

City of London

Local Plan Issues & Options

Evidence Summary

City Plan 2036 - Shaping the Future City
LD16



September 2016



Contents

Introduction	3
Purpose and format of this document	3
Other sources of evidence to support the Local Plan.....	4
1. Population and Employment Trends.....	5
Population.....	5
Employment.....	6
2. A World Financial and Business Centre.....	8
Offices.....	8
Current distribution of offices in the City	8
Recent gains and losses of office stock	8
Office Development Pipeline.....	9
Local Plan office floorspace targets and trajectory	11
Office Development in the Eastern Cluster and the Key City Places	12
Types of business and their spatial distribution	13
Increase of SMEs / TMT	16
Online sources of information	18
3. City Culture and Heritage	19
Visitors, Arts and Culture	19
Visitors.....	19
Hotels.....	19
Online sources of information:	20
Historic Environment/Protected views.....	21
Location of designated heritage assets.....	21
Location of protected views.....	21
Summary of completed schemes and development pipeline within protected views policy areas	23
Summary data of development in Conservation Areas	25
Summary data of development affecting listed buildings	26
Online sources of information	26
Tall buildings.....	27
Number and location of existing tall buildings	27

Projected pipeline of tall buildings	27
Areas inappropriate for tall buildings.....	28
Online sources of information	30
4. Environmental Sustainability	31
Sustainability and Climate Change.....	31
Energy use and carbon emissions	31
Air quality	33
BREEAM assessments for office developments	34
Online sources of information	36
Public Transport, Streets and Walkways	37
Public transport.....	37
Cycling and walking.....	38
Car and van use	38
Congestion.....	38
Waste and the Circular Economy.....	39
Flood Risk.....	41
Online sources of information:	41
Transport	41
Waste and the Circular Economy	42
Flood Risk	42
5. City Communities	43
Open Spaces and Recreation	43
Open Space	43
Recreation.....	45
Online sources of information:	45
Local Plan Monitoring Paper – Policy CS19: Open Spaces.....	45
Retailing.....	46
Principal Shopping Centres	47
Vacant Units.....	49
Retail Development Pipeline.....	49
Online sources of information:	50
Housing	51
Housing development.....	51
Affordable housing	53

Online sources of information:	53
Social and Community Infrastructure	54
Communities	54
Services and facilities	54
Online sources of information:	56

Introduction

Purpose and format of this document

- I. This document contains summary facts and figures about land-use and development within the City of London, including current baseline data and details about recent trends. It has been prepared to support the public consultation on Issues and Options for the City of London Local Plan review, by providing information that may be helpful to people who intend to respond to the Issues and Options consultation questions.
- II. The information provided in this evidence document is drawn predominantly from previously published sources, in particular from Local Plan monitoring and development information papers published by the City Corporation on its website. The document pulls together data on the key social, economic and environmental characteristics of the City that are considered of most relevance to the Local Plan review. Links are also provided to the relevant web pages if readers would like to access the original source material. The most up-to-date monitoring data available has been used in this document.
- III. The data within this document is grouped into the following five sections:
 - Population and employment trends;
 - A world financial and business centre;
 - Culture and heritage;
 - Environmental sustainability; and
 - City communities.
- IV. The first section on population and employment trends provides contextual data of relevance to the entire Local Plan, while the next four sections match four of the five broad themes within the Issues and Options consultation document to enable easy cross-reference between the two documents. Specific data on the Key City Places is included, where appropriate, within the individual topic sub-headings.

Other sources of evidence to support the Local Plan

- V. The Local Plan needs to be based on robust evidence. The City Corporation already has an extensive evidence base and further data relevant to the Local Plan review is published by a range of other organisations, including the Mayor of London in support of the London Plan.
- VI. It will be necessary to commission some additional studies to inform the Local Plan review. This process has started and will continue as we develop the draft Local Plan. As these studies are completed, they will be published on the City Corporation's website.

Population and Employment Trends

Population

The City's usually resident population in 2016 is estimated at 8,300. Information from GLA 2015 based demographic projections, which take into account the number of dwellings required to be built in the City up to 2026, suggests that the usually resident population will increase by 1,400 (17%) by 2026, see Table 1 below.

Year	Population
2011	7,400
2016	8,300
2021	9,200
2026	9,700
2031	10,000
2036	10,200

Table 1: City of London Population Projections

Source: GLA 2015 Round Demographic Projections - Local authority population projections - SHLAA DCLG-based population projections

In addition to the above, there are an estimated 1,400 UK residents who have a second home in the City (ONS 2011).

Table 2 shows key population statistics for 2016, setting out the gender and age profile of the City's population.

Gender	Population
Male	4,700
Female	3,600
Total	8,300
Age Profile	
0-19	900
20-64	6,000
65+	1,400
Total	8,300

Table 2: City of London Population Gender and Age Profile 2016

Source: GLA 2015 Round Demographic Projections - Local authority population projections - SHLAA DCLG-based population projections

Figure 1 compares the City's age profile with that of Greater London. It demonstrates that the City has an older age profile than London as a whole, with significantly lower percentages of people under 29, and greater percentages of people aged over 30. The City's older age profile is particularly marked in the 45+ age bracket.

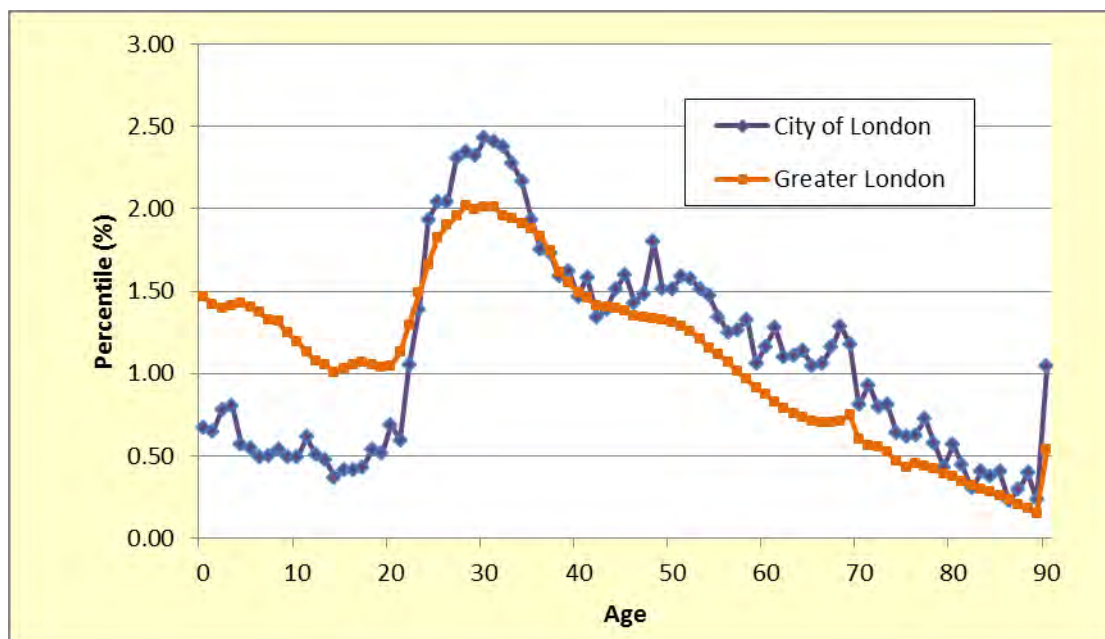


Figure 1: Comparison of age profile for City of London and Greater London 2016

Source: GLA 2015 Round SHLAA-based population projections: DCLG-based model

Employment

Employment levels and projections in the current Local Plan were derived from GLA 2009 projections, and assumed a level of employment of 373,000 in 2011, rising to 401,000 in 2016 and then to 428,000 by 2026.

The London Plan 2016 includes revised employment projections for the period 2011 to 2036, suggesting that the City's employment in 2011 was 418,000 and would rise to 475,000 by 2036, an increase of 13.5%.

The recovery from the 2008-9 recession in London has been characterised by significant employment growth, above the levels suggested in both the GLA's 2009 projections and the London Plan 2016 projections. The GLA issued new employment projections at borough level in June 2016, which suggest significant continued growth in employment in the City. These projections suggest that total employment in 2016 stood at 505,000 and could rise to 575,000 by 2036. These latest projections pre-date the EU referendum and a new round of projections is expected to be published in 2017 to inform the review of the London Plan.

The ONS Business Register Employment Statistics (BRES) provides information on recent employment trends in the City (but not projections). The most recent data is from 2014 and demonstrates that total employment in the City has increased from 331,900 in 2009 to 414,600 in 2014, a growth of approximately 25%.

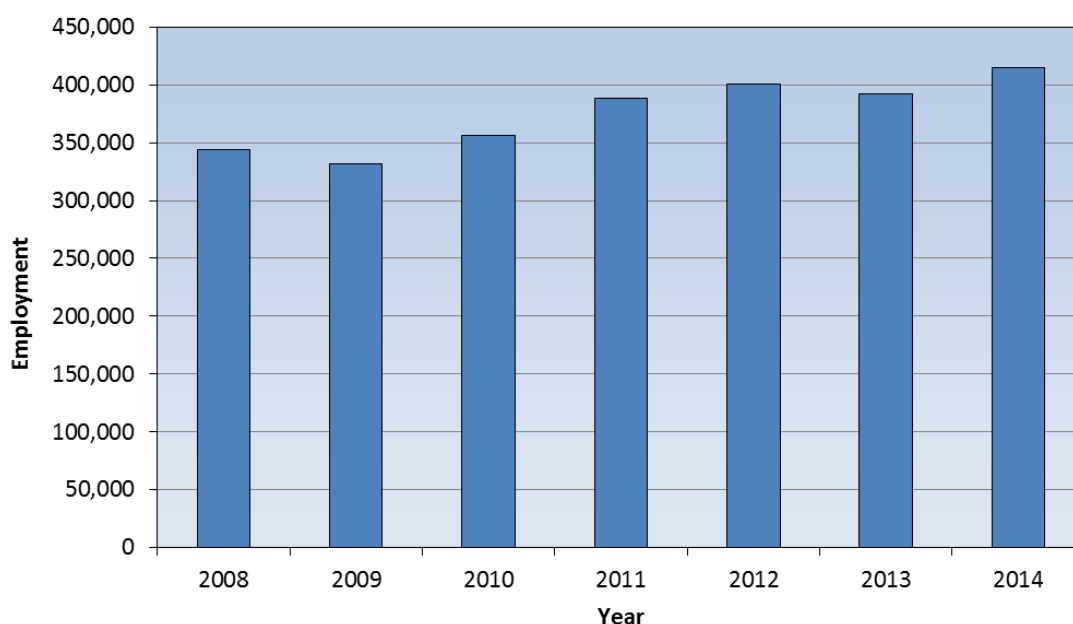


Figure 2: Employment in the City of London 2008-2014

Source: Office for National Statistics – Business register Employment Survey 2014

Breaking the employment figures down to look at full and part time employees and working owners, shows that the majority of employees in the City (85%) work full time, with 12% working part time and 3% being working owners. The proportion of full time workers in the City is significantly higher than in Inner London as a whole, where 74% of employment is full time.

Part time employment in the City is concentrated in Accommodation and Food Service Activities (36% of employees part time) and Wholesale and Retail (32%).

A World Financial and Business Centre

Offices

Current distribution of offices in the City

Figure 3 shows the principal land use distribution in the City. Offices are the dominant land use, with smaller concentrations of other uses in the residential clusters, Principal Shopping Centres and close to the major tourist attractions. The total office stock at 31 March 2016 was 8,720,000 square metres.

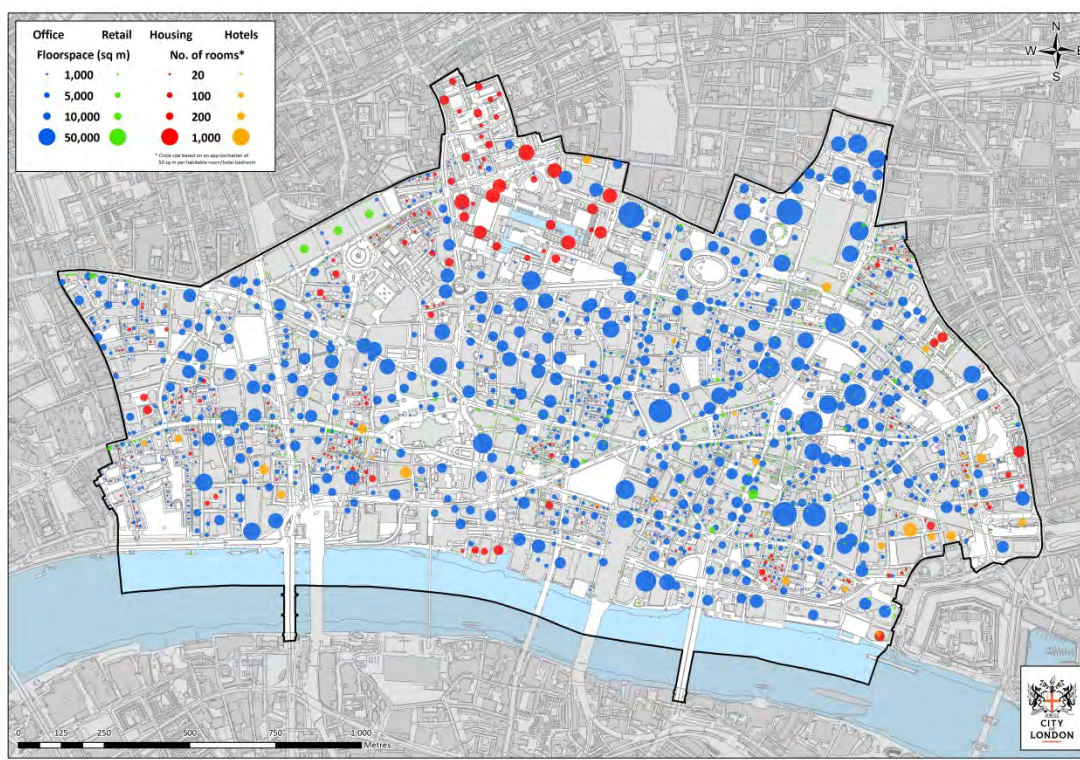


Figure 3: Distribution of offices in the City March 2016.

Recent gains and losses of office stock

Figure 4 shows the net gain and net loss of office floorspace across the City, arising out of the current development pipeline i.e. schemes under construction and those permitted but not commenced at 31 March 2016.

Developments with a net loss of office floorspace are spread across the City and tend to be of a relatively small scale. The most noticeable pattern is the loss of a few sites along the River Thames to either hotel or residential development.

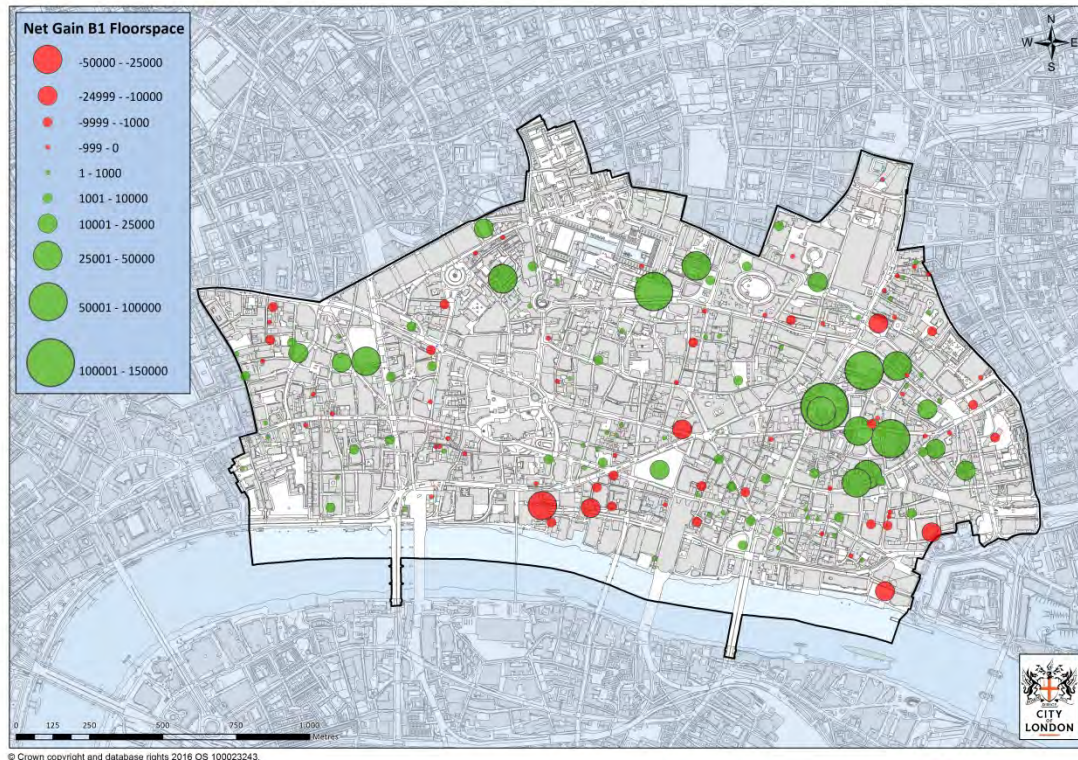


Figure 4: Net gain and net loss of office stock in the City March 2016

Office Development Pipeline

Figure 5 shows the spatial distribution of office development which has been permitted but not yet completed. The total pipeline increased to 1,658,700m² at 31 March 2016, an increase of 215,200m² since 30 September 2015.

This comprises:

- Under construction: 1,225,600 m² as at 31 March 2016 – the highest level since 2007/08.
- Permitted not commenced: 433,100 m² as at 31 March 2016. The total permitted not commenced is at its lowest level since the current monitoring series began in 2005.

