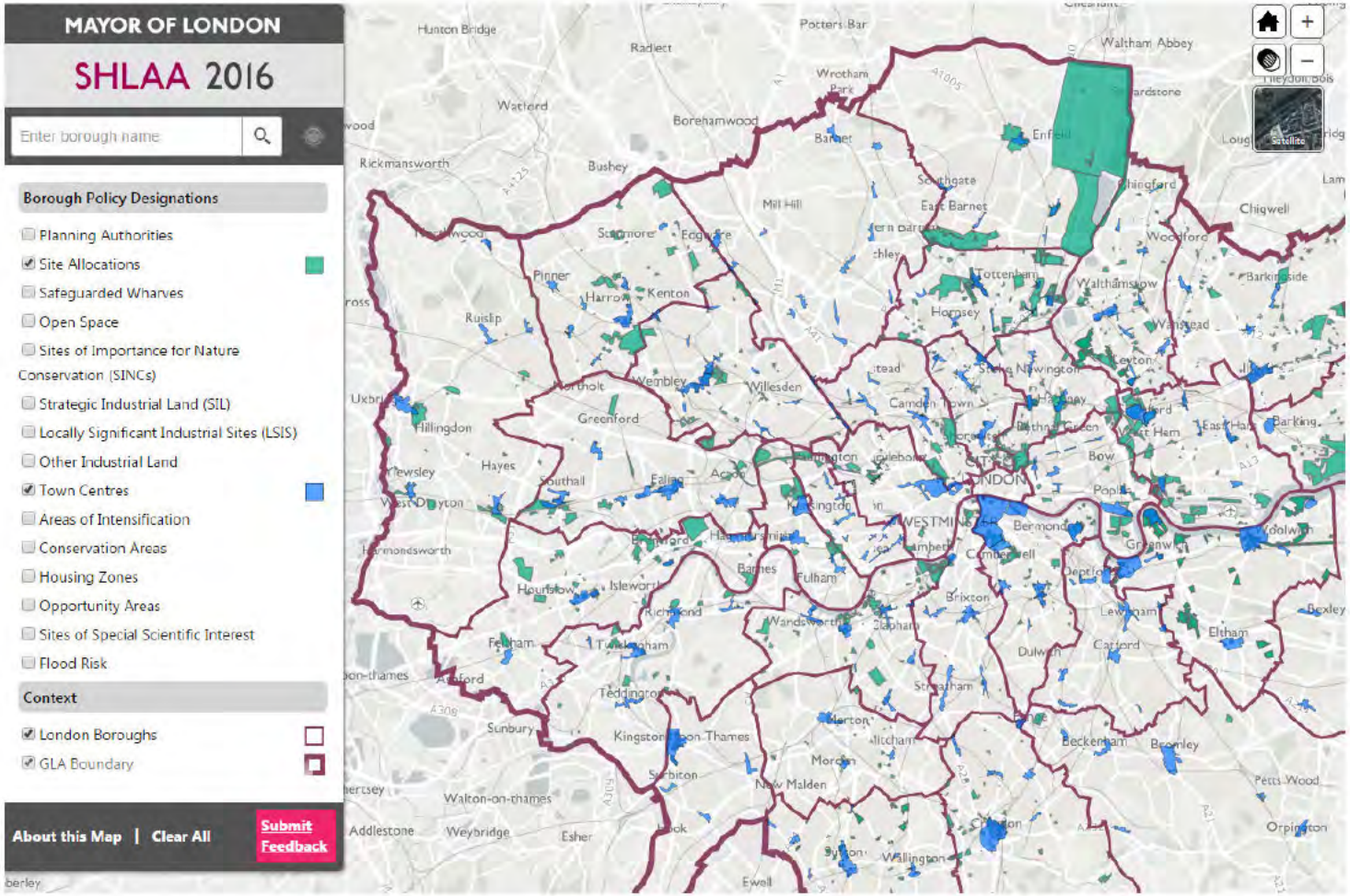
Sources of capacity

- **Large sites** – 0.25 hectares and more in size
  - Approvals
  - Allocations
  - ‘Potential’ sites
- **Small sites** – long term average trends in completions, (subject to scenario testing)

Call for sites



Updating policy designations & constraints maps



Context - Housing Need Assessment (SHMA)

- Likely to show a higher overall housing requirement
  - Faster household growth & worsening affordability
  - Initial indicative estimates – circa 55k to 65k
  - Affordable housing requirement likely to comprise more than half
- SHMA timetable - aim to finish by mid 2016
- More detailed discussion on methodology at future meetings
- Email:[redacted]@london.gov.uk

GLA Industrial Land Demand Study

Looks at different scenarios and their potential impact:

- Industrial demand-led – meeting demand
- Trend based – current trends continue - 100 hectares a year
- Infrastructure-led – Crossrail 2, Bakerloo line
- Tipping point – maximum release without significant economic impacts

The direction taken in London Plan will need to align with the SHLAA

Context - Policy scenarios being examined

- Transport infrastructure – eg Crossrail 2, Bakerloo Line Extension
- Station intensification areas
- Small sites trends & potential increases in output – eg suburban intensification
- Town centres – scope for additional capacity to come forward

Site Confidentiality

Potential sites – confidential within the SHLAA system

- It is for Boroughs to determine which potential SHLAA sites should be specifically identified - eg: Local Plans, Site Allocations, Registers, Permission in Principle

Approved / allocated sites – published in document and on London Datastore

SHLAA horizon – 2016 to 2041

Timescales & Phasing periods

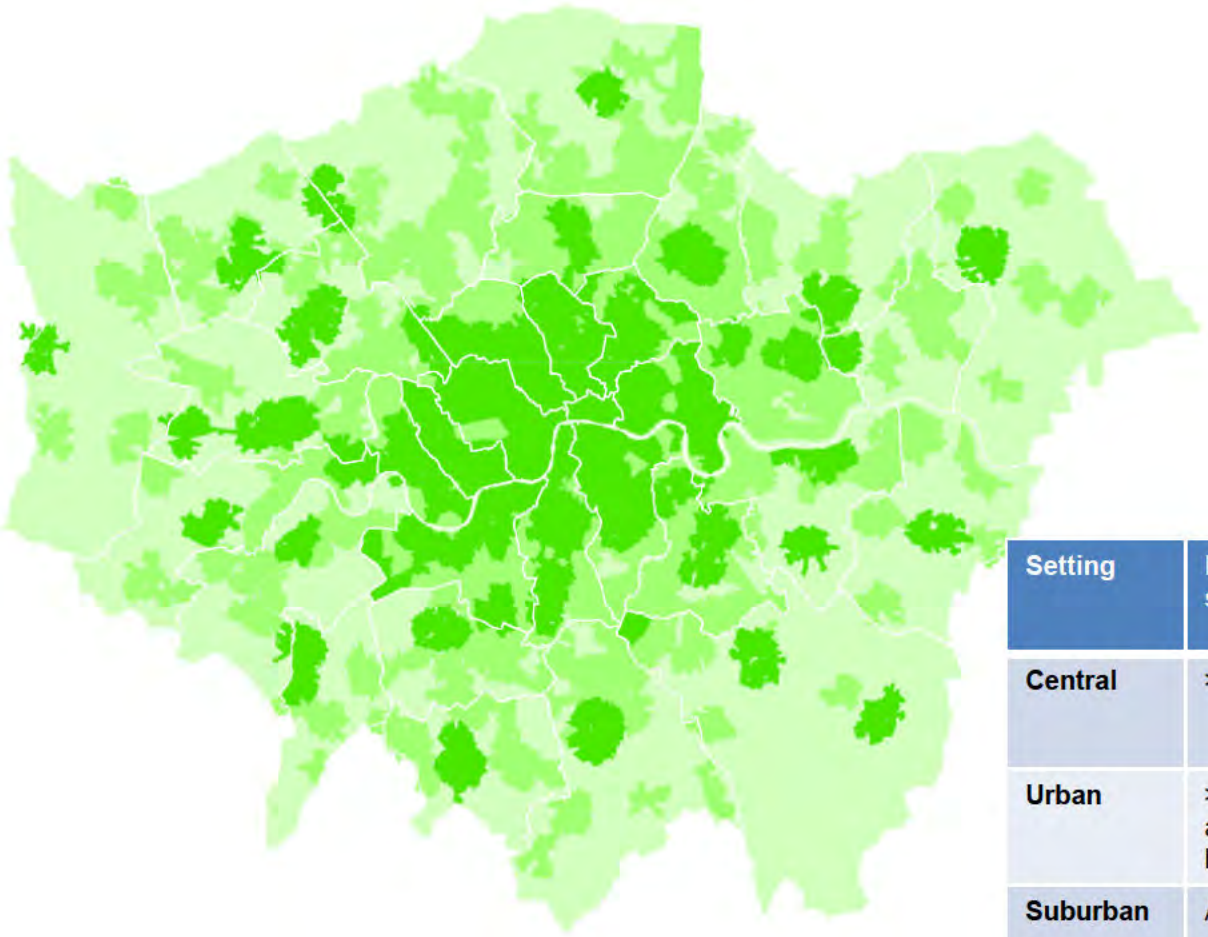
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Start	April 2016	**April 2019**	**April 2024**	**April 2029**	April 2034
Finish	March 2019	**March 2024**	**March 2029**	**March 2034**	March 2041
Years	3	**5**	**5**	**5**	7

