CONSUMER EXPENDITURE AND COMPARISON GOODS FLOORSPACE NEED IN LONDON

31st October 2017

MAYOR OF LONDON

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1 EXECUTIVE SUMMARY

1.1 Introduction

This study provides evidence of the likely future consumer expenditure in London, and forecasts the need for comparison retail floorspace across London and within its individual centres. It will be used to inform the London Plan, which gives strategic planning guidance on the future growth of London's town centres and retail developments within London.

The previous retail needs study, produced by Experian in 2013, looked at the retail supply and likely demand from 2011 to 2031, and estimated the retail needs for this period for London. The current study creates an update to the previous study, this time based from 2015 and looking forward to 2050, using the most up-to-date data and trends available in October 2016.

1.2 National Economic and Retail Trends

Since the last study there has been substantial economic, political, social and technological change. The possible impact of Brexit, a changing world trade and security climate and the range of emerging disruptive technologies point to an increasingly uncertain economic future.

In parallel to these wider macroeconomic patterns there are other significant structural retail changes. Most significant amongst these is the substantial and continuing move from shop based retail purchases to on-line retail. This has been particularly strong in certain comparison retail sectors such as electrical goods, books, music, films, cameras, holidays, insurance and games. This trend continues and the current 20% of sales value on-line will expand over time. These changes have left in their wake a set of retail company failures and contractions including Jessops, Comet, HMV and many independent book and music stores. On-line grocery shopping continues to grow, and supermarkets have seen increasing competition for non-food and even some food sales from on-line purchases.

Retail supply has also seen a range of other changes in the last decade. This includes the strengthening of major multiple brands against the independents and in favour of the dominant brands with the larger market share, growth of larger retail centres and the major malls, continued demand for car-oriented out-of-town retail parks, and decline particularly in smaller and more down-market high streets. These trends were recognised nationally and led to the Mary Portas review of high streets.

1.3 London Economic and Retail Trends

In London, this pattern of concentration on fewer larger and stronger centres can also be seen and should be expected to continue, with an impact on certain smaller and shadowed centres (those where proximity to a very strong retail destination deflects sales away). London has also seen the development and continued growth of large malls, most significantly in Stratford and Shepherds Bush, although notably these have been developed on the edge of existing centres rather than as stand-alone retail parks. London's retail centres, particularly in the east of the capital, continue to see strong competition from Bluewater and Lakeside retail parks.

Despite these uncertainties and structural challenges, there are good reasons to have confidence in London's continued economic performance.as the economic engine of the UK economy. The London economy is much more dynamic than the rest of the UK with a younger, growing, diverse population and healthy business base that will show greater levels of retail space needs than much of the UK. London's population is expected to rise substantially and workforce and tourism demand are likely to expand.

1.4 Key Findings

In the context of all the above economic, demographic, retail supply and social changes, this study evaluates not only the overall absolute levels of comparison retail space needed in London but also where the space is most likely to be needed. The polarisation of centres, with demand for comparison goods floorspace increasingly being drawn to larger centres, will mean that some centres will require substantial extra retail space and others will need to plan for a more static scenario. In some cases, centres will require policies to ameliorate the possible decline in demand for retail space.

Using GLA population projections as one of the inputs, this study assesses the need for comparison goods retail floorspace in Greater London between 2015 and 2050 and evaluates how well the existing and pipeline retail floorspace will meet this demand. It looks at the absolute need for additional comparison goods retail floorspace over time at a series of geographic levels and against a set of possible scenarios and measures the impact of these.

Comparison and Convenience Expenditure Projection

The first part of the study assesses spending growth for London. If the expected base level of spending growth occurs then the study projects a rise from £36.6 billion on comparison goods expenditure in London in 2015 to £80.8 billion by 2041, and a rise from £15.2M to £19.8M on convenience retail expenditure.

Figure 1. Spend by Greater	London residents under	r differing growth projections
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(2012 pri	ices £m)	2015	2041
Central	Convenience	15,246	19,873
	Comparison	26,673	59,116
	Total retail spend	41,919	78,989
Low	Convenience	15,246	17,452
	Comparison	26,673	52,053
	Total retail spend	41,919	69,506
High	Convenience	15,246	22,615
	Comparison	26,673	67,094
	Total retail spend	41,919	89,710

Comparison Retail Floorspace Needs

The study converts the comparison goods expenditure forecast into floorspace requirements for London.

If no major changes take place to the patterns of retail supply and none of the developments in the current pipeline were constructed and it is assumed that current trends of improving retail efficiency continue then London will need nearly 1.6 million square metres of additional comparison goods retail floorspace by 2041 (*baseline* scenario).

If all the known developments in the **pipeline** are built by 2041 London will need 1.2 million square metres of additional floorspace (2.4 million gross if pipeline isn't built).

Alongside the baseline and pipeline scenarios, three further scenarios have been produced:

- Strengthening of selected retail centres in line with the London Plan (**Future Network Changes**). This results in a projected 1.2 million square meters of additional floor space.
- Continuing polarisation towards larger centres continuing (**Quality Adjustment**) This results in a projected demand for 1.3 million square meters of additional floorspace.

• Strengthening larger centres near to the parts of London where retail capacity is least accessible (Addressing Gaps in Provision). This results in a projected demand of 1.3 million square meters.

• Figure 3 shows the comparison floorspace requirement forecasts under these different scenarios.

Overall floorspace requirements are largely driven by expected demand which is expected to be muted in the short term then recover to levels of substantial growth, as shown in Figure 2.

Figure 2. Net comparison goods retail floorspace requirements for London 2015-2050 (central forecast spend and base productivity) – Baseline scenario.

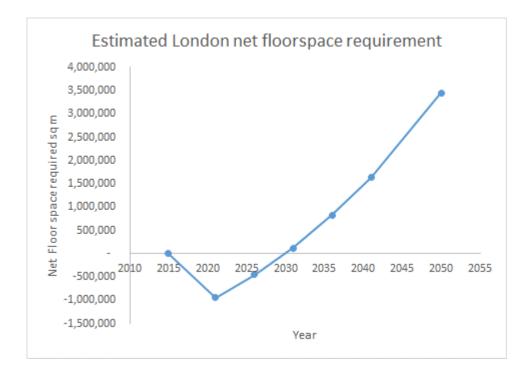
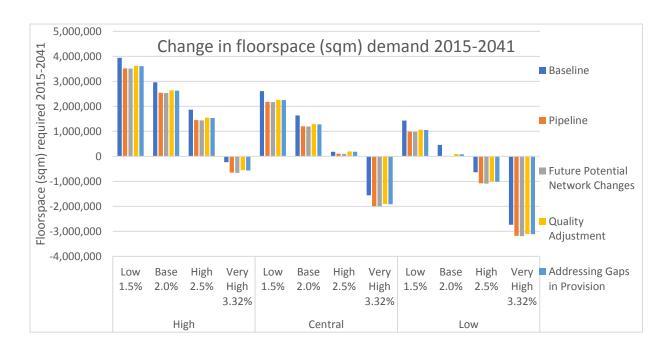


Figure 3. Net¹ comparison goods retail floorspace requirements for London 2041 sensitivity testing against spend and productivity assumptions – sqm.

Spend	Productivity	Baseline	Pipeline	Future Potential Network Changes	Quality Adjustment	Addressing Gaps in Provision
Upper	Low 1.5%	3,938,233	3,520,963	3,509,729	3,617,935	3,605,294
Central	Low 1.5%	2,608,572	2,178,163	2,168,270	2,263,578	2,252,457
Lower	Low 1.5%	1,431,624	989,581	980,879	1,064,813	1,055,005
Upper	Base 2.0%	2,963,846	2,546,577	2,535,343	2,643,531	2,630,897
Central	Base 2.0%	1,634,172	1,203,760	1,193,864	1,289,194	1,278,066
Lower	Base 2.0%	457,229	15,179	6,480	90,409	80,620
Upper	High 2.5%	1,867,836	1,450,576	1,439,352	1,547,539	1,534,900
Central	High 2.5%	182,064	107,764	97,860	193,183	182,064
Lower	High 2.5%	-638,771	-1,080,817	-1,089,506	-1,005,577	-1,015,399
Upper	Very High 3.32%	-231,530	-648,810	-660,035	-551,843	-564,477
Central	Very High 3.32%	-1,561,203	-1,991,617	-2,001,511	-1,906,173	-1,917,312
Lower	Very High 3.32%	-2,738,145	-3,180,190	-3,188,899	-3,104,965	-3,114,760



¹ Gross floor space requirement is the amount of additional floor space that would be needed to satisfy the estimated retail spend at an assumed rate of efficiency and rate of efficiency change over time. Gross floorspace assumes that existing vacant space is not filled before making this estimate; by contrast Net floorspace requirement assumes that all existing vacant floor space is used up before any additional floorspace is developed.

1.5 **Summary of Conclusions**

Household expenditure by London residents is projected to rise from £155.4 billion in 2015 to £281.7 billion in 2041

Comparison goods retail spending is projected to grow the fastest at 3.1% per annum to around £59 billion by 2041. Household spend on accommodation and catering (including restaurants, cafes, takeaways and on-licence) are projected to grow by 2.7% per annum and leisure spending by 2.5% per annum over the same period, Household spending on convenience goods is forecast to be more modest at 1.0% per annum to around £20 billion by 2041.

Spending by domestic and overseas tourists and commuters will boost the vitality and viability of town centres

Spend on comparison goods in London by domestic and overseas tourists is projected to grow from £3.2 billion in 2015 to £8.5 billion in 2041. The net inflow of commuter spending from the East and South East of England is projected to grow from £3 billion to £5.3 billion in the same period.

Spending via the internet and other special forms of trading on comparison goods retail is projected to increase from 18.6% in 2015 to 25.1% by 2026 and 25.7% by 2041

The growth of online comparison goods retail has been spectacular from 3% share in 2007 to 18.6% by 2015. This growth is projected to continue but flatten out over time.

Total comparison goods retail spend in London is projected to rise from £36.6 billion in 2015 to £80.9 billion in 2041

Total comparison goods expenditure in London is forecast to grow by 2.6% per annum over the period 2015 to 2021, and by between 3.4% and 3.7% per annum in the 5-year periods 2021-2041.

London has a baseline need for a net additional 1.6 million sq. m of comparison goods retail floorspace over the period 2015 to 2041. If all the retail schemes in the planning pipeline are built out, London will still have need for a net additional 1.2 million sq. m of comparison goods retail floorspace.

Figure 4. Comparison Goods Retail Floorspace requirements in London 2015 to 2041: comparison of development scenarios 2041 (central spend forecast and base productivity).

	Baseline	Pipeline	Potential future Network changes	Quality Adjustment	Addressing gaps in provision
Net Floorspace requirements sq. m (gross less space already planned)	1,634,172	1,203,760	1,193,864	1,289,194	1,278,066
Gross floorspace requirements	2,816,052	2,385,642	2,375,753	2,471,074	2,459,945

Trends in the efficiency (productivity) in the use of space are moving towards greater efficiency

Over time retailers have could achieve higher sales per sq. m as they improve space efficiency. Estimates of the amount of retail floorspace required are highly dependent on the assumed future overall economic conditions and on the actual future levels of productivity growth.

Trends towards the polarisation of comparison goods retail floorspace demand towards the stronger and more attractive centres are likely to continue

The larger centres in the UK have strengthened at the expense of the smaller and undifferentiated retail centres. This study shows that this is likely to continue and strengthen within London by 2041.

Approximately half of London's town centres are expected to have a surplus of comparison goods retail floorspace by 2041

Of the 240 GLA retail centres 114 are expected to have a surplus of comparison goods by 2041. The largest need for space is in the largest International, Metropolitan and some Major centres. By contrast it is in the 114 smaller centres and a few Major centres that there is likely to be more comparison goods retail space than required. In the centres where there may be a surplus of space then a different approach will be required to support the vitality of these centres.

The future? Disruptive technologies?

The potential for disruptive technologies including autonomous vehicles, 3D printing, automation and bio-tech, to provide both opportunities and threats to the retail economy of London is likely to grow by 2041. This is an area in need in future research and impact studies.

2 INTRODUCTION

2A Aims and objectives

The Greater London Authority (GLA) appointed Experian to assess the scale and nature of consumer expenditure in London for comparison goods, convenience goods, and other expenditure including leisure to the year 2041. Focusing on strategic requirements for comparison goods retail floorspace needs in London., distributed to boroughs and individual town centres. And taking account of strategic retail developments in the planning pipeline and assessing future scenarios for the distribution of assessed need in the context of the London Plan town centre network.

This has involved building upon existing and forecast expenditure datasets across all boroughs of London and identifying centres where the need for floorspace is greatest.

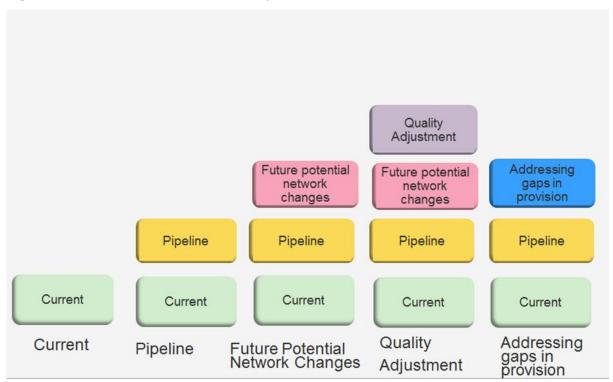
Since the previous study in 2013 the economic and commercial landscape has seen considerable changes both in the maturing of major retail schemes such as Westfield London and in changes to the shopping patterns of the British and London and overseas consumer particularly in the continuing growth of internet sales.

Key objectives

- 2.1 The study assesses the scale and nature of consumer expenditure in London for comparison goods, convenience goods, and other expenditure including leisure to the year 2050. It focuses on strategic requirements for comparison goods retail floorspace need in London, distributed to boroughs and individual town centres.
- 2.2 The study will inform the London Plan. It will complement research into other town centre uses such as offices, hotel demand and the London Town Centre Health Checks.
- 2.3 The study will be framed within the wider policy context of the London Plan and the National Planning Policy Framework which recognise town centres as a key spatial priority.

2B Scope of the study

Figure 5. Scenarios examined in the study.



- 2.4 This study starts with estimating and forecasting spending on comparison goods at a London wide level then drilling down to each separate centre and identifying the level of need for floorspace in each place. The project starts with the current patterns of supply and demand and looks forward, factoring in the major retail pipeline developments in and around the capital to 2050. In addition, the study has assessed the scale and nature of consumer expenditure across London (total and average per capita) for comparison goods, convenience goods, and other expenditure including leisure over the period 2015 to 2050.
- 2.5 Next, the project built an update of the GLA's borough-level comparison goods expenditure forecasts into local level spend estimates. This local spend was then distributed between the shopping centres of London based on an assessment of the current relative attractiveness of each shopping destination and their accessibility. The amount of existing and expected floorspace in each centre was then compared with the predicted spend to calculate the balance between demand and supply. In turn this balance was used to determine the likely retail floorspace need for London in the future.
- 2.6 From this the baseline scenario (that is, assuming no new developments 2015-2050) shows comparison goods floorspace need associated with each centre.
- 2.7 The next scenario consisted of a 'future proposals' scenario following the same basic methodology but showing the impact on the baseline scenario (trade diversion to/from existing centres) of all significant retail proposals across London. It highlights the potential impact of the known proposals for major retail developments. The general accuracy of the information on the scale and nature of these proposals were confirmed by the relevant boroughs before incorporation in the model. Where only the scale of the proposal is known, a view has been taken by Experian as to the nature/composition of the development in the light of broadly comparable formats elsewhere. In

- neither circumstance, should it be taken to imply that either the boroughs or the GLA would necessarily support these proposals.
- 2.8 Then scenarios took all the existing and pipeline developments, and increasing the strength and efficiency of the larger centres in London evaluated a possible future where current trends towards the strengthening of larger retail centres continues and the resultant impact on other smaller centres measured. The additional attractiveness of these major centres is then applied and the impact on their likely levels of expenditure and on other centres is measured.
- 2.9 The final scenario looks at the impact of adding in a set of strengthened centres that would fill any significant gaps in coverage remaining after all areas of demand within easy reach of a large shopping destination are removed.
- 2.10 The results of each scenario have been mapped and presented in tabular form to show the overall revised distribution and differences/diversions from the baseline scenario. As the volume of reported material is substantial in its size and depth, this report contains only the summary maps and tables reporting the key findings. More details of each scenario run and the predicted impacts on expenditure, floorspace and needs are supplied in addition in electronic form. (The scenario data packs).
- 2.11 Scenario data packs:
 - Interactive Excel spreadsheet reports at London, sub zones, borough and centre level showing the retail floorspace needs where the user can vary year, scenario, spend assumptions, space productivity assumptions and geographic level.
 - Sets of PDF maps for each scenario at London, sub zone, borough and centre level showing retail space requirements.

Disruptive Technologies

- 2.12 When predicting the likely changes in retail supply and demand as far into the future as 2050 over a 35-year time span, it is impossible to fully predict the impacts of a range of emerging and potentially disruptive technologies. Within the scope of the current study we have tried to account for the increasing move of ever more retail sales to the internet and the supporting delivery infrastructure. We have measured the speeding up of the efficiency in the use of retail space and accounted for the move in favour of larger and stronger retail centres and against smaller and less differentiated shopping centres.
- 2.13 This study however does not account for a range of technological and behavioural changes that, over the time span of several decades, may well have profound implications for both the demand and supply of retail. The major disruptive changes that are likely to have an impact include:
 - Autonomous vehicles
 - Automation of labour
 - 3D Printing
 - Climate Change
 - Bio-Technology
 - On-demand services
 - Nano-technology and smart materials
 - Virtual reality
- 2.14 A substantial shift to autonomous vehicles could reduce demand for car parking in town centres, freeing up land. It could also result in the loss of driving and delivery jobs. This, and other forms of automation, may result in higher unemployment and significant changes in the types of jobs available, impacting individual's spending power.

- 2.15 3D printing could revolutionise stock levels and transport infrastructure and local micro-manufacture coupled with online specification and ordering would reduce the need for shops.
- 2.16 In recent years, there has been an increase in on-demand services with direct home delivery of products and services. Deliveroo and Just Eat being examples. This trend seems likely to grow. If there is a dramatic increase in the range of goods that consumers can and are willing to specify and order on-line, far less shopping space stock and range will be required.
- 2.17 Bio-technology may result in longer life spans and a higher proportion of income being spent on health-related products and services and longer life spans will change the balance of age groups of consumers and their demand characteristics.
- 2.18 Nano-technology and smart materials are in their infancy but have the potential to be disruptive to existing patterns of retail behaviour and offer.
- 2.19 Virtual reality has the potential to simulate part of the experience of visiting a shop and may again reduce the need for retail space.
- 2.20 We recognise that many of these trends may have a significant impact on the predicted retail space requirements, particularly toward the end of the period covered by this study. However, many of these technologies are still emerging, and the rate of uptake, level of interest and cost factors remain uncertain. Different technologies could have dramatically different effects, and the speed of change is highly unpredictable. These factors have therefore been excluded from the projections in this study.

2C Economic context

- 2.21 The strong performance of the UK economy in the past four years (2012-2016) has meant that it has recovered ground lost during the 2007/08 recession more quickly than seemed likely a few years ago. However, the EU referendum result has created major uncertainties regarding the medium and long-term outlook for the UK economy. Much will depend on the outcome of the negotiations with the EU over the terms of the UK's departure. We expect the pace of expansion to underperform the long-term trend throughout 2017-21. GDP growth is expected to average 1.4% per annum during that period, against 2.6% from 1981 to 2008. The weaker medium-term growth outlook reflects in large measure the expected slowdown in consumer demand, as real incomes are eroded by higher inflation and sluggish earnings growth as the labour market deteriorates from the buoyancy of recent years. Fiscal policy will be easier than in the past six years and the monetary stance more accommodative which will help support activity but until trade negotiations are resolved uncertainty will continue to weigh on consumer and business sentiment. However, once these uncertainties are ironed out and a new economic relationship established, we expect GDP growth to accelerate to around 2.3% per annum in the longer term, a slightly weaker longer-term outlook than annual growth of 2.5% in the previous study.
- 2.22 All key economic forecasters have downgraded their medium and longer term outlook considering the events in the last few years. In their November 2016, Economic and Fiscal Outlook report the Office for Budget Responsibility downgraded their GDP outlook for 2017 and 2018 from 2.2% and 2.1% respectively, to 1.4% and 1.7%2. This brings their view more in line with Experian's current house view of 1.4% and 1.8% growth in 2017 and 2018, respectively (although the forecasts were run on a slightly earlier vintage where growth in 2017 of 1.1% was expected). Their view for 2015 and beyond is now largely in line with Experian's expectations. Since the writing of this report, the OBR have further edged their forecasts upwards.
- 2.23 The outlook for consumer spending in London is more favourable than the UK average even though it is subdued compared to its historical average. London has always outperformed the national average given its strong labour market and robust income growth and a proportionately higher share of overseas spending. However, the gap in consumer spending growth between London and the UK average is expected to narrow in the forecast period: it will outperform the national average by 0.5 percentage points in the long term compared to the pre-recession gap of about 1 percentage point. Compared to the previous study, the long-term growth rate for Greater London has been downgraded from around 2.6% per annum to 2.4% per annum, in line with a moderately weaker national profile.

Alternative Forecasts

- 2.24 The short to medium term prospects for the UK economy are fraught with uncertainty. Indeed, the central forecasts for regional consumer spending that underpin the small area expenditure forecasts are subject to both upside and downside risks that may affect key results. As such, it is useful to construct alternative scenarios to define other possible outcomes.
- 2.25 The results of this study were produced around the time Article 50 was triggered and exit negotiations were yet to commence. In its White Paper³, the government made clear that it will seek a new strategic partnership with the EU and prioritise securing the freest and most frictionless trade possible in goods and services between the UK and the EU. In Experian's view, uncertainty over the future relationship with the EU will weigh on business confidence leading to a period of weaker growth in the short term until a more certain trading environment is established. Such a period of weakness has been incorporated into our central forecast. In the longer term, economic growth is assumed to settle around a more stable equilibrium.

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² Office for Budget Responsibility: Economic and fiscal outlook – November 2016

³ HM Government (2017) 'The United Kingdom's exit from and new partnership with the European Union White Paper'

- 2.26 There are both downside and upside risks to the outlook. The Bank of England has warned that fundamental weaknesses in the UK economy remain, primarily sluggish earnings growth, and weak productivity. Adverse developments in these areas could hamper consumer confidence and spending, and result in slower economic growth than in the central forecast.
- 2.27 A sterling crisis is also a possible risk given the magnitude of the balance of payments current account deficit (representing almost 7% of GDP). If capital flows deterred by political and economic uncertainty are insufficient to cover this, the exchange rate will have to take the strain. The weakness in the global trade backdrop is another potential risk. If international demand remains lacklustre, the UK will be unable to capitalise fully on the depreciation in sterling to boost exports.
- 2.28 While risks are more on the downside, there is an upside risk. The depreciation in sterling could help to improve the UK's trade performance which could in turn boost economic growth prospects. Given London's role as a prominent global and financial centre, we would expect incomes in the capital to then grow faster than in the central forecast.

