MAYOR OF LONDON

THE LONDON PLAN

THE SPATIAL DEVELOPMENT STRATEGY FOR GREATER LONDON

MARCH 2021

GG2 Making the best use of land

To create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:

A enable the development of brownfield land, particularly in Opportunity Areas, on surplus public sector land, and sites within and on the edge of town centres, as well as utilising small sites

B prioritise sites which are well-connected by existing or planned public transport

C proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling

D applying a design–led approach to determine the optimum development capacity of sites

E understand what is valued about existing places and use this as a catalyst for growth, renewal, and place-making, strengthening London's distinct and varied character

F protect and enhance London's open spaces, including the Green Belt, Metropolitan Open Land, designated nature conservation sites and local spaces, and promote the creation of new green infrastructure and urban greening, including aiming to secure net biodiversity gains where possible

G plan for good local walking, cycling and public transport connections to support a strategic target of 80 per cent of all journeys using sustainable travel, enabling car-free lifestyles that allow an efficient use of land, as well as using new and enhanced public transport links to unlock growth

H maximise opportunities to use infrastructure assets for more than one purpose, to make the best use of land and support efficient maintenance.

Creating a healthy city

1.3.1 The mental and physical health of Londoners is, to a large extent, determined by the environment in which they live. Transport, housing, education, income, working conditions, unemployment, air quality, green space, climate change and social and community networks can have a greater influence on health than healthcare provision or genetics. Many of these determinants of health can be shaped by the planning system, and local authorities are accordingly responsible for planning and public health.

1.3.2 As set out in the Mayor's Health Inequalities Strategy, the scale of London's health inequalities is great and the need to reduce them is urgent. Healthy life expectancy is lower in more deprived areas, and the differences between parts of London is stark – more than 15 years for men and almost 19 years for women. London's ongoing growth provides an opportunity to reduce these inequalities. Delivering Good Growth will involve prioritising health in all of London's planning decisions, including through design that supports health outcomes, and the assessment and mitigation of any potential adverse impacts of development proposals on health and health inequality.

1.3.3 The causes of London's health problems are wide-ranging. Many of London's major health problems are related to inactivity. Currently only 34 per cent of Londoners report doing the 20 minutes of active travel each day that can help them to stay healthy, but good planning can help them to build this into their daily routine. Access to green and open spaces, including waterways, can improve health, but access and quality varies widely across the city. Excessive housing costs or living in a home that is damp, too hot or too cold can have serious health impacts. A healthy food environment and access to healthy food is vital for good health. Good planning can help address all these issues.

1.3.4 The Healthy Streets Approach outlined in this plan puts improving health and reducing health inequalities at the heart of planning London's public space. It will tackle London's inactivity crisis, improve air quality and reduce the other health impacts of living in a car-dominated city by planning street networks that work well for people on foot and on bikes, and providing public transport networks that are attractive alternatives to car use. It will also ensure that streets become more social spaces.

1.3.5 The social and environmental causes of ill-health are numerous and complex, and the people who are most affected by London's health inequalities tend also to be affected by other forms of inequality. Creating a healthy city with reduced health inequalities will make London fairer for everyone. The Mayor plays a pivotal role in bringing together a diverse range of stakeholders from service providers, boroughs, communities and the private sector in order to provide

a more integrated approach to promoting a healthy city and reducing health inequalities. The Mayor will co-ordinate investment and focus regeneration initiatives in those parts of London most affected by inequalities, including health inequalities.

GG3 Creating a healthy city

To improve Londoners' health and reduce health inequalities, those involved in planning and development must:

A ensure that the wider determinants of health are addressed in an integrated and co-ordinated way, taking a systematic approach to improving the mental and physical health of all Londoners and reducing health inequalities

B promote more active and healthy lives for all Londoners and enable them to make healthy choices

C use the Healthy Streets Approach to prioritise health in all planning decisions

D assess the potential impacts of development proposals and Development Plans on the mental and physical health and wellbeing of communities, in order to mitigate any potential negative impacts, maximise potential positive impacts, and help reduce health inequalities, for example through the use of Health Impact Assessments

E plan for appropriate health and care infrastructure to address the needs of London's changing and growing population

F seek to improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution

G plan for improved access to and quality of green spaces, the provision of new green infrastructure, and spaces for play, recreation and sports

H ensure that new buildings are well-insulated and sufficiently ventilated to avoid the health problems associated with damp, heat and cold

I seek to create a healthy food environment, increasing the availability of healthy food and restricting unhealthy options.

GG4 Delivering the homes Londoners need

To create a housing market that works better for all Londoners, those involved in planning and development must:

A ensure that more homes are delivered

B support the delivery of the strategic target of 50 per cent of all new homes being genuinely affordable

C create mixed and inclusive communities, with good quality homes that meet high standards of design and provide for identified needs, including for specialist housing

D identify and allocate a range of sites to deliver housing locally, supporting skilled precision-manufacturing that can increase the rate of building, and planning for all necessary supporting infrastructure from the outset

E establish ambitious and achievable build-out rates at the planning stage, incentivising build-out milestones to help ensure that homes are built quickly and to reduce the likelihood of permissions being sought to sell land on at a higher value.

Growing a good economy

1.5.1 London is the engine of the UK economy, accounting for more than a fifth of the country's economic output. Its labour market, housing market and transport links are interconnected with the Wider South East city region, which shapes the development of the whole of the UK. Together, London and the Wider South East contribute a full half of the country's output. London has unique strengths in specialist fields like finance, business services, technology, creative industries and law, as well as attracting tourists from around the world, providing a gateway to the rest of the UK. The wealth this generates is essential to keeping the whole country functioning, but the benefits of economic success are not shared evenly within London itself.

1.5.2 The things that make London's economy so strong are the same things that make London an attractive and exciting place to live, work and visit. London's ethos of tolerance and respect, its rich cultural and historic assets, the quality of its streets and public places, its spirit of creativity and entrepreneurialism – these things attract businesses of all sizes and allow them to develop and thrive. The people who these businesses employ need strong communities, good public transport connections, pleasant environments that promote good health, access to shops and local services, and good quality, affordable homes in places they want to live. The continuing success of London's economy is reliant upon making the city work better for everyone.

1.5.3 Projected growth towards 6.9 million jobs by 2041 provides an opportunity to strengthen London's economy for the future, and doing so will depend on increasing diversification. The Central Activities Zone and Northern Isle of Dogs will remain vital to London's economic success, but growth in town centres across London will be equally important, alongside supporting local regeneration, investment in Opportunity Areas and enabling access to a wide range of jobs. Reasonably-priced, good quality employment space will be needed across London to make this happen.

1.5.4 The right infrastructure is also required to help businesses succeed across London. The digital economy, underpinned by world-class digital connectivity, data and digital services is of ever-increasing importance, improving processes, opening up new markets and allowing more flexible working. Convenient transport connections and street, rail and waterway networks that allow the efficient movement of goods and people are also vital, alongside the schools, healthcare facilities and other amenities that employees need to be healthy and productive.

1.5.5 Developing Londoners' skills will help people into work and enable businesses to thrive. By working closely with communities and businesses, London's world-

class higher education institutions can support growth and regeneration while addressing skills shortages.

1.5.6 Britain's exit from the European Union will put new pressures on London's economy, and the need to strengthen and diversify London's business base will become ever-more important. Doing so in a way that spreads London's success more equitably will be an important part of delivering Good Growth.

GG5 Growing a good economy

To conserve and enhance London's global economic competitiveness and ensure that economic success is shared amongst all Londoners, those involved in planning and development must:

A promote the strength and potential of the wider city region

B seek to ensure that London's economy diversifies and that the benefits of economic success are shared more equitably across London

C plan for sufficient employment and industrial space in the right locations to support economic development and regeneration

D ensure that sufficient high-quality and affordable housing, as well as physical and social infrastructure is provided to support London's growth

E ensure that London continues to provide leadership in innovation, research, policy and ideas, supporting its role as an international incubator and centre for learning

F promote and support London's rich heritage and cultural assets, and its role as a 24-hour city

G make the fullest use of London's existing and future public transport, walking and cycling network, as well as its network of town centres, to support agglomeration and economic activity

H recognise and promote the benefits of a transition to a low carbon circular economy to strengthen London's economic success.

Increasing efficiency and resilience

1.6.1 Successful cities must adapt to a changing world, and a focus on Good Growth provides an opportunity to become more efficient and resilient. A responsible city must limit its impact on climate change while adapting to the consequences of the environmental changes that human behaviour is already creating. Global cities also face other threats against which London must protect its residents and visitors, and proper strategic planning can help to make the city a safer place.

1.6.2 All cities must face up to the reality of climate change and the need to limit their future contribution to this major global problem. This London Plan will require developments to contribute towards London's ambitious target to become zero-carbon by 2050 by increasing energy efficiency, including through the use of smart technologies, and utilising low carbon energy sources. Creating a low carbon circular economy, in which the greatest possible value is extracted from resources before they become waste, is not only socially and environmentally responsible, but will save money and limit the likelihood of environmental threats affecting London's future.

1.6.3 These environmental threats are real and present, and London must be prepared for them. London's homes and infrastructure must be protected against the increasing likelihood of heatwaves, and developments must plan for a more integrated approach to water management, while minimising flood risk.

1.6.4 Equally significant in a global city is the threat of terrorism, and new forms of attack require new forms of defence. Large-scale fires also remain a possibility in London. As public places are made safer and existing housing is improved, these threats underline the importance of collaborative planning with London's police forces and public safety experts, the London Fire and Emergency Planning Authority.

1.6.5 Careful planning of strategic and local infrastructure in all its forms can make the city smarter, more efficient and more resilient, preparing it for all that the future may bring. This will require collaboration between the infrastructure industry and planning authorities to determine what is needed where in order to plan for London's future, using the framework established by the Mayor's Strategic Infrastructure Investment Plan.

1.6.6 Ensuring sufficient housing at the right price is also key to the city's resilience. The shortage of affordable housing in the capital is hindering the recruitment and retention of public service workers, including those crucial to the operation

of the emergency services, the health system and London's transport infrastructure.

1.6.7 Good planning can make London more resilient against the threats of the modern world, while improving the city's impact on the environment. The approaches set out in this Plan will ensure that London remains a safe and prosperous place to live for many decades to come.

GG6 Increasing efficiency and resilience

To help London become a more efficient and resilient city, those involved in planning and development must:

A seek to improve energy efficiency and support the move towards a low carbon circular economy, contributing towards London becoming a zero-carbon city by 2050

B ensure buildings and infrastructure are designed to adapt to a changing climate, making efficient use of water, reducing impacts from natural hazards like flooding and heatwaves, while mitigating and avoiding contributing to the urban heat island effect

C create a safe and secure environment which is resilient the impact of emergencies including fire and terrorism

D take an integrated and smart approach to the delivery of strategic and local infrastructure by ensuring that public, private, community and voluntary sectors plan and work together.

Strategic Infrastructure Priorities

1. East West Rail and new Expressway road link (Oxford - Cambridge)
2. North Down Rail Link (Gatwick - Reading) including extension to Oxford
3. A27 / M27 / A259 and rail corridor (Dover - Southampton)
4. West Anglia Mainline, Crossrail 2 North (London - Stansted - Cambridge - Peterborough) and M11
5. Great Eastern Mainline (London - Ipswich - Norwich) and A12
6. Essex Thameside, A217 and A13 corridor
7. Thames Gateway Kent : Elizabeth Line Extension and HS1 (London - North Kent - Channel Tunnel)
8. Lower Thames Crossing
9. Brighton Mainline (London - Gatwick - Brighton)
10. South West Mainline, Crossrail 2 South West (London - Surrey / Southern Rail Access to Heathrow) and A3
11. Great Western Mainline (London - Reading / Western Rail Access to Heathrow)
12. Midlands and West Coast Mainline (London - Luton - Bedford / Milton Keynes)
13. Felixstowe - Nuneaton / Midlands and A14

Policy SD4 The Central Activities Zone (CAZ)

A The unique international, national and London-wide roles of the CAZ, based on an agglomeration and rich mix of strategic functions and local uses, should be promoted and enhanced.

B The nationally and internationally significant office functions of the CAZ should be supported and enhanced by all stakeholders, including the intensification and provision of sufficient space to meet demand for a range of types and sizes of occupier and rental values.

C The distinct environment and heritage of the CAZ should be sustained and enhanced.

D Taking account of the dense nature of the CAZ, practical measures should be taken to improve air quality, using an air quality positive approach where possible (Policy SI 1 Improving air quality) and to address issues related to climate change and the urban heat island effect.

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E The unique concentration and diversity of cultural, arts, entertainment, night-time economy and tourism functions should be promoted and enhanced.

F The vitality, viability, adaptation and diversification of the international shopping and leisure destinations of the West End (including Oxford Street, Regent Street, Bond Street and the wider West End Retail and Leisure Special Policy Area) and Knightsbridge together with other CAZ retail clusters including locally-oriented retail and related uses should be supported.

G The CAZ as a centre of excellence and specialist clusters including functions of state, health, law, education, creative and cultural activities, and other more local Special Policy Areas should be supported and promoted.

H The attractiveness and inclusiveness of the CAZ to residents, visitors and businesses should be enhanced, including through public realm improvements and the reduction of traffic dominance, as part of the Healthy Streets Approach (see Policy T2 Healthy Streets).

I Infrastructure to sustain and enhance the CAZ and its agglomeration of strategic functions including its public transport and digital connectivity and its potential to accommodate new development should be secured.

J The safety, security and resilience of the CAZ should be promoted working with businesses and communities.

K The quality and character of predominantly residential neighbourhoods, where more local uses predominate, should be conserved and enhanced.

L Development of social infrastructure that meets the distinct needs of the CAZ should be supported.

M Sufficient capacity for industry and logistics should be identified and protected, including last mile distribution, freight consolidation and other related service functions within or close to the CAZ and Northern Isle of Dogs to support the needs of businesses and activities within these areas.

N In Development Plans, boroughs should:

1) define the detailed boundaries of the CAZ, the Northern Isle of Dogs, town centres (including the International centres), CAZ retail clusters, Special Policy Areas and specialist clusters of strategic functions having regard to the CAZ Diagram shown in Figure 2.16

2) develop locally sensitive policies to meet this Plan's objectives for the CAZ

2.4.1 The CAZ is the vibrant heart and globally-iconic core of London. It is **one of the world's most attractive and competitive business locations**. It accommodates one third of London's jobs and generates almost 10 per cent of the UK's output. It contains the seat of national Government and is internationally renowned for its culture, night-time economy, tourism, shopping and heritage. It is also home to more than 230,000 residents.

2.4.2 The density, scale and mix of business functions and activities in the CAZ are unique and are underpinned by the connectivity provided by public transport, walking and cycling networks. This agglomeration results in exceptional levels of productivity, which is not replicated elsewhere in the UK, and provides national benefits. It **requires different or tailored approaches** to the application of national policy to address its distinct circumstances.

2.4.3 For the purposes of CAZ policies, the Northern Isle of Dogs (NIOD) is recognised as a CAZ '**satellite**'[9] **location** for world city office functions. Future potential reserve[10] locations for CAZ office functions are Stratford and Old Oak Common.

2.4.4 The **strategic functions** of the CAZ include, but are not necessarily limited to:

a. functions associated with the State, Government and Monarchy
b. diplomatic organisations (such as embassies and high commissions)
c. agglomerations of nationally and internationally significant offices and company headquarters connected with finance, business, professional bodies, associations and institutions
d. uses connected with science, technology, media, communications and cultural sectors of regional, national and international importance
e. centres of excellence for higher and further education and research
f. centres of medical excellence and associated specialist facilities
g. legal establishments of regional, national and international importance
h. arts, culture, leisure, entertainment and activities and areas of regional, national and international importance

9 The term 'satellite' is used to indicate that the NIOD is geographically separate from the CAZ but it is treated as part of the CAZ in London Plan policy.

10 These locations are not formally within the CAZ and are identified as future strategic reserves for nationally significant office functions in the event that future demand for office space exceeds development capacity in the CAZ. Specific policy directions for Stratford and Old Oak Common are contained within supporting text to Policy SD1 Opportunity Areas) and Annex 1 (Town Centre Network)

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i. retailing, including specialist outlets, of regional, national and international importance

j. tourism facilities including hotels and conference centres

k. specialist creative clusters including for example clothing, fashion, jewellery, printing, antiques, musical instruments, art and culture

l. transport facilities, especially for public transport of regional, national and international importance

m. places of worship and places of assembly of regional, national and international importance

n. use and enjoyment of the River Thames

o. heritage, built environment, the Royal Parks and other green and open spaces (public and private).

2.4.5 Development Plans should set out the appropriate balance between the various CAZ strategic functions in different parts of the CAZ having regard to local circumstances.

2.4.6 The CAZ contains housing, social infrastructure and community uses to address the needs of residents, visitors and workers. Whilst they are not strategic functions of the CAZ, these **locally orientated uses** play an important role in the character and function of the Zone as a vibrant mixed-use area, ensuring activity and vitality at different times of the day and week. New residential development should be complementary and not compromise the strategic functions of the CAZ.

2.4.7 The **City of London** and the **Northern Isle of Dogs** are nationally important locations for globally-oriented financial and business services. The **West End** is a vibrant mixed-use business location, an internationally-renowned shopping, cultural and visitor destination and home to several world-leading academic institutions as well as a significant residential population. The unique roles of these locations and their strategic contribution to the economy, culture and identity of the capital should be promoted and enhanced.

2.4.8 As a whole, the CAZ supports a nationally and internationally significant scale and **agglomeration of offices**, enabled by the hyper-connectivity of its public transport infrastructure. The CAZ has important clusters in areas such as tech, the creative industries and life sciences,[11] adding to its strengths in the business, professional and financial services sector, arts and culture, health, education and law. A supportive policy approach to the wide variety of business

[11] London Office Policy Review, Ramidus Consulting, 2017

space requirements, quality and range of rental values is essential to enable these sectors to flourish and for small and medium-sized enterprises to fulfil their economic potential alongside larger businesses.[12]

2.4.9 The distinct **environment and heritage** of the CAZ should be sustained and enhanced through development decisions, Local Plans and other initiatives[13] such as the transformation of the Oxford Street district (including pedestrianisation of Oxford Street itself). This should recognise both its strategic elements, including the River Thames, the Royal Parks, World Heritage Sites, Designated Views and unique concentration of heritage assets, as well as more local features including the public realm, smaller waterways and green and open spaces.

2.4.10 **Air quality** in the CAZ is particularly poor due to the intensity of the road network and land uses. The CAZ also experiences high levels of construction which results in dust and emissions from construction activities and equipment that adversely affect air quality. The Mayor is taking practical steps to improve air quality in the CAZ including the T-charge and stricter Ultra-Low Emission Zone which will impose charges on the most polluting vehicles.[14]

2.4.11 **Arts, culture, tourism and entertainment activities** are a defining feature of the vibrant and distinctive character of the CAZ with its varied mix of daytime, evening and night-time uses. Together they make a vital contribution to London's culture and heritage, ensuring the capital is an attractive place in which to live, work, visit and invest. The CAZ includes several areas that are rich in cultural activity including the West End, South Bank/Bankside/London Bridge, the Barbican, King's Cross and the South Kensington museums complex, along with more local clusters and cultural venues. It also contains the country's largest concentrations of night-time activity in Soho, Covent Garden and Shoreditch. These areas and functions should be recognised, nurtured and supported in line with CAZ Policy and other policies related to culture and supporting the evening and night-time economy. Policies on hotels and other serviced accommodation in the CAZ (and elsewhere) are set out in the Economy chapter of this Plan.

2.4.12 The CAZ contains a vibrant, successful and diverse retail offer at a scale and quality that makes it a **shopping destination** of global significance. It contains a range of unique centres and mixed-use clusters with a predominant retail

12 Small Offices and Mixed Use Development in the CAZ, Ramidus Consulting, 2015

13 Mayor's Environment Strategy 2018

14 Details on the TfL website: https://tfl.gov.uk/modes/driving/emissions-surcharge, https://tfl.gov.uk/modes/driving/ultra-low-emission-zone; See also the Mayor's Environment Strategy 2018

function which perform different roles in the wider London Plan town centre network (see Policy SD8 Town centre network) including:

a. International centres – The West End (including the primary retail functions of Oxford Street, Regent Street, Bond Street and the wider West End Retail and Leisure Special Policy Area) and Knightsbridge

b. The West End Retail and Leisure Special Policy Area (WERLSPA) – including Covent Garden and Soho, where retail should complement the strategic cultural, leisure, evening and night-time economy roles of these areas

c. CAZ retail clusters – significant mixed-use clusters with a predominant retail function and in terms of scale broadly comparable to Major or District centres in the London Plan town centre network (see Annex 1)

d. Locally identified CAZ retail centres – smaller clusters or parades of retail and related uses broadly comparable to local/neighbourhood centres in the London Plan town centre network and generally serving very localised areas

e. Specialist retail destinations / clusters – including for example Covent Garden, arcades, street markets, covered and specialist markets, niche retailing, and retail and related facilities that serve specific communities (see Policy E9 Retail, markets and hot food takeaways)

f. Other retail clusters including areas within the CAZ – defined in Local Plans as being appropriate for retail development and ancillary clusters of retail associated with public transport termini and stations.

2.4.13 Wider trends in consumer expenditure and the emergence of **multi-channel retailing** present both challenges and opportunities for retailing within the CAZ. Overall, the CAZ is projected to have demand for approximately 375,000 sqm of additional comparison goods retail floorspace over the period 2016-2041[15] (after the committed pipeline of retail development is taken into account). Within this context the vitality and viability of the international shopping centres and other CAZ retail clusters above should be enhanced, supporting their adaptation and diversification, along with improvements to the quality of the environment and public realm.

2.4.14 The CAZ contains several other important **specialist clusters of activity** which contribute towards the capital's international and national roles. These clusters contain significant concentrations of strategic functions of arts and culture, state, health, law and education and are represented spatially in the CAZ Diagram (Figure 2.16). Many of these clusters have developed organically over

15 Consumer Expenditure and Comparison Goods Retail Floorspace Need in London, Experian, 2017

time and the dynamic nature of the CAZ means that this process is continually evolving. It will be important to promote and sustain certain clusters such as Tech City; the arts, cultural and creative clusters in Soho/West End, Barbican/ Smithfield/ Farringdon, Shoreditch, South Kensington museums complex, King's Cross, Angel and London Bridge/Southbank; and the centres of medical excellence and life sciences research clusters around the Euston Road including the University College Hospital, the Wellcome Trust and the Francis Crick Institute (and on the CAZ fringe[16] at Whitechapel and White City).

2.4.15 **Special Policy Areas** are supported, particularly where development pressures and market conditions could lead to the loss of valued specialist clusters of uses or functions identified as having particular significance to London's unique identity, economic function or cultural heritage. Examples include St James's (art and antiques), Savile Row (bespoke tailoring), Denmark Street (musical instrument retail) and Hatton Garden (jewellery). Given the operation of the Use Classes Order and permitted development rights, Special Policy Areas often require the collaboration of landowners to achieve their objectives.

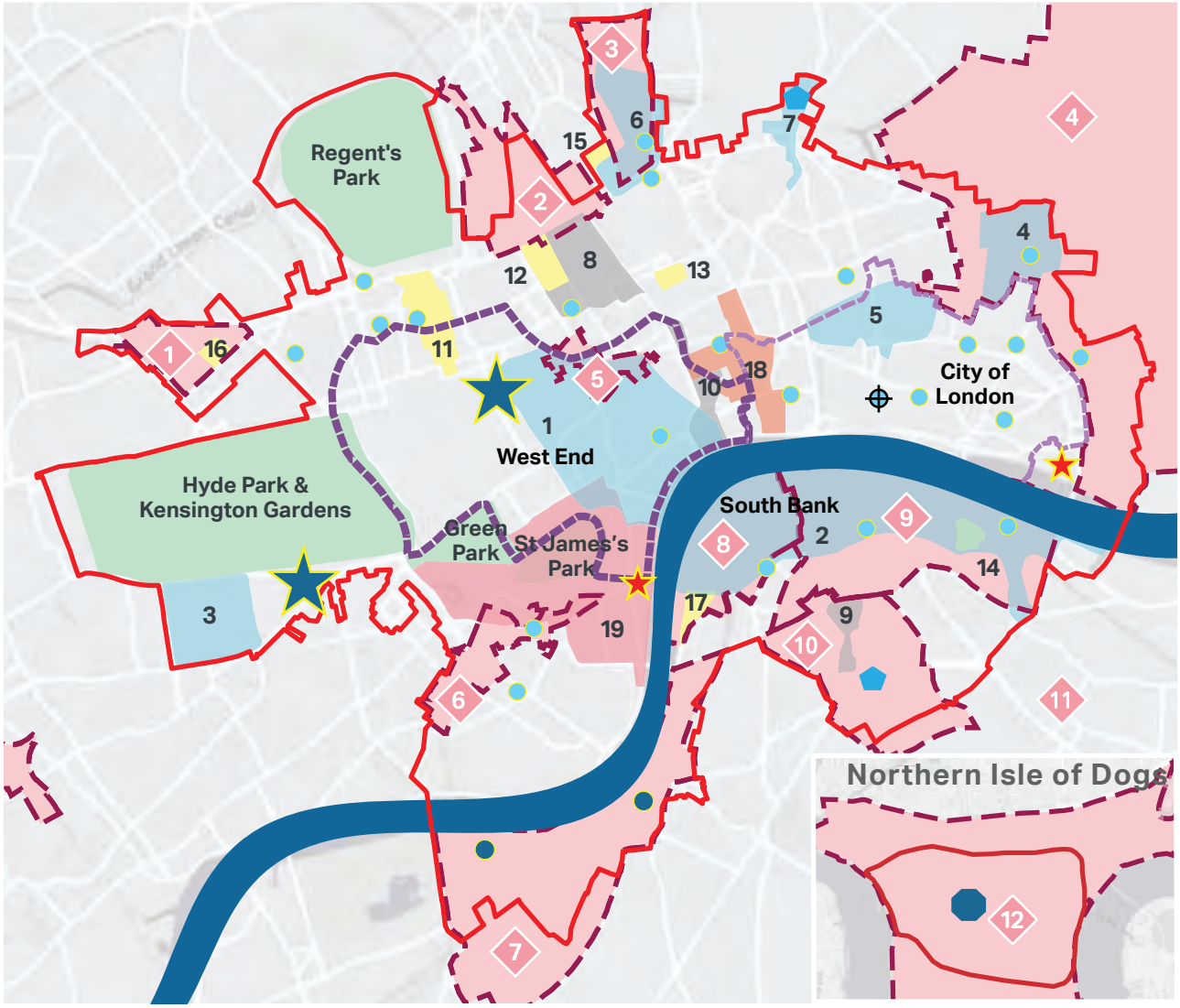
2.4.16 The CAZ is one of the most connected places in the world. Crossrail and the Thameslink programme will significantly increase the number of people within 45 minutes' travel time of central London, improving access to the labour market and the competitiveness of businesses. Further investment in strategic **transport infrastructure** and capacity improvements are necessary to support the growth and success of the CAZ, in particular Crossrail 2.

2.4.17 **Digital connectivity** and associated infrastructure is a key consideration in the CAZ where densities of commercial development in particular are high. Where necessary, development proposals should seek to aggregate demand in areas not currently served by high-speed connectivity and liaise jointly with providers to ensure that infrastructure requirements can be planned and delivered appropriately (see Policy SI 6 Digital connectivity infrastructure).

2.4.18 Local Plans and development proposals should respond to issues related to climate change taking into account the distinct circumstances of the CAZ including the **urban heat island effect** (whereby the CAZ suffers from higher local temperatures than surrounding parts of London) and its vulnerability to **flooding** due to low-lying land and the high proportion of impermeable surfaces.

16 The CAZ fringe refers to areas that have a functional relationship with the CAZ and lie within reasonable proximity to the CAZ but do not lie within the Zone itself

Figure 2.16 - CAZ Diagram



The Central Activities Zone and the Northern Isle of Dogs

- CAZ and NIOD
- St Paul's Cathedral
- World Heritage Site
- Royal Parks
- City of London
- West End
- River Thames
- Opportunity Area

Specialist Clusters

- Academic
- Arts, culture and entertainment
- Health
- Legal
- State

Source: GLA Planning

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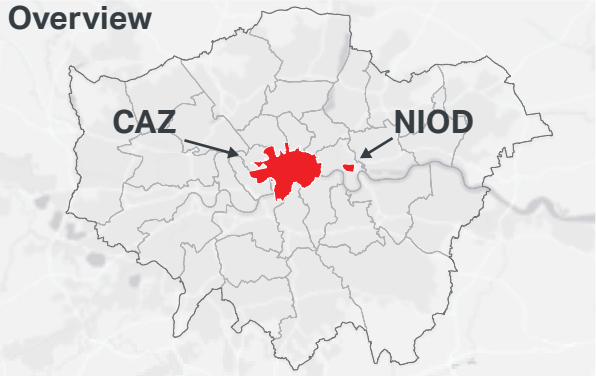
Retail Clusters and Town Centres

- International
- Metropolitan
- Major
- CAZ retail cluster
- Potential CAZ retail cluster



Specialist Clusters

1. West End (including Soho / Covent Garden)
2. South Bank, Bankside and London Bridge
3. Royal Albert Hall / South Kensington Museums
4. Shoreditch
5. Barbican / Smithfield / Farringdon
6. King's Cross
7. Angel / Sadler's Wells
8. University College London / University of London
9. Southbank University
10. LSE / King's College London
11. Harley Street
12. University College Hospital
13. Great Ormond Street Hospital
14. King's College London Guy's Campus
15. Francis Crick Institute
16. St Mary's Hospital cluster
17. St Thomas' Hospital
18. Temple, Royal Courts of Justice, Inns of Court
19. Royal Palaces, Palace of Westminster and Whitehall

Opportunity Areas

1. Paddington
2. Euston
3. King's Cross
4. City Fringe / Tech City
5. Tottenham Court Road
6. Victoria
7. Vauxhall, Nine Elms and Battersea
8. Waterloo
9. London Bridge Bankside
10. Elephant and Castle
11. Old Kent Road
12. Isle of Dogs

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2.4.19 The quality and character of the CAZ's **predominantly residential neighbourhoods** should be conserved and enhanced. This should ensure a variety of housing suitable to the needs of diverse communities, including affordable housing, whilst ensuring that development does not compromise strategic CAZ functions. Boroughs should also consider **social infrastructure** demands generated by residents, workers and visitors in the CAZ when undertaking social infrastructure need assessments.

2.4.20 In the high-value land market within the CAZ there is very limited **industrial and logistics capacity**. Differentials between industrial and non-industrial land values in the CAZ boroughs put immense pressure on sites in industrial use for conversion to non-industrial uses.[17] In Development Plans and development decisions, boroughs (particularly but not exclusively those in CAZ and inner London) should take into account the supply and demand for industrial and related uses providing essential functions and services to the CAZ. These functions include: sustainable distribution and logistics; 'just-in-time' servicing such as food service activities, printing, administrative and support services, office supplies, repair and maintenance; construction; waste management and recycling; and land to support transport functions (see also Policy E4 Land for industry, logistics and services to support London's economic function, Policy E5 Strategic Industrial Locations (SIL) and Policy E6 Locally Significant Industrial Sites).

Policy SD5 Offices, other strategic functions and residential development in the CAZ

A New residential development should not compromise the strategic functions of the CAZ.

B Residential development is not appropriate in defined parts of the City of London and Northern Isle of Dogs (areas to be identified by boroughs in Development Plans).

C Offices and other CAZ strategic functions are to be given greater weight relative to new residential development in all other areas of the CAZ except:

17 London Industrial Land Supply and Economy Study, AECOM, 2016; London Industrial Land Demand Study, CAG Consultants, 2017

1) the Vauxhall, Nine Elms, Battersea and Elephant & Castle Opportunity Areas, where offices and other CAZ strategic functions are given equal weight relative to new residential; and

2) wholly residential streets or predominantly residential neighbourhoods (with exceptions in appropriate circumstances – for example clusters of specialist CAZ strategic functions, Special Policy Areas and CAZ retail clusters).

D In Development Plans, boroughs should develop local policies for the areas in parts B and C above and identify the areas in Part C.

E The Mayor will work with boroughs and support them to introduce Article 4 Directions to remove office to residential permitted development rights across the whole of the CAZ and the Northern Isle of Dogs (and those parts of Tech City and Kensington & Chelsea lying outside the CAZ).

F In areas where offices and other CAZ strategic functions are given greater or equal weight relative to new residential development (as defined in Part C), mixed-use office/residential proposals should be supported where there is an equivalent or net increase in office floorspace.

G Residential or mixed-use development proposals should not lead to a net loss of office floorspace in any part of the CAZ unless there is no reasonable and demonstrable prospect of the site being used for offices. To achieve this, alternative provision of equivalent or net additional office space can be made (including through swaps and credits – see Part H below). This should be within the CAZ and near the development.

H Local approaches to mixed-use development of offices with housing should sustain strategically-important clusters of commercial activities within the CAZ and consider the potential to use land use swaps, credits and off-site contributions.

2.5.1 The CAZ is an **internationally and nationally significant office location**, complemented by the Northern Isle of Dogs and Tech City.

2.5.2 Table 6.1 indicates that the CAZ and the Northern Isle of Dogs are projected to accommodate more than 367,000 additional office jobs and a net increase of 3.5 million sqm (GIA) of office floorspace over the period 2016-2041,[18] an average of 140,000 sqm per annum. The **provision of a range of office floorspace** in

[18] London Office Policy Review, Ramidus Consulting, 2017

terms of size, quality and cost should be supported through a combination of intensification, redevelopment and refurbishment whilst ensuring a suitable supply of secondary stock, which provides relatively affordable lower-cost market provision of business space (see Policy E2 Providing suitable business space and Policy E3 Affordable workspace).

2.5.3 Given their strategic importance, as a general principle, offices and other CAZ strategic functions are given greater weight relative to new residential development in the Zone (with exceptions set out in policy). The principle of greater weight is designed to ensure that the agglomerations of offices and other CAZ strategic functions are not compromised by new residential development. The principle should inform Local Plan preparation and development management. Residential development is considered inappropriate in defined parts of the **City of London and Northern Isle of Dogs** reflecting the prominent role of these locations in providing capacity for world city business functions. This policy will ensure that the current and future potential to assemble and deliver office development in these locations is not compromised by residential development.

2.5.4 The Opportunity Areas of **Vauxhall Nine Elms Battersea and Elephant & Castle** have potential to deliver greater levels of housing alongside employment than the other CAZ Opportunity Areas. In these areas, offices and other CAZ strategic functions may be given equal weight relative to new residential development.

2.5.5 Development Plans will play a key role in setting out detailed office policies for the CAZ and the appropriate balance between CAZ strategic functions (including offices) and residential in mixed-use areas and in identifying locations or sites where residential development is appropriate. Evidence required to demonstrate no reasonable prospect of a site being used for offices is set out in paragraph 6.1.7 of this Plan.

2.5.6 The Mayor supports a co-ordinated approach to the introduction of **Article 4 Directions** by the CAZ boroughs before the exemptions expire in May 2019 to ensure that London's nationally-significant offices in and around the CAZ are safeguarded. Boroughs are encouraged to draw on both strategic[19] and local evidence to support these Directions.

2.5.7 **Land use swaps and credits** can be used to support local balances between CAZ strategic functions and housing. A land use swap is where a developer provides an off-site office development to satisfy the requirements of Part H by a specified residential or mixed residential and commercial development.

19 London Office Policy Review, Ramidus Consulting, 2017; Small offices and mixed-use development in CAZ, Ramidus Consulting, 2015

The planning applications for the two sites are considered at the same time by the planning authority and are linked by a Section 106 agreement or planning condition. A land use credit is where new off-site office provision is provided in advance by a developer on the basis that it could be drawn down to satisfy the requirements of Part H by a specified residential or mixed residential and commercial development.

2.5.8 **Affordable housing** provision should be provided on-site as part of residential and mixed-use schemes in the CAZ (see Policy H4 Delivering affordable housing). In exceptional circumstances, off-site and cash in lieu contributions can be provided in line with Policy H4 Delivering affordable housing where this serves to sustain important clusters of commercial activities in the CAZ and Northern Isle of Dogs.

Policy SD6 Town centres and high streets

A The vitality and viability of London's varied town centres should be promoted and enhanced by:

1) encouraging strong, resilient, accessible and inclusive hubs with a diverse range of uses that meet the needs of Londoners, including main town centre uses, night-time economy, civic, community, social and residential uses
2) identifying locations for mixed-use or housing-led intensification to optimise residential growth potential, securing a high-quality environment and complementing local character and heritage assets
3) delivering sustainable access to a competitive range of services and activities by walking, cycling and public transport
4) strengthening the role of town centres as a main focus for Londoners' sense of place and local identity in the capital
5) ensuring town centres are the primary locations for commercial activity beyond the CAZ and important contributors to the local as well as London-wide economy
6) supporting the role of town centres in building sustainable, healthy and walkable neighbourhoods with the Healthy Streets Approach embedded in their development and management.

B The adaptation and diversification of town centres should be supported in response to the challenges and opportunities presented by multi-channel shopping and changes in technology and consumer behaviour, including improved management of servicing and deliveries.

C The potential for new housing within and on the edges of town centres should be realised through mixed-use or residential development that makes best use of land, capitalising on the availability of services within walking and cycling distance, and their current and future accessibility by public transport.

D The particular suitability of town centres to accommodate a diverse range of housing should be considered and encouraged, including smaller households, Build to Rent, older people's housing and student accommodation.

E The redevelopment, change of use and intensification of identified surplus office space to other uses including housing should be supported, taking into account the impact of office to residential permitted development rights (see Policy E1 Offices) and the need for affordable and suitable business space (Policy E2 Providing suitable business space, Policy E3 Affordable workspace).

F The management of vibrant daytime, evening and night-time activities should be promoted to enhance town centre vitality and viability, having regard to the role of individual centres in the night-time economy (see Figure 7.6 and Table A1.1) and supporting the development of cultural uses and activity.

G Tourist infrastructure, attractions and hotels in town centre locations, especially in outer London, should be enhanced and promoted (see Policy E10 Visitor infrastructure).

H The delivery of a barrier-free and inclusive town centre environment that meets the needs of all Londoners, including disabled and older Londoners and families with young children, should be provided. This may include Shopmobility schemes, the provision of suitably designed crossing points, dropped kerbs and tactile paving, seating and public toilets.

I The varied role of London's high streets should be supported and enhanced.

J The provision of social infrastructure should be enhanced, particularly where it is necessary to support identified need from town centre and local residents, and facilities should be located in places that maximise footfall to surrounding town centre uses.

K Safety and security should be improved, and active street frontages should be secured in new development, including where there are ground floor residential frontages.

2.6.1 London's **town centres are central to the lives of Londoners**. They provide a focus for the local community, both geographically and in relation to the sense of identity and broad mix of uses they provide. Policy SD6 Town centres and high streets does not apply to CAZ Retail Clusters or any town centres located wholly within the Central Activities Zone (CAZ).[20] The CAZ contains a rich mix of functions, including a substantial quantity and variety of main town centre uses, and will continue to play a crucial role in supporting London's growth. Policy SD4 The Central Activities Zone (CAZ) and Policy SD5 Offices, other strategic functions and residential development in the CAZ guide development of the CAZ and set out how the development of main town centre uses in the CAZ should be brought forward.

2.6.2 The spaces within and around town centres have an important public function, with high streets, public squares, markets, parks, gardens and other open spaces providing opportunities for people to gather, meet, socialise, and be entertained. Town centres are usually transport hubs, served by rail, tram and bus networks, and are accessible for people walking and cycling. Town centres and high streets have social value, providing access to a range of shops and services, employment opportunities, social contact, and information and support. The agglomeration of town centres gives rise to formal and informal networks of businesses, supply chains, customers, employees, institutions, and volunteers that can provide mutual support, advice and economic benefit. Many town centres in London are of historic interest and contain high concentrations of heritage assets.

2.6.3 **High streets** are one of London's most characteristic urban features which play an important role in terms of local economic and social infrastructure, providing employment opportunities and promoting community and cultural exchange. The character and function of high streets within town centres should be promoted and enhanced.

2.6.4 Over the years, town centres have absorbed change and new technologies. To continue to thrive they will need to evolve and diversify in response to current

20 Policy SD6 Town centres and high streets applies to the entirety of Angel town centre and Elephant and Castle town centre.

and future economic trends, technological advances, consumer behaviours, and the development of the 24-hour city. This **need for adaptation and diversification**, together with their good public transport accessibility, makes many town centres appropriate locations for residential-led intensification or mixed-use development that makes best use of land. Bringing new residents into town centres can enhance their commercial role, increasing footfall, particularly to support convenience retail, leisure uses and the evening and night-time economy. Town centres will also need to diversify the range of commercial uses, particularly smaller centres and those with projected decline in demand for retail floorspace. Boroughs and others should ensure their strategies, policies and decisions encourage a broad mix of uses while protecting core retail uses to meet demand.