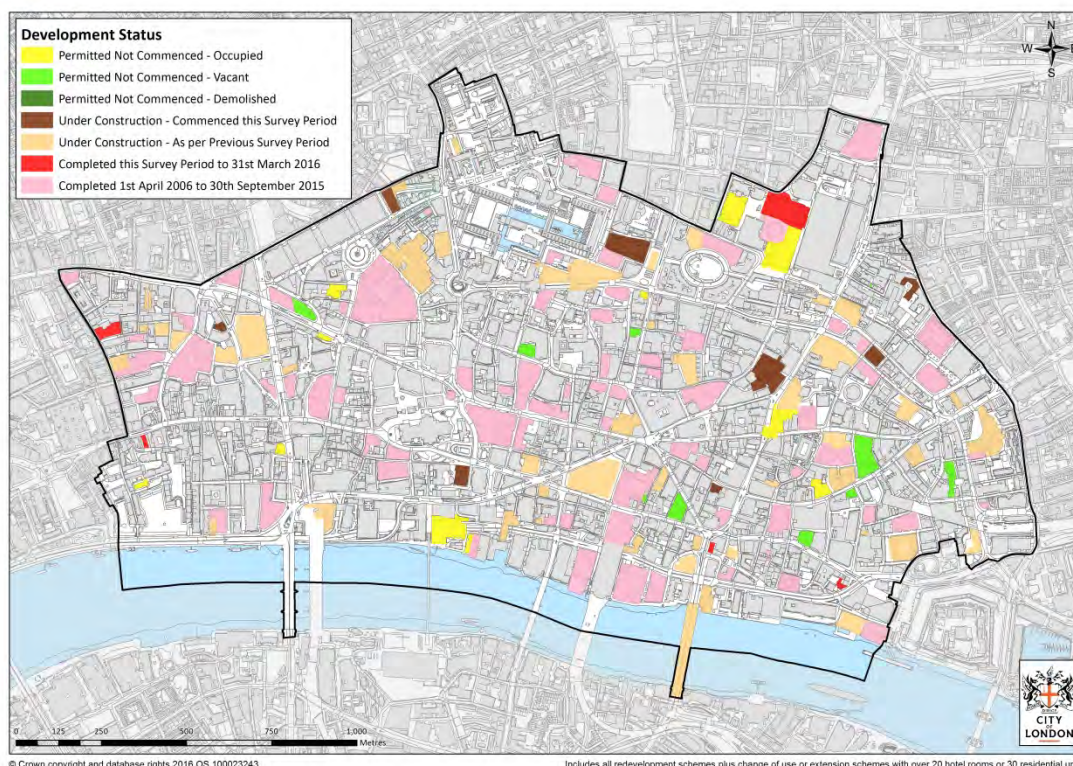


Figure 5: Office development pipeline by location March 2016

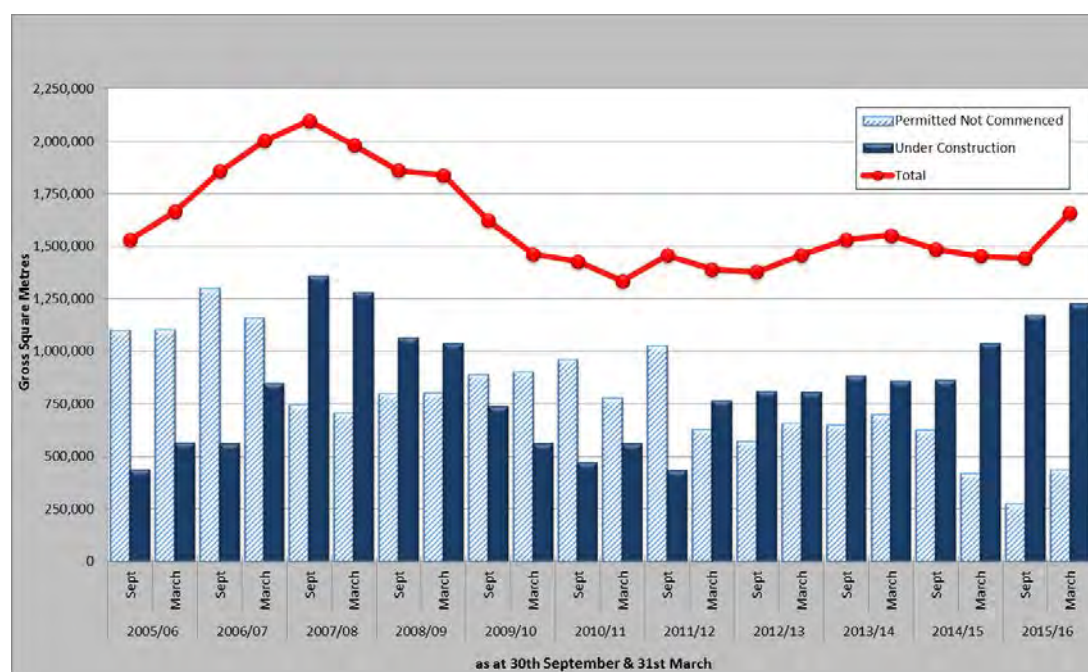


Figure 6: Office development pipeline by floorspace

Figure 6 shows that the office development pipeline has fluctuated with economic and development cycles. The total pipeline (including under construction) has been around 1,500,000m² gross in recent years. The pipeline of office floorspace permitted not commenced has been consistently below the Local Plan target of 750,000m² gross. This is in part due to the slowdown in office schemes during and immediately

following the recession and also to the fact that developers are implementing schemes soon after permission has been granted.

Local Plan office floorspace targets and trajectory

To accommodate the employment growth projected in the City's adopted Local Plan (and the higher employment growth predicted by more recent London Plan projections), an increase in office space will be required. Table 3 summarises the targets set in the Local Plan for the delivery of office floorspace. For the period of 2011–2016 the target was 650,000m² which equates to an average of 130,000m² per year.

Phase	Office Floorspace Target
Phase 1: 2011–2016	650,000m ²
Phase 2: 2016–2021	250,000m ²
Phase 3: 2021–2026	250,000m ²
Total	1,150,000m ²

Table 3: Adopted Local Plan office floorspace targets.

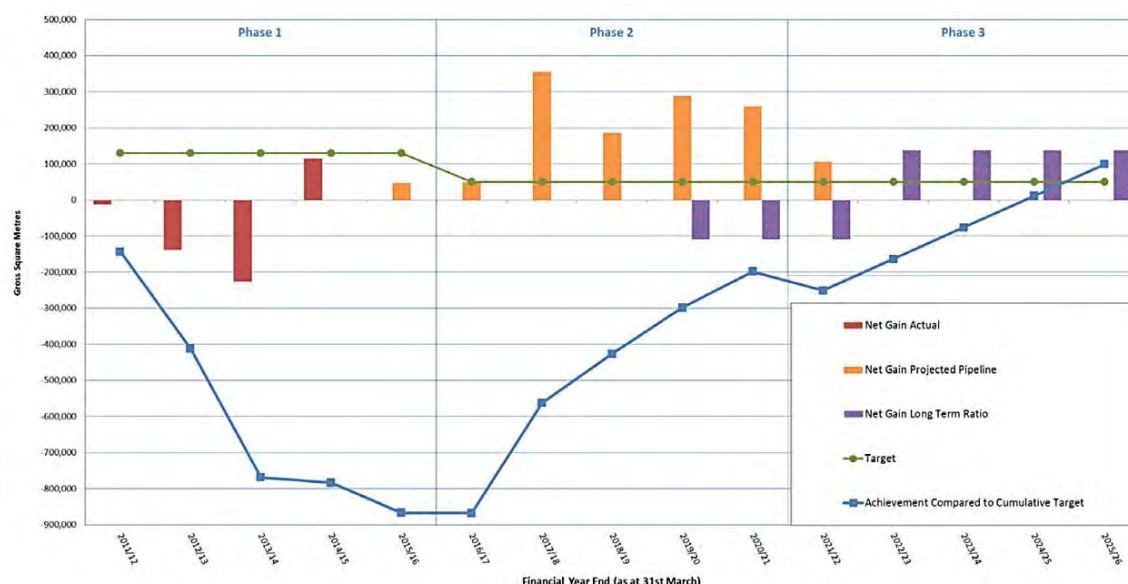


Figure 7: Office floorspace trajectory.

Figure 7 shows the office development trajectory and progress towards meeting Local Plan office floorspace targets. This shows that there is currently a significant shortfall in meeting the overall target of 1,150,000m² by 2026, due largely to the demolition of existing floorspace pending its redevelopment and replacement with new floorspace. New office floorspace development in the period to 2021 will reduce this shortfall and, based on the current office development pipeline, it is expected that the Local Plan target will have been met before 2026.

Office Development in the Eastern Cluster and the Key City Places

The Local Plan identifies 5 Key City Places where significant change is anticipated over the period to 2026. This distribution, together with the rest of the City, has been used as the basis for analysing the distribution of B1 office floorspace throughout the City. The Key City Places and Rest of the City Area are illustrated in Figure 8.

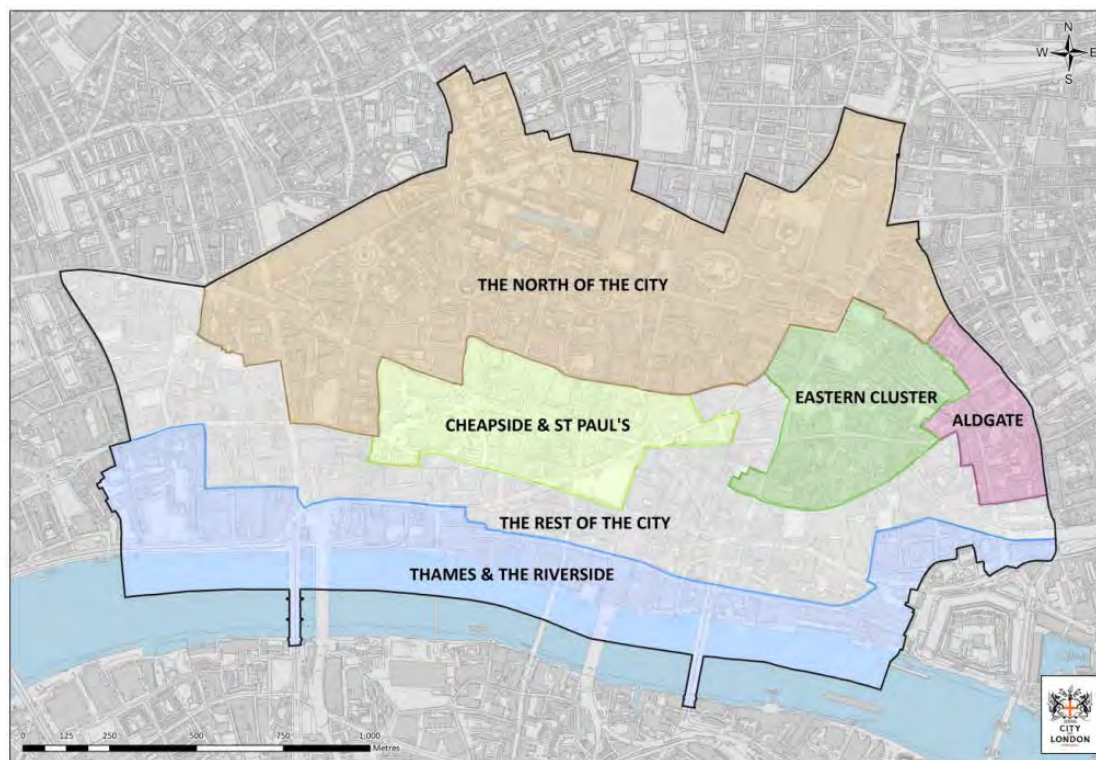


Figure 8: Key City Places

Due to the large size differences between these areas, the most appropriate method of comparison between the Key City Place areas is a comparison of the differences in density of B1 office floorspace as illustrated in Figure 9 and summarised in Table 4. The average density throughout the City as at 2016 is estimated at 29,800m² of B1 office floorspace per hectare, an increase from 29,500m² in 2014.

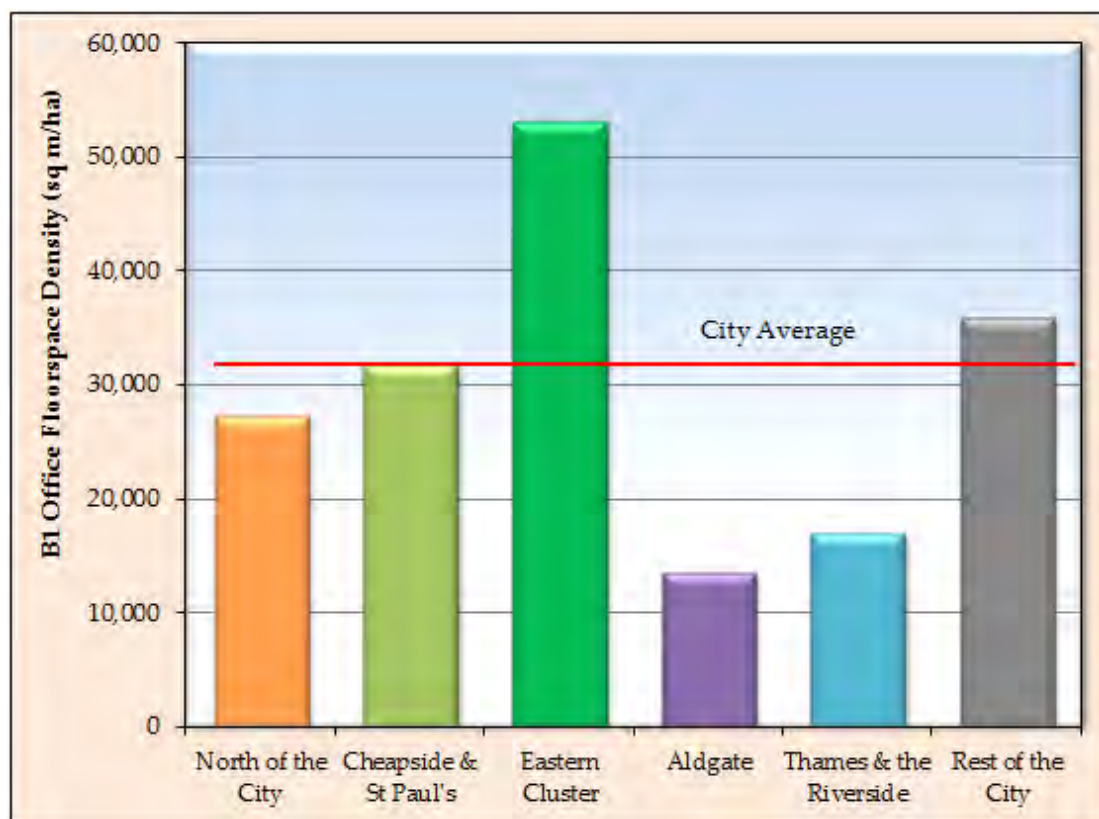


Figure 9: B1 office floorspace density by Key City Place March 2016.

Key City Place	B1 Office Floorspace Density (m2/ha)
North of the City	27,300
Cheapside & St. Paul's	31,700
Eastern Cluster	53,100
Aldgate	13,500
Thames & the Riverside	17,000
Rest of the City	35,900
City of London Average	29,800

Table 4: B1 office floorspace density by Key City Place

The Eastern Cluster has by far the highest B1 office floorspace density with an estimated 53,100m² per hectare, well above the City average. The Rest of the City and Cheapside & St Paul's have densities slightly above the City average. The North of the City has an average density of 27,300m² per hectare, slightly below the City average but with considerable variation within the area. The Thames & the Riverside and Aldgate Key City Places have a significantly lower density of B1 office floorspace than the City average.

Types of business and their spatial distribution

Figure 10 shows the percentage of employment in the City by business sector in 2014. The Finance and Insurance sector is the single largest

sector, with 39% of all employment. The Professional and Estates sector is the second largest with 27%.

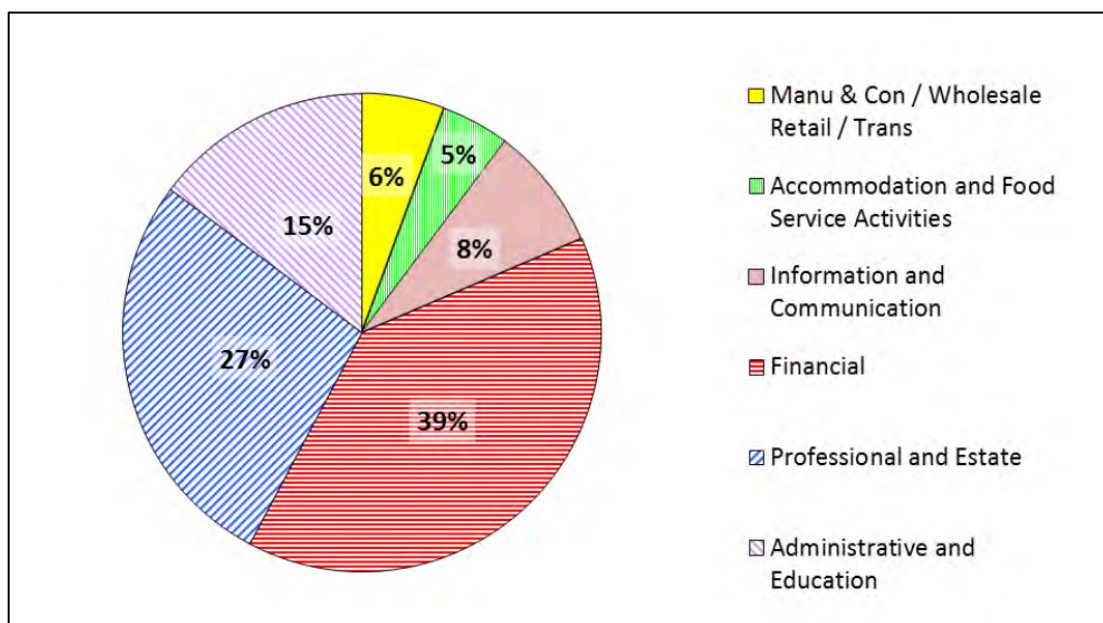


Figure 10: Percentage employment by industrial sector, 2014

Source: Office for National Statistics – Business Register Employment Survey

The provision of office space has developed to support a series of specialist business clusters. Figure 11 shows total workplace population distribution in the City of London (A). Also shown is the workplace population distribution for Professional & Estate activities (B) and Financial & Insurance activities (C). The two largest industrial sectors in the City of London, accounting for around 70% of the workforce. The greatest concentration of workers is in the eastern part of the City, with fewer workers in areas where non-office land uses predominate such as the residential areas at the Barbican and Golden Lane Estates and also around Smithfield Market and St Bartholomew's Hospital. Those working in Financial and Insurance activities are more concentrated in the central and eastern parts of the City whilst those working in Professional & Estate activities, including legal activities, are more concentrated in the western part of the City.

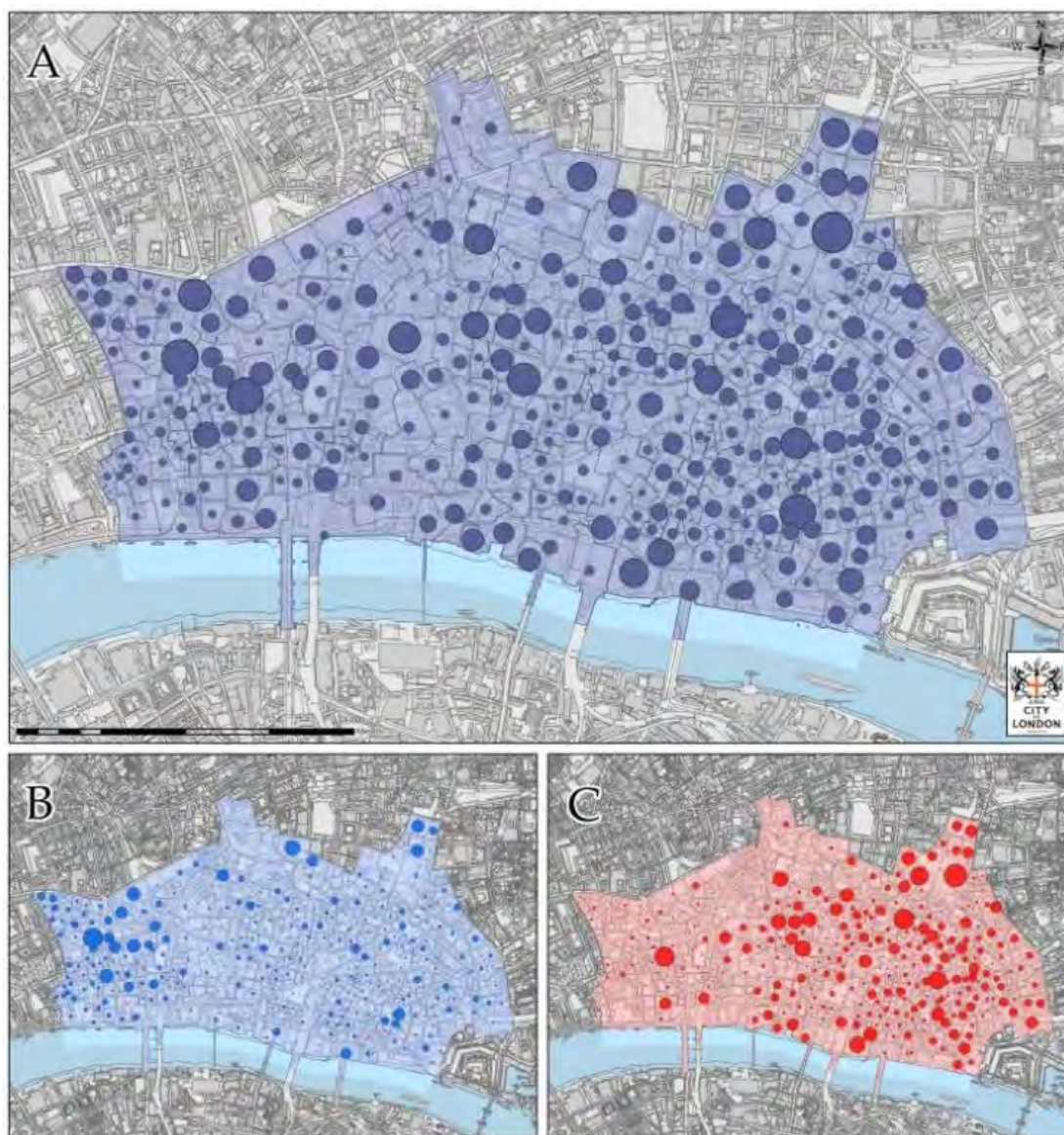


Figure 11: (A, B & C). Workplace population distribution in the City of London 2011 Census

Figure 12 shows the distribution of employment by industrial sector for each of the Census Area Statistics (CAS) wards at 2014.