Density estimates

- **Approvals** - based on London Development Database
- **Allocated and potential large sites** – matrix based estimates

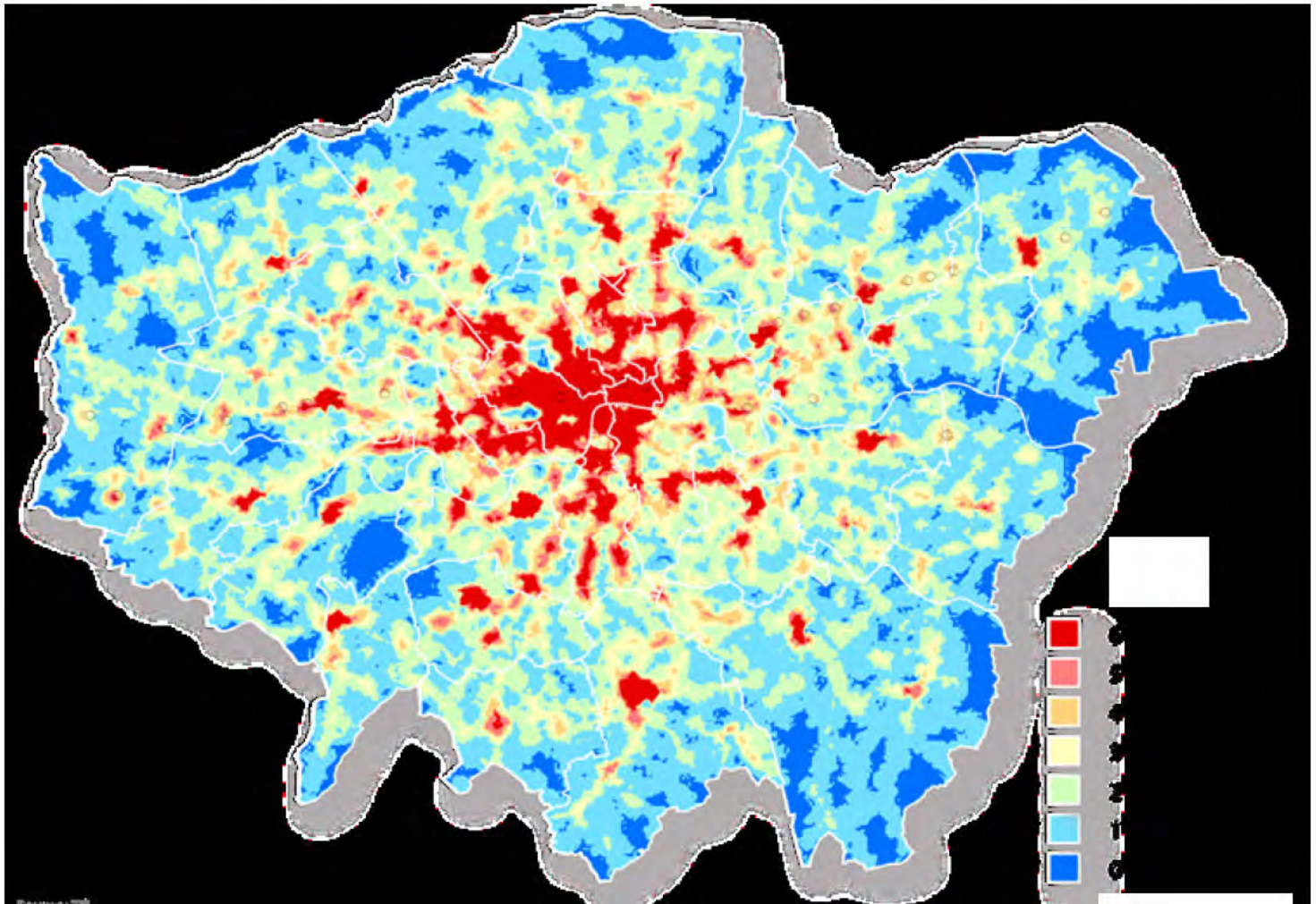
Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
Suburban	150–200 hr/ha	150–250 hr/ha	200–350 hr/ha
3.8–4.6 hr/unit	35–55 u/ha	35–65 u/ha	45–90 u/ha
3.1–3.7 hr/unit	40–65 u/ha	40–80 u/ha	55–115 u/ha
2.7–3.0 hr/unit	50–75 u/ha	50–95 u/ha	70–130 u/ha
Urban	**150–250 hr/ha**	**200–450 hr/ha**	**200–700 hr/ha**
3.8 –4.6 hr/unit	35–65 u/ha	45–120 u/ha	45–185 u/ha
3.1–3.7 hr/unit	40–80 u/ha	55–145 u/ha	55–225 u/ha
2.7–3.0 hr/unit	50–95 u/ha	70–170 u/ha	70–260 u/ha
Central	**150-300 hr/ha**	**300–650 hr/ha**	**650–1100 hr/ha**
3.8–4.6 hr/unit	35–80 u/ha	65–170 u/ha	140–290 u/ha
3.1–3.7 hr/unit	40–100 u/ha	80–210 u/ha	175–355 u/ha
2.7–3.0 hr/unit	50–110 u/hr	100–240 u/ha	215–405 u/ha

Updated character settings map



Setting	Housing stock	Proximity to town centre
Central	>75% flats	1km of International, Metropolitan or Major town centre boundary
Urban	>75% flats and terraced housing	1km of District town centre boundary
Suburban	All other areas	All other areas

Public Transport Access Level (PTAL)



3 Maps

- 2011
- 2021
- 2031

Standard density assumptions

PTAL	0 to 1	2 to 3	4 to 6
Suburban	65	80	115
Urban	80	145	225
Central	100	210	355