2.6.5 Retailing has evolved to become multi-channel, with a mix of physical stores, 'click and collect' points, direct delivery to homes and workplaces, and showrooms for digital businesses. Overall, household expenditure on retail is projected to rise but this demand will be spread unevenly across London's town centres, reflecting **trends towards the polarisation of retail space** towards the larger and stronger centres in London.[21] Approximately 76 per cent of the gross comparison goods retail floorspace requirement is anticipated to be focused in the International, Metropolitan and Major town centres and CAZ retail clusters, with 11 per cent in District centres.[22] As many as 60 per cent of District centres in London are likely to have surplus comparison goods retail space over the Plan period.

2.6.6 These trends present significant **challenges and opportunities for retailing** in all town centres and associated high streets including adapting to new innovative forms of retailing, accommodating new space where there is identified demand, and managing the transition of surplus retail floorspace to other uses, such as leisure, business, and more intensive forms of mixed-use development that include a residential component, in appropriate locations. Boroughs and other stakeholders will need to proactively manage their town centres to take account of these trends and the impacts on centres of different types and sizes.

2.6.7 **Residential development** plays an important role in ensuring town centre vitality, particularly through the delivery of diverse housing. Residential-only schemes in town centres may be appropriate outside the primary shopping area

21 Consumer Expenditure and Comparison Goods Retail Floorspace Need in London, Experian, 2017

22 Consumer Expenditure and Comparison Goods Retail Floorspace Need in London, Experian, 2017

and primary and secondary shopping frontages where it can be demonstrated that they would not undermine local character and the diverse range of uses required to make a town centre vibrant and viable.

Policy SD7 Town centres: development principles and Development Plan Documents

A When considering development proposals, boroughs should take a town centres first approach, discouraging out-of-centre development of main town centre uses in accordance with Parts A1 - A3, with limited exceptions for existing viable office locations in outer London (see Policy E1 Offices). Boroughs should:

1) apply the sequential test to applications for main town centre uses, requiring them to be located in town centres. If no suitable town centre sites are available or expected to become available within a reasonable period, consideration should be given to sites on the edge-of-centres that are, or can be, well integrated with the existing centre, local walking and cycle networks, and public transport. Out-of-centre sites should only be considered if it is demonstrated that no suitable sites are (or are expected to become) available within town centre or edge of centre locations. Applications that fail the sequential test should be refused
2) require an impact assessment on proposals for new, or extensions to existing, edge or out-of-centre development for retail, leisure and office uses that are not in accordance with the Development Plan. Applications that are likely to have a significant adverse impact should be refused
3) realise the full potential of existing out-of-centre retail and leisure parks to deliver housing intensification through redevelopment and ensure such locations become more sustainable in transport terms, by securing improvements to public transport, cycling and walking. This should not result in a net increase in retail or leisure floorspace in an out-of-centre location unless the proposal is in accordance with the Development Plan or can be justified through the sequential test and impact assessment requirements in Parts A(1) and A(2) above.

B Boroughs should support the town centres first approach in their Development Plans by:

1) assessing the need for main town centre uses, taking into account capacity and forecast future need
2) allocating sites to accommodate identified need within town centres, considering site suitability, availability and viability, with limited exceptions for existing viable office locations in outer London (see Policy E1 Offices). If suitable and viable town centre sites are not available, boroughs should allocate appropriate edge-of-centre sites that are, or can be, well integrated with the existing centre, local walking and cycle networks, and public transport
3) reviewing town centre boundaries where necessary
4) setting out policies, boundaries and site allocations for future potential town centres to accommodate identified deficiencies in capacity (having regard to Policy SD8 Town centre network and the future potential town centre classifications in Annex 1).

C In Development Plans, boroughs should:

1) define the detailed boundary of town centres in policy maps including the overall extent of the town centre (taking into consideration associated high streets which have particular economic or social value) along with specific policy-related designations such as primary shopping areas, primary and secondary frontages and night-time economy in light of demand/capacity assessments for town centre uses and housing
2) consider the protection of out-of-centre high streets as local parades or business areas and develop appropriate policies to support and enhance the role of these high streets, subject to local evidence, recognising the capacity of low-density commercial sites, car parks and retail parks for housing intensification and mixed-use redevelopment (see Policy H1 Increasing housing supply)
3) develop policies through strategic and local partnership approaches (Policy SD9 Town centres: Local partnerships and implementation) to meet the objectives for town centres set out in Policy SD6 Town centres and high streets to support the development, intensification and enhancement of each centre, having regard to the current and potential future role of the centre in the network (Policy SD8 Town centre network

4) develop policies for edge-of-centre areas, revising the extent of shopping frontages where surplus to forecast demand and introducing greater flexibility, permitting a range of non-residential uses taking into account local circumstances
5) identify centres that have particular scope to accommodate new commercial development and higher density housing, having regard to the growth potential indicators for individual centres in Annex 1. Criteria to consider in assessing the potential for intensification in town centres include:
    a) assessments of demand for retail, office and other commercial uses
    b) assessments of capacity for additional housing
    c) public transport accessibility and capacity
    d) planned or potential transport improvements – to indicate future capacity for intensification
    e) capacity and proximity of social infrastructure
    f) existing and potential level of density of development and activity
    g) relationship with wider regeneration initiatives
    h) vacant land and floorspace – as a further measure of demand and also of under-utilisation of the existing centre
    i) potential to complement local character, existing heritage assets and improve the quality of the town centre environment
    j) viability of development.
6) identify sites suitable for higher density mixed-use residential intensification capitalising on the availability of services within walking and cycling distance and current and future public transport provision including, for example:
    a) comprehensive redevelopment of low-density supermarket sites, surface car parks, and edge-of-centre retail/leisure parks
    b) redevelopment of town centre shopping frontages that are surplus to demand
    c) redevelopment of other low-density town centre buildings that are not of heritage value, particularly where there is under-used space on upper floors, whilst re-providing non-residential uses

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d) delivering residential above existing commercial, social infrastructure and transport infrastructure uses or re-providing these uses as part of a mixed-use development.

7) support flexibility for temporary or 'meanwhile' uses of vacant properties.

D Development proposals should:

1) ensure that commercial floorspace relates to the size and the role and function of a town centre and its catchment

2) ensure that commercial space is appropriately located having regard to Part A and B above, and is fit for purpose, with at least basic fit-out and not compromised in terms of layout, street frontage, floor to ceiling heights and servicing

3) support efficient delivery and servicing in town centres including the provision of collection points for business deliveries in a way that minimises negative impacts on the environment, public realm, the safety of all road users, and the amenity of neighbouring residents

4) support the diversity of town centres by providing a range of commercial unit sizes, particularly on larger-scale developments.

2.7.1 The London Plan takes a strong **town centres first** approach, in order to make the most of the agglomeration benefits and accessibility of town centres and to ensure sustainable patterns of development. Out-of-centre development can be particularly detrimental to town centres, undermining their economic performance, local character, and the accessibility they provide to a broad range of services, and encouraging increased trips by car. In order to support the vitality of town centres, it is important to take a sequential approach, focusing on sites within town centres before considering edge-of-centre sites. This ensures that town centre uses are not unnecessarily dispersed, maximises the overall growth potential of town centres and promotes investment in high streets and primary shopping frontages.

2.7.2 Borough's local Development Plan Documents should proactively plan to meet forecast need for main town centre uses by allocating sites within or (where justified) on the edge of town centres and through town centre boundary reviews, in order to support the town centres first approach. Where town centre and edge of centre sites are not available, local Development Plan Documents should identify future potential town centres that could accommodate the forecast additional need, and set appropriate policies, boundaries and site

allocations for these areas (having regard to Policy SD8 Town centre network and the future potential town centre classifications in Annex 1). This approach will deliver a sustainable pattern of development by **focusing main town centre uses to existing town centres or through the creation of new centres**.

2.7.3 Policy SD7 Town centres: development principles and Development Plan Documents does not apply to **CAZ** Retail Clusters or any town centres located wholly within the Central Activities Zone.[23, 24]

2.7.4 Where **edge-of-centre developments of retail, leisure and office uses** are proposed, and are not in accordance with the Development Plan, these should be accompanied by a robust and detailed impact assessment. This applies to development greater than a locally set floorspace threshold, or 2,500 sqm if a local floorspace threshold has not been set. An impact assessment may also be required for developments below this threshold, for example where a borough has set a proportionate, local floorspace threshold. Impact assessment may also be required where a proposal is likely to give rise to development at a scale not related to the role and function of a centre, such as a large retail store in or on the edge of a neighbourhood or local centre. Assessments should consider the impact on existing, committed and planned public and private investment in a centre or centres in the catchment area of the proposal, and the impact on town centre vitality and viability.

2.7.5 Existing out-of-centre and edge-of-centre retail and leisure parks are often low density and car dependent, and poorly integrated into the surrounding area. They usually suffer from an environment that creates barriers to cycling and walking, with extensive surface car parks and buildings that have large footprints and limited active frontages. Many of these places have significant potential to provide additional housing, improve the impact on the local environment, improve legibility, and become more sustainable in the modes of transport they enable and encourage. **Redevelopment of retail and leisure parks to deliver housing intensification** is encouraged, as set out in Policy H1 Increasing housing supply. This should not generally result in an increase of retail or leisure floorspace, taking account of the town centres first approach, the sequential approach to town centre uses, and impact assessments where appropriate. Some edge-of-centre retail parks may be appropriate for a wider range of employment uses, subject to sequential testing and impact assessment.

23 Policy SD7 Town centres: development principles and Development Plan Documents applies to the entirety of Angel town centre and Elephant and Castle town centre.

24 See paragraph 2.6.1 for further information.

2.7.6 It is important that boroughs **plan positively to meet the needs of their communities**. Being able to access convenience retail, specialist shops and services is important for supporting the daily lives of Londoners and for creating and sustaining strong and inclusive communities. Many town centres and high streets serve specific communities, for example they may provide specialist food or clothing that meet the cultural or religious needs of one or more particular group. Boroughs should use their evaluation of the area and engagement with local communities and stakeholders to draw up local Development Plan policies, designations and site allocations, and develop town centre strategies that seek to meet the needs of their communities.

2.7.7 The **location, design, type, and level of fit-out** of commercial uses, particularly those in mixed-use development, should support the town centres first approach and ensure that commercial premises make a positive contribution to the vitality of the area and are quickly occupied. Where commercial uses are appropriate, it is important that the units are prominently and accessibly situated and clustered together. They should have flexible layouts with few columns or risers, be of a suitable depth to be able to accommodate back-of-house functions, and have adequate floor-to-ceiling heights. Units should be weather-tight and partially fitted-out, such as with toilets, kitchenettes, heating and services, to make them commercially attractive to potential occupiers, before residential units are occupied. A range of unit sizes should be provided, to ensure that town centres can provide floorspace for both large and small occupiers, and to support the diversity, vitality and vibrancy of town centres.

Policy SD8 Town centre network

A The changing roles of town centres should be proactively managed in relation to the town centre network as a whole (see Figure 2.17 and Annex 1). This process should support sustainable economic growth across the Greater London boundary to enhance the vitality and viability of London's centres and complement those in the Wider South East.

B Identified deficiencies in the London town centre network can be addressed by promoting centres to function at a higher level in the network, designating new centres (see Annex 1) or reassessing town centre boundaries (see Policy SD7 Town centres: development principles and Development Plan Documents). Diversification in centres with current or projected declining demand for commercial, particularly retail, floorspace should be supported.

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Policy D1 London's form, character and capacity for growth

Defining an area's character to understand its capacity for growth

A Boroughs should undertake area assessments to define the characteristics, qualities and value of different places within the plan area to develop an understanding of different areas' capacity for growth. Area assessments should cover the elements listed below:

1) demographic make-up and socio-economic data (such as Indices of Multiple Deprivation, health and wellbeing indicators, population density, employment data, educational qualifications, crime statistics)
2) housing types and tenure
3) urban form and structure (for example townscape, block pattern, urban grain, extent of frontages, building heights and density)
4) existing and planned transport networks (particularly walking and cycling networks) and public transport connectivity
5) air quality and noise levels
6) open space networks, green infrastructure, and water bodies
7) historical evolution and heritage assets (including an assessment of their significance and contribution to local character)
8) topography and hydrology
9) land availability
10) existing and emerging Development Plan designations
11) land uses
12) views and landmarks.

Planning for growth

B In preparing Development Plans, boroughs should plan to meet borough-wide growth requirements, including their overall housing targets, by:

1) using the findings of area assessments (as required in Part A) to identify suitable locations for growth, and the potential scale of that growth (e.g. opportunities for extensive, moderate or limited growth) consistent with the spatial approach set out in this Plan; and

2) assessing the capacity of existing and planned physical, environmental and social infrastructure to support the required level of growth and, where necessary, improvements to infrastructure capacity should be planned in infrastructure delivery plans or programmes to support growth; and

3) following the design-led approach (set out in Policy D3 Optimising site capacity through the design-led approach) to establish optimised site capacities for site allocations. Boroughs are encouraged to set out acceptable building heights, scale, massing and indicative layouts for allocated sites, and, where appropriate, the amount of floorspace that should be provided for different land uses.

3.1.1 This Plan provides a policy framework for delivering Good Growth through good design. Part A of this policy sets out the requirements for assessing an area's characteristics and Part B sets out the steps for using this information to establish the capacity for growth of different areas and ensure that sites are developed to an optimum capacity that is responsive to the site's context and supporting infrastructure.

3.1.2 **Understanding the existing character and context** of individual areas is essential in determining how different places may best develop in the future. An evaluation of the current characteristics of a place, how its past social, cultural, physical and environmental influences have shaped it and what the potential opportunities are for it to change will help inform an understanding of an area's capacity for growth and is crucial for ensuring that growth and development is inclusive.

3.1.3 It is important to understand **how places are perceived, experienced and valued**. Those involved in commissioning or undertaking area assessments should consider how they can involve the widest range of people appropriate depending on the scope and purpose of the work.

3.1.4 **Area assessments** should be used to identify the areas that are appropriate for extensive, moderate, or limited growth to accommodate borough-wide growth requirements. This analysis should form the foundation of Development Plan preparation and area-based strategies. This process will be fundamental to inform decision making on how places should develop, speeding up the Development Plan process and bringing about better-quality development. It will also help speed up planning decision making by providing an easily accessible knowledge-base about an area that is integrated in Development Plan policies.

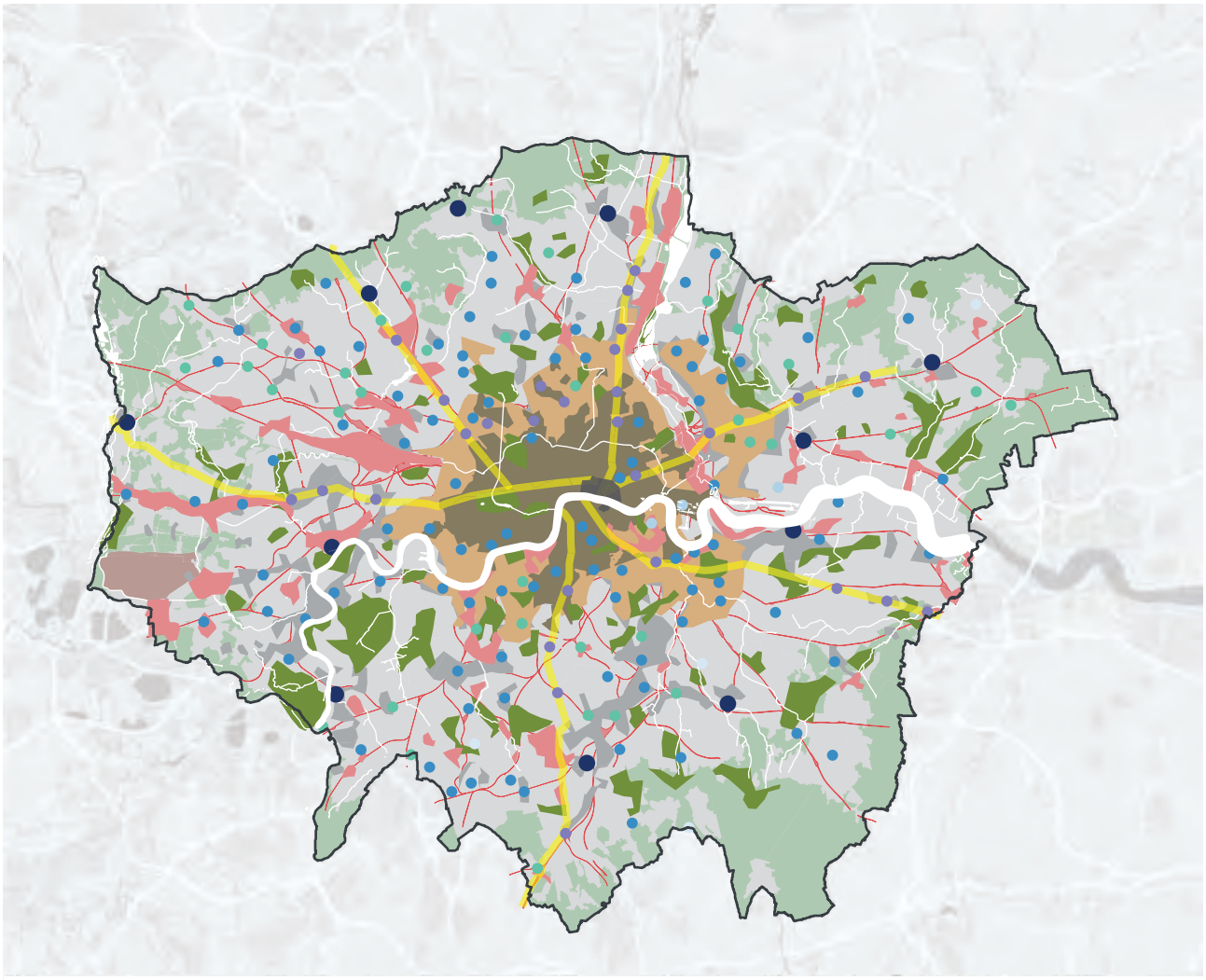
3.1.5 When identifying the growth potential of areas and sites the **sequential spatial approach to making the best use of land** set out in GG2 Parts A to C should be followed.

3.1.6 The process set out in this policy, of evidence gathering and establishing the location and scale of growth in an area, provides the opportunity to **engage and collaborate with the local community and other stakeholders** as part of the plan making process, enabling them to help shape their surroundings. The requirements of Parts A and B help to inform the identification of locations that may be suitable for tall buildings, see Policy D9 Tall buildings.

3.1.7 As change is a fundamental characteristic of London, **respecting character and accommodating change** should not be seen as mutually exclusive. Understanding of the character of a place should not seek to preserve things in a static way but should ensure an appropriate balance is struck between existing fabric and any proposed change. Opportunities for change and transformation, through new building forms and typologies, should be informed by an understanding of a place's distinctive character, recognising that not all elements of a place are special and valued.

3.1.8 The Mayor will provide **supplementary planning guidance** to provide additional support for boroughs when implementing the policy. Figure 3.1 illustrates the broad characteristics of London as derived from its historical development, which can be used to inform area-based strategies.

Figure 3.1 - Outline Character Map of London



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3.2.6 In order to support the Healthy Streets Approach, development proposals should take account of the existing and planned **connectivity of a site via public transport and active modes** to town centres, social infrastructure and other services and places of employment. Opportunities to improve these connections to support higher density development should be identified.

Policy D3 Optimising site capacity through the design-led approach

The design-led approach

A All development must make the best use of land by following a design-led approach that optimises the capacity of sites, including site allocations. Optimising site capacity means ensuring that development is of the most appropriate form and land use for the site. The design-led approach requires consideration of design options to determine the most appropriate form of development that responds to a site's context and capacity for growth, and existing and planned supporting infrastructure capacity (as set out in Policy D2 Infrastructure requirements for sustainable densities), and that best delivers the requirements set out in Part D.

B Higher density developments should generally be promoted in locations that are well connected to jobs, services, infrastructure and amenities by public transport, walking and cycling, in accordance with Policy D2 Infrastructure requirements for sustainable densities. Where these locations have existing areas of high density buildings, expansion of the areas should be positively considered by Boroughs where appropriate. This could also include expanding Opportunity Area boundaries where appropriate.

C In other areas, incremental densification should be actively encouraged by Boroughs to achieve a change in densities in the most appropriate way. This should be interpreted in the context of Policy H2 Small sites.

D Development proposals should:

Form and layout

1) enhance local context by delivering buildings and spaces that positively respond to local distinctiveness through their layout, orientation, scale, appearance and shape, with due regard to existing and emerging street hierarchy, building types, forms and proportions

2) encourage and facilitate active travel with convenient and inclusive pedestrian and cycling routes, crossing points, cycle parking, and legible entrances to buildings, that are aligned with peoples' movement patterns and desire lines in the area
3) be street-based with clearly defined public and private environments
4) facilitate efficient servicing and maintenance of buildings and the public realm, as well as deliveries, that minimise negative impacts on the environment, public realm and vulnerable road users

Experience

5) achieve safe, secure and inclusive environments
6) provide active frontages and positive reciprocal relationships between what happens inside the buildings and outside in the public realm to generate liveliness and interest
7) deliver appropriate outlook, privacy and amenity
8) provide conveniently located green and open spaces for social interaction, play, relaxation and physical activity
9) help prevent or mitigate the impacts of noise and poor air quality
10) achieve indoor and outdoor environments that are comfortable and inviting for people to use

Quality and character

11) respond to the existing character of a place by identifying the special and valued features and characteristics that are unique to the locality and respect, enhance and utilise the heritage assets and architectural features that contribute towards the local character
12) be of high quality, with architecture that pays attention to detail, and gives thorough consideration to the practicality of use, flexibility, safety and building lifespan through appropriate construction methods and the use of attractive, robust materials which weather and mature well
13) aim for high sustainability standards (with reference to the policies within London Plan Chapters 8 and 9) and take into account the principles of the circular economy

14) provide spaces and buildings that maximise opportunities for urban greening to create attractive resilient places that can also help the management of surface water.

E Where development parameters for allocated sites have been set out in a Development Plan, development proposals that do not accord with the site capacity in a site allocation can be refused for this reason.

3.3.1 For London to accommodate the growth identified in this Plan in an inclusive and responsible way every new development needs to make the most efficient use of land by optimising site capacity. This means ensuring the development's form is the most appropriate for the site and land uses meet identified needs. The optimum capacity for a site does not mean the maximum capacity; it may be that a lower density development – such as gypsy and traveller pitches – is the optimum development for the site.

3.3.2 **A design-led approach** to optimising site capacity should be based on an evaluation of the site's attributes, its surrounding context and its capacity for growth to determine the appropriate form of development for that site.

3.3.3 The **area assessment** required by Part A of Policy D1 London's form, character and capacity for growth, coupled with an area's assessed capacity for growth as required by Part B of Policy D1 London's form, character and capacity for growth, will assist in understanding a site's context and determining what form of development is most appropriate for a site. Design options for the site should be assessed to ensure the proposed development best delivers the design outcomes in Part B of this policy.

3.3.4 Designating appropriate development capacities through site allocations enables boroughs to proactively optimise the capacity of strategic sites through a consultative design-led approach that allows for **meaningful engagement and collaboration** with local communities, organisations and businesses.

3.3.5 Developers should have regard to designated development capacities in allocated sites and ensure that the design-led approach to optimising capacity on unallocated sites is carefully applied when **formulating bids** for development sites. The sum paid for a development site is not a relevant consideration in determining acceptable densities and any overpayments cannot be recouped through compromised design or reduced planning obligations.

3.3.6 **Good design** and good planning are intrinsically linked. The form and character of London's buildings and spaces must be appropriate for their location, fit for purpose, respond to changing needs of Londoners, be inclusive, and make

the best use the city's finite supply of land. The efficient use of land requires optimisation of density. This means coordinating the layout of the development with the form and scale of the buildings and the location of the different land uses, and facilitating convenient pedestrian connectivity to activities and services.

3.3.7 Developments that show a clear understanding of, and relationship with, the distinctive features of a place are more likely to be successful. These features include buildings, structures, open spaces, public realm and the underlying landscape. Development should be designed to respond to the **special characteristics** of these features which can include: predominant architectural styles and/or building materials; architectural rhythm; distribution of building forms and heights; and heritage, architectural or cultural value. The Mayor will provide further guidance on assessing and optimising site capacity through a design-led approach.

3.3.8 Buildings should be of high quality and enhance, activate and appropriately frame the **public realm**. Their massing, scale and layout should help make public spaces coherent and should complement the existing streetscape and surrounding area. Particular attention should be paid to the design of the parts of a building or public realm that people most frequently see or interact with in terms of its legibility, use, detailing, materials and location of entrances. Creating a comfortable pedestrian environment with regard to levels of sunlight, shade, wind, and shelter from precipitation is important.

3.3.9 Measures to design out exposure to poor air quality and noise from both external and internal sources should be integral to development proposals and be considered early in the design process. Characteristics that increase pollutant or noise levels, such as poorly-located emission sources, street canyons and noise sources should also be designed out wherever possible. Optimising site layout and building design can also reduce the risk of overheating as well as minimising carbon emissions by reducing energy demand.

3.3.10 To minimise the use of new materials, the following **circular economy principles** (see also Figure 3.2) should be taken into account at the start of the design process and, for referable applications or where a lower local threshold has been established, be set out in a Circular Economy Statement (see Policy SI 7 Reducing waste and supporting the circular economy):

- building in layers – ensuring that different parts of the building are accessible and can be maintained and replaced where necessary

- designing out waste – ensuring that waste reduction is planned in from project inception to completion, including consideration of standardised components, modular build and re-use of secondary products and materials
- designing for longevity
- designing for adaptability or flexibility
- designing for disassembly
- using systems, elements or materials that can be re-used and recycled.

3.3.11 Large-scale developments in particular present opportunities for innovative building design that avoids waste, supports high recycling rates and helps London transition to a circular economy, where materials, products and assets are kept at their highest value for as long as possible. Further guidance on the application of these principles through Circular Economy Statements will be provided.

3.3.12 Figure 3.2 shows a **hierarchy for building approaches** which maximises use of existing materials. Diminishing returns are gained by moving through the hierarchy outwards, working through refurbishment and re-use through to the least preferable option of recycling materials produced by the building or demolition process. The best use of the land needs to be taken into consideration when deciding whether to retain existing buildings in a development.

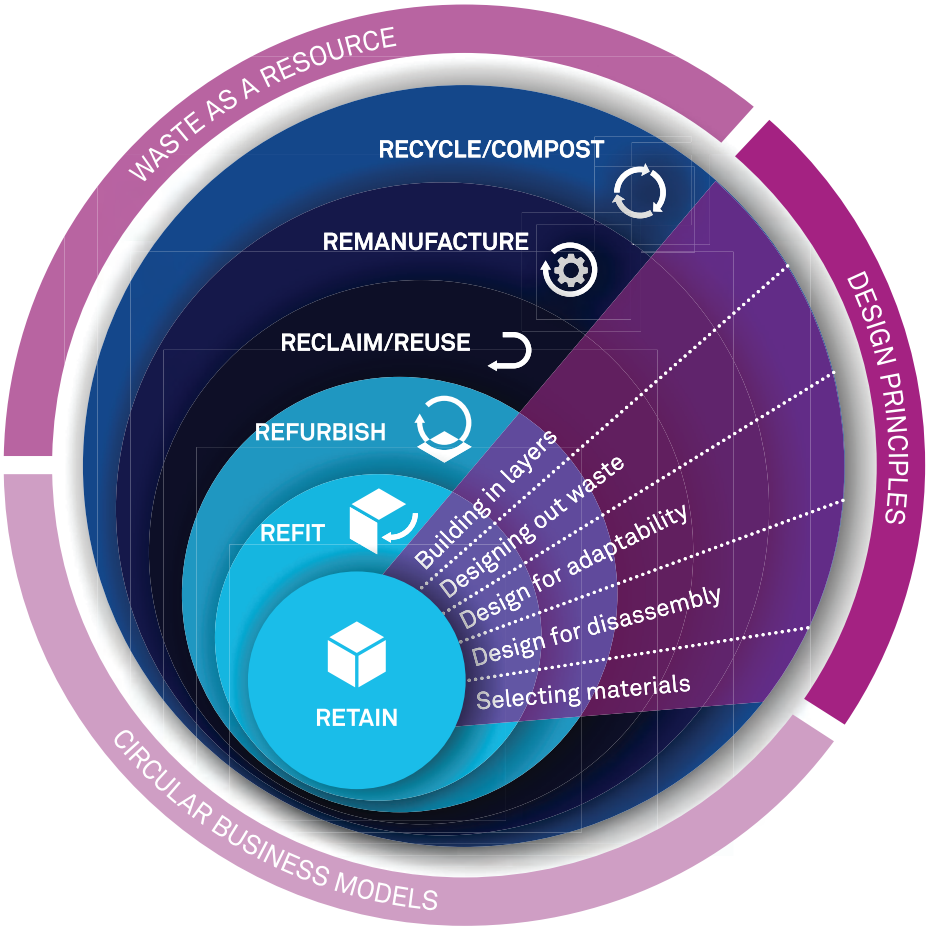
3.3.13 **Maximising urban greening** and creating green open spaces provides attractive places for Londoners to relax and play, and helps make the city more resilient to the effects of climate change. Landscaping and urban greening should be designed to ecologically enhance and, where possible, physically connect, existing parks and open spaces.

3.3.14 Measures to **design out crime** should be integral to development proposals and be considered early in the design process. Development should reduce opportunities for anti-social behaviour, criminal activities, and terrorism, and contribute to a sense of safety without being overbearing or intimidating. Developments should ensure good natural surveillance, clear sight lines, appropriate lighting, logical and well-used routes and a lack of potential hiding places.

3.3.15 Development should create **inclusive places** that meet the needs of all potential users.

3.3.16 The design and layout of development should reduce the dominance of cars and provide permeability to **support active travel** (public transport, walking and cycling), community interaction and economic vitality.

Figure 3.2 - Circular economy hierarchy for building approaches



Source: Building Revolutions (2016), David Cheshire, RIBA Publishing ©

3.3.17 New developments should be designed and managed so that **deliveries** can be received outside of peak hours and if necessary in the evening or night-time without causing unacceptable nuisance to residents. Appropriate facilities will be required to minimise additional freight trips arising from missed deliveries.

3.3.18 Shared and easily accessible **storage space** supporting separate collection of dry recyclables, food waste and other waste should be considered in the early design stages to help improve recycling rates, reduce smell, odour and vehicle movements, and improve street scene and community safety.

3.3.19 Buildings and spaces should be designed so that they can **adapt to changing uses** and demands now and in the future. Their lifespan and potential uses or requirements should be carefully considered, creating buildings and spaces

that are easy to maintain, and constructed of materials that are safe, robust and remain attractive over time.

3.3.20 **Masterplans and strategic frameworks** should be used when planning large-scale development to create welcoming and inclusive neighbourhoods, promote active travel, enable the successful integration of the built form within its surrounding area, and deliver wider benefits to residents, such as access to shared amenity space and high-quality public realm.

Monitoring density and site capacity

3.3.21 **Comparing density** between schemes using a single measure can be misleading as it is heavily dependent on the area included in the planning application site boundary as well as the size of residential units. Planning application boundaries are determined by the applicant. These boundaries may be drawn very close to the proposed buildings, missing out adjacent areas of open space, which results in a density which belies the real character of a scheme. Alternatively, the application boundary may include a large site area so that a tall building appears to be a relatively low-density scheme while its physical form is more akin to schemes with a much higher density.

3.3.22 To help assess, monitor and compare development proposals several measures of density are required to be provided by the applicant. Density measures related to the residential population will be relevant for infrastructure provision, while measures of density related to the built form and massing will inform its integration with the surrounding context. The following **measurements of density** should be provided for all planning applications that include new residential units:

1. number of units per hectare
2. number of habitable rooms per hectare
3. number of bedrooms per hectare
4. number of bedspaces per hectare.

3.3.23 Measures relating to height and scale should be the maximum height of each building or major component in the development. Boroughs should report each of the required density measures provided by the applicant when they submit details of the development to the London Development Database. The following additional measurements should be provided for all major planning applications:

1. the Floor Area Ratio (total Gross External Area of all floors / site area)
2. the Site Coverage Ratio (Gross External Area of ground floors /site area)
3. the maximum height in metres above ground level of each building and at Above Ordinance Datum (above sea level).

Policy D4 Delivering good design

Design analysis and development certainty

A Masterplans and design codes should be used to help bring forward development and ensure it delivers high quality design and place-making based on the requirements set out in Part B of Policy D3 Optimising site capacity through the design-led approach.

B Where appropriate, visual, environmental and movement modelling/assessments should be undertaken to analyse potential design options for an area, site or development proposal. These models, particularly 3D virtual reality and other interactive digital models, should, where possible, be used to inform plan-making and decision-taking, and to engage Londoners in the planning process.

Design scrutiny

C Design and access statements submitted with development proposals should demonstrate that the proposal meets the design requirements of the London Plan.

D The design of development proposals should be thoroughly scrutinised by borough planning, urban design, and conservation officers, utilising the analytical tools set out in Part B, local evidence, and expert advice where appropriate. In addition, boroughs and applicants should make use of the design review process to assess and inform design options early in the planning process. Development proposals referable to the Mayor must have undergone at least one design review early on in their preparation before a planning application is made, or demonstrate that they have undergone a local borough process of design scrutiny, based on the principles set out in Part E if they:

1) include a residential component that exceeds 350 units per hectare; or
2) propose a building defined as a tall building by the borough (see Policy D9 Tall buildings), or that is more than 30m in height where there is no local definition of a tall building.

E The format of design reviews for any development should be agreed with the borough and comply with the Mayor's guidance on review principles, process and management, ensuring that:

1) design reviews are carried out transparently by independent experts in relevant disciplines
2) design review comments are mindful of the wider policy context and focus on interpreting policy for the specific scheme
3) where a scheme is reviewed more than once, subsequent design reviews reference and build on the recommendations of previous design reviews
4) design review recommendations are appropriately recorded and communicated to officers and decision makers
5) schemes show how they have considered and addressed the design review recommendations
6) planning decisions demonstrate how design review has been addressed.

Maintaining design quality

F The design quality of development should be retained through to completion by:

1) ensuring maximum detail appropriate for the design stage is provided to avoid the need for later design amendments and to ensure scheme quality is not adversely affected by later decisions on construction, materials, landscaping details or minor alterations to layout or form of the development
2) ensuring the wording of the planning permission, and associated conditions and legal agreement, provide clarity regarding the quality of design
3) avoiding deferring the assessment of the design quality of large elements of a development to the consideration of a planning condition or referred matter
4) local planning authorities considering conditioning the ongoing involvement of the original design team to monitor the design quality of a development through to completion.

3.4.1 The processes and actions set out in the policy will help ensure development delivers good design. The responsibility for undertaking a particular process or action will depend on the nature of the development or plan; however, the outcome of this process must ensure the most efficient use of land is made so that the development on all sites is optimised.

3.4.2 Applicants will primarily be responsible for undertaking design analysis through the use of various **digital modelling techniques** as part of a wide range of design and presentation techniques. These techniques can also be used as part of the plan-making process to assess growth options and forms of development, as described in Part B of Policy D1 London's form, character and capacity for growth.

3.4.3 To enable the design of a proposed development to be fully assessed, applicants must provide the necessary **technical information** in an agreed format. The detail and nature of this should be commensurate with the scale of the development. All outline applications referred to the Mayor should be accompanied by thorough design codes, ensuring exemplary design standards are carried through the planning process to completion.

3.4.4 The **Mayor's Design Advocates (MDAs)** will play a key role in helping to deliver good design. They will help champion design across the GLA Group and beyond, through research, design review, capacity building, commissioning and advocacy. MDAs are also members of the London Review Panel, which the Mayor has set up to provide design scrutiny. This review panel is primarily focused on the review of Mayoral investments, but can provide design review sessions for development proposals referred to the Mayor where they have not previously been subject to review, or for schemes of particular significance.

3.4.5 All development proposals should be subject to a level of scrutiny appropriate to the scale and/or impact of the project. This **design scrutiny** should include work by planning case officers and ongoing and informal review by qualified urban design officers and conservation officers. Development proposals required to undergo design review as set out under Part D will form a small portion of overall planning applications in London. The Mayor may require that other referable developments undergo design review. Boroughs are encouraged to use design review to support their scrutiny of development proposals.

3.4.6 The Mayor has published a **London Quality Review Charter**, with accompanying guidance. The Charter promotes a consistent approach across London's design review sector and promotes transparency of process. The Charter builds on

the established 2013 guidance[27] which calls for reviews to be independent, expert, multidisciplinary, accountable, transparent, proportionate, timely, advisory, objective and available. The Charter includes guidance on how panels and processes should be managed and records kept. It also clarifies that the purpose of the design review process is not to dictate the design of a scheme or contradict planning policy, but to guide better design outcomes. More widely, the Mayor's Good Growth by Design Programme, is developing a support offer to London's boroughs and London's review sector, for example, offering advice to boroughs wishing to put in place a design review function.

3.4.7 The **scrutiny** of a proposed development's design should cover its layout, scale, height, density, land uses, materials, architectural treatment, detailing and landscaping. The design and access statement should explain the approach taken to these design issues (see also requirements of Policy D5 Inclusive design).

3.4.8 For **residential development** it is particularly important to scrutinise the qualitative aspects of the development design described in Policy D6 Housing quality and standards. The higher the density of a development the greater this scrutiny should be of the proposed built form, massing, site layout, external spaces, internal design and ongoing management. This is important because these elements of the development come under more pressure as the density increases. The housing minimum space standards set out in Policy D6 Housing quality and standards help ensure that as densities increase, quality of internal residential units is maintained.

3.4.9 **Higher density residential developments**[28] should demonstrate their on-going sustainability in terms of servicing, maintenance and management. Specifically, details should be provided of day-to-day servicing and deliveries, longer-term maintenance implications and the long-term affordability of running costs and service charges (by different types of occupiers).

3.4.10 It is important that **design quality is maintained throughout the development process** from the granting of planning permission to completion of a development. What happens to a design after planning consent can be instrumental to the success of a project and subsequent quality of a place. Changes to designs after the initial planning permission has been granted are

27 Design Review Principles and Practice, The Design Council, et al, 2013, available at: https://www.designcouncil.org.uk/sites/default/files/asset/document/DC%20Cabe%20Design%20Review%2013_W_0.pdf

28 Higher density residential developments are those with a density of at least 350 units per hectare

often allowable as minor amendments, or in the case of outline applications in the form of additional necessary detail. However, even minor changes can have a substantial effect on design quality, environmental quality and visual impact. The cumulative effect of amendments can often be significant and should be reviewed holistically. Sufficient design detail needs to be provided in approved drawings and other visual material, as well as in the wording of planning permissions to ensure clarity over what design has been approved, and to avoid future amendments and value engineering resulting in changes that would be detrimental to the design quality.

3.4.11 **Design codes** submitted with outline planning applications for large developments can be one such way to ensure that design quality is upheld throughout the planning process. Their main purpose is to describe the key design principles of a development proposal in a simple, concise and mainly graphical format, and they should draw on the proposal's layout, massing and heights to define the principal features that make up the overall design integrity of the scheme. Assessment of the design of large elements of a development, such as landscaping or building façades, should be undertaken as part of assessing the whole development and not deferred for consideration after planning permission has been granted.

3.4.12 Having a sufficient level of design information, including key construction details provided as part of the application, can help to ensure that the quality of design will be maintained if the permitted scheme is subject to subsequent minor amendments. However, it is also generally beneficial to the design quality of a completed development if the **architectural design team is involved in the development from start to finish**[29]. Securing the design team's ongoing involvement can be achieved in a number of ways, such as through a condition of planning permission, as a design reviewer, or through an architect retention clause in a legal agreement.

29 Shaping London: How can London deliver good growth?, Mayor's Design Advisory Group, 2016

Policy D5 Inclusive design

A Boroughs, in preparing their Development Plans, should support the creation of inclusive neighbourhoods by embedding inclusive design, and collaborating with local communities in the development of planning policies that affect them.

B Development proposal should achieve the highest standards of accessible and inclusive design. They should:

1) be designed taking into account London's diverse population
2) provide high quality people focused spaces that are designed to facilitate social interaction and inclusion
3) be convenient and welcoming with no disabling barriers, providing independent access without additional undue effort, separation or special treatment
4) be able to be entered, used and exited safely, easily and with dignity for all
5) be designed to incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building.

C Design and Access Statements, submitted as part of development proposals, should include an inclusive design statement.

3.5.1 The built environment includes the internal and external parts of buildings, as well as the spaces in between them. Despite recent progress in building a more accessible city, too many Londoners still experience barriers to living independent and dignified lives, due to the way the built environment has been designed and constructed or how it is managed. An **inclusive design approach** helps to ensure the diverse needs of all Londoners are integrated into Development Plans and proposals from the outset. This is essential to ensuring that the built environment is safe, accessible and convenient, and enables everyone to access the opportunities London has to offer.