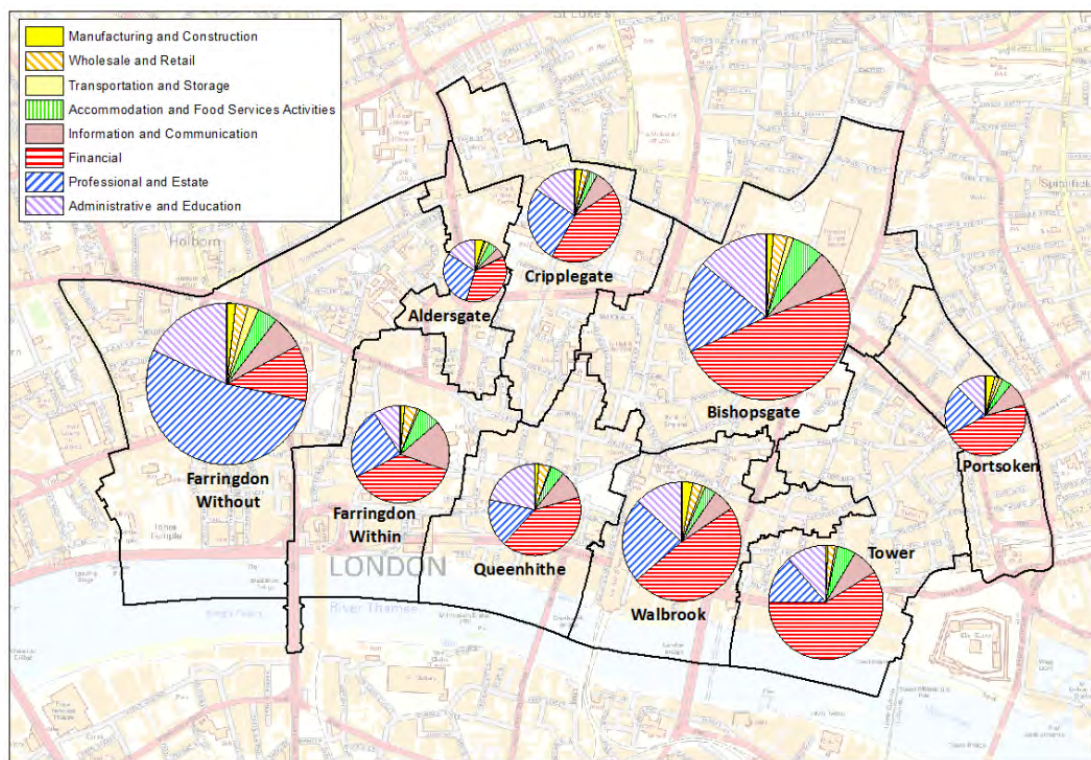


Figure 12: Employment for Census Area Statistical Wards analysed by industrial sector.

Source: Office for National Statistics – Business Register Employment Survey 2014

Increase of SMEs / TMT

Research undertaken for the City Corporation and the City Property Association provides a detailed examination of the role of small and medium enterprises (SMEs) in the City (*Clusters and Connectivity: The City as a Place for SMEs*, Ramidus Consulting Ltd for the City of London Corporation and the City Property Association, March 2016).

SMEs are usually defined as companies employing fewer than 250 people. Over 16,500 firms are located in the City of London, and 98.6% of these firms are SMEs. SMEs in the City can range from newly formed start-ups with little revenue to very wealthy established companies.

Between 800 to 1,000 start-ups arrived in the Square Mile annually between 2012 and 2014, with almost half consistently in Real Estate, Professional Services and support activities.

Figure 13 shows that the number of employees working for large enterprises dipped in 2005, but otherwise has risen continuously, from 172,400 in 2001 to 235,700 in 2012. SMEs, on the other hand, remained relatively stable between 2001 and 2005, but have since risen significantly, from 86,700 in 2005 to 118,100 in 2012 – a rise of 36% in seven years.

There were 10,285 office workplaces with fewer than ten employees in the City in 2013, up from 9,435 in 2012. Workplaces with between 10 and 249 employees rose from 2,660 to 2,900 over the same period and those with over 250 employees rose from 1,450 to 1,580.

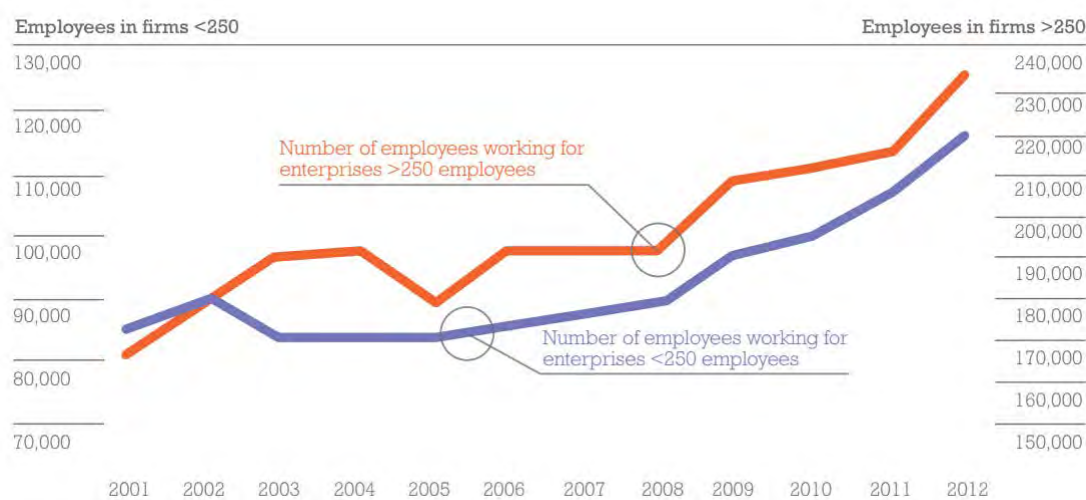


Figure 13: Large and small firms in the City of London, 2001 – 2012

Source: Clusters and Connectivity: The City as a Place for SMEs, Ramidus Consulting Ltd

SMEs are attracted to the City by several factors, including: its dense business cluster, which offers ready access to suppliers and clients; its historically rich urban environment and diverse office stock, and the sense of prestige attached to the location. The City is also well regarded for the competitive price of its office space.

The Technology, Media and Telecommunications sector (TMT), has grown by 8% over the ten years to 2015 and accounts for 34,500 jobs (8% of employment). In addition to rating the business and transport connectivity highly, this sector felt particularly strongly that a City location helped to attract the right staff, and appreciated the building amenities here. Flexible workspaces and serviced offices have quadrupled over the last twenty years and continue to grow, providing a new type of space, from which many smaller SMEs have benefitted.

Many SMEs in the TMT sector are clustered adjacent to Shoreditch, Clerkenwell and Farringdon, leading certain parts of the City to acquire

a look and feel similar to these tech hubs and characterised by small and serviced offices in historic buildings.

Online sources of information

Local Plan Monitoring Paper – Policy CS1: Offices

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

Development Info – May 2016 (March 2016 survey data)

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/development.aspx>

Employment Trends in the City of London

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Documents/employment-trends-2014.pdf>

Office Stock in the City of London and 2016 update

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/land-use/Pages/default.aspx>

Clusters and Connectivity: The City as a Place for SMEs

<https://www.cityoflondon.gov.uk/business/economic-research-and-information/research-publications/Pages/Clusters-and-Connectivity.aspx>

City Culture and Heritage

Visitors, Arts and Culture

Visitors

In 2014, visits to attractions in the City totalled approximately 6.5 million, with over 10 million total visitors. Visitors to the City in 2014 spent £1,015 million and 7.7% of the workforce was employed in the tourism sector. Key visitor attractions include St. Paul's Cathedral, the Barbican complex and the Museum of London as well as numerous churches, historic buildings, gardens and smaller museums. Visitor numbers have increased since 2014 and are likely to continue increasing, with a consequential need for more and improved facilities to meet their needs.

Alongside its status as a financial centre, the City Corporation's aspiration is for the City of London to strengthen its role as a Cultural Hub for London and beyond. Work is underway to develop a strategy for the enhancement of cultural facilities in the City and to deliver a Cultural Hub centred around the Barbican, Guildhall School of Music and Drama and Smithfield. Key aspirations include moving the Museum of London to the vacant Smithfield General Market, and creating a new Centre for Music on the existing Museum site adjacent to the Barbican, bringing over 2 million additional visitors to this part of the City each year.

Hotels

The demand for hotel accommodation in the City has continued to increase. The total stock of hotel bedrooms in the City increased to 4,984 in March 2016, which is nearly double the number of bedrooms in the City than six years previously in 2010. Spatially, hotel development is focused in the southern and eastern area of the City, with the area close to the Tower of London and east of the Eastern Cluster having the greatest concentration. A further grouping of hotels is growing between Queen Victoria Street and Upper Thames Street. There is a variety of types of hotels in the City, including business and smaller boutique hotels. In recent years significant numbers of budget hotels have been developed, a trend that is expected to continue in the foreseeable future.

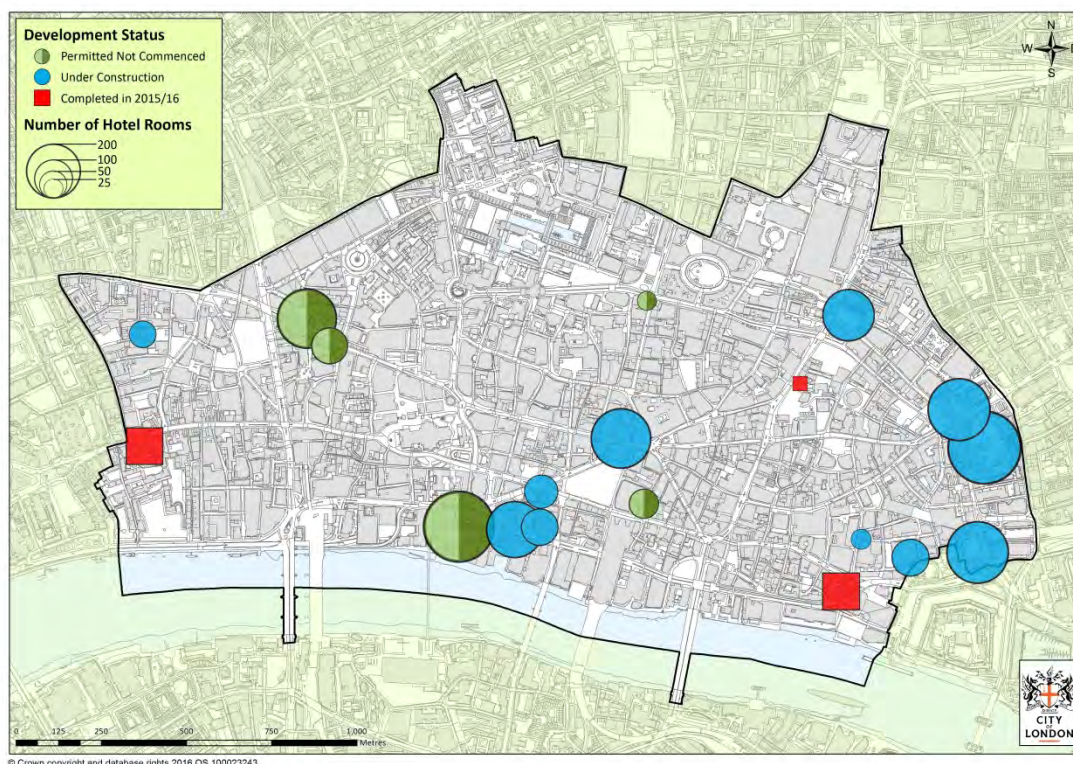


Figure 14: Hotel development in the City March 2016

Online sources of information:

Local Plan Monitoring Paper – Policy CS11: Visitors, Art, Culture, Hotels

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

Historic Environment/Protected views

Location of designated heritage assets

Figure 15 shows the location of the City's designated heritage assets. In total there are 48 scheduled ancient monuments, 4 historic parks and gardens, over 600 listed buildings and 26 conservation areas. The Tower of London World Heritage Site is a designated heritage asset which sits within the London Borough of Tower Hamlets, but the Local Setting Area of the Tower of London extends into the City and is a consideration for protected views policy.

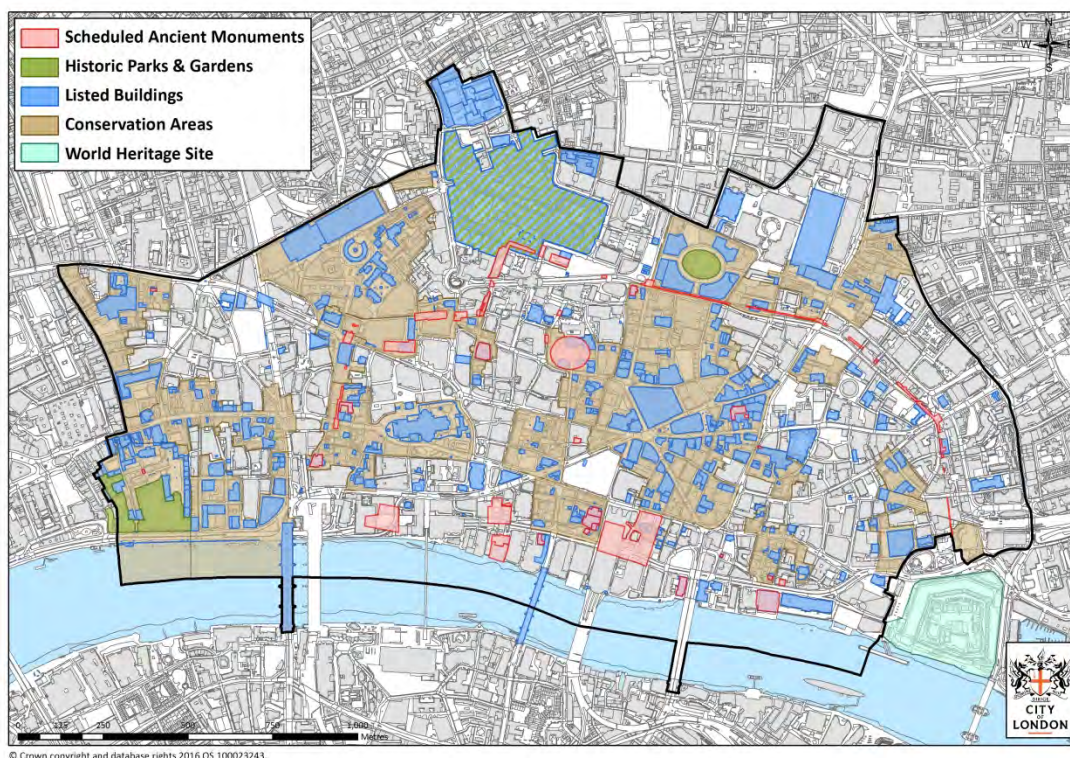


Figure 15: Heritage assets in the City of London February 2016

Location of protected views

- 1.1. The London Plan 2016 and the City of London Local Plan (Core Strategic Policy CS13: Protected Views) set out the regional and local protected views applicable to the City of London. The Mayor's London View Management Framework SPG (2012) provides more detail, including detailed management plans for each protected view of landmarks such as St. Paul's Cathedral and the Tower of London.
- 1.2. Figure 16 sets out the relevant London View Management Framework (LVMF) views within the context of the City of London. There are nine views with geometrically-defined

Protected Vistas affecting the City, with definitive height limits along Viewing Corridors and Wider Setting Consultation Areas.

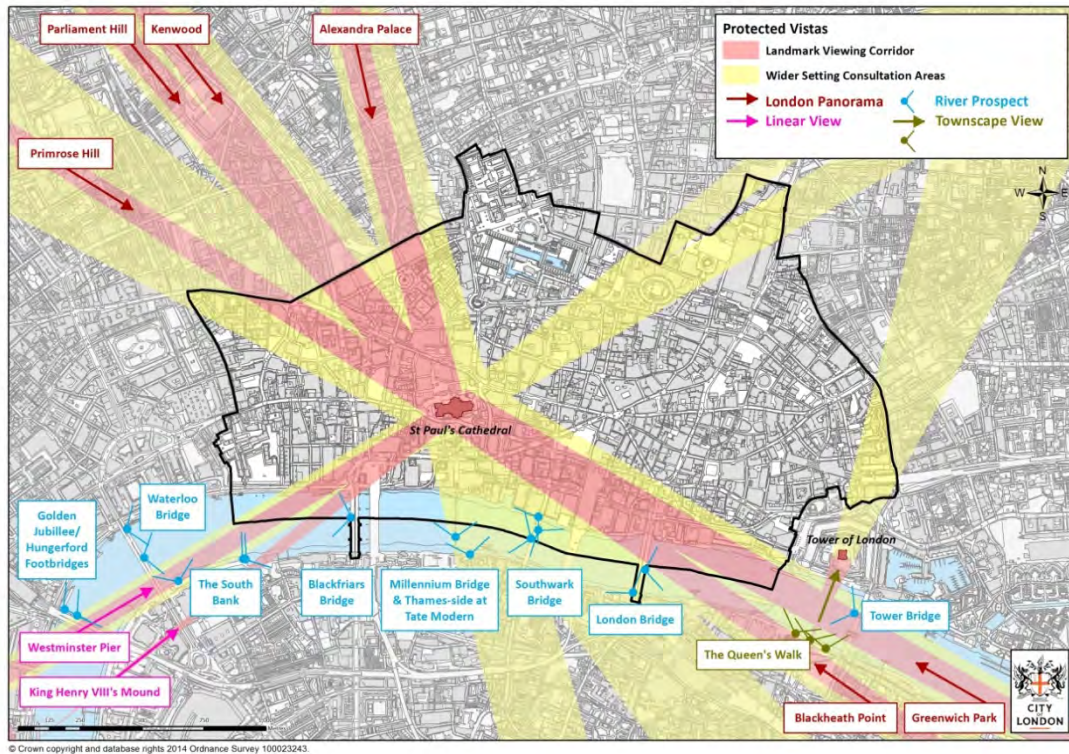


Figure 16: London View Management Framework (LVMF) policy areas and viewpoints affecting the City.