Figures - Dwelling per hectare

Standard density estimates - explained

Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
Suburban	150–200 hr/ha	150–250 hr/ha	200–350 hr/ha
3.8–4.6 hr/unit	35–55 u/ha	35–65 u/ha	45–90 u/ha
3.1–3.7 hr/unit	40–65 u/ha	40–80 u/ha	55–115 u/ha
2.7–3.0 hr/unit	50–75 u/ha	50–95 u/ha	70–130 u/ha
Urban	**150–250 hr/ha**	**200–450 hr/ha**	**200–700 hr/ha**
3.8 –4.6 hr/unit	35–65 u/ha	45–120 u/ha	45–185 u/ha
3.1–3.7 hr/unit	40–80 u/ha	55–145 u/ha	55–225 u/ha
2.7–3.0 hr/unit	50–95 u/ha	70–170 u/ha	70–260 u/ha
Central	**150-300 hr/ha**	**300–650 hr/ha**	**650–1100 hr/ha**
3.8–4.6 hr/unit	35–80 u/ha	65–170 u/ha	140–290 u/ha
3.1–3.7 hr/unit	40–100 u/ha	80–210 u/ha	175–355 u/ha
2.7–3.0 hr/unit	50–110 u/hr	100–240 u/ha	215–405 u/ha

Town Centres - density assumptions

PTAL	0 to 1	2 to 3	4 to 6
Suburban	-	-	-
Urban	95	170	260
Central	110	240	405

Town centre density estimates

Setting	Public Transport Accessibility Level (PTAL)		
	0 to 1	2 to 3	4 to 6
Suburban	150–200 hr/ha	150–250 hr/ha	200–350 hr/ha
3.8–4.6 hr/unit	35–55 u/ha	35–65 u/ha	45–90 u/ha
3.1–3.7 hr/unit	40–65 u/ha	40–80 u/ha	55–115 u/ha
2.7–3.0 hr/unit	50–75 u/ha	50–95 u/ha	70–130 u/ha
Urban	**150–250 hr/ha**	**200–450 hr/ha**	**200–700 hr/ha**
3.8 –4.6 hr/unit	35–65 u/ha	45–120 u/ha	45–185 u/ha
3.1–3.7 hr/unit	40–80 u/ha	55–145 u/ha	55–225 u/ha
2.7–3.0 hr/unit	50–95 u/ha	70–170 u/ha	70–260 u/ha
Central	**150-300 hr/ha**	**300–650 hr/ha**	**650–1100 hr/ha**
3.8–4.6 hr/unit	35–80 u/ha	65–170 u/ha	140–290 u/ha
3.1–3.7 hr/unit	40–100 u/ha	80–210 u/ha	175–355 u/ha
2.7–3.0 hr/unit	50–110 u/hr	100–240 u/ha	215–405 u/ha

Opportunity areas - density assumptions

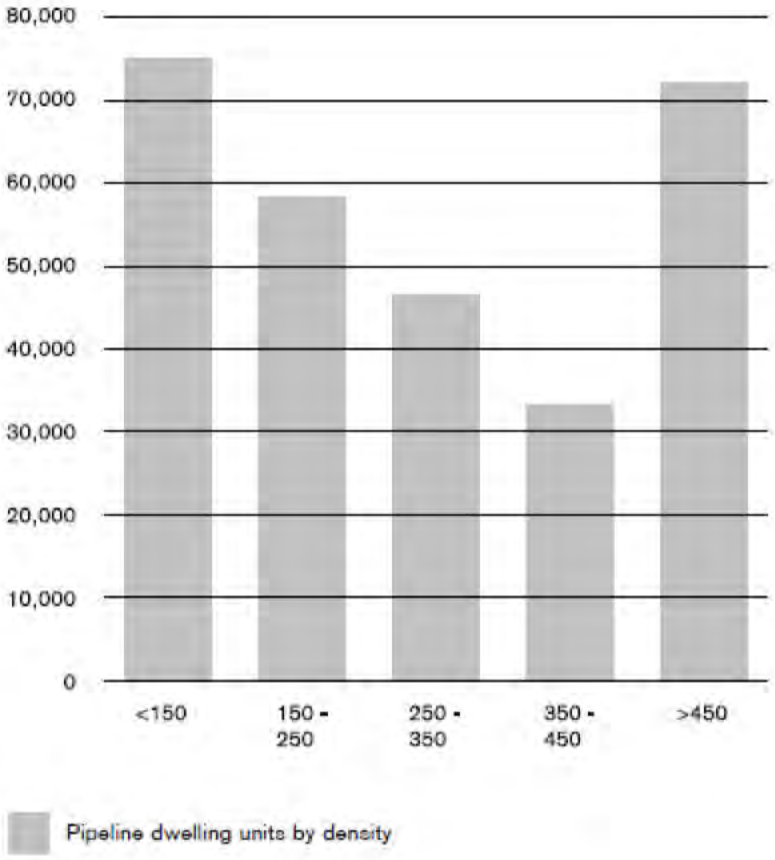
PTAL	0 to 1	2 to 3	4 to 6
Suburban (becomes urban)	80	145	225
Urban (becomes central)	100	210	355
Central (becomes central +)	**250**	**350**	**450**

Densities being delivered in opportunity areas

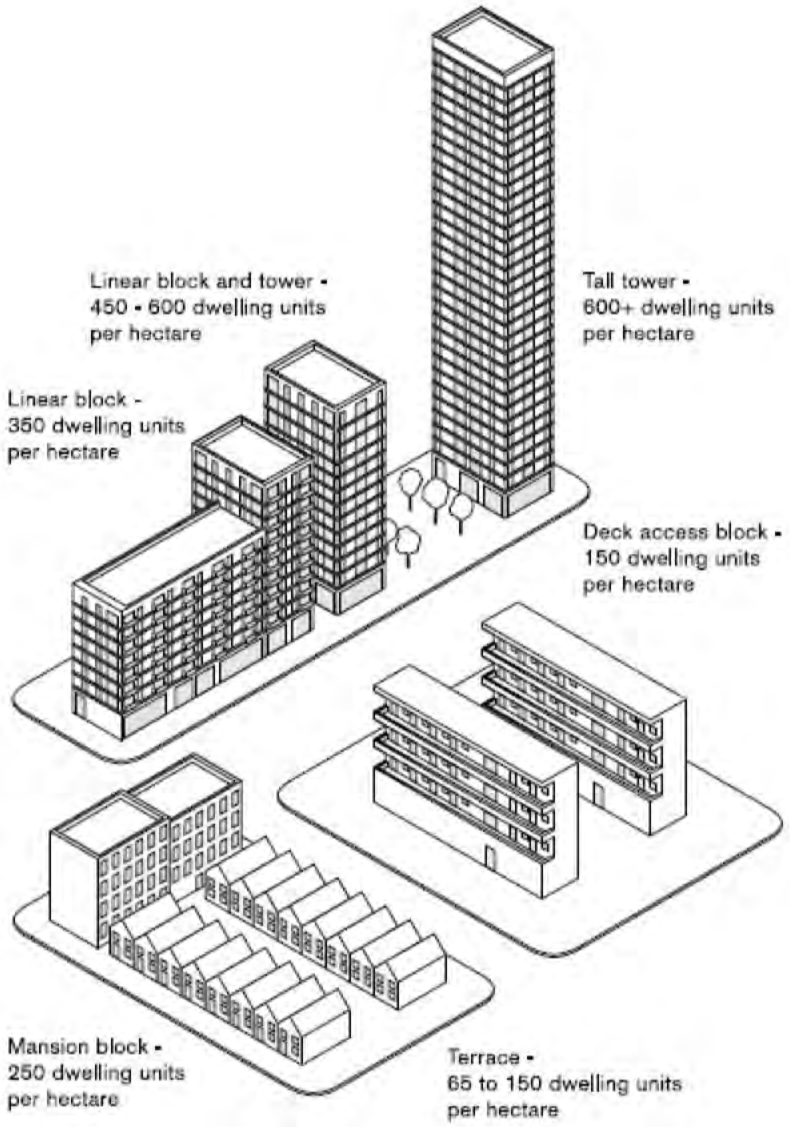
Table 4 - Average density trends in opportunity areas - approved large sites (0.25 hectares and more) between 2004-2016

PTAL	0 - 1	2 - 3	4 - 6
Suburban	83	204	337
Urban	150	226	329
Central	406	363	453

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



Density typically corresponds with building typologies.

