
LONDON OFFICE FLOORSPACE PROJECTIONS

REPORT - JULY 2014



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City Hall
The Queen's Walk
More London
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www.london.gov.uk
enquiries 020 7983 4100
minicom 020 7983 4458

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	Name	Position	Signature	Date
Prepared by:	AL	Associate		
	DL	LLP Director		
Reviewed by:	DL	LLP Director		
Approved by:	DL	LLP Director		
For and on behalf of Peter Brett Associates LLP				

Revision	Date	Description	Prepared	Reviewed	Approved

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1 Introduction

1.1 Study Brief

- 1.1.1 This paper reviews the office employment forecasts that were used to inform the 2012 London Office Policy Review (LOPR 2012) in the light of more recent data.
- 1.1.2 The purpose is to provide an updated view on the forecast demand for office employment space by borough in order to inform the Further Alterations to the London Plan (FALP).

1.2 Approach

- 1.2.1 Our approach to forecasting demand follows three steps:
- Forecast of employment by sector
 - Mapping of employment sectors to office sectors
 - Application of employment density ratios
- 1.2.2 The results are then reality checked and re-calibrated with reference to past completion rates.
- 1.2.3 We discuss each of these points in turn.

2 Employment Forecasts

2.1 GLA Employment Projections

- 2.1.1 The GLA provide sector level forecasts and borough employment projections consistent with the Workforce Jobs definition.
- 2.1.2 The sector forecasts are produced for the whole of London for 16 employment sectors and presented in Table 2.1 below. These forecasts form the control totals for the office employment forecasts. The methodology for the employment forecasts is set out in London Labour Market Projections¹ and is summarised in the report as follows: *“To construct long-term employment projections for London, GLA Economics use a trend-based methodology. This looks at the historical relationships between output and employment (or productivity) to ascertain the future relationship between the two. This provides an indication of the output growth required to keep employment in London stable (or for the employment growth rate to be zero). Combined with an assumed output growth rate for London, these two assumptions determine the projected employment growth. Further details on the methodology can be found in GLA Economics Working Paper 51: Employment Projection for London by sector and trend-based projections by borough, December 2011.”*²

Table 2-1 GLA Sector Forecasts

	2011	2016	2021	2026	2031	2036
Primary & utilities	32,000	27,300	23,200	19,700	16,600	14,000
Manufacturing	129,000	99,500	76,500	58,500	44,600	33,900
Construction	255,000	255,800	255,300	253,900	251,500	248,400
Wholesale	183,512	169,200	155,300	142,000	129,300	117,400
Retail	417,488	424,600	429,900	433,400	435,500	436,100
Transportation and Storage	265,000	252,400	239,200	225,800	212,400	199,200
Accommodation and food service activities	357,000	387,300	418,300	449,900	482,200	515,100
Information and Communication	360,000	391,900	424,700	458,300	492,800	528,200
Financial and insurance activities	368,000	366,600	363,400	358,900	353,100	346,300
Professional, Real Estate, Scientific and technical activities	670,000	744,900	824,200	908,300	997,400	1,091,700
Administrative and support service activities	463,000	503,100	544,100	586,100	629,100	673,000
Public Admin and defence	226,000	217,200	207,700	197,900	187,800	177,700
Education	353,000	365,900	377,600	388,000	397,300	405,500
Health	513,000	529,100	543,100	555,200	565,500	574,200
Arts, entertainment and recreation	164,000	173,000	181,600	189,900	197,800	205,400
Other services	139,000	149,300	159,700	170,100	180,500	191,000
All sectors	4,896,000	5,057,200	5,223,700	5,395,700	5,573,400	5,756,900

Source: GLA Economics

2.2 Comparative Forecasts

- 2.2.1 The employment forecasts determine the level of growth and hence demand for employment floorspace. They are thus a key input. But like all such forecast are subject to change, They are a best estimate at a moment in time and as economic conditions

¹ London Labour Market Projections – GLA Economics (April 2013)

² Working Paper 51: Employment Projection for London by sector and trend-based projections by borough, - GLA Economics (December 2011)

London Office Floorspace Projections

change or new economic data becomes available or is revised then the projections are likely to change³.

- 2.2.2 By way of a sensitivity test we have also compared the GLA's projections with those prepared by other forecasting bodies.
- 2.2.3 Experian projections by sector for the period 2011-31 are compared to the GLA in the table below. Overall the Experian projections are much more bullish than those of the GLA. They show growth of 1.1m (22.7%) compared to 680,000 (13.8%) for the GLA.

Table 2-2 Comparison of GLA and Experian Forecasts

	2011-31 GLA	2011-31 Experian
Primary & utilities	-15,394	5,340
Manufacturing	-84,422	-35,630
Construction	-3,460	38,310
Wholesale	-54,204	23,330
Retail	17,982	83,670
Transportation and Storage	-52,592	78,160
Accommodation and food service activities	125,163	99,390
Information and Communication	132,788	92,890
Financial and insurance activities	-14,922	90,250
Professional, Real Estate, Scientific and technical activities	327,386	293,540
Administrative and support service activities	166,103	178,810
Public Admin and defence	-38,206	-59,380
Education	44,271	82,850
Health	52,541	102,550
Arts, entertainment and recreation	33,808	23,220
Other services	41,519	20,890
All sectors	677,362	1,118,190

Source: GLA Economics/Experian 2013 ©

- Experian project positive growth for five sectors – Primary & Utilities; Construction; Wholesale; Transport & Storage; and Financial and Insurance Activities – where the GLA have forecast negative growth.
 - Experian also project significantly higher growth for Retail; Education; and Health. The forecast decline for Manufacturing is also lower under the Experian projections.
 - By contrast the GLA projects higher growth than Experian in Accommodation and Food services; Information and Communication; and Professional, Real Estate, Scientific and Technical activities.
- 2.2.4 In April 2013 Oxford Economics published forecasts for the period to 2020 in a research report for the City Corporation. These are set out below. Although only for a ten year period the forecast showed growth of 755,000 or a rate of 1.5% p.a.

³ GLA Economics have recently published a review of their Economic Forecasts: 'Performance of GLA Economics' employment projections' – Current Issues Note 40 (January 2014)

2.2.5 These forecasts may to some extent represent recovery from recession and hence not the long run trend. We have therefore also looked at the growth rate for the period 2015-20 and, though reduced compared with growth from 2010, this still represents a growth rate of 1.3% p.a. which is more than twice the GLA rate over the long run.

Table 2-3 Oxford Economics London Employment Forecasts 2010-20

	2010	2011	2015	2020	2010-20	2010-20%	2010-20% p.a.	2015-20% p.a.
Primary	4,300	4,300	4,100	3,600	-700	-16.3%	-1.8%	-2.6%
Manufacturing	138,300	140,000	134,300	124,700	-13,600	-9.8%	-1.0%	-1.5%
Construction	278,600	287,500	317,400	342,600	64,000	23.0%	2.1%	1.5%
Wholesale & Retail	571,000	590,500	621,900	668,700	97,700	17.1%	1.6%	1.5%
Transportation & Storage	253,800	256,500	277,700	291,900	38,100	15.0%	1.4%	1.0%
Accommodation & Food	310,000	340,600	379,300	411,000	101,000	32.6%	2.9%	1.6%
Information & Communication	341,100	367,600	403,900	430,200	89,100	26.1%	2.3%	1.3%
Financial & Insurance	340,700	358,200	362,800	364,300	23,600	6.9%	0.7%	0.1%
Real Estate	99,600	88,800	98,800	111,700	12,100	12.1%	1.2%	2.5%
Professional, Scientific & Technical	596,900	582,100	668,900	757,800	160,900	27.0%	2.4%	2.5%
Administrative & Support	480,600	481,600	544,100	614,300	133,700	27.8%	2.5%	2.5%
Public Admin & Defence	238,900	231,800	208,300	193,600	-45,300	-19.0%	-2.1%	-1.5%
Health & Education	806,200	826,900	815,200	817,700	11,500	1.4%	0.1%	0.1%
Other Services	344,000	359,900	382,900	426,800	82,800	24.1%	2.2%	2.2%
Total	4,804,000	4,916,400	5,219,600	5,558,900	754,900	15.7%	1.5%	1.3%

Source: Oxford Economics

2.2.6 Professional Scientific and Technical and Administrative & Support are again the big growth sectors,

2.2.7 The table below summarises different employment projections for London covering both previous GLA versions and also those of other forecasting institutions. As can be seen these cover a range of views. Whilst generating a high level of employment growth the GLA forecasts do not appear over-optimistic when compared to other forecasts.

2.2.8 Comparison with past growth needs to take account of the business cycle. But by way of illustration the number of employees in London grew by 0.3% p.a. over the period 1981-2011, or by 0.9% p.a. over the period 1991-2011. The two peak to peak periods of 1988-2001 and 2001-2008 both produced growth at an average of 0.6% p.a. In this regard the overall GLA employment projections seem reasonable unless we are expecting some form of long-run structural change.

London Office Floorspace Projections

Table 2-4 Forecast Comparisons Employment ('000s)

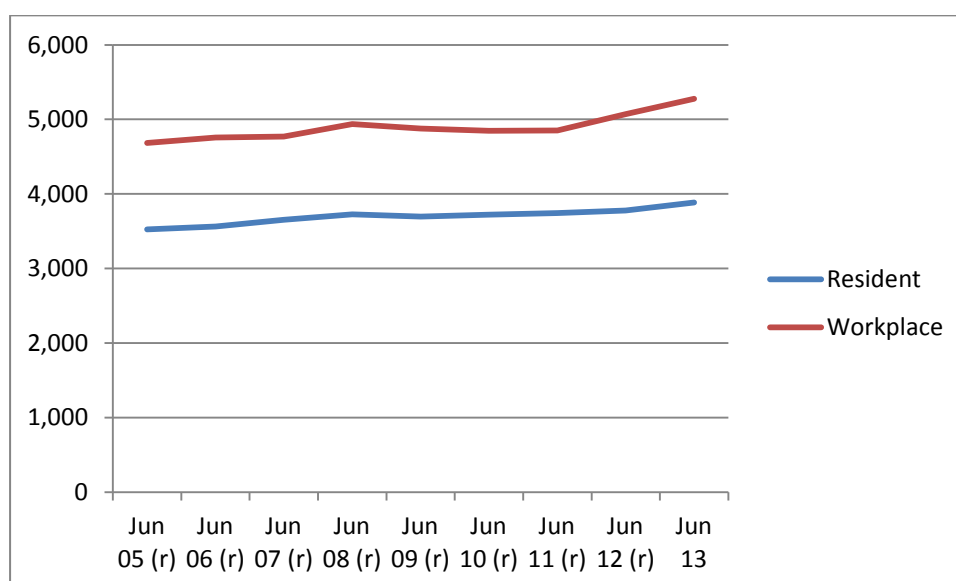
Forecasting Body	Date	Fcst Period	2011	2021	2031	2041	Period Yrs	Growth	Avg p.a.	% p.a.
GLA Economics	Apr-13	2011-41	4,896	5,224	5,573	5,946	30	1,050	35	0.6%
GLA Economics WP51	Dec-11	2011-36	4,803	5,089	5,393	5,552	25	749	30	0.5%
GLA Economics WP38	Nov-09	2011-31	4,797	5,114	5,452		20	655	33	0.6%
Experian	Dec-13	2011-31	4,935	5,609	6,054		20	1,119	56	1.0%
Oxford Economics	Apr-13	2010-20	4,804	5,559			10	755	76	1.5%
IER/CE Working Futures	Aug-12	2010-20	4,683	5,037			10	354	35	0.7%
Oxford Economics	Jun-10	2010-31	4,645		5,400		21	755	36	0.7%

2.3 Latest Employment Data

2.3.1 The most recent employment data shows workforce jobs in London has risen to 5.35m (September 2013)⁴. Thus employment has already reached the levels projected for 2026 in the GLA Economics Projections.