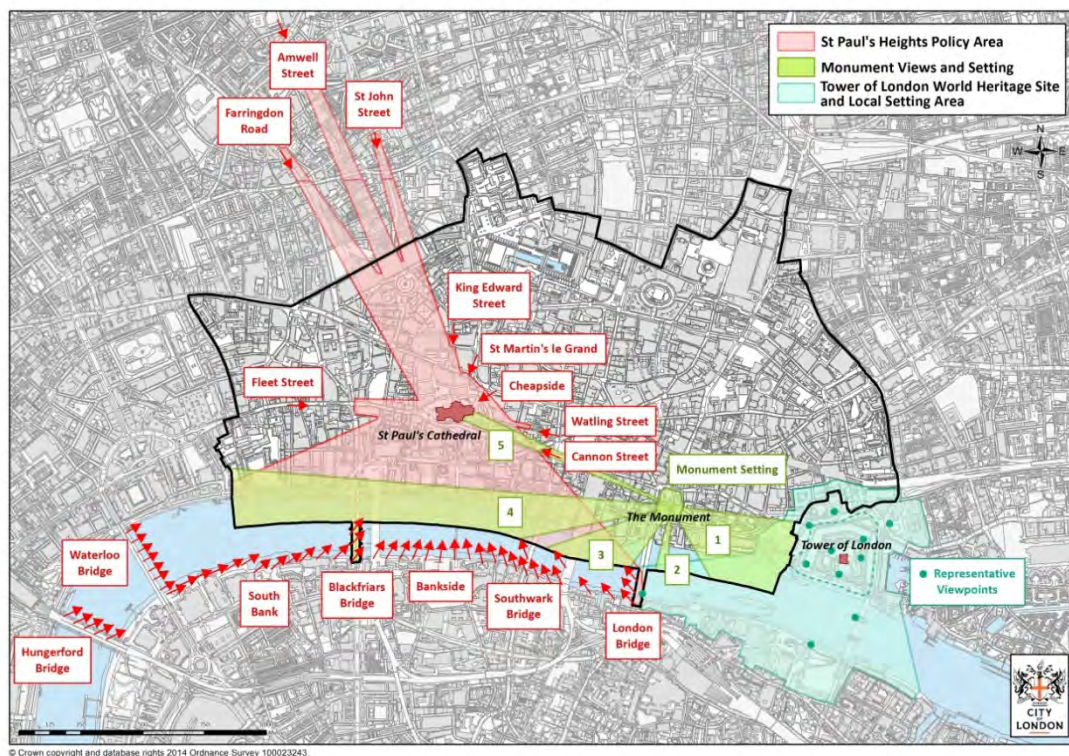


Figure 17: Local view policy areas and indicative viewpoints.

Figure 17 shows local views policy and indicative viewpoints. This comprises the St. Paul's Heights Policy Area (showing the key viewpoints), Monument Views and Setting (showing the five views) and the Tower of London World Heritage Site and Local Setting Area (showing representative viewpoints).

Summary of completed schemes and development pipeline within protected views policy areas

There were twenty-one completed schemes within the protected views policy areas in the period 2012–2016 (Figure 18). Three additional sites outside the protected views policy areas (starred in Figure 18) have been assessed within the context of the LVMF River Prospects / Townscape Views.

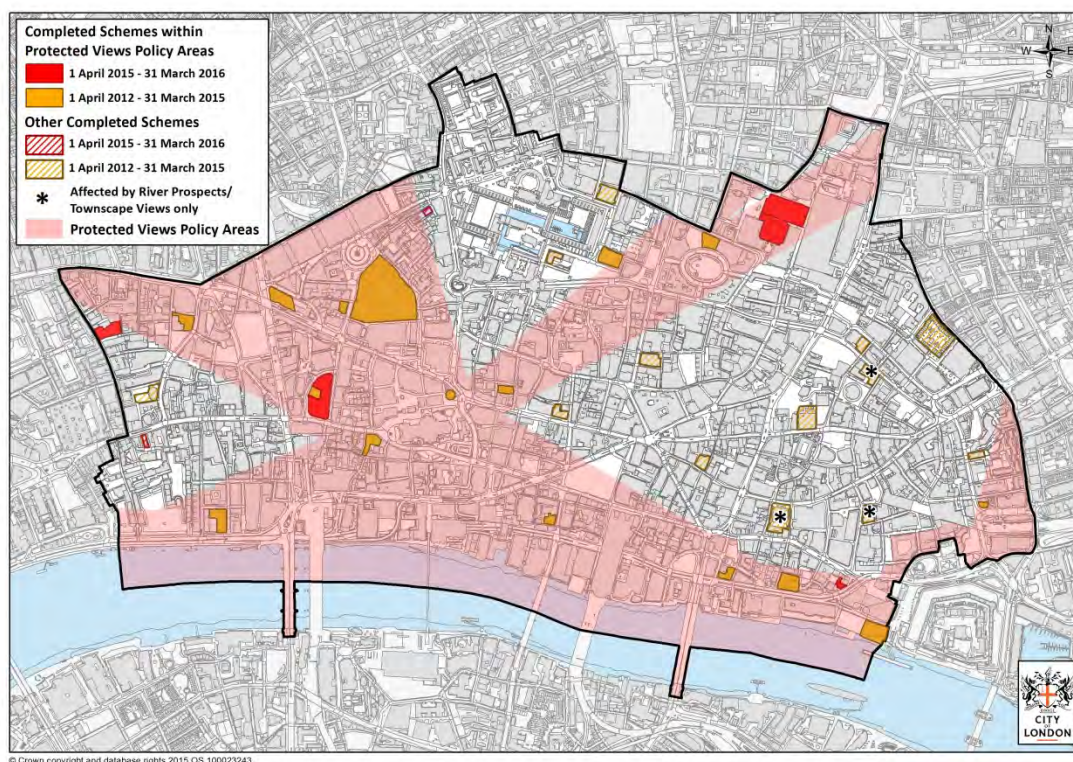


Figure 18: Completed schemes (1st April 2012-31st March 2016) within Protected Views Policy Areas.

There were thirty-three schemes under construction within the protected views policy areas at 31st March 2016 (Figure 19). Eight additional sites outside the protected views policy areas (starred in Figure 19) have been assessed within the context of the LVMF River Prospects / Townscape Views.

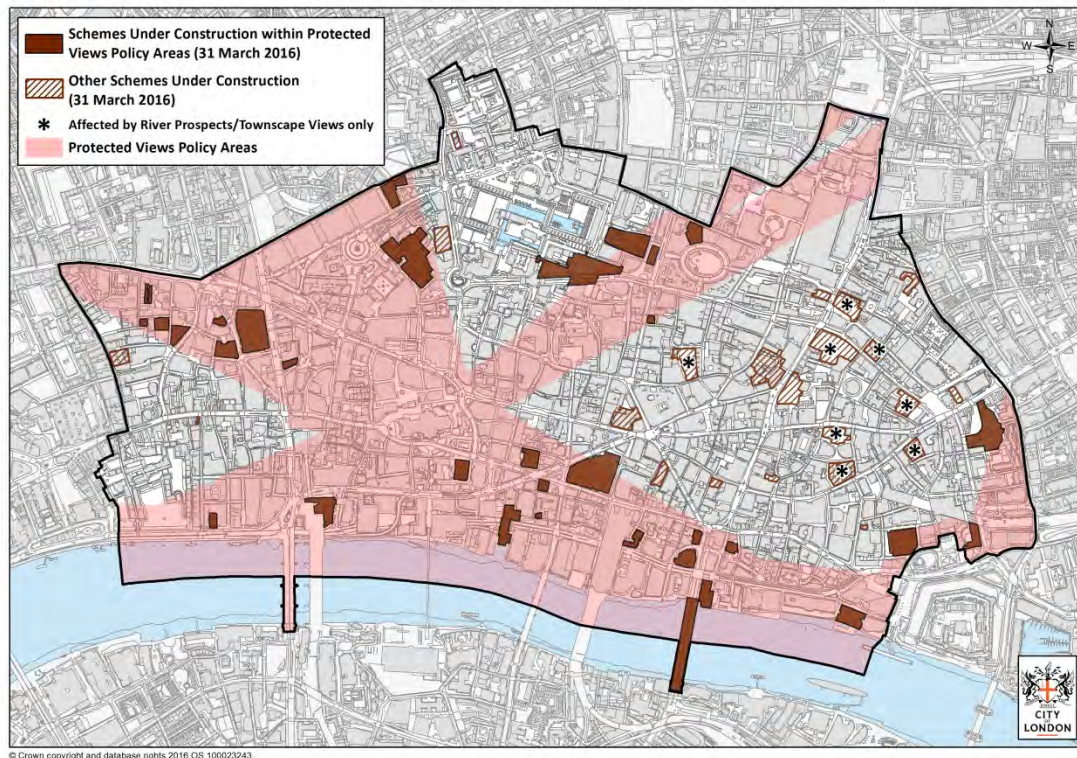


Figure 19: Schemes under construction at March 2016 within the Protected Views Policy Areas.

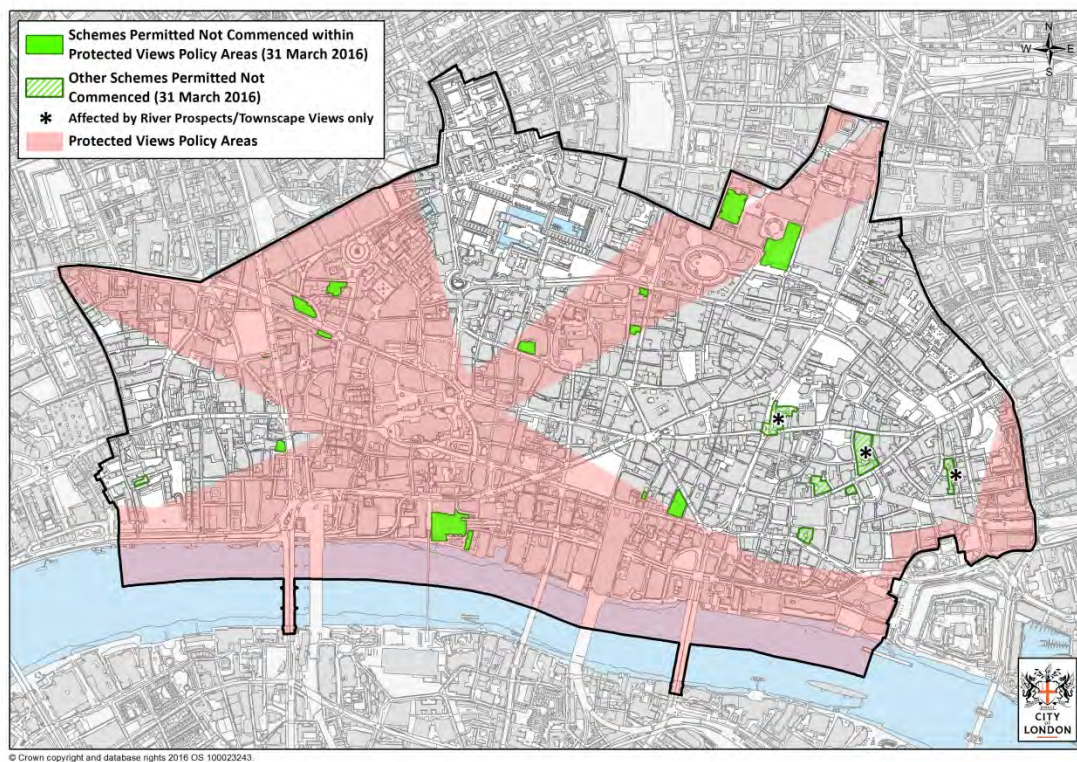


Figure 20: Schemes permitted not commenced at March 2016 within the Protected Views Policy Areas.

There were fourteen schemes permitted not commenced within the protected views policy areas at 31st March 2016 (Figure 20). Three additional sites outside the protected views policy areas (starred in Figure 20) have been assessed within the context of the LVMF River Prospects / Townscape Views.

Summary data of development in Conservation Areas

Thirty six major schemes were completed in Conservation Areas between 2007/08 and 2014/15. These are shown in Figure 21.

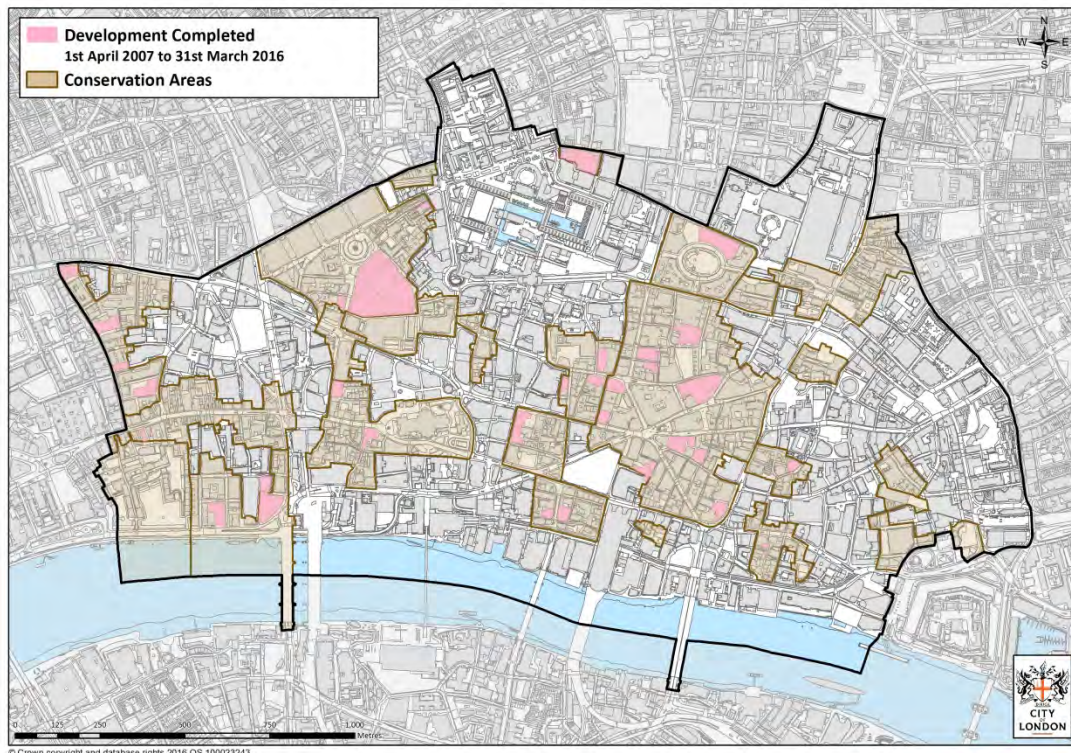


Figure 21: Developments in Conservation Areas 2007/08 to 2015/16.

Conservation Areas cover 37% of land in the City of London. In the period 2007/08 – 2014/15, a site area of approximately 97,000m² was redeveloped in Conservation Areas – 36% of the City total. This suggests that Conservation Areas have not acted as a barrier to redevelopment. In terms of floorspace, approximately 628,000m² was redeveloped in Conservation Areas – 18% of the City total. This difference would suggest that the size of redevelopments in Conservation Areas tend to be of a smaller scale than the City average.

Twelve of the 36 completed sites are located in Bank Conservation Area. The total floorspace redeveloped in Bank Conservation Area represents 40% of all the floorspace in redevelopments within Conservation Areas and 11% of the City total for the period 2007/08 to 2014/15.

Summary data of development affecting listed buildings

No listed buildings were demolished over the period 2007/08 to 2014/15. Since 2007/08, 1,200 Listed Building Consents have been granted for (a) development works and change of use; and (b) minor alterations. The spatial distribution of the consents is illustrated in Figure 22.

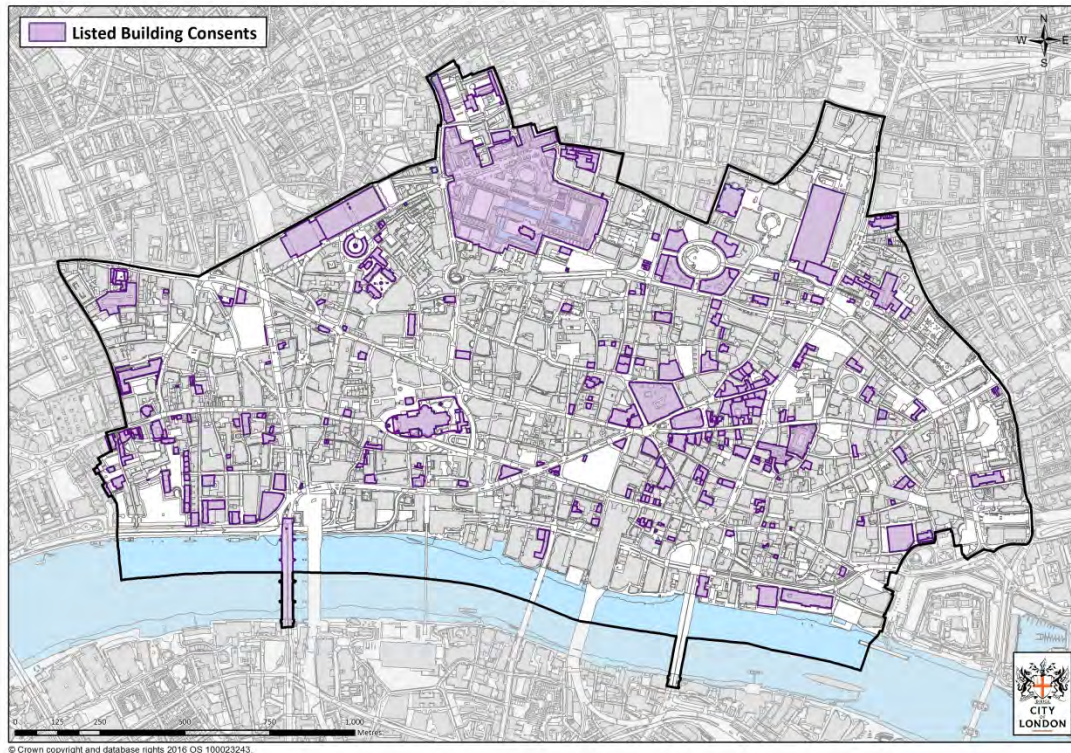


Figure 22: Listed Building Consents 2007/08 to 2015/16

Online sources of information

Local Plan Monitoring Paper – Policy CS13: Protected Views
<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

Tall buildings

Number and location of existing tall buildings

Figure 23 shows the distribution (as at March 2016) of tall buildings over 75m Above Ordnance Datum (AOD) in the City with the Key City Places policy areas of the Local Plan overlaid. Additionally, those buildings in the 50-75m AOD range are also shown for context as well as tall buildings under construction and permitted not commenced.