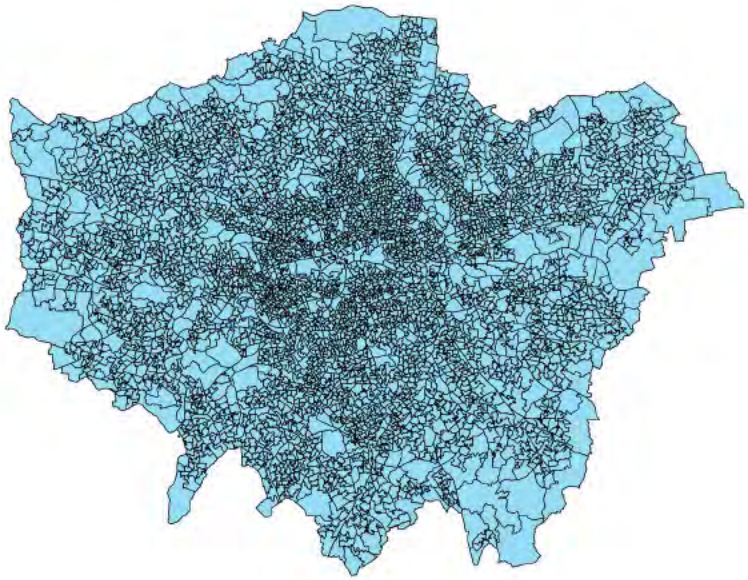


Borough ability to determine site densities

- Boroughs able to adjustment site density where necessary
- Normally only when a more detailed site appraisal or masterplanning exercise has been undertaken
- Reductions in site density will be scrutinised – clear and robust reasons why density would need to be lower than estimate – eg heritage asset
- Previous 2013 SHLAA study – one third of all sites density was changed (70% decreased, 30% increased)
- Character setting changes – fixed approach, based on the updated character map
- OAPF capacity studies – alternative density estimates can be used

GLA 2016 Density review

- 5 research projects - informing Full Review of the London Plan
- Can be accessed here: https://www.london.gov.uk/what-we-do/planning/london-plan/london-plan-technical-and-research-reports
- LSE research - measuring density & implementing density policy (Project 1)
  - estimates average densities for LSOAs
  - based on 6 factors and their impact on completed densities (2008-15) – *PTAL, character, job accessibility, centrality, population density*
  - Includes modelled uplift in opportunity areas, intensification areas, town centres,
  - The model is still in development
  - May be used to benchmark SHLAA findings



Potential sites - probability based approach

Planning policy constraints	• Designated open space • Industrial land • Wharves
Environmental Constraints	• Flood Risk • Aircraft Noise pollution • Health and Safety Executive consultation zones • Pylons
Delivery constraints	• Land ownership • Local Infrastructure • Contamination

How does this work?

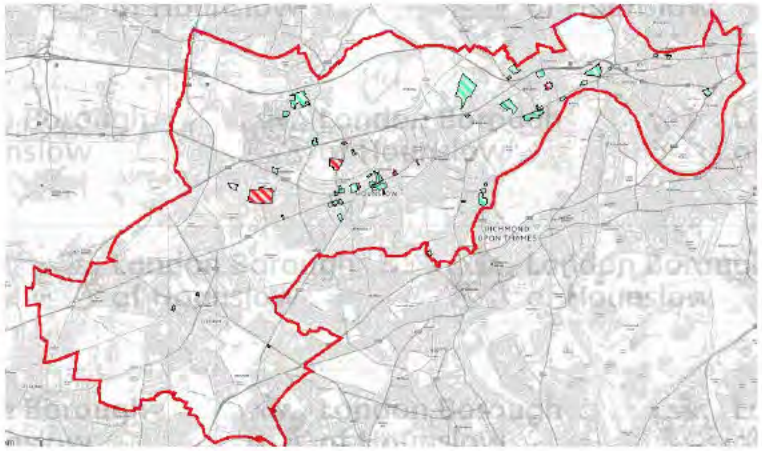
The system applies the lowest probability score (%) following an assessment of:

- planning policy constraints
- environmental constraints
- delivery constraints

Illustrative example:

Allocated sites

- Site capacity will be based on notional capacity
  - net residential site area x density estimate
  - Taking into account land uses
- Constraints will be recorded in system and this will impact default phasing assumptions
- Reflects planning status and higher likelihood of delivery
- Ensures that potential housing capacity is not under-estimated
- Applies to sites in DPDs/ SPD



Planning policy constraints

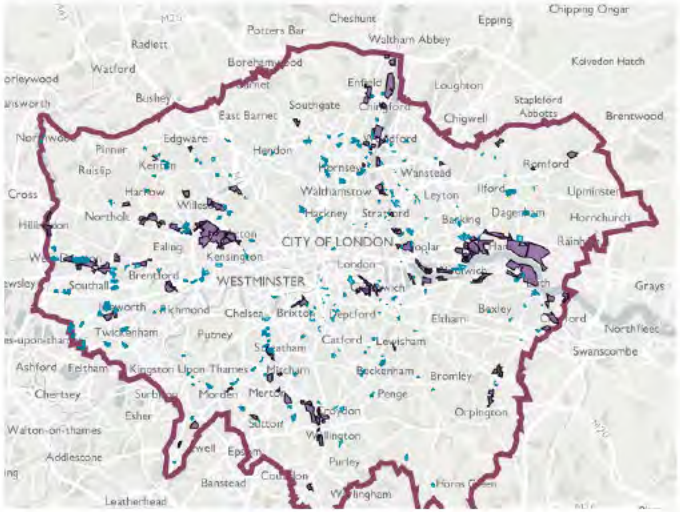
Constraint	Default probability assumption
Designated open space	0% probability - unsuitable
Strategic industrial location (SIL)	0% probability – unsuitable ✞
Safeguarded Wharves	0% probability - unsuitable
Locally Significant Industrial Sites (LSIS) designated in a Local Plan	Restricted - 40% probability
	Limited - 50% probability
	Managed - 60% probability
Non-designated industrial site protected by Local Plan policies	Restricted - 45% probability
	Limited - 55% probability
	Managed - 60% probability

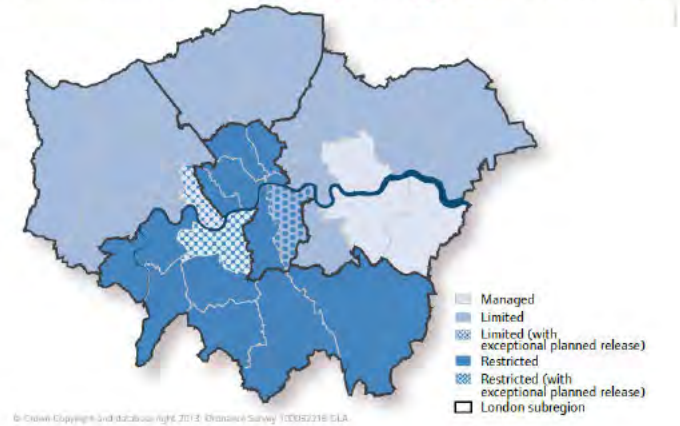
✞ All sites earmarked for release in the industrial supply study should be assessed as potential sites as a starting point. This overall quantum of industrial release may need to be revisited at a later date following the demand study.