2.3.2 In recent years the number of workforce jobs in London has grown at a slightly faster rate than number of resident workers. Over the period 2005-13 the resident workforce grew at an average of 1.2% p.a. whilst the workforce jobs grew at an average of 1.5% p.a. Population projections for London show continued growth at an average of 0.6% p.a..

Figure 2-1 Resident and Workplace Employment Change



Source: ONS

2.3.3 The more recent employment data taken together with employment projections from other forecasting bodies would suggest the balance of risk is on the upside. i.e. there may be higher employment growth and hence greater demand for office floorspace than implied by the GLA forecasts, especially in the near term.

⁴ The GLA employment series does not include 'Activities of households' and HM Force and Government supported trainees so the comparable figure would be 5.33m

2.4 Borough Sector Employment Projections

- 2.4.1 The GLA's sector level employment projections form the control totals for the office projections. The GLA do not produce sector forecast at borough level. We generate borough sector forecasts by initially assuming that each sector grows at the same rate as the London sector forecasts. The London sector growth rates are applied to the 2011 borough sector data (16 sectors). The input data for this is BRES 2011 employment data which is grossed up to 2011 borough employment totals to account for self-employed.
- 2.4.2 Our borough sector forecasts are then calibrated to ensure consistency with both the GLA's London sector level forecasts and with the GLA's borough level forecasts. A process of reiterations to these dual constraints is undertaken.
- 2.4.3 The employment projections are for employment in total (workforce jobs definition).

Employment Projections by Land Use Category

- 2.4.4 The next step is to produce the employment land use borough forecasts (office, industrial, retail and other uses). The land use projections are later required to produce the LTS development led forecasts which are based on estimates of employment capacity by land use.
- 2.4.5 The base year borough land use data is collected from the Business Register Employment Survey data (BRES) at the 5 digit Standard Industrial Classification (SIC) level. We estimate a share of office and industrial jobs for each of the 16 sector borough employment totals. The ratio is carried forward to estimate industrial and office forecasts for each borough applied to the 16 sector borough forecasts. "Other" jobs are calculated by subtraction from the total.
- 2.4.6 The sectoral definitions used to create this land use mapping are set out in the Appendix. Whilst such matches will never be perfect it is a best fit based on accumulated studies and experience. It uses the office employment definition used for the London Office Policy Review and the industrial definition used for the London Industrial and Warehousing Demand Study.
- 2.4.7 There are potentially significant shifts underway in the manner in which employers occupy space driven by technology and changes in working practices. This land use mapping should be kept under continual review. It is based on total jobs and there may be some differential characteristics in the way certain categories of workers occupy space. For example self-employed workers in Outer London in some sectors may be working from home rather than occupying office space, whereas in Central London workplaces self-employed workers in those same sectors will probably be occupying office space.
- 2.4.8 Office employment projections by borough derived from the GLA Triangulated employment projections are set out in Table 2.5 overleaf.
- 2.4.9 The projected office employment growth of 575,000 is substantially higher than the 303,000 projected for London Plan 2011. In part this is due to the longer time period of 25 years (2011-36) rather than the 20 year time period of the London Plan (2011-31). But that only accounts for part of the difference.
- 2.4.10 The principal reason lies in the forecast growth sectors. The office projections in the London Plan 2011 were informed by LOPR(09), which in turn was based on the GLA employment projections set out in WP38⁵. In WP38 the principal office employment sectors were Financial Services and Business Services, which together were projected

⁵ Working Paper38: Employment Projection for London by sector and trend-based projections by borough, - GLA Economics (November 2009)

to increase by 326,000 over the period 2011-31 (virtually all of this accounted for by Business Services).

- 2.4.11 As shown in Table 2.1 the Professional, Real Estate, Scientific and Technical Services activities, which is predominantly office based, is projected to grow by 422,000 over the period 2011-36. Other sectors with large office content such as Administrative and Support Services and Information and Communications have projected growth of 210,000 and 168,000 respectively. As noted these sectors are also projected to have high levels of growth in both the Experian and Oxford Economics forecasts.
- 2.4.12 It may be that forecast growth in office employment sectors was on the low side in WP38. WP38 itself saw a reduction in Business Services employment growth compared to previous projections. As the report notes, *“the growth in Business Services employment decreases from 526,000 (from the last forecast) to 372,000 (in this forecast). As Business Services is a residual, this change has occurred as a result of changes in the projections of the other sectors”*.⁶

⁶ Working Paper38: Employment Projection for London by sector and trend-based projections by borough, - GLA Economics (November 2009)

Table 2-5 Office Employment Projections by Borough 2011-36

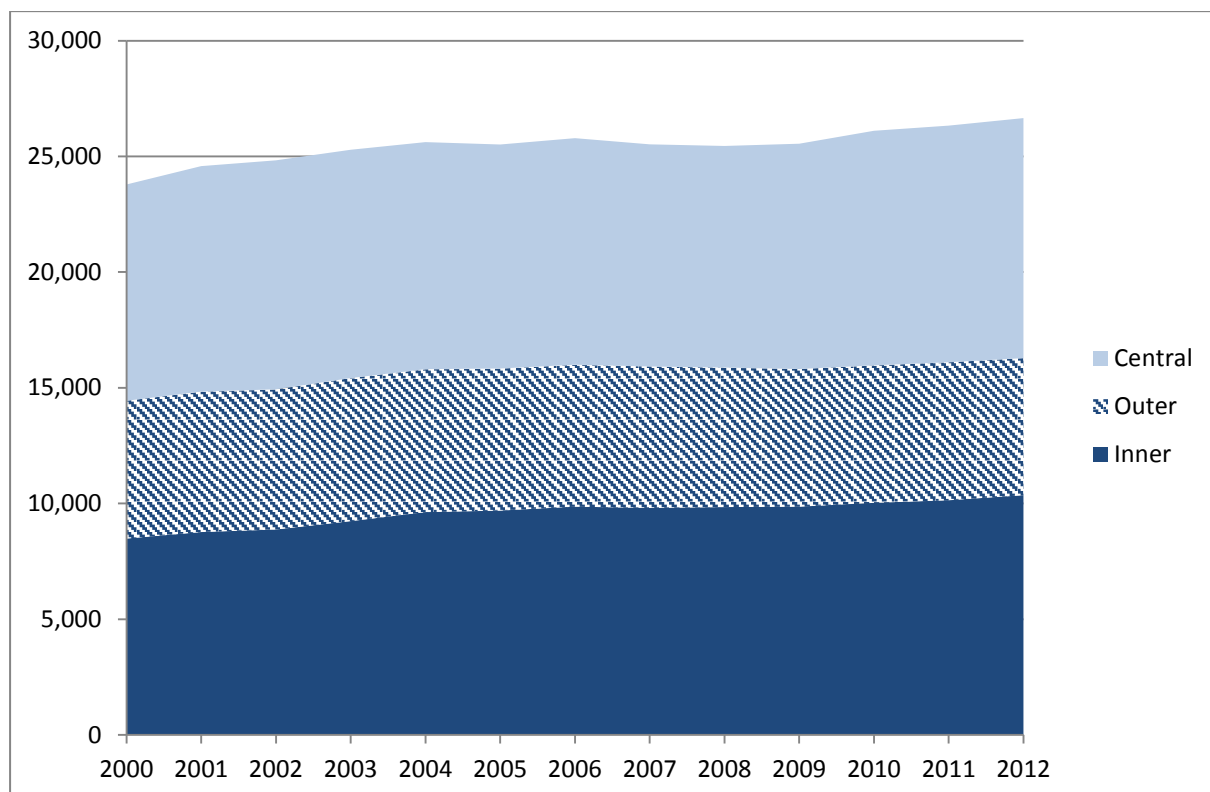
	2011	2036	2011-36
Barking and Dagenham	6,000	9,000	3,000
Barnet	30,000	43,000	13,000
Bexley	9,000	13,000	4,000
Brent	16,000	27,000	11,000
Bromley	23,000	31,000	9,000
Camden	136,000	195,000	60,000
City of London	328,000	381,000	53,000
Croydon	35,000	48,000	13,000
Ealing	26,000	38,000	12,000
Enfield	15,000	21,000	6,000
Greenwich	11,000	17,000	6,000
Hackney	34,000	45,000	11,000
Hammersmith and Fulham	46,000	72,000	27,000
Haringey	12,000	19,000	7,000
Harrow	17,000	25,000	8,000
Havering	9,000	13,000	4,000
Hillingdon	29,000	47,000	18,000
Hounslow	38,000	57,000	19,000
Islington	87,000	125,000	38,000
Kensington and Chelsea	34,000	48,000	14,000
Kingston upon Thames	18,000	25,000	7,000
Lambeth	34,000	48,000	14,000
Lewisham	11,000	16,000	5,000
Merton	16,000	25,000	8,000
Newham	15,000	21,000	6,000
Redbridge	14,000	20,000	6,000
Richmond upon Thames	27,000	38,000	10,000
Southwark	92,000	138,000	46,000
Sutton	12,000	17,000	5,000
Tower Hamlets	133,000	159,000	26,000
Waltham Forest	8,000	12,000	4,000
Wandsworth	26,000	42,000	16,000
Westminster	306,000	392,000	86,000
London	1,650,000	2,226,000	575,000

3 Floorspace Stock and Density Ratios

3.1 Floorspace Stock

3.1.1 Over the period 2000-12 the total office floorspace stock in London grew by 2.9m sq m, an increase of 12.1%. This was made up of an increase of 1.9m sq m (22%) in Inner London, 1.0m sq m (11%) in the two Central London Boroughs of City and Westminster⁷, whilst in Outer London the total stock remained relatively static declining by 31,000 sq m in total.

Figure 3-1 Floorspace Stock Change by Broad Policy Area 2000-20112



3.2 Office Completions

3.2.1 Over the period 2000-12 the London Development Database (LDD) recorded a total of 7.3m sq m of office completions in London, an annual average of 600,000 sq m. This however is the gross floorspace stock developed and does not record any losses to stock. In terms of net completions there were an additional 2.9m sq m recorded as additions to the office stock. This represents an addition of 240,000 sq m p.a., or an addition to the stock at the rate of 1.0% p.a. based on 2000 stock data.

3.2.2 The net additional office completions from LDD data match the change in stock recorded over the period 2000-12 from Valuation Office Agency (VOA) office floorspace data, which also shows an increase of 2.9m sq m.

3.2.3 If office floorspace stock were to continue to grow at an average of 240,000 sq m a year then this would imply net additional demand of 6.0m sq m over the Plan period 2011-36.

⁷ We use the City and Westminster as the proxy for Central London in the analysis of VOA data as it is only available at Borough level and we cannot construct a data series for CAZ

- 3.2.4 The net completions of 2.9m sq m is made up of 1.6m sq m in Inner London, 1.0 m sq m in the Central London Boroughs of City and Westminster, Whilst Outer London saw an increase of 0.3m sq m.
- 3.2.5 The stock of office space has grown fastest in Inner London. For Inner London annual net completions have grown at a rate of 1.9% p.a. based on 2000 stock. This compares to 0.9% for the two Central London Boroughs and 0.4% p.a. increase in stock for Outer London. There is a slight discrepancy between the net completions and change in stock calculations for both Inner and Outer London.

Table 3-1 Office Stock and Completions 2000-12

	Inner	Outer	Central	London
Gross Completions	2,394,814	653,383	4,243,263	7,291,460
Annual Average	199,568	54,449	353,605	607,622
Completions/Stock	2.3%	0.9%	3.8%	2.6%
Net Completions	1,618,788	307,538	987,127	2,913,453
Annual Average	134,899	25,628	82,261	242,788
Completions/Stock	1.6%	0.4%	0.9%	1.0%
Change in Stock	1,942,000	-101,000	1,028,000	2,869,000
Annual Average	161,833	-8,417	85,667	239,083
Completions/Stock	1.9%	-0.1%	0.9%	1.0%
Gross/Net	1.5	2.1	4.3	2.5
Gross/Change Stock	1.2	-6.5	4.1	2.5

Source: LDD/VOA/PBA

- 3.2.6 Across London as a whole gross completion are 2.5 times higher than net completions or additions to stock. But the redevelopment ratio⁸ is much higher in Central London at 4.3:1.
- 3.2.7 The concentration of office activity in Central London is even more marked when looking at the Central Activities Zone (CAZ). 70% of net completions of the period 2000-12 were in CAZ with 18% in the rest of Inner London and 11% in Outer London. A total of 5.8m sq m of office space was completed over this period of which 2.0m sq m represented net additions to stock.