Retail Trends

2.29 Retail productivity has shown an increase over time as retailers compete to reduce their cost base and increase their sales. With higher sales per square floor over time we see another reason why less retail space is needed for the same amount of sales. Clearly there is a balance between rising retail demand both from domestic residents, workers and visitors and from domestic and international tourism. But this is offset by these moves of retail trade on-line and by the more efficient use of space over time. At some point at national level it is likely that a balance will be reached and that we will have reached "Peak Retail Space". But, even if little or no net additional retail space were to be needed we will still need to plan for retail change as the existing retail floor space may well be in the wrong locations and be of the wrong type to meet the needs of modern and future retail.

Factors that will result in geographic polarisation of demand and therefore required retail space

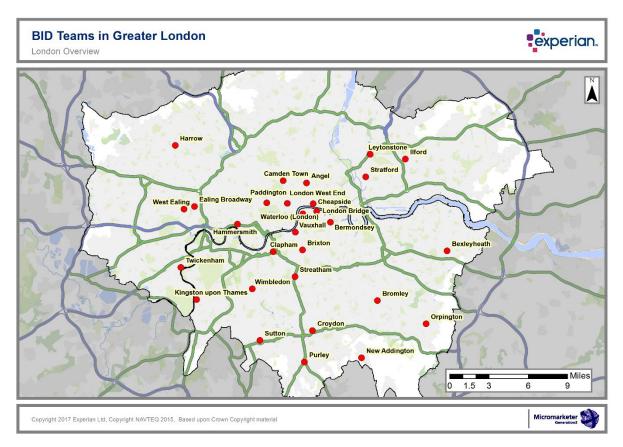
- Polarisation to larger stronger centres
- Polarisation to stronger brands. Larger and stronger brands growing their market share and multiples squeezing smaller independent retailers
- Polarisation to cheaper brands. Increasing price pressure and growth of discounter chains
- 2.30 Examination of the historic trends of vacancy rates by centre over the UK and in London and the South-East shows that retail vacancy has been at its highest in smaller centres especially where they have a more down-market catchment mix and lack tourist and entertainment attractors.
- 2.31 By contrast the larger centres and especially the major malls have seen lower levels of vacancy. This is a significant trend where the larger and stronger retail centres are prospering at the expense of smaller and less differentiated retail locations especially where they have less spending power in their immediate catchments. The relative strength of the larger centres reflects their wider range of retail fascias offered, the presence of key footfall drivers such as department stores and "big name" stores, and the support of other non-retail leisure and cultural attractions.
- 2.32 Since the last London comparison goods retail floorspace need study in 2013 we have seen changes in the brand mix of the UK retail landscape resulting in several notable retail failures. In some cases, this has reflected technological changes. (Game Group, Comet, HMV, Jessops and Blockbuster). In others, the rise and fall of the economic cycle has seen a sharp contraction in demand such as furniture as house moves dry up during a recession. (Dwell, Dreams). In some a combination of strong competition and structural changes to shopper behaviour has resulted in other failures. (BHS, Allders of Croydon and Phones4U).
- 2.33 In the supermarket brands a combination of trends has reduced the overall need for additional and existing retail space. This has led to a range of commercial responses including Sainsbury's

locating Argos within their stores and locating other brands within supermarkets. The largest supermarkets are seeing more and more non-food goods moving to the internet, growing pressure from the discounters such as Aldi and Lidl and increasing food home deliveries supported by purpose designed distribution centres and more recently by the expansion of Amazon into the repaid delivery of food. This has resulted in write downs for existing supermarket lease values, the attempt to fill unwanted existing space with other tenants and a reduction in the building and opening of new supermarkets. Many of the largest supermarkets are now too large for the new demand patterns and the pipeline for major supermarkets is drying up apart from the discounters who use a smaller footprint.

Planning Implications for these changes. Overheating centres and weaker centres that will need regeneration

- 2.34 The study shows that there is a strong difference between central London and the Major Malls such as Westfield Stratford, Westfield London Brent Cross and the major foci of development such as Croydon with increasing development and spend and the smaller weaker centres particularly to the east such as Barking and Dagenham.
- 2.35 This raises two key planning and strategic questions. First how best to cope with, manage and optimise the centres that are overheating. In the more successful retail centres sales densities are likely to rise as the price of space rises with growing commercial demand and high density concentration results in congestion with issues for refuse disposal, public transport and infrastructure maintenance and investment.
- 2.36 Secondly, what measures will be needed in the centres which are being left behind and will need action to regenerate and support them.
- 2.37 The Mary Portas review of the high street (https://www.gov.uk/government/publications/the-portas-review-the-future-of-our-high-streets) advocated a range of policy responses to help regenerate weakened retail centres. These included better parking provision, lower business rates, town teams which led to the range of BID teams (see Figure 6) and relaxed licencing and promotion of local markets. They are likely to have the greatest success in places with alternative sources of demand for housing, leisure etc.
- 2.38 In addition, retail centres with surplus shop space can look to additional housing, cultural and leisure and night time economy uses and business use of ex shop units. The appropriateness of each alternative use will depend on the local sources of other types of demand and on the local environment.

Figure 6. Town Centre Bid Teams.



2D Policy context

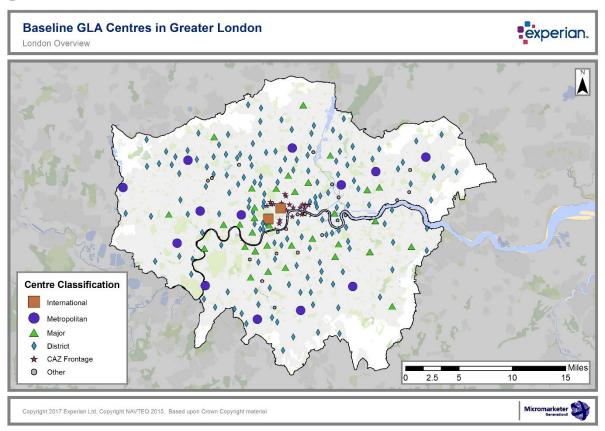
- 2.39 The London Plan needs to be informed with robust assessments of need for retail uses. This is set out in the Government's National Planning Policy Framework (NPPF) and associated guidance. The NPPF sets out policy guidance to ensure the viability of town centres and that planning policies should ensure that the need for retail and other town centre floorspace is met in full.
- 2.40 The current adopted London Plan 2016 provides an integrated economic, environmental, transport and social framework for the development of the capital until 2036. As such it forms part of the development plan for Greater London, and together with the London boroughs' local plans provides guidelines for policies and guides planning decisions by councils and the Mayor. This study provides evidence of the possible levels of retail space needed in London and supports the new London Plan, which is due to be published in autumn 2017.

2E London's town centre network

2.41 London is served by an extensive and diverse retail offer ranging from the heart of London West End through a series a significant sub centres such as Croydon, Romford and a hierarchy of smaller retail destinations. There are also a number of retail malls such as Brent Cross, Westfield London and Stratford and by major malls just beyond the London boundaries including Bluewater and Lakeside. Over time an increasing amount of comparison retail activity has shifted to the web of retail parks across London and to on-line purchases.

- 2.42 Experian defines 388 retail centres within Greater London which are widely used in impact studies of retail activity, by contrast he GLA defines 241 centres for the purposes of the London Plan. This study simulates supply and demand changes and reports them against both definitions.
- 2.43 Each retail centre is defined by the physical extent of the shops that make it up and the level of attractiveness of each centre relates to the volume, mix and quality of the retail offer in each place. Centres with large amounts of retail space, low vacancy and the presence of key attractor brands pull more customers to them from a wider area.

Figure 7. Baseline GLA centres.



3 METHODOLOGY

Methodology Overview

Figure 8. Key project inputs.



- 3.1 Figure 8 shows an overview of the project where demand from residents, tourism and workforce is compared with the existing and potential availability of retail space to derive an assessment of comparison floorspace need.
- 3.2 Figure 9 shows the factors that contribute to the balance between retail supply and demand. The existing demand is determined by the volume of people and how much they currently spend. This demand can rise if the population increases and if each person spends more as the economy improves. Of course, demand would fall if the population fell, or each person was to spend less. As this assessment relates to demand expressed in shops, the available pot of demand will fall if a bigger proportion of spend happens online and not in shops. The other consideration in this balance is the amount and type of supply. The existing retail supply is both within London and in the neighbouring centres beyond London. This supply can rise as additional retail space is added by pipeline developments. If the supply grows relatively in major retail nodes (the larger stronger centres) both within and beyond London they can suck demand from smaller weaker centres. Finally, there is a general trend that retail space is becoming more efficient over time. In other words, retailers can get higher sales per square meter and require less space to obtain the same level of sales.

SUPPLY DEMAND Improved Loss to Retail space Internet efficiency Major Retail **Economic** development growth nodes Pipeline of Population Retail growth developments Existina **Existing Retail** demand supply population and spend

Figure 9. Measuring the balance between supply and demand.

- 3.3 The methodology of this project had two main stages, first the Consumer expenditure was estimated for London and the rest of the UK projected to 2050. These estimates included the spend likely to come from residents, workers and tourists. Account was taken of the movement of sales to the internet. These estimates were then distributed between the shopping centres using the Experian gravity model. The balance between demand and floorspace supply was then calculated. The main tasks within these phases were as follows:
 - Estimate small area comparison goods and convenience goods residential spend for 2015 to 2050
 - Estimate tourism and workforce spend by London centres for 2015 to 2050
 - Produce a range of spend estimates reflecting possible future economic conditions (Lower, Central and Upper)
 - Distribute the residential demand to retail centres using a gravity model
 - Add in centre level worker and tourist spend
 - Produce a Baseline for the forecast spend for each centre, and the gross and net floorspace required to meet this spend
 - Run a series of scenarios on the gravity model where the attractiveness of centres is flexed to reflect a series of possible outcomes: Pipeline, Future potential network changes, quality adjustment and Addressing gaps in provision.
 - Apply different possible levels of floorspace productivity to the Baseline and each scenario Low, Base, High and very high
 - Apply different possible levels of economic growth to the Baseline and each scenario Low,
 Central and Upper
 - Report the floorspace requirements for a range of time periods for each of these scenarios.

3A Consumer expenditure forecasts

- London Consumer Expenditure and Comparison Goods Retail Floorspace Need study contains two distinct but interrelated parts:
- 3.5 This first section provides a view of the spending that goes through retail outlets within London. It presents estimates and forecasts of consumer spending by **London residents**, by **commuters** from outside of London who work in central London and by **tourists** visiting London. Retail spending in London (on comparison goods) is made up of:

Equation 1

$$RSCP_{London} = DSCP_{LondonLondoners} + DSCP_{London,RUK} + SCP_{LondonOT} + SCP_{LondonRUK} + SCP_{LondonCom}$$

where:

- RSCP is retail sales of comparison goods
- DSCP is day-to-day spend on comparison goods excluding spending made on overseas or domestic tourism (involving a stay of a least one night) visits.
- SCP is spent on comparison goods by tourists or commuters from outside of London
- 3.6 The subscripts refer to the source of the spending (Londoners, rest of UK, overseas tourists, UK tourists and commuters from outside of London) and where the spending takes place (London).
- 3.7 We can also describe day-to-day spend on comparison goods by Londoners as:

Equation 2

$$DSCP_{LondonLondoners} = TSCP_{UK,Londoners} - DSCP_{RUK,Londoners} - SCP_{SFT,Londoners} - SCP_{RUK,LondonerTarists}$$

where:

- TSCP is total spend on comparison goods by Londoners, the suffix SFT refers to spending on special forms of trading (e.g. mail order, internet, market stalls) and the suffix Londoner Tourists refers to the spending of Londoners on tourist visits (to the rest of the UK).
- 4.1 Finally, total household (consumer) spending by Londoners can be described as: Equation 3

$$CE_{Londoners} = TSCP_{UK,Londoners} + TSCV_{UK,Londoners} + TSOTHER_{UK,Londoners} + TS_{ABR,Londoners}$$

where:

- CE is total household (consumer) spending
- TSCP is total spend on comparison goods by Londoners
- TSCV is total spend on convenience goods by Londoners
- TSOTHER is other spending in the UK by Londoners
- TS is total spending (Where the suffix ABR refers to spending made abroad.)
- 3.8 Equations 1-3 show that in order to derive retail sales of comparison goods in London we need to be able to split total household spending by Londoners down into its component parts. This enables us to make allowances for leakages of that spending in the form of day-to-day spending that takes place outside of London, (domestic and international) tourist spending by Londoners and spending on special forms of trading and to add in allowance for spending in London by tourists and by commuters from outside of London. Day-to-day spending by Londoners (DSCPRUK, Londoners) is

- derived from our shopper flow surveys and is dealt with in Chapter 6. The derivation of these variables is described below.
- 3.9 The estimates of spending by London residents fall into two parts: estimates of spending by all Londoners, and estimates for spending by residents of the different parts of London (boroughs and postcode sectors1).

London and ROSE-level estimates and forecasts

- 3.10 The London and ROSE estimates are based on data from the following sources:
 - The National Accounts and Consumer Trends (Office for National Statistics (ONS))2;
 - The Living Costs and Food Survey (LCFS) (ONS)4;
 - 2011 Census (ONS)4;
 - GLA Demographic Projections⁵;
 - GLA Employment Projections
 - ONS Demographic Projections for Greater London, the South East and East of England⁵;
 - Forecasts for total household spending from Experian's Regional Planning Service⁶;
 - Forecasts for total employment from Experian's Regional Planning Service⁷
 - Forecasts for expenditure by COICOP⁸ category from Experian's UK Macro and Regional Forecasting model⁹.
- 3.11 It should be noted that the models were driven by Experian's in-house economic forecasts after ensuring consistency with GLA long-term employment projections up until 2041. Both series estimate growth of 0.8% per annum over the medium and longer terms.
- 3.12 The projections out until 2050 are generated using Experian's macroeconomic, regional and Financial Strategy Segment (FSS) models (Please see Appendix 2 for a more detailed summary of the FSS modelling methodology and a list of the FSS groups and types, with descriptions). Household spending is derived by sharing out UK nominal expenditure (obtained from National Accounts) using regional spending by category reported in the LCFS. Nominal regional spending is deflated by published UK deflators and then aggregated to produce a regional total. The historic estimates are driven forward by our macroeconomic forecast variables (chiefly consumer spending, incomes and inflation) using assumptions about income and price elasticities. The shares of the individual components of consumer spending, not just the levels, will be sensitive to the UK outlook.
- 3.13 To produce the UK forecast we use a heavily customised version of the National Institute of Social & Economic Research's (NISER) model called NIGEM to provide our core macroeconomic forecast. NIGEM is a general equilibrium model of the UK and World economy which forecasts, amongst other things, aggregate output, expenditure, income, employment and spending based on

¹ The breakdown to post code sectors is required to feed our gravity model, which is built up from the post code sector level.

² 2011 - 2016

^{32011 - 2014}

⁴ 2011

⁵ 2015 forecast round: 2011 - 2050

⁶ 2011 – 2050

 $^{^{7}}$ 2011 - 2050

⁸ 2011 – 2050

⁹ The Classification of individual consumption by purpose, abbreviated as COICOP, is a classification developed by the United Nations Statistics Division to classify and analyse individual consumption expenditures incurred by households, non-profit institutions serving households and general government according to their purpose. It includes categories such as clothing and footwear, housing, water, electricity, and gas and other fuels.

 $^{^{10}}$ 2011 - 2037

the UK National Accounts published by the ONS. The regional model is solved sequentially. Each variable in the sequence is dependent only on variables earlier in the sequence and not variables later in the sequence. The sequence is divided into sections. The first is the core, which produces headline total forecasts for each region for each variable in the following order: population, hours worked, wages, output, employment, income and consumer spending. The headline consumer spending is then run through Experian's FSS model which generates spending for COICOP categories at postcode level. It is these forecasts that are aggregated up and which form the basis of the work for this report.

Sub-regional estimates

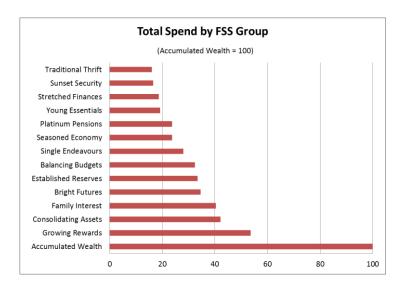
- 3.14 One of the requirements of this study is to produce estimates and projections of spending at a borough and sub-regional level as well as at the London level. In addition, estimates and forecasts at the post code sector level are needed to feed into our gravity model of spend by destination (that is, by town/retail centre) rather than residence.
- 3.15 There is no official detail for consumer spending below the regional level. Our estimates and forecasts for spending in boroughs and postal-codes is based on several sources:
 - ONS Regional Income Accounts for NUTS2 and NUTS3¹⁰;
 - Experian's Local Forecasting Model;
 - Experian's FSS socio-demographic segmentation and forecast model FSS Economics;
- 3.16 The Regional Income Accounts are used to estimate total spending at a local level which is constrained to regional spending. This is then split to the COICOP level using the estimates of expenditure for each FSS segment from FSS Economics. The local data is then disaggregated to the postal sector again using FSS Economics.
- 3.17 FSS Economics segments each household into one of 50 types based on a variety of data sources. Spending estimates are then derived by coding the Living Costs and Food Survey by FSS type and forecasts are made at the national level for each FSS type. FSS types have been found to be a good discriminator between spending patterns and, hence, the FSS makeup of an area (post code sectors in this case) can be used to infer local spending levels. The relativities between different FSS types are used at the local and postal level to produce disaggregate estimates.
- 3.18 Figure 10 shows how total spend levels vary between FSS groups (FSS groups are a 14-way aggregation of FSS types and are used here for exposition), while Map 1 shows average household weekly spend on comparison goods by borough. (Please see Appendix 2 for a more detailed summary of the FSS modelling methodology and a list of the FSS groups and types, with descriptions).

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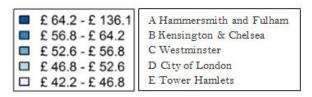
¹⁰ NUTS stands for 'Nomenclature of Territorial Units for Statistics'

Figure 10. Total relative spend by FSS Group



3.19 The map below shows that in 2015 the London boroughs where spend on comparison goods per person was relatively high tend to be in the centre and West of the city. At the other extreme, eastern boroughs tend to have the lowest spend per person.

Figure 11. Average weekly spend per person on comparison goods in London (2015).

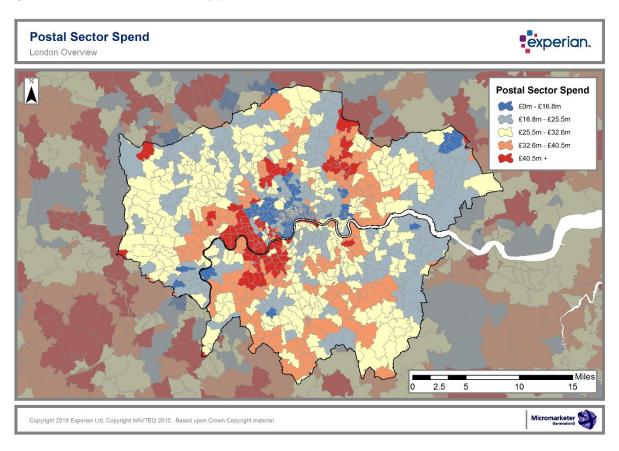




Small area forecasts

- 3.20 The small area estimates are projected into the future using three sets of assumptions:
 - Relative household spend by FSS type remains constant in the future.
 - Relative household size by post-code sector remains constant in the future.
 - Estimates for population, by ward are provided by GLA.
- 3.21 The small area (post code sector) projections are driven by the GLA's ward-level projections of population and forecasted spend per head for Greater London, the South East and the East of England.
- 3.22 Our spending estimates are divided by the population numbers from our Regional Planning Service to derive population per head spending. These are then multiplied by the GLA population numbers.
- 3.23 Figure 12 shows how residential spend (i.e. spending by people living in London) is distributed across London at a Postal Sector level. Stronger levels of demand can be seen in the west and north of London.

Figure 12. Residential demand by postal sector 2015.



Spend by UK residents from outside of London

3.24 Non-Londoners as well as Londoners do day-to-day shopping in London centres so we also need small area estimates and projections of spending for non-London post code sectors. These have been put together in the same way as the London estimates. Figure 13 summarises the estimates and projections of comparison goods spend and compares it with spending by Londoners.

Figure 13. Total spending on comparison goods by residents of the Greater South East

	Spending in 2015 (£m, 2012 prices)	Share of Greater South East in 2015 (%)	Projected annual average growth rates 2015-2041 (2012 prices)	Projected annual average growth rates 2015-2050 (2012 prices)
London	26,673	30.4	3.1%	3.1%
South East	36,943	42.0	2.9%	3.0%
East of England	24,239	27.6	3.0%	3.1%
Greater South East	87,854	100	3.0%	3.0%

Spend by tourists

Tourism spend in London

- 3.25 The tourism estimates are based on data from three sources.
 - The International Passenger Survey (IPS) for trips and spending by visitors from overseas (ONS).
 - GB Tourism Survey (GBTS) for trips and spending by GB visitors (Visit England).
 - Sub-regional tourism (SRT) estimates for 2013 (ONS) for domestic and overseas trips and spending.
- 3.26 These sources provide estimates of total spend by tourists, but the GBTS has the added advantage of providing a breakdown of the total. It consists of accommodation, eating & drinking out, travel, services or advice, clothes, other shopping, and entertainment. We have defined domestic tourist spend on comparison goods as being equal to 90 per cent of spending on clothes and on other comparison goods shopping (with domestic tourist spend on convenience goods accounting for the other 10 per cent). There is no information on the breakdown of shopping other than that between clothes shopping and the rest, so the 90 per cent figure is a working assumption that has been followed in the previous two studies.
- 3.27 The IPS only provides information on total spend. We have assumed that the proportion of this spent on retail goods is the same as for domestic tourists (average of 2000-2015), which is 25 per cent. We have again assumed a 90:10 split between comparison and convenience goods.
- 3.28 The SRT data provided a useful reference for cross-checking the estimates in the other sources.
- 3.29 The forecasts continue to be produced by combining a forecast of visitor nights with forecasts of spend per night stayed. In line with GLA planning assumptions, the long-run forecasts for the number of visitor nights are consistent with the trends from the latest GLA long-term visitor projections.
- 3.30 There is no data on spending by ROSE residents on day trips to London, so this has not been factored into the tourism spending number.
- 3.31 The forecasts for tourism spending are constructed by combining forecasts for total visitor nights and average spending per visitor night using the formula:

Total tourism spending = average spending per visitor night x total visitor nights

3.32 The projection for total visitor nights is taken from the GLA's long term visitor projections. An estimate of average spend per visitor night for overseas tourists in 2015 was constructed using the historic data for total overseas visitor nights and consumer spending by overseas tourists. The same approach was used to estimate average spend per visitor night for domestic tourists in 2015. Average spend per visitor night by overseas tourists is assumed to grow in line with an estimate of global consumer spending per person. This measure of global consumer spending per person is sourced from Experian's Global Futures Forecasting Service and is based upon an aggregation of forecasts for 47 countries including Europe, US, BRICS and Japan. Average spend per visitor night by domestic tourists is assumed to increase in line with UK residents spend per person over the forecast period. These consumer spending per person forecasts are taken from the October 2016 vintage of Experian's UK Economics Forecasting Service.