‡ Borough classifications for industrial land release – restricted, limited or managed – will be updated once the GLA Industrial Demand Study is finalised.

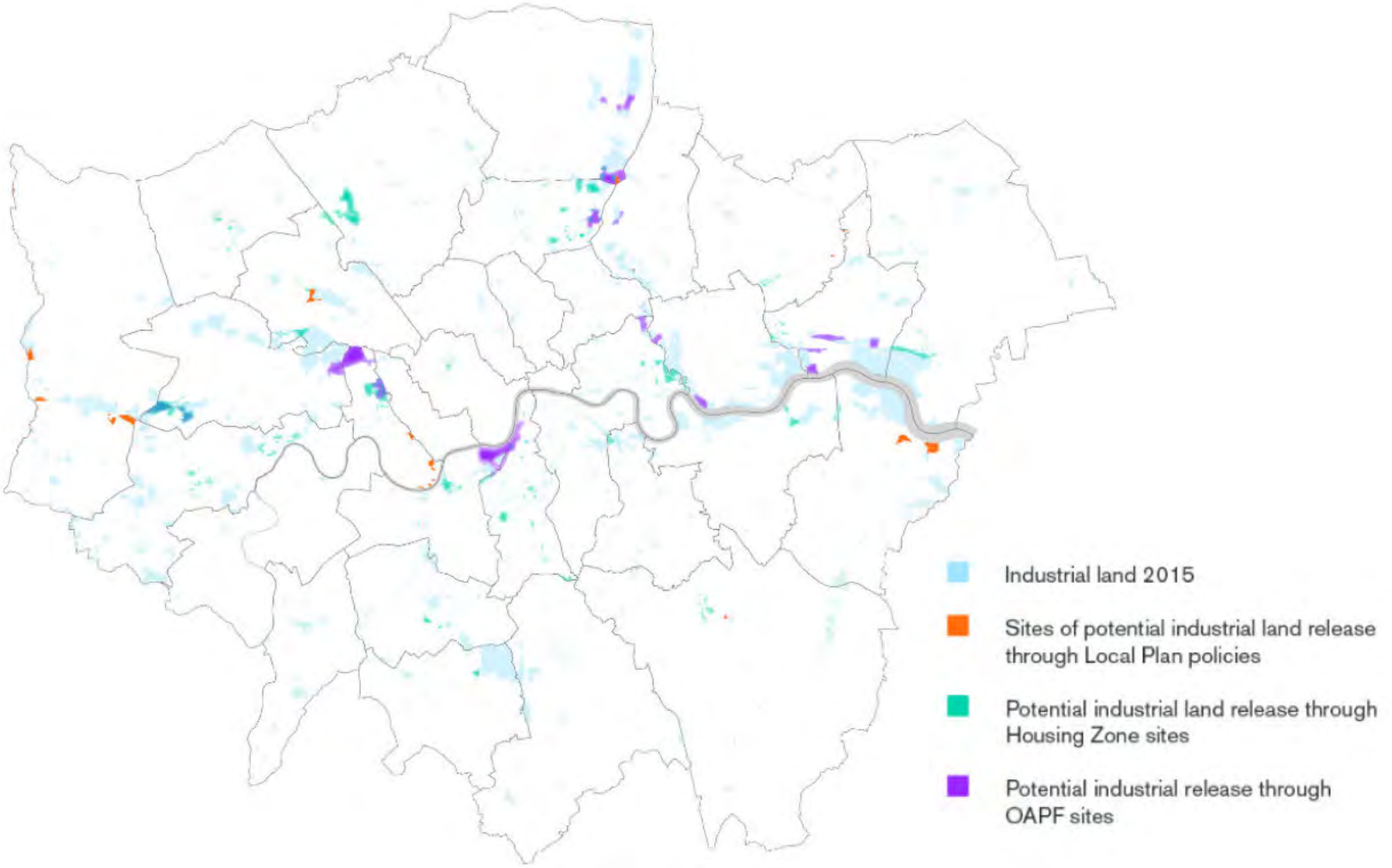
Based on GIS data

Boroughs can amend default probability assumptions



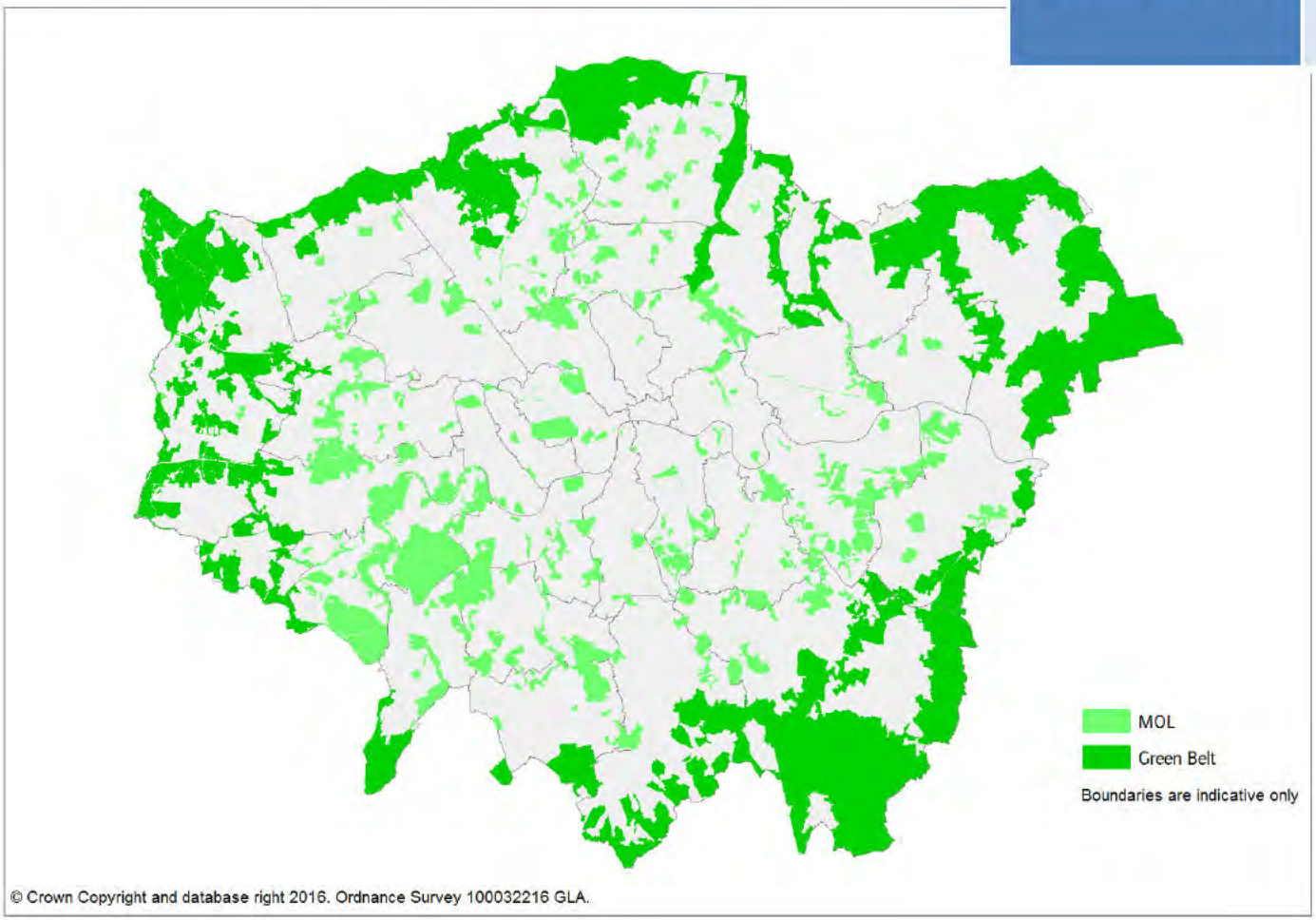


Industrial land earmarked for release



Designated open space

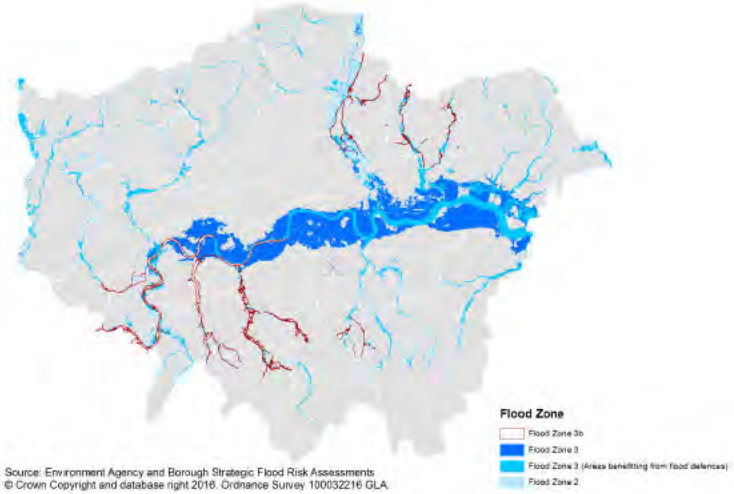
Default probability assumption	Automatically classified as 'unsuitable' 0% probability



Environmental constraints

Constraint	Categories	Impact on probability
Flood risk	Low - Areas in Zone 3 benefiting from flood defences	Reduces probability by 5%
	Medium - areas in Zone 3 not benefiting from flood defences	Reduces probability by 10%
	High - Zone 3b	Site considered unsuitable (0% probability)