Table 3-2 Completions 2000-12 for CAZ, Rest of Inner and Outer

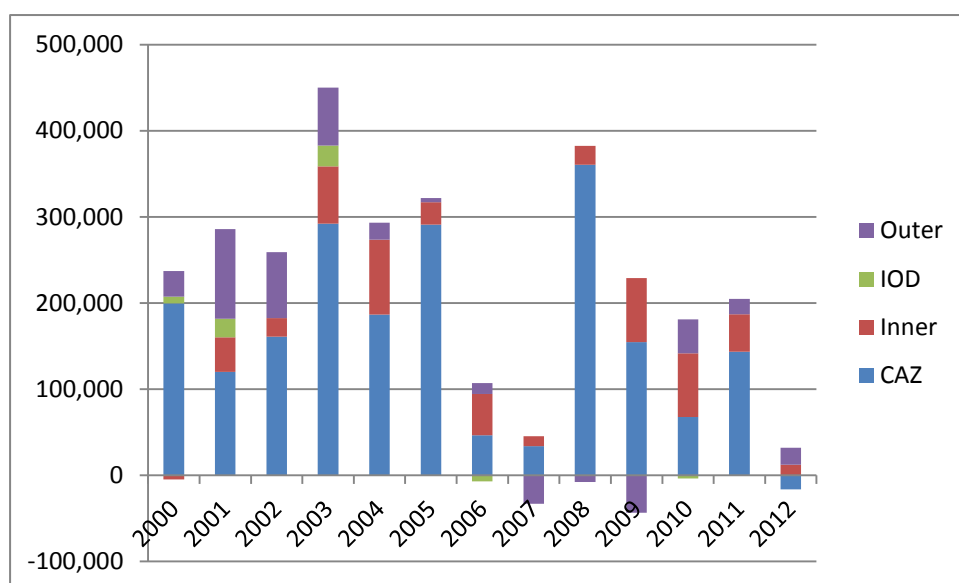
	CAZ	Rest of Inner	IOD	Outer	London
Gross Completions	5,816,670	767,014	54,393	653,383	7,291,460
Annual Average	484,723	63,918	4,533	54,449	607,622
Net Completions	2,041,568	521,589	42,758	307,538	2,913,453
Annual Average	170,131	43,466	3,563	25,628	242,788
Gross/Net	2.8	1.5	1.3	2.1	2.5
Net Completions as % of London total	70.1%	17.9%	1.5%	10.6%	100.0%

Source: LDD/PBA

- 3.2.8 The concentration of growth is even more marked in the latter part of the period with average annual completions for Outer London since 2005 of just 1,300 sq m p.a.

⁸ Calculated as the ratio of gross floorspace completions to net additions to stock

Figure 3-2 Net Additional Office Completions by Year



Source: LDD/PBA

3.3 Density Ratios⁹

London Office Policy Review 2012

- 3.3.1 The London Office Policy Review 2012 (LOPR 12) identifies a number of studies that have produced estimates of employment densities in offices. Having reviewed the evidence across the reports, it focuses on three reports by the British Council for Offices (BCO), Homes and Communities Agency (HCA) and National Audit Office (NAO). The NAO report was based purely on public sector evidence; and the HCA report was based on no empirical evidence at all. Nevertheless, both report densities “in line” with general thinking. Of the three, the BCO provides the most comprehensive and reliable evidence.
- 3.3.2 The densities produced by the three reports were: BCO, 11.8; HCA, 11.9, and NAO, 13.2 (all measured in sq m Net Internal Area (NIA) per person). LOPR 12 took these average densities and applied a ratio to reflect desk sharing. The benchmark ratio used is 1.2, i.e. 1.2 workers per desk¹⁰.
- 3.3.3 The result of this was that the BCO density of 11.8 converted to 9.8; the HCA density of 11.9 converted to 10.7 and the NAO density of 13.2 converted to 12.0. The average of these three – 10.8 – was then taken as the benchmark density with which to convert employment forecasts into floorspace demand.
- 3.3.4 LOPR 12 also converts the sq m NIA figures given thus far into gross internal area (GIA). This was based analysis of EGI data which showed that on average Net floorspace was 79% of Gross. Thus, for example, the overall average of 10.8 sq m converts to 13.7 sq m GIA.

Update

- 3.3.5 BCO (2009) has now been updated and replaced by BCO (2013). The new study comprised a sample of 2,485,484 sq m NIA across 381 properties, across the country. It is by far the most extensive study of occupancy densities undertaken.

⁹ This section was prepared by Ramidus Consulting

¹⁰ See London Officer Policy Review 2012 Figure 5.3 and para 5.5.9

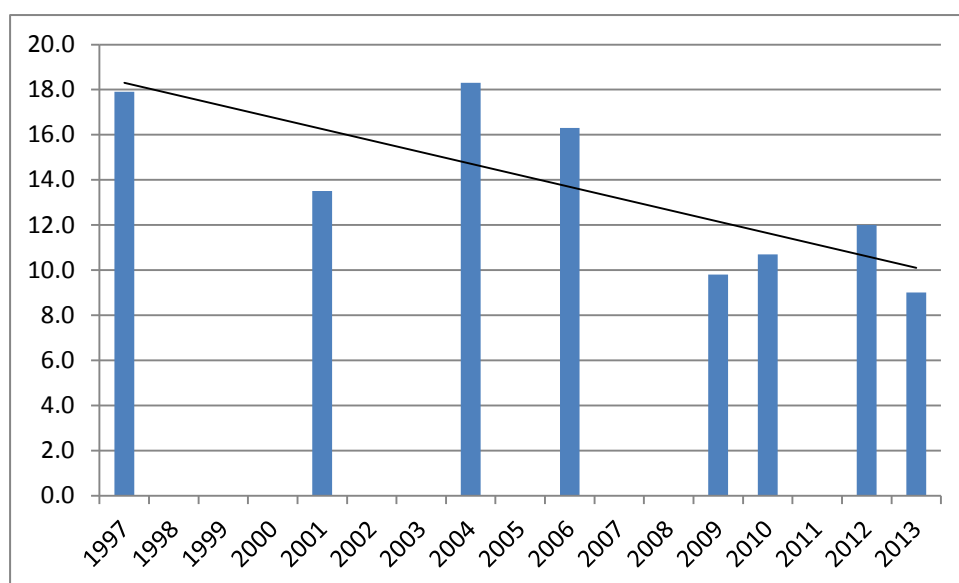
- 3.3.6 The overall finding was a mean density of 10.9 sq m, with 38% of the sample falling within the 8-10 sq m range; and 58% falling within the 8-12 sq m range
- 3.3.7 Within the overall 10.9 sq m mean, the London average density was found to be lower at 11.3. However, it is important to stress that the sample includes older properties as well as new. The purpose of the forecasts is to understand the demand for new space generated by employment change. It is therefore recommended that the higher density figure of 10.9 is adopted to reflect the greater efficiency of new buildings.
- 3.3.8 When the benchmark ratio of 1.2 workers per desk is applied, we derive an overall ratio of 9.0 sq m NIA. This converts to a gross figure of 11.3 sq m GIA.

Commentary

- 3.3.9 Given the qualifications over the HCA and NAO reports, it is strongly recommended that FALP (and future LOPRs) use the BCO (2013) report as the sole evidence base for further calculations of floorspace demand based on employment densities. It is comprehensive, reliable and up-to-date.
- 3.3.10 On this basis, the underlying density of 10.9 sq m NIA (13.7 sq m GIA), with a converted density of 9.0 sq m NIA (11.3 sq m GIA) to allow for the 1.2 ratio desk sharing ratio, should be the adopted figures going forward.
- 3.3.11 First, BCO (2013) saw average densities increase to 10.9 sq m from 11.8 sq m in BCO (2009). This was in-line with expectations given practical experience of occupier buildings. However, the study also noted that the rate of increase in densities appears to be slowing. Evidence from the mid-1990s suggests that offices then were around half as dense as many offices are being planned today. However, there is growing evidence that the rate of increase in densities is levelling out. This is to be expected, given the physical limitations of buildings.
- 3.3.12 Secondly, cost pressures (particularly rent) remain strong and occupiers continue to seek efficiencies from their space. This is leading to a more widespread adoption of desk sharing. This trend is being reinforced as the positive benefits of flexible working are being increasingly realised. There is plenty of evidence to demonstrate these trends, but no structured survey material that is reliable enough to use as a basis for projections. Given that the 9.0 sq m converted density given above might increase further in the future, it might be prudent to include scenario in projections that allows the 9.0 sq m to increase, to say, 8.0 sq m.
- 3.3.13 Finally, while projections seek to calculate the amount of space needed by a growing workforce, it is also true that occupiers of existing older stock are also increasing their densities, and that over time this will have the effect of increasing capacity within existing stock. This could have a significant impact on the projected demand for new space. Given the overall BCO (2013) density of 10.9 sq m, it is likely that the density within older stock (say, pre-1985) is considerably lower – perhaps 16-17 sq m. If greater efficiency in older stock is to be taken into account in calculations, then it would be reasonable to suggest that the 16-17 sq m might increase to, say, 14-15 sq m. The sharing ratio will also need to be added to this.
- 3.3.14 Whilst there is no one consistent time series successive surveys over time would indicate rising densities (a fall in the floorspace to worker ratio). This is illustrated in the Figure below where we have attempted to standardise on measurement form existing published surveys¹¹.

¹¹ Drawn from London Office Policy Review 2012 Figure 5.6 and BCO 2013 data set out above.

Figure 3-3 Floorspace to Worker Ratio (Sq m per worker) from published surveys over time

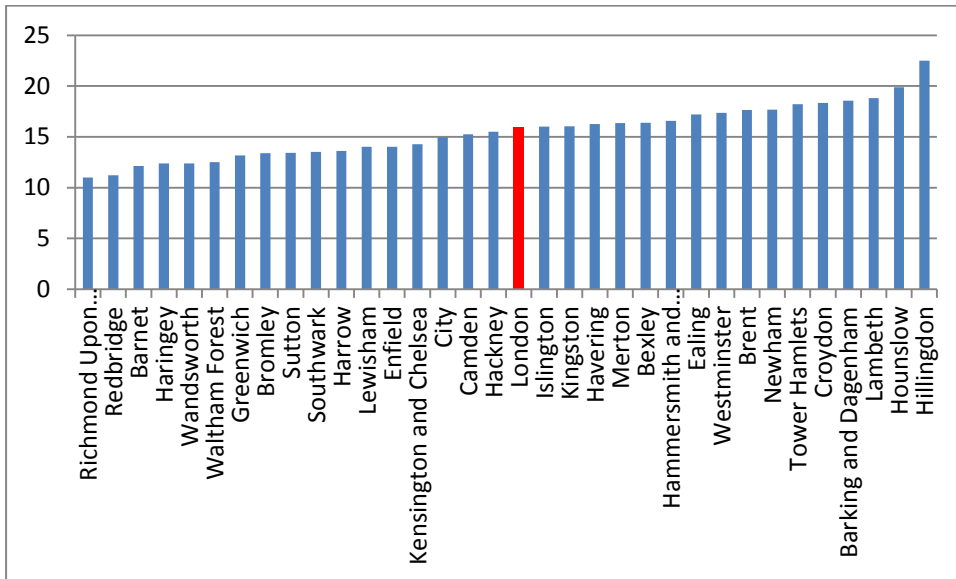


Source: PBA/LOPR/Surveys

3.4 Testing the Office Floorspace Definitions

- 3.4.1 In order to test our office floorspace definitions we have compared our office employment estimates based on BRES and GLA data to the VOA office floorspace stock data at borough level. This is illustrated in the figure below. For London the implied density ratio is 16 sq m per worker. Or if it is assumed that 8% of the stock is vacant then the implied occupied density ratio is 14.8 sq m per worker. These figures seem consistent with data from historic surveys.
- 3.4.2 Many of the larger central London office centres also have a ratio close to the London average. In the City it is a bit lower which is consistent with the City churning its office stock more rapidly and adopting newer working practices and space standards. Camden, Hackney and Islington are all close to the London average.
- 3.4.3 For boroughs with a higher floorspace per job ratio this may imply less efficient utilisation of old space, but is more likely a reflection of higher than optimal vacancy rates. This is probably the case with boroughs such as Hounslow and Croydon. For Westminster the explanation for the above average floorspace per job ratio is likely to lie in the more prestigious locations and higher value activities that reflect the office market in Westminster.
- 3.4.4 The boroughs with lower floorspace per job ratios are all Outer London boroughs and this probably reflects that lower value office activities that occur in outer London and hence densities are closer to those found in call centres. Another possible explanation is that in outer London our definition is to some degree over-estimating office jobs (inflating the denominator). That is, sectors that we would expect to occupy offices in Central London may not necessarily occupy office space in Outer London. We have tried to correct for this to some extent, but suspect there may still be some small over-estimation which will in turn feed through in to over-estimating the demand for office floorspace in Outer London.