3.5.2 **Inclusive design is indivisible from good design**. It is therefore essential to consider inclusive design and the development's contribution to the creation of inclusive neighbourhoods at the earliest possible stage in the development

process – from initial conception through to completion and, where relevant, the occupation and on-going management and maintenance of the development.

3.5.3 Inclusive design principles should be discussed with boroughs in advance of an application being submitted, to ensure that these principles are understood and incorporated into the original design concept. To demonstrate this, and to inform decision making, speed up the process and bring about better-quality development, an **inclusive design statement** is required as part of the Design and Access Statement. The inclusive design statement should:

- explain the design concept and illustrate how an inclusive design approach has been incorporated into this
- detail what best practice standards and design guidance documents have been applied in terms of inclusive design
- show that the potential impacts of the proposal on people and communities who share a protected characteristic and who will be affected by it have been considered
- set out how access and inclusion will be maintained and managed, including fire evacuation procedures
- detail engagement with relevant user groups, such as disabled or older people's organisations, or other equality groups.

3.5.4 The detail contained in the Design and Access Statements, including the inclusive design statement, should be proportionate to the scale and type of development.

3.5.5 The social factors that influence inclusion have a direct impact on well-being and are an important component in achieving more inclusive communities. Many factors that influence potential barriers to inclusion can be mitigated **by ensuring the involvement of local communities** in the planning policies and decisions that will affect them.

3.5.6 Inclusive design creates spaces and places that can facilitate social integration, enabling people to lead more interconnected lives. Development proposals should help to create **inclusive neighbourhoods** that cumulatively form a network in which people can live and work in a safe, healthy, supportive and inclusive environment. An inclusive neighbourhood approach will ensure that people are able to easily access services, facilities and amenities that are relevant to them and enable them to safely and easily move around by active travel modes through high-quality, people-focused spaces, while enjoying barrier-free access to surrounding areas and the wider city.

3.5.7 **Links to the wider neighbourhood** should be carefully considered, including networks of legible, logical, safe and navigable pedestrian routes, dropped kerbs and crossing points with associated tactile paving.

3.5.8 Where **security measures** are required in the external environment, the design and positioning of these should not adversely impact access and inclusion.

3.5.9 **Entrances** into buildings should be easily identifiable and should allow everyone to use them independently without additional effort, separation or special treatment. High and low level obstructions in buildings and in the public realm should be eliminated. The **internal environment** of developments should meet the highest standards in terms of access and inclusion, creating buildings which meet the needs of the existing and future population.

3.5.10 Buildings should be designed and built to accommodate robust **emergency evacuation** procedures for all building users, including those who require level access. All building users should be able to evacuate from a building with dignity and by as independent means as possible. Emergency carry down or carry up mechanical devices or similar interventions that rely on manual handling are not considered to be appropriate, for reasons of user dignity and independence. The installation of lifts which can be used for evacuation purposes (accompanied by a management plan) provide a dignified and more independent solution. The fire evacuation lifts and associated provisions should be appropriately designed, constructed and include the necessary controls suitable for the purposes intended. See also Policy D12 Fire safety.

3.5.11 When dealing with **historic buildings and heritage assets**, careful consideration should be given to inclusive design at an early stage. This is essential to securing successful schemes that will enable as many people as possible to access and enjoy the historic environment now and in the future.

3.5.12 The Mayor will assist boroughs and other agencies in implementing an inclusive design approach by providing **further guidance** where necessary, continuing to contribute to the development of national technical standards and supporting training and professional development programmes. Further guidance on inclusive design standards can be found in the following British Standard documents:

- BS8300-1:2018 Design of an accessible and inclusive built environment. External environment. Code of practice. January 2018.
- BS8300-2:2018 Design of an accessible and inclusive built environment. Buildings. Code of practice. January 2018.

Policy D6 Housing quality and standards

A Housing development should be of high quality design and provide adequately-sized rooms (see Table 3.1) with comfortable and functional layouts which are fit for purpose and meet the needs of Londoners without differentiating between tenures.

B Qualitative aspects of a development are key to ensuring successful sustainable housing. Table 3.2 sets out key qualitative aspects which should be addressed in the design of housing developments.

C Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating.

D The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space.

E Housing should be designed with adequate and easily accessible storage space that supports the separate collection of dry recyclables (for at least card, paper, mixed plastics, metals, glass) and food waste as well as residual waste.

F Housing developments are required to meet the minimum standards below which apply to all tenures and all residential accommodation that is self-contained.

Private internal space

1) Dwellings must provide at least the gross internal floor area and built-in storage area set out in Table 3.1.

2) A dwelling with two or more bedspaces must have at least one double (or twin) bedroom that is at least 2.75m wide. Every other additional double (or twin) bedroom must be at least 2.55m wide.

3) A one bedspace single bedroom must have a floor area of at least 7.5 sq.m. and be at least 2.15m wide.

4) A two bedspace double (or twin) bedroom must have a floor area of at least 11.5 sq.m..

5) Any area with a headroom of less than 1.5m is not counted within the Gross Internal Area unless used solely for storage (If the area under the stairs is to be used for storage, assume a general floor area of 1 sq.m. within the Gross Internal Area).

6) Any other area that is used solely for storage and has a headroom of 0.9-1.5m (such as under eaves) can only be counted up to 50 per cent of its floor area, and any area lower than 0.9m is not counted at all.

7) A built-in wardrobe counts towards the Gross Internal Area and bedroom floor area requirements, but should not reduce the effective width of the room below the minimum widths set out above. Any built-in area in excess of 0.72 sq.m. in a double bedroom and 0.36 sq.m. in a single bedroom counts towards the built-in storage requirement.

8) The minimum floor to ceiling height must be 2.5m for at least 75 per cent of the Gross Internal Area of each dwelling.

Private outside space

9) Where there are no higher local standards in the borough Development Plan Documents, a minimum of 5 sq.m. of private outdoor space should be provided for 1-2 person dwellings and an extra 1 sq.m. should be provided for each additional occupant, and it must achieve a minimum depth and width of 1.5m. This does not count towards the minimum Gross Internal Area space standards required in Table 3.1

G The Mayor will produce guidance on the implementation of this policy for all housing tenures.

Table 3.1 - Minimum internal space standards for new dwellings^

Type of dwelling		Minimum gross internal floor areas+ and storage (square metres)			
Number of bedrooms (b)	Number of bed spaces (persons(p))	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *	N/A	N/A	1
	2p	50	58	N/A	1.5
2b	3p	61	70	N/A	2
	4p	70	79	N/A	2
3b	4p	74	84	90	2.5
	5p	86	93	99	2.5
	6p	95	102	108	2.5
4b	5p	90	97	103	3
	6p	99	106	112	3
	7p	108	115	121	3
	8p	117	124	130	3
5b	6p	103	110	116	3.5
	7p	112	119	125	3.5
	8p	121	128	134	3.5
6b	7p	116	123	129	4
	8p	125	132	138	4

Notes to Table 3.1

Key

b: bedrooms

p: persons

^ New dwelling in this context includes new build, conversions and change of use.

* Where a studio / one single bedroom one person dwelling has a shower room instead of a bathroom, the floor area may be reduced from 39 sq.m. to 37 sq.m., as shown bracketed.

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[+] The Gross Internal Area (GIA) of a dwelling is defined as the total floor space measured between the internal faces of perimeter walls that enclose a dwelling. This includes partitions, structural elements, cupboards, ducts, flights of stairs and voids above stairs. GIA should be measured and denoted in square metres (sq.m.).

Built-in storage areas are included within the overall GIA and include an allowance of 0.5 sq.m. for fixed services or equipment such as a hot water cylinder, boiler or heat exchanger.

GIAs for one storey dwellings include enough space for one bathroom and one additional WC (or shower room) in dwellings with five or more bedspaces. GIAs for two and three storey dwellings include enough space for one bathroom and one additional WC (or shower room). Additional sanitary facilities may be included without increasing the GIA, provided that all aspects of the space standard have been met.

3.6.1 Housing can be delivered in different physical forms depending on the context and site characteristics. Ensuring homes are of adequate size and fit for purpose is crucial in an increasingly dense city; therefore this Plan sets out **minimum space standards** for dwellings of different sizes in Policy D6 Housing quality and standards and Table 3.1. This is based on the minimum gross internal floor area (GIA) relative to the number of occupants and takes into account commonly required furniture and the spaces needed for different activities and moving around. This means applicants should state the number of bedspaces/occupiers a home is designed to accommodate rather than simply the number of bedrooms. When designing homes for more than eight bedspaces, applicants should allow approximately 10 sq.m. per extra bedspace.

3.6.2 The space standards are minimums which applicants are encouraged to exceed. The **standards apply to all new self-contained dwellings** of any tenure, and consideration should be given to the elements that enable a home to become a comfortable place of retreat. The provision of additional services and spaces as part of a housing development, such as building management and communal amenity space, is not a justification for failing to deliver these minimum standards. Boroughs are, however, encouraged to resist dwellings with floor areas significantly above those set out in Table 3.1 for the number of bedspaces they contain due to the level of housing need and the need to make efficient use of land.

3.6.3 To address the impacts of the urban heat island effect and the fact that the majority of housing developments in London are made up of flats, a **minimum ceiling height** of 2.5m for at least 75 per cent of the gross internal area is required so that new housing is of adequate quality, especially in terms of daylight penetration, ventilation and cooling, and sense of space. The height

of ceilings, doorways and other thresholds should support the creation of an inclusive environment and therefore be sufficiently high to not cause an obstruction. To allow for some essential equipment in the ceilings of kitchens and bathrooms, up to 25 per cent of the gross internal area of the dwelling can be lower than 2.5 m. However, any reduction in ceiling height below 2.5 m should be the minimum necessary for this equipment, and not cause an obstruction.

3.6.4 **Dual aspect dwellings** with opening windows on at least two sides have many inherent benefits. These include better daylight, a greater chance of direct sunlight for longer periods, natural cross-ventilation, a greater capacity to address overheating, pollution mitigation, a choice of views, access to a quiet side of the building, greater flexibility in the use of rooms, and more potential for future adaptability by altering the use of rooms.

3.6.5 **Single aspect dwellings** are more difficult to ventilate naturally and are more likely to overheat, and therefore should normally be avoided. Single aspect dwellings that are north facing, contain three or more bedrooms or are exposed to noise levels above which significant adverse effects on health and quality of life occur, should be avoided. The design of single aspect dwellings must demonstrate that all habitable rooms and the kitchen are provided with adequate passive ventilation, privacy and daylight, and that the orientation enhances amenity, including views. It must also demonstrate how they will avoid overheating without reliance on energy intensive mechanical cooling systems.

3.6.6 A variety of approaches to housing typologies and **layout of buildings** should be explored to make the best use of land and create high quality, comfortable and attractive homes. For example, increasing ceiling heights and having bay windows can optimise daylight and sunlight and allow buildings to be closer together than can otherwise be achieved.

3.6.7 Housing developments should be designed to **maximise tenure integration**, and affordable housing units should have the same external appearance as private housing. All entrances will need to be well integrated with the rest of the development and should be indistinguishable from each other.

3.6.8 Development should help create a more socially inclusive London. **Gated forms of development** that could realistically be provided as a public street are unacceptable and alternative means of security should be achieved through utilising the principles of good urban design and inclusive design (see Policy D5 Inclusive design).

3.6.9 **Private outside space** should be practical in terms of its shape and utility, and care should be taken to ensure the space offers good amenity. All dwellings should have level access to one or more of the following forms of private outside spaces: a garden, terrace, roof garden, courtyard garden or balcony. The use of

roof areas, including podiums, and courtyards for additional private or shared outside space is encouraged.

3.6.10 **Communal play space** should meet the requirements of Policy S4 Play and informal recreation.

Table 3.2 - Qualitative design aspects to be addressed in housing developments

Layout, orientation and form	
i	The built form, massing and height of the development should be appropriate for the surrounding context, and it should be shown that alternative arrangements to accommodate the same number of units or bedspaces with a different relationship to the surrounding context have been explored early in the design process (making use of the measures in paragraph 3.3.23), particularly where a proposal is above the applicable density indicated in Part D of Policy D4 Delivering good design
ii	The layout of the scheme (including spaces between and around buildings) should: • form a coherent, legible and navigable pattern of streets and blocks • engender street based activity and provide a sense of safety • maximise active frontages onto public facing sides of a development, where appropriate wrapping around inactive frontages
iii	The site layout, orientation and design of individual dwellings and, where applicable, common spaces should: • provide privacy and adequate daylight for residents • be orientated to optimise opportunities for visual interest through a range of immediate and longer range views, with the views from individual dwellings considered at an early design stage • provide clear and convenient routes with a feeling of safety • help reduce noise from common areas to individual dwellings • help meet the challenges of a changing climate by ensuring homes are suitable for warmer summers and wetter winters

Outside space	
iv	Communal outside amenity spaces should: • provide sufficient space to meet the requirements of the number of residents • be designed to be easily accessed from all related dwellings • be located to be appreciated from the inside • be positioned to allow overlooking • be designed to support an appropriate balance of informal social activity and play opportunities for various age groups • meet the changing and diverse needs of different occupiers
v	Private amenity space for each dwelling should be usable and have a balance of openness and protection, appropriate for its outlook and orientation
Usability and ongoing maintenance	
vi	The development should ensure that: • the experience of arrival, via footpaths, entrances and shared circulation spaces is comfortable, accessible and fit for purpose • features are designed to allow maintenance activities such as window cleaning, to be undertaken with ease • sufficient levels of secure, covered and conveniently located externally accessible storage is provided for deliveries and other bulky items • recycling and waste disposal, storage and any on site management facilities are convenient in their operation and location, appropriately integrated, and designed to work effectively for residents, management and collection services*

* See also the London Waste and Recycling Board's Waste Management Planning Advice for New Flatted Properties 2014. http://www.lwarb.gov.uk/what-we-do/resource-london/successes-to-date/efficiencies-programme-outputs/

3.6.11 Other components of housing design are also important to improving the attractiveness of new homes as well as the Mayor's wider objectives to improve the quality of Londoners' environment. The Mayor intends to produce a single **guidance** document which clearly sets out the standards which need to be met in order to implement Policy D6 Housing quality and standards for all housing tenures, as well as wider qualitative aspects of housing developments. This will include guidance on daylight and sunlight standards. This will build on the guidance set out in the 2016 Housing SPG and the previous London Housing Design Guide.

Policy D7 Accessible housing

A To provide suitable housing and genuine choice for London's diverse population, including disabled people, older people and families with young children, residential development must ensure that:

1) at least 10 per cent of dwellings (which are created via works to which Part M volume 1 of the Building Regulations applies) meet Building Regulation requirement M4(3) 'wheelchair user dwellings'

2) all other dwellings (which are created via works to which Part M volume 1 of the Building Regulations applies) meet Building Regulation requirement M4(2) 'accessible and adaptable dwellings'.

3.7.1 Many households in London require **accessible or adapted housing** to lead dignified and independent lives. In addition, Londoners are living longer and with the incidence of disability increasing with age, older people should have the choice of remaining in their own homes rather than moving due to inaccessible accommodation. To address these and future needs, Policy D7 Accessible housing should apply to all dwellings which are created via works to which Part M volume 1 of the Building Regulations applies,[30] which, at the time of publication of this Plan, generally limits the application of this policy to new build dwellings.

3.7.2 Where any part of an **approach route** – including the vertical circulation in the common parts of a block of flats – is shared between dwellings of different categories (i.e. M4(2) and M4(3)), the design provisions of the highest numbered category of dwelling served should be applied, to ensure that people can visit their neighbours with ease and are not limited by the design of communal areas. For residential disabled persons parking requirements – see Policy T6 .1 Residential parking.

3.7.3 To ensure that all potential residents have **choice within a development**, the requirement for M4(3) wheelchair user dwellings applies to all tenures. Wheelchair user dwellings should be distributed throughout a development to provide a range of aspects, floor level locations, views and unit sizes.

30 This is governed by the Building Regulations 2010: http://www.legislation.gov.uk/uksi/2010/2214/pdfs/uksi_20102214_en.pdf and the Building Regulations &c. (Amendment) Regulations 2015: http://www.legislation.gov.uk/uksi/2015/767/pdfs/uksi_20150767_en.pdf

3.7.4 Standard M4(3) wheelchair user dwellings distinguishes between '**wheelchair accessible**' (a home readily usable by a wheelchair user at the point of completion) and '**wheelchair adaptable**' (a home that can be easily adapted to meet the needs of a wheelchair user). Planning Practice Guidance[31] states that Local Plan policies for wheelchair accessible homes should only be applied to those dwellings where the local authority is responsible for allocating or nominating a person to live in that dwelling, otherwise M4(3) dwellings should be wheelchair adaptable.

3.7.5 As set out in Approved Document M of the Building Regulations, Volume 1: Dwellings, to comply with requirements M4(2) or M4(3), **step-free access** into the dwelling must be provided.

3.7.6 In exceptional circumstances the provision of a lift to dwelling entrances may not be achievable. In the following circumstances – and only in blocks of four storeys or less – it may be necessary to apply some flexibility in the application of this policy:

- Specific small-scale infill developments (see Policy H2 Small sites)
- Flats above existing shops or garages
- Stacked maisonettes where the potential for decked access to lifts is restricted

3.7.7 If it is agreed at the planning stage (for one of the reasons listed above) that a specific development warrants flexibility in the application of the accessible housing standards M4(2) and M4(3), affected dwellings above or below ground floor would be required to satisfy the mandatory building regulations requirements of M4(1) via the Building Control process. M4(2) and M4(3) dwellings should still be required for ground floor units.

3.7.8 M4(2) and M4(3) dwellings should be **secured via planning condition** to allow the Building Control body to check compliance of a development against the optional Building Regulations standards. Planning conditions should specify:

- Number of dwellings per size typology (i.e. x no. of y bed units) which must comply with Part M4(2)
- Number of dwellings per size typology (i.e. x no. of y bed units) which must comply with Part M4(3)(2)(a) wheelchair adaptable standards
- Number of dwellings per size typology (i.e. x no. of y bed units) which must comply with Part M4(3)(2)(b) wheelchair accessible standards

31 https://www.gov.uk/guidance/housing-optional-technical-standards

Policy D8 Public realm

Development Plans and development proposals should:

A encourage and explore opportunities to create new public realm where appropriate

B ensure the public realm is well-designed, safe, accessible, inclusive, attractive, well-connected, related to the local and historic context, and easy to understand, service and maintain. Landscape treatment, planting, street furniture and surface materials should be of good quality, fit-for-purpose, durable and sustainable. Lighting, including for advertisements, should be carefully considered and well-designed in order to minimise intrusive lighting infrastructure and reduce light pollution

C maximise the contribution that the public realm makes to encourage active travel and ensure its design discourages travel by car and excessive on-street parking, which can obstruct people's safe enjoyment of the space. This includes design that reduces the impact of traffic noise and encourages appropriate vehicle speeds

D be based on an understanding of how the public realm in an area functions and creates a sense of place during different times of the day and night, days of the week and times of the year. In particular, they should demonstrate an understanding of how people use the public realm, and the types, location and relationship between public spaces in an area, identifying where there are deficits for certain activities, or barriers to movement that create severance for pedestrians and cyclists

E ensure both the movement function of the public realm and its function as a place are provided for and that the balance of space and time given to each reflects the individual characteristics of the area. The priority modes of travel for the area should be identified and catered for, as appropriate. Desire lines for people walking and cycling should be a particular focus, including the placement of street crossings, which should be regular, convenient and accessible

F ensure there is a mutually supportive relationship between the space, surrounding buildings and their uses, so that the public realm enhances the amenity and function of buildings and the design of buildings contributes to a vibrant public realm

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G ensure buildings are of a design that activates and defines the public realm, and provides natural surveillance. Consideration should also be given to the local microclimate created by buildings, and the impact of service entrances and facades on the public realm

H ensure appropriate management and maintenance arrangements are in place for the public realm, which maximise public access and minimise rules governing the space to those required for its safe management in accordance with the Public London Charter

I incorporate green infrastructure such as street trees and other vegetation into the public realm to support rainwater management through sustainable drainage, reduce exposure to air pollution, moderate surface and air temperature and increase biodiversity

J ensure that appropriate shade, shelter, seating and, where possible, areas of direct sunlight are provided, with other microclimatic considerations, including temperature and wind, taken into account in order to encourage people to spend time in a place

K ensure that street clutter, including street furniture that is poorly located, unsightly, in poor condition or without a clear function is removed, to ensure that pedestrian amenity is improved. Consideration should be given to the use, design and location of street furniture so that it complements the use and function of the space. Applications which seek to introduce unnecessary street furniture should be refused

L explore opportunities for innovative approaches to improving the public realm such as open street events and Play Streets

M create an engaging public realm for people of all ages, with opportunities for social activities, formal and informal play and social interaction during the daytime, evening and at night. This should include identifying opportunities for the meanwhile use of sites in early phases of development to create temporary public realm

N ensure that any on-street parking is designed so that it is not dominant or continuous, and that there is space for green infrastructure as well as cycle parking in the carriageway. Parking should not obstruct pedestrian lines

O ensure the provision and future management of free drinking water at appropriate locations in the new or redeveloped public realm.

3.8.1 The **public realm** includes all the publicly-accessible space between buildings, whether public or privately owned, from alleyways and streets to squares and open spaces, including the Thames and London's waterways. Some internal or elevated spaces can also be considered as part of the public realm, such as markets, shopping malls, sky gardens, viewing platforms, museums or station concourses. Such forms of public realm are particularly relevant in areas of higher density.

3.8.2 The quality of the public realm has a significant influence on quality of life because it affects people's sense of place, security and belonging, as well as having an influence on a range of health and social factors. For this reason, the public realm, and the buildings that frame those spaces, should be attractive, accessible, designed for people and contribute to the highest possible standards of comfort, good acoustic design, security and ease of movement. Higher levels of comfort should be sought in places where people will wish to sit, play, relax, meet, and dwell outside compared to other parts of the public realm that are primarily used for movement. As London's population grows, the demands on London's public realm to accommodate a greater **variety and intensity of uses** will increase. It is particularly important to recognise these demands in higher density development.

3.8.3 The public realm should be seen as a series of **connected routes and spaces** that help to define the character of a place. Around eighty per cent of public realm in London is in the form of streets and roads. A small proportion (less than eight per cent) of these have the primary purpose of moving large numbers of vehicles through them, while most are intended to be quiet residential streets used for play, recreation and local access. The remaining streets are places which function as key centres for leisure, shopping, culture, social interaction and accessing services and employment, such as high streets or public squares.

3.8.4 The specific balance between the different functions of any one space, such as its place-based activities, its function to facilitate movement and its ability to accommodate different uses of the kerbside, should be at the heart of how the space is designed and managed. The Mayor's **Healthy Streets Approach** explains how the design and management of streets can support a wide range of activities in the public realm as well as encourage and facilitate a shift to active travel.

3.8.5 **Pedestrian crossings** should be accessible and provide tactile paving and associated dropped kerbs or level access in accordance with national guidance.

3.8.6 Places should be distinctive, attractive and of the highest quality, allowing people to meet, congregate and socialise, as well as providing opportunity for quiet enjoyment. Public realm is **valuable for London's cultural activity**,

providing a stage for informal and everyday culture and for organised cultural activity. The opportunity to incorporate these uses should be identified and facilitated through community engagement, careful design and good acoustic design. Careful consideration is needed of the benefits of using the public realm for particular events and the impact of the events on the use and enjoyment of the space by the public.

3.8.7 **Legibility and signposting** make an important contribution to whether people feel comfortable in a place, and are able to understand it and navigate their way around. Transport for London's Streets Toolkit provides detailed design guidance for creating high quality streets and public spaces.

3.8.8 Even when a development does not include the creation of new public realm it will have an **impact on neighbouring public realm**. Therefore, any impact or change to the conditions, use or nature of existing public space brought about by a development should meet the requirements of this policy.

3.8.9 The effective **management and ongoing maintenance** of public realm should be a key consideration in the design of places and secured through the planning system where appropriate. Whether publicly or privately owned, public realm should be open, free to use and offer the highest level of public access. These spaces should only have rules restricting the behaviour of the public that are considered essential for safe management of the space. The Mayor will develop a 'Public London Charter' which will set out the rights and responsibilities for the users, owners and managers of public spaces irrespective of land ownership. The rules and restrictions on public access and behaviour covering all new or redeveloped public space and its management should be in accordance with the Public London Charter, and this requirement should be secured through legal agreement or planning condition.

3.8.10 The **lighting** of the public realm needs careful consideration to ensure it is appropriate to address safety and security issues, and make night-time activity areas and access routes welcoming and safe, while also minimising light pollution.

3.8.11 The provision of accessible **free drinking water** fountains helps improve public health, reduces waste from single-use plastic bottles and supports the circular economy through the use of reusable water bottles. Free drinking water fountains that can both refill water bottles directly and be drunk from should be provided in appropriate locations in new or redeveloped public realm. Appropriate locations for these water fountains should be identified by boroughs during the planning process. These locations include areas with high levels of pedestrian activity, such as in town centres and inside shopping malls, as well as areas of the public realm used for play, exercise and relaxing, such

as parks and squares. The ongoing management and maintenance of facilities should be secured and agreed at the planning stage to ensure long-term provision is achievable.

3.8.12 Opportunities should be identified by boroughs and applicants for the **meanwhile (temporary) use** of phased development sites to create attractive public realm. Parameters for any meanwhile use, particularly its longevity and associated obligations, should be established from the outset and agreed by all parties. Whilst the creation of temporary public realm makes the best use of land and provides visual, environmental and health benefits to the local community, planning permission for more permanent uses is still required.

Policy D9 Tall buildings

Definition

A Based on local context, Development Plans should define what is considered a tall building for specific localities, the height of which will vary between and within different parts of London but should not be less than 6 storeys or 18 metres measured from ground to the floor level of the uppermost storey.

Locations

B

1) Boroughs should determine if there are locations where tall buildings may be an appropriate form of development, subject to meeting the other requirements of the Plan. This process should include engagement with neighbouring boroughs that may be affected by tall building developments in identified locations.
2) Any such locations and appropriate tall building heights should be identified on maps in Development Plans.
3) Tall buildings should only be developed in locations that are identified as suitable in Development Plans.

Impacts

C Development proposals should address the following impacts:

1) visual impacts
    a) the views of buildings from different distances:

i long-range views – these require attention to be paid to the design of the top of the building. It should make a positive contribution to the existing and emerging skyline and not adversely affect local or strategic views

ii mid-range views from the surrounding neighbourhood – particular attention should be paid to the form and proportions of the building. It should make a positive contribution to the local townscape in terms of legibility, proportions and materiality

iii immediate views from the surrounding streets – attention should be paid to the base of the building. It should have a direct relationship with the street, maintaining the pedestrian scale, character and vitality of the street. Where the edges of the site are adjacent to buildings of significantly lower height or parks and other open spaces there should be an appropriate transition in scale between the tall building and its surrounding context to protect amenity or privacy.

b) whether part of a group or stand-alone, tall buildings should reinforce the spatial hierarchy of the local and wider context and aid legibility and wayfinding

c) architectural quality and materials should be of an exemplary standard to ensure that the appearance and architectural integrity of the building is maintained through its lifespan

d) proposals should take account of, and avoid harm to, the significance of London's heritage assets and their settings. Proposals resulting in harm will require clear and convincing justification, demonstrating that alternatives have been explored and that there are clear public benefits that outweigh that harm. The buildings should positively contribute to the character of the area

e) buildings in the setting of a World Heritage Site must preserve, and not harm, the Outstanding Universal Value of the World Heritage Site, and the ability to appreciate it

f) buildings near the River Thames, particularly in the Thames Policy Area, should protect and enhance the open quality of the river and the riverside public realm, including views, and not contribute to a canyon effect along the river

g) buildings should not cause adverse reflected glare

h) buildings should be designed to minimise light pollution from internal and external lighting

2) functional impact

a) the internal and external design, including construction detailing, the building's materials and its emergency exit routes must ensure the safety of all occupants

b) buildings should be serviced, maintained and managed in a manner that will preserve their safety and quality, and not cause disturbance or inconvenience to surrounding public realm. Servicing, maintenance and building management arrangements should be considered at the start of the design process

c) entrances, access routes, and ground floor uses should be designed and placed to allow for peak time use and to ensure there is no unacceptable overcrowding or isolation in the surrounding areas

d) it must be demonstrated that the capacity of the area and its transport network is capable of accommodating the quantum of development in terms of access to facilities, services, walking and cycling networks, and public transport for people living or working in the building

e) jobs, services, facilities and economic activity that will be provided by the development and the regeneration potential this might provide should inform the design so it maximises the benefits these could bring to the area, and maximises the role of the development as a catalyst for further change in the area

f) buildings, including their construction, should not interfere with aviation, navigation or telecommunication, and should avoid a significant detrimental effect on solar energy generation on adjoining buildings

3) environmental impact

a) wind, daylight, sunlight penetration and temperature conditions around the building(s) and neighbourhood must be carefully considered and not compromise comfort and the enjoyment of open spaces, including water spaces, around the building

b) air movement affected by the building(s) should support the effective dispersion of pollutants, but not adversely affect street-level conditions

c) noise created by air movements around the building(s), servicing machinery, or building uses, should not detract from the comfort and enjoyment of open spaces around the building

4) cumulative impacts

a) the cumulative visual, functional and environmental impacts of proposed, consented and planned tall buildings in an area must be considered when assessing tall building proposals and when developing plans for an area. Mitigation measures should be identified and designed into the building as integral features from the outset to avoid retro-fitting.

Public access

D Free to enter publicly-accessible areas should be incorporated into tall buildings where appropriate, particularly more prominent tall buildings where they should normally be located at the top of the building to afford wider views across London.

3.9.1 Whilst high density does not need to imply high rise, **tall buildings** can form part of a plan-led approach to facilitating regeneration opportunities and managing future growth, contributing to new homes and economic growth, particularly in order to make optimal use of the capacity of sites which are well-connected by public transport and have good access to services and amenities. Tall buildings can help people navigate through the city by providing reference points and emphasising the hierarchy of a place such as its main centres of activity, and important street junctions and transport interchanges. Tall buildings that are of exemplary architectural quality, in the right place, can make a positive contribution to London's cityscape, and many tall buildings have become a valued part of London's identity. However, they can also have detrimental visual, functional and environmental impacts if in inappropriate locations and/or of poor quality design. The processes set out below will enable boroughs to identify locations where tall buildings play a positive role in shaping the character of an area.

3.9.2 Boroughs should determine and **identify locations where tall buildings may be an appropriate form of development** by undertaking the steps below:

1. based on the areas identified for growth as part of Policy D1 London's form, character and capacity for growth, undertake a sieving exercise by assessing potential visual and cumulative impacts to consider whether there are locations where tall buildings could have a role in contributing to the emerging character and vision for a place
2. in these locations, determine the maximum height that could be acceptable
3. identify these locations and heights on maps in Development Plans.

3.9.3 Tall buildings are generally those that are substantially taller than their surroundings and cause a significant change to the skyline. Boroughs should **define what is a 'tall building' for specific localities**, however this definition should not be less than 6 storeys or 18 metres measured from ground to the floor level of the uppermost storey. This does not mean that all buildings up to this height are automatically acceptable, such proposals will still need to be assessed in the context of other planning policies, by the boroughs in the usual way, to ensure that they are appropriate for their location and do not lead to unacceptable impacts on the local area. In large areas of extensive change, such as Opportunity Areas, the threshold for what constitutes a tall building should relate to the evolving (not just the existing) context. This policy applies to tall buildings as defined by the borough. Where there is no local definition, the policy applies to buildings over 6 storeys or 18 metres measured from ground to the floor level of the uppermost storey.

3.9.4 The higher the building the greater the level of **scrutiny** that is required of its design. In addition, tall buildings that are referable to the Mayor, must be subject to the particular design scrutiny requirements set out in Part D of Policy D4 Delivering good design.

3.9.5 The Mayor will work with boroughs to provide a **strategic overview of tall building locations** across London and will seek to utilise 3D virtual reality digital modelling to help identify these areas, assess tall building proposals and aid public consultation and engagement. 3D virtual reality modelling can also help assess cumulative impacts of developments, particularly those permitted but not yet completed.

3.9.6 A tall building can be considered to be made up of three main parts: a top, middle and base. The top includes the upper floors, and roof-top mechanical or telecommunications equipment and amenity space. The **top** should be designed to make a positive contribution to the quality and character of the skyline, and mechanical and telecommunications equipment must be integrated in the total

building design. Not all tall buildings need to be iconic landmarks and the design of the top of the building (i.e. the form, profile and materiality) should relate to the building's role within the existing context of London's skyline. Where publicly-accessible areas, including viewing areas on upper floors, are provided as a public benefit of the development, they should be freely accessible and in accordance with Part G of Policy D8 Public realm. Well-designed safety measures should be integrated into the design of tall buildings and must ensure personal safety at height.

3.9.7 The **middle** of a tall building has an important effect on how much sky is visible from surrounding streets and buildings, as well as on wind flow, privacy and the amount of sunlight and shadowing there is in the public realm and by surrounding properties.

3.9.8 The **base** of the tall building is its lower storeys. The function of the base should be to frame the public realm and streetscape, articulate entrances, and help create an attractive and lively public realm which provides a safe, inclusive, interesting, and comfortable pedestrian experience. The base should integrate with the street frontage of adjacent buildings and, where appropriate, enable the building to transition down in height.

3.9.9 Any **external lighting** for tall buildings should be minimal, energy efficient and designed to minimise glare, light trespass, and sky glow, and should not negatively impact on protected views, designated heritage assets and their settings, or the amenity of nearby residents.

3.9.10 The list of impacts of tall buildings in Policy D9 Tall buildings is not exhaustive and **other impacts** may need to be taken into consideration. For example, the impact of new tall buildings in proximity to waterbodies supporting notable bird species upon the birds' flight lines may need to be considered.

3.9.11 **Safety** considerations must be central to the design and operation of tall buildings. Policy D11 Safety, security and resilience to emergency provides information on how to ensure the design of buildings follows best practice to minimise the threats from fire, flood, terrorism, and other hazards and Policy D12 Fire safety sets out specific requirements to address fire risk.

provide adequate protection, do not compromise good design, do not shift vulnerabilities elsewhere, and are cost-effective. Development proposals should incorporate measures that are proportionate to the threat of the risk of an attack and the likely consequences of one.

3.11.4 By drawing upon current Counter Terrorism principles, new development, including streetscapes and public spaces, should incorporate elements that deter terrorists, maximise the probability of their detection, and delay/disrupt their activity until an appropriate response can be deployed. Consideration should be given to **physical, personnel and electronic security** (including detailed questions of design and choice of materials, vehicular stand off and access, air intakes and telecommunications infrastructure). The Metropolitan Police (Designing Out Crime Officers and Counter Terrorism Security Advisors) should be consulted to ensure major developments contain appropriate design solutions, which mitigate the potential level of risk whilst ensuring the quality of places is maximised.

Policy D12 Fire safety

A In the interests of fire safety and to ensure the safety of all building users, all development proposals must achieve the highest standards of fire safety and ensure that they:

1) identify suitably positioned unobstructed outside space:
    a) for fire appliances to be positioned on
    b) appropriate for use as an evacuation assembly point
2) are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures
3) are constructed in an appropriate way to minimise the risk of fire spread
4) provide suitable and convenient means of escape, and associated evacuation strategy for all building users
5) develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in

6) provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

B All major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor.

The statement should detail how the development proposal will function in terms of:

1) the building's construction: methods, products and materials used, including manufacturers' details
2) the means of escape for all building users: suitably designed stair cores, escape for building users who are disabled or require level access, and associated evacuation strategy approach
3) features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans
4) access for fire service personnel and equipment: how this will be achieved in an evacuation situation, water supplies, provision and positioning of equipment, firefighting lifts, stairs and lobbies, any fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these
5) how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building
6) ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures.

3.12.1 The **fire safety of developments** should be considered from the outset. Development agreements, development briefs and procurement processes should be explicit about incorporating and requiring the highest standards of fire safety. How a building will function in terms of fire, emergency evacuation, and the safety of all users should be considered at the earliest possible stage to ensure the most successful outcomes are achieved, creating developments that are safe and that Londoners can have confidence living in and using.

3.12.2 The matter of fire safety compliance is covered by Part B of the Building Regulations. However, to ensure that development proposals achieve the

highest standards of fire safety, reducing risk to life, minimising the risk of fire spread, and providing suitable and convenient means of escape which all building users can have confidence in, applicants should consider issues of fire safety before building control application stage, taking into account the diversity of and likely behaviour of the population as a whole.

3.12.3 Applicants should demonstrate on a site plan that space has been identified for the **appropriate positioning of fire appliances**. These spaces should be kept clear of obstructions and conflicting uses which could result in the space not being available for its intended use in the future.

3.12.4 Applicants should also show on a site plan **appropriate evacuation assembly points**. These spaces should be positioned to ensure the safety of people using them in an evacuation situation.

3.12.5 Developments, their floor layouts and cores need to be **planned around issues of fire safety and a robust strategy for evacuation from the outset**, embedding and integrating a suitable strategy and relevant design features at the earliest possible stage, rather than features or products being applied to pre-determined developments which could result in less successful schemes which fail to achieve the highest standards of fire safety. This is of particular importance in blocks of flats, as building users and residents may be less familiar with evacuation procedures.

3.12.6 Suitable **suppression systems** (such as sprinklers) installed in buildings can reduce the risk to life and significantly reduce the degree of damage caused by fire, and should be explored at an early stage of building design.

3.12.7 The provision of **stair cores** which are suitably sized, provided in sufficient numbers and designed with appropriate features to allow simultaneous evacuation should also be explored at an early stage and provided wherever possible.

3.12.8 Policy D5 Inclusive design requires development to incorporate **safe and dignified emergency evacuation** for all building users, by as independent means as possible. In all developments where lifts are installed, Policy D5 Inclusive design requires as a minimum at least one lift per core (or more, subject to capacity assessments) to be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building. Fire evacuation lifts and associated provisions should be appropriately designed and constructed, and should include the necessary controls suitable for the purposes intended.

3.12.9 **Fire statements** should be submitted with all major development proposals. These should be produced by a third-party independent, suitably-qualified

assessor. This should be a qualified engineer with relevant experience in fire safety, such as a chartered engineer registered with the Engineering Council by the Institution of Fire Engineers, or suitably qualified and competent professional with the demonstrable experience to address the complexity of the design being proposed. This should be evidenced in the fire statement. Planning departments could work with and be assisted by suitably qualified and experienced officers within borough building control departments and/or the London Fire Brigade, in the evaluation of these statements.

3.12.10 **Fire safety and security measures** should be considered in conjunction with one another, in particular to avoid potential conflicts between security measures and means of escape or access of the fire and rescue service. Early consultation between the London Fire Brigade and the Metropolitan Police Service can successfully resolve any such issues.

3.12.11 **Refurbishment** that requires planning permission will be subject to London Plan policy. Some refurbishment may not require planning permission; nevertheless, the Mayor expects steps to be taken to ensure all existing buildings are safe, taking account of the considerations set out in this policy, as a matter of priority.

Policy D13 Agent of Change

A The Agent of Change principle places the responsibility for mitigating impacts from existing noise and other nuisance-generating activities or uses on the proposed new noise-sensitive development. Boroughs should ensure that Development Plans and planning decisions reflect the Agent of Change principle and take account of existing noise and other nuisance-generating uses in a sensitive manner when new development is proposed nearby.

B Development should be designed to ensure that established noise and other nuisance-generating uses remain viable and can continue or grow without unreasonable restrictions being placed on them.

C New noise and other nuisance-generating development proposed close to residential and other noise-sensitive uses should put in place measures to mitigate and manage any noise impacts for neighbouring residents and businesses.

Policy H1 Increasing housing supply

A Table 4.1 sets the ten-year targets for net housing completions that each local planning authority should plan for. Boroughs must include these targets in their Development Plan Documents.

B To ensure that ten-year housing targets are achieved, boroughs should:

1) prepare delivery-focused Development Plans which:
   a) allocate an appropriate range and number of sites that are suitable for residential and mixed-use development and intensification
   b) encourage development on other appropriate windfall sites not identified in Development Plans through the Plan period, especially from the sources of supply listed in B2
   c) enable the delivery of housing capacity identified in Opportunity Areas, working closely with the GLA.
2) optimise the potential for housing delivery on all suitable and available brownfield sites through their Development Plans and planning decisions, especially the following sources of capacity:
   a) sites with existing or planned public transport access levels (PTALs) 3-6 or which are located within 800m distance of a station[39] or town centre boundary[40]
   b) mixed-use redevelopment of car parks and low-density retail parks and supermarkets
   c) housing intensification on other appropriate low-density sites in commercial, leisure and infrastructure uses
   d) the redevelopment of surplus utilities and public sector owned sites
   e) small sites (see Policy H2 Small sites)
   f) industrial sites that have been identified through the processes set out in Policy E4 Land for industry, logistics and services to support

39 Tube, rail, DLR and tram stations

40 District, major, metropolitan and international town centres – for the purposes of Policy H1 Increasing housing supply Part B2a, the 800m distance is measured from the edge of the town centre boundary

London's economic function, Policy E5 Strategic Industrial Locations (SIL), Policy E6 Locally Significant Industrial Sites and Policy E7 Industrial intensification, co-location and substitution.