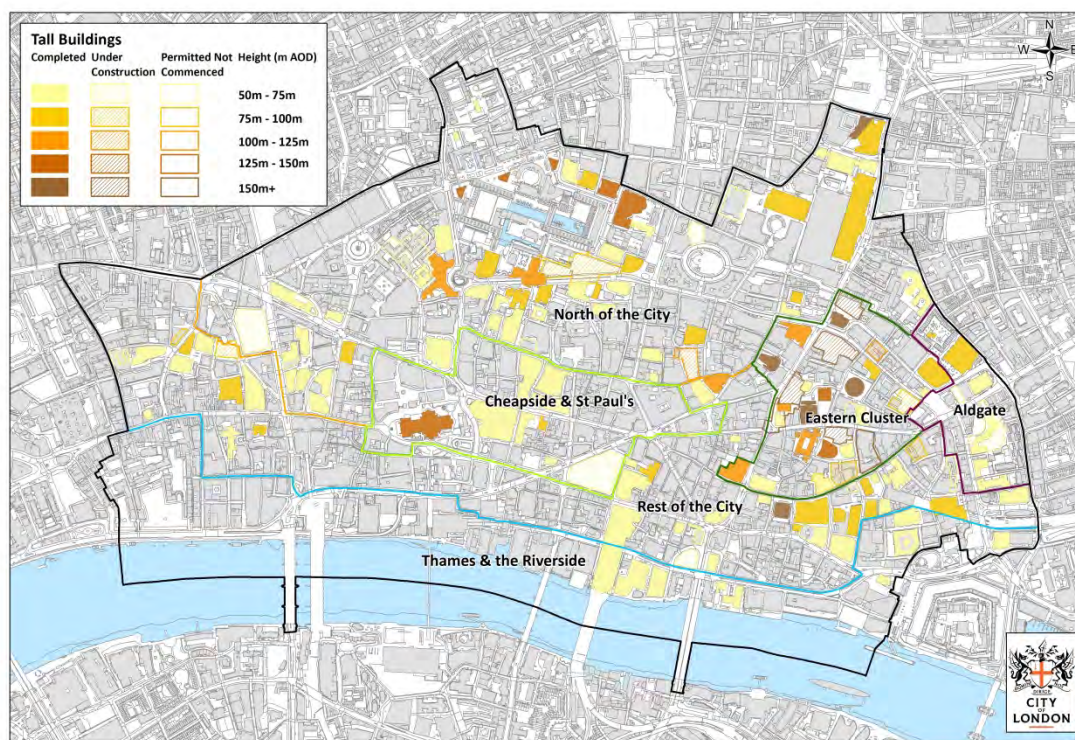


Figure 23: City of London tall buildings distribution March 2016

Projected pipeline of tall buildings

Figure 24 shows the location of all tall buildings in the development pipeline as at 31st March 2016 analysed by the development status of the scheme. Of the 15 schemes with planning permission at 31st March 2016, 10 are under construction and 5 are permitted not commenced. Ten of the schemes are within the Eastern Cluster including all 6 of the schemes over 150m AOD.

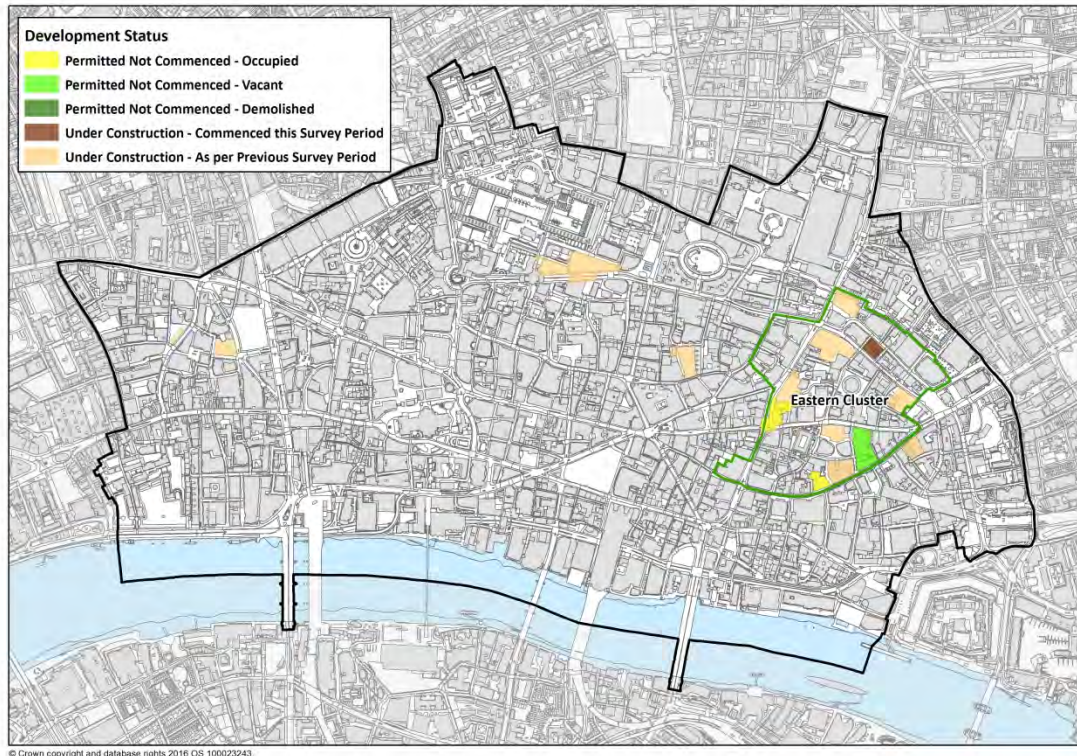


Figure 24: Tall Buildings (over 75m AOD) in the development pipeline, March 2016.

Areas inappropriate for tall buildings

Planning applications for tall buildings are considered in the context of Local Plan Core Strategic Policy CS14, which defines those areas which are considered to be inappropriate for tall buildings and where proposals will be refused. Figure 25 sets out the individual policy areas where tall buildings are inappropriate, comprising:

- St. Paul's Heights Policy Area.
- LVMF Landmark Viewing Corridors.
- Monument Views Policy Area.
- Conservation Areas.

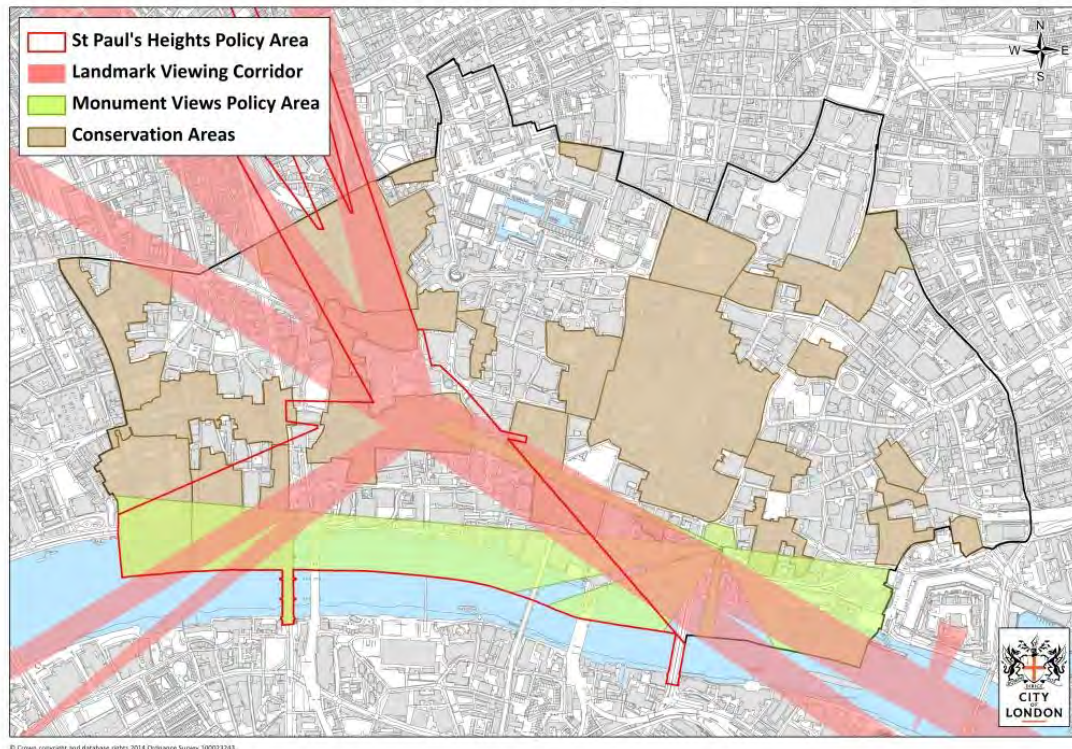


Figure 25: Individual policy areas inappropriate for tall buildings.

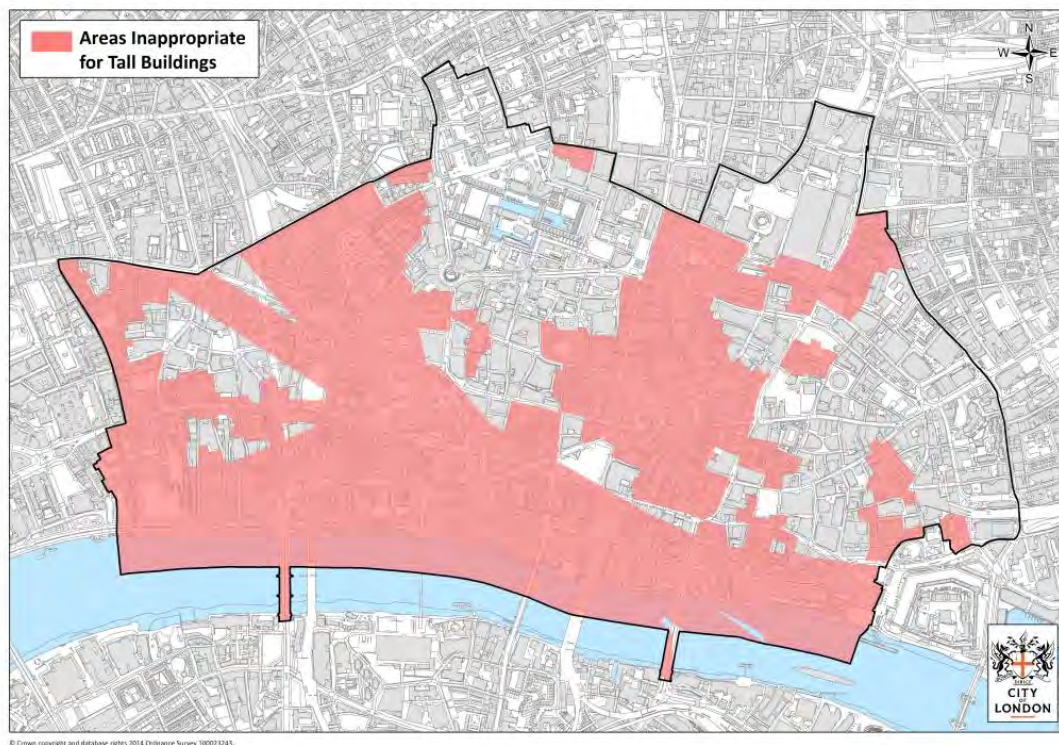


Figure 26: Composite of inappropriate areas for tall buildings in the City.

Figure 26 shows a composite of all areas inappropriate for tall buildings. All other sites in the City are considered to be sensitive to tall buildings.

Online sources of information

Tall Buildings in the City of London

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/tall-buildings.aspx>

Local Plan Monitoring Paper – Policy CS14: Tall Buildings

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

Environmental Sustainability

Sustainability and Climate Change

Energy use and carbon emissions

Department for Energy and Climate Change statistics show that there has been a gradual reduction in the City's energy use over the last 10 years although there are fluctuations between one year and the next. This reduction in energy use corresponds with a period of increased employment (see Section One: Population and Employment) indicating that energy consumption per employee has fallen. This trend will need to continue if the national and London Plan targets for carbon emission reduction are to be met.

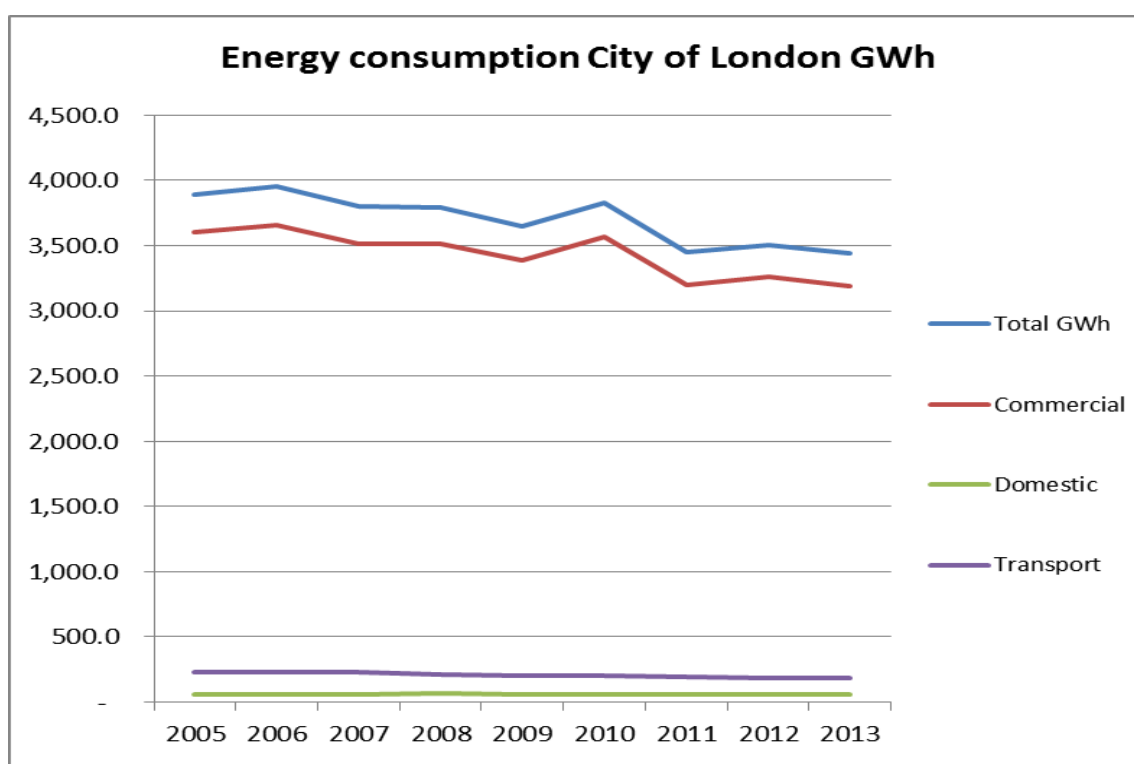


Figure 27: Energy consumption trends 2005-2013

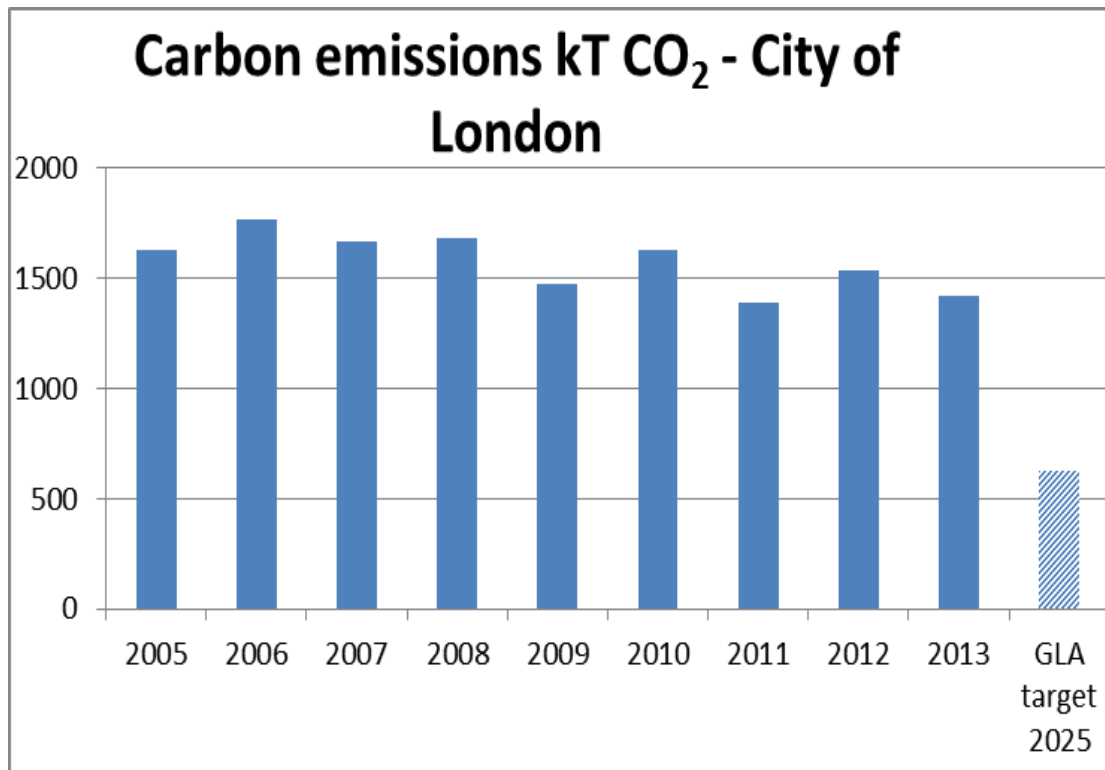


Figure 28: Carbon emission trends 2005-2013

Source: DECC sub national energy trends data Office for National Statistics

Air quality

The City of London, alongside the rest of central London, is an air quality management area for fine particulates (PM10) and nitrogen dioxide (NO2). Fine Particulate Matter (PM10) has been monitored in the City at Beech Street, Upper Thames Street and at the Sir John Cass School since 2006. The PM10 (24 hour average) objective of 50 $\mu\text{g m}^{-3}$ has been exceeded on many occasions with Upper Thames Street showing the highest concentrations. Nitrogen dioxide is continuously monitored at three locations (Beech Street, Walbrook Wharf and Sir John Cass School). The EU air quality limit value of 40 $\mu\text{g m}^{-3}$ (annual average) was exceeded at all of these sites throughout the period 1999-2014.