Figure 14. Spending on comparison goods by overseas and domestic tourists

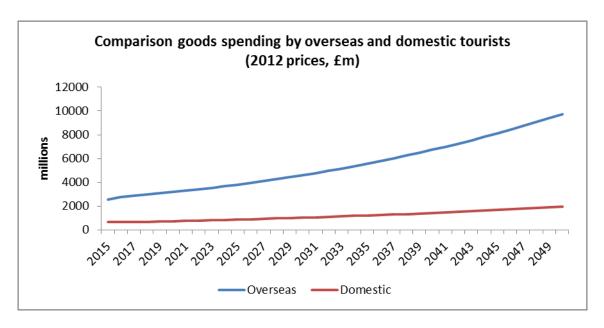


Figure 15. Visits and spend by overseas and domestic tourists in London*.

	Visitor nights, millions			Total spend on comparison goods (2012 prices £m)			
	Overseas	Domestic	Total	Overseas	Domestic	Total	
2015	108	30	138	2,575	665	3,240	
2021	122	32	154	3,303	742	4,045	
2026	129	36	165	3,944	892	4,836	
2031	136	39	176	4,783	1,059	5,842	
2036	144	42	186	5,791	1,251	7,042	
2041	151	45	196	6,991	1,466	8,457	
2050	164	51	215	9,748	1,936	11,684	
Average annua	l percentage	change.					
2015-2021	2.0%	1.2%	1.8%	4.2%	1.8%	3.8%	
2015-2026	1.6%	1.5%	1.6%	4.0%	2.7%	3.7%	
2015-2031	1.5%	1.6%	1.5%	3.9%	2.9%	3.8%	
2015-2036	1.4%	1.6%	1.4%	3.9%	3.1%	3.8%	
2015-2041	1.3%	1.6%	1.4%	3.9%	3.1%	3.8%	
2015-2050 1.4% 1.7% 1.4% 4.4% 3.5% 4							
* Staying at least	* Staying at least one night.						
Source: International Passenger Survey, Experian Projections, GLA.							

Out of region tourism spend

- 3.33 As well as taking account of the demand created by tourist spending in London retail outlets, we need to make an allowance for the spending by the residents of London, and other parts of the UK, on tourist trips (involving a stay of at least one night) within the UK (spending abroad has already been deducted). Spending made on holiday is not available to be spent as part of day-to-day spending in London, so should be deducted from the total spending number for London. This is because the spending by the residents of, for example, Cambridge, on tourist trips to London will have already been picked up in our allowance for tourist spend in London and should not, therefore, be included in our shopper flow allocations. Equally, spending made on trips by Cambridge residents to other regions is not available for shopping in London.
- In principle, it is possible to obtain residence-based domestic tourist spending from the GBTS. In practice, we have been unable to find a source within Visit England (which jointly sponsors the GBTS with Visit Scotland and Visit Wales.) who can provide this. Consequently, we have had to rely on estimates inferred from place-of-spending estimates.
- 3.35 In both 2010 and 2011, domestic tourist spending on comparison goods accounted for 2.7 per cent of total UK spending on comparison goods ¹¹. However, as London is one of the UK's major domestic tourist destinations ¹² and as Londoners are less likely to undertake tourist trips away from London involving overnight stays, we have assumed that the share of Londoners' comparison goods spend that takes place on domestic tourist trips is rather less than the UK average at 2.0 per cent¹³. This implies that the equivalent figure for the rest of the UK is 2.8 per cent.
- 3.36 The 2.0 per cent figure for Londoners, and 2.8 per cent for residents of the rest of the UK, is deducted from estimated comparison goods spend, after allowing for spending on special forms of trading to give available day-to-day spend by residents.

Commuter Spend

- 3.37 Estimates of commuting into and out of London and ROSE local authorities were derived from two sources:
 - ONS Estimates of inflow and outflow proportions at the Local Authority level
 - ONS Estimates of Resident and Workplace based Employment at the Local Authority level.
- 3.38 The estimates of inflow and outflow at the Local Authority level are taken from the 2011 census. The estimates of Local Authority employment are taken from the 2011 Census (ONS). The employment proportions were used to turn the Resident and Workplace employment stocks into flows. These flows were then re-expressed as proportions of the population to project forward inflows and outflows of commuters. We use population here to be consistent with the work done on household expenditure, and to reflect the scenarios, that are predicated on population projections. A strong correlation between employment and population in the long run make this a viable methodology.
- 3.39 In the absence of any official estimates, we have assumed that 10 percent of spending by commuters takes place near their place of work. This is consistent with the assumption made in previous vintages of this study and ensuring that the impact of the other model drivers is not

¹¹ Based on our estimates of UK comparison goods spend, after deducting an allowance for special forms of trading, and UKTS data on spend on shopping and assuming that 90 per cent of shopping spend is on comparison goods and 10 per cent on convenience.

¹² In 2002, domestic tourist spend on shopping in London was 16.3 per cent of the UK total whereas London accounted for 12.4 per cent of the UK's population and 14.3 per cent of UK comparison goods spend.

¹³ Londoners are also more likely to spend money on overseas tourist trips and this may also depress the share of comparison spend going on domestic trips relative to the UK average.

distorted. This amount is deducted from the current and future projections for resident spending, before it is allocated using the gravity model and allocated separately to town centres in central London

Figure 16. Commuter Spending coming in and out of London from the South East and East of England

	Commuter spending	(2012 prices £m)	
	In ¹⁴	Out 15	Net
2015	19,349	16,365	2,985
2021	21,767	18,403	3,364
2026	24,558	20,775	3,783
2031	27,569	23,327	4,242
2036	31,014	26,265	4,749
2041	34,776	29,474	5,302
2050	42,501	36,046	6,455
Average annual perd	entage change.		
2015-2021	2.0%	2.0%	2.0%
2015-2026	2.2%	2.2%	2.2%
2015-2031	2.2%	2.2%	2.2%
2015-2036	2.3%	2.3%	2.2%
2015-2041	2.3%	2.3%	2.2%
2015-2050	2.6%	2.6%	2.5%

Special forms of trading

- 3.40 An increasing volume of spending does not go through traditional retail outlets but instead goes through other channels -special forms of trading (SFT) notably the internet. Also, included in SFT are markets and market stalls, door-to-door sales, telephone sales and mail order. The strong increase in online shopping in the past decade has lifted the share of SFT to a level where it now accounts for over a tenth of total retail sales.
- 3.41 The key driver of SFT is e-tailing, whose market share is following the classic S-curve profile of a slow start, rapid take-off and an eventual plateau. The slow start saw e-tailing rise to a 3% share of total retail sales in 2007 from its inception in the early years of this century. The rise since then has been dramatic, with ONS data showing a 6.5% share in mid-2010 rising to 11.6% share in 2015. The problem with the S-curve as a model for projecting future market share is that we have no real way of knowing where exactly we are on the curve (e.g., is there more rapid growth to come or are we getting close to the levelling off e-tailing's share?). But rapidly changing technology, the enthusiastic response of consumers to new ways of buying retail goods and the response of traditional retailers to meet this response suggests that the maturing of the internet market (the point at which it grows more or less in line with total retail sales) is still years away.
- Our estimates of retail spending by UK households shown below in figure Figure **40** (chapter 4) were run in October 2016. They are derived from the ONS publication Consumer Trends (June 2016 issue), from which we used the chained volume measure which shows expenditure at 2012 prices.
- 3.43 For SFT our estimates are based on ONS data for online transactions including sales by supermarkets, department stores and catalogue companies. The ONS figure of internet sales (which includes internet fulfilment companies) plus their estimate of mail order and market/stalls sales is therefore a comprehensive estimate of SFT in retailing. Services are excluded as businesses are asked to separate out non-goods elements of their sales.

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¹⁴ Spending by non-London resident commuters from the East and South East of England near their workplaces in Greater London.

¹⁵ Spending by London resident commuters near to their workplaces in the South East and East of England.

- 3.44 To produce the forecast for SFT volumes by convenience and comparison goods, the components of total retail sales SFT were projected forward. They were then aggregated up and constrained to our projection for total retail SFT volumes.
- 3.45 We have undertaken sensitivity testing of SFT. The central assumption was that the share of comparison goods SFT would plateau at around 25% by 2025. However, given the rapid growth of SFT, it is not unreasonable to test a 'high' case of a 30% share.
- 3.46 For completeness, we have also included a 'low' case of a share of 21% which assumes that SFT's potential is being overestimated in the central case. The assumptions are presented in Figure 17 below
- 3.47 Figure 17 also includes SFT retailing market share of comparison goods adjusted for SFT sales from stores. It is assumed that 25% of SFT sales are made online, but are collected by the consumer in a retail store (for example 'click and collect').
- 3.48 Our estimates for SFT retailing market share of comparison goods in the central case of 25.2% (£14.5 billion) for 2031, compares to an estimate of 20.6% (£11.0 billion) in our 2009 study. Adjusting for SFT sales from stores, the estimate for 2031 of 22.8% (£13.1 billion) compares to an estimate of 17.5% (£9.3 billion) in the previous study. The share of internet sales in total retail transactions has grown quicker than expected. At the UK level the share stood at 11.7% in mid-2016 against 4.7% in June 2008, and is expected to continue to increase. 16
- 3.49 In the retail needs analysis, the central case of SFT has been used to model space requirements.

Figure 17. Estimated and projected market share of Special Forms of Trading (SFT) in London: Comparison Goods

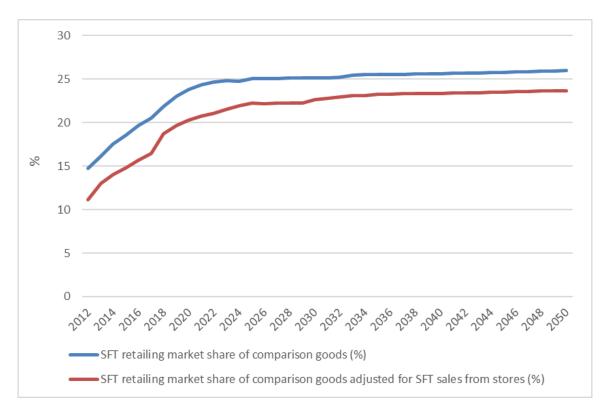
Volumes at 2012 prices	Growth in retailing %	Growth in SFT %	SFT retailing market share of comparison goods (%)			share goods	etailing mar of comparis adjusted for rom stores	son or SFT
2015	3.2	11.3		18.6			14.9	
Forecast			High	Central	Low	High	Central	Low
2021	2.3	5.8	26.4	24.4	21.4	21.1	20.8	17.5
2026	2.6	3.4	30.6	25.1	21.5	25.4	22.2	18.1
2031	2.7	3.6	31.3	25.2	21.5	26.6	22.8	18.3
2036	2.6	3.6	31.1	25.5	21.5	26.4	23.3	18.2
2041	2.6	3.6	30.9	25.7	21.4	26.2	23.4	18.2
2050	2.5	3.6	30.7	26.0	21.5	26.1	23.7	18.3

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¹⁶ Estimates from the 2009 study on a 2009 price base, while the current estimates are on a 2013 price base.

Figure 18. Estimated and projected market share of non-store retail sales - Special Forms of Trading (SFT)



Small Area estimates of non-store retail sales (SFT)

3.50 There are no official estimates of non-store retail sales below the UK level. We have used FSS to infer local spending on SFT. Expenditure on comparison goods via SFT are derived by coding a Target Group Index (TGI) survey on the purchases of comparison and convenience goods over the Internet all split by FSS type. The estimates are then constrained to the London-level estimates described above.

Business spend

3.51 This has been excluded due to lack of any data that could reasonably underpin such estimates. There is no official or survey evidence which can be sensibly used to derive how much local retail spending businesses undertake.

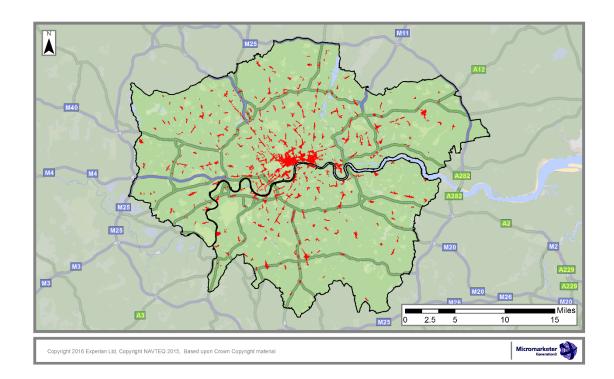
Consumer expenditure - results

3.52 The results of the consumer expenditure forecasts are shown in Chapter 4.

Choice of retail destinations included in the project

- 3.53 While the project is primarily concerned with the 221 International, Metropolitan, Major and District centres and CAZ frontages identified in the London Plan, the list has been extended to take account of the flow of comparison goods expenditure to other retail destinations:
 - Neighbourhood and More Local centres.
 - Out-of-centre retail locations.
 - Centres which lie outside London but absorb London residents' expenditure.
 - Central Activities Zone (CAZ Frontages)

Figure 19. Centres included in study (showing only those within Greater London).



- 3.54 The extended list of 388 centres, together with a more detailed explanation of the generation of this list, is included within the Appendix. Goad covers 90 per cent of the International, Metropolitan, Major and District centres in London, as well as destinations out-of-town, outside London and some neighbourhood centres. Where there is no coverage (the remaining 10 per cent and several Neighbourhood and More Local Centres), substitute data has been assembled based on Experian's database of neighbourhood centres. In some cases, manipulation of individual Goad centre boundaries, in conjunction with the GLA, was required to match this as closely as possible to London Plan centres: for example, the West End, Fulham Road and Chelsea. GOAD also covers the Central Activities Zone (CAZ Frontages).
- 3.55 The neighbourhood database was created by clustering groups of retail outlets based on source data from Experian's Shop*Point Database. This is the largest single retail business data source in the country, bringing together data from various sources including Companies House, Thomson and Yell Directories. Experian's Shop*Point data gives a unique insight into the distribution of retail activity in the UK and Ireland. Shop*Point covers over 800,000 retail locations, along with motor, leisure and vacant outlet records and is one of the most comprehensive sources of retail information on which brands are located where.

Current comparison floorspace provision

The first stage in applying spend to individual centres is to establish the existing floorspace provision in each centre. This is based on Experian's Goad database.

Goad

- 3.56 Goad database is the basis of the floorspace provision analysis in this project. Accurately quantifying existing floorspace provision underpins the whole modelling process and allows assumptions to be made about an individual centre's future attractiveness.
- 3.57 Experian owns Goad, a unique source of town centre and retail park data. The Goad database comprises floor plans of over 2,000 town centres and 1,500 retail parks across the country, which is updated annually by a team of professional surveyors. Goad's floorspace figures are based on Ordnance Survey gross surface area calculations rather than net trading areas. The Goad retail database represents a snapshot of the retail centre at the time of the survey and Experian accepts that centres may have changed in the months since the last annual survey.
- 3.58 The appendix includes further details of the contents of the Goad database and survey dates for the retail centres covered by the report.
- 3.59 Experian used its own Goad database as the source of existing floorspace provision with an allowance made for comparison goods space on upper floors/basements. This database is updated annually by a team of professional surveyors. Goad's floorspace figures are based on Ordnance Survey gross surface area calculations rather than net trading areas. The categorisation by Goad of what constitutes comparison retail, and the addition of upper floors floor space, have both been harmonised to match as closely as possible the geographic definition of centres and retail category definitions used by the GLA. The Goad database also enables a dynamic rating of the strength of the centre as a retail destination, which contributes to the attractiveness scores of centres used in the model. This enables us to measure both the volume and relative quality of retail provision in each centre and calculate the relative attractiveness that this mix produces.
- 3.60 Experian calibrates its shopping centre models against surveys of shopping patterns collected for Experian. In total the survey had c.5 million responses to date from across the UK. The product covers over 3,000 town centres, retail parks and shopping malls across Britain. The survey has revealed distinct trading patterns especially out of town and in town centres where public transport is a significant determinant of the catchment.
- 3.61 The raw Goad database of surveyed retail units was manually enhanced for large retail units with multiple floors such as department stores. This in turn was used to score the attractiveness of each shopping destination.
- 3.62 The Experian gravity model was then calibrated according to current shopping patterns, as observed in the survey. This first gives a mathematical model that represents the existing shopping patterns. Then by adjusting the supply and demand inputs, it is capable of running 'what if' scenarios that model future changes to London's retail scene and assess the impact to centres' turnovers.
- 3.63 Commuter and tourist and business spend are added as separate overlay layers to the predictions of this gravity model which describe the spend of residents in shopping destinations.

Modelling future spend at each retail centre

3.64 Catchment areas based on surveys are useful but static as they measure a sample of actual customers linking where they live and where they shop. By contrast this study requires a dynamic picture of the balance of supply and demand. To do this a mathematical model was built to simulate the known patterns of retail supply and demand. This was then adjusted to fit the current picture. This base line scenario was then adjusted to measure the likely changes that would result from a range of changes such as growing population and demand, differences in the strength of the future economy and changes to the relative and absolute provision of retail space.

Attractiveness scores

- 3.65 Central to this model is the scoring of each retail destination. The Goad database enables a rating of the attractiveness and vitality of retail floorspace in a centre. This forms the basis of Experian's Retail Centre attractiveness scores and is measured with the following information from the Experian Goad retail database:
 - Size of place: Count of multiple retailer outlets (multiple retailers are defined as having a store network of nine or more outlets).
 - Mix of place: Count of comparison retailer outlets (comparison retailers are defined by Goad's usage classification).
 - Size of shops: Floorspace of multiple retailer outlets.
 - Vacancy: Total floorspace of vacant outlets.
 - Non-Retail offer: Number of service and other premises (such as churches, offices etc.).
 - Key attractors: Count of key retail attractors (selected by Experian to represent popular and successful retail fascia).
- 3.66 These are combined to generate a 'vitality score' for each centre. This centre vitality score represents the relative attractiveness of each place. The importance of each contributing element are selected using experience of building both sales performance models for retailers and planning models for shopping centre owners, developers and investors.
- 3.67 The seven variables are weighted appropriately to derive an overall vitality score for each centre. Two variables (floorspace of vacant outlets and number of service and miscellaneous outlets) that carry negative weightings as these both reduce the retail pull of the destination. There is a strong relationship between this level of attractiveness and the extent (depth and breadth) of the centre's retail catchment area. The attractiveness scores are used to generate a first pass of the model which is then calibrated according to the real-life behaviour of shoppers, based on actual customer flows from Experian's shopper surveys.

Gravity modelling – General

- 3.68 Attractiveness scores are used to model consumers' actual shopping patterns. Expenditure from each area can be apportioned out to retail centres using the scores, in a process known as a gravity model. The assumption is that an individual's expected level of expenditure at a given centre is proportional to the attractiveness of that centre and inversely proportional to a measure of distance to that centre. These are analogous to weight and distance in the laws of gravity.
- 3.69 The aim is to produce a tool that mimics the shopping patterns seen from real customer flow data. This study uses Experian's 4.8 million shopper surveys to do this. This process of refining the model to measured shopping patterns, known as model calibration, consists of adjusting factors so that the observed patterns are best reflected in the model. The key parameters that are tuned are:
 - Decay: the amount that people are deterred from traveling as distance and time increase.
 - Attractiveness Scores of centres: the relative pull of each destination
 - Centre type: People's likelihood to travel relative to different types of centre (in-town, out-of-town retail parks, out-of-town shopping malls, neighbourhood centres).
- 3.70 In addition, some adjustment is made to take account of unique behaviour for the most dominant centres (International and Metropolitan) that defy attempts to model catchments using attractiveness scores generated in the same way as smaller centres.
- 3.71 Figure 20 shows the flow of data in a gravity model. The Experian Spatial Interaction Model an origin constrained gravity model takes their main inputs. The demand which is the spending power from the volume and mix of people living in each postal sector within and beyond London. This is where the flows of spend come from. Second, the Supply points as the retail centres where these

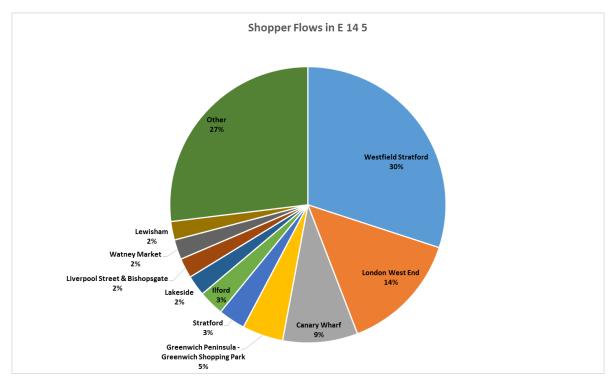
- people could spend their money. Each retail centre is scored by relative attractiveness as described above. The third input is the travel times between each postal sector and each retail destination.
- 3.72 The Experian Spatial Interaction Model calculates the likely flows of money between where people live and where they spend it. This is output as a set of predicted flows. These flows are then used to define the catchment of each destination and summed to give its predicted sales from residential demand coming from both within and beyond London.
- 3.73 Finally, the demand from this model is added demand coming from people at place of work and from both domestic and foreign tourists and the balance between space and likely demand calculated.
- 3.74 By running this model with a range of different inputs a set of scenarios was created and the supply demand balance calculated against a set of possible space efficiency assumptions.

П Demand Travel Times scenario Retail Supply Spending Car Train Tube power **Experian Spatial** Interaction Model Predicted sales flows to shopping centres Balance between supply and demand

Figure 20. The gravity modelling process.

3.75 By way of illustration, the following chart is an example of expenditure flows from a postal sector E 14 5.





3.76 The equation used to generate the flows from each geographic brick (for example, postal sector) to each retail centre is:

Flow = **O** x **A** x exponent^{-decay} x distance

where

Flow is the predicted flow from a specific origin to a destination

O the demand in each origin. In this case population in each postal sector weighted by its social mix

A the attractiveness of each retail destination

Negative exponent of decay is how much each additional unit of distance reduces the flow

Distance is the travel time between this origin and destination

The predicted flows to any destination from a specific origin are then summed and constrained so that they exactly match the total spend available from that origin

Gravity modelling - GLA specifics

3.77 A postal sector is the area represented by the initial letters and numbers of a postcode: for example, SW20 9 or E 14 5. The average population of a postal sector in London is 6,500 – a similar size to a ward. The map below shows an example set of postal sector boundaries around Canary Wharf.