3) establish ambitious and achievable build-out rates at the planning stage, incentivising build-out milestones to help ensure that homes are built quickly and to reduce the likelihood of permissions being sought to sell land on at a higher value.

C Boroughs should proactively use brownfield registers and permission in principle to increase planning certainty for those wishing to build new homes.

D Boroughs should publish and annually update housing trajectories based on the targets in Table 4.1 and should work with the Mayor to resolve any anticipated shortfalls.

E Where new sustainable transport infrastructure is planned, boroughs should re-evaluate the appropriateness of land use designations and the potential to accommodate higher-density residential and mixed-use development, taking into account future public transport capacity and connectivity levels.

F On sites that are allocated for residential and mixed-use development there is a general presumption against single use low-density retail and leisure parks. These developments should be designed to provide a mix of uses including housing on the same site in order to make the best use of land available for development.

4.1.1 The Mayor has carried out a London-wide Strategic Housing Market Assessment (SHMA) and Strategic Housing Land Availability Assessment (SHLAA). The SHMA has identified **need for 66,000 additional homes per year**. The SHMA covers overall housing need as well as exploring specific requirements for purpose-built student accommodation and specialist older persons' accommodation within the overall figure.

4.1.2 For the purposes of the Plan, London is considered as a single housing market area, with a series of complex and interlinked sub-markets. The advantage of **strategic planning** is that it allows London to focus development in the most sustainable locations, allowing all of London's land use needs to be planned for with an understanding of how best to deliver them across the capital. Because of London's ability to plan strategically, boroughs are not required to carry out

their own housing needs assessment[41] but must plan for, and seek to deliver, the housing targets in this Plan. These have been informed by the SHLAA and the SHMA.

4.1.3 The Mayor recognises that development of this scale will require not just an increase in the number of homes approved but also a fundamental transformation in how new homes are delivered. The London Plan, London Housing Strategy and Mayor's Transport Strategy together provide a framework to help achieve this ambition but achieving this step change in delivery will require increased levels of funding to support the delivery of housing and infrastructure, which is discussed in more detail in Chapter 11.

4.1.4 In particular, the **London Housing Strategy** sets out the Mayor's proposals for working with boroughs and other partners to deliver the step change in housing supply required, through:

- **proactive intervention in London's land market** to unlock and accelerate housing delivery, including on public land and through compulsory purchase and other forms of land assembly
- **increased and better-targeted investment** to de-risk development and maximise opportunities from new transport infrastructure
- **diversification of the housebuilding industry** through increased Build to Rent development, more support for small and medium-sized builders, and more supply from councils and housing associations
- **tackling the construction skills gap** and modernising construction methods.

4.1.5 The London Housing Strategy encourages boroughs to put in place clear plans to bring forward appropriate sites in their own ownership for housing delivery. Boroughs should align these plans with their Development Plans in order to speed up housing delivery and ensure planning policy implications are fully considered.

4.1.6 Also set out in the London Housing Strategy, is the Mayor's aim to ensure that Londoners have an opportunity to purchase new homes before they are marketed overseas – particularly those homes that ordinary Londoners are more likely to be able to afford. The Mayor is discussing with major homebuilders steps to make more new homes available to Londoners before anyone else. The Mayor would keep any such steps under review to ensure that they deliver his

41 Where boroughs wish to commission their own research on housing requirements to complement the London-wide SHMA, they are encouraged to do this on a sub-regional rather than single-borough basis.

objectives. Their effectiveness will be monitored and the Mayor will consider other measures if necessary.

4.1.7 **The ten-year housing targets** in Table 4.1 are based on the 2017 London SHLAA. This includes an assessment of large housing sites (0.25 hectares and above) undertaken in partnership with boroughs, which provides the most comprehensive study available of the capital's capacity for housing delivery based on a consistent pan-London methodology. In addition, the SHLAA includes an assessment of small site capacity using a combination of trend data for certain types of development and an estimate of potential for intensification in existing residential areas. The differences between borough housing targets are a reflection of the variations in the constraints and opportunities affecting development on large sites and the capacity for development on small sites.[42] This includes: transport connectivity; the availability of large brownfield sites; scope to accommodate higher residential densities around town centres and stations; planning designations for industrial land, Green Belt, Metropolitan Open Land and other protected open spaces; environmental constraints; heritage assets; and the need to accommodate other land uses.

4.1.8 The SHLAA shows that there is **capacity** across London for approximately 40,000 new homes a year on large sites. Modelling in the SHLAA also shows that there is capacity for development on small sites for 12,000 new homes a year. The allowance for windfall sites (that are not specifically identified) is considered appropriate given the policy framework set out in the London Plan; the capital's reliance on recycled brownfield sites in other active land uses; and the number of additional homes expected to be provided via incremental intensification of existing residential areas. Boroughs should identify as many sites, including small sites, as possible via their Development Plan Documents. However, because of the nature of some sites (as set out above), including the particular incremental characteristics of small sites, boroughs are supported in using windfall assumptions in their five-year housing trajectories based on the numbers set out in Table 4.2. This is because, in contrast with recent annual trends on small sites, the figures in Table 4.2 are considered to better reflect a minimum baseline for housing delivery given the policy focus on developing small sites for housing in this Plan (Policy H2 Small sites) and the package of measures outlined in the London Housing Strategy.

4.1.9 There will inevitably be variations in housing completions from one year to the next, as well as a degree of uncertainty in the delivery and phasing of large sites. Therefore, the Mayor will monitor both housing

42 For a full discussion of the SHLAA methodology and findings see 2017 SHLAA report.

completions and the net pipeline of approved homes when assessing progress towards delivering the London Plan housing targets (see Chapter 12 - Monitoring). The ten-year housing targets set out in Table 4.1 should be monitored in net terms taking into account homes lost through demolition, amalgamations[43] or change of use.[44] Net non-self-contained accommodation for students should count towards meeting housing targets on the basis of a 2.5:1 ratio, with two and a half bedrooms/units being counted as a single home. Net non-self-contained accommodation for older people (C2 Use Class) should count towards meeting housing targets on the basis of a 1:1 ratio, with each bedroom being counted as a single home. All other net non-self-contained communal accommodation should count towards meeting housing targets on the basis of a 1.8:1 ratio, with one point eight bedrooms/units being counted as a single home. The approach to **monitoring net housing provision** from different forms of non-self-contained accommodation is based on the amount of self-contained housing this form of supply will free up. The ratios for student accommodation and other forms of communal accommodation mirror the ratios set out in the Government's Housing Delivery Test Measurement Rulebook.

4.1.10 The Mayor will work closely with boroughs on their **housing trajectories** and Development Plans to ensure these targets are planned for effectively, particularly where issues are identified in terms of completions and the development pipeline. In order to effectively contribute towards meeting London's housing needs, it is essential that all permitted homes are built out in a timely manner. Boroughs should encourage ambitious and achievable build-out milestones for all development proposals and consider using tools such as viability reviews (see Policy H5 Threshold approach to applications). The increase in housing delivery required by these targets may be achieved gradually and boroughs are encouraged to set out a realistic and, where appropriate, stepped housing delivery target over a ten-year period. This should be supported by a clear articulation of how these homes will be delivered and any actions the boroughs will take in the event of under delivery.[45] With the support of the boroughs and taking account of the information published in accordance with Part D, the Mayor will monitor housing supply against targets on a London-wide basis.

43 Amalgamating flats into larger homes.

44 For example, a scheme involving 25 gross new homes and the loss of 10 existing homes would contribute 15 net additional homes towards meeting housing targets.

45 This would also fulfil the requirement of a 'Housing Delivery Test action plan'

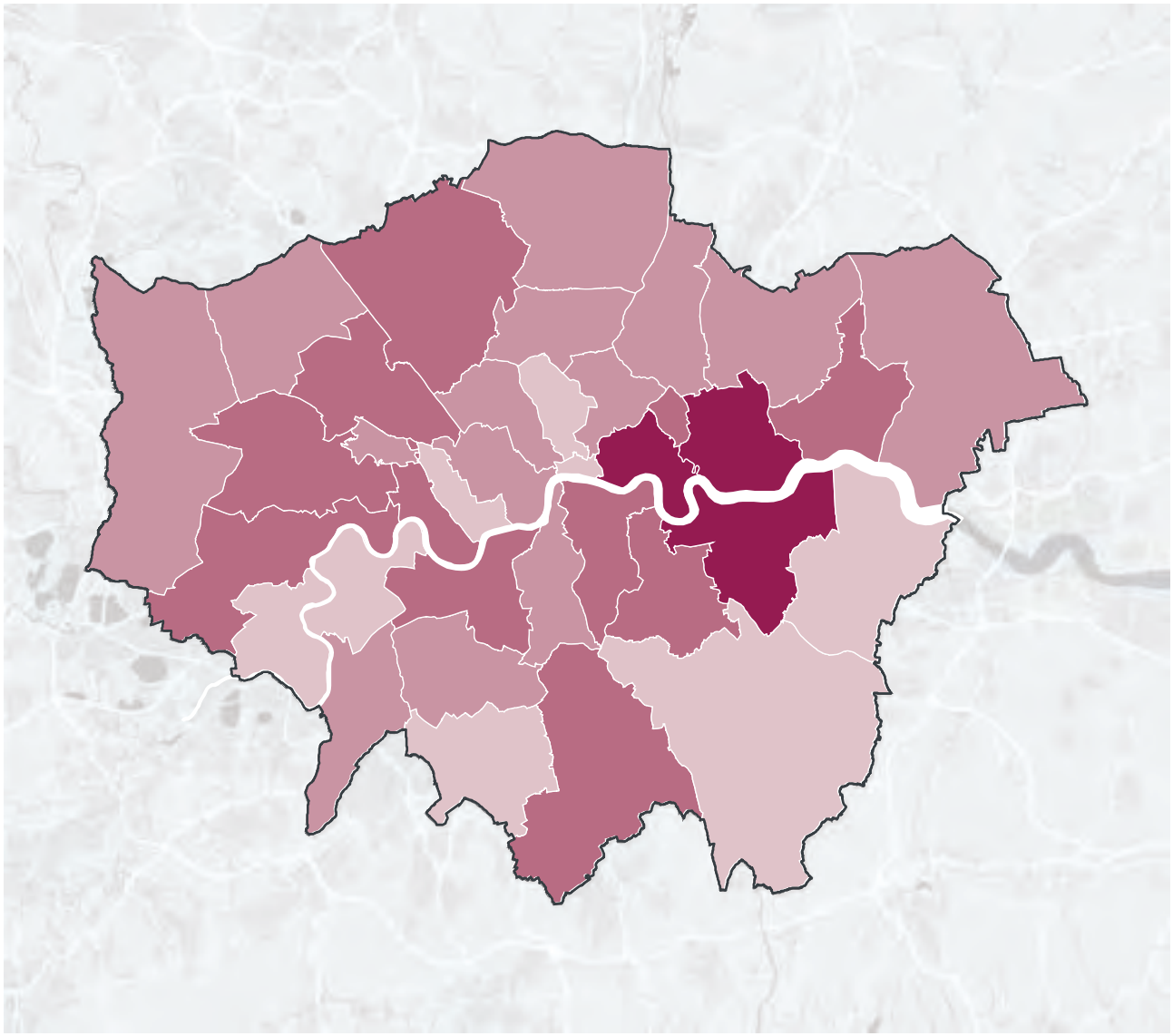
4.1.11 If a target is needed beyond the 10 year period (2019/20 to 2028/29), boroughs should draw on the 2017 SHLAA findings (which cover the plan period to 2041) and any local evidence of identified capacity, in consultation with the GLA, and should take into account any additional capacity that could be delivered as a result of any committed transport infrastructure improvements, and roll forward the housing capacity assumptions applied in the London Plan for small sites.

4.1.12 As identified in the Habitats Regulation Assessment, a mitigation strategy for Epping Forest Special Area of Conservation (SAC) is being produced to respond to the impact of additional recreational pressure and air pollution from nearby authorities, including some London boroughs. Should monitoring and evidence demonstrate adverse impacts on the SAC associated with development from London and following the implementation of the mitigation strategy, this will be considered as part of assessing whether a review of the London Plan is required. The GLA will engage with the relevant stakeholders on the formulation and delivery of the mitigation strategy.

Table 4.1 - 10 year targets for net housing completions (2019/20 -2028/29)

Planning Authority	Ten year housing target
Barking & Dagenham	19,440
Barnet	23,640
Bexley	6,850
Brent	23,250
Bromley	7,740
Camden	10,380
City of London	1,460
Croydon	20,790
Ealing	21,570
Enfield	12,460
Greenwich	28,240
Hackney	13,280
Hammersmith & Fulham	16,090
Haringey	15,920
Harrow	8,020
Havering	12,850
Hillingdon	10,830
Hounslow	17,820
Islington	7,750
Kensington & Chelsea	4,480
Kingston	9,640
Lambeth	13,350
Lewisham	16,670
London Legacy Development Corporation	21,540
Merton	9,180
Newham	32,800
Old Oak Park Royal Development Corporation	13,670
Redbridge	14,090
Richmond	4,110
Southwark	23,550
Sutton	4,690
Tower Hamlets	34,730
Waltham Forest	12,640
Wandsworth	19,500
Westminster	9,850
Total	**522,870**

Figure 4.1 - 10 Year Housing Target for Net Completions



10 Year Housing Target for Net Completions

- 24,001 - 34,730
- 16,001 - 24,000
- 8,001 - 16,000
- 1,460 - 8,000

Source: GLA Planning

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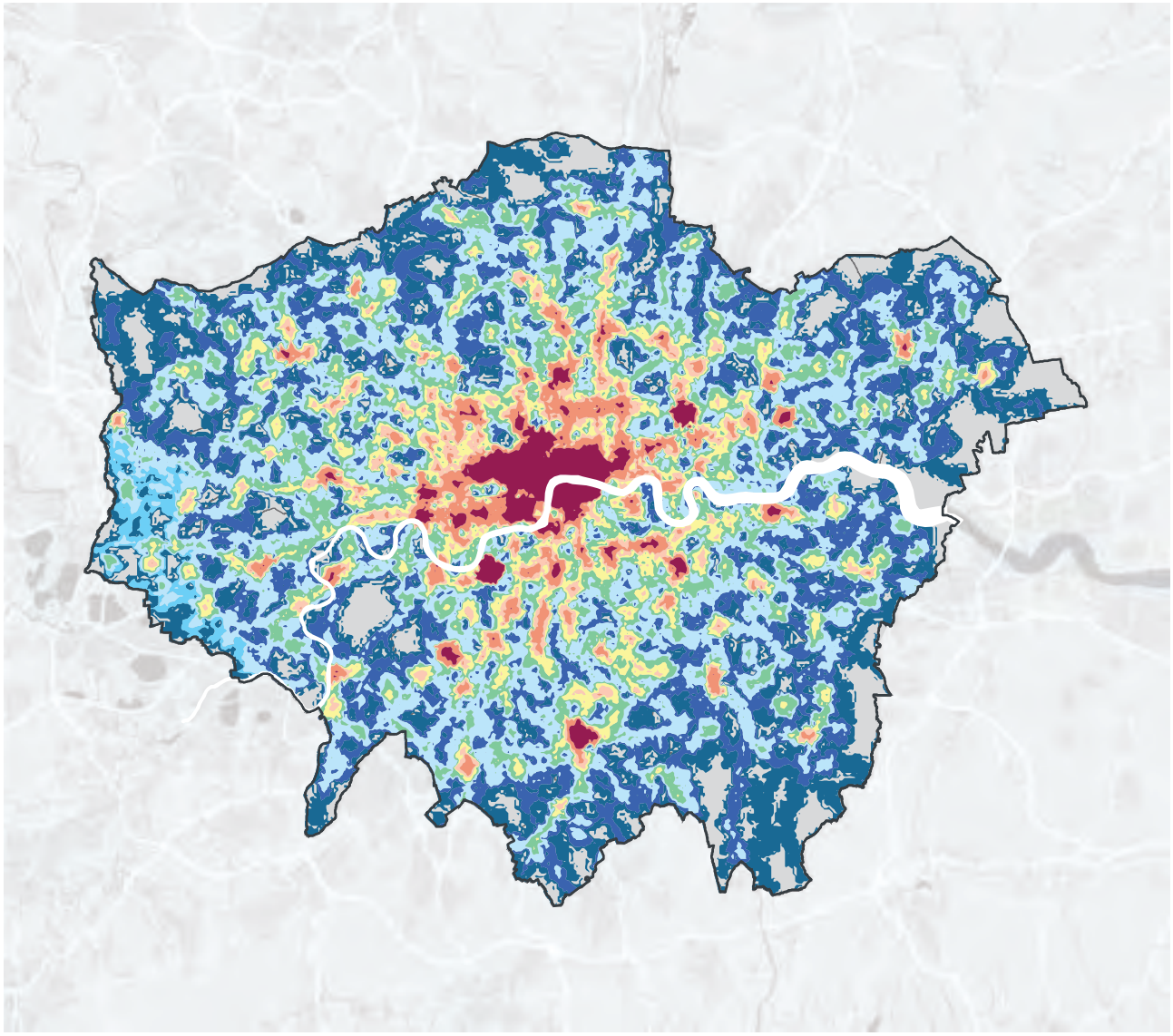
Figure 4.2 - Public Transport Access



Public Transport Access Levels
2021

- 0
- 1a
- 1b
- 2
- 3
- 4
- 5
- 6a
- 6b

Source: Transport for London (TfL)

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widespread, where it does happen it reduces the amount of new housing stock being occupied by households in need. Where the practice is widespread in a new building it can also negatively affect the provision of services to tenants.

4.9.3 It is unlawful for homes in greater London to be used **as short-term holiday rented accommodation** for a cumulative period of more than 90 days a year without seeking planning permission.[65] The use of dwellings as short-term holiday rentals can have a detrimental impact on neighbours' residential amenity and community cohesion in the wider area where concentrated in a particular location. The use also reduces the supply of homes available for people to live in.

4.9.4 **Houses in multiple occupation** (HMOs) are an important part of London's housing offer, reducing pressure on other elements of the housing stock. Their quality can, however, give rise to concern. Where they are of a reasonable standard they should generally be protected and the net effects of any loss should be reflected in Annual Monitoring Reports. In considering proposals which might constrain this provision, including Article 4 Directions affecting changes between Use Classes C3 and C4, boroughs should take into account the strategic as well as local importance of HMOs.

Policy H10 Housing size mix

A Schemes should generally consist of a range of unit sizes. To determine the appropriate mix of unit sizes in relation to the number of bedrooms for a scheme, applicants and decision-makers should have regard to:

1) robust local evidence of need where available or, where this is not available, the range of housing need and demand identified by the 2017 London Strategic Housing Market Assessment
2) the requirement to deliver mixed and inclusive neighbourhoods
3) the need to deliver a range of unit types at different price points across London
4) the mix of uses in the scheme
5) the range of tenures in the scheme

65 Pursuant to the Deregulation Act 2015 (sections 44 and 45: Short-term use of London accommodation: relaxation of restrictions and power to relax restrictions.): http://www.legislation.gov.uk/ukpga/2015/20/pdfs/ukpga_20150020_en.pdf

6) the nature and location of the site, with a higher proportion of one and two bed units generally more appropriate in locations which are closer to a town centre or station or with higher public transport access and connectivity

7) the aim to optimise housing potential on sites

8) the ability of new development to reduce pressure on conversion, sub-division and amalgamation of existing stock

9) the need for additional family housing and the role of one and two bed units in freeing up existing family housing.

B For low-cost rent, boroughs should provide guidance on the size of units required (by number of bedrooms) to ensure affordable housing meets identified needs. This guidance should take account of:

1) evidence of local housing needs, including the local housing register and the numbers and types of overcrowded and under-occupying households

2) other criteria set out in Part A, including the strategic and local requirement for affordable family accommodation

3) the impact of welfare reform

4) the cost of delivering larger units and the availability of grant.

4.10.1 The 2017 London Strategic Housing Market Assessment (SHMA) estimated the **unit size mix of new homes** required to meet London's current and projected housing needs using three different scenarios, the results of which are set out in the SHMA report addendum. The main factors influencing this size mix include the projected growth in different household types, assumptions about under-occupation, and the substantial number of overcrowded households in London, whose needs can be addressed by providing family-sized homes but also smaller homes for concealed households to move into. Boroughs can draw on the scenarios in the SHMA to understand housing mix requirements or to inform local assessments. While the SHMA identifies the full range of needs between 2016 and 2041, boroughs may wish to prioritise meeting the most urgent needs earlier in the Plan period, which may mean prioritising low-cost rented units of particular sizes.

4.10.2 Policy H10 Housing size mix sets out all the issues that applicants and boroughs should take into account when considering the **mix of homes on a**

site. Boroughs are encouraged to set out the preferred housing size mix (for all tenures) as part of a site allocation, ensuring that the housing size mix is determined in accordance with Parts A and B. It should be noted that in terms of delivering mixed and inclusive communities, a neighbourhood may currently have an over-concentration of a particular size of unit and a new development could help redress the balance.

4.10.3 Well-designed **one- and two- bedroom units** in suitable locations can attract those wanting to downsize from their existing homes, and this ability to free up existing family stock should be considered when assessing the unit mix of a new build development.

4.10.4 **One-bedroom units** play a very important role in meeting housing need, and provision in new developments can help reduce the pressure to convert and subdivide existing larger homes. However, one-person and one-bed units are the least flexible unit type so schemes should generally consist of a range of unit sizes.

4.10.5 As part of their housing strategy functions, local authorities are required to have an understanding of housing needs in their area (for example, as set out in a Strategic Housing Market Assessment) and this, along with their local Housing Register, will provide the evidence for the **size of low-cost rented homes** (in terms of number of bedrooms) required to meet identified need. Combined with the considerations set out in Part A, this information should inform local policy or guidance about the size (in terms of number of bedrooms) of low-cost rented units expected on a development. This clarity about the unit size mix for affordable homes, taken together with the threshold approach to affordable housing, will help ensure that applicants and landowners understand the cost implications of overall affordable housing requirements when formulating development proposals and purchasing land. Boroughs should take account of the availability of grant funding when producing guidance or policy on this issue.

4.10.6 The impact of this policy on the mix of homes in terms of numbers of bedrooms approved across London will be carefully **monitored and assessed** as part of the Annual Monitoring Report process. This will highlight any adverse impacts and identify if any revisions are necessary to the policy.

Policy S2 Health and social care facilities

A Boroughs should work with Clinical Commissioning Groups (CCGs) and other NHS and community organisations to:

1) identify and address local health and social care needs within Development Plans, taking account of NHS Forward Planning documents and related commissioning and estate strategies, Joint Strategic Needs Assessments and Health and Wellbeing Strategies
2) understand the impact and implications of service transformation plans and new models of care on current and future health infrastructure provision to maximise health and care outcomes
3) undertake a needs assessment to inform Development Plans, including an audit of existing health and social care facilities. Needs should be assessed locally and sub-regionally, addressing borough and CCG cross-boundary issues
4) identify sites in Development Plans for future provision, particularly in areas with significant growth and/or under provision and to address needs across borough boundaries
5) identify opportunities to make better use of existing and proposed new infrastructure through integration, co-location or reconfiguration of services, and facilitate the release of surplus buildings and land for other uses.

B Development proposals that support the provision of high-quality new and enhanced health and social care facilities to meet identified need and new models of care should be supported.

C New facilities should be easily accessible by public transport, cycling and walking.

5.2.1 London's health care services are vital to maintaining and improving Londoners' quality of life. The health service is also one of the capital's major employers, with over 200,000[82] people working in the NHS in London. Several factors

82 NHS Workforce Statistics, NHS, April 2018 https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/nhs-workforce-statistics---april-2018

affect the **demand for health services and facilities**. These include a growing and ageing population, an increase in complex and long-term health conditions that need an integrated approach, and changes in patients' personal preferences. New treatments and technologies are also transforming the ability to predict, diagnose and treat conditions. Policies throughout the Plan seek to support preventative health measures and contribute positively to the wider determinants of health. This policy facilitates this by supporting the integrated service delivery of health and social care facilities and services.

5.2.2 The NHS Long Term Plan[83] builds on the NHS Five Year Forward View, which identified the need to **prevent avoidable illness** and **transform the way that care is organised and delivered** to meet increasing demands for healthcare within the resources available. It describes the following priorities:

- increasing support for people to manage their own health better, for example through diabetes prevention and management and online therapies for common mental health problems
- undertaking a higher proportion of healthcare in community rather than hospital settings
- redesigning and reducing pressure on emergency hospital services establishing digitally-enabled primary and outpatient care across the NHS
- making best use of available assets, including more flexible approaches to how facilities are used and the overall configuration of the health estate, which requires a mix of dis-investment in older, out-of-date facilities and re-investment in more modern, fit for purpose estate
- ensuring that models of care change and continuously evolve
- ensuring that existing and planned new health infrastructure supports and facilitates change.

5.2.3 There are currently four broad **types of health infrastructure provision**:

- primary care – GP practices, plus community pharmacists, dentists and opticians
- community healthcare – this covers a wide range of diagnostic and healthcare services, including non-acute mental health services, which provide a means of delivering care closer to home than from a hospital setting
- acute provision
- specialist provision.

83 The NHS Long Term Plan (NHS England, January 2019)

5.2.4 **Sustainability and Transformation Plans** (STPs) were produced by the NHS and local Government in 2016 to set out how local health and care services would evolve and become sustainable by 2020/21. Five sub-regional STPs were developed in London. These five-year plans set out in varying levels of detail the proposed changes to NHS hospital estates and primary care facilities in each area. Local NHS organisations will increasingly focus on population health and partnerships with local authority-funded services through the development of new integrated care systems (ICSs) that will emerge from sustainability and transformation partnerships. ICSs will deliver the integration of primary and specialist care, physical and mental health services and health and social care.

5.2.5 Whilst there is no one-size-fits-all model of care, and an increasing blurring of the boundaries between primary, secondary (acute) and tertiary (specialist) health services, there are some broad underlying **principles that underpin the planning of new facilities** or changes to existing facilities. The NHS General Practice Forward View[84] and the NHS Long Term Plan support the provision of primary care at greater scale, with larger practices and/or more joined up networks of GPs offering a wider range of services to patients, including extended opening hours and widespread use of digital consultations. This means fewer GP practices serving larger patient catchments (perhaps 10-20,000 people per practice) and operating from larger premises than is the norm at present. Models of community healthcare are based around larger population catchments (50,000 or more people) or localities to ensure individual services are viable, and to maximise the benefits of integrating and/or co-locating services in community healthcare centres or hubs, or in more flexible ways across localities or networks of service providers.[85]

5.2.6 In **assessing the need for new health and social care facilities**, consideration should be given to the location, scale and timing of new residential development, and the quality, capacity and accessibility of existing health and social care facilities to meet some or all growth. Joint Strategic Needs Assessments produced by local Health and Wellbeing Boards describe the current and future health and wellbeing needs of the local population and identify priorities for action which are set out in more detail in the Boards' Health and Wellbeing Strategies. These documents are valuable sources of evidence to inform the development and review of Development Plans.

84 General Practice Forward View, NHS England, 2016, https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf

85 Breaking down barriers to better health and care, NHS England, June 2018

5.2.7 Where population growth and change is taking place at modest levels, it may be possible to accommodate this through a combination of **efficiency savings, service reconfiguration and small adjustments in capacity**, for example through the conversion of non-clinical space to consulting or treatment rooms. In areas of high or concentrated population growth, particularly in Opportunity Areas, it is more likely that **new primary and community facilities or capacity will need to be provided**. Boroughs have a key role to play in ensuring that the need for health and social care facilities is assessed, that sufficient and appropriately-located sites are allocated for such facilities, and that mechanisms are in place to secure their provision through, for example, Section 106 or Community Infrastructure Levy contributions.

5.2.8 The **co-location of facilities with other uses**, such as other forms of social infrastructure or housing, is encouraged to use land more efficiently and to enable a more integrated service delivery.

5.2.9 Development and regeneration proposals for an area provide an opportunity to **re-think how land and buildings are used** and whether there is a more optimal configuration or use of that land. Hospital reconfigurations are an example where more intensive and better use of a site can lead to a combination of improved facilities and the creation and release of surplus land for other priorities. The London Estates Board aims to improve the way surplus and underused NHS assets are identified and released, and provide a single forum for estate discussions in London, ensuring early involvement of London Government partners. Membership includes NHS partners, local Government, the GLA and national partners (central Government, NHS England, One Public Estate and the national NHS property companies).

Policy S3 Education and childcare facilities

A To ensure there is a sufficient supply of good quality education and childcare facilities to meet demand and offer educational choice, boroughs should:

1) prepare Development Plans that are informed by a needs assessment of education and childcare facility needs. Needs should be assessed locally and sub-regionally, addressing cross-boundary issues. Needs assessments should include an audit of existing facilities.

Policy E1 Offices

A Improvements to the quality, flexibility and adaptability of office space of different sizes (for micro, small, medium-sized and larger enterprises) should be supported by new office provision, refurbishment and mixed-use development.

B Increases in the current stock of offices should be supported in the locations in Parts C and D below.

C The unique agglomerations and dynamic clusters of world city businesses and other specialist functions of the central London office market, including the CAZ, NIOD (Northern Isle of Dogs) and other nationally-significant office locations (such as Tech City and Kensington & Chelsea), should be developed and promoted. These should be supported by improvements to walking, cycling and public transport connectivity and capacity. Future potential reserve locations for CAZ-type office functions are identified at Stratford and Old Oak Common, capitalising on their current and potential public transport connectivity to central London, the UK and beyond.

D The diverse office markets in outer and inner London (outside the areas identified in Part C) should be consolidated and – where viable – extended, focusing new development in town centres and other existing office clusters supported by improvements to walking, cycling and public transport connectivity and capacity including:

1) the strategic outer London office location at Croydon town centre
2) other town centre office locations (having regard to the Town Centre Network office guidelines in Table A1.1 and Figure A1.4 in Annex 1)
3) existing urban business parks (such as Chiswick Park, Stockley Park and Bedfont Lakes), taking steps towards greater transport sustainability of these locations
4) locally-oriented, town centre office provision to meet local needs.

E Existing viable office floorspace capacity in locations outside the areas identified in Part C should be retained, supported by borough Article 4 Directions to remove permitted development rights where appropriate, facilitating the redevelopment, renewal and re-provision of office space where viable and releasing surplus office capacity to other uses.

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F Boroughs should consult upon and introduce Article 4 Directions to ensure that the CAZ, NIOD, Tech City, Kensington & Chelsea and geographically-defined parts of other existing and viable strategic and local office clusters (such as those in and around the CAZ, in town centres and other viable business locations – see Part D3 above) are not undermined by office to residential permitted development rights.

G Development proposals related to new or existing offices should take into account the need for a range of suitable workspace including lower cost and affordable workspace.

H The scope for the re-use of otherwise surplus large office spaces for smaller office units should be explored.

I The redevelopment, intensification and change of use of surplus office space to other uses including housing is supported, subject to the provisions of Parts G and H.

6.1.1 London has a **diverse range of office markets**[95] with agglomerations of nationally and internationally significant office functions in the Central Activities Zone, Northern Isle of Dogs, Kensington & Chelsea and Tech City, complemented by strategic town centre office locations in inner and outer London and locally-oriented provision in other town centres across the whole of the capital.

6.1.2 The office market is going through a **period of restructuring** with increasing numbers of micro, small and medium-sized enterprises (SMEs), changing work styles supported by advances in technology, and new forms of accommodation such as flexible and co-working space.[96] Office employment projections suggest an increase of 619,300 jobs, from 1.98 million in 2016 to 2.60 million in 2041, a rise of 31 per cent.[97] This could translate into demand for between 4.7 and 6.1 million sq.m. of office floorspace over the period 2016 to 2041 (Table 6.1). It is important that the planning process does not compromise potential growth and so Table 6.1 provides a broad monitoring benchmark which needs to be set against other drivers such as development trends, employment densities, rents, take-up and vacancy.

95 Offices include uses falling within Use Class B1a and office-related B1b.

96 London Office Policy Review, Ramidus Consulting, 2017; Supporting places of work: incubators, accelerators, co-working spaces, URS, Ramidus, #1Seed and Gort Scott, 2014

97 Ramidus Consulting, 2017 op cit

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Table 6.1 - Projected office employment and floorspace demand 2016-2041

Location	Office employment growth 2016-2041		Office floorspace demand 2016-2041
	Total	% of total growth	Gross Internal Area (million sq.m.)
Outer London	142,200	23%	0.3 – 1.5
CAZ and NIOD	367,700	59%	3.5
Inner London (outside CAZ+NIOD)	109,400	18%	1.0 – 1.1
London total	619,300	100%	4.7 – 6.1

Source: Ramidus Consulting, 2017 (Note: numbers may not sum due to rounding)

6.1.3 The projections indicate that the CAZ boroughs and some parts of **inner London** will continue to see growth in office employment and development of new office floorspace, driven by agglomeration economies, high value-added activities and viability of new space. There is broadly sufficient capacity to accommodate this demand in the CAZ and Northern Isle of Dogs complemented by Tech City and Kensington & Chelsea, although there are sub-markets within these areas where demand may exceed capacity.[98] Stratford and Old Oak Common are identified as potential future reserves for CAZ-related office capacity.

6.1.4 **Outer London** will see growth in office employment but the development of significant new office floorspace is anticipated to be focused in selected locations, particularly in west and south London (Figure A1.4) and where values are sufficient to make new office development viable. Office growth in these locations should be supported by improvements to walking, cycling and public transport connectivity and capacity.

6.1.5 It is important to ensure that there is sufficient space to support the growth of new start-up companies and to accommodate SMEs, including lower-cost and affordable business space. Development Plans and development proposals should support the provision of **space suitable for SMEs** in light of strategic and local assessments of demand and supply.

98 London Employment Sites Database, CAG Consulting, 2017 and Ramidus 2017 op cit..

6.1.6 Outside the office to residential permitted development rights (PDR) exemption areas, more than 1.9 million sq.m. of office space had received prior approval to change to residential by March 2018[99] mostly, but not exclusively, in town centres in west and south London and in areas around the CAZ fringe. There are concerns that **office to residential PDR** is having disproportionate impacts on occupied office floorspace and on SMEs and that it could undermine the potential to deliver significantly more housing through more intensive forms of mixed-use development, particularly in town centres. This Plan therefore supports boroughs to consult upon and introduce Article 4 Directions for the areas currently exempted in and around the CAZ and for geographically-defined parts of other existing and viable strategic and local office locations, to ensure that their office functions are not undermined by office to residential PDR and to protect local amenity or the wellbeing of an area.

6.1.7 **Surplus office space** includes sites and/or premises where there is no reasonable prospect of these being used for business purposes. Evidence to demonstrate surplus office space should include strategic and local assessments of demand and supply, and evidence of vacancy and marketing (at market rates suitable for the type, use and size for at least 12 months, or greater if required by a local Development Plan Document). This evidence should be used to inform viability assessments.

Policy E2 Providing suitable business space

A Boroughs should include policies in local Development Plan Documents that support the provision, and where appropriate, protection of a range of B Use Class business space, in terms of type, use and size, at an appropriate range of rents, to meet the needs of micro, small and medium-sized enterprises and to support firms wishing to start-up or expand.

B Development of B Use Class business uses should ensure that the space is fit for purpose having regard to the type and use of the space.

C Development proposals that involve the loss of existing B Use Class business space (including creative and artists' workspace) in areas identified in a local Development Plan Document where there is a shortage of lower-cost space or workspace of particular types, uses or sizes, should:

99 London Development Database

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1) demonstrate that there is no reasonable prospect of the site being used for business purposes, or

2) ensure that an equivalent amount of B Use Class business space is re-provided in the proposal which is appropriate in terms of type, use and size, incorporating existing businesses where possible, and include affordable workspace where appropriate (see Policy E3 Affordable workspace).

D Development proposals for new B Use Class business floorspace greater than 2,500 sq.m. (gross external area), or a locally determined lower threshold in a local Development Plan Document, should consider the scope to provide a proportion of flexible workspace or smaller units suitable for micro, small and medium-sized enterprises.

6.2.1 The provision of a **sufficient supply of business space of different types, uses and sizes** will ensure that workspace is available for occupation by SMEs and businesses wishing to start-up or expand. It will also help to ensure that workspace is available at an appropriate range of rents.

6.2.2 Development of business uses should ensure that the space is fit for purpose, with at least basic fit-out, and not compromised in terms of layout, street frontage, floor loading, floor to ceiling heights and servicing, having regard to the type and use of the space. This should take into account the varied operational and servicing requirements of different business uses.

6.2.3 Smaller occupiers and creative businesses are particularly vulnerable and sensitive to even small fluctuations in costs. To support a **diverse economy**, it is important that cost pressures do not squeeze out smaller businesses, particularly from fringe locations around central London, but also across the capital as a whole. There is evidence that the conversion of occupied or partially-occupied offices to residential use, through permitted development rights, is having a particular impact on secondary space in outer London and on the fringes of the CAZ.[100]

6.2.4 **Low-cost business space** refers to secondary and tertiary space that is available at open market rents, which is of a lower specification than prime space,[101] or found in non-prime locations such as back-of-town centre and

100 Ramidus Consulting, 2017 op cit / London Development Database monitoring

101 See Glossary for definitions of Prime, secondary and tertiary commercial property

high street locations, railway arches, heritage buildings in the CAZ, and smaller-scale provision in industrial locations. It usually commands rents at or below the market average.

6.2.5 Part B of this policy is intended to operate in those parts of London where there is evidence in a local Development Plan Document of particular **shortages of business space** available for occupation, including lower-cost space. It supports the life-cycle of prime, secondary and tertiary business space over the longer term by securing the re-provision of capacity at open market rents and the provision of affordable workspace at rents maintained below the market rate where appropriate – (see Policy E3 Affordable workspace). It will be most effective in those parts of London where boroughs have removed office or light industrial to residential permitted development rights through Article 4 Directions.

6.2.6 Larger-scale commercial development proposals should consider the scope to incorporate a **range of sizes of business units**, including for SMEs. Flexible workspace can include a variety of types of space including serviced offices, co-working space[102] and hybrid industrial space for B1c/B2/B8 uses. What constitutes a reasonable proportion of workspace suitable for SMEs should be determined on the circumstances of each case.

6.2.7 If business space is demonstrated to be obsolete or surplus to requirements (see paragraphs 6.1.7 and 6.7.5), it should be **redeveloped for housing and other uses**.

Policy E3 Affordable workspace

A In defined circumstances set out in Parts B and C below, planning obligations may be used to secure affordable workspace (in the B Use Class) at rents maintained below the market rate for that space for a specific social, cultural or economic development purpose such as:

1) for specific sectors that have social value such as charities, voluntary and community organisations or social enterprises
2) for specific sectors that have cultural value such as creative and artists' workspace, rehearsal and performance space and makerspace
3) for disadvantaged groups starting up in any sector

102 Ramidus Consulting, 2017 op cit section 2.3

4) supporting educational outcomes through connections to schools, colleges or higher education

5) supporting start-up and early stage businesses or regeneration.

B Consideration should be given to the need for affordable workspace for the purposes in Part A above:

1) where there is affordable workspace on-site currently, or has been at any time since 1 December 2017, except where it is demonstrated that the affordable workspace has been provided on a temporary basis pending redevelopment of the site

2) in areas identified in a local Development Plan Document where cost pressures could lead to the loss of affordable or low-cost workspace for micro, small and medium-sized enterprises (such as in the City Fringe around the CAZ and in Creative Enterprise Zones)

3) in locations identified in a local Development Plan Document where the provision of affordable workspace would be necessary or desirable to sustain a mix of business or cultural uses which contribute to the character of an area.

C Boroughs, in their Development Plans, should consider detailed affordable workspace policies in light of local evidence of need and viability. These may include policies on site-specific locations or defining areas of need for certain kinds of affordable workspace.

D Affordable workspace policies defined in Development Plans and the terms set out in Section 106 agreements should ensure that the objectives in Part A above are monitored and achieved, including evidence that the space will be managed by a workspace provider with a long-term commitment to maintaining the agreed or intended social, cultural or economic impact. Applicants are encouraged to engage with workspace providers at an early stage in the planning process to ensure that the space is configured and managed efficiently.

E Leases or transfers of space to workspace providers should be at rates that allow providers to manage effective workspace with sub-market rents, meeting the objectives in Part A, over the long-term.

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6.3.1 It is important that London continues to **generate a wide range of economic and other opportunities**, to ensure that London is a fairer, more inclusive and more equal city. The cost of workspace in London is particularly high relative to other parts of the UK and to ensure that all types of development needed to support the economy can be accommodated there is a need for affordable workspace for some economic, social and cultural uses that cannot afford to operate at open market rents and to support start-up or early stage businesses.