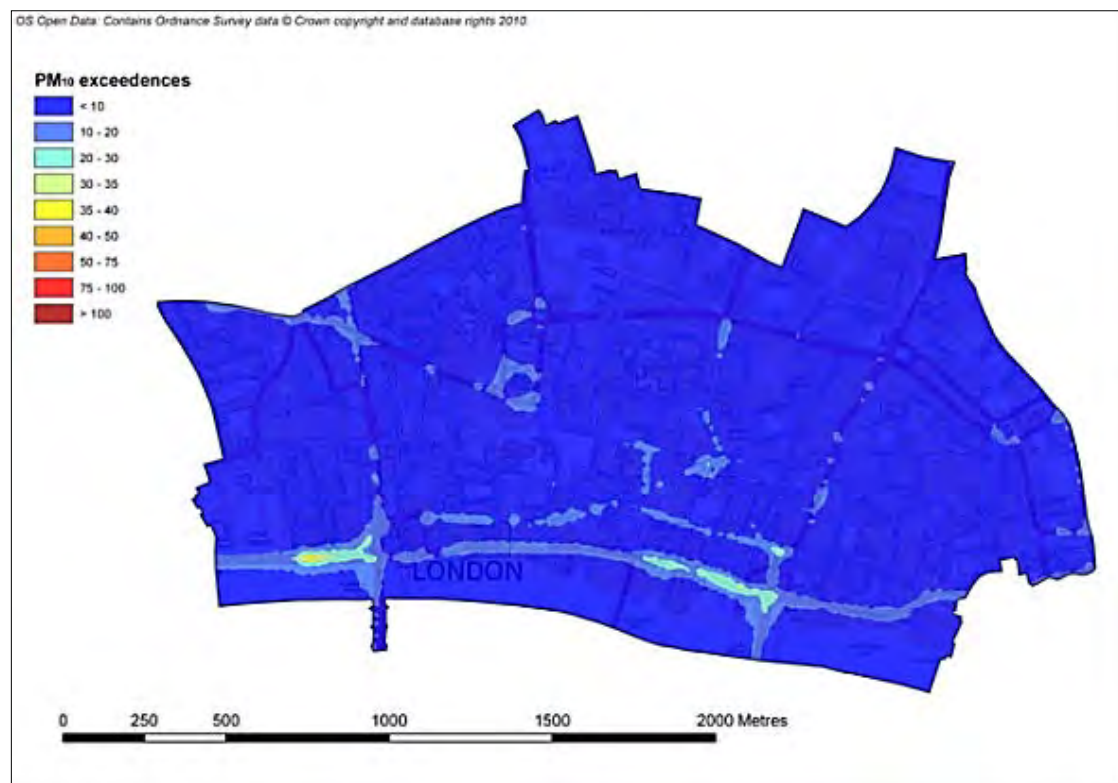


Figure 29: Modelled concentrations of daily average PM10 exceedences, 2015



Figure 30: Modelled concentrations of annual average nitrogen dioxide, 2015

Source: City of London Air Quality Strategy 2015-2020

BREEAM assessments for office developments

BREEAM is a sustainability rating scheme which examines a range of factors such as energy and water use, transport, materials and waste associated with new development. Almost 75% of major City office schemes permitted between 2011 and 2014 were predicted to achieve an “Excellent” rating (Figure 32). The City of London Local Plan monitoring shows that the larger floorspace buildings in the City tend to achieve higher BREEAM ratings than smaller developments (Figure 31).

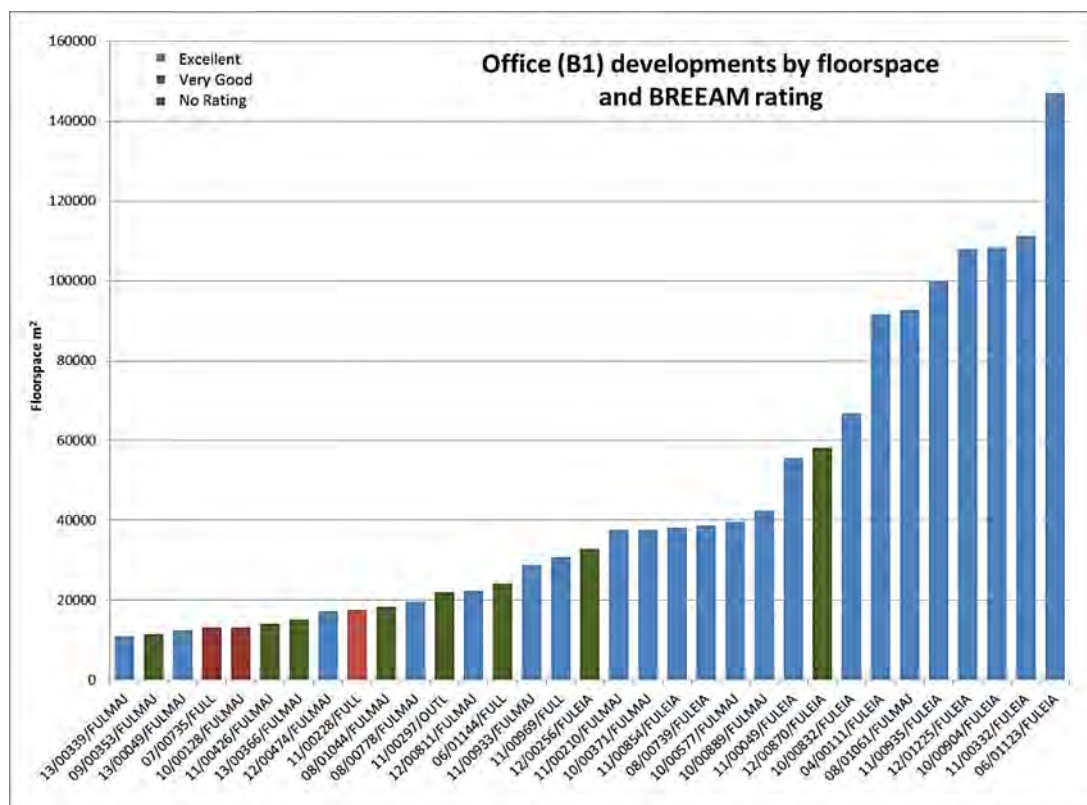


Figure 31: Office planning permissions by floorspace and BREEAM rating

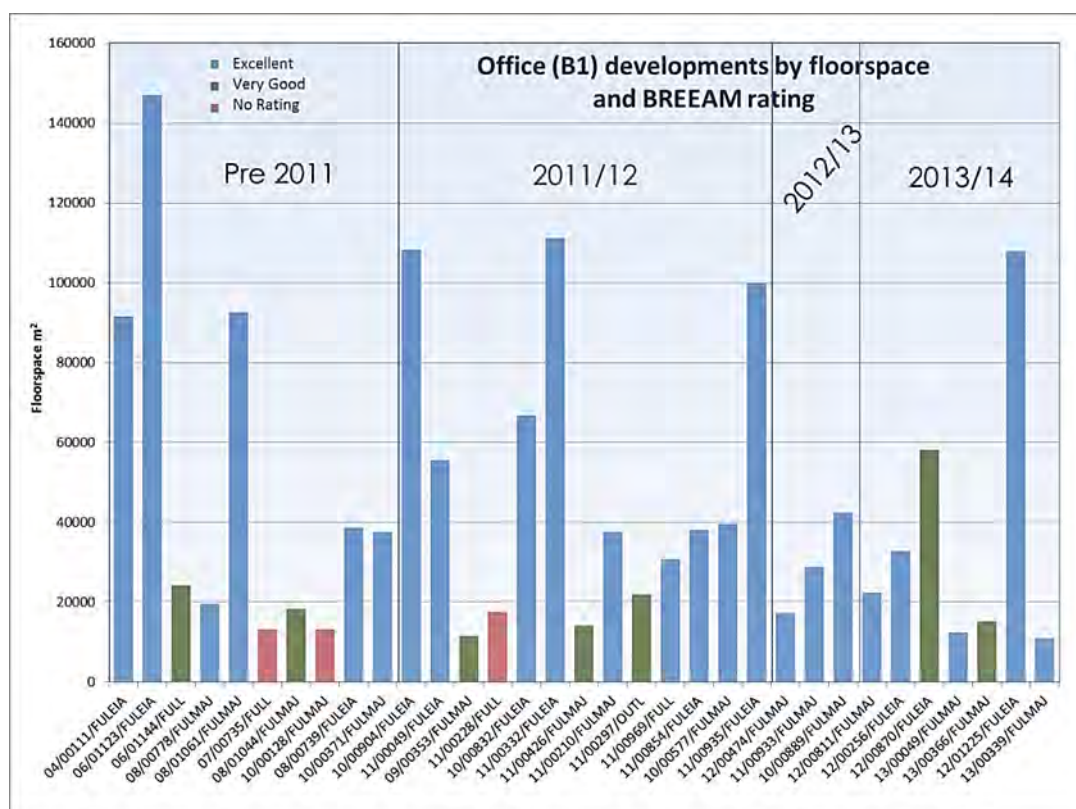


Figure 32: Office planning permissions in chronological order of permission

Source: City of London sustainability monitoring report 2015

Online sources of information

Energy use and carbon emissions

<https://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics#sub-national-energy-consumption-statistics>

Air quality

<https://www.cityoflondon.gov.uk/business/environmental-health/environmental-protection/air-quality/Pages/air-quality-reports.aspx>

BREEAM assessments – Local Plan Monitoring Paper – Policy CS15: Sustainability

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

Public Transport, Streets and Walkways

Public transport

The City is served by an extensive public transport network with six mainline railway stations, 12 underground and DLR stations and 54 bus routes. Over 90% of journeys to work are made by public transport or active modes of travel, using the City's streets to complete their journeys as pedestrians or cyclists. The train has been the most popular method of travel to work from 1991-2011. The number of people travelling by train has increased moderately from 142,760 in 1991 to 165,810 in 2011 – a 16% increase over the period. However, because the total workforce of the City of London has increased by 44% over the period, the percentage travelling by train has decreased from 58% in 1991 to 46% in 2011.

The number of people travelling by London Underground has increased significantly over the period 2007-2014, with the growth in annual entry/exit figures for stations in the City and nearby within 500m of the City shown in Table 5.

Station	Underground Lines	2014 Entry/Exits	Network Rail and Overground
London Bridge		74,976,665	
Liverpool Street		73,661,457	
Bank / Monument		52,306,067	
Tower Hill		26,323,869	
Moorgate		25,895,151	
Farringdon		23,628,728	
St Paul's		17,538,974	
Chancery Lane		16,592,090	
Blackfriars		13,142,562	
Aldgate East		12,248,009	
Barbican		11,444,738	
Temple		8,135,916	
Aldgate		7,221,566	
Mansion House		6,195,631	
Cannon Street		5,299,813	

Table 5: Annual Entry & Exits 2014 - Underground Stations

The number of people travelling by bus, minibus or coach has increased significantly from 11,560 in 1991 to 21,940 in 2011 although the percentage share of the workforce has remained consistent at 5-6% during the period.

Cycling and walking

There has been a significant increase in both workforce numbers and percentage share of the workforce travelling by bicycle – increasing from 1,980 in 1991 (1%) to 13,501 in 2011 (4%). Likewise by foot – increasing from 3,120 in 1991 (1%) to 16,416 in 2011 (5%).

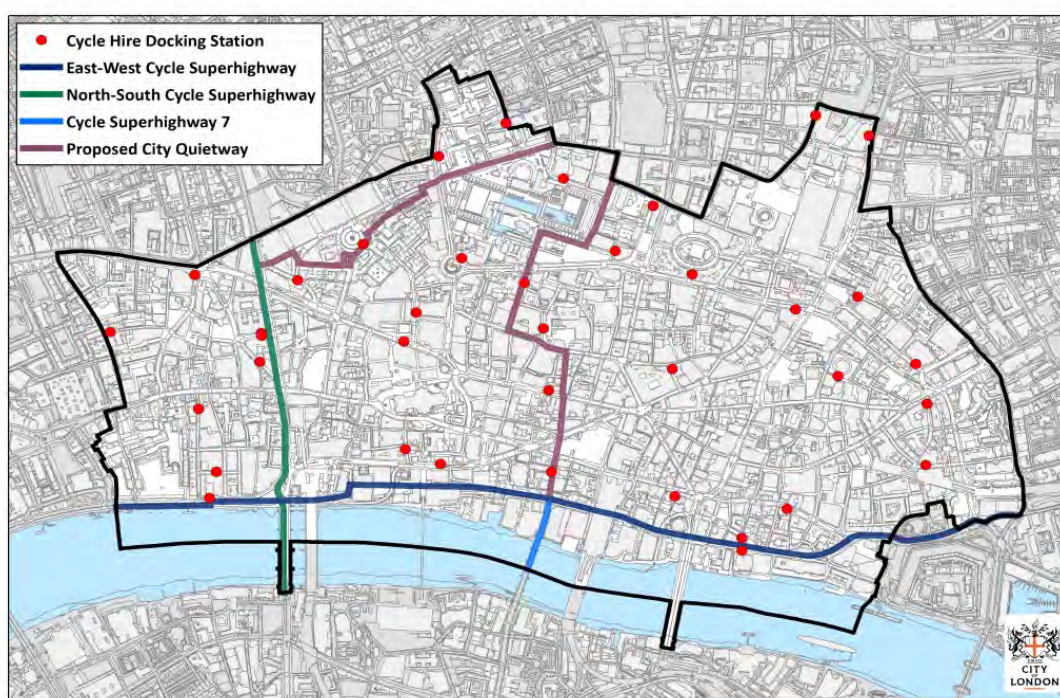


Figure 33: Cycling infrastructure in the City of London April 2016

Car and van use

The number of people either driving or a passenger in a car or van has fluctuated over the period 1991-2011 – increasing from 19,240 in 1991 to 21,882 by 2001, then declining to 17,312 by 2011. This represents an overall decrease from 8% of the workforce in 1991 to 5% in 2011.

Congestion

Provision of additional public transport such as Crossrail and upgrades of the underground, overground and Thameslink networks will accommodate additional passengers but will put further pressure on the City's pedestrian environment. Two of the ten new Crossrail Stations being built are within the City's boundaries - a new eastern ticket hall for Crossrail's Farringdon station and a new Crossrail Station at Liverpool

Street. The completion of Crossrail will make Farringdon one of the biggest transport interchanges in Britain.

A particular issue needing consideration is the servicing of new tall buildings in the highly constrained street environment of the Eastern Cluster. This must be achieved whilst improving air quality, minimising energy consumption and improving the health of the City's communities.

Waste and the Circular Economy

The City of London differs from other waste planning authority areas in that the majority of its waste is commercial & industrial (C&I) and construction & demolition (C&D) waste rather than household waste. Since there are no waste management facilities in the City, most of the City's waste is managed by private contractors, and transferred elsewhere in London and south east England for processing.

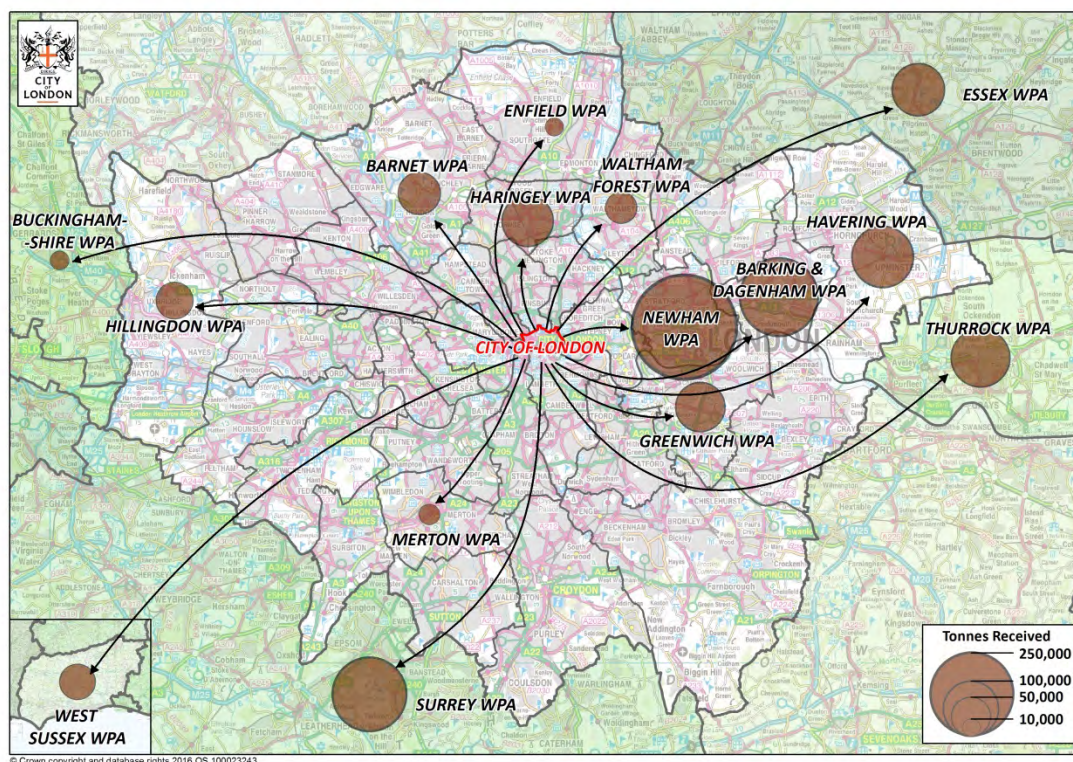


Figure 34: City of London Waste deposits 2010-2014

Source: Environment Agency Waste Data Interrogator

The City Corporation commissioned Anthesis to undertake a review of waste arisings in the City and future waste management capacity to inform the Local Plan Review. Table 6 shows the current and projected waste arisings, suggesting a significant reduction in arisings over the

prios to 2036 principally due to a reduction in construction, demolition and excavation waste.

Waste type	2014 (baseline)	2021	2031	2036
Local authority collected	3,949	3,717 - 4,457	3,382 - 4,947	3,382 - 5,094
Commercial & Industrial	186,891	186,210 - 187,660	173,700 - 207,360	169,350 - 214,120
Construction, Demolition & Excavation	451,860	147,065	101,730 - 128,610	77,130 - 114,840
Low level radioactive	Negligible (26.5kg)	N/A	N/A	N/A
Agricultural	5	N/A	N/A	N/A
Hazardous	3,038	2,951 – 3,168	2,824 – 3,371	2,753 – 3,481
Wastewater	3.8 million m ³	N/A	N/A	N/A
Total	645,743	339,943-342,350	281,636-344,288	252,615-337,535

Table 6: Current waste arisings and projections generated in the City of London (tonnes)

Source: City of London Waste Arisings and Waste Management Capacity Study review 2016, Anthesis

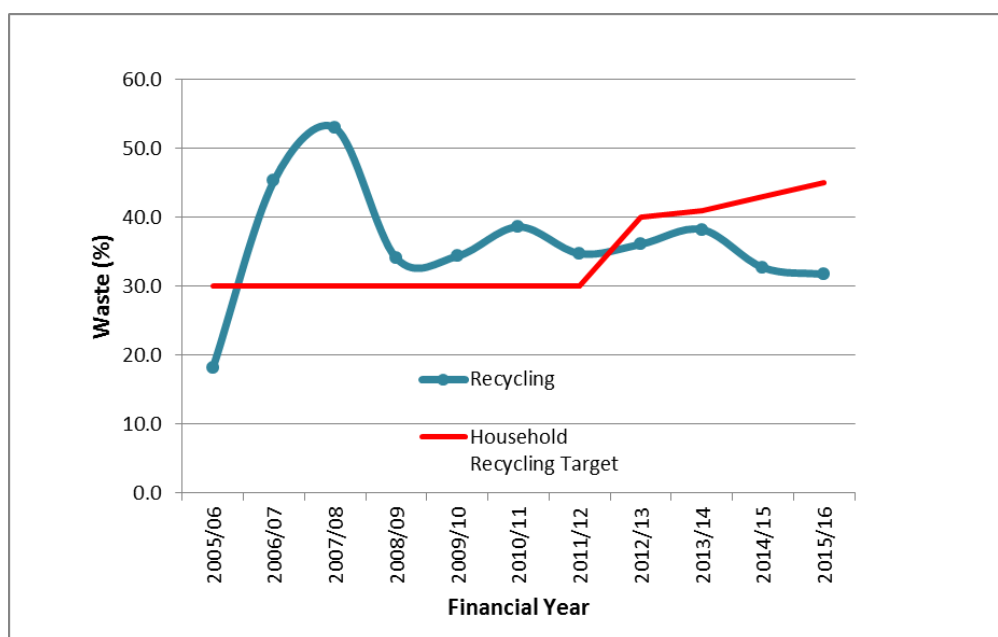


Figure35: Household waste recycling

Figure 35 shows the recycling rate for household waste in the City, compared to the City Corporation's recycling target, currently set at 45%. Recycling in the City is currently running at a rate of 32%.