Postal Sector Boundaries Around Canary Wharf
Postal Sector Level

E15

E112

A1203

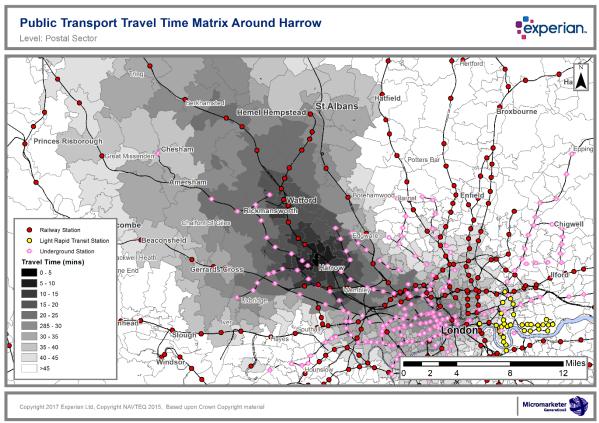
E114

Figure 22. Postal sector boundaries around Canary Wharf.

- 3.78 Using the methodology outlined above, expenditure modelled down to postal sector-level has been apportioned out to the 388 Experian centres within Greater London as well as those key centres outside. The Experian gravity or spatial interaction model was run using several different sets of assumptions to create the possible future scenarios described in this study.
- 3.79 The inputs to this model were initially based on Experian's standard gravity model product for Great Britain. This has been refined since 2013 to reflect and predict changing shopping patterns. The GLA's complete list of 241 centres within Greater London was merged into.
- 3.80 The measurement of travel distance uses drive time estimates as a basis. However, since the customer flow data from the surveys is multi-modal these drive times will effectively be weighted up or down to reflect actual catchment patterns in London. Building upon the methodology of the 2013 study we have incorporated a travel time matrix into the gravity modelling process which not only accounts for road users but also those consumers who typically use London's public transportation network (rail, tube, DLR etc.). Future developments resulting in changes to travel times were incorporated to reflect Crossrail.
- 3.81 Experian constructs travel time datasets using the locations of stations and stops from the government NAPTAN (National Public Transport Access Nodes) dataset and the timetabled times between stops from the NPTDR (National Public Transport Data Repository). This provides the timetabled travel times for each journey for a representative period each year. Experian then generalises this to provide an average travel time between nodes (stations or stops) and stores the times in an Experian link and node database. This covers tube and rail. Bus travel times are assumed to be like travel times by car.
- 3.82 To generate the travel times by each mode of travel the Experian software takes the location of the population weighted centroid of each postal sector and joins the network at the nearest 4 points on the network and then traverses the network until it finds the nearest node to the destination

centroid. The shortest path with the minimised travel time is then calculated from the set of all possible routes. Figure 23 provides an example of the travel time matrix around Harrow.





- 3.83 The model used for this study uses a database of shopper flow patterns consists of a list of geographic bricks (in this case, postal sectors) and a likelihood to travel to each of the competing shopping centres from that brick. For a given retail centre, the catchment area is represented by selecting those geographic bricks whose population is most likely to shop at that centre. For the purposes of this project a Primary catchment refers to the area comprising the set of postal sectors whose flows to a given centre are greatest, such that that area represents 50 per cent of the total shoppers at that centre. Catchments are shown for illustrative purposes only shopper flows come from outside as well as inside catchment areas and a change in relative attractiveness will affect centre spend by altering penetrations both within and outside of catchments.
 - 3.84 The following definitions are used for catchment maps:
 - Primary, 50 per cent of total shoppers.
 - Secondary, 75 per cent of total shoppers.
 - Tertiary, 90 per cent of total shoppers.
 - 3.85 An example catchment area map for Hampstead is depicted in Figure 24. The primary catchment area for Hampstead extends to include Kilburn to the south and north to Hendon. The Secondary and Tertiary catchment includes Wembley, Edgware, Finchley and Highgate. Together the Primary and Secondary catchments account for the area from which 75% of spend can be expected to come.
 - 3.86 For each scenario that is run, catchments for key centres have been produced that show the different areas from which people travel to shop.

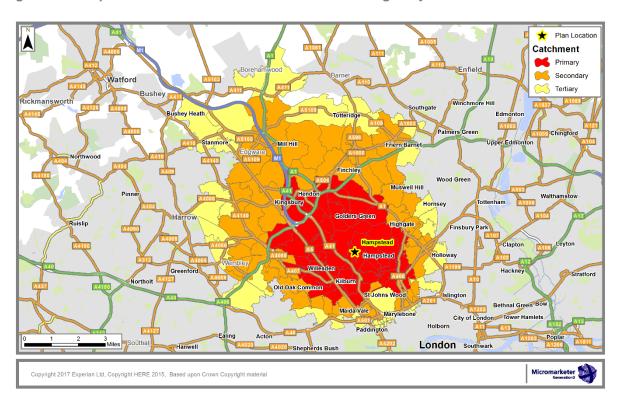
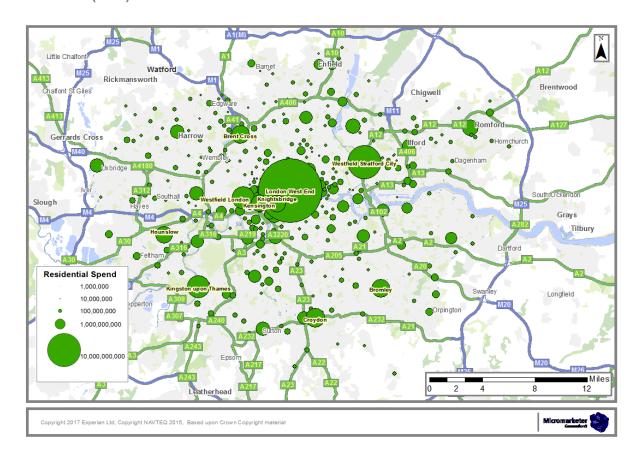


Figure 24. Hampstead catchment as defined in the baseline gravity model.

Figure 25. Estimated spending in London by all GB residents on comparison goods retail at centre level (2015)



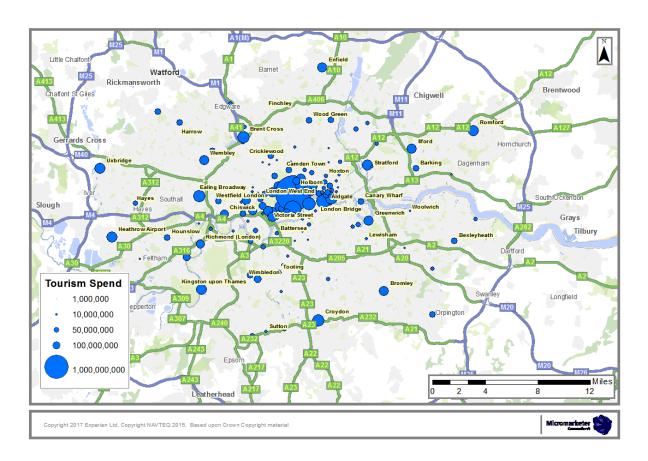
Incorporating tourist and commuter spend

3.87 Two additional layers of expenditure, excluded from the base estimates, are added separately at centre level to create total estimates in the model:

Tourism

3.88 The estimate of total tourism spend across London has been divided up among the list of centres according to the level of tourist-type activities adjacent to each centre. Those centres that have many tourist attractions nearby are assumed to benefit from incremental tourism sales. In addition, those centres that have a high number of tourist visitors (due to available hotel accommodation) are also assumed to benefit from additional sales of comparison goods. The splits have been adjusted according to commercial knowledge about the level of tourism in specific centres where available.

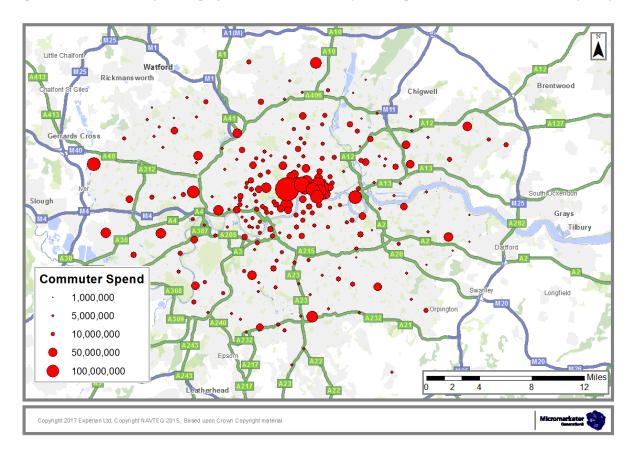
Figure 26. Estimated spending by tourists on comparison goods retail at centre level (2015).



Commuter expenditure

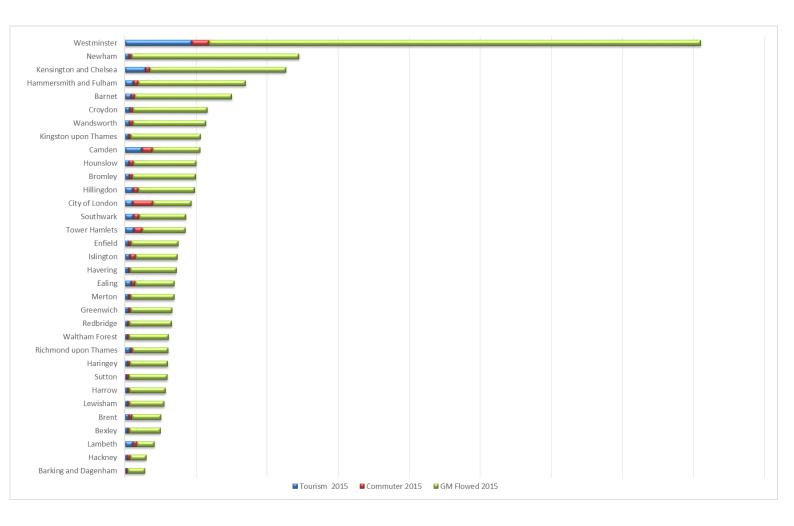
3.89 The total estimate of commuter expenditure in London, removed from the base expenditure estimates, has been divided up among the retail centres within the boroughs of London. This exercise factors the volume of daytime population against the level of comparison goods shops in the centre and apportions the expenditure accordingly. Commuter spend can be applied to any area within Greater London that has a significant daytime population, such as the City, Canary Wharf and Victoria Street.

Figure 27. Estimated spending by commuters on comparison goods retail at centre level (2015).



3.90 Figure 28 breaks down the contribution of residents, commuters and tourists to comparison goods expenditure within Greater London and its constituent boroughs in 2015 Approximately 82% of comparison goods expenditure within London is from resident based spend.

Figure 28. Breakdown of spend by borough between residential, tourism and commuter.



3B Comparison goods forecast needs¹⁷

3B1 Baseline

Turnover estimates - Baseline scenario

Assumptions used to create turnover estimates

3.91 The following table (Figure 29) summarises expenditure on comparison goods for 2015 for the top 20 Goad centres and identifies how this spend is composed of tourist, commuter and residential components.

Figure 29. Top 20 retail centres in Greater London by base spend (2015) Baseline.

PlanName	Borough	Total Spend 2015	% Residential in Centre	% Commuter in Centre	% Tourism in Centre
London West End	Westminster	£6,918,174,621	89.2	1.9	8.9
Westfield Stratford					
City	Newham	£1,721,643,196	96.4	0.3	3.3
	Hammersmith and				
Westfield London	Fulham	£824,182,886	94.4	1.2	4.4
Kingston upon					
Thames	Kingston upon Thames	£800,939,819	91.6	1.9	6.5
Croydon	Croydon	£649,086,805	85.5	4.7	9.8
Brent Cross	Barnet	£583,886,646	85.7	3.5	10.8
Bromley	Bromley	£578,384,348	89.3	2.9	7.8
Knightsbridge	Kensington and Chelsea	£529,559,621	88.7	1.0	10.3
Hounslow	Hounslow	£465,160,812	90.5	5.1	4.3
Victoria Street	Westminster	£459,046,758	61.0	8.0	31.0
Kensington	Kensington and Chelsea	£448,590,606	93.5	1.0	5.5
Romford	Havering	£439,415,504	84.1	4.6	11.3
Chelsea	Kensington and Chelsea	£404,435,499	97.4	1.1	1.5
Ealing Broadway	Ealing	£399,683,324	73.0	9.3	17.7
Uxbridge	Hillingdon	£365,387,406	75.3	11.0	13.7
Walthamstow	Waltham Forest	£362,807,183	94.4	2.1	3.4
Sutton	Sutton	£318,479,247	94.7	3.5	1.8
Harrow	Harrow	£318,127,294	96.8	3.2	0.0
Ilford	Redbridge	£312,998,729	82.2	5.0	12.8
Wimbledon	Merton	£309,051,359	84.5	6.4	9.1

¹⁷ This exercise should be complementary to individual impact assessments already being undertaken for some of the proposals. Because it applies a London wide approach and is concerned with the cumulative impact of all the proposals, there are inevitably instances where expenditure estimates and impacts at smaller centres differ significantly from studies that have been carried out at a local level. Additionally, the retail developments in the scenarios are assumed to take place instantaneously at a particular year rather than phased in over months or years, and the impacts to be immediate rather than assuming a maturity curve.

Figure 30. Boroughs by base spend (2015) Baseline.

Borough	Total Spend 2015	% Residential in Borough	% Commuter in Borough	% Tourism in Borough
Westminster	£8,105,889,349	85.4	3.0	11.6
Newham	£2,451,036,894	96.1	1.5	2.4
Kensington and Chelsea	£2,266,773,512	84.4	2.7	12.9
Hammersmith and Fulham	£1,699,745,360	89.0	3.9	7.2
Barnet	£1,506,415,650	90.6	3.4	6.0
Croydon	£1,159,667,496	90.1	3.7	6.1
Wandsworth	£1,139,531,646	90.1	4.2	5.8
Kingston upon Thames	£1,064,747,672	92.2	2.9	4.9
Camden	£1,058,184,167	63.5	14.0	22.5
Hounslow	£1,004,522,799	88.3	5.9	5.8
Bromley	£997,726,065	89.3	4.2	6.5
Hillingdon	£981,654,224	80.5	8.2	11.3
City of London	£934,565,227	57.5	30.9	11.6
Southwark	£859,859,357	76.3	9.6	14.2
Tower Hamlets	£850,797,266	71.1	13.9	15.0
Enfield	£749,997,095	88.0	5.5	6.6
Islington	£737,038,639	79.6	11.2	9.1
Havering	£725,187,587	89.1	4.0	6.8
Ealing	£694,105,932	79.6	7.7	12.8
Merton	£693,016,694	88.5	4.1	7.4
Greenwich	£661,795,122	87.7	4.5	7.8
Redbridge	£658,515,222	89.9	4.0	6.1
Waltham Forest	£615,331,413	90.8	4.2	5.1
Richmond upon Thames	£608,492,408	82.8	5.1	12.0
Haringey	£604,848,444	88.9	4.6	6.5
Sutton	£596,884,365	90.6	4.6	4.8
Harrow	£572,541,147	89.2	4.5	6.3
Lewisham	£552,059,690	88.5	5.1	6.5
Brent	£510,687,251	79.9	8.7	11.4
Bexley	£501,308,148	87.5	5.0	7.5
Lambeth	£416,033,802	59.2	13.3	27.5
Hackney	£300,746,888	74.7	14.0	11.4
Barking and Dagenham	£281,540,164	85.7	7.6	6.7

3B2 Pipeline

Pipeline

- 3.92 The key processes are:
 - Develop an understanding of the nature, scale and timing of proposed developments.
 - Incorporate this knowledge into the project model.
 - Revise the expenditure figures.
 - Realign the floorspace needs base analysis.

Analysis of Pipeline developments

- 3.93 The scale and timelines for the major retail developments and redevelopments that are proposed for London over the coming years have been assessed by the GLA and consultants and evaluated by the boroughs in terms of accuracy. The information has been gathered from the public domain, directly from the boroughs, and estimated/modelled in developments for which actual data is not forthcoming. Using the model, Experian then estimated the extent to which the new developments will affect consumer patterns and expenditure flows throughout London. Understanding the nature and scale of these developments will help formulate a picture of how London's retailing landscape will evolve over the next decade and beyond.
- 3.94 The following major retail developments have been started (under construction), committed, approved or proposed to commence in the short to medium term. In addition, the major proposed extensions to Lakeside and Bluewater shopping centres were included in the Pipeline.
- 3.95 Figure 31 sets out the Net additional comparison goods retail floor space (A1) that each development will add and when it is due to happen.
- 3.96 A full breakdown of all Pipeline developments included within the modelling process can be found within the appendices. The Pipeline developments were sourced from the London Development Database and were sent to the boroughs for verification.
- 3.97 Each London borough was asked to provide the following information for each of the developments:
 - Overall size.
 - Expected breakdown of floorspace by retail, leisure etc.
 - Expected breakdown of retail floorspace by comparison, convenience etc.
 - Number of units.
 - Expected start and completion time.
- 3.98 This level of detail is not always available. However, this should not detract from the outputs of the gravity model. Gaps in information have been in-filled by basing the likely composition of shopping developments on suitable benchmark centres.
- 3.99 It should be noted that Pipeline developments can increase the comparison goods retail (A1) floorspace but schemes can also reduce the existing A1 comparison goods retail floor space where the use is to be changed or existing buildings are to be demolished. The model applies these increases and in some cases decreases to the comparison goods floorspace and adjusts the attractiveness score of each shopping centre or high street that is impacted.

Figure 31. List of proposed major comparison goods retail developments in London (5,000 sq. m or above).

Borough Name	Net Additional Comparison Goods Retail Floorspace (m²)	Site/Scheme Name	Postcode	Estimated Opening Year	Status at January 2017
Barnet	55,000	Brent Cross Extension (North)	NW4 3FP	2022	Not Started
Hammersmith and Fulham	46,998	Land North Of Westfield Shopping Centre	W12	2017	Not Started
Tower Hamlets	29,662	Wood Wharf	E14 9SF	2021	Not Started
Ealing	16,040	Southall Gas Works	UB1 1QZ	2017	Not Started
Wandsworth	12,837	Battersea Power Station	SW8	2017	Under Construction
Greenwich	12,825	The O2	SE10 0DX	2017	Not Started
Bexley	12,006	B&Q Plc, Land At Crittall's Corner	DA14 6LX	2016	Not Started
Hammersmith and Fulham	10,182	Earls Court 2, Exhibition Centre And Adjoining Land	SW6 1TR	2016	Not Started
Barking and Dagenham	8,620	Barking Reach	IG11 0XF	2017-2022	Under Construction
Havering	8,422	Liberty Shopping Centre, 44- 52	RM1 3ER	2017	Under Construction
Tower Hamlets	8,096	Asda, 151 East Ferry Road	E14 3BT	2020	Not Started
Havering	7,860	Site At Romford Ice Rink	RM17 0AE	2017	Under Construction
Merton	7,740	88 Bushey Road	SW20 0JH	2017	Not Started
Croydon	7,635	Whitgift Centre redevelopment	CR0 1LU	2020	Not Started
Camden	6,682	Kings Cross Railway Lands	NW1	2017	Under Construction
Haringey	6,580	Tottenham Hale Retail Park	N15 4QD	2017	Not Started
Westminster	5,782	26-32 Oxford Street	W1C 2DZ	2017	Under Construction
Croydon	5,614	2 & 4 Trojan Way	CR0 4XL	2018	Not Started
Enfield	5,112	6 Glover Drive	N13 5NQ	2018	Not Started

Impact studies

- 3.100 These studies are essentially the outputs of the gravity modelling exercise. They quantify the extent to which the new developments would affect consumer patterns and expenditure flows throughout London. This involves running the model produced in Stage 2A with the expanded list of possible shopping destinations.
- 3.101 The retail footprints of the specified centres are redrawn, by factoring in the new retail developments into the model. The attractiveness score of each centre is recalculated based on this revised footprint and used to overwrite the original score in the gravity model.
- 3.102 The model was used to assess the impact on all centres examined in Stage 2A of the project:
 - Effect on flows.
 - Effect on catchment areas.
 - Effect on expenditure.

Modelled scenarios

- 3.103 The impact studies have been produced in the following ways:
 - Timeline: as a time series looking at each year from 2016-2041 and 2050. This considers
 the timings and gestation periods of the proposed schemes and provides an impact
 snapshot at given points in time.
- 3.104 They have been compared to the following base scenario:
 - 'Baseline': assumes that there will be no further development in London, but that population, workforce and expenditure will grow according to GLA/Experian forecasts.
- 3.105 For the purposes of simplicity within the model, the scenarios assume that each development is all built out immediately at the start of the year (the 'commencement of initial phase') as opposed to having a mid-year opening and longer phased implementation. This first year matches the expected opening year of the first phase of the centre. The model also assumes instant sales maturity. In reality, the developments will take a number of years to build and for their turnover to mature, causing short-term fluctuations in actual turnover figures.

3B3 Future potential network changes

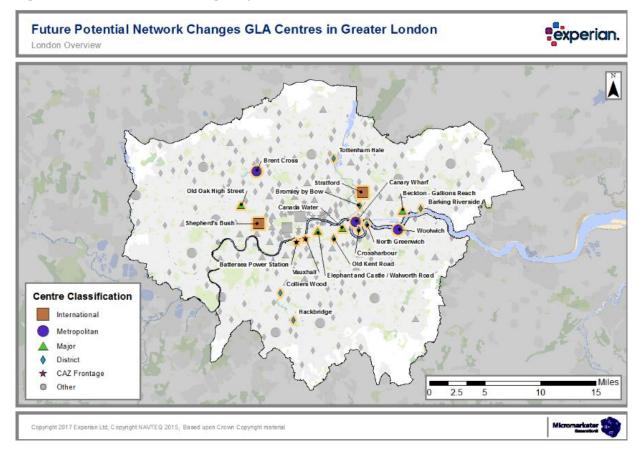
Scope of scenario

3.106 This scenario considers centres that are either named in the adopted 2016 London Plan as potential expansion centres or have since been identified as potential new or expanded centres. In the modelling process all existing centres are first adjusted to take account of the pipeline scenario changes and the attractiveness scores of the potential future network centres (listed below) are increased to simulate the provision of additional comparison goods retail floorspace at these locations.

Figure 32. Centres identified in the potential future network changes scenario.