6.3.2 Affordable workspace is defined here as workspace that is provided at **rents maintained below the market rate** for that space **for a specific social, cultural, or economic development purpose**. It can be provided and/or managed directly by a dedicated workspace provider, a public, private, charitable or other supporting body; through grant and management arrangements (for example through land trusts); and/or secured in perpetuity or for a period of at least 15 years by planning or other agreements.

6.3.3 Affordable workspace may **help support educational outcomes**, for example by businesses providing apprenticeships and work experience, offering mentoring by entrepreneurs and/or providing space for further and higher education leavers to develop academic work into businesses. It may also be linked with business support and skills training.

6.3.4 As well as ensuring a sufficient supply of affordable business space, the Mayor also wishes to support sectors that have **cultural or social value** such as artists, designer-makers, charities, voluntary and community organisations and social enterprises for which low-cost space can be important. Therefore, in certain specific circumstances, as set out in Part A, there may be a need to secure affordable workspace as part of new development.

6.3.5 Social, cultural, or economic development objectives can be set in **planning obligations**, or by ensuring workspace providers are on a Local Authority framework panel or accredited list. Arrangements for engaging a provider, how the space will be owned or leased and the process for review, changes in terms, disposal or termination, should be agreed with the Local Planning Authority. When drawing up local Development Plan policies, boroughs are encouraged to draw on the experience of local workspace providers to understand the nature of demand in an area. Planning obligations used to secure affordable workspace in mixed use schemes should include mechanisms to ensure its timely delivery. It may be appropriate to require this in advance of some or all residential elements being occupied.

6.3.6 Landowners sometimes provide affordable workspace on a voluntary and temporary basis prior to the redevelopment of a site. This provision makes good use of sites that may otherwise remain vacant. The **temporary use** of

a site should generally be secured through a temporary planning permission and must not result in an unacceptable impact on residential amenity or prevent development sites from being brought forward for development in a timely fashion. Parameters for any temporary use, particularly its longevity and associated obligations, should be established from the outset and agreed by all parties.

6.3.7 The Mayor will encourage the delivery of new workspace for **SMEs, the creative industries, artists and the fashion industry** within new residential and mixed-use developments. He will also provide assistance to artists and creative businesses through the Mayor's Creative Enterprise Zones (see Policy HC5 Supporting London's culture and creative industries) and promote schemes that provide linked affordable housing and affordable workspace in new housing developments.

Policy E4 Land for industry, logistics and services to support London's economic function

A A sufficient supply of land and premises in different parts of London to meet current and future demands for industrial and related functions should be provided and maintained, taking into account strategic and local employment land reviews, industrial land audits and the potential for intensification, co-location and substitution (see Policy E7 Industrial intensification, co-location and substitution). This should make provision for the varied operational requirements of:

1) light and general industry (Use Classes B1c and B2)
2) storage and logistics/distribution (Use Class B8) including 'last mile' distribution close to central London and the Northern Isle of Dogs, consolidation centres and collection points
3) secondary materials, waste management and aggregates
4) utilities infrastructure (such as energy and water)
5) land for sustainable transport functions including intermodal freight interchanges, rail and bus infrastructure
6) wholesale markets
7) emerging industrial-related sectors

- Development Plans and frameworks (including Opportunity Area Planning Frameworks, local Area Action Plans and Town Centre strategies)
- strategic infrastructure plans
- new development and refurbishment
- public transport connectivity and capacity upgrades
- other infrastructure
- management and investment (including Business Improvement Districts)
- improvements to the business environment and public realm
- promotion, branding and marketing.

6.8.7 Boroughs across London contain a rich variety of employment areas, including industrial estates, high streets and areas within and on the edge of town centres, which provide locations and opportunities for **locally significant sectors and clusters of businesses**. These are important for local economies and provide diverse employment opportunities for local residents. Boroughs are encouraged to identify these sectors and clusters and set out policies in Local Plans that support their growth, having regard in particular to public transport provision and ensuring the vitality and viability of town centres.

Policy E9 Retail, markets and hot food takeaways

A A successful, competitive and diverse retail sector, which promotes sustainable access to goods and services for all Londoners, should be supported in line with the wider objectives of this Plan, particularly for town centres (Policy SD6 Town centres and high streets, Policy SD8 Town centre network, Policy SD7 Town centres: development principles and Development Plan Documents and Policy SD9 Town centres: Local partnerships and implementation).

B In Development Plans, boroughs should:

1) identify future requirements and locations for new retail development having regard to the town centre policies in this Plan and strategic and local evidence of demand and supply
2) identify areas for consolidation of retail space where this is surplus to requirements

3) set out policies and site allocations to secure an appropriate mix of shops and other commercial units of different sizes, informed by local evidence and town centre strategies. Particular consideration should be given to the contribution large-scale commercial development proposals (containing over 2,500 sq.m. gross A Use Class floorspace) can make to the provision of small shops and other commercial units. Where justified by evidence of local need, policies should secure affordable commercial and shop units.

C Development Plans and development proposals should:

1) bring forward capacity for additional comparison goods retailing particularly in International, Metropolitan and Major town centres

2) support convenience retail in all town centres, and particularly in District, Local and Neighbourhood centres, to secure inclusive neighbourhoods and a sustainable pattern of provision where there is less need to travel

3) provide a policy framework to enhance local and neighbourhood shopping facilities and prevent the loss of retail and related facilities that provide essential convenience and specialist shopping

4) identify areas under-served in local convenience shopping and related services and support additional facilities to serve existing or new residential communities in line with town centre Policy SD7 Town centres: development principles and Development Plan Documents

5) support London's markets in their full variety, including street markets, covered markets, specialist and farmers' markets, complementing other measures to improve their management, enhance their offer and contribute to local identity and the vitality of town centres and the Central Activities Zone

6) manage existing edge-of-centre and out-of-centre retail (and leisure) by encouraging comprehensive redevelopment for a diverse mix of uses in line with Policy SD6 Town centres and high streets, Policy Policy SD8 Town centre network, Policy SD7 Town centres: development principles and Development Plan Documents and Policy SD9 Town centres: Local partnerships and implementation to realise their full potential for housing intensification, reducing car use and dependency, and improving access by walking, cycling and public transport

7) manage clusters of retail and associated uses having regard to their positive and negative impacts on the objectives, policies and priorities of the London Plan including:
   a) town centre vitality, viability and diversity
   b) sustainability and accessibility
   c) place-making or local identity
   d) community safety or security
   e) mental and physical health and wellbeing.

D Development proposals containing A5 hot food takeaway uses should not be permitted where these are within 400 metres walking distance from the entrances and exits of an existing or proposed primary or secondary school. Boroughs that wish to set a locally-determined boundary from schools must ensure this is sufficiently justified. Boroughs should also carefully manage the over-concentration of A5 hot food takeaway uses within town centres and other areas through the use of locally-defined thresholds in Development Plans.

E Where development proposals involving A5 hot food takeaway uses are permitted, boroughs should encourage operators to comply with the Healthier Catering Commitment standards. Where justified, boroughs should ensure compliance with the Healthier Catering Commitment through use of a condition.

F Development proposals involving the redevelopment of surplus retail space should support other planning objectives and include alternative town centre uses on the ground floor where viable (and in accordance with town centre Policy SD7 Town centres: development principles and Development Plan Documents) and residential development.

6.9.1 A diverse and competitive retail sector that meets the needs of Londoners and visitors to the capital is important. **Retailing is undergoing restructuring** in response to recent trends and future forecasts for consumer expenditure, population growth, technological advances and changes in consumer behaviour, with increasing proportions of spending made via the internet. As a result, retailing has evolved to become multi-channel, with a mix of physical stores, often supported by internet 'click and collect' in store or deliveries to homes,

workplaces or pick-up points, and in other cases purely online businesses with no physical stores.

6.9.2 Taking into account projected growth in household, commuter and tourist spending in London, retailers making more efficient use of existing space and special forms of trading (which includes internet-related spend), it is estimated that London could have a baseline **need for additional comparison goods retailing** of around 1.6 million sq.m. over the period 2016-2041, or 1.2 million sq.m. when current schemes in the planning pipeline are taken into account.[113]

6.9.3 In preparing or reviewing Development Plans, boroughs should take into account integrated strategic and local assessments of demand and capacity for both comparison and convenience goods retailing. Boroughs should plan proactively to accommodate that demand and **manage the transition of surplus retail** (including high street frontages, purpose-built shopping centres, malls and retail parks) to other uses in line with this policy and Policy SD6 Town centres and high streets, Policy SD8 Town centre network, Policy SD7 Town centres: development principles and Development Plan Documents, while ensuring sufficient capacity for convenience retail to meet the day-to-day needs of local residents.

6.9.4 **Street markets** in London can play a valuable economic, social and cultural role[114] helping to meet Londoners' varied dietary requirements, extend choice and access to a range of goods, contribute to the vitality and viability of town centres and the character of high streets, and provide opportunities for new businesses to start-up. Several markets are of strategic importance, such as those at Portobello Road, Borough, Columbia Road and Camden for example, and offer significant attractions for Londoners and visitors to the capital. Many markets have a specialist function, serving the shopping and leisure needs of a specific ethnic group, or providing speciality products and services. Whilst the planning system can help support the range of London's markets, broader actions are often required in terms of management and investment. The Mayor has established the London Markets Board to help ensure that markets continue to flourish, support growth in town centres and associated high streets, and remain vibrant attractions for all Londoners and visitors to the capital.

6.9.5 Policy SD6 Town centres and high streets promotes a **diverse range of uses** to support the vitality and viability of town centres. Some retail and related uses when clustered can support town centres to develop niche or specialist roles and may provide important visitor attractions. Over-concentrations of some uses however, such as betting shops, pawnbrokers, pay-day loan

113 Experian, 2017 op cit.

114 Understanding London's Markets, GLA, 2017

stores, amusement centres and hot food takeaways, can give rise to particular concerns regarding the impact on mental and physical health and wellbeing, amenity, vitality, viability and diversity. The proliferation and concentration of these uses should be carefully managed through Development Plans and planning decisions, particularly in town centres that are within Strategic Areas for Regeneration (see Table A1.1), which tend to have higher numbers of these premises.[115] Boroughs may require Health Impact Assessments for particular uses.

6.9.6 Obesity is one of the greatest health challenges facing the capital. In London 38 per cent of Year 6 pupils (10 to 11 year-olds) are overweight or obese – higher than any other region in England. Children living in the most deprived areas of London are twice as likely to be obese as children living in the least deprived areas.[116] The creation of a **healthy food environment**, including access to fresh food, is therefore important. The number of hot food takeaways in London has been steadily rising, with London boroughs having some of the highest densities of hot food takeaways in England. More deprived areas commonly have a higher density of hot food takeaways than other areas.[117]

6.9.7 **Hot food takeaways** generally sell food that is high in calories, fat, salt and sugar, and low in fibre, fruit and vegetables. There is evidence that regular consumption of energy-dense food from hot food takeaways is associated with weight gain, and that takeaway food is appealing to children. It is recognised that the causes of obesity are complex and the result of a number of factors, and that a broad package of measures is required to reduce childhood obesity within London. A wide range of health experts recommend restricting the proliferation of hot food takeaways, particularly around schools, in order to help create a healthier food environment. Boroughs wishing to set a locally-determined boundary from schools should justify this using evidence provided by public health leads. Shift and night-time workers also find it particularly difficult to access healthy food due to the limited options available to them at night time.

115 London Town Centre Health Check, GLA, 2018

116 From Evidence into Action: Opportunities to Protect and Improve the Nation's Health. Public Health England, Oct. 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/366852/PHE_Priorities.pdf

117 Fast Food Map. Public Health England, 2016, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/578041/Fast_food_map_2016.pdf

6.9.8 The **Healthier Catering Commitment**[118] is a scheme that helps food businesses in London to provide healthier food to their customers. The scheme promotes a reduction in the consumption of fat, salt and sugar, and an increase in access to fruit and vegetables. This can also help ensure there are healthier food options available for night workers.

6.9.9 Commercial activity provides opportunities for micro, small and medium-sized enterprises to establish and contribute to the diversity of town centres. Independent businesses, including shops, cafés and restaurants, play an important role in supporting the vitality and vibrancy of town centres and local communities, and many operate from smaller premises. In parts of London, **small shops and other A Class uses suitable for occupation by SMEs** may be in short supply and affordability can be a key concern. Larger developments that include a significant amount of commercial floorspace can contribute to the diversity, vitality and vibrancy of town centres by providing a range of unit sizes that includes smaller premises. The High Streets for All report found that almost 70 per cent of small businesses consider rent unaffordable[119] with average retail rents increasing 4 per cent per annum over the period 2009 to 2016.[120] Where there is local evidence of need, Development Plans should require affordable commercial and shop units (secured through planning conditions or planning obligations as appropriate).

118 The Healthier Catering Commitment, https://www.london.gov.uk/what-we-do/business-and-economy/food/our-projects-food-london/healthier-catering-commitment

119 High Streets for All, GLA, 2017

120 London Town Centre Health Check, GLA, 2017

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Policy E11 Skills and opportunities for all

A The Mayor will work with strategic partners to address low pay and gender and ethnicity pay gaps, and, as set out in his Skills for Londoners Strategy, co-ordinate national, regional and local initiatives to promote inclusive access to training, skills and employment opportunities for all Londoners.

B Development proposals should support employment, skills development, apprenticeships, and other education and training opportunities in both the construction and end-use phases, including through Section 106 obligations where appropriate. Boroughs should ensure these are implemented in ways that:

1) enable those people undertaking training to complete their training and apprenticeships
2) ensure the greatest possible level of take-up by Londoners of the training, apprenticeship and employment opportunities created
3) increase the proportion of under-represented groups within the construction industry workforce.

In partnership with the Mayor, boroughs are encouraged to consider cross-borough working to open up opportunities, including those created via Section 106 obligations, on a reciprocal basis, to residents from adjacent boroughs and across London.

6.11.1 London has a strong, dynamic, global economy, but despite the capital's economic growth and prosperity, the employment rate has lagged behind the national average for three decades. More than 270,000 Londoners are unemployed, with particularly high rates of youth unemployment. Employment rates in London are consistently lower for those without any formal qualifications. London also has a growing problem of in-work poverty, associated with low-skilled low-paid work. Ensuring an **effective and responsive skills system** is critical to tackling these issues, enabling more Londoners to find and progress in work and support strategic and local regeneration.

6.11.2 Developers are often required to make **employment and training opportunities in new developments** available to local residents as part of Section 106 planning agreements. While there are examples of this approach working well, by ensuring that developers make a direct, positive contribution to the local communities in which they are working, the current model does not always

succeed in enabling residents to complete their training, securing sustainable employment for local people or meeting the demand for construction skills.

6.11.3 **Employment and training targets** included in Section 106 agreements are often based on the number of new apprenticeship or training starts, rather than the meaningful completion of these. The often short-term nature of construction projects compared to the longer duration of apprenticeships mean that apprentices employed at the beginning of a project may not have finished their training by the time construction on site is completed. This means that once developments finish, apprentices may not be able to move with contractors to developments in different areas (because they too will have their own local labour requirements and requirements for new training and employment starts). They may therefore, be unable to complete their training. In addition, local labour requirements can mean that contractors struggle to meet the demand for skills because they must source labour from a geographically-defined labour pool, where the required skills may not necessarily be available.

6.11.4 **Cross-borough working, co-ordination and sharing of data** on employment and training opportunities, together with a more uniform approach to the drafting of Section 106 obligations across the capital, could help deliver more successful employment outcomes and ensure that the objectives in Part B can be achieved. The GLA is keen to support this approach and, as recommended by the Mayor's Homes for Londoners Construction Skills Sub-Group, will investigate how best to do this, recognising that there is a need to demonstrate that any new approach improves outcomes for employers, boroughs and residents. This new approach should provide more meaningful employment and training opportunities for residents across London, while recognising the importance of new developments for providing local employment opportunities. Successful implementation of this approach should ensure that employment and apprenticeship opportunities created by developments are taken up and completed by a greater number of Londoners.

Policy HC1 Heritage conservation and growth

A Boroughs should, in consultation with Historic England, local communities and other statutory and relevant organisations, develop evidence that demonstrates a clear understanding of London's historic environment. This evidence should be used for identifying, understanding, conserving, and enhancing the historic environment and heritage assets, and improving access to, and interpretation of, the heritage assets, landscapes and archaeology within their area.

B Development Plans and strategies should demonstrate a clear understanding of the historic environment and the heritage values of sites or areas and their relationship with their surroundings. This knowledge should be used to inform the effective integration of London's heritage in regenerative change by:

1) setting out a clear vision that recognises and embeds the role of heritage in place-making
2) utilising the heritage significance of a site or area in the planning and design process
3) integrating the conservation and enhancement of heritage assets and their settings with innovative and creative contextual architectural responses that contribute to their significance and sense of place
4) delivering positive benefits that conserve and enhance the historic environment, as well as contributing to the economic viability, accessibility and environmental quality of a place, and to social wellbeing.

C Development proposals affecting heritage assets, and their settings, should conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings. The cumulative impacts of incremental change from development on heritage assets and their settings should also be actively managed. Development proposals should avoid harm and identify enhancement opportunities by integrating heritage considerations early on in the design process.

D Development proposals should identify assets of archaeological significance and use this information to avoid harm or minimise it through design and appropriate mitigation. Where applicable, development should make provision for the protection of significant archaeological assets and landscapes. The protection of undesignated heritage assets of

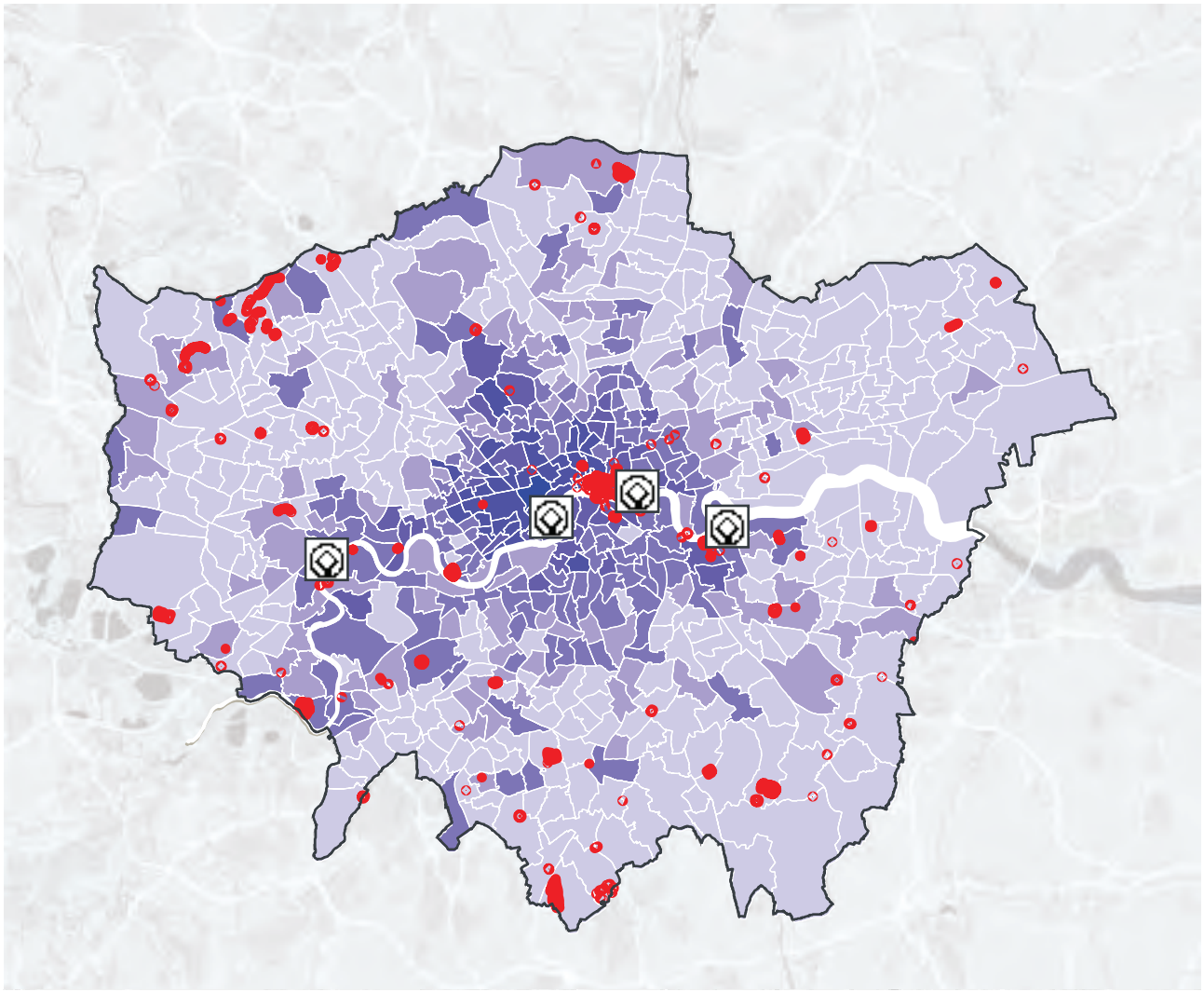
archaeological interest equivalent to a scheduled monument should be given equivalent weight to designated heritage assets.

E Where heritage assets have been identified as being At Risk, boroughs should identify specific opportunities for them to contribute to regeneration and place-making, and they should set out strategies for their repair and re-use.

7.1.1 London's historic environment, represented in its built form, landscape heritage and archaeology, provides a depth of character that benefits the city's economy, culture and quality of life. The built environment, combined with its historic landscapes, provides a unique sense of place, whilst layers of architectural history provide an environment that is of **local, national and international value**. London's heritage assets and historic environment are irreplaceable and an essential part of what makes London a vibrant and successful city, and their effective management is a fundamental component of achieving good growth. The Mayor will develop a London-wide Heritage Strategy, together with Historic England and other partners, to support the capital's heritage and the delivery of heritage-led growth.

7.1.2 London's **diverse range of designated and non-designated heritage assets** contributes to its status as a world-class city. Designated assets currently include four World Heritage Sites, over 1,000 conservation areas, 19,000 list entries for historic buildings, 150 registered parks and gardens, 160 scheduled monuments, and one battlefield. Non-designated assets cover an even wider range of features including buildings of local interest, most archaeological remains, canals, docks and waterways, historic hedgerows, ancient woodlands, and ancient and veteran trees. The distribution of designated assets differs across different parts of London, and is shown in Figure 7.1, Figure 7.2, Figure 7.3, and Figure 7.4. Note that these maps are for illustrative purposes only.

Figure 7.1 - Listed Buildings, Scheduled Monuments and World Heritage Sites



Listed Buildings
per square km

- 350 - 710
- 100 - 349
- 50 - 99
- 10 - 49
- 5 - 9
- 0 - 4

Scheduled Monuments

UNESCO World Heritage Sites from left to right: Royal Botanical Gardens, Kew; Westminster; Tower of London; and Maritime Greenwich

Source: Historic England

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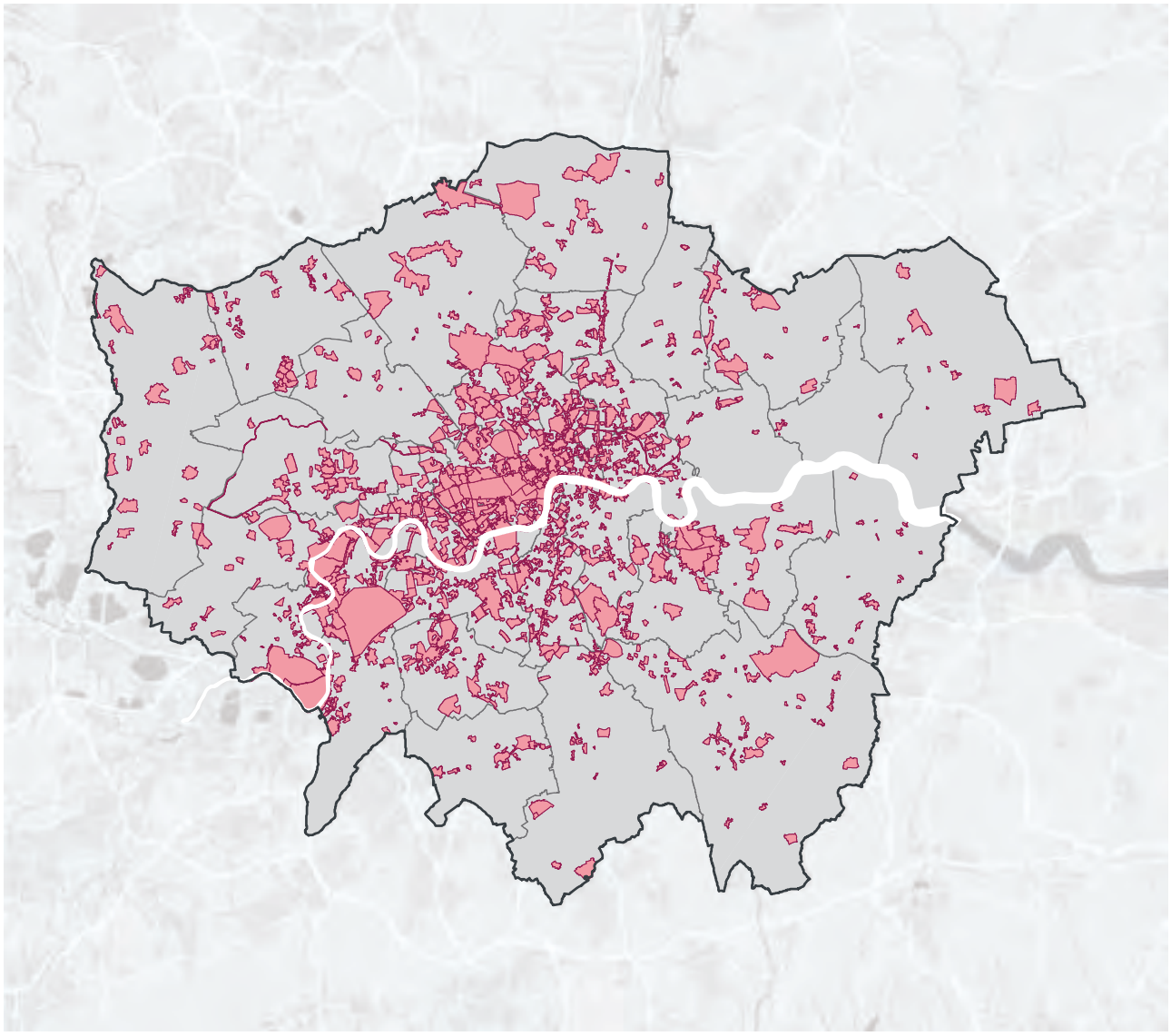
Figure 7.2 - London's Conservation Areas



London's Conservation Areas

Conservation Areas
London boroughs designate and review

Source: Historic England

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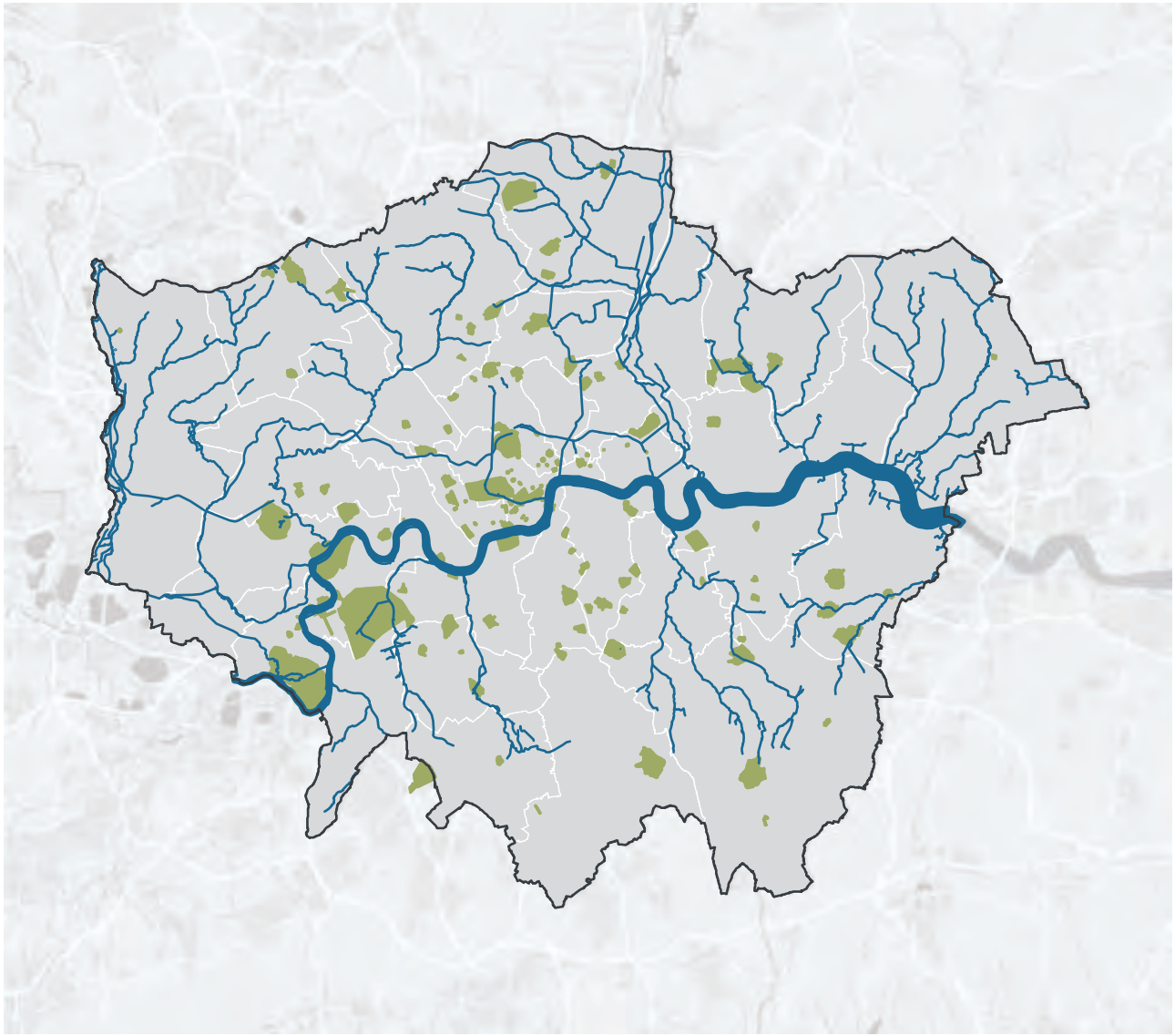
Figure 7.3 - London's Waterways and Registered Historic Parks & Gardens



London's Waterways and Registered Parks and Gardens

- Registered Historic Parks and Gardens
- Waterways

This map shows the spatial distribution of London's Registered Historic Parks and Gardens, which are designated heritage assets. It also shows the extensive network of London's waterways, many of which will have historic significance.

Source: Historic England

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7.1.3 Ensuring the **identification and sensitive management of London's heritage assets**, in tandem with promotion of the highest standards of architecture, will be essential to maintaining the blend of old and new that contributes to the capital's unique character. London's heritage reflects the city's diversity, its people and their impact on its structure. When assessing the significance of heritage assets, it is important to appreciate the influence of past human cultural activity from all sections of London's diverse community. Every opportunity to bring the story of London to people and improve the accessibility and maintenance of London's heritage should be exploited. Supporting infrastructure and visitor facilities may be required to improve access and enhance appreciation of London's heritage assets.

7.1.4 Many heritage assets make a significant contribution to local character which should be sustained and enhanced. The Greater London Historic Environment Record (GLHER)[127] is a comprehensive and dynamic resource for the historic environment of London containing over 196,000 entries. In addition to utilising this record, boroughs' existing **evidence bases**, including character appraisals, conservation plans and local lists should be used as a reference point for plan-making and when informing development proposals.

7.1.5 As set out in Policy D1 London's form, character and capacity for growth, Development Plans and strategies should demonstrate a clear understanding of the heritage values of a building, site or area and its relationship with its surroundings. Through proactive management from the start of the development process, planners and developers should **engage and collaborate with stakeholders** so that the capital's heritage contributes positively to its future. To ensure a full and detailed understanding of the local historic environment, stakeholders should include Historic England, London's Parks and Gardens Trust, The Royal Parks, boroughs, heritage specialists, local communities and amenity societies.

7.1.6 Historically, London has demonstrated an ability to regenerate itself, which has added to the city's distinctiveness and diversity of inter-connected places. Today **urban renewal** in London offers opportunities for the creative re-use of heritage assets and the historic environment as well as the enhancement,

127 The GLHER is a public record managed by Historic England and can be accessed by visiting the GLHER office and through remote searches that involve the supply of digital GLHER data. More information can be found at: https://historicengland.org.uk/services-skills/our-planning-services/greater-london-archaeology-advisory-service/

repair and beneficial re-use of heritage assets that are on the At Risk Register.[128] In some areas, this might be achieved by reflecting existing or original street patterns and blocks, or revealing and displaying archaeological remains; in others, it will be expressed by retaining and reusing buildings, spaces and features that play an important role in the local character of an area. Policy D1 London's form, character and capacity for growth further addresses the issue of understanding character and context.

7.1.7 **Heritage significance** is defined as the archaeological, architectural, artistic or historic interest of a heritage asset. This may be represented in many ways, in an asset's visual attributes, such as form, materials, architectural detail, design and setting, as well as through historic associations between people and a place, and where relevant, the historic relationships between heritage assets. Development that affects heritage assets and their settings should respond positively to the assets' significance, local context and character to protect the contribution that settings make to the assets' significance. In particular, consideration will need to be given to mitigating impacts from development that is not sympathetic in terms of scale, materials, details and form.

7.1.8 Where there is evidence of **deliberate neglect** of and/or damage to a heritage asset to help justify a development proposal, the deteriorated state of that asset will be disregarded when making a decision on a development proposal.

7.1.9 Understanding of **London's archaeology** is continuously developing with much of it yet to be fully identified and interpreted. To help identify sites of archaeological interest, boroughs are expected to develop up-to-date Archaeological Priority Areas for plan-making and decision-taking. Up-to-date Archaeological Priority Areas (APAs) are classified using a tier system recognising their different degrees of archaeological significance and potential as presently understood. Tier 1 APAs help to identify where undesignated archaeological assets of equivalent significance to a scheduled monument – and which are subject to the same policies as designated assets – are known or likely to be present.

7.1.10 Across London, Local Plans identify areas that have known archaeological interest or potential. The whole of the City of London has high archaeological sensitivity whilst elsewhere the Greater London **Archaeological Priority Area**

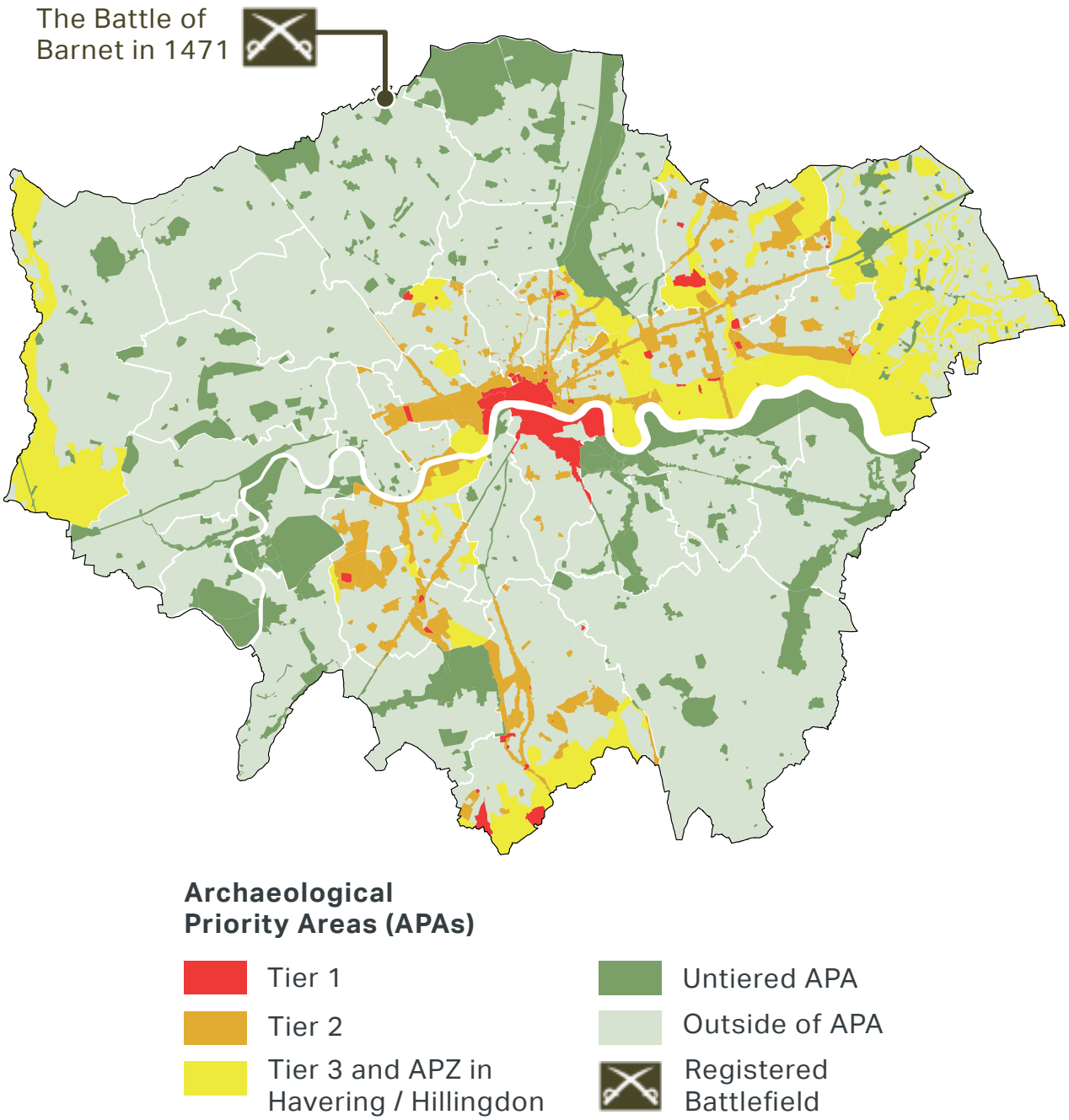
128 The Heritage at Risk Register is produced annually as part of Historic England's Heritage at Risk programme. The Register includes buildings or structures, places of worship, archaeological sites, battlefields, wrecks, parks and gardens, and conservation area known to be at risk as a result of neglect, decay or inappropriate development. Further information can be found at: https://historicengland.org.uk/advice/heritage-at-risk/

Review Programme is updating these areas using new consistent London-wide criteria (see Figure 7.4). Each new APA is assigned to a tier:

- Tier 1 is a defined area which is known, or strongly suspected, to contain a heritage asset of national significance, or which is otherwise of very high archaeological sensitivity.
- Tier 2 is a local area with specific evidence indicating the presence, or likely presence, of heritage assets of archaeological interest.
- Tier 3 is a landscape-scale zone within which there is evidence indicating the potential for heritage assets of archaeological interest to be discovered.
- Tier 4 (outside APA) covers any location that does not, on present evidence, merit inclusion within an Archaeological Priority Area.
- Other APAs which have not yet been reviewed are not assigned to a tier.

7.1.11 Developments will be expected to **avoid or minimise harm to significant archaeological assets**. In some cases, remains can be incorporated into and/or interpreted in new development. The physical assets should, where possible, be made available to the public on-site and opportunities taken to actively present the site's archaeology. Where the archaeological asset cannot be preserved or managed on-site, appropriate provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset, and must be undertaken by suitably-qualified individuals or organisations.

Figure 7.4 - Archaeological Priority Areas and Registered Battlefield



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Policy G1 Green infrastructure

A London's network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.

B Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way as part of a network consistent with Part A.

C Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:

1) identify key green infrastructure assets, their function and their potential function

2) identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.

D Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network.

8.1.1 A **green infrastructure approach** recognises that the network of green and blue spaces,[133] street trees, green roofs and other major assets such as natural or semi-natural drainage features must be planned, designed and managed in an integrated way. Policy G1 sets out the strategic green infrastructure approach and provides a framework for how this can be assessed and planned for. The remaining policies in this chapter provide more detail on specific aspects of green infrastructure, which work alongside other policies in the Plan to achieve multiple objectives. Objectives include: promoting mental and physical health and wellbeing; adapting to the impacts of climate change and the urban heat-island effect; improving air and water quality; encouraging walking and cycling; supporting landscape and heritage conservation; learning about the environment; supporting food growing and conserving and enhancing

133 London's waterways and their multifunctional role are specifically addressed in Policy SI 14 Waterways – strategic role to Policy SI 17 Protecting and enhancing London's waterways.

biodiversity and ecological resilience alongside more traditional functions of green space such as play, sport and recreation.