Aircraft noise pollution	Low - below 63 Db	No impact on probability
	Medium - above 63 Db	Reduces probability by 10%
	High - above 69 Db	Site considered unsuitable (0% probability)
Pylons	Low - none present	No impact on probability
	Medium - site intersects with pylon	Reduces probability by 10%
Health and Safety Executive consultation zones	Low – No HSE Zone	No impact on probability
	Medium – Middle & Outer Zone	Reduces probability by 10%
	High – Inner Zone	Site considered unsuitable (0% probability) †

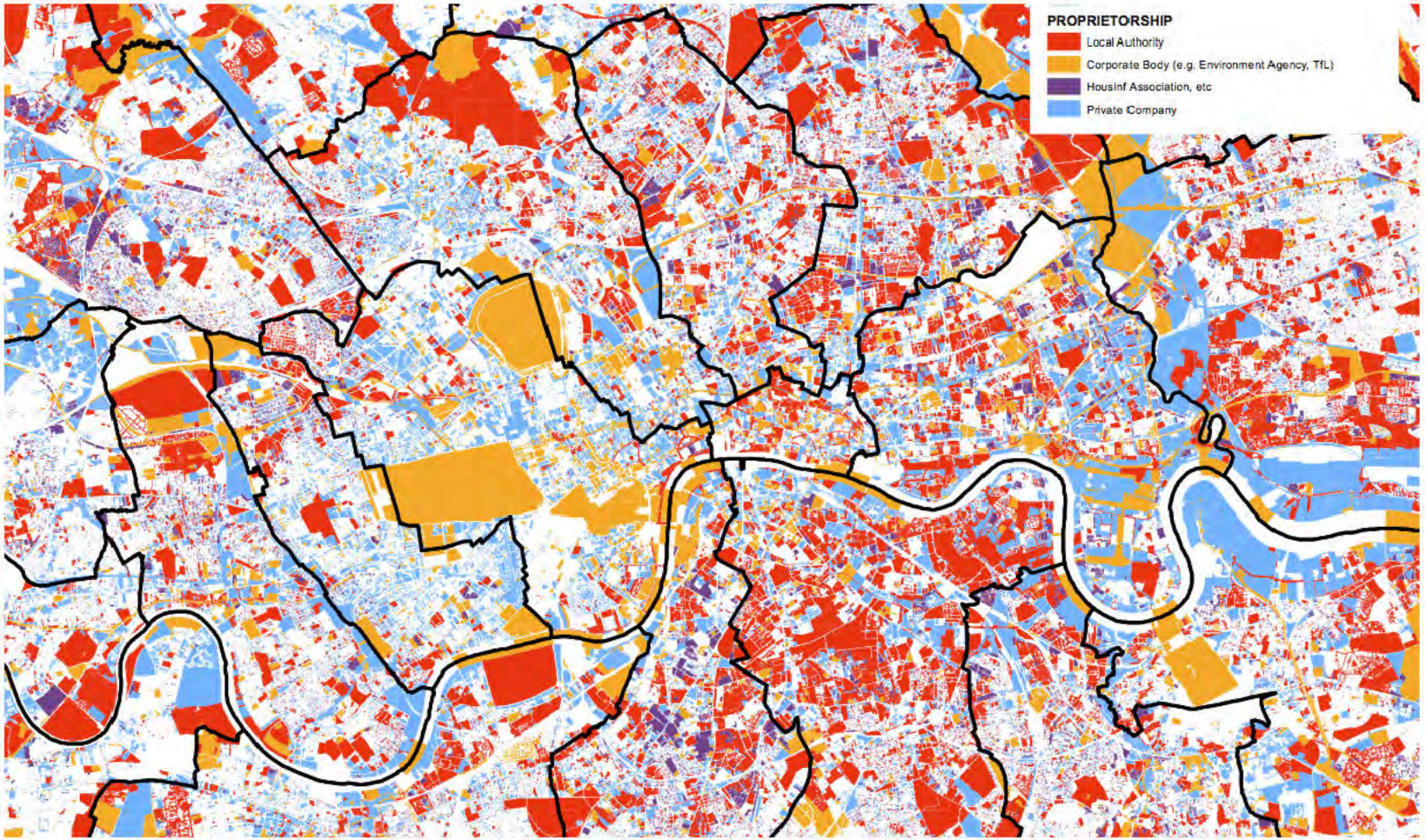
† Where Gas holder sites have been submitted through Call for sites by landowners these sites would not be considered unsuitable and should be assessed as potential sites. This effectively 'turns off' HSE constraints on these sites.