Centre Name	Borough	Current Status	Potential Future Status (to be tested)
Otrostfored	Name	Matura elitera Orantas	International
Stratford	Newham	Metropolitan Centre	Centre International
Shepherds Bush	Hammersmith and Fulham	Metropolitan Centre	Centre
Brent Cross	Barnet	Regional Shopping Centre	Metropolitan Centre
Woolwich	Greenwich	Major Centre	Metropolitan Centre
Canary Wharf	Tower Hamlets	Major Centre	Metropolitan Centre
Crossharbour	Tower Hamlets	Unclassified	District Centre
Elephant and Castle (including Walworth Road)	Southwark	District	Major Centre
Canada Water	Southwark	District	Major Centre
Old Oak High Street	OPDC	Unclassified	Major Centre
Beckton - Gallions Reach	Newham	Unclassified	Major Centre
North Greenwich	Greenwich	Unclassified	District Centre
Tottenham Hale	Haringey	Unclassified	District Centre
Colliers Wood	Merton	Unclassified	District Centre
Hackbridge	Sutton	Unclassified	District Centre
Bromley-by-Bow	Tower Hamlets	Unclassified	District Centre
Barking Riverside	Barking and Dagenham	Unclassified	District Centre
Old Kent Road	Southwark	Unclassified	District Centre
Battersea (PS)	Wandsworth	Unclassified	CAZ Frontage
Vauxhall	Lambeth/Wandsworth	Unclassified	CAZ Frontage

Figure 33. Future network changes by retail centre.



3B4 Quality adjustment

- 3.107 In the quality adjustment scenario, we assume that the existing retail provision and all the phased Pipeline scenario developments are included as well as the upgrading of selected centres set out in the Potential Future Network Changes scenario. In addition to this, all the adopted 2016 London Plan International, Metropolitan and Major town centres and CAZ frontages / retail centres (see figure Figure 34) are assumed to gain in attractiveness and all the other smaller shopping centres will see a relative decline in attraction. This scenario simulates a continuing trend in the retail behaviour of the UK in recent years where larger stronger centres have gained footfall and spend at the expense of the smaller high streets and centres.
- 3.108 For the purposes of modelling all the centres below were increased in attractiveness by 10%.:

Figure 34. Goad Centres included in the Quality adjustment scenario.

Goad Centre	Classification
Knightsbridge	International
London West End	International
Sloane Street	International
Bank	CAZ Frontage
Brick Lane	CAZ Frontage
Cheapside	CAZ Frontage
Euston (London)	CAZ Frontage
Fenchurch Street	CAZ Frontage
Fleet Street	CAZ Frontage
Holborn	CAZ Frontage
Kings Cross (London)	CAZ Frontage
Liverpool Street & Bishopsgate	CAZ Frontage
London Bridge	CAZ Frontage
Pimlico	CAZ Frontage
Victoria Street	CAZ Frontage
Waterloo (London)	CAZ Frontage
Westminster - Crawford Street	CAZ Frontage
Westminster - upper Grove	CAZ Frontage
Whitechapel - High Street	CAZ Frontage
Bromley	Metropolitan
Croydon	Metropolitan
Ealing Broadway	Metropolitan
Harrow	Metropolitan
Hounslow	Metropolitan
Ilford	Metropolitan
Kingston upon Thames	Metropolitan
Romford	Metropolitan
Shepherds Bush	Metropolitan
Stratford	Metropolitan
Sutton	Metropolitan
Uxbridge	Metropolitan
West Ealing	Metropolitan

Goad Centre	Classification
Barking	Major
Battersea	Major
Bexleyheath	Major
Brixton	Major
Camden Town	Major
Canary Wharf	Major
Catford	Major
Chelsea	Major
Chiswick	Major
Clapham Junction	Major
Dalston - Kingsland High Road	Major
East Ham	Major
Edgware	Major
Eltham	Major
Enfield	Major
Fulham - North End Road	Major
Hammersmith - King Street	Major
Holloway	Major
Islington - Chapel Market	Major
Kensington	Major
Kilburn	Major
Lewisham	Major
Orpington	Major
Peckham	Major
Portabello Road	Major
Putney	Major
Queensway	Major
Richmond (London)	Major
Southall	Major
Streatham	Major
Tooting	Major
Walthamstow	Major

Goad Centre	Classification
Westfield London	Metropolitan
Westfield Stratford City	Metropolitan
Wood Green	Metropolitan

Goad Centre	Classification
Wandsworth	Major
Wembley	Major
Wimbledon	Major
Woolwich	Major

3B5 Addressing gaps in provision

3.109 This scenario incorporates all the previous scenarios (baseline, pipeline, potential future network changes and quality adjustment), identifies where the remaining gaps in coverage are within London and strengthens appropriate centres to fill those gaps. There are two steps to the scenario: measuring the accessibility of larger centres, and then identifying centres to fill these gaps.

Measuring accessibility

- 3.110 This scenario assumes an optimal situation where each part of London is within easy reach of one or more larger centres, as larger centres give access to a wider range of goods and services. The larger centres are defined using the GLA classification of International, Metropolitan and CAZ frontage centres. The shortest travel time by road or on trains or tube was measured from every postal sector in London to this set of large centres.
- 3.111 This process identified pockets of London that are furthest from any large centre in terms of travel time by car or train or bus. (taking the fastest time of each mode).

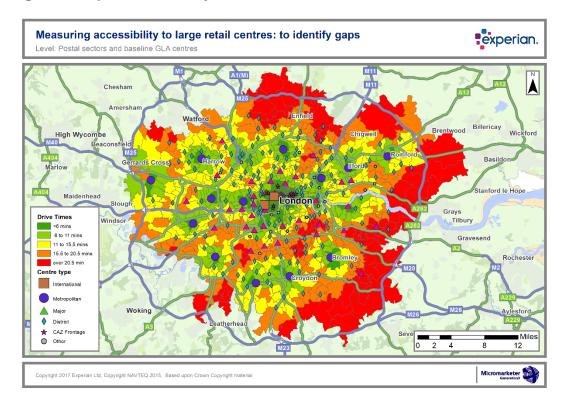


Figure 35. Gaps in accessibility.

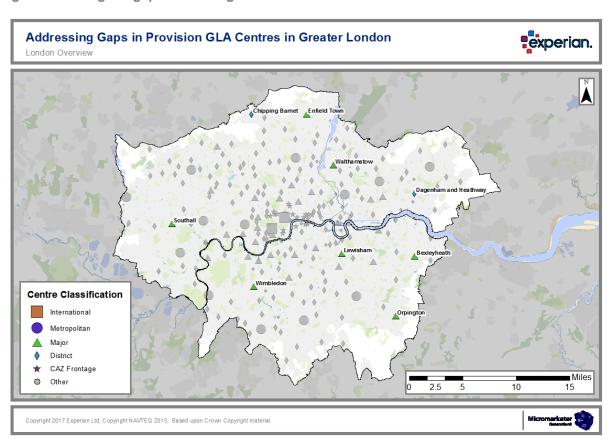
Filling Gaps

- 3.112 In practice, there are some areas on the periphery of London that are already served by large centres just outside the London border particularly Lakeside and Bluewater to the east and Watford to the north.
- 3.113 Once we have identified the least accessible, non-covered areas of London the next step is to identify candidate centres in the gaps that could serve these areas if they were strengthened. (reclassified as a higher order centre). The choice of centres to strengthen is then constrained by the existing size and mix of retail offer and the nature of the centres. Within each gap the largest available centre in the gap was selected and its attractiveness score increased. In most cases this leads to the strengthening of a larger centre, however in a few cases only a small centre is available in the gap.

3.114 For the purposes of the modelling exercise the centres strengthened in this scenario are:

- Bexleyheath
- Lewisham
- Orpington
- Walthamstow
- Wimbledon
- Dagenham
- Greenford
- Barnet
- Enfield

Figure 36. Filling the gaps in coverage.



Growth forecasts

3.115 As outlined in section 3C above, the future economic growth of the UK and London is uncertain, and could vary significantly. We have allowed for this by increasing the per capita growth rate in consumer expenditure by 0.5% for the high scenario, and decreasing it by 0.5% for the lower scenario. Using shares derived from the existing relationships, we derive the potential impact of this UK-wide assumption on the three key regions and their constituent local areas. We then re-ran the entire process on the new consumer expenditure forecasts obtained to derive implications for retail spending on comparison and convenience goods for small areas in Greater London. Importantly, the proportion of spending on different categories did not vary between the scenarios.

Retail Productivity Change

Current Retail Productivity

3.116 For bricks and motor stores, sales per square foot (or sq. m) is the most useful measure of relative retail performance. It tells you how efficiently retail space is being used and is affected by changes to store layout, merchandising, staff organisation and performance. This is calculated as follows (expressed as sales per sq. ft. or sales per sq. m):

Retail sales productivity = net annual sales / total productive floor space

- 3.117 Retailers will also use other KPIs (such as inventory turnover, gross margin return on investment, sales by product category, basket value, items per transaction, and sales per employee); for the purposes of comparing all types of retail on a common basis, sales per sq. ft. is the best measure to use.
- 3.118 Retail productivity can vary between different centres and different stores. Higher productivity generally occurs in:
 - Stronger fascias (brand names and concepts) than weaker fascias, for example, a Tesco is usually higher than a Morrisons of equal size;
 - Stronger centres with more attractiveness and higher footfall, as these are bigger places with more and specialist shops;
 - Locations with a better pitch, for example on a busy street or junction and near to anchor tenants;
 - Some product categories, for example electrical goods is higher than groceries;
 - Stores with better layout;
 - Businesses with better sales staff;
 - Shops where technology is used to best effect;
 - Shops where prices are optimised against competition and demand.
- 3.119 On average convenience goods have a higher sales density than comparison goods but, for certain categories such as electrical goods sales densities can be every bit as high.

Productivity Change

3.120 As space costs the operator money (the rent or lease cost or its notional value if its freehold) then there is always an incentive to get more sales out of the same space so that individual businesses remain competitive. This drive to optimise efficiency, together with technological changes, has resulted in more sales per sq. ft. over time. The rate of change in floor space efficiency is referred to as 'productivity change', and it means that if the demand for retail goods rises the amount of

space needed will remain constant or even fall as the space is more efficiently used. (Retail productivity is usually measured on a rolling 12-month basis to remove seasonality.)

- 3.121 Historically, a productivity growth rate of **1.5%** has been assumed. However, analysis of Experian Goad databases shows that productivity has been growing at a faster rate than this, and that this has accelerated in recent years. In 2009 the rate of improvement in the UK for the previous 5 years was **1.9%**. The Experian report on the need for retail space in London in 2013 ran a set of assumed rates of retail productivity of: low: 1.5%, base: 1.9%, and high: 2.5%. The most recent analysis of spend between 2009 and 2015 shows a higher rate of productivity growth at **3.32%** (Retail Planner Briefing Note 13 October 2015 Appendix 4B and Historic Goad data)¹⁸.
- 3.122 This study uses the same set of values as the 2013 study, but adds the actual measured 2009 to 2015 rate as a higher scenario. It seems likely that the most extreme productivity growth rate of 3.32% per annum was in response to the financial crash resulting in significant loss of retail space. It seems likely that this was an outlier event and that this rate is unlikely to continue.

•	Old widely used rate	1.5%
•	Base rate for previous study	2.0%
•	High rate for previous study	2.5%
•	Measured change 2009-2015	3.32%

3.123 These rates of retail productivity growth have been applied to all scenarios and growth forecasts in the study. For example, a productivity rate of 1.5% means that each year into the future will require 1.5% less space to sell the same value.

Figure 37. Experian floorspace efficiency estimate at August 2016.

Year	GOAD Comparison and Convenience retail minus vacant retail floorspace (ft²)	% Retail Space Change	Total Retail Spend at 2015 prices) ** (£Bn)	Sales per ft ²	Floorspace productivity measure - annual change in sales/ft ²
2009	536,602,613		£303	£565	
2010	536,138,100	-0.1%	£314	£586	3.7%
2011	450,322,900	-16.0%	£323	£717	22.5%
2012	447,955,700	-0.5%	£336	£750	4.6%
2013	452,847,300	1.1%	£351	£775	3.3%
2014	457,575,800	1.0%	£363	£793	2.3%
2015	460,549,100	0.6%	£375	£814	2.6%

% Change PA 2009-2015: 7.4% Average of annual changes: 6.5%

Average of annual changes excl. 2011: 3.3%

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¹⁸ This excludes the change in 2010-2011, as this year saw a significant drop in retail ffloorspace as the lagged impact of the recession took effect.

¹⁹ Source: *Retail Planner Briefing Note* 13 October 2015; *Retail Planner,* Appendix 4b: UK Retail Spend Estimates

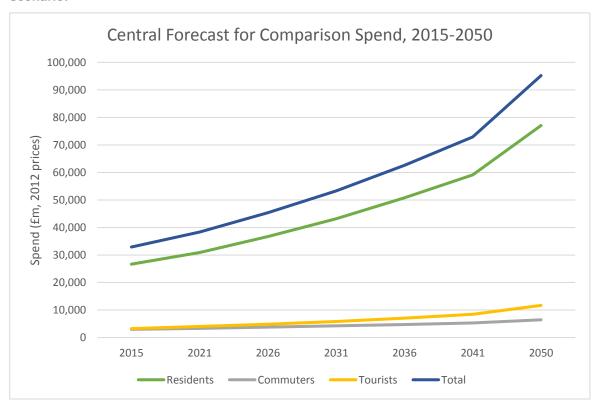
4 OUTCOMES

Consumer Expenditure Forecast

Figure 38. Total comparison spend in London, by source (£m, 2012 prices): Central scenario.

Central Forecast	Residents	Commuters	Tourists	Total
2015	£26,673	£2,985	£3,240	£32,898
2021	£30,920	£3,364	£4,045	£38,329
2026	£36,741	£3,783	£4,836	£45,360
2031	£43,203	£4,242	£5,842	£53,287
2036	£50,781	£4,749	£7,042	£62,572
2041	£59,116	£5,302	£8,457	£72,875
2050	£77,061	£6,455	£11,684	£95,200
Annual average growth ra	ates:			
2015-2021	2.5%	2.0%	3.8%	3.3%
2015-2026	3.0%	2.2%	3.7%	3.8%
2015-2031	3.1%	2.2%	3.8%	4.1%
2015-2036	3.1%	2.2%	3.8%	4.5%
2015-2041	3.1%	2.2%	3.8%	4.9%
2015-2050	3.5%	2.5%	4.2%	5.4%

Figure 39. Chart of total comparison spend in London, by source (£m, 2012 prices): Central scenario.



Household spending by London residents

4.1 The central forecast presented below is predicated on the baseline population scenario supplied by GLA. The high and low scenarios are built around the high and low GLA population scenarios. The central forecast estimates show spending growing at an annual average rate of 2.3% in the 2015 – 2041 period. This is underlined by growth of 3.1% in comparison goods spending, and 1.0% in convenience goods spending. Accommodation and catering are expected to register annual average increase of 2.9% and leisure 2.5%. The low scenario shows total spending growing at an average annual rate of 1.8% between 2015 and 2041, while the high scenario estimates the annual gains at 2.8%. The respective contributions of convenience and comparison are gains of 0.5% and 2.6% in the low scenario and 1.5% and 3.6% in the high scenario. (Please see Appendix for a breakdown of what is included in each of the categories).

Figure 40. Estimated and forecast household spending by London residents (£m, 2012 prices): Central Scenario.

Central Forecast	Convenience goods	Comparison goods	Total retail spending	Accomm. spending	Catering Spending	Leisure spending	Other goods & services	Other (domestic)	Total Spending
2015	15,246	26,673	41,919	2,379	10,217	4,748	12,416	83,698	155,377
2021	15,768	30,920	46,687	2,794	11,997	5,188	13,691	94,382	174,740
2026	16,747	36,741	53,488	3,224	13,843	6,027	15,259	105,794	197,635
2031	17,685	43,203	60,887	3,668	15,750	6,880	16,723	118,297	222,205
2036	18,783	50,781	69,564	4,173	17,920	7,914	18,673	132,331	250,576
2041	19,873	59,116	78,989	4,709	20,219	9,124	20,722	147,914	281,676
2050	21,791	77,061	98,853	5,784	24,836	11,571	24,810	179,654	345,507
Annual aver	age growth rates:		•	•	•	•	•		
2015-2021	0.6%	2.5%	1.8%	2.7%	2.7%	1.5%	1.6%	2.0%	2.0%
2015-2026	0.9%	3.0%	2.2%	2.8%	2.8%	2.2%	1.9%	2.2%	2.2%
2015-2031	0.9%	3.1%	2.4%	2.7%	2.7%	2.3%	1.9%	2.2%	2.3%
2015-2036	1.0%	3.1%	2.4%	2.7%	2.7%	2.5%	2.0%	2.2%	2.3%
2015-2041	1.0%	3.1%	2.5%	2.7%	2.7%	2.5%	2.0%	2.2%	2.3%
2015-2050	1.2%	3.5%	2.8%	2.9%	2.9%	2.9%	2.3%	2.5%	2.6%

Figure 41. Estimated and forecast household spending by London residents (£m, 2012 prices): Low Scenario.

Low Scenario	Convenience goods	Comparison goods	Total retail spending	Accomm. spending	Catering Spending	Leisure spending	Other goods & services	Other (domestic)	Total Spending
2015	15,246	26,673	41,919	2,379	10,217	4,748	12,416	83,698	155,377
2021	15,299	30,017	45,316	2,712	11,648	5,035	13,288	91,613	169,611
2026	15,848	34,809	50,657	3,054	13,113	5,707	14,448	100,186	187,164
2031	16,323	39,944	56,267	3,390	14,557	6,356	15,447	109,297	205,314
2036	16,911	45,820	62,730	3,764	16,161	7,133	16,828	119,290	225,906
2041	17,452	52,053	69,506	4,143	17,791	8,024	18,219	130,097	247,781
2050	18,299	64,940	83,239	4,869	20,907	9,736	20,868	151,179	290,798
Annual avera	age growth rates:			•	•	•	•		
2015-2021	0.1%	2.0%	1.3%	2.2%	2.2%	1.0%	1.1%	1.5%	1.5%
2015-2026	0.4%	2.4%	1.7%	2.3%	2.3%	1.7%	1.4%	1.6%	1.7%
2015-2031	0.4%	2.6%	1.9%	2.2%	2.2%	1.8%	1.4%	1.7%	1.8%
2015-2036	0.5%	2.6%	1.9%	2.2%	2.2%	2.0%	1.5%	1.7%	1.8%
2015-2041	0.5%	2.6%	2.0%	2.2%	2.2%	2.0%	1.5%	1.7%	1.8%
2015-2050	0.6%	2.9%	2.2%	2.3%	2.3%	2.3%	1.7%	1.9%	2.0%

Figure 42. Estimated and forecast household spending by London residents (£m, 2012 prices): High Scenario.

High Scenario	Convenience goods	Comparison goods	Total retail spending	Accomm. spending	Catering Spending	Leisure spending	Other goods & services	Other (domestic)	Total Spending
2015	15,246	26,673	41,919	2,379	10,217	4,748	12,416	83,698	155,377
2021	16,249	31,845	48,094	2,877	12,356	5,345	14,105	97,221	179,998
2026	17,692	38,770	56,462	3,402	14,609	6,363	16,111	111,687	208,635
2031	19,152	46,710	65,862	3,967	17,033	7,444	18,098	127,988	240,392
2036	20,852	56,252	77,104	4,625	19,861	8,775	20,710	146,724	277,799
2041	22,615	67,094	89,710	5,348	22,964	10,367	23,553	168,065	320,006
2050	25,928	91,369	117,297	6,865	29,477	13,740	29,472	213,313	410,164
Annual avera	age growth rates:								
2015-2021	1.1%	3.0%	2.3%	3.2%	3.2%	2.0%	2.1%	2.5%	2.5%
2015-2026	1.4%	3.5%	2.7%	3.3%	3.3%	2.7%	2.4%	2.7%	2.7%
2015-2031	1.4%	3.6%	2.9%	3.2%	3.2%	2.9%	2.4%	2.7%	2.8%
2015-2036	1.5%	3.6%	2.9%	3.2%	3.2%	3.0%	2.5%	2.7%	2.8%
2015-2041	1.5%	3.6%	3.0%	3.2%	3.2%	3.0%	2.5%	2.7%	2.8%
2015-2050	1.7%	4.1%	3.4%	3.5%	3.5%	3.5%	2.8%	3.1%	3.2%

These figures can also be expressed at a per-head level, as shown in Figures Figure 43 - Figure 45.

Figure 43. Estimated and forecast household spending per head by London residents, (£m, 2012 prices): Central Forecast.

Central Forecast	Convenience goods	Compariso n goods	Total retail spendin g	Accomm spending	Catering Spendin g	Leisure spendin g	Other goods & service s	Other (domestic)	Total Spendin g
2015	1,765	3,088	4,854	275	1,183	550	1,438	9,691	17,990
2021	1,718	3,368	5,086	304	1,307	565	1,491	10,282	19,035
2026	1,750	3,840	5,591	337	1,447	630	1,595	11,058	20,657
2031	1,785	4,360	6,145	370	1,589	694	1,688	11,939	22,425
2036	1,838	4,968	6,806	408	1,753	774	1,827	12,946	24,515
2041	1,893	5,631	7,523	448	1,926	869	1,974	14,088	26,829
2050	2,001	7,076	9,077	531	2,280	1,062	2,278	16,496	31,725
Annual ave	rage growth rates:								
2015-2021	-0.5%	1.5%	0.8%	1.7%	1.7%	0.5%	0.6%	1.0%	0.9%
2015-2026	-0.1%	2.0%	1.3%	1.8%	1.8%	1.2%	0.9%	1.2%	1.3%
2015-2031	0.1%	2.2%	1.5%	1.9%	1.9%	1.5%	1.0%	1.3%	1.4%
2015-2036	0.2%	2.3%	1.6%	1.9%	1.9%	1.6%	1.1%	1.4%	1.5%
2015-2041	0.3%	2.3%	1.7%	1.9%	1.9%	1.8%	1.2%	1.4%	1.5%
2015-2050	0.4%	2.7%	2.0%	2.1%	2.1%	2.1%	1.5%	1.7%	1.8%

Figure 44. Estimated and forecast household spending per head by London residents, (£m, 2012 prices): Low Scenario.

Low Scenario	Convenience goods	Comparison goods	Total retail spending	Accomm. spending	Catering Spending	Leisure spending	Other goods & services	Other (domestic)	Total Spending
2015	1,765	3,088	4,854	275	1,183	550	1,438	9,691	17,990
2021	1,667	3,270	4,936	295	1,269	548	1,448	9,980	18,477
2026	1,656	3,638	5,295	319	1,371	596	1,510	10,472	19,563
2031	1,647	4,031	5,679	342	1,469	641	1,559	11,031	20,721
2036	1,654	4,483	6,137	368	1,581	698	1,646	11,670	22,101
2041	1,662	4,958	6,620	395	1,695	764	1,735	12,391	23,600

2050	1,680	5,963	7,643	447	1,920	894	1,916	13,881	26,701
Annual average growth rates:									
2015-2021	-1.0%	1.0%	0.3%	1.2%	1.2%	0.0%	0.1%	0.5%	0.4%
2015-2026	-0.6%	1.5%	0.8%	1.3%	1.3%	0.7%	0.4%	0.7%	0.8%
2015-2031	-0.4%	1.7%	1.0%	1.4%	1.4%	1.0%	0.5%	0.8%	0.9%
2015-2036	-0.3%	1.8%	1.1%	1.4%	1.4%	1.1%	0.6%	0.9%	1.0%
2015-2041	-0.2%	1.8%	1.2%	1.4%	1.4%	1.3%	0.7%	0.9%	1.0%
2015-2050	-0.2%	2.1%	1.5%	1.6%	1.6%	1.6%	0.9%	1.2%	1.3%

Figure 45. Estimated and forecast household spending per head by London residents, (£m, 2012 prices): High Scenario.