Figure 3-4 Implied Office Density Ratios by Borough (Gross sq m per worker)



Source: VOA/PBA

4 Forecast Office Demand

4.1 Employment Projections

- 4.1.1 As in previous versions of LOPR, the office employment floorspace projections that informed LOPR12 were based on a 'Triangulated' employment projections that consisted of:
- Trend projections produced by GLA Economics as set out in WP51
 - Capacity projections based on a partial update of the London Employment Sites Database compiled by PBA Roger Tym
 - Accessibility projections updated to be re-based to the new WP51 growth forecasts.
- 4.1.2 The GLA have subsequently produced an updated Triangulated projection published in London Labour Market Projections – GLA Economics (April 2013). This forms the basis of our updated forecast employment estimates.
- 4.1.3 The Table below summarises the office employment projections by borough drawing on the GLA's Triangulated Employment projections. For London as a whole office jobs are projected to increase by 575,000 over the period 2011-36, an average of 23,000 a year. At an employment density ratio of 10.8 sq m per worker this would imply a net addition to stock of 6.2m sq m. If an 8% vacancy factor is added as in the previous London Plan then this would increase to 6.7m sq m.
- 4.1.4 If an employment density ratio of 12 sq m per worker were applied then this would require a net additional 6.9m sq m or 7.5m sq m if the 8% vacancy factor were applied.
- 4.1.5 At the lower density ratio of 9 sq m per worker recommended for adoption in the previous Chapter this would require a net additional 5.2m sq m or 5.6m sq m if the 8% vacancy rate were applied.

Table 4-1 Borough Office Employment and Floorspace Projections

	2011-36	9 sq m	+ 8%	10.8 sq m	+ 8%	12 sq m	+ 8%
Barking and Dagenham	3,000	29,000	31,000	35,000	37,000	38,000	41,000
Barnet	13,000	118,000	127,000	141,000	153,000	157,000	170,000
Bexley	4,000	40,000	43,000	48,000	52,000	54,000	58,000
Brent	11,000	96,000	103,000	115,000	124,000	128,000	138,000
Bromley	9,000	78,000	84,000	93,000	100,000	103,000	112,000
Camden	60,000	536,000	578,000	643,000	694,000	714,000	771,000
City of London	53,000	473,000	511,000	568,000	613,000	631,000	681,000
Croydon	13,000	114,000	124,000	137,000	148,000	152,000	165,000
Ealing	12,000	107,000	115,000	128,000	138,000	142,000	154,000
Enfield	6,000	57,000	61,000	68,000	74,000	76,000	82,000
Greenwich	6,000	50,000	54,000	60,000	65,000	67,000	72,000
Hackney	11,000	98,000	106,000	118,000	127,000	131,000	141,000
Hammersmith and Fulham	27,000	240,000	259,000	288,000	311,000	320,000	346,000
Haringey	7,000	67,000	73,000	81,000	87,000	90,000	97,000
Harrow	8,000	71,000	76,000	85,000	92,000	94,000	102,000
Havering	4,000	33,000	36,000	40,000	43,000	44,000	48,000
Hillingdon	18,000	164,000	177,000	197,000	213,000	219,000	236,000
Hounslow	19,000	171,000	185,000	205,000	222,000	228,000	246,000
Islington	38,000	343,000	370,000	411,000	444,000	457,000	493,000
Kensington and Chelsea	14,000	130,000	140,000	156,000	168,000	173,000	187,000
Kingston upon Thames	7,000	64,000	69,000	77,000	83,000	86,000	93,000
Lambeth	14,000	124,000	134,000	149,000	161,000	166,000	179,000
Lewisham	5,000	49,000	53,000	59,000	63,000	65,000	70,000
Merton	8,000	73,000	78,000	87,000	94,000	97,000	104,000
Newham	6,000	56,000	61,000	68,000	73,000	75,000	81,000
Redbridge	6,000	54,000	59,000	65,000	70,000	72,000	78,000
Richmond upon Thames	10,000	93,000	101,000	112,000	121,000	124,000	134,000
Southwark	46,000	416,000	449,000	499,000	539,000	555,000	599,000
Sutton	5,000	44,000	48,000	53,000	57,000	59,000	64,000
Tower Hamlets	26,000	233,000	251,000	279,000	301,000	310,000	335,000
Waltham Forest	4,000	35,000	38,000	42,000	45,000	46,000	50,000
Wandsworth	16,000	146,000	158,000	176,000	190,000	195,000	211,000
Westminster	86,000	777,000	840,000	933,000	1,007,000	1,036,000	1,119,000
London	575,000	5,178,000	5,593,000	6,214,000	6,711,000	6,905,000	7,457,000

4.2 Increasing Density Across the Office Stock

- 4.2.1 The approach set out above only applies the density ratio to the net change in stock. As noted in the previous chapter it is quite likely that in twenty-five years time (what are now) new working practices and workspace efficiency will be applied more widely across the whole of the office stock. Also as previously noted gross new completions are much higher than net additions to stock owing to redevelopment. This is especially the case in Central London where the ratio is around 4:1. This implies new stock, and hence higher density occupancy will apply to more than just the net additions to stock.
- 4.2.2 We have therefore constructed an alternative scenario that looks at an overall reduction in the floorspace to worker ratio by 2036. We have assumed that by 2036 the ratio of existing floorspace stock to office employment will have reduced to at least 15 sq m per worker (GEA) at the borough level by 2036. For those boroughs where the current ratio is below this level we have maintained it at its current ratio.
- 4.2.3 The results are set out in Table 4.2 overleaf with two different density assumptions shown for net additions to stock. One assumes it is occupied at 9 sq m per worker with an 8% vacancy allowance. This produces a demand estimate of 3.4m sq m of additional office floorspace.
- 4.2.4 The other assumes net additions to stock are occupied at 12 sq m per worker with an 8% vacancy allowance. This produces a demand estimate of 5.2m sq m of additional office floorspace.
- 4.2.5 For Tower Hamlets the net additional demand figure is negative. This is due to it being a borough with a large floorspace stock and an initial high implied floorspace per worker ratio at 2011 of 18.2 sq m. This implies there is a capacity to be had from increasing utilisation of this stock to 15 sq m per worker.

Table 4-2 Office Floorspace Projections Higher Stock Efficiency

	2011	2036 9 sq m	2011-36	2036 12 sq m	2011-36
Barking and Dagenham	103,000	114,000	11,000	125,000	22,000
Barnet	361,000	488,000	127,000	531,000	170,000
Bexley	147,000	178,000	31,000	193,000	46,000
Brent	283,000	344,000	61,000	378,000	95,000
Bromley	302,000	386,000	84,000	414,000	112,000
Camden	2,073,000	2,618,000	545,000	2,811,000	738,000
City of London	4,913,000	5,424,000	511,000	5,594,000	681,000
Croydon	647,000	653,000	6,000	694,000	47,000
Ealing	446,000	504,000	58,000	542,000	96,000
Enfield	204,000	265,000	61,000	286,000	82,000
Greenwich	149,000	203,000	54,000	221,000	72,000
Hackney	530,000	618,000	88,000	654,000	124,000
Hammersmith and Fulham	755,000	942,000	187,000	1,029,000	274,000
Haringey	146,000	219,000	73,000	243,000	97,000
Harrow	230,000	306,000	76,000	332,000	102,000
Havering	153,000	177,000	24,000	189,000	36,000
Hillingdon	653,000	612,000	-41,000	672,000	19,000
Hounslow	749,000	750,000	1,000	811,000	62,000
Islington	1,389,000	1,672,000	283,000	1,795,000	406,000
Kensington and Chelsea	482,000	622,000	140,000	669,000	187,000
Kingston upon Thames	290,000	341,000	51,000	364,000	74,000
Lambeth	637,000	643,000	6,000	687,000	50,000
Lewisham	150,000	203,000	53,000	220,000	70,000
Merton	269,000	325,000	56,000	351,000	82,000
Newham	260,000	281,000	21,000	302,000	42,000
Redbridge	156,000	215,000	59,000	234,000	78,000
Richmond upon Thames	299,000	400,000	101,000	433,000	134,000
Southwark	1,241,000	1,690,000	449,000	1,840,000	599,000
Sutton	161,000	209,000	48,000	225,000	64,000
Tower Hamlets	2,422,000	2,247,000	-175,000	2,331,000	-91,000
Waltham Forest	100,000	138,000	38,000	150,000	50,000
Wandsworth	319,000	477,000	158,000	530,000	211,000
Westminster	5,311,000	5,431,000	120,000	5,711,000	400,000
London	26,330,000	29,695,000	3,365,000	31,559,000	5,229,000

4.3 Comparison with Past Stock Change

- 4.3.1 The table below compares the projections for employment demand with that derived from extrapolation of past growth. Past growth has been calculated by net change in office stock over the period 2000-12 from VOA data. We have calculated the annual (arithmetic) average over this and multiplied by the 25 years of the forecast plan period.
- 4.3.2 Estimates of employment have also been prepared for the Central Activities Zone (CAZ) are including the north of the Isle of Dogs. This enables the forecasts to be split between the broad policy areas of CAZ, Inner and Outer London.
- 4.3.3 At the London level the two figures are very similar. But the spatial dimension by borough is quite different. The forecast employment approach produces an estimate for CAZ of 3.0m sq m or 54% of the total. Whereas the approach based on stock change puts 5.2m or 88% of floorspace in CAZ. Conversely the forecast approach places 29% of growth in Outer London where past change would suggest there has been a small loss of office floorspace.
- 4.3.4 Given that the two methods produce a very different spatial pattern of growth a more conservative approach might be to produce a guideline based on an average of the two projections. This average is also included in the Table.