8.1.2 All development takes place within a wider environment and green infrastructure should be an integral element and not an 'add-on'. Its **economic and social value** should be recognised as highlighted in the London i-Tree Assessment[134] and the Natural Capital Account for London's Public Parks.[135]

8.1.3 To help deliver on his manifesto commitment to make more than half of London green by 2050, the Mayor will review and update existing Supplementary Planning Guidance on the All London Green Grid – London's strategic green infrastructure framework – to provide **guidance** on the strategic green infrastructure network and the preparation of green infrastructure strategies.

Policy G2 London's Green Belt

A The Green Belt should be protected from inappropriate development:

1) development proposals that would harm the Green Belt should be refused except where very special circumstances exist,

2) subject to national planning policy tests, the enhancement of the Green Belt to provide appropriate multi-functional beneficial uses for Londoners should be supported.

B Exceptional circumstances are required to justify either the extension or de-designation of the Green Belt through the preparation or review of a Local Plan.

134 Valuing London's Urban Forest - Results of the London i-Tree Eco Project, Treeconomics, 2015, https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/valuing-londons-urban-forest

135 Natural capital accounts for public green space in London, Vivid Economics, 2017, https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/green-infrastructure/natural-capital-account-london?source=vanityurl

Policy G5 Urban greening

A Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.

B Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses).

C Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors set out in Table 8.2.

8.5.1 The inclusion of **urban greening measures** in new development will result in an increase in green cover, and **should be integral to planning** the layout and design of new buildings and developments. This should be considered from the beginning of the design process.

8.5.2 **Urban greening** covers a wide range of options including, but not limited to, street trees, green roofs, green walls, and rain gardens. It can help to meet other policy requirements and provide a range of benefits including amenity space, enhanced biodiversity, addressing the urban heat island effect, sustainable drainage and amenity – the latter being especially important in the most densely developed parts of the city where traditional green space is limited. The management and ongoing maintenance of green infrastructure should be considered and secured through the planning system where appropriate.

8.5.3 A number of cities have successfully adopted a 'green space factor' to encourage more and better urban greening. The Mayor has developed a generic **Urban Greening Factor** model to assist boroughs and developers in determining the appropriate provision of urban greening for new developments.

This is based on a review of green space factors in other cities.[137] The factors outlined in Table 8.2 are a simplified measure of various benefits provided by soils, vegetation and water based on their potential for rainwater infiltration as a proxy to provide a range of benefits such as improved health, climate change adaption and biodiversity conservation.

8.5.4 The UGF is currently only applied to major applications, but may eventually be applied to applications below this threshold as boroughs develop their own models. London is a diverse city so it is appropriate that each borough develops its own approach in response to its local circumstances. However, the challenges of climate change, poor air quality and deficiencies in green space need to be tackled now, so while each borough develops its own bespoke approach the Mayor has recommended the standards set out above. Further guidance will be developed to support implementation of the Urban Greening Factor.

8.5.5 Residential development places greater demands on **existing green infrastructure** and, as such, a higher standard is justified. Commercial development includes a range of uses and a variety of development typologies where the approach to urban greening will vary. Whilst the target score of 0.3 does not apply to B2 and B8 uses, these uses will still be expected to set out what measures they have taken to achieve urban greening on-site and quantify what their UGF score is.

8.5.6 The Urban Greening Factor for a proposed development is calculated in the following way:

(Factor A x Area) + (Factor B x Area) + (Factor C x Area) etc. divided by Total Site Area.

So, for example, an office development with a 600 sq.m. footprint on a site of 1,000 sq.m. including a green roof, 250 sq.m. car parking, 100 sq.m. open water and 50 sq.m. of amenity grassland would score the following;

(0.7 x 600) + (0.0 x 250) + (1 x 100) + (0.4 x 50) / 1000 = 0.54

8.5.7 So, in this example, the proposed office development exceeds the interim target score of 0.3 for a predominately commercial development under Part B of Policy G5 Urban greening.

137 Urban Greening Factor for London, The Ecology Consultancy, 2017, https://www.london.gov.uk/sites/default/files/urban_greening_factor_for_london_final_report.pdf

Table 8.2 - Urban Greening Factors

Surface Cover Type	Factor
Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm – see livingroofs.org for descriptions.[A]	0.8
Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree – see Trees in Hard Landscapes for overview.[B]	0.8
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014.[C]	0.7
Flower-rich perennial planting – see RHS perennial plants for guidance.[D]	0.7
Rain gardens and other vegetated sustainable drainage elements – See CIRIA for case-studies.[E]	0.7
Hedges (line of mature shrubs one or two shrubs wide) – see RHS for guidance.[F]	0.6
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6
Green wall –modular system or climbers rooted in soil – see NBS Guide to Façade Greening for overview.[G]	0.6
Groundcover planting – see RHS Groundcover Plants for overview.[H]	0.5
Amenity grassland (species-poor, regularly mown lawn).	0.4
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.[I]	0.3
Water features (chlorinated) or unplanted detention basins.	0.2
Permeable paving – see CIRIA for overview.[J]	0.1
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0

Notes for Table 8.2

A. https://livingroofs.org/intensive-green-roofs/
B. http://www.tdag.org.uk/trees-in-hard-landscapes.html
C. https://livingroofs.org/wp-content/uploads/2016/03/grocode2014.pdf
D. https://www.rhs.org.uk/advice/profile?pid=868
E. http://www.susdrain.org/case-studies/
F. https://www.rhs.org.uk/advice/profile?pid=351
G. https://www.thenbs.com/knowledge/the-nbs-guide-to-facade-greening-part-two
H. https://www.rhs.org.uk/advice/profile?PID=818
I. https://livingroofs.org/wp-content/uploads/2016/03/grocode2014.pdf
J. https://www.susdrain.org/delivering-suds/using-suds/suds-components/source-control/pervious-surfaces/pervious-surface-types/pervious-surface-types.html

Policy G6 Biodiversity and access to nature

A Sites of Importance for Nature Conservation (SINCs) should be protected.

B Boroughs, in developing Development Plans, should:

1) use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks
2) identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them
3) support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans
4) seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context

5) ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.

C Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:

1) avoid damaging the significant ecological features of the site
2) minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
3) deliver off-site compensation of better biodiversity value.

D Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.

E Proposals which reduce deficiencies in access to nature should be considered positively.

8.6.1 **Sites of Importance for Nature Conservation** (SINCs) comprise:

1. Sites of Metropolitan Importance – strategically-important conservation sites for London
2. Sites of Borough Importance – sites which support habitats or species of value at the borough level
3. Sites of Local Importance – sites which are important for the provision of access to nature at the neighbourhood level.

Several Sites of Metropolitan Importance also have statutory European or national nature conservation designations (see paragraph 8.6.3)

8.6.2 The level of protection afforded to SINCS should be commensurate with their status and the contribution they make to wider ecological networks. When undertaking comprehensive reviews of SINCs across a borough, or when identifying or amending Sites of Metropolitan Importance, boroughs should consult the London Wildlife Sites Board.

8.6.3 Sites with a formal **European or national designation** (including Special Protection Areas, Special Areas of Conservation, Sites of Special Scientific Interest, National Nature Reserves and Local Reserves) are protected by legislation. There are legal provisions which ensure these sites are not harmed by development; there is a duty to consult Natural England on proposals that might affect these sites, and undertake an appropriate assessment of the potential impacts on European sites if a plan or project is likely to have a significant effect on the integrity of a European site.

8.6.4 Although heavily urbanised, London consists of a **wide variety of important wildlife habitats**, including a number of sites which have national and international protection. These habitats range from semi-natural features such as chalk grasslands and ancient woodlands to more urban habitats such as reservoirs and vegetated railway corridors. The wildlife value of these sites must be protected and appropriate maintenance regimes should be established to maintain or enhance the wildlife value of sites, recognising the additional pressure some sites may experience due to London's projected growth. Improved sustainable access to wildlife sites should be secured, where appropriate, so that Londoners can better experience and appreciate the natural environment within the city. The connections between protected sites – green corridors – are often critical in helping to sustain wildlife populations that would be vulnerable if they were confined to isolated areas of habitat. London's water spaces make up an important set of habitats in London. Policy SI 17 Protecting and enhancing London's waterways addresses the protection of water spaces, with a particular priority for improving and restoring them. The habitat value of waterways is a key element of their future management.

8.6.5 Development proposals that are adjacent to or near **SINCs or green corridors** should consider the potential impact of indirect effects to the site, such as noise, shading or lighting. There may also be opportunities for new development to contribute to enhancing the nature conservation value of an adjacent SINC or green corridor by, for example, sympathetic landscaping that provides complementary habitat. The London Environment Strategy includes guidance on identifying SINCs (Appendix 5) as well as habitat creation targets and a comprehensive list of priority species and habitats that require particular consideration when planning decisions are made. The London Wildlife Sites Board offers help and guidance to boroughs on the selection of SINCs.[138]

138 Tree and Woodland Strategy Guidance, Mayor of London, 2013, https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance-and-spgs/tree-and-woodland

Figure 8.2 - Designated nature conservation sites

Sites of Importance for Nature Conservation and Sites of Special

- Sites of Importance for Nature Conservation (SINC)
- Sites of Special Scientific Interest (SSSI)

Source: Greenspace Information for Greater London (GiGL)

8.6.6 Biodiversity net gain is an approach to development that leaves biodiversity in a better state than before. This means that where biodiversity is lost as a result of a development, the compensation provided should be of an overall greater biodiversity value than that which is lost. This approach does not change the fact that losses should be avoided, and biodiversity offsetting is the option of last resort. The Mayor will be producing guidance to set out how biodiversity net gain applies in London.

Policy G7 Trees and woodlands

A London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.

B In their Development Plans, boroughs should:

1) protect 'veteran' trees and ancient woodland where these are not already part of a protected site[139]

2) identify opportunities for tree planting in strategic locations.

C Development proposals should ensure that, wherever possible, existing trees of value are retained.[140] If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.

139 Forestry Commission/Natural England (2018): Ancient woodland and veteran trees; protecting them from development, https://www.gov.uk/guidance/planning-applications-affecting-trees-and-woodland

140 Category A, B and lesser category trees where these are considered by the local planning authority to be of importance to amenity and biodiversity, as defined by BS 5837:2012

8.7.1 **Trees and woodlands play an important role** within the urban environment. They help to trap air pollutants, add to amenity, provide shading, absorb rainwater and filter noise. They also provide extensive areas of habitat for wildlife, especially mature trees. The urban forest is an important element of London's green infrastructure and comprises all the trees in the urban realm, in both public and private spaces, along linear routes and waterways, and in amenity areas. The Mayor and Forestry Commission have previously published a London Tree and Woodland Framework and Supplementary Planning Guidance on preparing tree strategies to help boroughs plan for the management of the urban forest.[141] These, and their successor documents, should inform policies and proposals in boroughs' wider green infrastructure strategies.

8.7.2 The Mayor wants to increase tree canopy cover in London by 10 per cent by 2050. Green infrastructure strategies can be used to help boroughs identify locations where there are strategic opportunities for tree planting to maximise potential benefits. Trees should be designed into developments from the outset to maximise tree planting opportunities and optimise establishment and vigorous growth. When preparing more detailed planning guidance boroughs are also advised to refer to sources such as Right Trees for a Changing Climate[142] and guidance produced by the Trees and Design Action Group.[143]

8.7.3 An i-Tree Eco Assessment of London's trees quantified the benefits and services provided by the capital's **urban forest**.[144] This demonstrated that London's existing trees and woodlands provide services (such as pollution removal, carbon storage, and storm water attenuation) valued at £133 million per year. The cost of replacing these services if the urban forest was lost was calculated at £6.12 billion. Consequently, when trees are removed the asset is degraded and the compensation required in terms of substitute planting to replace services lost should be based on a recognised tree valuation method such as CAVAT[145] or i-Tree Eco.[146]

141 Tree and Woodland Strategy Guidance, Mayor of London, 2013, https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance-and-spgs/tree-and-woodland

142 The Right Trees for Changing Climate Database, http://www.righttrees4cc.org.uk/

143 Trees and Design Action Group guidance, http://www.tdag.org.uk/guides--resources.html

144 Valuing London's Urban Forest - Results of the London i-Tree Eco Project, Treeconomics, 2015, https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/valuing-londons-urban-forest

145 CAVAT, https://www.ltoa.org.uk/resources/cavat

146 i-Tree Eco, https://www.itreetools.org/

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Policy SI 1 Improving air quality

A Development Plans, through relevant strategic, site-specific and area-based policies, should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality.

B To tackle poor air quality, protect health and meet legal obligations the following criteria should be addressed:

1) Development proposals should not:
   a) lead to further deterioration of existing poor air quality
   b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits
   c) create unacceptable risk of high levels of exposure to poor air quality.

2) In order to meet the requirements in Part 1, as a minimum:
   a) development proposals must be at least Air Quality Neutral
   b) development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures
   c) major development proposals must be submitted with an Air Quality Assessment. Air quality assessments should show how the development will meet the requirements of B1
   d) development proposals in Air Quality Focus Areas or that are likely to be used by large numbers of people particularly vulnerable to poor air quality, such as children or older people should demonstrate that design measures have been used to minimise exposure.

C Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. To achieve this a statement should be submitted demonstrating:

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1) how proposals have considered ways to maximise benefits to local air quality, and

2) what measures or design features will be put in place to reduce exposure to pollution, and how they will achieve this.

D In order to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance.[147]

E Development proposals should ensure that where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site. Where it can be demonstrated that emissions cannot be further reduced by on-site measures, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated within the area affected by the development.

147 The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance, Mayor of London, 2014

9.1.1 **Poor air quality** is a major issue for London which is failing to meet requirements under legislation. Poor air quality has direct impacts on the health, quality of life and life expectancy of Londoners. The impacts tend to be most heavily felt in some of London's most deprived neighbourhoods, and by people who are most vulnerable to the impacts, such as children and older people. London's air quality should be significantly improved and exposure to poor air quality, especially for vulnerable people, should be reduced.

9.1.2 The Mayor is committed to **making air quality in London the best of any major world city**, which means not only achieving compliance with legal limits for Nitrogen Dioxide as soon as possible and maintaining compliance where it is already achieved, but also achieving World Health Organisation targets for other pollutants such as Particulate Matter.

9.1.3 The aim of this policy is to ensure that new developments are designed and built, as far as is possible, **to improve local air quality and reduce the extent to which the public are exposed to poor air quality**. This means that new developments, as a minimum, must not cause new exceedances of legal air

quality standards, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits.[148] Where limit values are already met, or are predicted to be met at the time of completion, new developments must endeavour to maintain the best ambient air quality compatible with sustainable development principles.

9.1.4 Where this policy refers to 'existing poor air quality' this should be taken to include areas where legal limits for any pollutant, or World Health Organisation targets for Particulate Matter, are already exceeded and areas where current pollution levels are within 5 per cent of these limits.[149]

9.1.5 For major developments, **a preliminary Air Quality Assessment** should be carried out before designing the development to inform the design process. The aim of a preliminary assessment is to assess:

- The most significant sources of pollution in the area
- Constraints imposed on the site by poor air quality
- Appropriate land uses for the site
- Appropriate design measures that could be implemented to ensure that development reduces exposure and improves air quality.

9.1.6 **Further assessments** should then be carried out as the design evolves to ensure that impacts from emissions are prevented or minimised as far as possible, and to fully quantify the expected effect of any proposed mitigation measures, including the cumulative effect where other nearby developments are also underway or likely to come forward.

9.1.7 **Assessment of the impacts** of a scheme on local air pollution should include fixed plant, such as boiler and emergency generators, as well as expected transport-related sources. The impact assessment part of an Air Quality Assessment should always include all relevant pollutants. Industrial, waste and other working sites may need to include on-site vehicles and mobile machinery as well as fixed machinery and transport sources.

9.1.8 The impact assessment should provide decision makers with sufficient information to understand the **scale and geographic scope of any detrimental,**

148 Air Quality Standards Regulations, 2010 (or subsequent revisions thereof), http://www.legislation.gov.uk/uksi/2010/1001/contents/made

149 Land-Use Planning & Development Control: Planning for Air Quality, Institution of Air Quality Management, 2017, http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf. This guidance indicates that even very small impacts on ambient air quality cannot be considered 'negligible' where existing levels are within 5% of limits.

or beneficial, impacts on air quality and enable them to exercise their professional judgement in deciding whether the impacts are acceptable, in line with best practice.

9.1.9 Meeting the **Air Quality Neutral benchmarks**,[150] although necessary to control the growth in London's regional emissions, will not always be sufficient to prevent unacceptable local impacts, as these may be affected by other factors, such as the location of the emissions source, the rate of emissions (as opposed to the annual quantum) and the layout of the development in relation to the surrounding area. As developments can still have significant local impacts that are not captured by Air Quality Neutral, for example by concentrating emissions, increasing exposure or preventing dispersion in particular locations, it is still important for these impacts to be assessed and mitigated.

9.1.10 For most **minor developments**, achieving Air Quality Neutral will be enough to demonstrate that they are in accordance with Part B1 of this policy. However, where characteristics of the development or local features raise concerns about air quality, or where there are additional requirements for assessment in local policy, a full Air Quality Assessment may be required. Additional measures may also be needed to address local impacts. Guidance on Air Quality Neutral will set out streamlined assessment procedures for minor developments.

9.1.11 An **air quality positive approach** is linked to other policies in the London Plan, such as Healthy Streets, energy masterplanning and green infrastructure. One of the keys to delivering this will be to draw existing good practice together in a holistic fashion, at an early stage in the process, to ensure that the development team can identify which options deliver the greatest improvement to air quality. Large schemes, subject to Environmental Impact Assessments, commonly have project and design teams representing a range of expertise, that can feed in to the development of a statement to set out how air quality can be improved across the proposed area of the development.

9.1.12 **Single-site schemes**, including referable schemes, are often constrained by pre-existing urban form and structure, transport and heat networks. These constraints may limit their ability to consider how to actively improve local air quality. By contrast, large schemes, particularly **masterplans**, usually have more flexibility to consider how new buildings, amenity and public spaces, transport and heat networks are deployed across the area and will therefore have greater opportunities to improve air quality and reduce exposure through the careful choice of design and infrastructure solutions. Delivery of an air quality positive

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approach will be project specific and will rely on the opportunities on site or in the surrounding area to improve air quality.

9.1.13 **Statements for large-scale development proposals**, prepared in response to Part C of this policy, should set out:

- How air quality is intended to be analysed and opportunities for its improvement identified as part of the design process.
- How air quality improvements have informed the design choices made about layout and distribution of buildings, amenity spaces and infrastructure.
- What steps will be taken to promote the uptake and use of sustainable and zero-emission modes of transport beyond minimum requirements. This may include specific measures in transport plans or delivery against Healthy Streets indicators.
- How air pollutant emissions from the buildings or associated energy centres can be reduced beyond the minimum requirements set out in Part B of this policy. This may include specific measures in heating masterplans or working with existing heat network providers to reduce or eliminate energy centre emissions.
- How specific measures that are identified to deliver air quality improvements will be evaluated and secured, including whether more detailed design specifications will be required so that the final development meets the desired performance.

9.1.14 The GLA will produce **guidance** in order to assist developers and boroughs in identifying measures and best practice to inform the preparation of statements for developments taking an air quality positive approach.

9.1.15 Where the Air Quality Assessment or the air quality positive approach assumes that specific measures are put in place to improve air quality, prevent or mitigate air quality impacts, these should be secured through the **use of planning conditions or s106 agreements**. For instance, if ultra-low NOx boilers are assumed in the assessment, conditions should require the provision of details of the installed plant prior to the occupation of the building, or where larger plant is used for heating, post installation emissions tests should be required to ensure that the modelled emission parameters are achieved.

9.1.16 The GLA maintains and publishes an **inventory of emission sources** (the London Atmospheric Emissions Inventory or LAEI). This inventory is based on a detailed assessment of all current sources of pollution in London and can be used to help understand the existing environment at development sites.

9.1.17 **Air Quality Focus Areas** (AQFA) are locations that not only exceed the EU annual mean limit value for nitrogen dioxide (NO2) but are also locations with high human exposure. AQFAs are not the only areas with poor air quality but they have been defined to identify areas where currently planned national, regional and local measures to reduce air pollution may not fully resolve poor air quality issues. There are currently 187 AQFAs across London (Figure 9.1). The list of Air Quality Focus Areas is updated from time to time as the London Atmospheric Inventory is reviewed and the latest list in the London Datastore should always be checked.

9.1.18 AQFAs are distinct from **Air Quality Management Areas**. Air Quality Management Areas (AQMAs) are declared by the London boroughs in response to modelled or measured existing exceedances of legal air quality limits. The analysis underpinning AQMAs is often more spatially detailed than London-wide modelling and may include the identification of additional air quality hot spots or other local issues.

9.1.19 All London boroughs have declared AQMAs covering some or all of their area. Boroughs are required to produce **Air Quality Action Plans** setting out the actions they are taking to improve local air quality; planning decisions should be in accordance with these action plans and developers should take any local requirements in Air Quality Action Plans into account.

9.1.20 AQFAs are defined based on GLA modelling forecasts that incorporate actions taken by the GLA and others as well as broader changes in emissions sources and are not intended to supplant the role of AQMAs in planning decisions. In practice **developers will need to consider both designations** where they overlap.

9.1.21 It may not always be possible in practice for developments to achieve Air Quality Neutral standards or to acceptably minimise impacts using on-site measures alone. If a development can demonstrate that it has exploited all relevant on-site measures it may be possible to make the development acceptable through **additional mitigation or offsetting payments**.

9.1.22 Where there have been significant **improvements to air quality** resulting in an area no longer exceeding air quality limits, Development Plans should not take advantage of this investment and worsen the local air quality back to a poor level. The sustainability appraisal for local plans should consider the effect of national, London-wide and local programmes to improve air quality to ensure that any potential conflicts are avoided.

9.1.23 **Further guidance** will be published on Air Quality Neutral and air quality positive approaches as well as guidance on how to reduce construction and demolition impacts.

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Figure 9.1 - Air Quality Focus Areas

London's Air Quality Focus Areas

● Air Quality Focus Area (AQFA)

Source: GLA Environment

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Policy SI 2 Minimising greenhouse gas emissions

A Major development should be net zero-carbon.[151] This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in accordance with the following energy hierarchy:

1) be lean: use less energy and manage demand during operation
2) be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly
3) be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site
4) be seen: monitor, verify and report on energy performance.

B Major development proposals should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy.

C A minimum on-site reduction of at least 35 per cent beyond Building Regulations[152] is required for major development. Residential development should achieve 10 per cent, and non-residential development should achieve 15 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided, in agreement with the borough, either:

1) through a cash in lieu contribution to the borough's carbon offset fund, or
2) off-site provided that an alternative proposal is identified and delivery is certain.

D Boroughs must establish and administer a carbon offset fund. Offset fund payments must be ring-fenced to implement projects that deliver carbon reductions. The operation of offset funds should be monitored and reported on annually.

151 Where zero-carbon is used in the Plan it refers to net zero-carbon – see Glossary for definition.

152 Building Regulations 2013. If these are updated, the policy threshold will be reviewed. https://www.gov.uk/government/publications/conservation-of-fuel-and-power-approved-document-l

E Major development proposals should calculate and minimise carbon emissions from any other part of the development, including plant or equipment, that are not covered by Building Regulations, i.e. unregulated emissions.

F Development proposals referable to the Mayor should calculate whole life-cycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions.

9.2.1 The Mayor is committed to London **becoming a zero-carbon city**. This will require reduction of all greenhouse gases, of which carbon dioxide is the most prominent.[153] London's homes and workplaces are responsible for producing approximately 78 per cent of its greenhouse gas emissions. If London is to achieve its objective of becoming a zero-carbon city by 2050, new development needs to meet the requirements of this policy. Development involving major refurbishment should also aim to meet this policy.

9.2.2 **The energy hierarchy** (Figure 9.2) should inform the design, construction and operation of new buildings. The priority is to minimise energy demand, and then address how energy will be supplied and renewable technologies incorporated. An important aspect of managing demand will be to reduce peak energy loadings.

9.2.3 Boroughs should ensure that all developments maximise opportunities for **on-site electricity and heat production** from solar technologies (photovoltaic and thermal) and use innovative building materials and smart technologies. This approach will reduce carbon emissions, reduce energy costs to occupants, improve London's energy resilience and support the growth of green jobs.

9.2.4 A zero-carbon target for major residential developments has been in place for London since October 2016 and applies to **major non-residential developments** on final publication of this Plan.

153 'Carbon' is used in the London Plan as a shorthand term for all greenhouse gases. London's carbon accounting is measured in carbon dioxide equivalent, which includes the conversion of other greenhouse gases into their equivalent carbon dioxide emissions.

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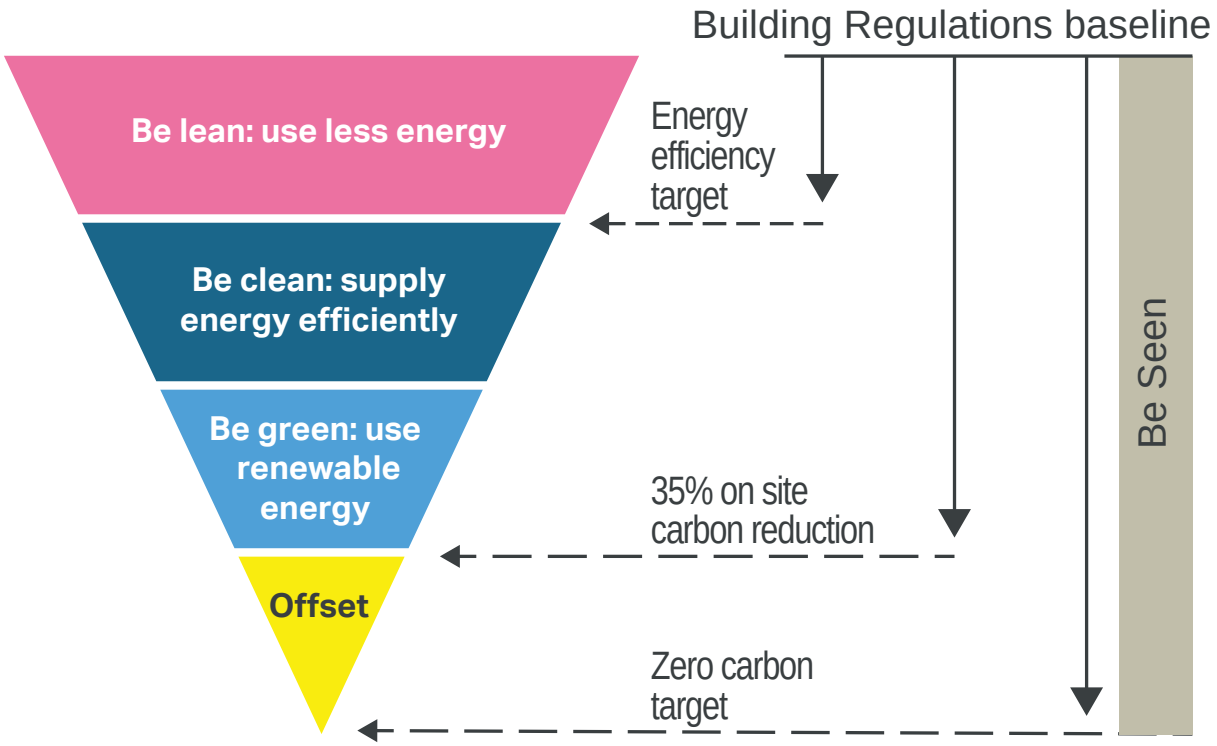
Figure 9.2 - The energy hierarchy and associated targets



Source: Greater London Authority

9.2.5 To meet the zero-carbon target, an on-site reduction of at least 35 per cent beyond the baseline of Part L of the current Building Regulations is required.[154] The minimum **improvement over the Target Emission Rate** (TER) will increase over a period of time in order to achieve the zero-carbon London ambition and reflect the costs of more efficient construction methods. This will be reflected in future updates to the London Plan.

9.2.6 The Mayor recognises that **Building Regulations** use outdated carbon emission factors and that this will continue to cause uncertainty until they are updated by Government. Interim guidance has been published in the Mayor's Energy Planning Guidance on the use of appropriate emissions factors. This guidance will be updated again once Building Regulations are updated to help provide certainty to developers on how these policies are implemented.

154 Building Regulations 2013. If these are updated, the policy threshold will be reviewed. https://www.gov.uk/government/publications/conservation-of-fuel-and-power-approved-document-l

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9.2.7 Developments are expected to achieve carbon reductions beyond Part L from **energy efficiency measures** alone to reduce energy demand as far as possible. Residential development should achieve 10 per cent and non-residential development should achieve 15 per cent over Part L. Achieving energy credits as part of a Building Research Establishment Environmental Assessment Method (BREEAM) rating can help demonstrate that energy efficiency targets have been met. Boroughs are encouraged to include BREEAM targets in their Local Plans where appropriate.

9.2.8 The price for offsetting carbon[155] is regularly reviewed. Changes to the GLA's suggested **carbon offset price** will be updated in future guidance. New development is expected to get as close as possible to zero-carbon on-site, rather than relying on offset fund payments to make up any shortfall in emissions. However, **offset funds** have the potential to unlock carbon savings from the existing building stock through energy efficiency programmes and by installing renewable technologies – typically more expensive to deliver in London due to the building age, type and tenure.

9.2.9 The Mayor provides **support to boroughs** by advising those which are at the early stages of setting up their carbon offsetting funds, and by setting out guidance on how to select projects. To ensure that offset funds are used effectively to reduce carbon whilst encouraging a holistic approach to retrofitting, Mayoral programmes offer additional support.[156]

9.2.10 The move towards zero-carbon development requires comprehensive **monitoring of energy demand and carbon emissions** to ensure that planning commitments are being delivered. Major developments are required to monitor and report on energy performance, such as by displaying a Display Energy Certificate (DEC), and reporting to the Mayor for at least five years via an online portal to enable the GLA to identify good practice and report on the operational performance of new development in London.

9.2.11 Operational carbon emissions will make up a declining proportion of a development's whole life-cycle carbon emissions as operational carbon targets become more stringent. To fully capture a development's carbon impact, a **whole life-cycle approach** is needed to capture its unregulated emissions (i.e. those associated with cooking and small appliances), its embodied emissions

155 Boroughs should develop a price for offsetting carbon using either a nationally recognised carbon pricing mechanism or a price based on the cost of offsetting carbon across the borough. A nationally recognised non-traded price of £95/tonne has been tested as part of the viability assessment for the London Plan which boroughs may use to collect offset payments.

156 For examples see London Environment Strategy 2018.

(i.e. those associated with raw material extraction, manufacture and transport of building materials and construction) and emissions associated with maintenance, repair and replacement as well as dismantling, demolition and eventual material disposal). Whole life-cycle carbon emission assessments are therefore required for development proposals referable to the Mayor. Major non-referable development should calculate unregulated emissions and are encouraged to undertake whole life-cycle carbon assessments. The approach to whole life-cycle carbon emissions assessments, including when they should take place, what they should contain and how information should be reported, will be set out in guidance.

9.2.12 The Mayor may publish further planning guidance on sustainable design and construction[157] and will continue to regularly update the guidance on preparing **energy strategies** for major development. Boroughs are encouraged to request energy strategies for other development proposals where appropriate. As a minimum, energy strategies should contain the following information:

a. a calculation of the energy demand and carbon emissions covered by Building Regulations and, separately, the energy demand and carbon emissions from any other part of the development, including plant or equipment, that are not covered by the Building Regulations (i.e. the unregulated emissions), at each stage of the energy hierarchy

b. proposals to reduce carbon emissions beyond Building Regulations through the energy efficient design of the site, buildings and services, whether it is categorised as a new build, a major refurbishment or a consequential improvement

c. proposals to further reduce carbon emissions through the use of zero or low-emission decentralised energy where feasible, prioritising connection to district heating and cooling networks and utilising local secondary heat sources. (Development in Heat Network Priority Areas should follow the heating hierarchy in Policy SI 3 Energy infrastructure)

d. proposals to further reduce carbon emissions by maximising opportunities to produce and use renewable energy on-site, utilising storage technologies where appropriate

e. proposals to address air quality risks (see Policy SI 1 Improving air quality). Where an air quality assessment has been undertaken, this could be referenced instead

157 This will build on the 2014 Sustainable Design and Construction SPG.

f. the results of dynamic overheating modelling which should be undertaken in line with relevant Chartered Institution of Building Services Engineers (CIBSE) guidance, along with any mitigating actions (see Policy SI 4 Managing heat risk)

g. proposals for demand-side response, specifically through installation of smart meters, minimising peak energy demand and promoting short-term energy storage, as well as consideration of smart grids and local micro grids where feasible

h. a plan for monitoring and annual reporting of energy demand and carbon emissions post-construction for at least five years

i. proposals explaining how the site has been future-proofed to achieve zero-carbon on-site emissions by 2050

j. confirmation of offsetting arrangements, if required

k. a whole life-cycle carbon emissions assessment, and actions to reduce life-cycle carbon emissions (for development proposals referable to the Mayor)

l. analysis of the expected cost to occupants associated with the proposed energy strategy

m. proposals that connect to or create new heat networks should include details of the design and specification criteria and standards for their systems as set out in Policy SI 3 Energy infrastructure.

Policy SI 3 Energy infrastructure

A Boroughs and developers should engage at an early stage with relevant energy companies and bodies to establish the future energy and infrastructure requirements arising from large-scale development proposals such as Opportunity Areas, Town Centres, other growth areas or clusters of significant new development.

B Energy masterplans should be developed for large-scale development locations (such as those outlined in Part A and other opportunities) which establish the most effective energy supply options. Energy masterplans should identify:

1) major heat loads (including anchor heat loads, with particular reference to sites such as universities, hospitals and social housing)
2) heat loads from existing buildings that can be connected to future phases of a heat network
3) major heat supply plant including opportunities to utilise heat from energy from waste plants
4) secondary heat sources, including both environmental and waste heat
5) opportunities for low and ambient temperature heat networks
6) possible land for energy centres and/or energy storage
7) possible heating and cooling network routes
8) opportunities for futureproofing utility infrastructure networks to minimise the impact from road works
9) infrastructure and land requirements for electricity and gas supplies
10) implementation options for delivering feasible projects, considering issues of procurement, funding and risk, and the role of the public sector
11) opportunities to maximise renewable electricity generation and incorporate demand-side response measures.

C Development Plans should:

1) identify the need for, and suitable sites for, any necessary energy infrastructure requirements including energy centres, energy storage and upgrades to existing infrastructure

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2) identify existing heating and cooling networks, identify proposed locations for future heating and cooling networks and identify opportunities for expanding and inter-connecting existing networks as well as establishing new networks.

D Major development proposals within Heat Network Priority Areas should have a communal low-temperature heating system:

1) the heat source for the communal heating system should be selected in accordance with the following heating hierarchy:

a) connect to local existing or planned heat networks

b) use zero-emission or local secondary heat sources (in conjunction with heat pump, if required)

c) use low-emission combined heat and power (CHP) (only where there is a case for CHP to enable the delivery of an area-wide heat network, meet the development's electricity demand and provide demand response to the local electricity network)

d) use ultra-low NOx gas boilers

2) CHP and ultra-low NOx gas boiler communal or district heating systems should be designed to ensure that they meet the requirements in Part B of Policy SI 1 Improving air quality

3) where a heat network is planned but not yet in existence the development should be designed to allow for the cost-effective connection at a later date.

E Heat networks should achieve good practice design and specification standards for primary, secondary and tertiary systems comparable to those set out in the CIBSE/ADE Code of Practice CP1 or equivalent.

9.3.1 The Mayor will work with boroughs, energy companies and major developers to promote the **timely and effective development of London's energy system** (energy production, distribution, storage, supply and consumption).

9.3.2 London is part of a national energy system and currently sources approximately 95 per cent of its energy from outside the GLA boundary. Meeting the **Mayor's zero-carbon target by 2050** requires changes to the way we use and supply energy so that power and heat for our buildings and transport is generated from local clean, low-carbon and renewable sources. London will need to shift from its

reliance on using natural gas as its main energy source to a more diverse range of low and zero-carbon sources, including renewable energy and secondary heat sources. Decentralised energy and local secondary heat sources will become an increasingly important element of London's energy supply and will help London become more self-sufficient and resilient in relation to its energy needs.

9.3.3 Many of London's existing **heat networks** have grown around combined heat and power (CHP) systems. However, the carbon savings from gas engine CHP are now declining as a result of national grid electricity decarbonising, and there is increasing evidence of adverse air quality impacts. Heat networks are still considered to be an effective and low-carbon means of supplying heat in London, and offer opportunities to transition to zero-carbon heat sources faster than individual building approaches. Where there remains a strategic case for low-emission CHP systems to support area-wide heat networks, these will continue to be considered on a case-by-case basis. Existing networks will need to establish decarbonisation plans. These should include the identification of low- and zero-carbon heat sources that may be utilised in the future, in order to be zero-carbon by 2050. The Mayor will consider how boroughs and network operators can be supported to achieve this.

9.3.4 Developments should connect to existing heat networks wherever feasible. New and existing networks should incorporate good practice design and specification standards comparable to those set out in the CIBSE/ADE Code of Practice CP1 for the UK or equivalent. They should also register with the Heat Trust or an equivalent scheme. This will support the development of good quality networks whilst helping network operators prepare for regulation and ensuring that customers are offered a reliable, cost-competitive service. Stimulating the delivery of new district heating infrastructure enables the opportunities that district heating can provide for London's energy system to be maximised. The Mayor has identified **Heat Network Priority Areas**, which can be found on the London Heat Map website.[158] These identify where in London the heat density is sufficient for heat networks to provide a competitive solution for supplying heat to buildings and consumers. Data relating to new and expanded networks will be regularly captured and made publicly available. Major development proposals outside Heat Network Priority Areas should select a low-carbon heating system that is appropriate to the heat demand of the development, provides a solution for managing peak demand, as with heat networks, and avoids high energy bills for occupants.

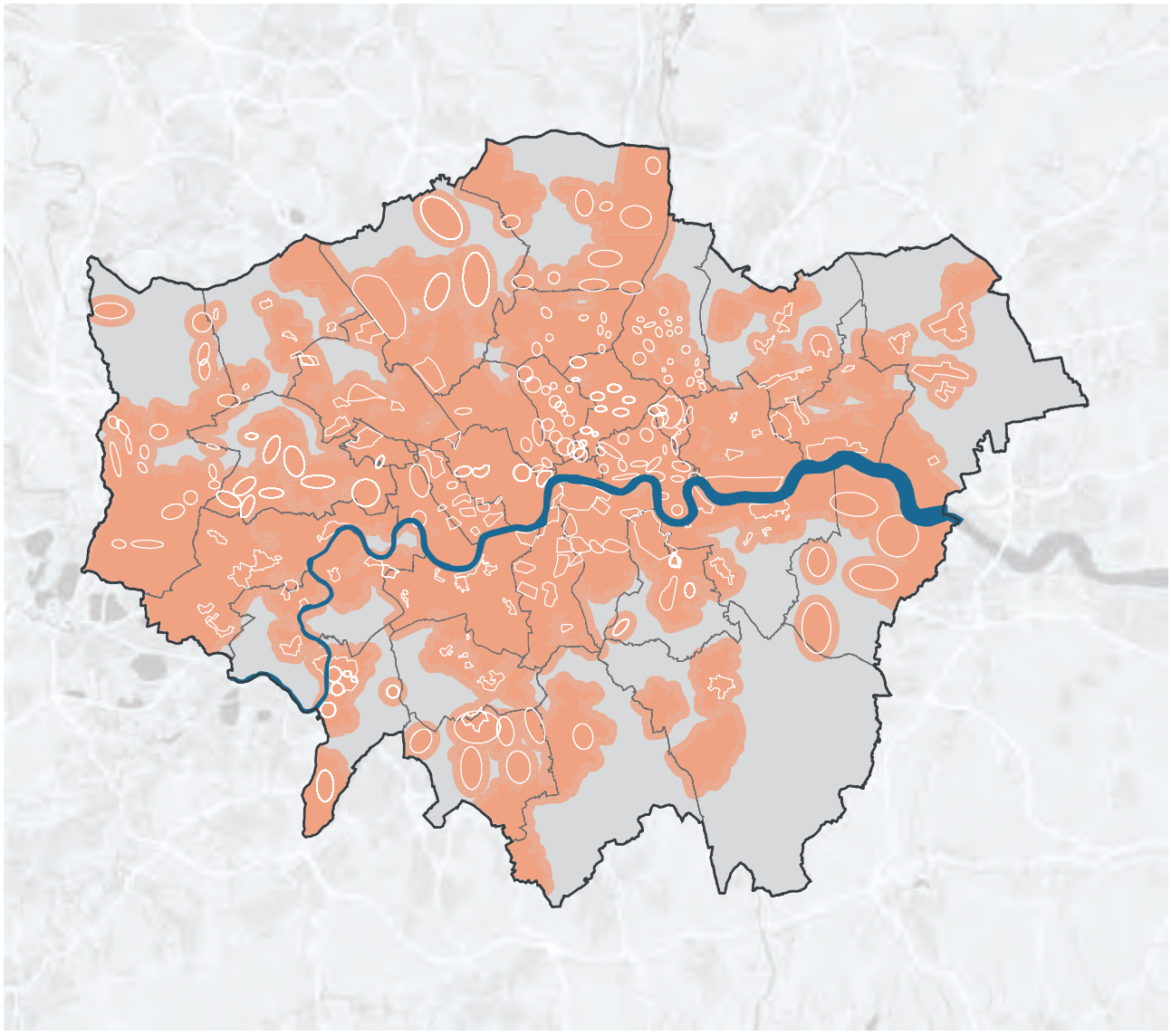
158 London Heat Map, https://www.london.gov.uk/what-we-do/environment/energy/london-heat-map

9.3.5 Where developments are proposed within Heat Network Priority Areas but are beyond existing heat networks, the heating system should be designed to **facilitate cost-effective future connection**. This may include, for example, allocating space in plant rooms for heat exchangers and thermal stores, safeguarding suitable routes for pipework from the site boundary and making provision for connections to the future network at the site boundary. The Mayor is taking a more direct role in the delivery of district-level heat networks so that more new and existing communally-heated developments will be able to connect into them, and has developed a comprehensive decentralised energy support package. Further details are available in the London Environment Strategy.