High Scenario	Convenience goods	Comparison goods	Total retail spending	Accomm. spending	Catering Spending	Leisure spending	Other goods & services	Other (domestic)	Total Spending
2015	1,765	3,088	4,854	275	1,183	550	1,438	9,691	17,990
2021	1,770	3,469	5,239	313	1,346	582	1,537	10,591	19,608
2026	1,849	4,052	5,902	356	1,527	665	1,684	11,674	21,807
2031	1,933	4,714	6,647	400	1,719	751	1,827	12,917	24,261
2036	2,040	5,503	7,543	452	1,943	858	2,026	14,354	27,178
2041	2,154	6,391	8,545	509	2,187	987	2,243	16,008	30,480
2050	2,381	8,390	10,770	630	2,707	1,262	2,706	19,587	37,662
Annual averag	ge growth rates:								
2015-2021	0.0%	2.0%	1.3%	2.2%	2.2%	1.0%	1.1%	1.5%	1.4%
2015-2026	0.4%	2.5%	1.8%	2.3%	2.3%	1.7%	1.4%	1.7%	1.8%
2015-2031	0.6%	2.7%	2.0%	2.4%	2.4%	2.0%	1.5%	1.8%	1.9%
2015-2036	0.7%	2.8%	2.1%	2.4%	2.4%	2.1%	1.6%	1.9%	2.0%
2015-2041	0.8%	2.8%	2.2%	2.4%	2.4%	2.3%	1.7%	1.9%	2.0%
2015-2050	1.0%	3.3%	2.6%	2.7%	2.7%	2.7%	2.1%	2.3%	2.4%

4.3 Total convenience goods spending in London is estimated to have grown at an annual average rate of just 0.4% between 2012 and 2016. In the same period comparison goods spending is estimated to have grown at an annual average rate of 4.3%. Within the convenience goods categorisation food and alcoholic beverage spending is estimated to have grown by 1.2%, non-alcoholic beverage spending did not grow, while spending on newspapers and tobacco declined by 3.2% and 4% respectively.

In the short-term (2015 - 2021) we expect convenience spending growth to pick-up slightly, growing at an annual average rate of 0.6%. The mild strengthening largely reflects a slowdown in the declines in spending on tobacco, and a strengthening in non-alcoholic beverage spending growth. Gains in food spending, by far the largest component of convenience spending are little changed at around 1%. Consumers displayed restraint in their food spending in the years following the global financial crisis and this is expected to persist in the forecast.

Spending on comparison goods in London was strong in 2015 and 2016, estimated to have grown at an annual average rate of 5%. Spending is expected to stagnate in 2016-17 as a deterioration in household incomes linked to rising inflation, and weak pay growth constrains non-essential spending. These pressures should slowly dissipate from 2018 and our forecast sees growth average 2.5% in the 2015 - 2021 period.

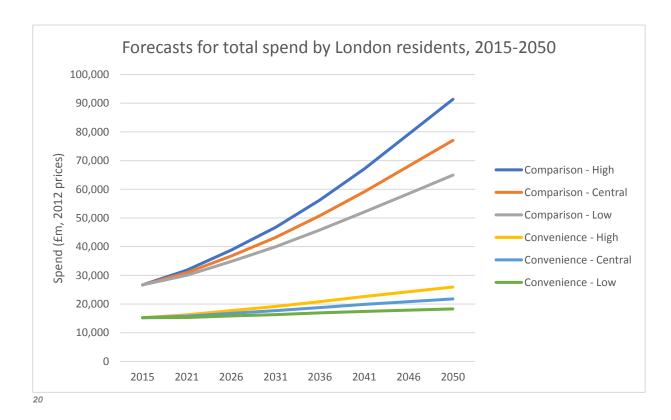
In the mid to long term as the global economy strengthens and the UK economy regains its poise, spending growth in London is expected to be more assured. Convenience goods spending growth is expected to settle at a rate of around 1%. Comparison goods spending is anticipated to grow by roughly 3% a year. The strong rates of growth registered in the 2012 – 2016 period are unlikely to

be achieved, unless a stronger than anticipated pattern of productivity and wage growth materialises.

4.4 The key scenario assumptions and results are summarised in Figure 46. Note that the scenarios relate to sensitivity tests on the per capita growth rate in consumer expenditure as explained above. All three scenarios are predicated on the central GLA population scenario and vary only the economic assumptions.

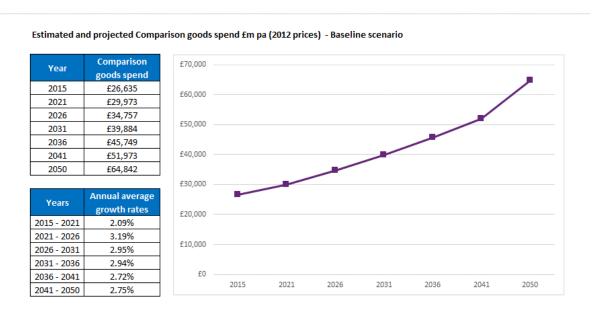
Figure 46. Headline scenario forecasts for total spend by Greater London residents.

(2012 pri	(2012 prices £m)		2021	2026	2031	2036	2041	2050
Central	Convenience	15,246	15,768	16,747	17,685	18,783	19,873	21,791
	Comparison	26,673	30,920	36,741	43,203	50,781	59,116	77,061
	Total retail spend	41,919	46,687	53,488	60,887	69,564	78,989	98,853
Low	Convenience	15,246	15,299	15,848	16,323	16,911	17,452	18,299
	Comparison	26,673	30,017	34,809	39,944	45,820	52,053	64,940
	Total retail spend	41,919	45,316	50,657	56,267	62,730	69,506	83,239
High	Convenience	15,246	16,249	17,692	19,152	20,852	22,615	25,928
	Comparison	26,673	31,845	38,770	46,710	56,252	67,094	91,369
	Total retail spend	41,919	48,094	56,462	65,862	77,104	89,710	117,297



 $^{^{20}}$ The forecast does not generate figures for 2046; however, for clarity this has been calculated in the chart as the difference between the 2050 and 2041 figures.

Figure 47. Growth in comparison goods spend in London 2015 to 2050.



4.5 Experian's estimate of total comparison goods expenditure in London in 2015 is £36.6 billion (see Figure 3), and this figure is projected to rise to £106.1 billion by 2050. The projections for the latter periods must be treated with caution due to the inherent uncertainties of the economy in the longer term. This includes London residents' household spend, ROSE Commuters and overseas tourists as well as domestic demand.

Retail floorspace requirements

This section sets out the estimated amount of floorspace needed in London for each of the scenarios for 2041 and splits this by zone, borough and centre, based on the expenditure forecasts set out above.

4A1 Baseline



London-wide comparison floorspace requirement

4.6 If the economy grows in the way expected by the Central spend projections of this study and no changes are made to the existing supply of retail floorspace, London is estimated to need an extra 2.8 million sq. m of comparison goods retail floorspace by 2041 (Gross) or 1.6 M sq. m (Net)²¹. This assumes the central spend forecast, and 2% productivity growth over this time period; however, the floorspace required is sensitive to both the spend forecast and productivity growth, as shown in Figure 48 below.

Figure 48. BASELINE SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base productivity with sensitivity test for spend)

Spend	Spend £	Gross Floorspace Requirement sq. m	Net Floorspace Requirement sq. m
Upper	£90,087,042,764	4,145,721	2,963,846
Base	£80,793,448,636	2,816,052	1,634,172
Lower	£72,567,554,690	1,639,106	457,229

Base productivity 2% Growth pa

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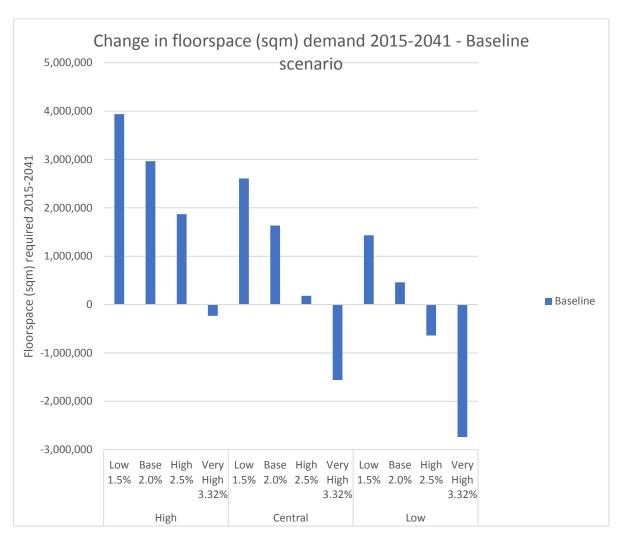
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²¹ Gross floor space requirement is the amount of additional floor space that would be needed to satisfy the estimated retail spend at an assumed rate of efficiency and rate of efficiency change over time. Gross floorspace assumes that existing vacant space is not filled before making this estimate; by contrast Net floorspace requirement assumes that all existing vacant floor space is used up before any additional floorspace is developed.

Figure 49. BASELINE SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base spend with sensitivity test for productivity growth).

Productivity		Gross Floorspace Requirement sq.	Net Floorspace Requirement sq.
Growth	Spend £	m	m
1.5% Low	£80,793,448,636	3,790,447	2,608,572
2.0% Base	£80,793,448,636	2,816,052	1,634,172
2.5% High	£80,793,448,636	1,720,056	538,179
3.3% very			
high	£80,793,448,636	-379,324	-1,561,203

Base spend



- 4.7 Sub-regional comparison floorspace requirement. Although there is a clear need for additional retail space for London as a whole, the pattern varies considerably by location with larger Inner London Growth and lower rates of growth in the east and North.
- 4.8 At the borough level, more detail emerges with a need for additional space growing more in Kensington and Chelsea, Hammersmith and Fulham, Wandsworth and Lambeth. Although growth is across all boroughs lower than average growth is predicted for Bromley, Hillingdon, Enfield, Havering, Redbridge, Sutton, Bexley and Barking and Dagenham.

Figure 50. BASELINE SCENARIO: Sub-regional balance of comparison goods retail floorspace requirement 2041 (assumes no change to existing supply).

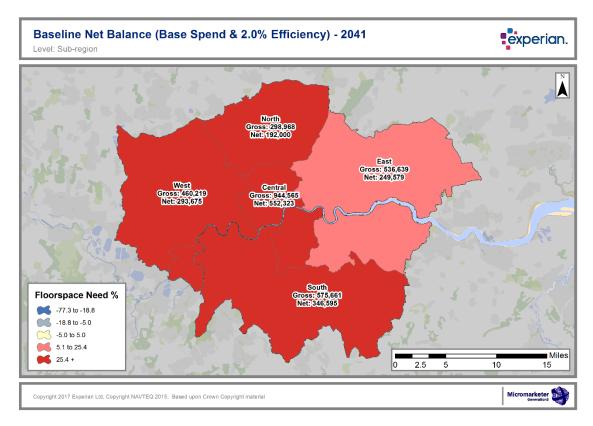


Figure 51. BASELINE SCENARIO: Borough level balance of comparison goods retail floorspace requirement 2041 (assumes no change to existing supply).

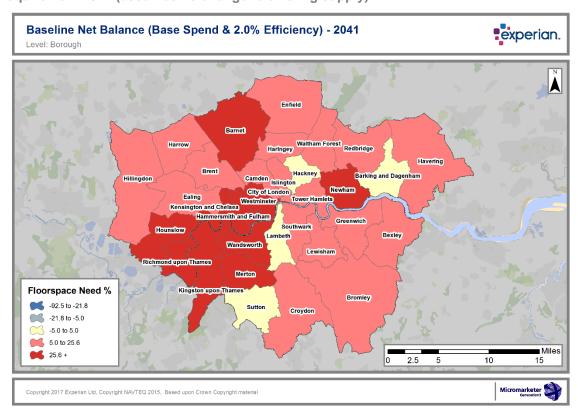
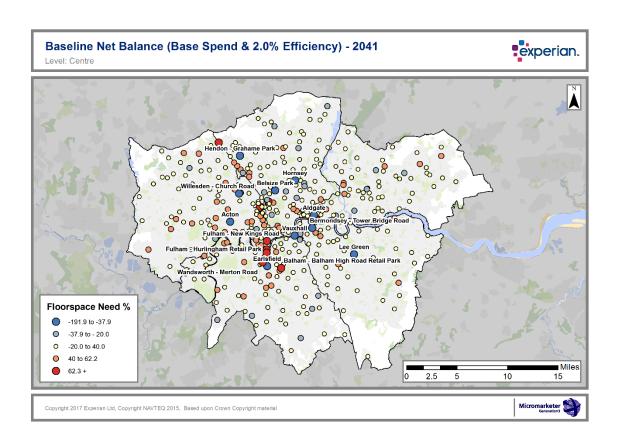


Figure 52. BASELINE SCENARIO: Centre level balance of comparison goods retail floorspace requirement 2041 (assumes no change to existing supply).



Centre-level comparison floorspace requirement

4.9 At a centre level the above figure shows that the future space needs vary considerably by centre. It is the centres of south west London and central London that have the greatest unmet need for space.

Figure 53. BASELINE SCENARIO: Centres with greatest rise in Estimated Turnover between 2015 and 2041.

Rank (From - To)	GLA Centre	Estimated turnover	Difference
(218 - 209)	Southfields	£11,223,273	£16,974,273
(72 - 65)	South Kensington	£58,439,979	£85,452,862
(38 - 38)	Fulham	£118,635,220	£170,477,364
(86 - 72)	Fulham Road (east)	£52,524,674	£75,382,322
(143 - 134)	Fulham Road (west)	£27,163,195	£38,984,055
(37 - 37)	Wandsworth	£127,846,489	£183,355,097
(154 - 143)	Earls Court Road	£24,066,373	£34,219,824
(55 - 54)	Notting Hill Gate	£80,234,652	£113,953,529
(229 - 229)	Battersea	£6,848,640	£9,720,536
(213 - 206)	Earlsfield	£12,183,253	£17,244,533

Baseline Pipeline Pipeli

London-wide comparison floorspace requirement

4.10 The Pipeline scenario adds in the pipeline of known developments coming forward that would increase (or reduce) comparison retail capacity. Given that there is a significant pipeline of development coming forward, this reduces the required amount of comparison retail floorspace for all of London significantly. However, this is distributed unevenly, depending on where the proposed retail developments are located. Figures Figure 54 and Figure 55 sets out the required amount of floorspace in the Pipeline scenario for the different spend forecasts and productivity growth levels.

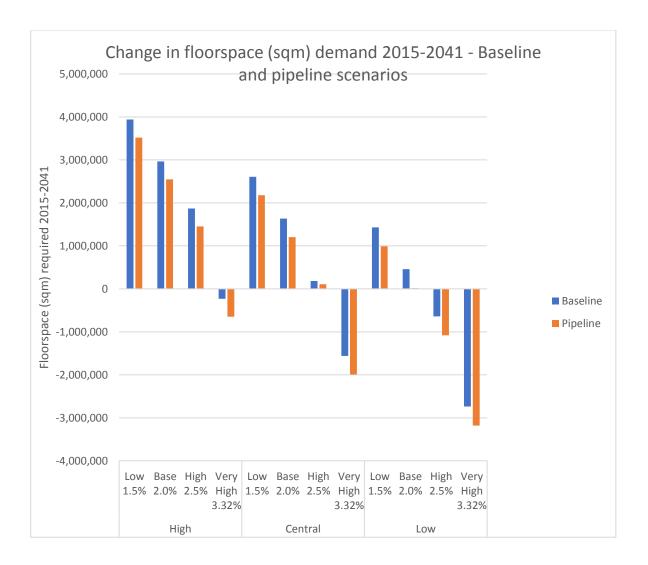
Figure 54. PIPELINE SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base productivity with sensitivity test for spend).

Spend	Spend £	Gross Floorspace Requirement sq. m	Net Floorspace Requirement sq. m
Upper	£91,196,015,380	3,728,446	2,546,577
Base	£81,770,526,368	2,385,642	1,203,760
Lower	£73,427,892,267	1,197,068	15,179

Base productivity 2% Growth pa.

Figure 55. PIPELINE SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base spend with sensitivity test for productivity growth).

Productivity		Gross Floorspace Requirement sq.	Net Floorspace Requirement sq.
Growth	Spend £	m	m
1.5% Low	£81,770,526,368	3,360,036	2,178,163
2.0% Base	£81,770,526,368	2,385,642	1,203,760
2.5% High	£81,770,526,368	1,289,645	107,764
3.3% very			
high	£81,770,526,368	-809,734	-1,991,617



Sub-regional comparison floorspace requirement

4.11 When comparing the Baseline with the addition of pipeline developments it is central London that gains at the expense of outer London but to a lesser extent. Even so, it is the east London boroughs of Redbridge and Barking and Dagenham as well as Hillingdon, Bromley and Enfield that show falls in space needed and the western boroughs of Kensington and Chelsea, Hammersmith and Fulham and Wandsworth showing gains in space needed.

Figure 56. PIPELINE SCENARIO: Sub-regional balance of comparison goods retail floorspace requirement 2041 (assuming all pipeline developments are built).

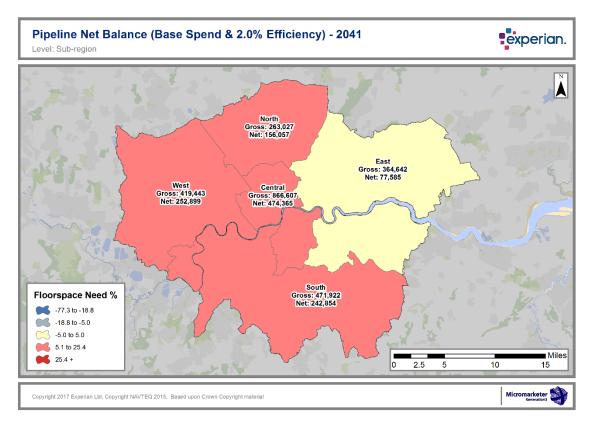
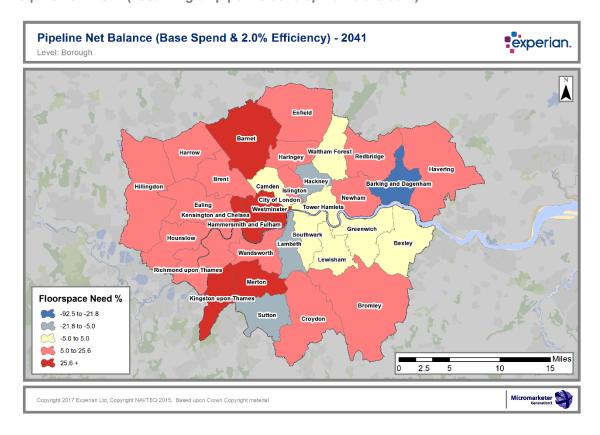


Figure 57. PIPELINE SCENARIO: Borough level balance of comparison goods retail floorspace requirement 2041 (assuming all pipeline developments are built).



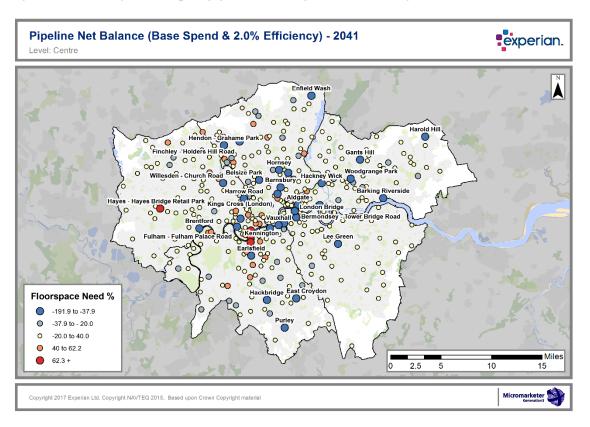
Centre-level comparison floorspace requirement

- 4.12 The large pipeline development will promote the ranking of Brent Cross three places, and although the additional space near Westfield London does not increase its rank it will attract a larger amount of spend. Developments at Greenwich increase the strength of Greenwich shopping park and London West End consolidates its strength within London.
- 4.13 Some of the greatest negative impacts are shown in Bromley, Harrow Road, Tooting and Cheapside.

Figure 58. Overall change from 2015 Baseline to 2	2041	Pipeline.
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	Estimated turnover 2041	Gross Floorspace Requirement (m²)	Net Floorspace Requirement (m²)	Estimated turnover difference	Turnover %
ĺ	£81,770,526,368	2,385,642	1,203,760	£45,209,279,673	124%

Figure 59. PIPELINE SCENARIO: Centre level balance of comparison goods retail floorspace requirement 2041 (assuming all pipeline developments are built).



- 4.14 Examination of where the retail flows to each centre comes from (excluding commuter and tourism spend) shows the more peripheral boroughs of Havering, Enfield, Hillingdon, Kingston and Sutton pulling a higher percentage of their spend from outside London.
- 4.15 Outside of London both Lakeside and Bluewater have major extensions to their shopping centres within the pipeline. The impact of these developments will be expected to increase the amount of

spend flowing from inside London out to these large destinations. The overall pattern of flows for Bluewater and Lakeside can be seen in the Appendices.

Impact assessment (comparing pipeline to baseline scenario)

4.16 The impact of the proposed new developments on the Greater London ranking of existing centres can be seen above, which charts the change in relative position over 2015-2041.

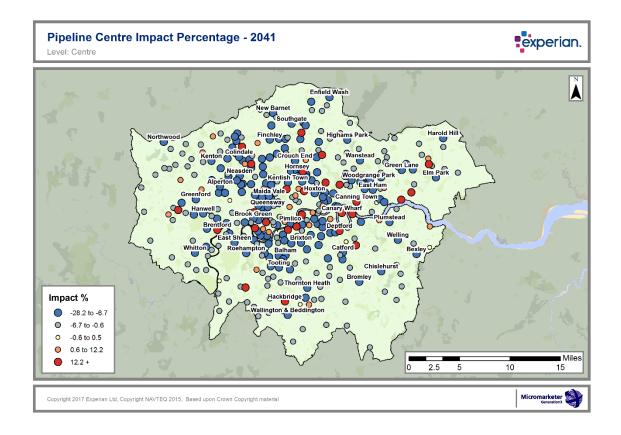
Figure 60. Centres impacted by the pipeline – most increased in rank.