Table 4-3 Office Floorspace Projections by Borough 2011-36 (sq m)

	Forecast Employment Method	Past Stock Growth Method	Average
Barking and Dagenham	31,000	-4,000	13,000
Barnet	127,000	75,000	101,000
Bexley	43,000	35,000	39,000
Brent	103,000	58,000	81,000
Bromley	84,000	-92,000	-4,000
Camden	578,000	506,000	542,000
City of London	511,000	1,940,000	1,225,000
Croydon	124,000	-250,000	-63,000
Ealing	115,000	2,000	59,000
Enfield	61,000	31,000	46,000
Greenwich	54,000	50,000	52,000
Hackney	106,000	200,000	153,000
Hammersmith and Fulham	259,000	248,000	254,000
Haringey	73,000	-25,000	24,000
Harrow	76,000	-225,000	-74,000
Havering	36,000	-17,000	10,000
Hillingdon	177,000	-40,000	69,000
Hounslow	185,000	329,000	257,000
Islington	370,000	383,000	377,000
Kensington and Chelsea	140,000	-4,000	68,000
Kingston upon Thames	69,000	-54,000	8,000
Lambeth	134,000	25,000	80,000
Lewisham	53,000	6,000	30,000
Merton	78,000	15,000	46,000
Newham	61,000	146,000	103,000
Redbridge	59,000	-52,000	3,000
Richmond upon Thames	101,000	75,000	88,000
Southwark	449,000	494,000	471,000
Sutton	48,000	-71,000	-12,000
Tower Hamlets	251,000	2,063,000	1,157,000
Waltham Forest	38,000	-2,000	18,000
Wandsworth	158,000	-71,000	44,000
Westminster	840,000	202,000	521,000
London	5,593,000	5,977,000	5,785,000

4.3.5 Table 4.4 summarises the floorspace projections by the broad sub-regional policy areas of CAZ (including Canary Wharf), Inner and Outer

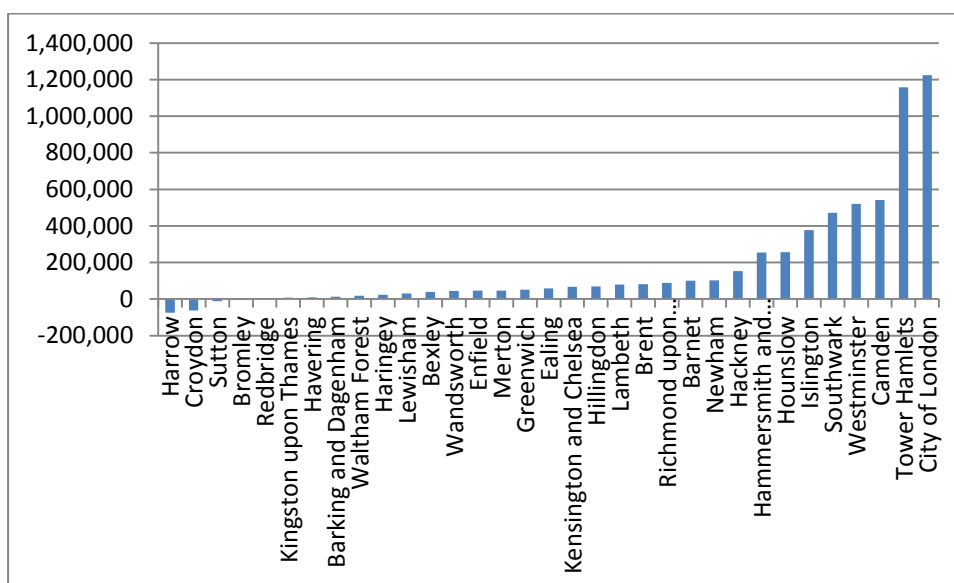
London Office Floorspace Projections

Table 4-4 Projected Growth in Office Floorspace by Policy Area 2011-36 (sq m)

	Forecast Employment Method	Past Stock Growth Method	Average
CAZ	3,044,000	5,244,000	4,144,000
CAZ ex Canary Wharf	2,889,000	3,978,000	3,433,000
Inner	920,000	944,000	932,000
Outer	1,628,000	-210,000	709,000
	5,593,000	5,977,000	5,785,000
CAZ	54.4%	87.7%	71.6%
CAZ ex Canary Wharf	51.6%	66.5%	59.3%
Inner	16.5%	15.8%	16.1%
Outer	29.1%	-3.5%	12.3%

- 4.3.6 The preferred guideline forecast is set out in the Figure below ranked by borough size. The largest projected growth is in the City and Tower Hamlets followed by the fringe Central London boroughs of Camden, Southwark and Islington.

Figure 4-1 Change in Office Floorspace Demand (Sq m) by Borough 2011-36



4.4 Sensitivity Test

- 4.4.1 There are inevitably a huge range of assumptions and uncertainties attached to such projections. The two key variables that will affect the projections of office space are the employment projections and density ratios.

Employment Forecasts

- 4.4.2 Comparison of the GLA forecasts with other employment projections would suggest that the balance of risk lies on the upside – i.e. employment growth in general and office employment growth in particular will be higher than those projected by GLA Economics.

Density Ratios

- 4.4.3 With regard to the density ratios used the risk is on the downside – i.e. density ratios may be higher (floorspace per worker lower) and hence lower demand for offices. A sensitivity test on 8 sq m per worker is set out in the Table overleaf. The demand for office floorspace will be lower still if existing stock is occupied at higher densities.
- 4.4.4 The balance of risks between the employment projections may even each other out.

London Office Floorspace Projections

Table 4-5 Office Floorspace Projections Sensitivity Test on Higher Density Ratios¹²

	2011	2036	2011-36	8 sq m	+ 8%
Barking and Dagenham	6,000	9,000	3,000	26,000	28,000
Barnet	30,000	43,000	13,000	105,000	113,000
Bexley	9,000	13,000	4,000	36,000	39,000
Brent	16,000	27,000	11,000	85,000	92,000
Bromley	23,000	31,000	9,000	69,000	74,000
Camden	136,000	195,000	60,000	476,000	514,000
City of London	328,000	381,000	53,000	420,000	454,000
Croydon	35,000	48,000	13,000	102,000	110,000
Ealing	26,000	38,000	12,000	95,000	102,000
Enfield	15,000	21,000	6,000	50,000	54,000
Greenwich	11,000	17,000	6,000	44,000	48,000
Hackney	34,000	45,000	11,000	87,000	94,000
Hammersmith and Fulham	46,000	72,000	27,000	213,000	231,000
Haringey	12,000	19,000	7,000	60,000	65,000
Harrow	17,000	25,000	8,000	63,000	68,000
Havering	9,000	13,000	4,000	30,000	32,000
Hillingdon	29,000	47,000	18,000	146,000	157,000
Hounslow	38,000	57,000	19,000	152,000	164,000
Islington	87,000	125,000	38,000	305,000	329,000
Kensington and Chelsea	34,000	48,000	14,000	115,000	124,000
Kingston upon Thames	18,000	25,000	7,000	57,000	62,000
Lambeth	34,000	48,000	14,000	111,000	119,000
Lewisham	11,000	16,000	5,000	43,000	47,000
Merton	16,000	25,000	8,000	65,000	70,000
Newham	15,000	21,000	6,000	50,000	54,000
Redbridge	14,000	20,000	6,000	48,000	52,000
Richmond upon Thames	27,000	38,000	10,000	83,000	90,000
Southwark	92,000	138,000	46,000	370,000	399,000
Sutton	12,000	17,000	5,000	39,000	42,000
Tower Hamlets	133,000	159,000	26,000	207,000	223,000
Waltham Forest	8,000	12,000	4,000	31,000	33,000
Wandsworth	26,000	42,000	16,000	130,000	140,000
Westminster	306,000	392,000	86,000	691,000	746,000
London	1,650,000	2,226,000	575,000	4,603,000	4,971,000

¹² Figures in Table are rounded to nearest '000.

Appendix A

Classification of Sectors to Land Use for B-class sectors

Source: PBA

	01000 : DEFRA/Scottish Executive Agricultural Data
	01110 : Growing of cereals (except rice), leguminous crops and oil seeds
	01120 : Growing of rice
	01130 : Growing of vegetables and melons, roots and tubers
	01140 : Growing of sugar cane
	01150 : Growing of tobacco
	01160 : Growing of fibre crops
	01190 : Growing of other non-perennial crops
	01210 : Growing of grapes
	01220 : Growing of tropical and subtropical fruits
	01230 : Growing of citrus fruits
	01240 : Growing of pome fruits and stone fruits
	01250 : Growing of other tree and bush fruits and nuts
	01260 : Growing of oleaginous fruits
	01270 : Growing of beverage crops
	01280 : Growing of spices, aromatic, drug and pharmaceutical crops
	01290 : Growing of other perennial crops
	01300 : Plant propagation
	01410 : Raising of dairy cattle
	01420 : Raising of other cattle and buffaloes
	01430 : Raising of horses and other equines
	01440 : Raising of camels and camelids
	01450 : Raising of sheep and goats
	01460 : Raising of swinepigs
	01470 : Raising of poultry
	01490 : Raising of other animals
	01500 : Mixed farming
	01610 : Support activities for crop production
	01621 : Farm animal boarding and care
	01629 : Support activities for animal production (other than farm animal boarding and care) nec
	01630 : Post-harvest crop activities
	01640 : Seed processing for propagation
	01700 : Hunting, trapping and related service activities
	02100 : Silviculture and other forestry activities
	02200 : Logging
	02300 : Gathering of wild growing non-wood products

London Office Floorspace Projections

	02400 : Support services to forestry
	03110 : Marine fishing
	03120 : Freshwater fishing
	03210 : Marine aquaculture
	03220 : Freshwater aquaculture
	05101 : Mining of hard coal from deep coal mines (underground mining)
	05102 : Mining of hard coal from open cast coal working (surface mining)
	05200 : Mining of lignite
	06100 : Extraction of crude petroleum
	06200 : Extraction of natural gas
	07100 : Mining of iron ores
	07210 : Mining of uranium and thorium ores
	07290 : Mining of other non-ferrous metal ores
	08110 : Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate
	08120 : Operation of gravel and sand pits; mining of clays and kaolin
	08910 : Mining of chemical and fertiliser minerals
	08920 : Extraction of peat
	08930 : Extraction of salt
	08990 : Other mining and quarrying nec
	09100 : Support activities for petroleum and natural gas extraction
	09900 : Support activities for other mining and quarrying
Industrial	10110 : Processing and preserving of meat
Industrial	10120 : Processing and preserving of poultry meat
Industrial	10130 : Production of meat and poultry meat products
Industrial	10200 : Processing and preserving of fish, crustaceans and molluscs
Industrial	10310 : Processing and preserving of potatoes
Industrial	10320 : Manufacture of fruit and vegetable juice
Industrial	10390 : Other processing and preserving of fruit and vegetables
Industrial	10410 : Manufacture of oils and fats
Industrial	10420 : Manufacture of margarine and similar edible fats
Industrial	10511 : Liquid milk and cream production
Industrial	10512 : Butter and cheese production
Industrial	10519 : Manufacture of milk products (other than liquid milk and cream, butter, cheese) nec
Industrial	10520 : Manufacture of ice cream
Industrial	10611 : Grain milling
Industrial	10612 : Manufacture of breakfast cereals and cereals-based foods
Industrial	10620 : Manufacture of starches and starch products
Industrial	10710 : Manufacture of bread; manufacture of fresh pastry goods and cakes
Industrial	10720 : Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes

Industrial	10730 : Manufacture of macaroni, noodles, couscous and similar farinaceous products
Industrial	10810 : Manufacture of sugar
Industrial	10821 : Manufacture of cocoa, and chocolate confectionery
Industrial	10822 : Manufacture of sugar confectionery
Industrial	10831 : Tea processing
Industrial	10832 : Production of coffee and coffee substitutes
Industrial	10840 : Manufacture of condiments and seasonings
Industrial	10850 : Manufacture of prepared meals and dishes
Industrial	10860 : Manufacture of homogenised food preparations and dietetic food
Industrial	10890 : Manufacture of other food products nec
Industrial	10910 : Manufacture of prepared feeds for farm animals
Industrial	10920 : Manufacture of prepared pet foods
Industrial	11010 : Distilling, rectifying and blending of spirits
Industrial	11020 : Manufacture of wine from grape
Industrial	11030 : Manufacture of cider and other fruit wines
Industrial	11040 : Manufacture of other non-distilled fermented beverages
Industrial	11050 : Manufacture of beer
Industrial	11060 : Manufacture of malt
Industrial	11070 : Manufacture of soft drinks; production of mineral waters and other bottled waters
Industrial	12000 : Manufacture of tobacco products
Industrial	13100 : Preparation and spinning of textile fibres
Industrial	13200 : Weaving of textiles
Industrial	13300 : Finishing of textiles
Industrial	13910 : Manufacture of knitted and crocheted fabrics
Industrial	13921 : Manufacture of soft furnishings
Industrial	13922 : Manufacture of canvas goods, sacks etc
Industrial	13923 : Manufacture of household textiles (other than soft furnishings of 13921)
Industrial	13931 : Manufacture of woven or tufted carpets and rugs
Industrial	13939 : Manufacture of carpets and rugs (other than woven or tufted) nec
Industrial	13940 : Manufacture of cordage, rope, twine and netting
Industrial	13950 : Manufacture of non-wovens and articles made from non-wovens, except apparel
Industrial	13960 : Manufacture of other technical and industrial textiles
Industrial	13990 : Manufacture of other textiles nec
Industrial	14110 : Manufacture of leather clothes
Industrial	14120 : Manufacture of workwear
Industrial	14131 : Manufacture of men's outerwear, other than leather clothes and workwear
Industrial	14132 : Manufacture of women's outerwear, other than leather clothes and workwear
Industrial	14141 : Manufacture of men's underwear
Industrial	14142 : Manufacture of women's underwear