9.3.6 The Mayor also supports the development of **low-temperature networks** for both new and existing systems as this allows cost-effective use of low-grade waste heat. It is expected that network supply temperatures will drop from the traditional 90°C-95°C to 70°C and less depending on system design and the temperature of available heat sources. Further guidance on designing and operating heat networks will be set out in the updated London Heat Network Manual.

9.3.7 **Low-emission CHP** in this policy refers to those technologies which inherently emit very low levels of NOx. It is not expected that gas engine CHP will fit this category with the technology that is currently available. Further details on circumstances in which it will be appropriate to use low-emission CHP and what additional emissions monitoring will be required will be provided in further guidance. This guidance will be regularly updated to ensure that it reflects changes in technology.

Figure 9.3 - Heat Network Priority Areas



Heat Network Priority Areas

- Heat Network Priority Areas
- Local Authority Heat Network Studies

Source: GLA Environment

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9.3.8 Increasing the amount of **renewable and secondary energy** is supported and development proposals should identify opportunities to maximise both secondary heat sources and renewable energy production on-site. This includes the use of solar photovoltaics, heat pumps and solar thermal, both on buildings and at a larger scale on appropriate sites. There is also potential for wind and hydropower-based renewable energy in some locations within London. Innovative low- and zero-carbon technologies will also be supported.

9.3.9 **Electricity** is essential for the functioning of any modern city. Demand is expected to rise in London in response to a growing population and economy, the increased take up of electric vehicles, and the switch to electric heating systems (such as through heat pumps). It is of concern that the electricity network and substations are at or near to capacity in a number of areas, especially in central London. The Mayor will work with the electricity and heat industry, boroughs and developers to ensure that appropriate infrastructure is in place and integrated within a wider smart energy system designed to meet London's needs.

9.3.10 Demand for **natural gas** in London has been decreasing over the last few years, with a 25 per cent reduction since 2000.[159] This trend is expected to continue due to improved efficiency and a move away from individual gas boilers. Alongside the continuing programme of replacing old metal gas mains (predominantly with plastic piping), local infrastructure improvements may be required to supply energy centres, associated with heat networks, that will support growth in Opportunity Areas and there may also be a requirement for the provision of new pressure reduction stations. These requirements should be identified in energy masterplans.

9.3.11 Cadent Gas and SGN operate London's gas distribution network. Both companies are implementing significant **gasholder de-commissioning programmes**, replacing them with smaller gas pressure reduction stations. The Mayor will work with key stakeholders including the Health and Safety Executive to achieve the release of the resulting brownfield sites for redevelopment including energy infrastructure where appropriate.

9.3.12 Land will be required for energy supply infrastructure including **energy centres**. These centres can capture and store energy as well as generate it. The ability to efficiently store energy as well as to generate it can reduce overall energy consumption, reduce peak demand and integrate greater levels of renewable energy into the energy system.

159 Based on data from London Energy and Greenhouse Gas Inventory (LEGGI) https://data.london.gov.uk/dataset/leggi

Note for Figure 9.4: Thames Water has developed a model of its drains and sewers in London to assess waste water flows. The model compares the theoretical capacity of the drain or sewer pipe against how much waste water flow the pipe is currently receiving during a one in two-year rainfall event. The model's outputs can be visualised as a 'heat map', which highlights at a strategic scale where there is a higher (green) or lower (red) ability to receive additional flows. 'Green' areas do not mean that no additional drainage infrastructure is required. The modelling does not consider how waste water is routed through the network, so it should be noted that some 'green' areas will flow into 'red' areas, hence increasing flows upstream will exacerbate performance in the downstream catchments. The hatched area on the map shows the portions of the sewer system that are generally combined sewers, which means they capture both waste water and surface water flows.

Policy SI 6 Digital connectivity infrastructure

A To ensure London's global competitiveness now and in the future, development proposals should:

1) ensure that sufficient ducting space for full fibre connectivity infrastructure is provided to all end users within new developments, unless an affordable alternative 1GB/s-capable connection is made available to all end users
2) meet expected demand for mobile connectivity generated by the development
3) take appropriate measures to avoid reducing mobile connectivity in surrounding areas; where that is not possible, any potential reduction would require mitigation
4) support the effective use of rooftops and the public realm (such as street furniture and bins) to accommodate well-designed and suitably located mobile digital infrastructure.

B Development Plans should support the delivery of full-fibre or equivalent digital infrastructure, with particular focus on areas with gaps in connectivity and barriers to digital access.

9.6.1 The **provision of digital infrastructure** is as important for the proper functioning of development as energy, water and waste management services and should be treated with the same importance. London should

be a world-leading tech hub with world-class digital connectivity that can anticipate growing capacity needs and serve hard to reach areas. Fast, reliable digital connectivity is essential in today's economy and especially for digital technology and creative companies. It supports every aspect of how people work and take part in modern society, helps smart innovation and facilitates regeneration.

9.6.2 **London's capability** in this area is currently limited by a range of issues, including the availability of fibre and the speeds delivered. The industry regulator Ofcom publishes the data on digital connectivity coverage on which Figure 9.5 is based, but there are some limitations to the practicality of the data that is collected. Further work will be done to accurately identify locations in the capital where current connectivity provisions are not suitable for the needs of the area.

9.6.3 **Better digital connectivity** with a focus on capability, affordability, security, resilience and the provision of appropriate electrical power supply should be promoted across the capital. The specific requirements of business clusters, such as a symmetrical-capable service with the same upload and download speeds, should also be met.

9.6.4 Given the fast pace at which digital technology is changing, a flexible approach to development is needed that supports **innovation and choice**. Part R1 of the Building Regulations 2010 requires buildings to be equipped with at least 30 MB/s ready in-building physical infrastructure, however new developments using full fibre to the property or other higher-grade infrastructure can achieve connectivity speeds of 1GB/s. Developers should engage early with a range of network operators, to ensure that development proposals are designed to be capable of providing this level of connectivity to all end users. Mechanisms should also be put in place to enable further future infrastructure upgrades. Innovation is driving reductions in the size of infrastructure, with marginal additional unit costs, but greater digital connectivity is needed in more locations.

9.6.5 Development proposals should also demonstrate that **mobile connectivity** will be available throughout the development and should not have detrimental impacts on the digital connectivity of neighbouring buildings. Early consultation with network operators will help to identify any adverse impact on mobile or wireless connectivity and appropriate measures to avoid/mitigate them.

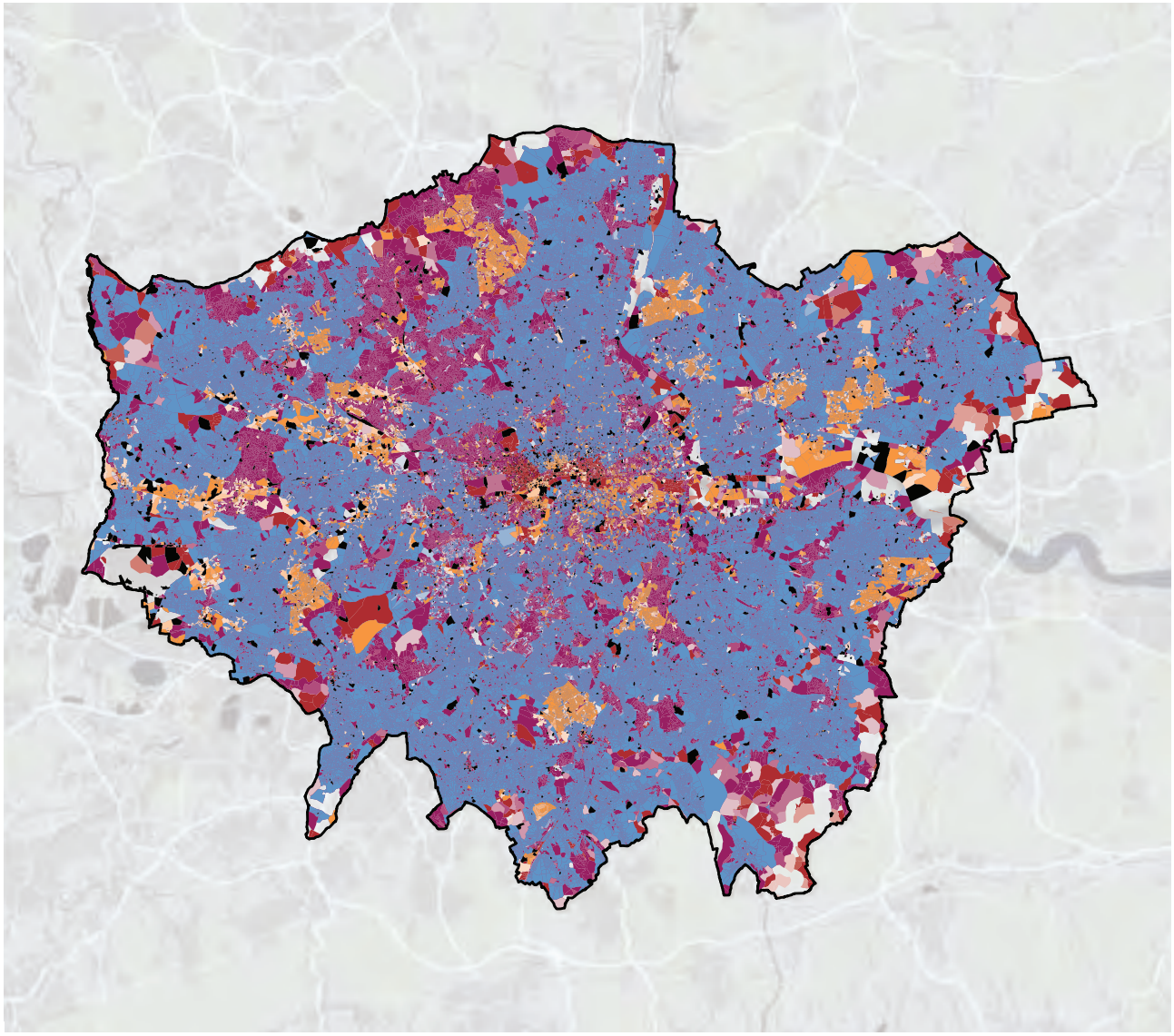
9.6.6 Access for network operators to rooftops of new developments should be supported where an improvement to the mobile connectivity of the area can be identified. Where possible, other opportunities to secure **mobile connectivity improvements** should also be sought through new developments, including for example the creative use of the public realm.

9.6.7 For some types of development (such as commercial) specific requirements regarding **communications access and security** may apply. Data centres, in particular, depend on reliable connectivity and electricity infrastructure. Warehouse-based data centres have emerged as a driver of industrial demand in London over recent years and this will need to be taken into account when assessing demand for industrial land (see Policy E4 Land for industry, logistics and services to support London's economic function, Policy E5 Strategic Industrial Locations (SIL), Policy E6 Locally Significant Industrial Sites and Policy E7 Industrial intensification, co-location and substitution).

9.6.8 The Mayor will work with network operators, developers, councils and Government to develop guidance and share good practice to **increase awareness and capability** amongst boroughs and developers of the effective provision of digital connectivity and to support the delivery of policy requirements. The Mayor will also help to identify spatial gaps in connectivity and overcome barriers to delivery to address this form of digital exclusion, in particular through his Connected London work. Boroughs should encourage the delivery of high-quality / world-class digital infrastructure as part of their Development Plans.

9.6.9 Digital connectivity supports **smart technologies** in terms of the collection, analysis and sharing of data on the performance of the built and natural environment, including for example, water and energy consumption, waste, air quality, noise and congestion. Development should be fitted with smart infrastructure, such as sensors, to enable better collection and monitoring of such data. As digital connectivity and the capability of these sensors improves, and their cost falls, more and better data will become available to improve monitoring of planning agreements and impact assessments, for example related to urban design. Further guidance will be developed to make London a smarter city.

Figure 9.5 - Broadband coverage May 2019



Broadband coverage as of May 2019
Availability (% Premises)

Full Fibre	Ultra-fast Broadband	Super-fast Broadband	30Mbit/s Unavailability
1 - 20	1 - 20	1 - 20	1 - 20
21 - 40	21 - 40	21 - 40	21 - 40
41 - 60	41 - 60	41 - 60	41 - 60
61 - 80	61 - 80	61 - 80	61 - 80
81 - 100	81 - 100	81 - 100	81 - 100
			No Data Available (Postcode areas)

Source: Ofcom

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Note for Figure 9.5: For the most up to date broadband coverage and information on broadband connection types please see https://www.london.gov.uk/what-we-do/business-and-economy/supporting-londons-sectors/connectivity

Policy SI 7 Reducing waste and supporting the circular economy

A Resource conservation, waste reduction, increases in material re-use and recycling, and reductions in waste going for disposal will be achieved by the Mayor, waste planning authorities and industry working in collaboration to:

1) promote a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible
2) encourage waste minimisation and waste prevention through the reuse of materials and using fewer resources in the production and distribution of products
3) ensure that there is zero biodegradable or recyclable waste to landfill by 2026
4) meet or exceed the municipal waste recycling target of 65 per cent by 2030[163]
5) meet or exceed the targets for each of the following waste and material streams:
    a) construction and demolition – 95 per cent reuse/recycling/recovery
    b) excavation – 95 per cent beneficial use[164]
6) design developments with adequate, flexible, and easily accessible storage space and collection systems that support, as a minimum, the separate collection of dry recyclables (at least card, paper, mixed plastics, metals, glass) and food.

163 Based on the EU definition of municipal waste being household waste and other waste similar in composition to household waste. This includes business waste collected by local authorities and by the private sector.

164 All inert excavation waste should be used for beneficial uses.

B Referable applications should promote circular economy outcomes and aim to be net zero-waste. A Circular Economy Statement should be submitted, to demonstrate:

1) how all materials arising from demolition and remediation works will be re-used and/or recycled
2) how the proposal's design and construction will reduce material demands and enable building materials, components and products to be disassembled and re-used at the end of their useful life
3) opportunities for managing as much waste as possible on site
4) adequate and easily accessible storage space and collection systems to support recycling and re-use
5) how much waste the proposal is expected to generate, and how and where the waste will be managed in accordance with the waste hierarchy
6) how performance will be monitored and reported.

C Development Plans that apply circular economy principles and set local lower thresholds for the application of Circular Economy Statements for development proposals are supported.

9.7.1 Waste is defined as anything that is discarded. A **circular economy** is one where materials are retained in use at their highest value for as long as possible and are then re-used or recycled, leaving a minimum of residual waste. London should move to a more circular economy as this will save resources, increase the resource efficiency of London's businesses, and help to reduce carbon emissions. The successful implementation of circular economy principles will help to reduce the volume of waste that London produces and has to manage. A key way of achieving this will be through incorporating circular economy principles into the design of developments (see also Policy D3 Optimising site capacity through the design-led approach) as well as through Circular Economy Statements for referable applications.

9.7.2 The adoption of circular economy principles for referable applications means creating a built environment where buildings are designed for **adaptation, reconstruction and deconstruction**. This is to extend the useful life of buildings and allow for the salvage of components and materials for reuse or recycling. Un-used or discarded materials should be brought back to an equal or

comparable level of quality and value and reprocessed for their original purpose (e.g. recycling glass back into glass, instead of into aggregate).

9.7.3 To assist with the introduction of Circular Economy principles, the Mayor will be providing further guidance on **Circular Economy Statements**. Circular Economy Statements are intended to cover the whole life cycle of development. This will apply to referable schemes and be encouraged for other major infrastructure projects within London. Boroughs are encouraged to set lower local thresholds through Development Plans.

9.7.4 In 2015[165] London produced just under 18 million tonnes (mt) of **waste**, comprising:

- 3.1mt household waste – 17 per cent
- 5.0mt commercial/industrial waste – 28 per cent
- 9.7mt construction, demolition and excavation waste – 54 per cent

9.7.5 Modelling[166] suggests that if London achieves the Mayor's reduction and recycling targets, it will have sufficient **Energy from Waste** capacity to manage London's non-recyclable municipal waste, once the new Edmonton and Beddington Lane facilities are operational.

9.7.6 The London Environment Strategy sets out a pathway to achieving a municipal recycling target of 65 per cent by 2030 and outlines the Mayor's approach to **municipal waste** management in detail. This includes London achieving a 50 per cent reduction in food waste and associated packaging waste per person by 2030, and London local authorities needing to provide a minimum level of recycling service, including separate food waste, to residents by 2020. To achieve these recycling targets, it will be important that recycling, storage and collection systems in new developments are appropriately designed. Further detail on how developments should do this is set out in guidance.

9.7.7 Re-use and recycling rates for **construction, demolition and excavation waste** and material (CD&E) in London is estimated between 50 – 60 per cent[167] for 2015 with some large construction projects including the Olympic Park achieving 85 – 95 per cent recovery rates. The targets for CD&E waste and material are already

165 https://www.london.gov.uk/what-we-do/planning/london-plan/london-plan-technical-and-research-reports

166 See objective 7.4 London Environment Strategy, May 2018

167 Based on CD&E waste data interrogator data 2015. Estimate only as actual CD&E waste performance data is not available and not a requirement to report. Actual performance likely to be higher as waste reused or recycled on- site is not reported through the waste data interrogator.

being set on some projects, but better data (particularly relating to reuse on site) is needed to inform performance. The adoption of circular economy principles in referable applications (and promoted in Local Plans) is expected to help London achieve the CD&E waste and material recovery targets early in the Plan period.

9.7.8 The movement and management of household, commercial and industrial, and construction, demolition and excavation waste will be monitored in collaboration with other stakeholders through available data sets (including the Environment Agency's Waste Data Interrogator tool and WasteDataFlow) and reporting against commitments in Circular Economy Statements. This will inform reporting on and **monitoring** of the achievement of the targets set out in this policy, Part A.

9.7.9 Part A4 reflects recent **changes to the regulatory regime** that mean that the particular characteristics of excavation waste make it difficult to recover. The Mayor will continue to work with stakeholders to understand the implications of this regulatory change and to promote its beneficial use and limit the amount sent to landfill. The best environmental option practicable for the management of excavation material should be used. This could, for example, include using the material as a resource within the construction of the proposed development, or in other local construction projects, or using the material in habitat creation, flood defences or landfill restoration. In line with circular economy principles, the management of excavation waste should be focused on-site or within local projects.

9.7.10 When it is intended to send **waste to landfill** it will be important to show evidence that the receiving facility has the capacity to deal with waste over the lifetime of the development. This information should be made available to the relevant waste planning authority to help plan for future needs.

Policy SI 8 Waste capacity and net waste self-sufficiency

A In order to manage London's waste sustainably:

1) the equivalent of 100 per cent of London's waste should be managed within London (i.e. net self-sufficiency) by 2026
2) existing waste management sites should be safeguarded (see Policy SI 9 Safeguarded waste sites)
3) the waste management capacity of existing sites should be optimised
4) new waste management sites should be provided where required
5) environmental, social and economic benefits from waste and secondary materials management should be created.

B Development Plans should:

1) plan for identified waste needs
2) identify how waste will be reduced, in line with the principles of the Circular Economy and how remaining quantums of waste will be managed
3) allocate sufficient sites, identify suitable areas, and identify waste management facilities to provide the capacity to manage the apportioned tonnages of waste, as set out in Table 9.2 – boroughs are encouraged to collaborate by pooling their apportionment requirements
4) identify the following as suitable locations to manage borough waste apportionments:
    a) existing waste and secondary material sites/land, particularly waste transfer facilities, with a view to maximising their capacity
    b) Strategic Industrial Locations and Locally Significant Industrial Sites
    c) safeguarded wharves with an existing or future potential for waste and secondary material management.

C Mayoral Development Corporations must cooperate with host boroughs to meet identified waste needs.

D Development proposals for materials and waste management sites are encouraged where they:

1) deliver a range of complementary waste management and secondary material processing facilities on a single site

2) support prolonged product life and secondary repair, refurbishment and remanufacture of materials and assets
3) contribute towards renewable energy generation, especially renewable gas technologies from organic/biomass waste, and/or
4) are linked to low emission combined heat and power and/or combined cooling heat and power (CHP is only acceptable where it will enable the delivery or extension of an area-wide heat network consistent with Policy SI 3 Energy infrastructure Part D1c)

E Developments proposals for new waste sites or to increase the capacity of existing sites should be evaluated against the following criteria:

1) the nature of the activity, its scale and location
2) effective implementation of the waste hierarchy and its contribution to London's circular economy
3) achieving a positive carbon outcome (i.e. re-using and recycling high carbon content materials) resulting in significant greenhouse gas savings – all facilities generating energy from waste will need to meet, or demonstrate that steps are in place to meet, a minimum performance of 400g of CO_2 equivalent per kilowatt hour of electricity produced
4) the impact on amenity in surrounding areas (including but not limited to noise, odours, air quality and visual impact) – where a site is likely to produce significant air quality, dust or noise impacts, it should be fully enclosed
5) the transport and environmental impacts of all vehicle movements related to the proposal – the use of renewable fuels from waste sources and the use of rail and waterway networks to transport waste should be supported.

F When planning for new waste sites or to increase the capacity at existing sites the following should be considered:

1) job creation and social value benefits, including skills, training and apprenticeship opportunities
2) local need
3) accessibility of services for local communities and businesses.

Table 9.1 - Forecast arisings of household, commercial and industrial waste by borough 2021-2041 (000's tonnes)

Borough	2021	2041
Barking & Dagenham	214	230
Barnet	315	340
Bexley	225	241
Brent	259	274
Bromley	249	267
Camden	360	374
City of London	230	238
Croydon	305	327
Ealing	291	306
Enfield	305	327
Greenwich	209	226
Hackney	183	195
Hammersmith & Fulham	183	190
Haringey	190	201
Harrow	188	205
Havering	229	249
Hillingdon	347	365
Hounslow	260	275
Islington	241	251
Kensington & Chelsea	201	210
Kingston	152	160
Lambeth	208	219
Lewisham	191	206
Merton	174	184
Newham	244	260
Redbridge	196	216
Richmond	179	190
Southwark	292	308
Sutton	161	172
Tower Hamlets	260	273
Waltham Forest	202	218
Wandsworth	251	264
City of Westminster	722	749
London total	**8,217**	**8,726**

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Table 9.2 - Borough-level apportionments of household, commercial and industrial waste 2021-2041 (000's tonnes)

Borough	Apportionment *	2021	2041
Barking & Dagenham	6.1	505	537
Barnet	2.6	215	229
Bexley	5.6	457	485
Brent	5.0	412	437
Bromley	2.3	192	204
Camden	1.6	133	141
City of London	1.0	84	90
Croydon	3.1	252	268
Ealing	6.6	542	576
Enfield	4.3	356	379
Greenwich	4.1	338	359
Hackney	1.3	111	118
Hammersmith & Fulham	2.6	210	223
Haringey	2.3	192	203
Harrow	1.9	160	170
Havering	4.5	370	393
Hillingdon	5.1	423	449
Hounslow	5.0	407	432
Islington	1.2	101	108
Kensington & Chelsea	1.4	116	123
Kingston	2.3	187	199
Lambeth	1.7	143	152
Lewisham	2.2	184	195
Merton	2.9	238	253
Newham	4.7	383	407
Redbridge	1.8	151	160
Richmond	1.8	148	157
Southwark	1.8	150	159
Sutton	2.6	211	224
Tower Hamlets	2.4	195	207
Waltham Forest	2.4	199	211
Wandsworth	3.2	264	280
City of Westminster	2.3	188	200
London total	**100.0**	**8,217**	**8,726**

* Apportionment is per cent share of London's total waste to be managed by borough

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Table 9.3 - Projected net exports of household, commercial and industrial waste from London (000's tonnes)

Type	2015	2021	2026	2041
London's arisings	8,100	8,216	8,299	8,726
London's exports	3,449	1,725	0	0

Note: 2015 is an actual figure (SLR May 2017), data for 2021, 2026 and 2041 are projections

9.8.1 In 2015, London managed 7.5mt of its own waste and exported 11.4mt of waste. London also imported 3.6mt of waste. This gives London a current waste **net self-sufficiency figure** of approximately 60 per cent. Around 5mt (49 per cent) of waste exported from London went to the East of England and 4.2mt (42 per cent) to the South East. The bulk of this waste is CD&E waste. Approximately 1.3mt of waste was exported overseas. The term net self-sufficiency is meant to apply to all waste streams, with the exception of excavation waste. The particular characteristics of this waste stream mean that it will be challenging for London to provide either the sites or the level of compensatory provision needed to apply net self-sufficiency to this waste stream.

9.8.2 In 2015, 2.9mt of the waste sent to the East of England went to landfill and 2.2mt went to landfill in the South East. Some 32 per cent of London's waste that was biodegradable or recyclable was sent to landfill. The Mayor is committed to **sending zero biodegradable or recyclable waste to landfill by 2026**.

9.8.3 Waste contracts do not recognise administrative boundaries and waste flows across borders. Therefore, sufficient sites should be identified within London to deal with the equivalent of 100 per cent of the waste apportioned to the boroughs as set out in Table 9.2. The Mayor will work with boroughs, the London Waste and Recycling Board, and the London and neighbouring Regional Technical Advisory Bodies to address **cross-boundary waste flow issues**. Examples of joint working include ongoing updates to the London Waste Map, sharing data derived from Circular Economy Statements, the monitoring of primary waste streams and progress to net self-sufficiency, supporting the Environment Agency's annual monitoring work, and collaboration on management solutions of waste arisings from London.

9.8.4 Waste is deemed to be managed in London if any of the following activities take place within London:

- waste is used for energy recovery

- the production of solid recovered fuel (SRF), or it is high-quality refuse-derived fuel (RDF) meeting the Defra RDF definition as a minimum[168] which is destined for energy recovery
- it is sorted or bulked for re-use (including repair and re-manufacture) or for recycling (including anaerobic digestion)
- It is reused or recycled (including anaerobic digestion).

9.8.5 Supporting the production of **SRF and high-quality RDF feedstock** will promote local energy generation and benefit Londoners, improving London's energy security, helping to achieve regional self-sufficiency and possibly reducing leakage of SRF and RDF overseas. London facilities should produce high-quality waste feedstock with very little recyclable content (i.e. plastics), supporting renewable energy generation.

9.8.6 Table 9.1 shows projected arisings for household, commercial and industrial waste for each borough. National policy guidance requires boroughs to have regard to the **waste apportionments** set out in the London Plan. The Plan's waste apportionment model defines the proportion of London's total household, commercial and industrial waste that each borough should plan for, and these apportionments are set out in Table 9.2. Part B3 requires boroughs to allocate sufficient land (sites and/or areas) and identify waste management facilities to provide the capacity to manage their apportioned tonnages of waste. Boroughs are encouraged to collaborate by pooling their apportionment requirements. Boroughs with a surplus of waste sites should offer to share these sites with those boroughs facing a shortfall in capacity before considering site release.

9.8.7 Boroughs should examine in detail **how capacity can be delivered at the local level** and demonstrate how this can be provided for through the allocation of sufficient sites and the identification of suitable areas in Development Plans to meet their apportionment, and should aim to meet their waste apportionment as a minimum. It may not always be possible for boroughs to meet their apportionment within their boundaries and in such circumstances boroughs will need to agree the transfer of apportioned waste. Where apportionments are pooled, boroughs must demonstrate how their joint apportionment targets will be met, for example through joint waste Development Plan Documents, joint evidence papers or bilateral agreements.

9.8.8 **Mayoral Development Corporations** (MDCs) must cooperate with host boroughs to meet identified waste needs; this includes boroughs'

168 See http://www.sita.co.uk/services-and-products/our-products/rdf-srf for an explanation of the differences between SRF and RDF.

apportionment requirements. This could be widened to cover boroughs in the relevant waste planning group where appropriate. In future iterations of the Plan full consideration will be given to apportioning waste needs to MDCs.

9.8.9 Waste planning authorities and groups should plan to meet the identified waste management needs of their local area and are encouraged to identify suitable **additional capacity for waste**, including those waste streams not apportioned by the London Plan, where practicable. This could include, waste transfer sites, new sites managing construction, demolition and excavation waste, or the reconfiguration and intensification of existing uses that increase management capacity.

9.8.10 Plans or agreements **safeguarding waste sites** should take a flexible approach. They should be regularly reviewed and updated to take account of development that may lead to the integration of waste sites or appropriate relocation of lost waste sites. Waste plans should be responsive to strategic opportunities across borough and joint waste planning boundaries for optimising capacity on existing waste sites, or that help to unlock investment in developing new waste sites. Where a waste site may be lost, compensatory capacity should first be explored within the borough. In cases where this can't be provided, and suitable capacity is found in another borough, the receiving borough or joint waste planning group is encouraged to take on the apportionment and include it as part of their Development Plan.

9.8.11 Land in Strategic Industrial Locations will provide the main opportunities for locating waste treatment facilities. Existing waste management sites should be clearly identified and safeguarded for waste use. Boroughs should also look to Locally Significant Industrial Sites and intensification of existing waste management sites. Large-scale redevelopment opportunities and redevelopment proposals should incorporate waste management facilities within them. The London Waste Map[169] shows the locations of London's permitted waste facilities and sites that may be suitable for waste facility location.

9.8.12 As noted above, waste flows across boundaries and London exported 3.4mt of household, commercial and industrial waste in 2015. To meet the Mayor's policy commitment of net self-sufficiency by 2026 there needs to be a reduction in exports or an increase in imports in the lead up to 2026. Table 9.3 is included to help neighbouring authorities plan for London's expected household, commercial and industrial waste exports.

169 London Waste Map, https://maps.london.gov.uk/webmaps/waste/

9.8.13 Tables 9.1, 9.2 and 9.3 only refer to household, commercial and industrial waste, not construction, demolition and excavation waste. As the **reliability of CD&E waste data is low**, apportionments for this waste stream are not set out. For a fuller discussion of the issues around CD&E waste data see paragraph 9.7.7 and the SLR consulting report (task 2) (May 2017).

9.8.14 To support the shift towards a low-carbon circular economy, all facilities generating energy from waste should meet, or demonstrate that they can meet in future, a measure of minimum greenhouse gas performance known as the **carbon intensity floor** (CIF). The CIF is set at 400g of CO_2 equivalent generated per kilowatt hour (kwh) of electricity generated. The GLA's free on-line ready reckoner tool can assist boroughs and applicants in measuring and determining performance against the CIF.[170] Achieving the CIF effectively rules out traditional mass burn incineration techniques generating electricity only. Instead, it supports techniques where both heat and power generated are used, and technologies are able to achieve high efficiencies, such as when linked with gas engines and hydrogen fuel cells. More information on how the CIF has been developed and how to meet it can be found in the London Environment Strategy.

9.8.15 Waste to energy facilities should be equipped with a **heat off-take** from the outset such that a future heat demand can be supplied without the need to modify the heat producing plant in any way or entail its unplanned shut-down. It should be demonstrated that capacity of the heat off-take meets the CIF at 100 per cent heat supply. In order to ensure it remains relevant, the CIF level will be kept under review.

9.8.16 Examples of the '**demonstrable steps**' required under Part E3 are:

- a commitment to source truly residual waste – waste with as little recyclable material as possible
- a commitment (via a Section 106 obligation) to deliver the necessary means for infrastructure to meet the minimum CO_2 standard, for example investment in the development of a heat distribution network to the site boundary, or technology modifications that improve plant efficiency
- an agreed timeframe (via a Section 106 agreement) as to when proposed measures will be delivered
- the establishment of a working group to progress the agreed steps and monitor and report performance to the consenting authority.

170 https://www.london.gov.uk/what-we-do/environment/waste-and-recycling/waste-policy

9.8.17 To assist in the delivery of 'demonstrable steps' the GLA can help to advise on **heat take-off opportunities** for waste to energy projects, particularly where these are linked to GLA supported energy masterplans.

9.8.18 In 2015 around 324,000 tonnes of **hazardous waste** was produced in London. Hazardous waste makes up a component of all waste streams and is included in the apportionments for household, commercial and industrial waste set out in Table 9.2. London sends small amounts of hazardous waste to landfill outside of London, approximately three per cent of the national total. The amount of such waste produced has continued to grow in the short and medium term. Without sustained action, there remains the risk of a major shortfall in our capacity to treat and dispose of hazardous waste safely. This could lead to storage problems, illegal disposal (including fly tipping) and rising public concern about health and environmental impacts. There is therefore a need to continue to identify hazardous waste capacity for London. The main requirement is for sites for regional facilities to be identified. Boroughs will need to work with neighbouring authorities to consider the necessary facilities when planning for their hazardous waste.

9.8.19 **Waste processing facilities** should be well designed. They should respect context, not be visually overbearing and should contribute to the local economy as a source of new products and new jobs. They should be developed and designed in consultation with local communities, taking account of health and safety within the facility, the site and adjoining neighbourhoods. Developments supporting circular economy outcomes such as re-use, repair and re-manufacture, will be encouraged. Where movement of waste is required, priority should be given to facilities for movement by river or rail. Opportunities for combined heat, power and cooling should be taken wherever possible. Although no further landfill proposals in London are identified or anticipated within the Plan period, if proposals do come forward for new or extended landfill capacity or for land-raising, boroughs should ensure that the resultant void-space has regard to the London Environment Strategy.

9.8.20 Following the Agent of Change principle, developments adjacent to waste management sites should be designed to **minimise the potential for disturbance and conflicts of use**. Developers should refer to the London Waste and Recycling Board's design guide for ensuring adequate and easily accessible storage space for high-rise developments, see Part E of Policy D6 Housing quality and standards.

Policy T1 Strategic approach to transport

A Development Plans should support, and development proposals should facilitate:

1) the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041

2) the proposed transport schemes set out in Table 10.1.

B All development should make the most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London's transport networks and supporting infrastructure are mitigated.

10.1.1 The integration of land use and transport, and the provision of a robust and resilient public transport network, are essential in realising and maximising growth and ensuring that different parts of the city are connected in a sustainable and efficient way. In order to help facilitate this, an integrated **strategic approach to transport** is needed, with an ambitious aim to reduce Londoners' dependency on cars in favour of increased walking, cycling and public transport use. Without this shift away from car use, which the policies in the Plan and the Mayor's Transport Strategy seek to deliver, London cannot continue to grow sustainably. To achieve sustainable growth, Development Plans should support walking, cycling and public transport through policies that support mode shift and the schemes in Table 10.1. Development proposals should facilitate sustainable travel through their location and design and by not precluding the implementation of the schemes in Table 10.1.

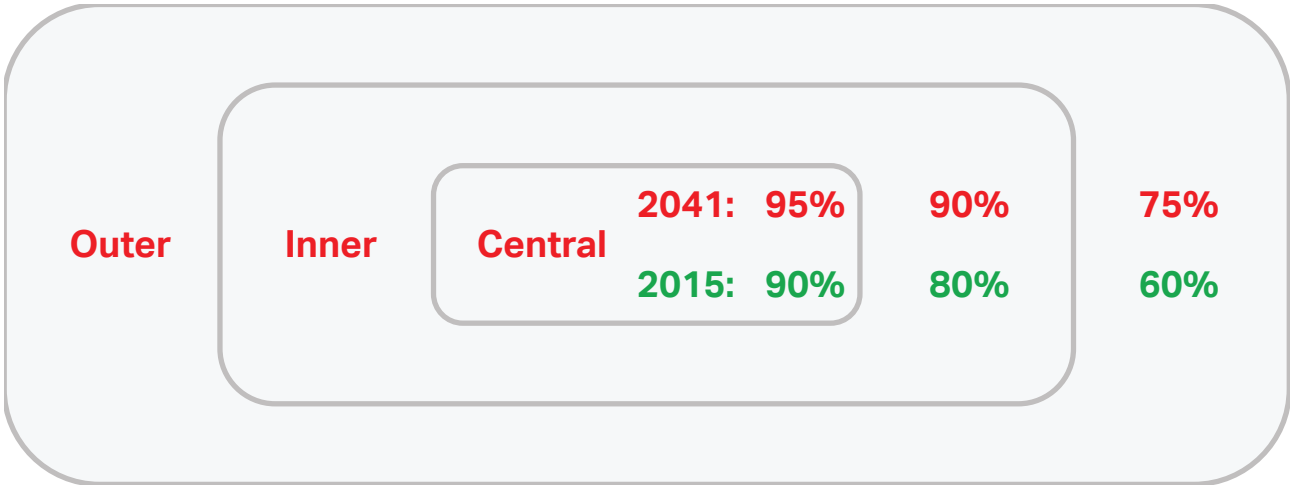
10.1.2 A shift from car use to more space-efficient travel also provides the only long-term **solution to the road congestion** challenges that threaten London's status as an efficient, well-functioning globally-competitive city. Reliable deliveries and servicing, and easy access to workplaces and key attractions are dependent on an increasingly-efficient transport network. Roads will continue to play a vital role in this, and greater priority needs to be given to making them more efficient for those activities that depend on them the most.

10.1.3 The Mayor will work with partners to minimise **freight trips** on the road network including through consolidation. He will promote safe, clean and efficient freight functions, including by road, rail, water and, for shorter distances, cycle.

10.1.4 **Rebalancing the transport system towards walking, cycling and public transport**, including ensuring high quality interchanges, will require sustained investment including improving street environments to make walking and cycling safer and more attractive, and providing more, better-quality public transport services to ensure that alternatives to the car are accessible, affordable and appealing. Achieving this is expected to result in different outcomes in different places, including modal splits in central, inner and outer London, as shown by Figure 10.1.

10.1.5 The **Mayor's Transport Strategy** provides more detail on the holistic approach that needs to be taken by all stakeholders to achieve these aims.

Figure 10.1 - Change in mode shares within central, inner and outer London expected to be required for a city-wide shift from 63 to 80 per cent share for walking, cycling and public transport



Policy T2 Healthy Streets

A Development proposals and Development Plans should deliver patterns of land use that facilitate residents making shorter, regular trips by walking or cycling.

B Development Plans should:

1) promote and demonstrate the application of the Mayor's Healthy Streets Approach to: improve health and reduce health inequalities; reduce

car dominance, ownership and use, road danger, severance, vehicle emissions and noise; increase walking, cycling and public transport use; improve street safety, comfort, convenience and amenity; and support these outcomes through sensitively designed freight facilities.

2) identify opportunities to improve the balance of space given to people to dwell, walk, cycle, and travel on public transport and in essential vehicles, so space is used more efficiently and streets are greener and more pleasant.

C In Opportunity Areas and other growth areas, new and improved walking, cycling and public transport networks should be planned at an early stage, with delivery phased appropriately to support mode shift towards active travel and public transport. Designs for new or enhanced streets must demonstrate how they deliver against the ten Healthy Streets Indicators.

D Development proposals should:

1) demonstrate how they will deliver improvements that support the ten Healthy Streets Indicators in line with Transport for London guidance

2) reduce the dominance of vehicles on London's streets whether stationary or moving

3) be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.

10.2.1 **Streets** account for 80 per cent of London's public spaces. High quality streets are fundamental to the character and efficient functioning of the city, and play a fundamental role in moving people around safely, improving public realm and providing spaces for people to come together. Successful streets are inclusive and provide for the various requirements of their users.

10.2.2 This Plan supports the implementation of the Mayor's Transport Strategy which aims to deliver the infrastructure and public realm required to **significantly increase levels of walking, cycling and public transport use** throughout London. It aims to make the city more accessible, inclusive, safe and welcoming to all, so that every Londoner can be active every day, creating a healthier city for people from all backgrounds, ensuring inequalities are reduced.