Rank (From - To)	GIA Centre largest rises in rank		Difference
(229 - 145)	Battersea	£6,848,640	£47,980,030
(187 - 81)	Lee Green	£17,273,917	£101,748,408
(231 - 181)	North Greenwich	£6,074,587	£29,540,191
(238 - 231)	Barking Riverside	£2,965,620	£13,883,414
(230 - 208)	Vauxhall	£6,626,618	£21,678,405
(228 - 203)	Crossharbour	£8,199,001	£21,297,185
(35 - 24)	Canary Wharf	£150,767,712	£391,624,257
(6 - 5)	Brent Cross	£613,141,826	£1,456,450,267
(233 - 228)	Canning Town	£5,545,249	£12,796,513
(138 - 100)	Palmers Green	£28,520,719	£63,207,885

Figure 61. Centres impacted by the pipeline – most decreased in rank.

Rank (From - To)	GLA Centre largest falls in rank	Estimated turnover	Difference
(225 - 233)	Harrow Road	£9,168,439	£5,599,353
(145 - 161)	Camberwell	£26,972,311	£18,157,873
(176 - 196)	Burnt Oak	£18,522,382	£12,743,159
(51 - 57)	Cheapside	£94,751,638	£67,460,897
(114 - 133)	Archway	£37,508,351	£27,579,436
(175 - 188)	Stoke Newington	£18,911,483	£14,455,100
(227 - 232)	Elm Park	£8,602,914	£6,588,219
(214 - 224)	West Green Road/ Seven Sisters	£12,112,560	£9,533,280
(62 - 75)	Wallington	£67,386,510	£53,938,512
(201 - 217)	Whetstone	£14,001,288	£11,259,038

Figure 62. Centres most impacted in the Pipeline Scenario.



4A3 Future potential network changes



4.17 This scenario looks at the impact of strengthening selected centres listed in section 3B3.

London-wide comparison floorspace requirement

Figure 63. POTENTIAL FUTURE NETWORK SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base productivity with sensitivity test for spend) assuming all pipeline developments and future potential network changes are built.

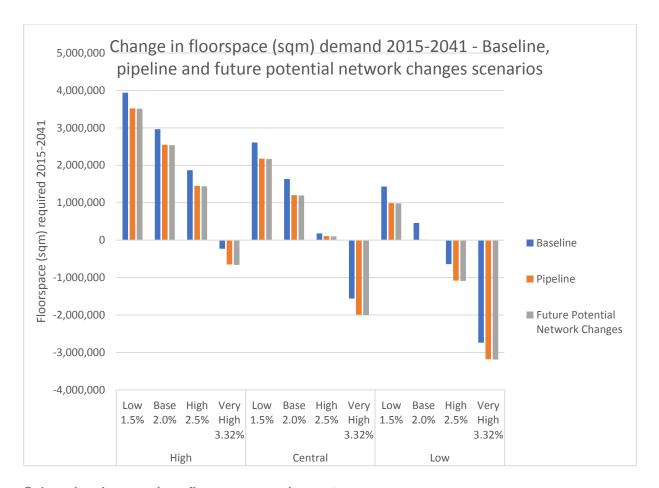
Spend	Spend £	Gross Floorspace Requirement sq. m	Net Floorspace Requirement sq. m
Upper	£91,259,981,416	3,717,223	2,535,343
Base	£81,826,884,743	2,375,753	1,193,864
Lower	£73,477,517,024	1,188,361	6,480

Base productivity 2% Growth pa.

Figure 64. POTENTIAL FUTURE NETWORK SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base spend with sensitivity test for productivity growth) assuming all pipeline developments and future potential network changes are built.

Productivity		Gross Floorspace Requirement sq.	Net Floorspace Requirement sq.
Growth	Spend £	m	m
1.5% Low	£81,826,884,743	3,350,148	2,168,270
2.0% Base	£81,826,884,743	2,375,753	1,193,864
2.5% High	£81,826,884,743	1,279,756	97,860
3.3% very			
high	£81,826,884,743	-819,623	-2,001,511

Base spend



Sub-regional comparison floorspace requirement

4.18 In this scenario, Inner London shows the greatest gains and east and south London sub zones the least gain.

Figure 65. POTENTIAL FUTURE NETWORK SCENARIO: Sub-regional balance of comparison goods retail floorspace requirement 2041 assuming all pipeline developments and future potential network changes are built.

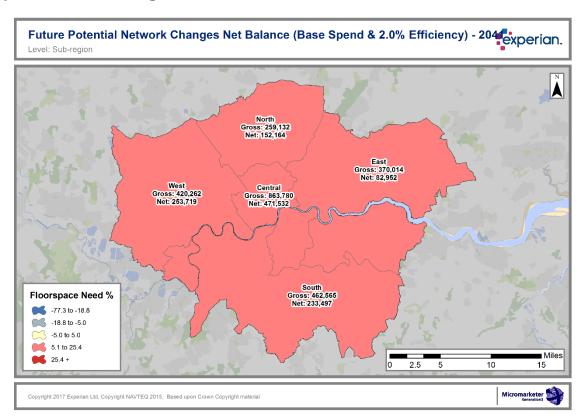
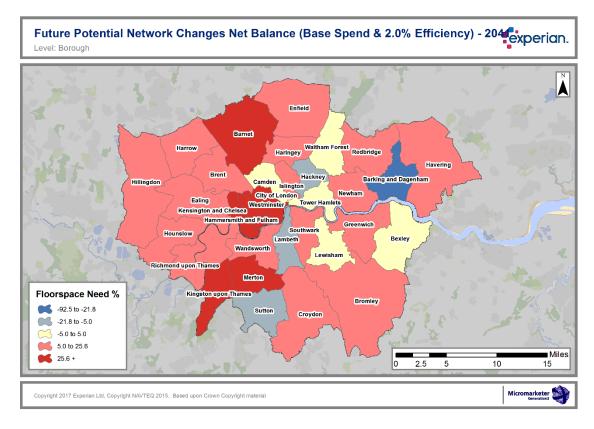
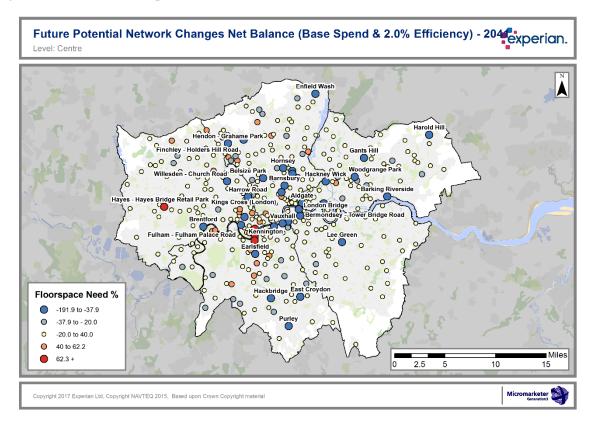


Figure 66. POTENTIAL FUTURE NETWORK SCENARIO: Sub-regional balance of comparison goods retail floorspace requirement 2041 assuming all pipeline developments and future potential network changes are built.



Centre-level comparison floorspace requirement

Figure 67. POTENTIAL FUTURE NETWORK SCENARIO: Centre level balance of comparison goods retail floorspace requirement 2041 assuming all pipeline developments and future potential network changes are built.



4.19 The figure on the following page identifies where the largest changes in rank position of centres are likely to occur if these centres were to be increased in strength. Westfield London, Brent Cross and Canary Wharf all show significant gain in turnover compared to the lower levels of Bromley and Walthamstow.

Figure 68. POTENTIAL FUTURE NETWORK SCENARIO: Rank, turnover and comparison goods retail floorspace requirements, 2041, and change in rank Baseline scenario, 2015, to the Potential Future Network scenario, 2041.

Rank (2041 PFN)	GOAD Centre	Estimated Turnover	Gross Floorspace Requirement (m2)	Net Floorspace Requirement (m2)	Change in Rank from 2015 Baseline	Estimated Turnover Change	Turnover % change
1	London West End	16,448,701,022	461,301	323,859	⇒ 0	ŵ £9,530,526,401	138%
2	Westfield Stratford City	3,571,516,050	43,799	33,229	⇒ 0	ŵ £1,849,872,854	107%
3	Westfield London	2,513,165,915	96,213	91,543	⇒ 0	♠£1,688,983,029	205%
4	Brent Cross	2,017,099,204	79,338	78,258	ŵ 2	ŵ £1,433,212,558	245%
5	Kingston upon Thames	1,759,686,148	66,448	55,928	U -1	ழ் £958,746,329	120%
6	Croydon	1,484,235,034	82,976	50,666	⊍ -1	ŵ £835,148,229	129%
7	Knightsbridge	1,162,375,247	74,240	65,534	ሱ 1	ŵ £632,815,626	119%
8	Victoria Street	1,115,979,794	16,320	4,790	ŵ 2	♠ £656,933,036	143%
9	Bromley	1,095,610,945	32,133	21,493	⊍ -2	ŵ £517,226,597	89%
10	Hounslow	988,012,486	22,052	9,152	⊍ -1	ŵ £522,851,674	112%
11	Kensington	971,961,500	24,606	19,396	⇒ 0	ŵ £523,370,894	117%
12	Romford	928,953,482	40,208	20,220	⇒ 0	ŵ £489,537,978	111%
13	Canary Wharf	899,599,472	10,314	5,084	û 20	ŵ £670,085,381	292%
14	Chelsea	881,536,905	34,397	25,871	& -1	ŵ £477,101,406	118%
15	Ealing Broadway	860,464,179	19,076	16,086	U -1	☆ £460,780,855	115%
16	Islington - Chapel Market	764,868,399	15,619	9,719	ŵ 5	介 £463,350,235	154%
17	Uxbridge	742,641,107	21,038	10,358	0 -2	企 £377,253,701	103%
18	Walthamstow	728,002,067	10,798	-2,462	" -2	企 £365,194,884	101%
19	Stratford	706,682,845	14,740	11,920	ŵ 5	ŵ £429,796,274	155%
20	Wimbledon	661,315,419	18,300	12,830	⇒ 0	企 £352,264,060	114%

Figure 69. Centres most impacted in the Future Potential Network Changes scenario: compared with Pipeline 2041 – which centres have increased rank the most.

Rank (From - To)	GLA Centre largest rise in rank	Estimated turnover	Difference
(62 - 54)	Elephant and Castle	£144,197,132	£37,975,638
(29 - 21)	Stratford (Newham)	£480,151,955	£115,567,924
(73 - 61)	Walworth Road	£125,359,910	£28,630,952
(55 - 49)	Shepherds Bush (excluding Westfield)	£177,153,531	£38,948,180
(28 - 26)	Canada Water	£481,357,252	£55,257,873
(33 - 31)	Woolwich	£411,334,155	£40,179,997
(24 - 23)	Canary Wharf	£542,391,969	£48,554,554
(203 - 193)	Crossharbour	£29,496,186	£2,640,478

Figure 70. Centres most impacted in the Future Potential Network Changes scenario: compared with Pipeline 2041 – which centres have decreased rank the most.

Rank (From - To)	GLA Centre largest falls in rank	Estimated turnover	Difference
(234 - 234)	Hackney Wick	£14,088,475	-£383,227
(228 - 229)	Canning Town	£18,341,762	-£380,515
(236 - 236)	Merry Fiddlers	£9,951,566	-£205,229
(189 - 190)	Bethnal Green	£33,260,946	-£619,951
(219 - 220)	Roman Road (east)	£23,542,292	-£435,278
(238 - 238)	Roman Road (west)	£7,336,967	-£135,655
(237 - 237)	Green Lane	£9,634,768	-£167,666
(181 - 183)	North Greenwich	£35,614,778	-£593,703
(88 - 88)	Green Street/ Upton Park	£104,421,363	-£1,588,146
(210 - 212)	Plumstead	£27,294,622	-£408,539

4.20 Under this scenario where the pipeline is constructed and additionally the named centres are strengthened, then London will need 1.2 million sq. m. of additional net Floorspace by 2041. The gross requirement would be 2.4 million sq. m. This reflects the additional space needed to service the demand sucked into London by the increased attractiveness of these centres in addition to the other changes.

4A4 Quality Adjustment



The quality adjustment scenario increases the relative draw of larger centres, as set out in above. This scenario shows a net Floorspace requirement of 1.19 M sq. m. by 2041 and a gross requirement of 2.3 million sq. m. Even though the scenario strengthens more centres, the floorspace requirement does not fall as more spend is drawn into London from the rest of the south east pulled by the increased attractiveness of the strengthened larger centres.

Figure 71. London-wide comparison floorspace requirement.

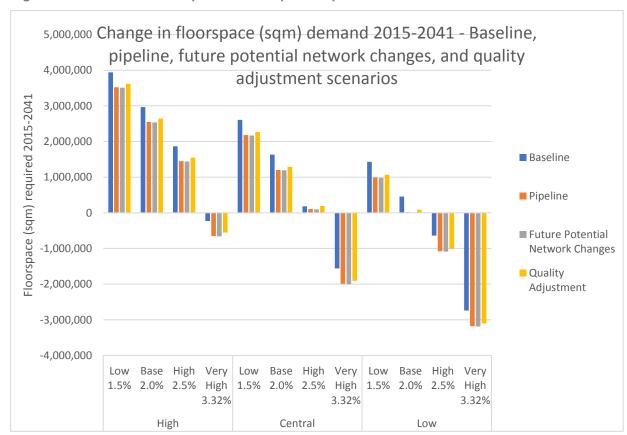


Figure 72. QUALITY ADJUSTMENT SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base productivity 2% pa growth with sensitivity test for spend).

Spend	Spend £	Gross Floorspace Requirement sq. m	Net Floorspace Requirement sq. m
Upper	£91,259,981,416	3,717,223	2,535,343
Base	£81,826,884,743	2,375,753	1,193,864
Lower	£73,477,517,024	1,188,361	6,480

Figure 73. QUALITY ADJUSTMENT SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base spend with sensitivity test for productivity growth).

Productivity		Gross Floorspace Requirement sq.	Net Floorspace Requirement sq.
Growth	Spend £	m	m
1.5% Low	£81,826,884,743	3,445,468	2,263,578
2.0% Base	£81,826,884,743	2,471,074	1,289,194
2.5% High	£81,826,884,743	1,375,077	193,183
3.3% very			
high	£81,826,884,743	-724,302	-1,906,173

Sub-regional comparison floorspace requirement

Figure 74. QUALITY ADJUSTMENT SCENARIO: Sub-regional balance of comparison goods retail floorspace requirement 2041.

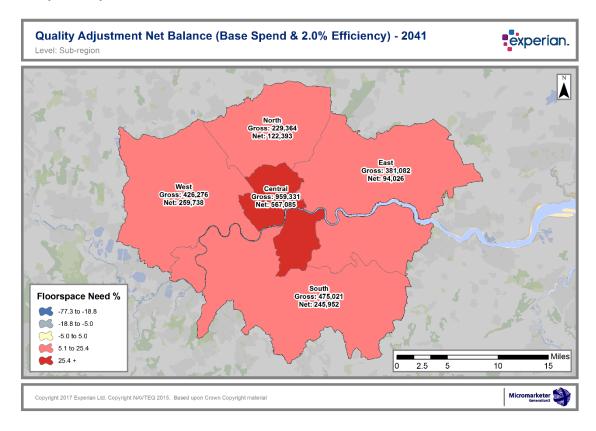
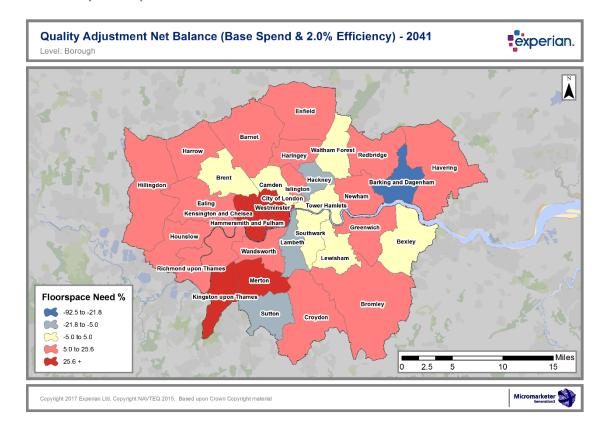


Figure 75. QUALITY ADJUSTMENT SCENARIO: Borough level balance of comparison goods retail floorspace requirement 2041.



Centre-level comparison floorspace requirement

Figure 76. QUALITY ADJUSTMENT SCENARIO: Centre level balance of comparison goods retail floorspace requirement 2041.

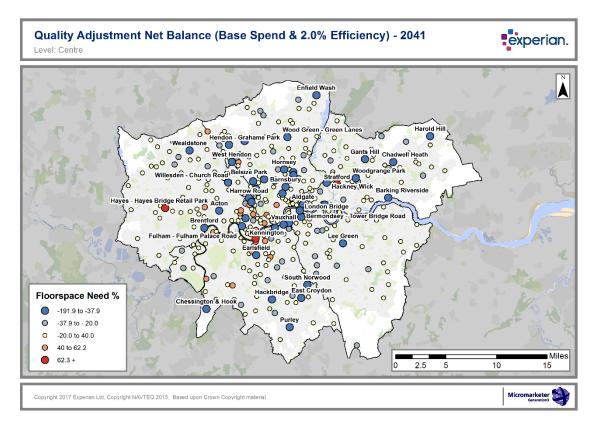


Figure 77. QUALITY ADJUSTMENT SCENARIO: Rank, turnover and comparison goods retail floorspace requirements, 2041, and change in rank from the Baseline, 2015, to the Quality Adjustment scenario, 2041.

Rank (2041 Quality Adjust- ment)	GOAD Centre	Estimated Turnover	Gross Floorspace Requirement (m2)	Net Floorspace Requirement (m2)	Change in Rank from 2015 Baseline	Estimated Turnover Change	Turnover % change
1	London West End	17,231,842,161	540,015	402,573	⇒ 0	ŵ £10,313,667,540	149%
2	Westfield Stratford City	3,760,172,174	56,055	45,485	⇒ 0	企 £2,038,528,978	118%
3	Westfield London	2,617,270,983	110,461	105,791	⇒ 0	ŵ£1,793,088,097	218%
4	Brent Cross	1,949,429,859	70,381	69,301	ŵ 2	ŵ £1,365,543,213	234%
5	Kingston upon Thames	1,849,102,353	81,069	70,549	⊕ -1	ŵ £1,048,162,534	131%
6	Croydon	1,550,292,926	99,093	66,783	⊍ -1	ŵ £901,206,121	139%
7	Knightsbridge	1,212,607,911	87,007	78,301	企 1	ŵ £683,048,290	129%
8	Victoria Street	1,148,690,820	18,560	7,030	ŵ 2	ŵ £689,644,062	150%
9	Bromley	1,140,856,251	39,616	28,976	⊍ -2	企 £562,471,903	97%
10	Hounslow	1,044,228,779	28,231	15,331	⊍ -1	ŵ £579,067,967	124%
11	Kensington	1,007,542,222	28,027	22,817	⇒ 0	ŵ £558,951,616	125%
12	Romford	981,668,475	53,064	33,076	⇒ 0	企 £542,252,971	123%
13	Canary Wharf	935,644,394	15,178	9,948	û 20	ŵ £706,130,303	308%
14	Chelsea	912,951,587	39,059	30,533	⊍ -1	ŵ £508,516,088	126%
15	Ealing Broadway	892,561,030	22,246	19,256	⊕ -1	☆ £492,877,706	123%
16	Islington - Chapel Market	805,400,050	19,333	13,433	∲ 5	介 £503,881,886	167%
17	Uxbridge	783,460,927	27,594	16,914	⊍ -2	企 £418,073,521	114%
18	Walthamstow	775,987,358	14,701	1,441	⊍ -2	企 £413,180,175	114%
19	Stratford	754,387,426	17,724	14,904	∲ 5	企 £477,500,855	172%
20	Sutton	689,140,775	28,406	2,376	∳ -3	ŵ £370,661,528	116%

Quality adjustment scenario compared to baseline scenario

4.22 With the growth in the stronger centres, including London West End, other smaller centres start to be impacted especially if they fall in the shadow of the growing larger retail centres.

Figure 78. Centres most impacted in the quality adjustment scenario.

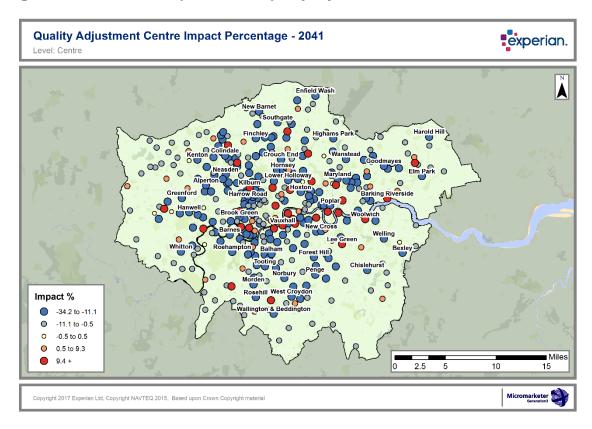


Figure 79. Centres most impacted in the Quality Adjustment scenario: comparing Baseline 2041 with Quality Adjustment 2041 – which centres have increased rank the most.

Rank (From - To)	GLA Centre largest rise in rank	Estimated turnover	Difference
(184 - 83)	Lee Green	£36,729,740	£74,732,070
(229 - 148)	Battersea	£16,569,176	£33,657,682
(238 - 231)	Barking Riverside	£5,894,651	£10,029,055
(231 - 185)	North Greenwich	£14,372,611	£18,457,165
(227 - 184)	Crossharbour	£17,490,160	£15,934,148
(35 - 23)	Canary Wharf	£321,618,607	£293,005,811
(230 - 209)	Vauxhall	£15,041,967	£10,663,614
(224 - 202)	Hackbridge	£19,464,650	£9,544,174
(142 - 101)	Palmers Green	£58,612,445	£28,508,715
(6 - 5)	Brent Cross	£1,366,593,445	£628,176,233

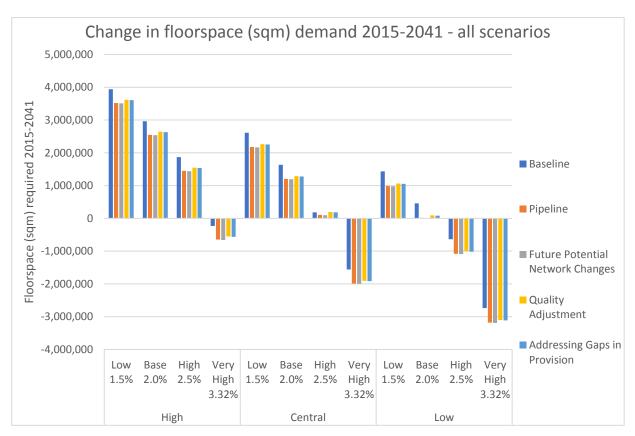
Figure 80. Centres most impacted in the Quality Adjustment scenario: comparing Baseline 2041 with Quality Adjustment 2041 – which centres have decreased rank the most.