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Industrial	14190 : Manufacture of other wearing apparel and accessories
Industrial	14200 : Manufacture of articles of fur
Industrial	14310 : Manufacture of knitted and crocheted hosiery
Industrial	14390 : Manufacture of other knitted and crocheted apparel
Industrial	15110 : Tanning and dressing of leather; dressing and dyeing of fur
Industrial	15120 : Manufacture of luggage, handbags and the like, saddlery and harness
Industrial	15200 : Manufacture of footwear
Industrial	16100 : Sawmilling and planing of wood
Industrial	16210 : Manufacture of veneer sheets and wood-based panels
Industrial	16220 : Manufacture of assembled parquet floors
Industrial	16230 : Manufacture of other builders' carpentry and joinery
Industrial	16240 : Manufacture of wooden containers
Industrial	16290 : Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
Industrial	17110 : Manufacture of pulp
Industrial	17120 : Manufacture of paper and paperboard
Industrial	17211 : Manufacture of corrugated paper and paperboard; manufacture of sacks and bags of paper
Industrial	17219 : Manufacture of paper and paperboard containers other than sacks and bags
Industrial	17220 : Manufacture of household and sanitary goods and of toilet requisites
Industrial	17230 : Manufacture of paper stationery
Industrial	17240 : Manufacture of wallpaper
Industrial	17290 : Manufacture of other articles of paper and paperboard
Industrial	18110 : Printing of newspapers
Industrial	18121 : Manufacture of printed labels
Industrial	18129 : Printing (other than printing of newspapers and printing on labels and tags) nec
Industrial	18130 : Pre-press and pre-media services
Industrial	18140 : Binding and related services
Industrial	18201 : Reproduction of sound recording
Industrial	18202 : Reproduction of video recording
Industrial	18203 : Reproduction of computer media
Industrial	19100 : Manufacture of coke oven products
Industrial	19201 : Mineral oil refining
Industrial	19209 : Other treatment of petroleum products (excluding mineral oil refiningpetrochemicals manufacture)
Industrial	20110 : Manufacture of industrial gases
Industrial	20120 : Manufacture of dyes and pigments
Industrial	20130 : Manufacture of other inorganic basic chemicals
Industrial	20140 : Manufacture of other organic basic chemicals
Industrial	20150 : Manufacture of fertilisers and nitrogen compounds
Industrial	20160 : Manufacture of plastics in primary forms

Industrial	20170 : Manufacture of synthetic rubber in primary forms
Industrial	20200 : Manufacture of pesticides and other agrochemical products
Industrial	20301 : Manufacture of paints, varnishes and similar coatings, mastics and sealants
Industrial	20302 : Manufacture of printing ink
Industrial	20411 : Manufacture of soap and detergents
Industrial	20412 : Manufacture of cleaning and polishing preparations
Industrial	20420 : Manufacture of perfumes and toilet preparations
Industrial	20510 : Manufacture of explosives
Industrial	20520 : Manufacture of glues
Industrial	20530 : Manufacture of essential oils
Industrial	20590 : Manufacture of other chemical products nec
Industrial	20600 : Manufacture of man-made fibres
Industrial	21100 : Manufacture of basic pharmaceutical products
Industrial	21200 : Manufacture of pharmaceutical preparations
Industrial	22110 : Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
Industrial	22190 : Manufacture of other rubber products
Industrial	22210 : Manufacture of plastic plates, sheets, tubes and profiles
Industrial	22220 : Manufacture of plastic packing goods
Industrial	22230 : Manufacture of builders ware of plastic
Industrial	22290 : Manufacture of other plastic products
Industrial	23110 : Manufacture of flat glass
Industrial	23120 : Shaping and processing of flat glass
Industrial	23130 : Manufacture of hollow glass
Industrial	23140 : Manufacture of glass fibres
Industrial	23190 : Manufacture and processing of other glass, including technical glassware
Industrial	23200 : Manufacture of refractory products
Industrial	23310 : Manufacture of ceramic tiles and flags
Industrial	23320 : Manufacture of bricks, tiles and construction products, in baked clay
Industrial	23410 : Manufacture of ceramic household and ornamental articles
Industrial	23420 : Manufacture of ceramic sanitary fixtures
Industrial	23430 : Manufacture of ceramic insulators and insulating fittings
Industrial	23440 : Manufacture of other technical ceramic products
Industrial	23490 : Manufacture of other ceramic products
Industrial	23510 : Manufacture of cement
Industrial	23520 : Manufacture of lime and plaster
Industrial	23610 : Manufacture of concrete products for construction purposes
Industrial	23620 : Manufacture of plaster products for construction purposes
Industrial	23630 : Manufacture of ready-mixed concrete
Industrial	23640 : Manufacture of mortars
Industrial	23650 : Manufacture of fibre cement

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Industrial	23690 : Manufacture of other articles of concrete, plaster and cement
Industrial	23700 : Cutting, shaping and finishing of stone
Industrial	23910 : Production of abrasive products
Industrial	23990 : Manufacture of other non-metallic mineral products nec
Industrial	24100 : Manufacture of basic iron and steel and of ferro-alloys
Industrial	24200 : Manufacture of tubes, pipes, hollow profiles and related fittings, of steel
Industrial	24310 : Cold drawing of bars
Industrial	24320 : Cold rolling of narrow strip
Industrial	24330 : Cold forming or folding
Industrial	24340 : Cold drawing of wire
Industrial	24410 : Precious metals production
Industrial	24420 : Aluminium production
Industrial	24430 : Lead, zinc and tin production
Industrial	24440 : Copper production
Industrial	24450 : Other non-ferrous metal production
Industrial	24460 : Processing of nuclear fuel
Industrial	24510 : Casting of iron
Industrial	24520 : Casting of steel
Industrial	24530 : Casting of light metals
Industrial	24540 : Casting of other non-ferrous metals
Industrial	25110 : Manufacture of metal structures and parts of structures
Industrial	25120 : Manufacture of doors and windows of metal
Industrial	25210 : Manufacture of central heating radiators and boilers
Industrial	25290 : Manufacture of other tanks, reservoirs and containers of metal
Industrial	25300 : Manufacture of steam generators, except central heating hot water boilers
Industrial	25400 : Manufacture of weapons and ammunition
Industrial	25500 : Forging, pressing, stamping and roll-forming of metal; powder metallurgy
Industrial	25610 : Treatment and coating of metals
Industrial	25620 : Machining
Industrial	25710 : Manufacture of cutlery
Industrial	25720 : Manufacture of locks and hinges
Industrial	25730 : Manufacture of tools
Industrial	25910 : Manufacture of steel drums and similar containers
Industrial	25920 : Manufacture of light metal packaging
Industrial	25930 : Manufacture of wire products, chain and springs
Industrial	25940 : Manufacture of fasteners and screw machine products
Industrial	25990 : Manufacture of other fabricated metal products nec
Industrial	26110 : Manufacture of electronic components
Industrial	26120 : Manufacture of loaded electronic boards
Industrial	26200 : Manufacture of computers and peripheral equipment

Industrial	26301 : Manufacture of telegraph and telephone apparatus and equipment
Industrial	26309 : Manufacture of communication equipment (other than telegraph and telephone apparatus and equipment)
Industrial	26400 : Manufacture of consumer electronics
Industrial	26511 : Manufacture of electronic instruments and appliances for measuring, testing, and navigation, except industrial process control equipment
Industrial	26512 : Manufacture of electronic industrial process control equipment
Industrial	26513 : Manufacture of non-electronic instruments and appliances for measuring, testing and navigation, except industrial process control equipment
Industrial	26514 : Manufacture of non-electronic industrial process control equipment
Industrial	26520 : Manufacture of watches and clocks
Industrial	26600 : Manufacture of irradiation, electromedical and electrotherapeutic equipment
Industrial	26701 : Manufacture of optical precision instruments
Industrial	26702 : Manufacture of photographic and cinematographic equipment
Industrial	26800 : Manufacture of magnetic and optical media
Industrial	27110 : Manufacture of electric motors, generators and transformers
Industrial	27120 : Manufacture of electricity distribution and control apparatus
Industrial	27200 : Manufacture of batteries and accumulators
Industrial	27310 : Manufacture of fibre optic cables
Industrial	27320 : Manufacture of other electronic and electric wires and cables
Industrial	27330 : Manufacture of wiring devices
Industrial	27400 : Manufacture of electric lighting equipment
Industrial	27510 : Manufacture of electric domestic appliances
Industrial	27520 : Manufacture of non-electric domestic appliances
Industrial	27900 : Manufacture of other electrical equipment
Industrial	28110 : Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
Industrial	28120 : Manufacture of fluid power equipment
Industrial	28131 : Manufacture of pumps
Industrial	28132 : Manufacture of compressors
Industrial	28140 : Manufacture of other taps and valves
Industrial	28150 : Manufacture of bearings, gears, gearing and driving elements
Industrial	28210 : Manufacture of ovens, furnaces and furnace burners
Industrial	28220 : Manufacture of lifting and handling equipment
Industrial	28230 : Manufacture of office machinery and equipment (except computers and peripheral equipment)
Industrial	28240 : Manufacture of power-driven hand tools
Industrial	28250 : Manufacture of non-domestic cooling and ventilation equipment
Industrial	28290 : Manufacture of other general-purpose machinery nec
Industrial	28301 : Manufacture of agricultural tractors
Industrial	28302 : Manufacture of agricultural and forestry machinery (other than agricultural tractors)
Industrial	28410 : Manufacture of metal forming machinery
Industrial	28490 : Manufacture of other machine tools

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Industrial	28910 : Manufacture of machinery for metallurgy
Industrial	28921 : Manufacture of machinery for mining
Industrial	28922 : Manufacture of earthmoving equipment
Industrial	28923 : Manufacture of equipment for concrete crushing and screening roadworks
Industrial	28930 : Manufacture of machinery for food, beverage and tobacco processing
Industrial	28940 : Manufacture of machinery for textile, apparel and leather production
Industrial	28950 : Manufacture of machinery for paper and paperboard production
Industrial	28960 : Manufacture of plastics and rubber machinery
Industrial	28990 : Manufacture of other special-purpose machinery nec
Industrial	29100 : Manufacture of motor vehicles
Industrial	29201 : Manufacture of bodies (coachwork) for motor vehicles (except caravans)
Industrial	29202 : Manufacture of trailers and semi-trailers
Industrial	29203 : Manufacture of caravans
Industrial	29310 : Manufacture of electrical and electronic equipment for motor vehicles
Industrial	29320 : Manufacture of other parts and accessories for motor vehicles
Industrial	30110 : Building of ships and floating structures
Industrial	30120 : Building of pleasure and sporting boats
Industrial	30200 : Manufacture of railway locomotives and rolling stock
Industrial	30300 : Manufacture of air and spacecraft and related machinery
Industrial	30400 : Manufacture of military fighting vehicles
Industrial	30910 : Manufacture of motorcycles
Industrial	30920 : Manufacture of bicycles and invalid carriages
Industrial	30990 : Manufacture of other transport equipment nec
Industrial	31010 : Manufacture of office and shop furniture
Industrial	31020 : Manufacture of kitchen furniture
Industrial	31030 : Manufacture of mattresses
Industrial	31090 : Manufacture of other furniture
Industrial	32110 : Striking of coins
Industrial	32120 : Manufacture of jewellery and related articles
Industrial	32130 : Manufacture of imitation jewellery and related articles
Industrial	32200 : Manufacture of musical instruments
Industrial	32300 : Manufacture of sports goods
Industrial	32401 : Manufacture of professional and arcade games and toys
Industrial	32409 : Manufacture of games and toys (other than professional and arcade games and toys) nec
Industrial	32500 : Manufacture of medical and dental instruments and supplies
Industrial	32910 : Manufacture of brooms and brushes
Industrial	32990 : Other manufacturing nec
Industrial	33110 : Repair of fabricated metal products
Industrial	33120 : Repair of machinery