The equivalent recycling rate for local authority collected commercial waste is 10%, giving a combined recycling rate for all local authority collected waste in the City in 2015/16 of 30.9%.

The City currently has one designated waste site at Walbrook Wharf. This site provides waste transfer facilities for up to 110,000 tonnes per

year enabling river transport of waste to river served waste management facilities elsewhere along the Thames.

Flood Risk

The risk of river flooding in the City of London is relatively low compared with some neighbouring boroughs because most of the City is built on higher ground and the Thames Barrier provides protection against flooding from the River Thames. Surface water and sewer overflows present a greater threat in Farringdon Street and Paul's Walk especially in the face of more intense rainfall which is predicted as our climate changes. The City of London Strategic Flood Risk Assessment 2012 provides comprehensive modelling of the flood risks that the City faces from tidal and river, surface water and sewers and from ground water.

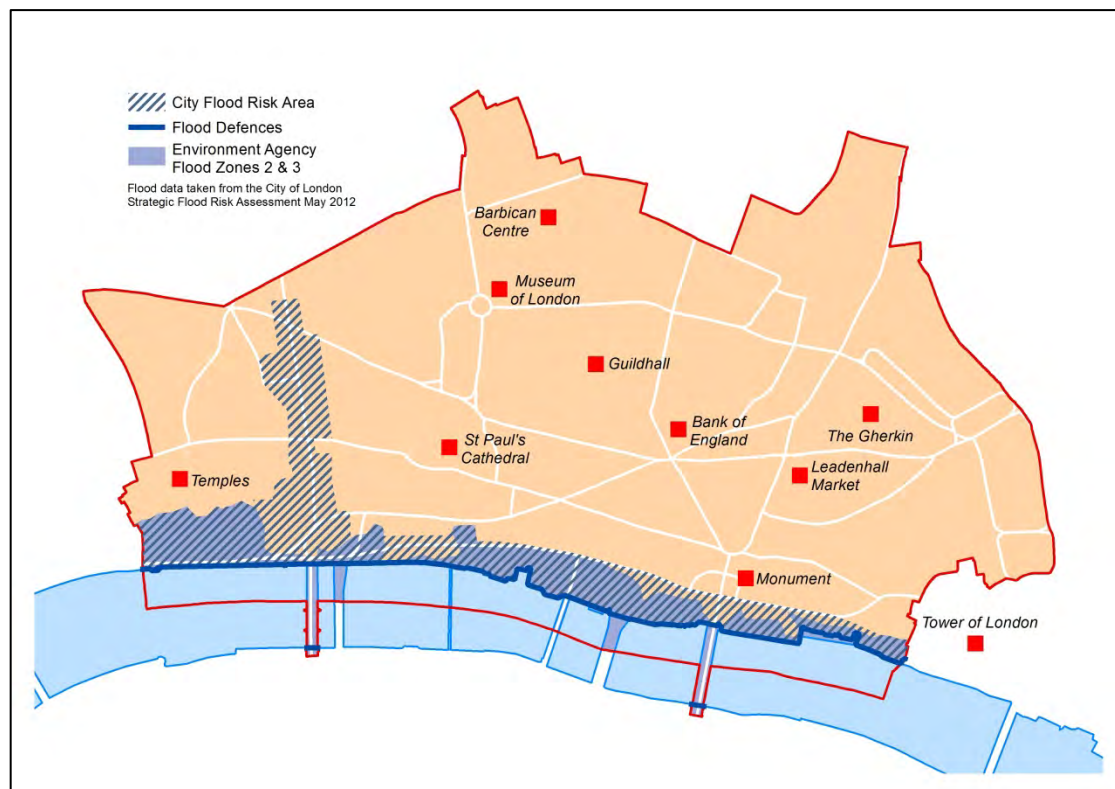


Figure 36: City Flood Risk Area

Online sources of information:

Transport

Travel to Work - City of London Workforce Census 2011 – Travel to Work Profile

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/employment-and-visitors.aspx#>

Waste and the Circular Economy

Local Plan Monitoring Paper – Policy CS17: Waste

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

Flood Risk

City of London Strategic Flood Risk Assessment

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/design/Pages/flood-risk.aspx>

City Communities

Open Spaces and Recreation

Open Space

The City of London has approximately 376 open spaces totalling 32 hectares which includes parks, gardens, churchyards and hard open spaces such as plazas and improvements to the highway. Most of the open spaces are small, with approximately 80% of sites less than 0.2 hectares in size and only 11% over half a hectare.

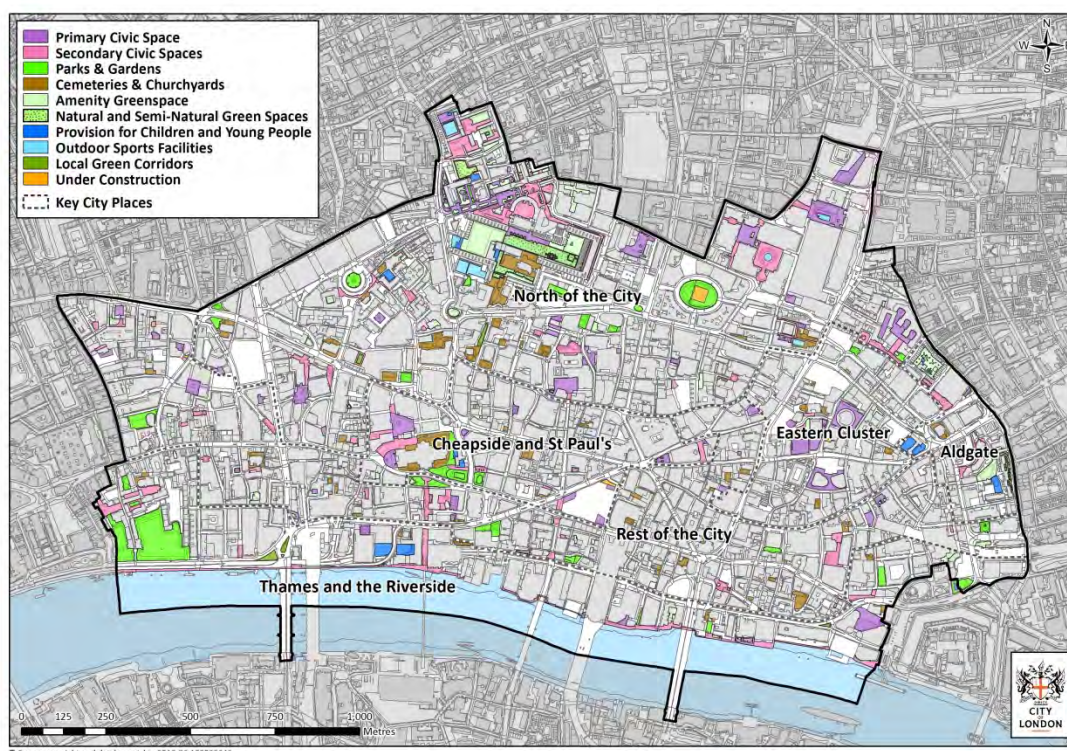


Figure 37: Distribution of open space in the City of London March 2016

The North of the City contains just over half of all the open space in the City, due to the relatively large amounts of space in the Barbican and Golden Lane estates and the Broadgate commercial estate. The Thames and the Riverside area has a significant amount of open space as it encompasses the Riverside Walk and the Temples legal precinct. The Aldgate and Eastern Cluster areas have the lowest percentages of open space and face pressure from increasing employment growth.

Overall, total open space in the City has shown a marginal net increase from 32.6 hectares in the 2011 to 32.9 hectares in 2015. The majority of the increase has been in the form of 'civic spaces' resulting from public realm enhancement schemes developed around new buildings and improved use of the public highway.

Green roof development has continued to be popular as part of new office developments. Schemes completed between 2008 and 2014 have provided approximately 13,800 m² of green roof space. However, with the exception of the terrace at One New Change, these green roofs have been private with no access to the general public.

Between 2015 and 2021 the total area of open space in the City is projected to increase by 3.4 hectares. The majority of the increase will continue to result from public realm enhancement schemes. The weekday daytime population is also projected to rise during this period, and this may impact of the ratio of open space per person in the City.

Although the City is densely developed, open spaces form an important function for relaxation and recreation. They also provide pockets of space for wildlife, forming corridors for the movement of species, improving air quality and providing urban cooling benefits. The River Thames, which is a Site of Metropolitan Importance for Nature Conservation, brings wider benefits for migrating birds and fish species. There is intense pressure on all the City's open spaces particularly at lunchtimes, but flexible working patterns could result in this being spread somewhat more evenly throughout the day. New development provides an opportunity to create additional open space, which should be designed for multiple uses and resilient to future climate conditions.

Recreation

There has been an increase in sport and recreation floorspace in the City in recent years, which is expected to continue to 2021. The majority of the increase has resulted from additional private gym facilities within office developments.

Online sources of information:

Local Plan Monitoring Paper – Policy CS19: Open Spaces

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

City of London Open Spaces Strategy SPD 2015

<https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/planning-policy/Pages/Supplementary-Planning-Documents.aspx>

Retailing

Retail plays a vital role in the City of London, adding vibrancy to the streets as well as supplying the essentials to keep the City running. Figure 38 shows the current distribution of retail units across the City.

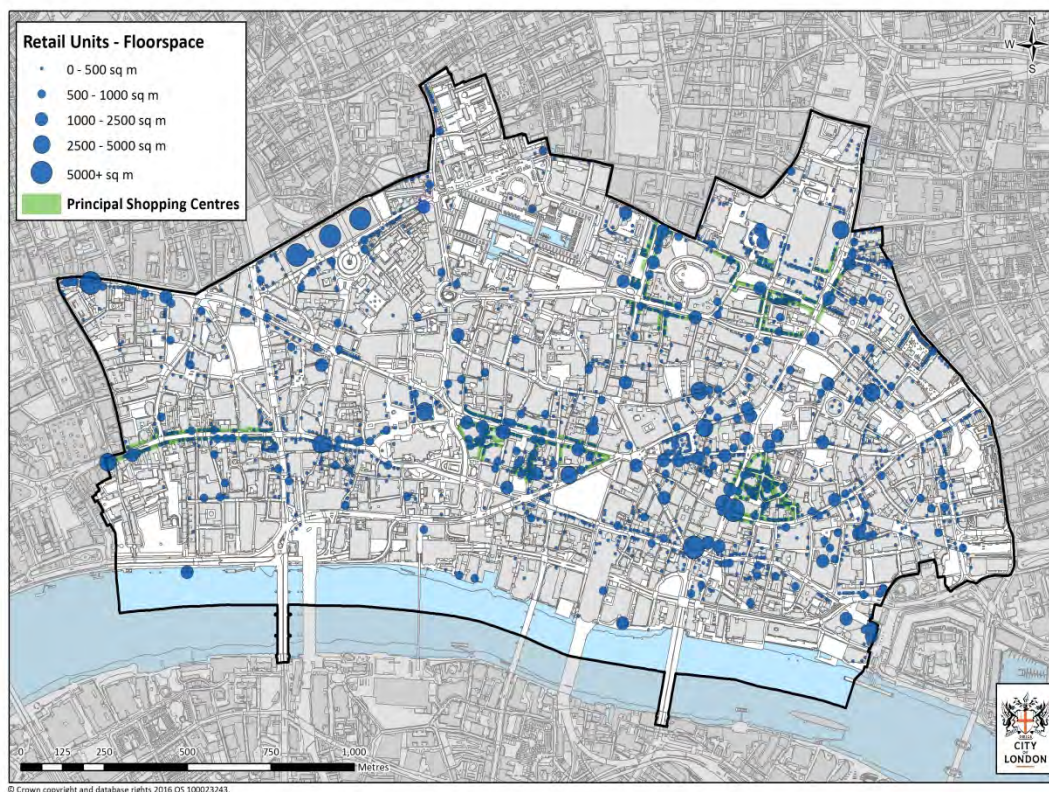


Figure 38: Distribution of retail units in the City of London, March 2016

The City of London has about 1,900 retail units within its boundary, totalling 590,000m² of floorspace. Figure 39 shows the classification of the different types of retail, as defined by the Use Classes Order¹.

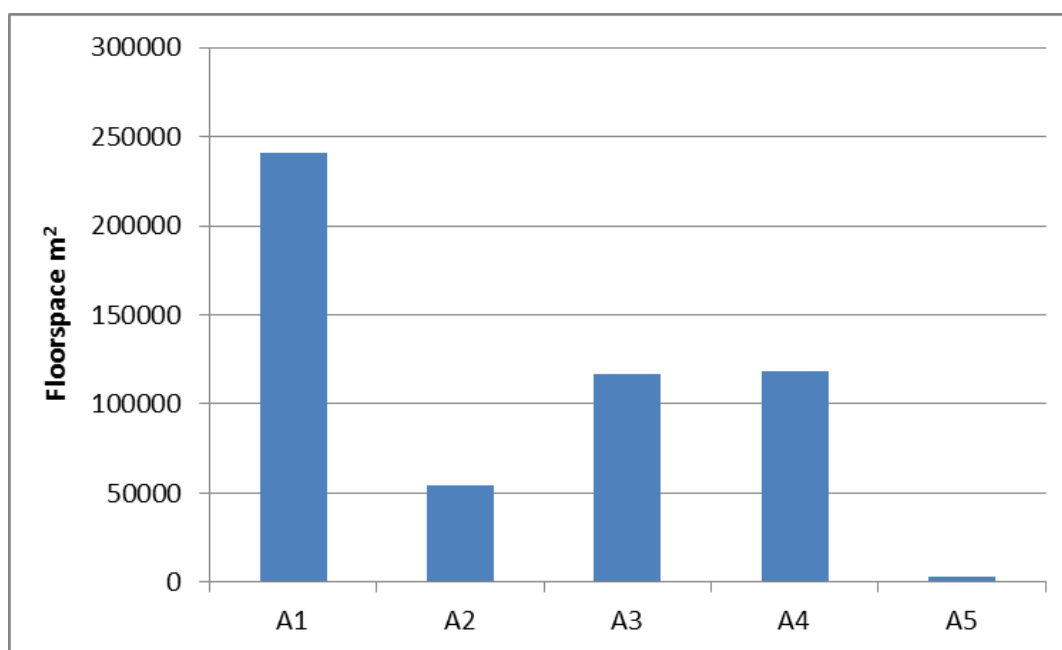


Figure 39: Retail floorspace in the City by Use Class Order March 2016

Principal Shopping Centres

There are five Principal Shopping Centres (PSCs) in the City of London which have the highest concentrations of retail provision: Cheapside, Fleet Street, Leadenhall Market, Liverpool Street and Moorgate.

¹ **A1 Shops** - Shops, retail warehouses, hairdressers, undertakers, travel and ticket agencies, post offices, pet shops, sandwich bars, showrooms, domestic hire shops, dry cleaners, funeral directors and internet cafes.

A2 Financial and professional services - Financial services such as banks and building societies, professional services (other than health and medical services) and including estate and employment agencies.

A3 Restaurants and cafés - For the sale of food and drink for consumption on the premises - restaurants, snack bars and cafes.

A4 Drinking establishments - Public houses, wine bars or other drinking establishments (but not night clubs).

A5 Hot food takeaways - For the sale of hot food for consumption off the premises.

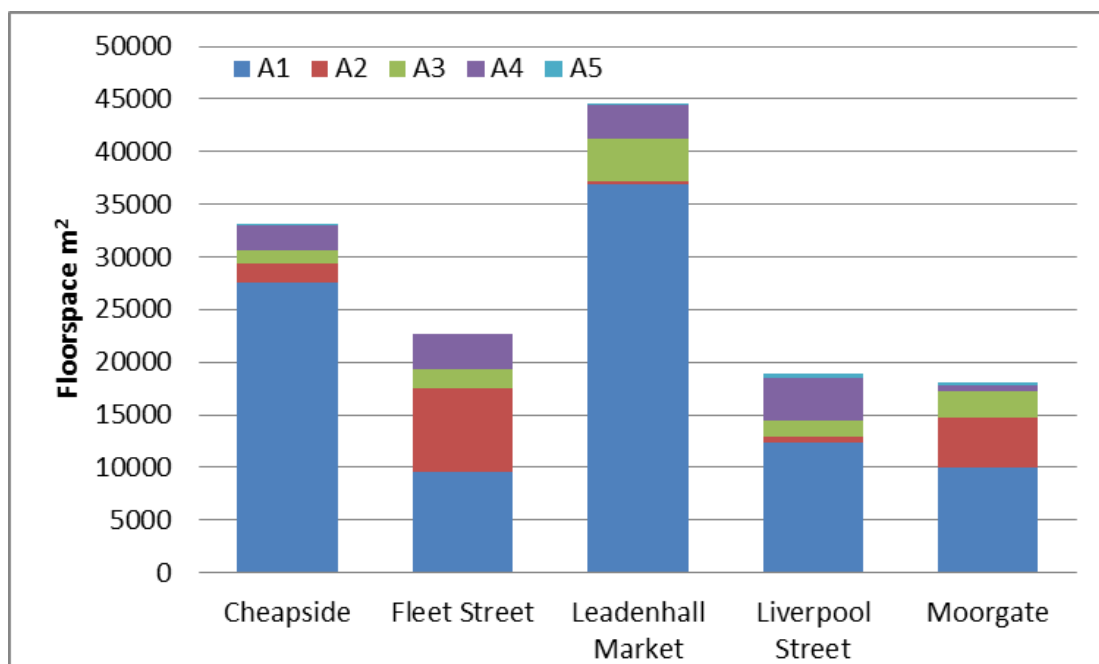


Figure 40: Retail in the PSCs by Use Class Order March 2016

Figure 40 shows the mix and quantity of retail floorspace within each PSC as defined by the Use Classes Order.

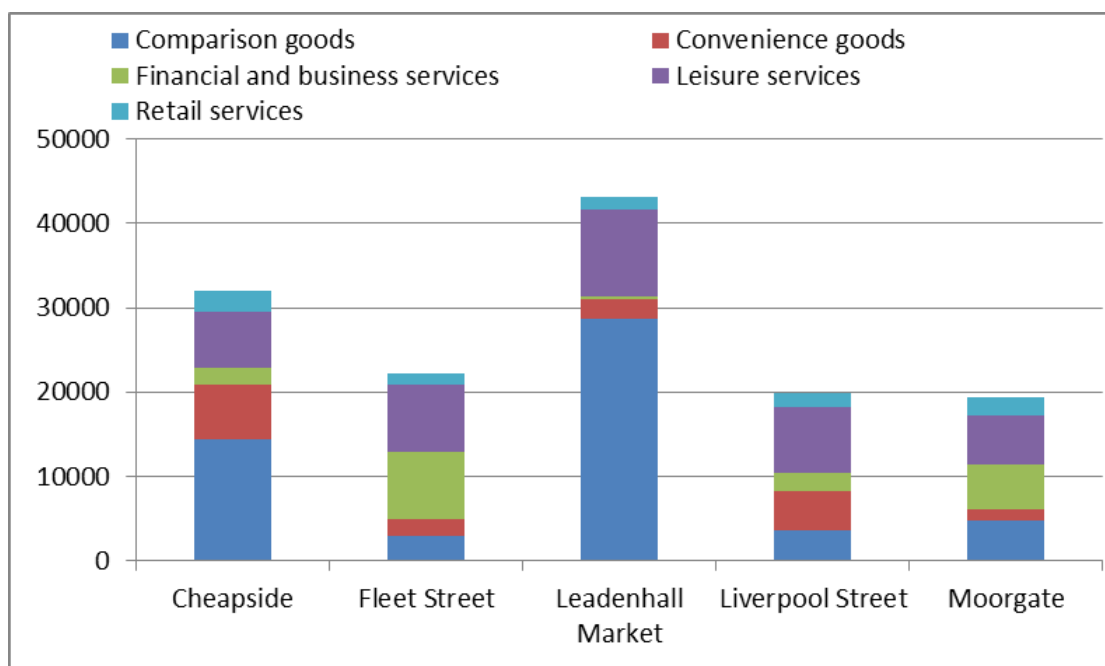


Figure 41: Retail in PSCs by Experian Classification March 2016

Retail can also be classified by the Experian classification², as shown in Figure 41.