Delivery constraints

Constraint	Categories	Impact on probability
Land ownership	Low	No impact on probability
	Medium	Reduces probability by 10%
	High	Reduces probability by 20%
Local infrastructure	Low	No impact on probability
	Medium	Reduces probability by 10%
Contamination	Low	No impact on probability
	Medium	Reduces probability by 10%

Land ownership



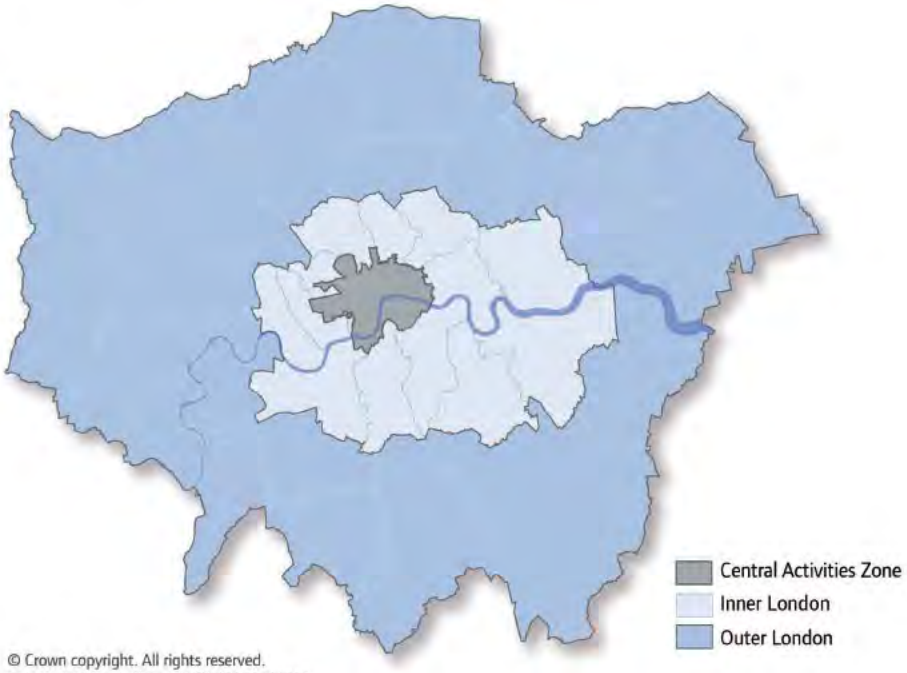
Overcoming constraints

- National Planning Practice Guidance - requires authorities to consider what actions would be needed to address or overcome constraints
- System presents potential options - selecting these options will ‘turn off’ constraints
- Examples - remediate land, de-designated land/ land-swaps, address fragmented ownership (CPO)
- Boroughs can also amend site boundaries as an alternative – this may be more appropriate, eg flood zone 3b, small overlap with open space, etc

Low probability classification

- Retail, leisure, office development completed before 2010 where there is a low probability of additional housing development
- Hospital or further education site with no plans for redevelopment
- Private/mixed tenure housing in multiple ownership and social housing estates
- Other reasons where necessary – scrutinised by GLA
- *Note - Primary and secondary schools removed*

Offices



Excluded:

- Recently completed offices (2010)
- Commercial core of the City & Canary Wharf
- High value business parks excluded – eg Chiswick, Bedfont Lakes

Low Probability:

- CAZ, core areas of City Fringe, Article 4 Directions, high value business parks – **5%** low probability
- Other locations – **10%** low probability

Excluded sites

- New build housing completions (since 2003)
- Recently completed development - office, retail, industry, leisure, etc (since 2010) – LDD information
- Primary & secondary schools
- Listed buildings / monuments
- Offices in core commercial zones in the City/ Canary Wharf and high value business parks
- Operational & safeguarded infrastructure (eg waste, transport, utilities)
- Major cultural, tourist venues

Default site phasing assumptions

- **Approvals started** - **phase 1** (2016 to 2019)
- **Approvals not started** - **phase 2** (2019 to 2024)
- **Potential / allocated sites that have a 100% probability** - **phase 2** (2019 to 2024)
- **Potential / allocated sites with probability greater or equal to 60%** (but less than 100%) - **phase 3** (2024 to 2029)
- **Potential / allocated sites with probability less than 60%** - **split between phases 3 and 4** (2024 to 2034)
- **Capacity on 'low probability' sites** - **split between phases 3, 4 and 5** (2024 to 2041)

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
2016 - 2019	2019 - 2024	2024 - 2029	2029 - 2034	2034 - 41

Boroughs to review site phasing assumptions

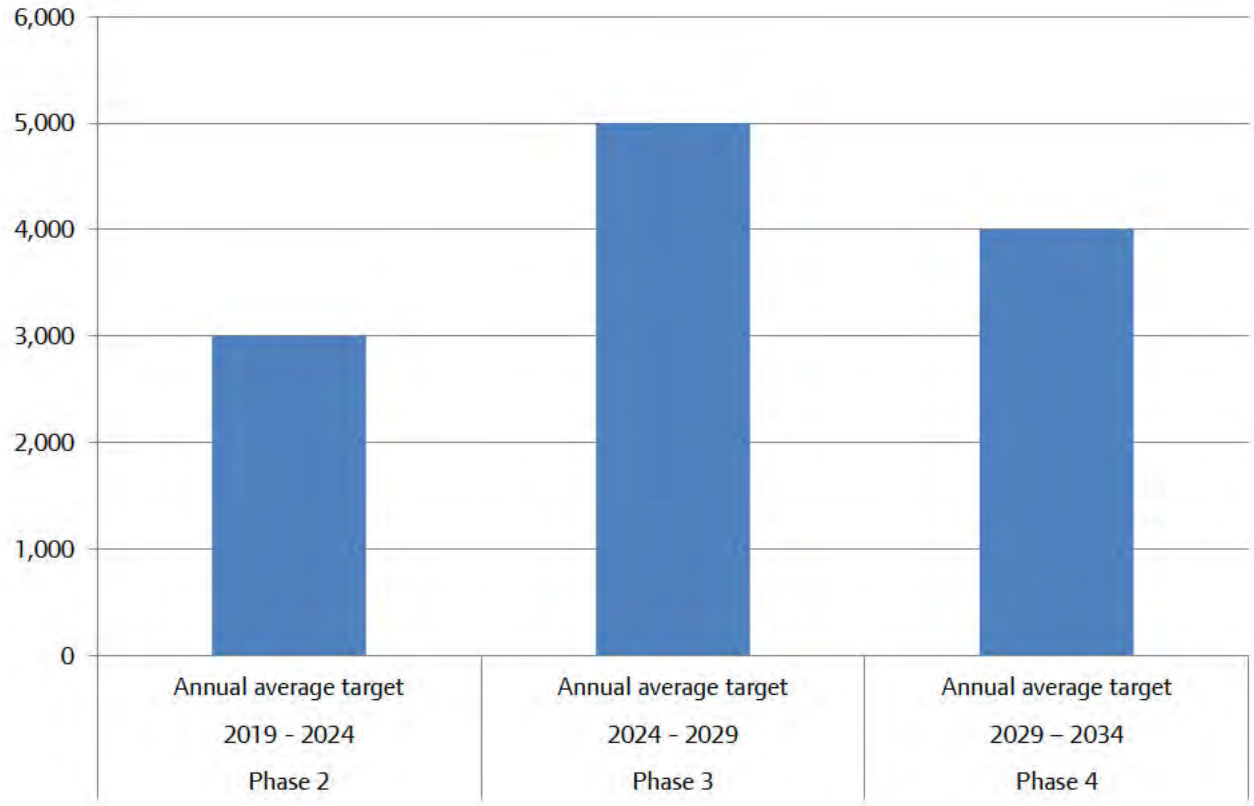
- System phasing assumptions should be considered a starting point
- Boroughs are advised to review and amend phasing where necessary drawing on local knowledge – to reflect likely lead-in times & build out rates
- Maximum caps (below) for individual sites - to ensure housing is spread by phasing period realistically to reflect likely build out rates on very large sites.