Industrial	33130 : Repair of electronic and optical equipment
Industrial	33140 : Repair of electrical equipment
Industrial	33150 : Repair and maintenance of ships and boats
Industrial	33160 : Repair and maintenance of aircraft and spacecraft
Industrial	33170 : Repair and maintenance of other transport equipment
Industrial	33190 : Repair of other equipment
Industrial	33200 : Installation of industrial machinery and equipment
	35110 : Production of electricity
	35120 : Transmission of electricity
	35130 : Distribution of electricity
	35140 : Trade of electricity
	35210 : Manufacture of gas
	35220 : Distribution of gaseous fuels through mains
	35230 : Trade of gas through mains
	35300 : Steam and air conditioning supply
	36000 : Water collection, treatment and supply
Industrial	37000 : Sewerage
Industrial	38110 : Collection of non-hazardous waste
Industrial	38120 : Collection of hazardous waste
Industrial	38210 : Treatment and disposal of non-hazardous waste
Industrial	38220 : Treatment and disposal of hazardous waste
Industrial	38310 : Dismantling of wrecks
Industrial	38320 : Recovery of sorted materials
	39000 : Remediation activities and other waste management services
	41100 : Development of building projects
	41201 : Construction of commercial buildings
	41202 : Construction of domestic buildings
	42110 : Construction of roads and motorways
	42120 : Construction of railways and underground railways
	42130 : Construction of bridges and tunnels
	42210 : Construction of utility projects for fluids
	42220 : Construction of utility projects for electricity and telecommunications
	42910 : Construction of water projects
	42990 : Construction of other civil engineering projects nec
	43110 : Demolition
	43120 : Site preparation
	43130 : Test drilling and boring
Industrial	43210 : Electrical installation
Industrial	43220 : Plumbing, heat and air-conditioning installation
Industrial	43290 : Other construction installation
Industrial	43310 : Plastering

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Industrial	43320 : Joinery installation
Industrial	43330 : Floor and wall covering
Industrial	43341 : Painting
Industrial	43342 : Glazing
Industrial	43390 : Other building completion and finishing
Industrial	43910 : Roofing activities
Industrial	43991 : Scaffold erection
Industrial	43999 : Specialised construction activities (other than scaffold erection) nec
	45111 : Sale of new cars and light motor vehicles
	45112 : Sale of used cars and light motor vehicles
	45190 : Sale of other motor vehicles
Industrial	45200 : Maintenance and repair of motor vehicles
	45310 : Wholesale trade of motor vehicle parts and accessories
	45320 : Retail trade of motor vehicle parts and accessories
Industrial	45400 : Sale, maintenance and repair of motorcycles and related parts and accessories
Industrial	46110 : Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods
Industrial	46120 : Agents involved in the sale of fuels, ores, metals and industrial chemicals
Industrial	46130 : Agents involved in the sale of timber and building materials
Industrial	46140 : Agents involved in the sale of machinery, industrial equipment, ships and aircraft
Industrial	46150 : Agents involved in the sale of furniture, household goods, hardware and ironmongery
Industrial	46160 : Agents involved in the sale of textiles, clothing, fur, footwear and leather goods
Industrial	46170 : Agents involved in the sale of food, beverages and tobacco
Industrial	46180 : Agents specialised in the sale of other particular products
Industrial	46190 : Agents involved in the sale of a variety of goods
Industrial	46210 : Wholesale of grain, unmanufactured tobacco, seeds and animal feeds
Industrial	46220 : Wholesale of flowers and plants
Industrial	46230 : Wholesale of live animals
Industrial	46240 : Wholesale of hides, skins and leather
Industrial	46310 : Wholesale of fruit and vegetables
Industrial	46320 : Wholesale of meat and meat products
Industrial	46330 : Wholesale of dairy products, eggs and edible oils and fats
Industrial	46341 : Wholesale of fruit and vegetable juices, mineral waters and soft drinks
Industrial	46342 : Wholesale of wine, beer, spirits and other alcoholic beverages
Industrial	46350 : Wholesale of tobacco products
Industrial	46360 : Wholesale of sugar and chocolate and sugar confectionery
Industrial	46370 : Wholesale of coffee, tea, cocoa and spices
Industrial	46380 : Wholesale of other food, including fish, crustaceans and molluscs
Industrial	46390 : Non-specialised wholesale of food, beverages and tobacco

Industrial	46410 : Wholesale of textiles
Industrial	46420 : Wholesale of clothing and footwear
Industrial	46431 : Wholesale of gramophone records, audio tapes, compact discs and video tapes and of the equipment on which these are played
Industrial	46439 : Wholesale of radio and television goods and of electrical household appliances (other than of gramophone records, audio tapes, compact discs and video tapes and the equipment on which these are played) n.e.c.
Industrial	46440 : Wholesale of china and glassware and cleaning materials
Industrial	46450 : Wholesale of perfume and cosmetics
Industrial	46460 : Wholesale of pharmaceutical goods
Industrial	46470 : Wholesale of furniture, carpets and lighting equipment
Industrial	46480 : Wholesale of watches and jewellery
Industrial	46491 : Wholesale of musical instruments
Industrial	46499 : Wholesale of household goods (other than musical instruments) nec
Industrial	46510 : Wholesale of computers, computer peripheral equipment and software
Industrial	46520 : Wholesale of electronic and telecommunications equipment and parts
Industrial	46610 : Wholesale of agricultural machinery, equipment and supplies
Industrial	46620 : Wholesale of machine tools
Industrial	46630 : Wholesale of mining, construction and civil engineering machinery
Industrial	46640 : Wholesale of machinery for the textile industry and of sewing and knitting machines
Industrial	46650 : Wholesale of office furniture
Industrial	46660 : Wholesale of other office machinery and equipment
Industrial	46690 : Wholesale of other machinery and equipment
Industrial	46711 : Wholesale of petroleum and petroleum products
Industrial	46719 : Wholesale of fuels and related products (other than petroleum and petroleum products)
Industrial	46720 : Wholesale of metals and metal ores
Industrial	46730 : Wholesale of wood, construction materials and sanitary equipment
Industrial	46740 : Wholesale of hardware, plumbing and heating equipment and supplies
Industrial	46750 : Wholesale of chemical products
Industrial	46760 : Wholesale of other intermediate products
Industrial	46770 : Wholesale of waste and scrap
Industrial	46900 : Non-specialised wholesale trade
	47110 : Retail sale in non-specialised stores with food, beverages or tobacco predominating
	47190 : Other retail sale in non-specialised stores
	47210 : Retail sale of fruit and vegetables in specialised stores
	47220 : Retail sale of meat and meat products in specialised stores
	47230 : Retail sale of fish, crustaceans and molluscs in specialised stores
	47240 : Retail sale of bread, cakes, flour confectionery and sugar confectionery in specialised stores
	47250 : Retail sale of beverages in specialised stores
	47260 : Retail sale of tobacco products in specialised stores
	47290 : Other retail sale of food in specialised stores

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	47300 : Retail sale of automotive fuel in specialised stores
	47410 : Retail sale of computers, peripheral units and software in specialised stores
	47421 : Retail sale of mobile telephones in specialised stores
	47429 : Retail sale of telecommunications equipment (other than mobile telephones) nec, in specialised stores
	47430 : Retail sale of audio and video equipment in specialised stores
	47510 : Retail sale of textiles in specialised stores
	47520 : Retail sale of hardware, paints and glass in specialised stores
	47530 : Retail sale of carpets, rugs, wall and floor coverings in specialised stores
	47540 : Retail sale of electrical household appliances in specialised stores
	47591 : Retail sale of musical instruments and scores in specialised stores
	47599 : Retail sale of furniture, lighting equipment and other household articles (other than musical instruments) nec, in speci
	47610 : Retail sale of books in specialised stores
	47620 : Retail sale of newspapers and stationery in specialised stores
	47630 : Retail sale of music and video recordings in specialised stores
	47640 : Retail sale of sporting equipment in specialised stores
	47650 : Retail sale of games and toys in specialised stores
	47710 : Retail sale of clothing in specialised stores
	47721 : Retail sale of footwear in specialised stores
	47722 : Retail sale of leather goods in specialised stores
	47730 : Dispensing chemist in specialised stores
	47741 : Retail sale of hearing aids in specialised stores
	47749 : Retail sale of medical and orthopaedic goods (other than hearing aids) nec, in specialised stores
	47750 : Retail sale of cosmetic and toilet articles in specialised stores
	47760 : Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores
	47770 : Retail sale of watches and jewellery in specialised stores
	47781 : Retail sale in commercial art galleries
	47782 : Retail sale by opticians
	47789 : Other retail sale of new goods in specialised stores (other than by opticians or commercial art galleries), nec
	47791 : Retail sale of antiques including antique books, in stores
	47799 : Retail sale of second-hand goods (other than antiques and antique books) in stores
	47810 : Retail sale via stalls and markets of food, beverages and tobacco products
	47820 : Retail sale via stalls and markets of textiles, clothing and footwear
	47890 : Retail sale via stalls and markets of other goods
	47910 : Retail sale via mail order houses or via Internet
	47990 : Other retail sale not in stores, stalls or markets
	49100 : Passenger rail transport, interurban
	49200 : Freight rail transport

	49311 : Urban, suburban or metropolitan area passenger railway transportation by underground, metro and similar systems
	49319 : Urban, suburban or metropolitan area passenger land transport other than railway transportation by underground, metro and similar systems
	49320 : Taxi operation
	49390 : Other passenger land transport nec
Industrial	49410 : Freight transport by road
Industrial	49420 : Removal services
	49500 : Transport via pipeline
	50100 : Sea and coastal passenger water transport
	50200 : Sea and coastal freight water transport
	50300 : Inland passenger water transport
	50400 : Inland freight water transport
	51101 : Scheduled passenger air transport
	51102 : Non-scheduled passenger air transport
	51210 : Freight air transport
	51220 : Space transport
Industrial	52101 : Operation of warehousing and storage facilities for water transport activities of division 50
Industrial	52102 : Operation of warehousing and storage facilities for air transport activities of division 51
Industrial	52103 : Operation of warehousing and storage facilities for land transport activities of division 49
Industrial	52211 : Operation of rail freight terminals
Industrial	52212 : Operation of rail passenger facilities at railway stations
Industrial	52213 : Operation of bus and coach passenger facilities at bus and coach stations
	52219 : Other service activities incidental to land transportation, nec (not including operation of rail freight terminals, passenger facilities at railway stations or passenger facilities at bus and coach stations)
	52220 : Service activities incidental to water transportation
	52230 : Service activities incidental to air transportation
Industrial	52241 : Cargo handling for water transport activities of division 50
Industrial	52242 : Cargo handling for air transport activities of division 51
Industrial	52243 : Cargo handling for land transport activities of division 49
	52290 : Other transportation support activities
Industrial	53100 : Postal activities under universal service obligation
Industrial	53201 : Licensed Carriers
	53202 : Unlicensed Carriers
	55100 : Hotels and similar accommodation
	55201 : Holiday centres and villages
	55202 : Youth hostels
	55209 : Other holiday and other short-stay accommodation (not including holiday centres and villages or youth hostels) nec
	55300 : Camping grounds, recreational vehicle parks and trailer parks
	55900 : Other accommodation