10.2.3 The **Healthy Streets Approach** is an evidence-based approach to improve health and reduce health inequalities, which will help Londoners use cars less, and walk, cycle and use public transport more. It supports the delivery of the

Mayor's aim that by 2041 all Londoners will be able to undertake at least the 20 minutes of active travel each day needed to stay healthy. It also requires better management of freight so the impact of moving goods, carrying out servicing and supporting construction on London's streets is lessened. To apply the Healthy Streets Approach, changes are required at a strategic, network and street level.

10.2.4 Londoners' direct interaction with the Healthy Streets Approach will be through the streets they use every day. The Healthy Streets Approach aims to bring about **positive changes to the character and use of the city's streets**. High-quality, pleasant and attractive environments with clean air and enough space for dwelling, walking, cycling and public transport use must be provided. The dominance of vehicles should be reduced by using design to ensure slower vehicle speeds and safer driver behaviour, in line with the Mayor's Vision Zero ambition. Measures that improve Londoners' experience of individual streets, including greening, to encourage them to live active lives should be embedded within new development.

10.2.5 Street environments are also affected by how the city's streets are planned and used at a larger scale. The Mayor will work with partners to deliver appealing local street environments and to plan the capital at the network level so that it functions better. This should be supported through development which facilitates opportunities to improve route choice and capacity for walking and cycling as well as linking to bus networks. As part of this, the Mayor will work with the freight industry, its customers and London's boroughs to develop more creative solutions to **managing freight**. This will include considering different uses of London's streets across the day so that more street space is available for walking, cycling and leisure purposes, while ensuring shops and services continue to thrive.

10.2.6 London's rapid growth means people need to travel more efficiently to keep the city functioning and to maintain and improve the quality of life for residents. S**trategic-level planning** to ensure walking, cycling and public transport are the first choices for travel is the only way to achieve this. Developing new housing around stations and improving connections to town centres will mean more people have the things they need within walking or cycling distance, while destinations further afield will be easily accessible by public transport.

10.2.7 The Healthy Streets Approach uses **10 indicators** that reflect the experience of being on streets. These indicators are based on evidence of what is needed to create a healthy, inclusive environment in which people choose to walk, cycle and use public transport.

Figure 10.2 - The Ten Healthy Streets Indicators

Source: Lucy Saunders

10.2.8 The Mayor has a long-term vision to reduce road danger so that no deaths or serious injuries occur on London's streets. This **Vision Zero** will be achieved by designing and managing a street system that accommodates human error and ensures impact levels are not sufficient to cause fatal or serious injury. This will require reducing the dominance of motor vehicles and targeting danger at source.

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Policy T4 Assessing and mitigating transport impacts

A Development Plans and development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity.

B When required in accordance with national or local guidance,[179] transport assessments/statements should be submitted with development proposals to ensure that impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel Plans, Parking Design and Management Plans, Construction Logistics Plans and Delivery and Servicing Plans will be required having regard to Transport for London guidance.[180]

C Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities and highways improvements or through financial contributions, will be required to address adverse transport impacts that are identified.

D Where the ability to absorb increased travel demand through active travel modes has been exhausted, existing public transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans and funding exist for an increase in capacity to cater for the increased demand, planning permission will be contingent on the provision of necessary public transport and active travel infrastructure.

E The cumulative impacts of development on public transport and the road network capacity including walking and cycling, as well as associated effects on public health, should be taken into account and mitigated.

F Development proposals should not increase road danger.

179 https://tfl.gov.uk/info-for/urban-planning-and-construction/transport-assessment-guide/transport-assessments

180 https://tfl.gov.uk/info-for/urban-planning-and-construction/guidance-for-applicants

10.4.1 It is important that the impacts and opportunities which arise as a result of development proposals are identified and assessed so that appropriate mitigations and opportunities are secured through the planning process. **Transport assessments** are therefore necessary to ensure that planning applications can be reviewed and assessed for their specific impacts and for their compatibility with the Healthy Streets Approach. Consideration of the potential impacts on internationally important wildlife sites should also be assessed, where required.

10.4.2 Transport assessments should include an assessment of demand arising from personal travel as well as from potential servicing and deliveries, taking into account the impacts both on all modes of transport including walking and cycling, and on streets as social spaces. For developments of strategic importance (development proposals that are referable to the Mayor), applicants are strongly advised to engage early with Transport for London through the **pre-application process** in order to ensure that all necessary elements are covered.[181]

10.4.3 It is important that development proposals **reduce the negative impact of development on the transport network** and reduce potentially harmful public health impacts. The biggest transport-related impact of development on public health in London is the extent to which it enables physical activity from walking, cycling and using public transport. The other main impacts on public health relate to air quality, road danger, noise, and severance. The phasing of development, and the use of travel plans and freight strategies, may help reduce negative impacts and bring about positive outcomes. Where adverse transport impacts have been identified from development proposals, mitigation will be sought in the form of financial contributions – to improve network service levels for example – or through directly providing infrastructure such as additional bus stops and street improvements.

10.4.4 New development that will give rise to significant numbers of new trips should be located in places well-connected by public transport, with capacity adequate to support the additional demand, or where there is a realistic prospect of additional access or capacity being provided in time to meet the new demand. The ability to absorb increased travel demand through active travel modes must also be considered. Funded proposals by applicants to improve transport access, capacity or connectivity are encouraged.

181 https://tfl.gov.uk/info-for urban-planning-and-construction/

Policy T5 Cycling

A Development Plans and development proposals should help remove barriers to cycling and create a healthy environment in which people choose to cycle. This will be achieved through:

1) supporting the delivery of a London-wide network of cycle routes, with new routes and improved infrastructure
2) securing the provision of appropriate levels of cycle parking which should be fit for purpose, secure and well-located. Developments should provide cycle parking at least in accordance with the minimum standards set out in Table 10.2 and Figure 10.3, ensuring that a minimum of two short-stay and two long-stay cycle parking spaces are provided where the application of the minimum standards would result in a lower provision.

B Cycle parking should be designed and laid out in accordance with the guidance contained in the London Cycling Design Standards.[182] Development proposals should demonstrate how cycle parking facilities will cater for larger cycles, including adapted cycles for disabled people.

C Development Plans requiring more generous provision of cycle parking based on local evidence will be supported.

D Where it is not possible to provide suitable short-stay cycle parking off the public highway, the borough should work with stakeholders to identify an appropriate on-street location for the required provision. This may mean the reallocation of space from other uses such as on-street car parking. Alternatively, in town centres, adding the required provision to general town centre cycle parking is also acceptable. In such cases, a commuted sum should be paid to the local authority to secure provision.

E Where it is not possible to provide adequate cycle parking within residential developments, boroughs must work with developers to propose alternative solutions which meet the objectives of the standards. These may include options such as providing spaces in secure, conveniently-located, on-street parking facilities such as bicycle hangers.

182 London Cycling Design Standards, Transport for London, https://tfl.gov.uk/corporate/publications-and-reports/streets-toolkit#on-this-page-2

F Where the use class of a development is not fixed at the point of application, the highest potential applicable cycle parking standard should be applied.

Table 10.2 - Minimum cycle parking standards*

Use Class		Long-stay (e.g. for residents or employees)	Short-stay (e.g. for visitors or customers)
A1	food retail above 100 sqm	1 space per 175 sqm gross external area (GEA)	areas with higher cycle parking standards (see Figure 10.3): • first 750 sqm: 1 space per 20 sqm; • thereafter: 1 space per 150 sqm (GEA) rest of London: • first 750 sqm: 1 space per 40 sqm; • thereafter: 1 space per 300 sqm (GEA)
	non-food retail above 100 sqm	• first 1000 sqm: 1 space per 250 sqm • thereafter: 1 space per 1000 sqm (GEA)	areas with higher cycle parking standards (see Figure 10.3): • first 1000 sqm: 1 space per 60 sqm; • thereafter: 1 space per 500 sqm (GEA) rest of London: • first 1000 sqm: 1 space per 125 sqm; • thereafter: 1 space per 1000 sqm (GEA)

Use Class		Long-stay (e.g. for residents or employees)	Short-stay (e.g. for visitors or customers)
A2-A5	financial / professional services; cafes & restaurants; drinking establishments; take-aways above 100 sqm	1 space per 175 sqm (GEA)	areas with higher cycle parking standards (see Figure 10.3): • 1 space per 20 sqm (GEA) rest of London: • 1 space per 40 sqm (GEA)
B1	business offices	• areas with higher cycle parking standards (see Figure 10.3): 1 space per 75 sqm • rest of London: 1 space per 150 sqm (GEA)	• first 5,000 sqm: 1 space per 500 sqm • thereafter: 1 space per 5,000 sqm (GEA)
	light industry and research and development	1 space per 250 sqm (GEA)	1 space per 1000 sqm (GEA)
B2-B8	general industrial, storage or distribution	1 space per 500 sqm (GEA)	1 space per 1000 sqm (GEA)
C1	hotels (bars, restaurants, gyms etc. open to the public should be considered individually under relevant standards)	1 space per 20 bedrooms	1 space per 50 bedrooms
C2	Hospitals	1 space per 5 FTE staff	1 space per 30 FTE staff
	care homes / secure accommodation	1 space per 5 FTE staff	1 space per 20 bedrooms

Use Class		Long-stay (e.g. for residents or employees)	Short-stay (e.g. for visitors or customers)
C3-C4	dwellings (all)	• 1 space per studio or 1 person 1 bedroom dwelling • 1.5 spaces per 2 person 1 bedroom dwelling • 2 spaces per all other dwellings	• 5 to 40 dwellings: 2 spaces • Thereafter: 1 space per 40 dwellings
D1	Nurseries	1 space per 8 FTE staff + 1 space per 8 students	
	primary schools / secondary schools/ sixth form colleges	1 space per 8 FTE staff + 1 space per 8 students	1 space per 100 students
	universities and colleges	1 space per 4 FTE staff + 1 space per 20 FTE students	1 space per 7 FTE students
	health centre, including dentists	1 space per 5 FTE staff	1 space per 3 FTE staff
	other (e.g. library, church, etc.)	1 space per 8 FTE staff	1 space per 100 sqm (GEA)
D2	sports (e.g. sports hall, swimming, gymnasium, etc.)	1 space per 8 FTE staff	1 space per 100 sqm (GEA)
	other (e.g. cinema, bingo, etc.)	1 space per 8 FTE staff	1 per 30 seats
Student accommodation		0.75 spaces per bedroom	1 space per 40 bedrooms
Specialist older persons housing**		1 space per 10 bedrooms	1 space per 40 bedrooms
Sui generis		As per most relevant other standard e.g. casino and theatre = D2, room in large-scale purpose-built shared living = studio C3	

Use Class	Long-stay (e.g. for residents or employees)	Short-stay (e.g. for visitors or customers)
Stations	To be considered on a case by case basis through liaison with TfL. The level of provision should take into account the type and location of the station, current and future rail and cycle demand and the potential for journey stages to and from the station to be made by cycle. A step-change in provision is expected, especially at termini, in order to meet the Mayor's mode share target.	

* The minimum of two short-stay and two long-stay cycle parking spaces does not apply to A1-A5 developments of less than 100 sqm or to short-stay parking at residential developments of fewer than 5 dwellings.

** as defined by Policy H13 Specialist older persons housing. The Mayor will continue to gather evidence with a view to revising and updating this standard. Where appropriate, proposals should provide higher provision than the above standard where it is needed.

10.5.1 Development should **facilitate and encourage cycling**, and reduce car dependency and the health problems it creates. Cycling is a space-efficient mode compared to cars so making streets attractive for cycling can bring benefits to all road users while also improving the experience of living, working and spending time in the city. The Mayor will deliver, in partnership with boroughs, a new London-wide network of strategic cycling routes which will transform the convenience and experience of cycling for all types of trips.

10.5.2 For some types of trip, the **level of cycling is dependent on the location of the destination**. For the boroughs identified on Figure 10.3 (the central and inner London boroughs, plus Richmond, Merton, Kingston, Hounslow and Barking & Dagenham), around 3.5 per cent of trips arriving at workplace, leisure and shopping destinations are made by cycle. This compares to around 1.5 per cent elsewhere in London.

Figure 10.3 - Boroughs and town centres where higher minimum cycle parking standards apply

Areas where higher minimum cycle parking standards apply

see table 10.2

- Higher minimum cycle parking standards

Source: Transport for London (TfL)

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10.5.3 The **minimum standards** for short-stay (for visitor / customer) cycle parking for Class A Uses and long-stay cycle parking (for employees) for office use in the locations identified on Figure 10.3 are thus set at twice the level as elsewhere – though the Mayor will support other boroughs adopting these higher standards borough-wide or for defined areas through their Development Plan Documents (such as existing Mini-Hollands, and Liveable Neighbourhoods or Opportunity Areas).

10.5.4 The locations where higher standards apply also include outer London Metropolitan and Major town centres where TfL has identified high potential for a switch to cycling. **Higher provision** in these locations is required to enable this increased level of cycling and contribute to Healthy Streets in town centres.

10.5.5 Cycle parking and cycle parking areas should allow easy access and provide **facilities for disabled cyclists**. This could include identifying and reserving specific spaces which provide step-free cycle parking and opportunities for people using adapted cycles, as well as providing facilities for other non-standard cycles such as tricycles, cargo bicycles and bicycles with trailers, for both long-stay and short-stay parking.

10.5.6 At **university campuses and schools**, cycle parking should be located in close proximity to the entrances of all buildings to provide convenience and choice for users. For nurseries and primary schools, an appropriate proportion of long-stay cycle parking spaces for students may be met through scooter parking. Nurseries should meet the standard through an appropriate mix of long and short-stay parking to cater for staff, those dropping off children, and children's cycle and scooter parking.

10.5.7 Staff cycle parking should be suitable for long-stay parking in terms of location, security and protection from the elements and inclement weather. In places of employment, **supporting facilities** are recommended, including changing rooms, maintenance facilities, lockers (at least two per three long-stay spaces are recommended) and shower facilities (at least one per ten long-stay spaces is recommended). Accessible facilities for disabled cyclists should also be provided.

10.5.8 **Short-stay cycle parking** must be available for shoppers, customers, messengers and other visitors, and must be convenient and readily accessible. It must have step-free access and be located within 15 metres of the main entrance wherever possible.

10.5.9 The provision of **space for folding bicycles** is generally not an acceptable alternative to conventional cycle parking. An exception may be applied in office developments in the CAZ, where the location of rail termini lends itself to greater levels of folding bicycle use. This should only be applied for up to 10 per cent of

long-stay spaces and where the full provision could not otherwise be provided. Provision of cycle hire caters for a different market of cyclist and also should not be accepted in lieu of cycle parking.

10.5.10 Where standards are based on floorspace, these have been calculated on the basis of the level of demand and potential growth in relation to Gross External Area (GEA). This calculation already takes into account that not all of the area covered by GEA will generate cycling trips.

Policy T6 Car parking

A Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity.

B Car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport, with developments elsewhere designed to provide the minimum necessary parking ('car-lite'). Car-free development has no general parking but should still provide disabled persons parking in line with Part E of this policy.

C An absence of local on-street parking controls should not be a barrier to new development, and boroughs should look to implement these controls wherever necessary to allow existing residents to maintain safe and efficient use of their streets.

D The maximum car parking standards set out in Policy T6 .1 Residential parking to Policy T6 .5 Non-residential disabled persons parking should be applied to development proposals and used to set local standards within Development Plans.

E Appropriate disabled persons parking for Blue Badge holders should be provided as set out in Policy T6 .1 Residential parking to Policy T6 .5 Non-residential disabled persons parking.

F Where provided, each motorcycle parking space should count towards the maximum for car parking spaces at all use classes.

G Where car parking is provided in new developments, provision should be made for infrastructure for electric or other Ultra-Low Emission vehicles in line with Policy T6 .1 Residential parking, Policy T6 .2 Office Parking, Policy T6 .3 Retail parking, and Policy T6 .4 Hotel and leisure uses parking.

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All operational parking should make this provision, including offering rapid charging. New or re-provided petrol filling stations should provide rapid charging hubs and/or hydrogen refuelling facilities.

H Where electric vehicle charging points are provided on-street, physical infrastructure should not negatively affect pedestrian amenity and should ideally be located off the footway. Where charging points are located on the footway, it must remain accessible to all those using it including disabled people.

I Adequate provision should be made for efficient deliveries and servicing and emergency access.

J A Parking Design and Management Plan should be submitted alongside all applications which include car parking provision, indicating how the car parking will be designed and managed, with reference to Transport for London guidance on parking management and parking design.

K Boroughs that have adopted or wish to adopt more restrictive general or operational parking policies are supported, including borough-wide or other area-based car-free policies. Outer London boroughs wishing to adopt minimum residential parking standards through a Development Plan Document (within the maximum standards set out in Policy T6 .1 Residential parking) must only do so for parts of London that are PTAL 0-1. Inner London boroughs should not adopt minimum standards. Minimum standards are not appropriate for non-residential use classes in any part of London.

L Where sites are redeveloped, parking provision should reflect the current approach and not be re-provided at previous levels where this exceeds the standards set out in this policy. Some flexibility may be applied where retail sites are redeveloped outside of town centres in areas which are not well served by public transport, particularly in outer London.

10.6.1 To manage London's road network and ensure that people and businesses can move about the city as the population grows and housing delivery increases significantly, new parking provision must be carefully controlled. The **dominance of vehicles on streets** is a significant barrier to walking and cycling, reduces the appeal of streets as public places and has an impact on the reliability and journey times of bus services. Reduced parking provision can facilitate higher-density development and support the creation of mixed and vibrant places that are designed for people rather than vehicles. As the population grows, a

fixed road network cannot absorb the additional cars that would result from a continuation of current levels of car ownership and use. Implementing the parking standards in this Plan is therefore an essential measure to support the delivery of new housing across the city. In some areas, it will be necessary for boroughs to introduce additional parking controls to ensure new development is sustainable and existing residents can continue to park safely and efficiently.

10.6.2 **Maximum standards for car parking** take account of PTAL as well as London Plan spatial designations and use classes. Developments in town centres generally have good access to a range of services within walking distance, and so car-free lifestyles are a realistic option for many people living there. Opportunity Areas offer the potential to coordinate new transport investment with development proposals to embed car-free or car-lite lifestyles from the outset. Differences in car use and ownership between inner and outer London are recognised, with trip distances and trip patterns sometimes making walking and cycling difficult in outer London.

10.6.3 The approach to parking in **outer London Opportunity Areas** should be set out in Opportunity Area Planning Frameworks, complementing the OA mode share target.[183] Through OAPFs, parking provision can vary within an outer London OA to reflect PTAL, but the overall quantum must not exceed the relevant maximum standard.

10.6.4 When **calculating general parking provision within the relevant standards**, the starting point for discussions should be the highest existing or planned PTAL at the site, although consideration should be given to local circumstances and the quality of public transport provision, as well as conditions for walking and cycling. Disabled persons parking provision for Blue Badge holders, car club spaces and provision for electric or other Ultra-Low Emission vehicles should be included within the maximum provision and not in addition to it.

10.6.5 **Where no standard is provided**, the level of parking should be determined on a case-by-case basis taking account of Policy T6 Car parking, current and future PTAL and wider measures of public transport, walking and cycling connectivity.

10.6.6 The quantum of any parking provision, as well as its design and implementation, should have regard to the need to promote active modes and public transport use. Provision should be **flexible for different users and adaptable** to future re-purposing in the context of changing requirements, including technological change. Alternative uses could include: seating, places for people to stop and spend time, areas of planting or additional cycle parking.

183 As required by the Mayor's Transport Strategy

10.6.7 The general principles outlined in paragraphs 10.6.4 to 10.6.6 above apply to the parking standards set for residential, office (and Use Classes B2 and B8), retail, and hotel and leisure uses under Policy T6 .1 Residential parking to Policy T6 .5 Non-residential disabled persons parking. In relation to Policy T6 Car parking Part L, where industrial sites are redeveloped parking will be considered on a case by case basis as set out in paragraph 10.6.18.

10.6.8 Surface-level car parking should be **permeable** in accordance with Policy Policy SI 13 Sustainable drainage.

Policy T6.1 Residential parking

A New residential development should not exceed the maximum parking standards set out in Table 10.3. These standards are a hierarchy with the more restrictive standard applying when a site falls into more than one category.

B Parking spaces within communal car parking facilities (including basements) should be leased rather than sold.

C All residential car parking spaces must provide infrastructure for electric or Ultra-Low Emission vehicles. At least 20 per cent of spaces should have active charging facilities, with passive provision for all remaining spaces.

D Outside of the CAZ, and to cater for infrequent trips, car club spaces may be considered appropriate in lieu of private parking. Any car club spaces should have active charging facilities.

E Large-scale purpose-built shared living, student accommodation and other sui generis residential uses should be car-free.

F The provision of car parking should not be a reason for reducing the level of affordable housing in a proposed development.

G Disabled persons parking should be provided for new residential developments. Residential development proposals delivering ten or more units must, as a minimum:

1) ensure that for three per cent of dwellings, at least one designated disabled persons parking bay per dwelling is available from the outset

2) demonstrate as part of the Parking Design and Management Plan, how an additional seven per cent of dwellings could be provided with one designated disabled persons parking space per dwelling in future upon

request as soon as existing provision is insufficient. This should be secured at the planning stage.

H All disabled persons parking bays associated with residential development must:

1) be for residents' use only (whether M4(2) or M4(3) dwellings)
2) not be allocated to specific dwellings, unless provided within the curtilage of the dwelling
3) be funded by the payment of a commuted sum by the applicant, if provided on-street (this includes a requirement to fund provision of electric vehicle charging infrastructure)
4) count towards the maximum parking provision for the development
5) be designed in accordance with the design guidance in BS8300vol.1
6) be located to minimise the distance between disabled persons parking bays and the dwelling or the relevant block entrance or lift core, and the route should be preferably level or where this is not possible, should be gently sloping (1:60-1:20) on a suitable firm ground surface.

Table 10.3 - Maximum residential parking standards

Location	Number of beds	Maximum parking provision*
Central Activities Zone Inner London Opportunity Areas Metropolitan and Major Town Centres All areas of PTAL 5 – 6 Inner London PTAL 4	All	Car free~
Inner London PTAL 3	All	Up to 0.25 spaces per dwelling
Inner London PTAL 2 Outer London Opportunity Areas	All	Up to 0.5 spaces per dwelling
Inner London PTAL 0 – 1	All	Up to 0.75 spaces per dwelling

Location	Number of beds	Maximum parking provision*
Outer London PTAL 4	1 – 2	Up to 0.5 - 0.75 spaces per dwelling+
Outer London PTAL 4	3+	Up to 0.5 - 0.75 spaces per dwelling+
Outer London PTAL 2 – 3	1 – 2	Up to 0.75 spaces per dwelling
Outer London PTAL 2 – 3	3+	Up to 1 space per dwelling
Outer London PTAL 0 – 1	1 – 2	Up to 1.5 space per dwelling
Outer London PTAL 0 – 1	3+	Up to 1.5 spaces per dwelling^

* Where Development Plans specify lower local maximum standards for general or operational parking, these should be followed

~ With the exception of disabled persons parking, see Part G Policy T6 .1 Residential parking

+ When considering development proposals that are higher density or in more accessible locations, the lower standard shown here should be applied as a maximum

^ Boroughs should consider standards that allow for higher levels of provision where there is clear evidence that this would support additional family housing

10.6.9 The Mayor's ambition is for London to be a city where it is easy for all disabled people to live and travel in London. Disabled people should have a genuine choice of housing that they can afford within a local environment that meets their needs. This means taking a holistic approach to creating streets, local services and a public transport network that caters for disabled people and people with long-term health conditions. It is recognised that some disabled people will rely on car travel more than others, whether as a passenger or a driver. This means that to ensure genuine housing choice, **disabled persons' parking** should be provided for new residential developments. In some circumstances this may include visitor parking for disabled residents who might have regular visitors such as carers. Any such parking should be marked out as such and restricted only for these users from the outset.

10.6.10 Where general parking is provided on-site, any disabled persons parking bays not provided at the outset should be identified on plan. For car-free development, how provision will be made, including whether bays are provided on-site or on-street, should be clearly set out and justified, in line with relevant guidance and local policies. All provision should be fully assessed and demonstrably consistent with the **inclusive design principles** of Policy D5 Inclusive design, and GG1 Building strong and inclusive communities; further information on how disabled persons parking should be approached and delivered will be set out in guidance.

10.6.11 Through **Parking Design and Management Plans**, applicants should provide details of how initial and future provision of disabled persons parking spaces will be made, managed and enforced. They should show where these spaces will be located and demonstrate how their availability will be made clear to residents prior to occupation to inform their housing decision. Where a bay is being marked up for a particular resident, this should be done prior to occupation. Details should also be provided of how existing or future residents would request a bay, how quickly it would be created and what, if any, provision of visitor parking for disabled residents is available. In car-free developments, at no time should any on-site space marked on plan for future disabled persons parking be used for general parking.

10.6.12 In implementing this policy, if three per cent of a scheme is less than one space, this should be rounded up to one.

10.6.13 Given the aims of this Plan and the Mayor's Transport Strategy in reducing car use and the priority given to affordable housing provision, to ensure the provision of parking does not impact on the level of affordable housing that is viable, the inclusion of parking provision (excluding disabled persons parking), even where consistent with the standards set out above, **should not result in a reduction to affordable housing**.

10.6.14 **Parking spaces should be leased rather than sold** to ensure the land they take up is used as efficiently as possible over the life of a development. This includes ensuring that disabled persons parking bays can be used by those who need them at any given time and ensuring enlarged bays are available to be converted to disabled persons parking bays as required. Leasing allows for spaces with active charging points to serve electric or other Ultra-Low Emission vehicles, and can more easily support passive provision becoming active. Leasing also supports parking provision to be adaptable to future re-purposing, such as following changes to transport technology or services. Leases should be short enough to allow for sufficient flexibility in parking allocation to reflect changing circumstances.

10.6.15 **Car clubs** count towards the maximum parking permitted because they share many of the negative impacts of privately-owned cars. However, in some areas, car club spaces can help support lower parking provision and car-lite lifestyles by enabling multiple households to make infrequent trips by car.

Policy T6.2 Office Parking

A The maximum parking standards set out in Table 10.4 should be applied to new office development.

B In well-connected parts of outer London, including town centres, in close proximity to stations and in Opportunity Areas, office developments are encouraged to be car-free.

C Car parking provision at Use Classes Order B2 (general industrial) and B8 (storage or distribution) employment uses should have regard to these office parking standards and take account of the significantly lower employment density in such developments. A degree of flexibility may also be applied to reflect different trip-generating characteristics. In these cases, appropriate provision for electric or other Ultra-Low Emission vehicles should be made.

D Outer London boroughs wishing to adopt more generous standards are required to do so through an evidence-based policy in their Development Plan that identifies the parts of the borough in which the higher standards will be applied, and justifies those standards, including:

1) the provision and operation of (existing and future) public transport, especially in relation to bus reliability
2) the impact on the ability to deliver Healthy Streets, promote active travel and deliver mode shift
3) the impact on congestion and air quality locally and on neighbouring boroughs and districts outside London as appropriate
4) a commitment to increase or enhance publicly-available cycle parking
5) a requirement (via Travel Plans) to reduce car parking provision over time and convert it to other uses.

E Boroughs should not seek to adopt more generous standards borough-wide.

F Operational parking requirements should be considered on a case-by-case basis. All operational parking must provide infrastructure for electric or other

Ultra-Low Emission vehicles, including active charging points for all taxi spaces.

G A Parking Design and Management Plan should be submitted alongside all applications which include car parking provision.

H Disabled persons parking should be provided as set out in Policy T6 .5 Non-residential disabled persons parking.

Table 10.4 - Maximum office parking standards

Location	Maximum parking provision*
Central Activities Zone and inner London	Car free^
Outer London Opportunity Areas	Up to 1 space per 600 sq.m. gross internal area (GIA)
Outer London	Up to 1 space per 100 sq.m. (GIA)
Outer London locations identified through a DPD where more generous standards apply	Up to 1 space per 50 sq.m. (GIA)

* Where Development Plans specify lower local maximum standards for general or operational parking, these should be followed

^ With the exception of disabled persons parking, see Policy T6 .5 Non-residential disabled persons parking

10.6.16 Parking associated with offices has the potential to generate car travel in the morning and evening peaks when streets are the most congested. In many parts of London this means that bus travel is less reliable and active travel is less attractive. **Office parking** also has the potential to induce habitual car travel even where alternatives to the car exist, impacting on the ability for the Mayor to meet his mode share target for 80 per cent of trips to be made by public transport and active travel. For these reasons, offices should be located in places that are accessible by public transport, walking and cycling and car parking provision should be kept to a minimum.

10.6.17 The **management of parking** that is provided should ensure that employees and visitors are encouraged to use non-car modes as much as possible. It should also ensure that the operation of car and cycle parking and the public

realm does not prioritise vehicles over people and that under-utilised parking is converted to other uses such as amenity space or green infrastructure.

10.6.18 For **industrial sites**, the role of parking – both for workers and operational vehicles – varies considerably depending on location and the type of development proposed. Provision should therefore be determined on a case-by-case basis, with the starting point for commuter parking being the standards in Table 10.4 with differences in employment densities[184] taken into account. Flexibility may then be applied in light of site-specific circumstances as above. Operational parking should be considered and justified separately.

Policy T6.3 Retail parking

A The maximum parking standards set out in Table 10.5 should be applied to new retail development, unless alternative standards have been implemented in a Development Plan through the application of Policy G below. New retail development should avoid being car-dependent and should follow a town centre first approach, as set out in Policy SD7 Town centres: development principles and Development Plan Documents.

B To make the most efficient use of land, the starting point for assessing the need for parking provision at all new retail development should be the use of existing public provision, such as town centre parking.

C Opportunities should be sought to make the most of all existing parking, for example using office parking for retail outside working hours. Where shared parking is identified, overall provision should be reduced to make better use of land and more intensively use the parking that remains.

D If on-site parking is justified it should be publicly-available.

E Disabled persons parking should be provided as set out in Policy T6 .5 Non-residential disabled persons parking.

F Where car parking is provided at retail development, provision for rapid electric vehicle charging should be made.

184 Density Guide 3rd Edition, Homes & Communities Agency, 2015, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/484133/employment_density_guide_3rd_edition.pdf (for standard employment density assumptions, see the employment density matrix)

G Boroughs may consider amended standards in defined locations consistent with the relevant criteria in the NPPF where there is clear evidence that the standards in Table 10.5 would result in:

1) A diversion of demand from town centres to out of town centres, undermining the town centres first approach.
2) A significant reduction in the viability of mixed-use redevelopment proposals in town centre.

Table 10.5 - Maximum retail parking standards

Location	Maximum parking provision*
Central Activities Zone and all areas of PTAL 5-6	Car-free^
Inner London Outer London Opportunity Areas Outer London retail below 500 sq.m.	Up to 1 space per 75 sq.m. gross internal area (GIA)
Rest of outer London	Up to 1 space per 50 sq.m. (GIA)

* Where Development Plans specify lower local maximum standards for general or operational parking, these should be followed

^ With the exception of disabled persons parking, see Policy T6 .5 Non-residential disabled persons parking.

10.6.19 Retail developments are significant trip attractors and should be located in places that are well-connected by public transport. Many retail trips are potentially walkable or cyclable, and improving the attractiveness of these modes through improved public realm and the application of the Healthy Streets Approach will support the vitality of London's many town centres and high streets. As such, **car parking provision should be kept to a minimum** and space should be used for activities that create vibrancy and contribute to the formation of liveable neighbourhoods.

10.6.20 Where significant provision of car parking at retail development can be justified, provision of r**apid electric vehicle charging facilities** should be made. Supplementary Planning Guidance on what provision is required will be provided.

10.6.21 As with office parking, any provision that is made should be carefully **managed** so that it does not undermine the attractiveness of alternatives to the car.

Policy T6.4 Hotel and leisure uses parking

A In the CAZ and locations of PTAL 4-6, any on-site provision should be limited to operational needs, disabled persons parking and parking required for taxis, coaches and deliveries or servicing.

B In locations of PTAL 0-3, schemes should be assessed on a case-by- case basis and provision should be consistent with the Healthy Streets Approach, mode share and active travel targets, and the aim to improve public transport reliability and reduce congestion and traffic levels.

C All operational parking must provide infrastructure for electric or other Ultra-Low Emission vehicles, including active charging points for all taxi spaces.

D Disabled persons parking should be provided as set out in Policy T6 .5 Non-residential disabled persons parking.

10.6.22 Hotel and leisure uses should be located in accessible locations to encourage walking, cycling and public transport use. Where Development Plans specify **lower local maximum standards** for general or operational parking, these should be followed.

Policy T6.5 Non-residential disabled persons parking

A Disabled persons parking should be provided in accordance with the levels set out in Table 10.6, ensuring that all non-residential elements should provide access to at least one on or off-street disabled persons parking bay.

B Disabled persons parking bays should be located on firm and level ground, as close as possible to the building entrance or facility they are associated with.

C Designated bays should be marked up as disabled persons parking bays from the outset.

D Enlarged bays should be large enough to become disabled persons parking bays quickly and easily via the marking up of appropriate hatchings and

symbols and the provision of signage, if required i.e. if it can be demonstrated that the existing level of disabled persons parking is not adequate. The process for converting enlarged bays should be set out in a Parking Design and Management Plan and secured at the planning stage.

E Designated disabled persons parking bays and enlarged bays should be designed in accordance with the design guidance provided in BS8300: Vol 1.

Table 10.6 - Non-residential disabled persons parking standards

Use	Designated bays (Per cent of total parking provision)	Enlarged bays (Per cent of total parking provision)
Workplace	5 per cent	5 per cent
Education	5 per cent	5 per cent
Retail, recreation, hotels and leisure	6 per cent	4 per cent
Transport car parks	5 per cent	5 per cent
Medical and health facilities	6 per cent	4 per cent
Religious buildings and crematoria	Minimum two spaces or 6 per cent, whichever is the greater	4 per cent
Sports facilities	Refer to Sport England Guidance	Refer to Sport England Guidance

10.6.23 Standards for non-residential disabled persons parking are based on a percentage of the total number of parking bays. Careful assessment will therefore be needed to ensure that these percentages make adequate provision in light of the need for disabled persons parking bays by Blue Badge holders. The provision of disabled persons parking bays should be **regularly monitored and reviewed** to ensure the level is adequate and enforcement is effective. All proposals should include an appropriate amount of Blue Badge parking, providing at least one space even if no general parking is provided.

Policy T7 Deliveries, servicing and construction

A Development plans and development proposals should facilitate sustainable freight movement by rail, waterways and road.

B Development Plans, Opportunity Area Planning Frameworks, Area Action Plans and other area-based plans should include freight strategies. These should seek to:

1) reduce freight trips to, from and within these areas
2) coordinate the provision of infrastructure and facilities to manage freight at an area-wide level
3) reduce road danger, noise and emissions from freight, such as through the use of safer vehicles, sustainable last-mile schemes and the provision of rapid electric vehicle charging points for freight vehicles.

Such strategies should be developed through policy or through the formulation of a masterplan for a planning application.

C To support carbon-free travel from 2050, the provision of hydrogen refuelling stations and rapid electric vehicle charging points at logistics and industrial locations is supported.

D Development Plans should safeguard railheads unless it can be demonstrated that a railhead is no longer viable or capable of being made viable for rail-based freight-handling. The factors to consider in assessing the viability of a railhead include:

- planning history, environmental impact and its relationship to surrounding land use context – recognising that the Agent of Change principle will apply
- location, proximity to the strategic road network and existing/potential markets
- the existing and potential contribution the railhead can make towards catering for freight movements by non-road modes
- the location and availability of capacity at alternative railheads, in light of current and projected capacity and market demands.

E Consolidation and distribution sites at all scales should be designed to enable 24-hour operation to encourage and support out-of-peak deliveries.

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F Development proposals for new consolidation and distribution facilities should be supported provided that they do not cause unacceptable impacts on London's strategic road networks and:

1) reduce road danger, noise and emissions from freight trips
2) enable sustainable last-mile movements, including by cycle and electric vehicle
3) deliver mode shift from road to water or rail where possible (without adversely impacting existing or planned passenger services).

G Development proposals should facilitate safe, clean, and efficient deliveries and servicing. Provision of adequate space for servicing, storage and deliveries should be made off-street, with on-street loading bays only used where this is not possible. Construction Logistics Plans and Delivery and Servicing Plans will be required and should be developed in accordance with Transport for London guidance and in a way which reflects the scale and complexities of developments.

H Developments should be designed and managed so that deliveries can be received outside of peak hours and in the evening or night time. Appropriate facilities are required to minimise additional freight trips arising from missed deliveries and thus facilitate efficient online retailing.

I At large developments, facilities to enable micro-consolidation should be provided, with management arrangements set out in Delivery and Servicing Plans.

J Development proposals must consider the use of rail/water for the transportation of material and adopt construction site design standards that enable the use of safer, lower trucks with increased levels of direct vision on waste and landfill sites, tip sites, transfer stations and construction sites.

K During the construction phase of development, inclusive and safe access for people walking or cycling should be prioritised and maintained at all times.

10.7.1 An efficient freight network is necessary to support the function of the city. This policy seeks to facilitate **sustainable freight movement** by rail, waterways and road in London through consolidation, modal shift and promoting deliveries at different times of day and night in order to reduce the impact on road congestion and air quality, and conflict with other users.

10.7.2 Currently many deliveries of non-urgent goods are made, unnecessarily, at congested times of the day. As many as two in every three delivery slots are missed, leading to repeat trips that cause additional congestion and emissions. Many van and lorry trips could be avoided or re-timed if freight activity were better **consolidated**.

10.7.3 The Mayor will work with all relevant partners to improve the **safety and efficiency** of freight across London and support consolidation within and beyond London, as well as the retiming of movements to avoid peak hours. To reduce the pressure on London's streets, developments should provide for deliveries and servicing off-street where possible, and through dedicated loading bays if not. Where loading in the carriageway is unavoidable and the impacts can be made acceptable, it should be designed to minimise the impact on people walking or cycling and other road users. Improved on-site storage can also reduce the need for deliveries during peak hours.

10.7.4 When planning freight movements, development proposals should demonstrate through Construction Logistics Plans and Delivery and Servicing Plans that all reasonable endeavours have been taken towards the use of **non-road vehicle modes**. Where rail and water freight facilities are available, Transport for London's freight tools should be used when developing the site's freight strategy.

10.7.5 Delivery and Servicing Plans should demonstrate how the requirements of the site are met, including **addressing missed deliveries**. Appropriate measures include large letter or parcel boxes and concierges accepting deliveries. Car-free developments should consider facilitation of home deliveries in a way that does not compromise the benefits of creating low-car or car-free environments.

10.7.6 **Construction Logistics and Delivery and Servicing Plans** should be developed in line with TfL guidance and adopt the latest standards around safety and environmental performance of vehicles to ensure freight is safe, clean and efficient. To make the plans effective they should be monitored and managed throughout the construction and operational phases of the development.

10.7.7 **To reduce the road danger associated with the construction of new development** and enable the use of safer vehicles, appropriate schemes such as CLOCS (Construction Logistics and Community Safety) or equivalent and FORS (Fleet Operator Recognition Scheme) or equivalent should be utilised to plan for and monitor site conditions. Development proposals should demonstrate 'good' on-site ground conditions ratings or the mechanisms to reach this level, enabling the use of vehicles with improved levels of driver direct vision. To support the procurement of these vehicles and to minimise road danger, the Mayor has introduced his Direct Vision Standard, which rates Heavy

Goods Vehicles on a star rating from 0 (lowest) to 5 (highest), based on how much the driver can see directly through the cab windows.

Policy T8 Aviation

A The Mayor supports the role of the airports serving London in enhancing the city's spatial growth, particularly within Opportunity Areas well connected to the airports by public transport and which can accommodate significant numbers of new homes and jobs. This should be reflected in relevant Development Plans and other area-based strategies.

B The environmental and health impacts of aviation must be fully acknowledged and aviation-related development proposals should include mitigation measures that fully meet their external and environmental costs, particularly in respect of noise, air quality and climate change. Any airport expansion scheme must be appropriately assessed and if required demonstrate that there is an overriding public interest or no suitable alternative solution with fewer environmental impacts.

C The Mayor will oppose the expansion of Heathrow Airport unless it can be shown that no additional noise or air quality harm would result, and that the benefits of future regulatory and technology improvements would be fairly shared with affected communities.

D All airport expansion development proposals that would impact on passenger movements through London should demonstrate how public transport and other surface access networks would accommodate resulting increases in demand alongside forecast background growth; this should include credible plans by the airport for funding and delivery of the required infrastructure.

E Development proposals that would lead to changes in airport operations or air traffic movements must take full account of their environmental impacts and the views of affected communities. Any changes to London's airspace must treat London's major airports equitably when airspace is allocated.

F Development proposals should make better use of existing airport capacity, underpinned by upgraded passenger and freight facilities and improved surface access links, in particular rail.

G Airport operators should work closely with airlines, Transport for London and other transport providers and stakeholders to ensure straightforward,