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
2,000	3,000	3,000	3,000	4,000

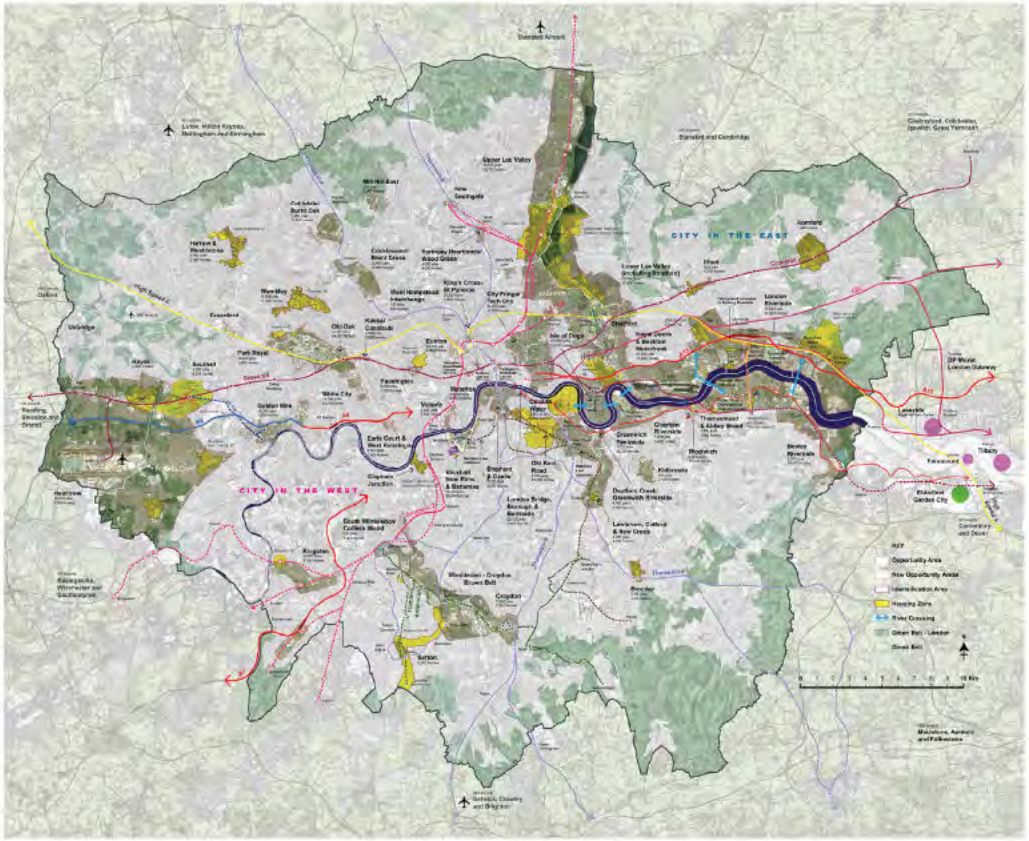
Housing targets

- Typically set as minimum 10 year targets, with annual monitoring targets
- SHLAA study to explore potential for:
  - for longer 15 year targets
  - average annual monitoring targets based on 5 year trajectory phases in SHLAA
- This seeks to:
  - Reflect phasing and ‘lumpy’ or delayed delivery on large sites
  - Respond to the Government’s proposed ‘delivery test’
  - Need for Plan targets to this to be tested in a fair and reasonable manner

Hypothetical example:



Emerging opportunity areas



- Greenford
- Hayes - already within Heathrow OA
- the Golden Mile/Great West Corridor
- Kingston – 3 areas
- Romford
- Wood Green / Haringey Heartlands
- Clapham Junction
- New Southgate
- Wimbledon – Croydon Brown Belt

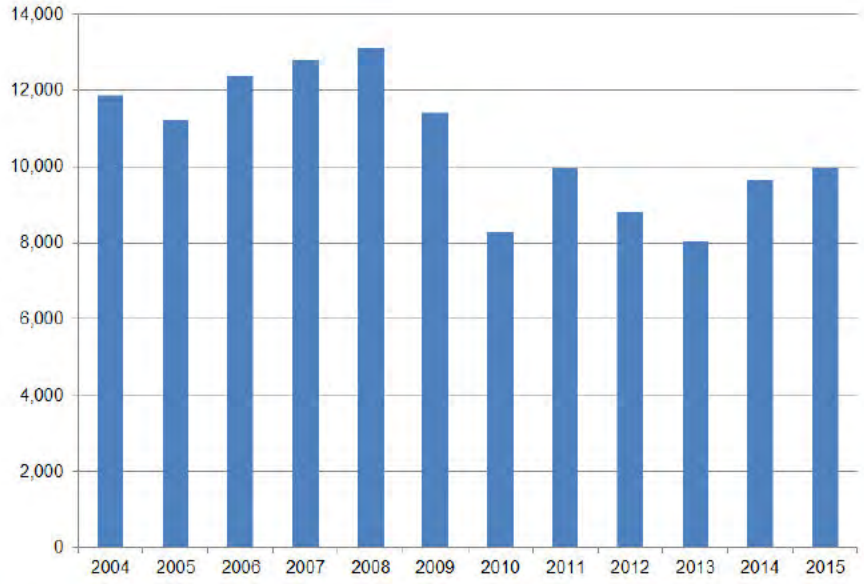
Transport infrastructure scenarios

Infrastructure that could unlock additional growth:

- Crossrail 2
- The Bakerloo Line extension (from Elephant & Castle to Lewisham)
- Crossrail 1 extension from Abbey Wood
- Metroisation of south London suburban rail network (improved suburban rail services)
- DLR extension to Thamesmead
- Further extension of the proposed Bakerloo Line (from Lewisham to Hayes)
- Sutton Tramlink Extension

Small sites

- Long term annual average trends in net conventional housing completions (2004 – 2015). Includes:
  - new build
  - change of use
  - Conversions
- Garden land
- Additional scenario testing of policy options:
  - Suburban intensification
  - Inner London intensification
  - Small sites registers / PiP
  - Methodology to follow



Town Centres & out of town retail

Town Centre Health Check data and indicators:

- Vacancy levels
- Surplus retail / commercial floorspace
- Heritage constraints
- Can feed into SHLAA site assessment process
- Scope for mixed use redevelopment
- Call for sites

Non-self contained housing

Existing pipeline of sites included in study:

- Student accommodation
- Shared living schemes (eg the Collective)
- Specialist housing for older people

Site capacity based on bedroom unit density

Vacant homes

- 0.6% of London's total stock
- Many boroughs below this benchmark
- Tested various options – see draft methodology
- SHLAA based targets would be minimal and only relevant in a small number of boroughs
- Based on Council Tax records
- Can be counted as new supply?
- Lumpy findings (+/-) impact monitoring targets

Local Authority Name	Vacant homes as a % of total stock (2015)
City of London	0.71%
Barking and Dagenham	0.28%
Barnet	0.86%
Bexley	0.41%
Brent	0.35%
Bromley	0.51%
Camden	1.12%
Croydon	0.67%
Ealing	0.51%
Enfield	0.66%
Greenwich	0.47%
Hackney	0.97%
Hammersmith and Fulham	0.31%
Haringey	0.80%
Harrow	0.11%
Havering	0.50%
Hillingdon	0.43%
Hounslow	0.41%
Islington	0.95%
Kensington and Chelsea	1.49%
Kingston upon Thames	0.27%
Lambeth	0.84%
Lewisham	0.59%
Merton	0.62%
Newham	1.21%
Redbridge	0.26%
Richmond upon Thames	0.44%
Southwark	0.72%
Sutton	0.68%
Tower Hamlets	0.60%
Waltham Forest	0.42%
Wandswor h	0.19%
Westminster	0.47%
TOTAL	**0.61%**

MAYOR OF LONDON

Consultation responses on the Draft SHLAA methodology:

By email - LondonSHLAA@london.gov.uk

By post - [redacted]
Greater London Authority
City Hall
The Queen's Walk, London SE1 2AA

Feedback & Questions