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	56101 : Licensed restaurants
	56102 : Unlicensed restaurants and cafes
	56103 : Take away food shops and mobile food stands
	56210 : Event catering activities
	56290 : Other food service activities
	56301 : Licensed clubs
	56302 : Public houses and bars
Office	58110 : Book publishing
Office	58120 : Publishing of directories and mailing lists
Office	58130 : Publishing of newspapers
Office	58141 : Publishing of learned journals
Office	58142 : Publishing of consumer, business and professional journals and periodicals
Office	58190 : Other publishing activities
	58210 : Publishing of computer games
	58290 : Other software publishing
Office	59111 : Motion picture production activities
Office	59112 : Video production activities
Office	59113 : Television programme production activities
Office	59120 : Motion picture, video and television programme post-production activities
Office	59131 : Motion picture distribution activities
Office	59132 : Video distribution activities
Office	59133 : Television programme distribution activities
	59140 : Motion picture projection activities
Office	59200 : Sound recording and music publishing activities
Office	60100 : Radio broadcasting
Office	60200 : Television programming and broadcasting activities
	61100 : Wired telecommunications activities
	61200 : Wireless telecommunications activities
	61300 : Satellite telecommunications activities
	61900 : Other telecommunications activities
Office	62011 : Ready-made interactive leisure and entertainment software development
Office	62012 : Business and domestic software development
Office	62020 : Computer consultancy activities
Office	62030 : Computer facilities management activities
Office	62090 : Other information technology and computer service activities
Office	63110 : Data processing, hosting and related activities
Office	63120 : Web portals
Office	63910 : News agency activities
Office	63990 : Other information service activities nec

Office	64110 : Central banking
Office	64191 : Banks
Office	64192 : Building societies
Office	64201 : Activities of agricultural holding companies
Office	64202 : Activities of production holding companies
Office	64203 : Activities of construction holding companies
Office	64204 : Activities of distribution holding companies
Office	64205 : Activities of financial services holding companies
Office	64209 : Activities of other holding companies (not including agricultural, production, construction, distribution and financial services holding companies) n.e.c
Office	64301 : Activities of investment trusts
Office	64302 : Activities of unit trusts
Office	64303 : Activities of venture and development capital companies
Office	64304 : Activities of open-ended investment companies
Office	64305 : Activities of property unit trusts
Office	64306 : Activities of real estate investment trusts
Office	64910 : Financial leasing
Office	64921 : Credit granting by non-deposit taking finance houses and other specialist consumer credit grantors
Office	64922 : Activities of mortgage finance companies
Office	64929 : Other credit granting (not including credit granting by non-deposit taking finance houses and other specialist consumer credit grantors and activities of mortgage finance companies) n.e.c.
Office	64991 : Security dealing on own account
Office	64992 : Factoring
Office	64999 : Other financial service activities, except insurance and pension funding, (not including security dealing on own account and factoring) n.e.c.
Office	65110 : Life insurance
Office	65120 : Non-life insurance
Office	65201 : Life reinsurance
Office	65202 : Non-life reinsurance
Office	65300 : Pension funding
Office	66110 : Administration of financial markets
Office	66120 : Security and commodity contracts brokerage
Office	66190 : Other activities auxiliary to financial services, except insurance and pension funding
Office	66210 : Risk and damage evaluation
Office	66220 : Activities of insurance agents and brokers
Office	66290 : Other activities auxiliary to insurance and pension funding
Office	66300 : Fund management activities
Office	68100 : Buying and selling of own real estate
Office	68201 : Renting and operating of Housing Association real estate
Office	68202 : Letting and operating of conference and exhibition centres

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Office	68209 : Letting and operating of own or leased real estate (other than Housing Association real estate and conference and exhibition services) n.e.c.
CAZ Office	68310 : Real estate agencies
Office	68320 : Management of real estate on a fee or contract basis
Office	69101 : Barristers at law
Office	69102 : Solicitors
Office	69109 : Activities of patent and copyright agents; other legal activities (other than those of barristers and solicitors) nec
Office	69201 : Accounting, and auditing activities
Office	69202 : Bookkeeping activities
Office	69203 : Tax consultancy
Office	70100 : Activities of head offices
Office	70210 : Public relations and communication activities
Office	70221 : Financial management
Office	70229 : Management consultancy activities (other than financial management)
Office	71111 : Architectural activities
Office	71112 : Urban planning and landscape architectural activities
Office	71121 : Engineering design activities for industrial process and production
Office	71122 : Engineering related scientific and technical consulting activities
Office	71129 : Other engineering activities (not including engineering design for industrial process and production or engineering related scientific and technical consulting activities)
Office	71200 : Technical testing and analysis
CAZ Office	72110 : Research and experimental development on biotechnology
CAZ Office	72190 : Other research and experimental development on natural sciences and engineering
Office	72200 : Research and experimental development on social sciences and humanities
Office	73110 : Advertising agencies
Office	73120 : Media representation
Office	73200 : Market research and public opinion polling
	74100 : Specialised design activities
	74201 : Portrait photographic activities
	74202 : Other specialist photography (not including portrait photography)
	74203 : Film processing
	74209 : Other photographic activities (not including portrait and other specialist photography and film processing) nec
Office	74300 : Translation and interpretation activities
Office	74901 : Environmental consulting activities
Office	74902 : Quantity surveying activities
Office	74909 : Other professional, scientific and technical activities (not including environmental consultancy or quantity surveying)
	75000 : Veterinary activities
	77110 : Renting and leasing of cars and light motor vehicles
	77120 : Renting and leasing of trucks

	77210 : Renting and leasing of recreational and sports goods
	77220 : Renting of video tapes and disks
	77291 : Renting and leasing of media entertainment equipment
	77299 : Renting and leasing of other personal and household goods (other than media entertainment equipment)
	77310 : Renting and leasing of agricultural machinery and equipment
	77320 : Renting and leasing of construction and civil engineering machinery and equipment
	77330 : Renting and leasing of office machinery and equipment (including computers)
	77341 : Renting and leasing of passenger water transport equipment
	77342 : Renting and leasing of freight water transport equipment
	77351 : Renting and leasing of passenger air transport equipment
	77352 : Renting and leasing of freight air transport equipment
	77390 : Renting and leasing of other machinery, equipment and tangible goods nec
Office	77400 : Leasing of intellectual property and similar products, except copyrighted works
Office	78101 : Motion picture, television and other theatrical casting
Office	78109 : Activities of employment placement agencies (other than motion picture, television and other theatrical casting) nec
Office	78200 : Temporary employment agency activities
Office	78300 : Other human resources provision
	79110 : Travel agency activities
	79120 : Tour operator activities
	79901 : Activities of tourist guides
	79909 : Other reservation service activities (not including activities of tourist guides)
	80100 : Private security activities
	80200 : Security systems service activities
	80300 : Investigation activities
	81100 : Combined facilities support activities
	81210 : General cleaning of buildings
	81221 : Window cleaning services
	81222 : Specialised cleaning services
	81223 : Furnace and chimney cleaning services
	81229 : Building and industrial cleaning activities (other than window cleaning, specialised cleaning and furnace and chimney cleaning services) n.e.c.
	81291 : Disinfecting and extermination services
	81299 : Cleaning services (other than disinfecting and extermination services) nec
	81300 : Landscape service activities
Office	82110 : Combined office administrative service activities
CAZ Office	82190 : Photocopying, document preparation and other specialised office support activities
Office	82200 : Activities of call centres
Office	82301 : Activities of exhibition and fair organizers

London Office Floorspace Projections

Office	82302 : Activities of conference organizers
Office	82911 : Activities of collection agencies
Office	82912 : Activities of credit bureaus
Industrial	82920 : Packaging activities
Office	82990 : Other business support service activities nec
Office	84110 : General public administration activities
Office	84120 : Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security
Office	84130 : Regulation of and contribution to more efficient operation of businesses
Office	84210 : Foreign affairs
	84220 : Defence activities
	84230 : Justice and judicial activities
	84240 : Public order and safety activities
	84250 : Fire service activities
Office	84300 : Compulsory social security activities
	85100 : Pre-primary education
	85200 : Primary education
	85310 : General secondary education
	85320 : Technical and vocational secondary education
	85410 : Post-secondary non-tertiary education
	85421 : First-degree level higher education
	85422 : Post-graduate level higher education
	85510 : Sports and recreation education
	85520 : Cultural education
	85530 : Driving school activities
	85590 : Other education nec
	85600 : Educational support activities
	86101 : Hospital activities
	86102 : Medical nursing home activities
	86210 : General medical practice activities
	86220 : Specialist medical practice activities
	86230 : Dental practice activities
	86900 : Other human health activities
	87100 : Residential nursing care activities
	87200 : Residential care activities for learning disabilities, mental health and substance abuse
	87300 : Residential care activities for the elderly and disabled
	87900 : Other residential care activities
	88100 : Social work activities without accommodation for the elderly and disabled
	88910 : Child day-care activities
	88990 : Other social work activities without accommodation nec

	90010 : Performing arts
	90020 : Support activities to performing arts
	90030 : Artistic creation
	90040 : Operation of arts facilities
	91011 : Library activities
	91012 : Archive activities
	91020 : Museum activities
	91030 : Operation of historical sites and buildings and similar visitor attractions
	91040 : Botanical and zoological gardens and nature reserve activities
	92000 : Gambling and betting activities
	93110 : Operation of sports facilities
	93120 : Activities of sport clubs
	93130 : Fitness facilities
	93191 : Activities of racehorse owners
	93199 : Other sports activities (not including activities of racehorse owners) nec
	93210 : Activities of amusement parks and theme parks
	93290 : Other amusement and recreation activities
Office	94110 : Activities of business and employers membership organisations
Office	94120 : Activities of professional membership organisations
Office	94200 : Activities of trade unions
Office	94910 : Activities of religious organisations
Office	94920 : Activities of political organisations
Office	94990 : Activities of other membership organisations nec
Industrial	95110 : Repair of computers and peripheral equipment
Industrial	95120 : Repair of communication equipment
Industrial	95210 : Repair of consumer electronics
Industrial	95220 : Repair of household appliances and home and garden equipment
Industrial	95230 : Repair of footwear and leather goods
Industrial	95240 : Repair of furniture and home furnishings
Industrial	95250 : Repair of watches, clocks and jewellery
Industrial	95290 : Repair of other personal and household goods
	96010 : Washing and (dry-)cleaning of textile and fur products
	96020 : Hairdressing and other beauty treatment
	96030 : Funeral and related activities
	96040 : Physical well-being activities
	96090 : Other personal service activities nec
	97000 : Activities of households as employers of domestic personnel
	98100 : Undifferentiated goods-producing activities of private households for own use
	98200 : Undifferentiated service-producing activities of private households for own use
	99000 : Activities of extraterritorial organisations and bodies

Other formats and languages

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Public Liaison Unit

Greater London Authority
City Hall
The Queen's Walk
More London
London SE1 2AA

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Chinese

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Vietnamese

Nếu bạn muốn có văn bản tài liệu này bằng ngôn ngữ của mình, hãy liên hệ theo số điện thoại hoặc địa chỉ dưới đây.

Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος εγγράφου στη δική σας γλώσσα, παρακαλείστε να επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυδρομικά στην παρακάτω διεύθυνση.

Turkish

Bu belgenin kendi dilinizde hazırlanmış bir nüshasını edinmek için, lütfen aşağıdaki telefon numarasını arayınız veya adrese başvurunuz.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਖਤਾ ਕਰੋ:

Hindi

यदि आप इस दस्तावेज की प्रति अपनी भाषा में चाहते हैं, तो कृपया निम्नलिखित नंबर पर फोन करें अथवा नीचे दिये गये पते पर संपर्क करें

Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি (কপি) চান, তা হলে নীচের ফোন নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

Urdu

اگر آپ اس دستاویز کی نقل اپنی زبان میں چاہتے ہیں، تو براہ کرم نیچے دئے گئے نمبر پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

Arabic

إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى الاتصال برقم الهاتف أو مراسلة العنوان أدناه

Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઈતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાધો.

MAYOR OF LONDON