Figures 40 and 41 show whilst large amounts of floorspace within the PSCs comes under the A1 Planning Use Class, significantly less falls into the Experience comparison or convenience classification. This difference is usually due to coffee shops and sandwich bars which are classified as A1 in the Use Classes Order but are regarded a 'Leisure Service' by Experian.

Vacant Units

Retail demand in the City of London is high with only a small percentage of retail units vacant at any one time. The City's 2016 Retail Units Analysis Report found that 5% of retail units were vacant. This is approximately 3% of all retail floorspace in the City of London, but below the 8.8% retail unit vacancy rate for Greater London.

Retail Development Pipeline

The Retail Development Pipeline (Figure 42) shows the amount of retail floorspace that currently holds planning permission. At 31st March 2016, there was 3,600m² of net retail floorspace either under construction, or permitted but not commenced.

² **Comparison goods:** Shops selling goods that are not purchased frequently by individual customers, e.g. clothing, footwear, jewellery and furniture

Convenience goods: Grocery, food retailers and newsagents, selling goods that are bought frequently and normally involve a minimum effort of selection (e.g. food, drink and newspapers).

Financial and business services: Firms which provide advice and management skills in sectors such as banking, mortgages, business development companies, collections, data services, human resource management, transaction processing etc.

Leisure services: Recreational facilities including cafes, pubs and restaurants

Retail services: Merchandising, shop-fitting and installation, reverse logistics, project management to the retailing and manufacturing industry.

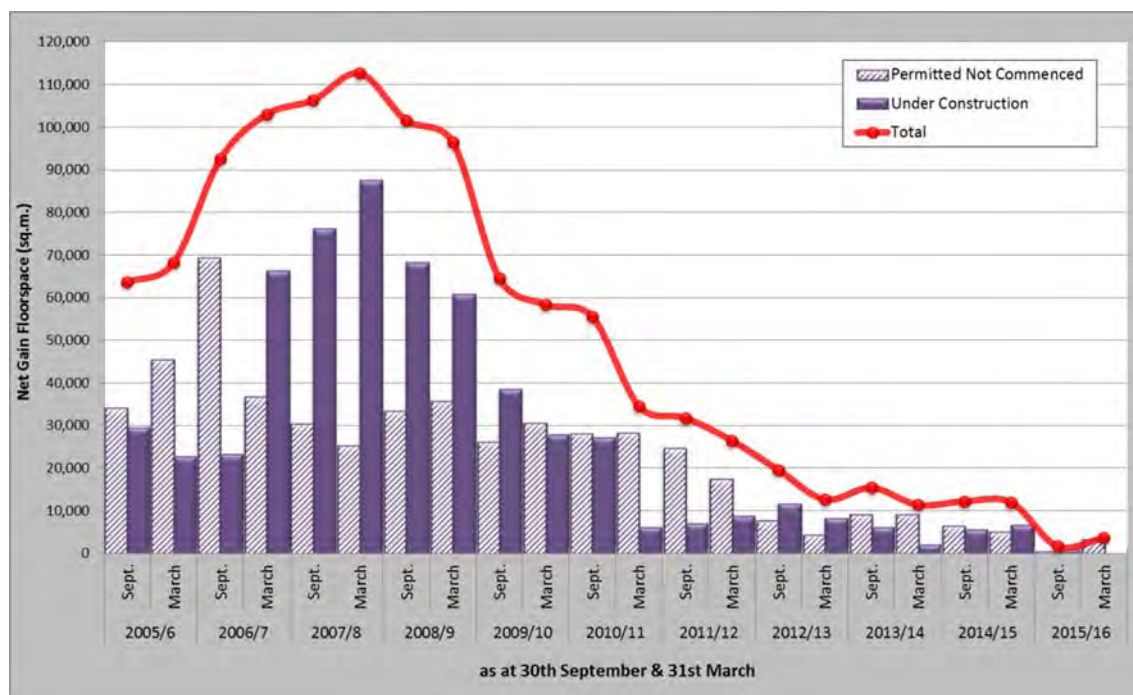


Figure 42: Retail development pipeline

Online sources of information:

City of London Retail Units Introduction 2016

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/land-use/Pages/default.aspx>

City of London Retail Units Analysis 2016

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/land-use/Pages/default.aspx>

Retail Units in the Principal Shopping Centres and Retail Links

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/land-use/Pages/default.aspx>

Housing

Housing development

The City's housing stock was 7,100 units at 31st March 2016, with concentrations around four estates (the Barbican, Golden Lane, Middlesex Street and Mansell Street) and also in areas of mixed uses such as Smithfield, the Temples, the Riverside (Queenhithe), City West, Carter Lane and Botolph Lane. The City has a relatively low usually resident population of approximately 8,300 residents (with an additional 1,400 second home owners). Future housing need in the City must take account of demographic growth, migration and the impact of welfare reforms.

The housing trajectory (Figure 43) indicates that over the current Local Plan period to 2025/26, new housing development in the City should exceed the London Plan target of 141 additional units each year.

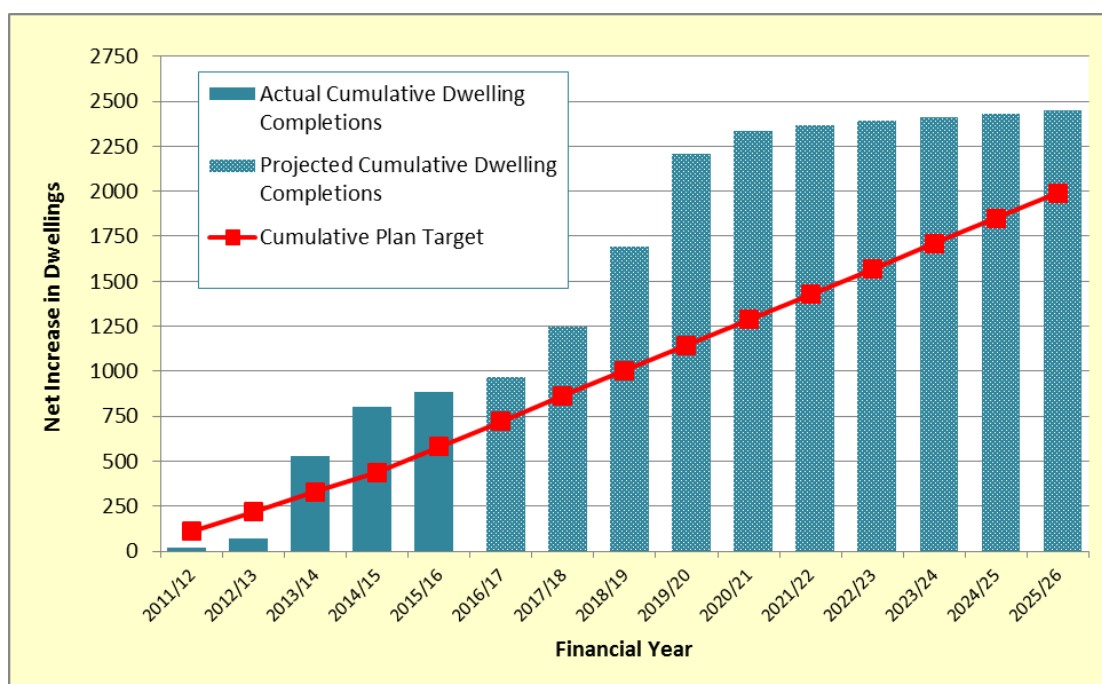


Figure 43: Cumulative Housing Trajectory

Whilst the London Plan target should be exceeded over the Local Plan period, completions vary considerably from year to year. In 2015/16, for example, 82 net additional dwellings were completed, which falls below the revised target of 141 units.

Projected additional dwellings for future years are analysed based upon sites with planning permission which have a high probability of being implemented, and potential net additions without planning permission which are based upon local housing capacity that may be developed depending on market conditions. High levels of housing completions are projected in 2017/18 and 2018/19. Both of these years are projected to exceed the London Plan target of 141 units per year. This will be achieved primarily through the Bart's Square scheme in Smithfield.

The City of London Strategic Housing Market Assessment 2016 has considered housing needs in the City over the projected period of the Local Plan Review, to 2036. This suggests that overall housing need averages 126 per year, below the annual target in the London Plan.

In 2015/16 over two thirds of residential units completed in the City of London were either studio or one bed apartments (68%). This reflects the nature of the City as a business district rather than a housing district. This is an increase of 2 percentage points from the previous year when 66% of completed units were one bedroom or smaller.

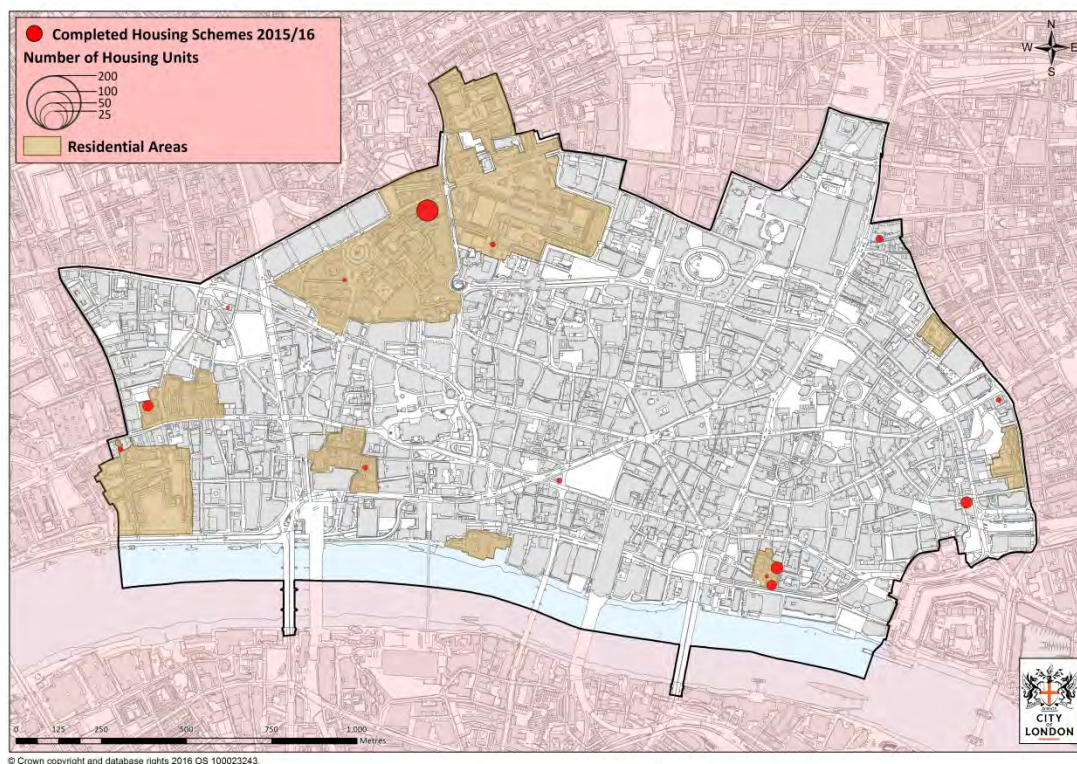


Figure 44: Location of net additional dwelling completions 2015/16

Affordable housing

Housing in the City is expensive, with the average residential unit costing £827,500 in 2015. Lower quartile prices are also high, at £595,200 in September 2015, with lower quartile rents at £1,681 per month. New affordable housing should ideally be provided on site, however as land within the City is expensive and limited, the City Corporation works with housing partners to deliver new affordable housing in sites in the City Fringe and in neighbouring boroughs.

A total of £14.2 million of contributions was received in 2015/16 across 17 developments. The applicant is required to pay this contribution on or before the implementation of the planning permission.

In 2015/16 the City of London spent £3.91 million on affordable housing over 6 schemes. The key expenditure (£3.5 million) was for the development of a Community Centre and 18 housing units at the City of London Avondale Square Estate in Southwark.

In July 2016, the total amount of unspent contributions for affordable housing stood at £55 million. At the same time, the City Corporation has an active development programme for new affordable housing which aims to deliver 700 new affordable units on City Corporation estates by 2026.

Online sources of information:

Local Plan Monitoring Paper – Policy CS21: Housing
<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/core-strategy-monitoring-reports.aspx>

Social and Community Infrastructure

Communities

The City's population differs from other areas in that the daytime population is dominated by workers, with residents forming a small but important fraction. Provision of services for the 8,300 people whose usual residence is in the City and the 1,400 with second homes in the City entails partnership working with neighbouring boroughs, to ensure that cost effective health, education and social services can be provided. Most households in the City are small and almost 56% of residents live alone.

The usually resident population will increase over the period of the Plan and is predicted to rise to 9,700 by 2026 and further to 10,200 By 2036. The working population is projected to increase to at least 428,000 by 2026, with the latest projections suggesting that it could increase to 575,000 by 2036. These increases will have implications for the effective delivery of health, education and social services to the resident and working populations.

The City is a relatively affluent area and falls within the 40% least deprived local authorities in England. However, disparities exist. While the Barbican West and East are amongst the 20% least deprived residential areas in England, Mansell Street and Petticoat Lane areas are among the 40% most deprived.

Services and facilities

There are several public doctors and dentists serving the City's residential population and large numbers of privately run health facilities in the City which mainly cater for the needs of the working population. The City of London Health and Wellbeing Board is seeking to provide facilities to cater for the needs of the growing working population.

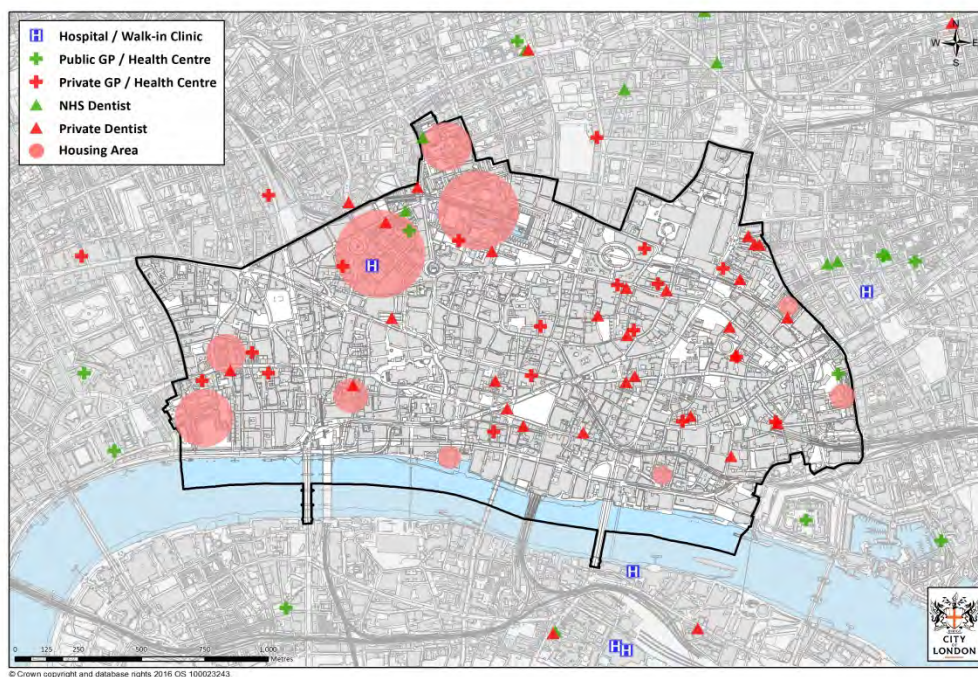


Figure 45: Distribution of health facilities in the City

The City has a significant student population including a specialist medical school with a presence at St Bartholomew's Hospital, performing arts at the Guildhall School of Music and Drama in the Barbican and a campus of the London Metropolitan University. The student population of the City may change from its current level (29,000) as educational institutions such as the London Metropolitan University consolidate their operations and provincial universities seek satellite space in central London.

The City has one primary school, Sir John Cass, and several independent schools. The City Corporation sponsors four secondary academies in Islington, Southwark and Hackney which cater for children living in the City. Through the newly formed Multi-Academy Trust the City Corporation will be opening four new academy schools in neighbouring boroughs over the next three years; two secondary academies and two primaries.

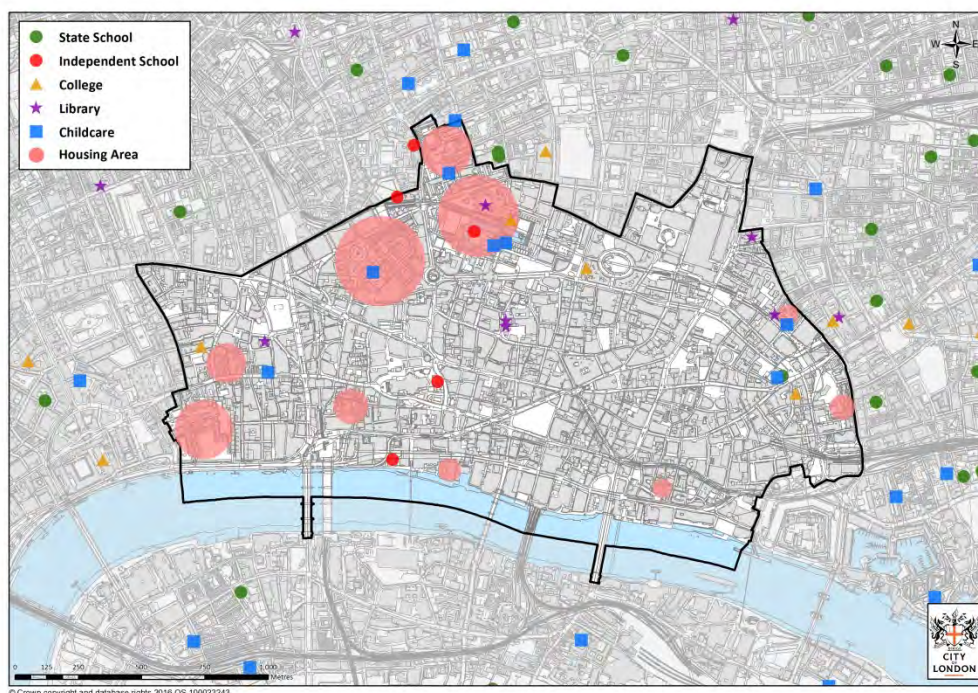


Figure 46: Distribution of skills and education facilities in the City

Online sources of information:

City of London Community Info

<http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/development-and-population-information/Pages/demography-and-housing.aspx>