Rank (From - To)	GLA Centre largest fall in rank	Estimated turnover	Difference
(223 - 233)	Harrow Road	£20,246,283	-£6,805,858
(173 - 194)	Burnt Oak	£41,532,828	-£11,685,819
(146 - 161)	Camberwell	£56,946,804	-£15,025,968
(197 - 217)	Whetstone	£32,299,674	-£8,412,750
(114 - 134)	Archway	£82,777,113	-£21,557,701
(213 - 223)	Roman Road (east)	£26,518,526	-£6,030,150
(237 - 238)	Roman Road (west)	£8,264,511	-£1,879,299
(220 - 228)	New Cross Gate	£21,837,062	-£4,600,569
(53 - 57)	Cheapside	£206,296,015	-£41,950,216
(179 - 187)	Stoke Newington	£39,375,873	-£7,536,939



Addressing gaps in provision scenario compared to baseline scenario

Figure 81. London-wide comparison floorspace requirement.



4.23 This scenario strengthens the nine selected centres identified from an analysis of the gaps of reachable demand in London. This has had the twin impact of uplifting these centres and relatively weakening nearby alternative centres.

Figure 82. ADDRESSING THE GAPS SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base productivity 2% pa with sensitivity test for spend) assumes all pipeline developments are built and gaps addressed.

Spend	Spend £	Gross Floorspace Requirement sq. m	Net Floorspace Requirement sq. m
Upper	£91,728,062,364	3,812,780	2,630,897
Base	£82,239,293,379	2,459,945	1,278,066
Lower	£73,840,650,424	1,262,494	80,620

Figure 83. ADDRESSING THE GAPS SCENARIO: London comparison goods retail spend and floorspace requirements 2041 (Base spend with sensitivity test for productivity growth).

Productivity Growth	Spend £M	Gross Floorspace Requirement sq. m	Net Floorspace Requirement sq. m
1.5% Low	£82,239,293,379	3,434,340	2,252,457
2.0% Base	£82,239,293,379	2,459,945	1,278,066
2.5% High	£82,239,293,379	1,363,948	182,064
3.3% very high	£82,239,293,379	-735,431	-1,917,312

Base spend

Sub-regional comparison floorspace requirement

Figure 84. ADDRESSING THE GAPS SCENARIO: Sub-regional balance of comparison goods retail floorspace requirement 2041.

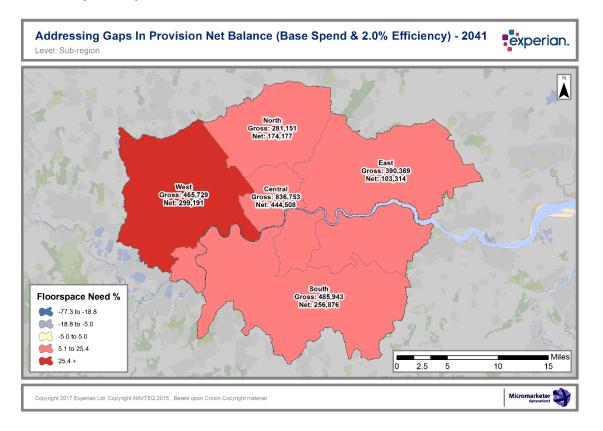
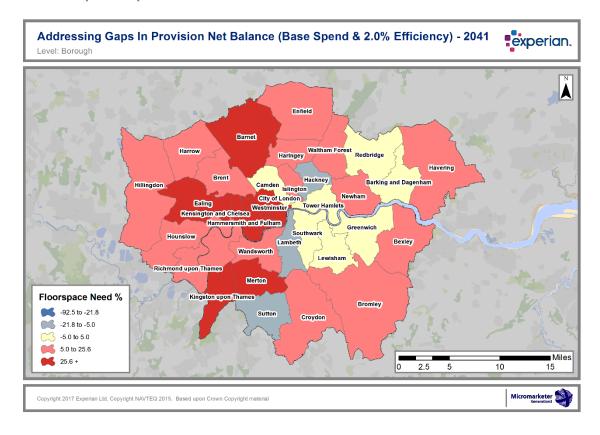


Figure 85. ADDRESSING THE GAPS SCENARIO: Borough level balance of comparison goods retail floorspace requirement 2041.



Centre-level comparison floorspace requirement

Figure 86. ADDRESSING THE GAPS SCENARIO: Centre level balance of comparison goods retail floorspace requirement 2041.

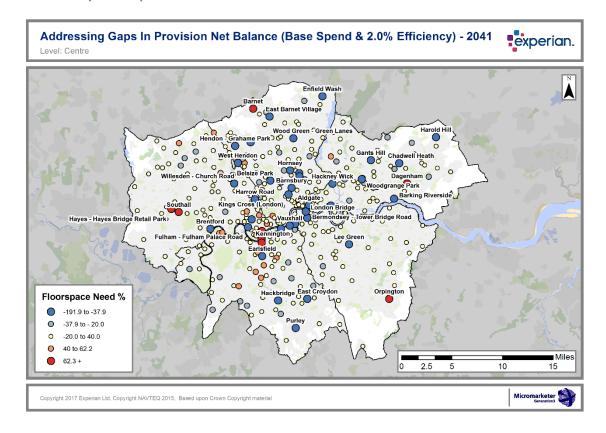


Figure 87. ADDRESSING THE GAPS SCENARIO: Rank, turnover and comparison goods retail floorspace requirements. 2041, and change in rank from the Baseline scenario, 2015, to the Addressing the Gaps scenario, 2041.

Rank (2041 Address- ing Gaps)	GOAD Centre	Estimated Turnover	Gross Floorspace Requirement (m2)	Net Floorspace Requirement (m2)	Change in Rank from 2015 Baseline	Estimated Turnover Change	Turnover % change
1	London West End	16,369,782,067	453,368	315,926	⇒ 0	ŵ £9,451,607,446	137%
2	Westfield Stratford City	3,542,806,791	41,934	31,364	⇒ 0	ŵ £1,821,163,595	106%
3	Westfield London	2,503,675,880	94,915	90,245	⇒ 0	ŵ £1,679,492,994	204%
4	Brent Cross	1,994,237,113	76,312	75,232	ŵ 2	ŵ £1,410,350,467	242%
5	Kingston upon Thames	1,756,387,268	65,908	55,388	U -1	ஓ £955,447,449	119%
6	Croydon	1,482,945,437	82,661	50,351	U -1	♠ £833,858,632	128%
7	Knightsbridge	1,158,714,022	73,310	64,604	企 1	ŵ £629,154,401	119%
8	Victoria Street	1,113,542,031	16,153	4,623	ŵ 2	ŵ £654,495,273	143%
9	Bromley	1,085,234,350	30,417	19,777	⊍ -2	ŵ £506,850,002	88%
10	Walthamstow	1,079,178,763	39,358	26,098	企 6	ŵ £716,371,580	197%
11	Hounslow	978,651,818	21,024	8,124	. -2	ŵ £513,491,006	110%
12	Kensington	969,606,846	24,379	19,169	. -1	ŵ £521,016,240	116%
13	Romford	915,097,073	36,829	16,841	⊕ -1	ŵ £475,681,569	108%
14	Chelsea	880,442,663	34,235	25,709	& -1	ŵ £476,007,164	118%
15	Ealing Broadway	852,389,459	18,279	15,289	⊍ -1	ஓ £452,706,135	113%
16	Canary Wharf	814,443,077	-1,178	-6,408	企 17	ŵ £584,928,986	255%
17	Islington - Chapel Market	760,984,423	15,263	9,363	ŵ 4	介 £459,466,259	152%
18	Uxbridge	735,325,060	19,862	9,182	∳ -3	ழ் £369,937,654	101%
19	Wimbledon	715,829,372	24,766	19,296	企 1	企 £406,778,013	132%
20	Sutton	652,692,518	20,963	-5,067	. -3	ŵ £334,213,271	105%

Figure 88. Centres most impacted in the Addressing the Gaps scenario.

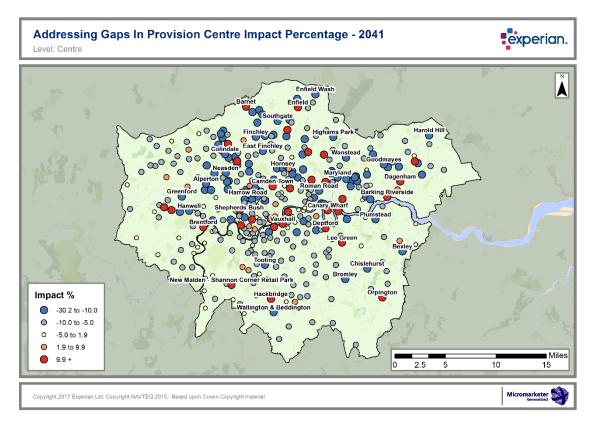


Figure 89. Centres most impacted in the Addressing the Gaps scenario: comparing Baseline 2041 with Addressing Gaps 2041 – which centres have increased rank the most.

Rank (From - To)	GLA Centres biggest rise in rank	Estimated turnover	Difference
(152 - 53)	Dagenham and Heathway	£52,634,958	£144,615,299
(229 - 146)	Battersea	£16,569,176	£37,994,246
(184 - 84)	Lee Green	£36,729,740	£79,963,373
(124 - 46)	Southall	£73,197,247	£150,991,371
(238 - 231)	Barking Riverside	£5,894,651	£10,007,192
(231 - 181)	North Greenwich	£14,372,611	£20,708,063
(56 - 35)	Chipping Barnet	£173,696,942	£212,257,410
(230 - 207)	Vauxhall	£15,041,967	£13,156,352
(35 - 26)	Canary Wharf	£321,618,607	£213,388,716
(227 - 200)	Crossharbour	£17,490,160	£11,604,436

Figure 90. Centres most impacted in the Addressing the Gaps scenario: comparing Baseline 2041 with Addressing Gaps 2041 – which centres have decreased rank the most.

Rank (From - To)	GLA Centre biggest fall in rank	Estimated turnover	Difference
(223 - 232)	Harrow Road	£20,246,283	-£5,517,546
(197 - 218)	Whetstone	£32,299,674	-£8,702,805
(173 - 196)	Burnt Oak	£41,532,828	-£10,832,220
(44 - 57)	Shepherds Bush (excluding Westfield)	£230,240,968	-£54,577,485
(114 - 135)	Archway	£82,777,113	-£19,036,965
(53 - 59)	Cheapside	£206,296,015	-£45,073,794
(146 - 159)	Camberwell	£56,946,804	-£12,114,344
(57 - 64)	Tooting	£171,782,465	-£29,600,810
(179 - 188)	Stoke Newington	£39,375,873	-£6,588,530
(138 - 149)	Liverpool Street	£61,817,515	-£9,634,070

Sensitivity to productivity growth

4.24 We find that, in all scenarios, the need for new floorspace is very sensitive to assumptions made about retail space productivity growth (i.e. the sustainable rate of increase of sales densities of both existing and new space) and to assumptions about sales densities for new space. The study examines 4 levels of productivity growth per annum: 1.5% Low, 2.0% Base and 2.5% High and 3.3% very high. Analysis of change in Goad data over the period 2009-2015 show the very high level of 3.3% to closely reflect recent changes but this may well be an untypical period spanning the 2008/9 economic crash which saw untypically large changes in retail space as some retail brands ceased to trade and others cut back on their outlets.

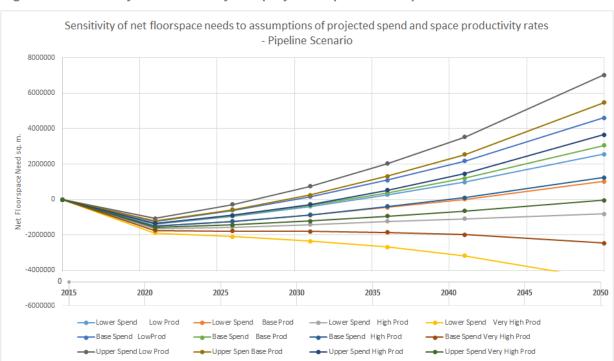


Figure 91. Sensitivity to Productivity and projected spend assumptions.

4.25 We recommend the cautious use of a space productivity growth of 2.0% for the Base level in the study, with monitoring of changes in retail floorspace efficiency as the predicted levels of floorspace need are highly sensitive to these changes.

5 CONCLUSIONS

5.1 This report has provided projections of consumer expenditure and an assessment of the need for additional comparison goods retail floorspace in London. The key findings and conclusions of the report are as follows:

Household expenditure by London residents is projected to rise from £155.4 billion in 2015 to £281.7 billion in 2041

- The projected future spend considers growth in population and households in London and in the projected employment volume and mix. Spend estimates were modelled down from Regional accounts using the Experian Mosaic segmentation to reflect local differences in spending power due to the social mix of neighbourhoods.
- 5.3 Of the various components of London household expenditure, comparison goods retail spending is projected to grow the fastest at 3.1% per annum to around £59 billion by 2041. Household spend on accommodation and catering (including restaurants, cafes, takeaways and on-licence) are projected to grow by 2.7% per annum and leisure spending by 2.5% per annum over the same period, Household spending on convenience goods is forecast to be more modest at 1.0% per annum to around £20 billion by 2041.
- The longer the forecast period the harder it becomes to forecast the economic outlook and the greater the uncertainty that exists in any projection. This study examined three levels of possible future household expenditure by London residents in 2041 ranging from a 'Low' scenario estimate of £247.8 billion, to the Central forecast of £281.7 billion and the 'High' scenario estimate of £320.0 billion.
- 5.5 This growth in household spending will support the vitality and viability of town centres in London but not all of this household spend takes place in London. Some, for example, is spent in locations in the rest of the UK and abroad, and some is spent via special forms of trading including online channels (see below). In the same way, some of the household expenditure of residents outside London will be spent in town centres within London. These 'outflows' of London household expenditure and 'inflows' of Non-London household expenditure are taken into account in the assessment of the need for comparison goods retail floorspace.

Spending by domestic and overseas tourists and commuters will boost the vitality and viability of town centres

- The available spend in any London centre comes from residents and from those that work nearby and in some cases this is boosted by large amounts of tourist spend. Spending on comparison goods in London by domestic and overseas tourists is projected to grow from £3.2 billion in 2015 to £8.5 billion in 2041. The net inflow of commuter spending from the East and South East of England is projected to grow from £3 billion to £5.3 billion in the same period. The largest focus of workers and tourism clearly benefits the central London retail centres with very large imports of international spending. Those larger outer London centres with strong office, leisure and tourism attractions also gain an additional boost to their available demand.
- 5.7 Employment, retail, culture and night time economy and tourism development in accessible locations outside of central London also helps to spread these economic benefits to town centres in inner and outer London and should be encouraged and supported as it addresses the issue of the polarisation of spend (see below).

Spending via the internet and other special forms of trading on comparison goods retail is projected to increase from 18.6% in 2015 to 25.1% by 2026 and 25.7% by 2041

- The growth of online comparison goods retail has been spectacular from 3% share in 2007 to 18.6% by 2015. This growth is projected to continue but flatten out over time in part because some 25% of internet sales are made online but collected in store. For some activities, most notably music, books, films and holidays the shift online has been much larger and the mix of shops and agencies on the street has changed in recent years.
- As the online market matures an omnichannel offer has emerged particularly for the more successful multiple retailers where the consumer researches online and may buy online and collect or choose to have it delivered. This trend favours the larger multiples who have invested in the systems both online and in fulfilments through rapid deliveries and in store collection. Although the major multiple retailers are becoming more sophisticated the threat to physical shops remains from the pure play large businesses such as Amazon as can be seen by the recent failure of Toys 'R' Us in the USA.

Total comparison goods retail spend in London is projected to rise from £36.6 billion in 2015 to £80.9 billion in 2041

Total spending on comparison goods retail consider London and Non-London household spend within the capital, together with commuters from outside London and domestic and overseas tourists. Total comparison goods expenditure in London is forecast to grow by 2.6% per annum over the period 2015 to 2021, and by between 3.4% and 3.7% per annum in the 5-year periods 2021-2041. The projections for the latter periods must be treated with caution due to the inherent uncertainties of the economy in the longer term.

London has a baseline need for a net additional 1.6 million sq. m of comparison goods retail floorspace over the period 2015 to 2041. If all the retail schemes in the planning pipeline are built out, London will still have need for a net additional 1.2 million sq. m of comparison goods retail floorspace.

Figure 92. Comparison Goods Retail Floorspace requirements in London 2015 to 2041: comparison of development scenarios 2041 (central spend forecast and base productivity).

	Baseline	Pipeline	Potential future Network changes	Quality Adjustment	Addressing gaps in provision
Net Floorspace requirements sq. m (gross less space already planned)	1,634,172	1,203,760	1,193,864	1,289,194	1,278,066
Gross floorspace requirements	2,816,052	2,385,642	2,375,753	2,471,074	2,459,945

Trends in the efficiency (productivity) in the use of space are moving towards greater efficiency

- Over time retailers have could achieve higher sales per sq. m as they improve space efficiency. Past studies assumed that there would be an annual improvement in space productivity of 1.5% (for comparison goods) This study has taken a higher assumed improvement of 2% per annum as the trend has continued to increase. Experian have compared retail sales totals with changes in retail space between 2009 and 2015 and found even higher rates of improvement. However, this measurement included a period of major retail loss of space following the economic crash.
- For this reason, a range of possible levels of space productivity growth were examined against the scenarios ranging from 1.5% Low, 2.0% base, 2.5% High and 3.32% very high. With the most likely future value taken as 2.0% annual productivity improvement. Estimates of the amount of retail floorspace required are highly dependent on the assumed future overall economic conditions and on the actual future levels of productivity growth.

Figure 93. Comparison goods retail floorspace requirements at 2041 with sensitivity testing on forecast spend and space productivity assumptions.

Spend and Space Productivity	Net floorspace requirements sq. m
Lower Spend Low Prod	989,581
Lower Spend Base Prod	15,179
Lower Spend High Prod	- 1,080,817
Lower Spend Very High Prod	- 3,180,190
Central Spend Low Prod	2,178,163
Central Spend Base Prod	1,203,760
Central Spend High Prod	107,764
Central Spend Very High Prod	- 1,991,617
Upper Spend Low Prod	3,520,963
Upper Spend Base Prod	2,546,577
Upper Spend High Prod	1,450,576
Upper Spend Very High Prod	- 648,810

Trends towards the polarisation of comparison goods retail floorspace demand towards the stronger and more attractive centres are likely to continue

- The larger centres in the UK have strengthened at the expense of the smaller and undifferentiated retail centres. This study shows that this is likely to continue and strengthen within London by 2041. Larger stronger retail destinations have an increasingly wide range of multiple and independent retail to choose from and the attractions of major department stores and large fashion destinations. Benefiting from a virtuous cycle of growth the agglomeration effects give them a strong edge especially if buttressed by office employment and tourist, leisure and cultural attractions.
- The growth of these key destinations can have an impact on the nearby alternative retail destinations as trade is deflected to them. The Experian gravity model used widely in this study and for the assessment of retail investment decisions and policy evaluation provides the means to simulate these behavioural patterns. The impact of future expansions and changes to the network will require more detailed assessments of retail capacity and impact that takes account of the additional space requirements in the larger growing centres and in the impact on the nearby smaller centre.

Approximately half of London's town centres are expected to have a surplus of comparison goods retail floorspace by 2041

- 5.15 Of the 240 GLA retail centres 114 are expected to have a surplus of comparison goods by 2041 assuming all pipeline developments are built and that spend is at the assumed baseline and productivity of retail space improves at the assumed baseline of 2% per annum.
- The largest need for space is in the largest International, Metropolitan and some Major centres. This study identifies that there is a clear need to plan for additional development in these larger centres and the accompanying infrastructure and transport needs.
- 5.17 By contrast it is in the 114 smaller centres and a few Major centres that there is likely to be more comparison goods retail space than required.
- In the centres where there may be a surplus of space then a different approach will be required to support the vitality of these centres. This may entail the conversion or redevelopment of surplus comparison goods retail units to other commercial uses as well as more intensive forms of mixed use development including housing. Alternative commercial uses might include smaller format convenience retail formats to serve local communities, service retail, leisure and cultural uses. . In some centres night time economic uses could help fill gaps arising from surplus comparison goods space. Where there is an overall surplus of retail and commercial space in a centre this may require tailored approaches to consolidate a town centre with the commercial uses focused in a smaller, viable core or high street, with opportunities to encourage new residential development in areas where commercial space is in surplus,

The future? Disruptive technologies?

5.19 The potential for disruptive technologies to provide both opportunities and threats to the retail economy of London is likely to grow by 2041. The impact of online sales has already had a significant impact and it is likely that the automation of jobs and particularly autonomous vehicles will change the face of retailing perhaps further increasing sales densities and reducing the need for car parking. In addition, 3D printing with local manufacturing, advances in bio-tech and virtual reality could all reduce the need for shops. Although some of these impacts may well fall within the timescale of this report their impacts are hard to foresee and are beyond the scope of this exercise. This is an area in need in future research and impact studies.

6 APPENDICES

Figure 94. Centres included in Modelling: Goad Names. (centres in red are non-Goad centres that have been added to the model).

Centre Name	
Barking Riverside	
Battersea Power Station	
Elm Park	
Hackbridge	
Hackney Wick	
Herne Hill	
Highams Park	
Lee Green	
New Cross Gate	
North Greenwich	
Old Oak High Street	
Plumstead	
Rosehill	
Acton	
Acton - West Five Centre	
Addiscombe	
Aldgate	
Alperton	
Alperton - Quill Street Retail Park	
Archway	
Balham	
Balham - Balham High Road Retail Park	
Bank	-
Barking	_
Barking - Abbey Road	_
Retail Park	
Barkingside	
Barnes	
Barnet	
Barnet - Friern Bridge Retail Park	
Barnet - The Hyde	_
Barnsbury	_
Battersea	_
Battersea Park	_
Beacontree Heath	_
Beckenham	_

Centre Name
Beckton
Beckton - Gallions Reach
Beckton Triangle &
Gateway Retail Parks
Belgravia
Belsize Park Bermondsey - Southwark
Park Road
Bermondsey - Tower
Bridge Road
Bethnal Green Bethnal Green - Cambridge
Heath
Bexley
Bexleyheath
Biggin Hill
Blackheath (London)
Brent - Brent Park
Brent Cross
Brent Cross - Brent Cross
Shopping Park
Brentford Cotoway Control
Brentford - Gateway Centre
Brick Lane Brixton
Broadway Market
Brook Groop
Brook Green
Burnt Oak Combarwell Donmark Hill
Camberwell - Denmark Hill
Camden Town
Canary Wharf
Canning Town
Carshalton
Catford - Bromley Road
Retail Park
Catford - Catford Hill Retail
Park
Chadwell Heath
Cheam

Centre Name
Cheapside
Chelsea
Chessington & Hook
Chingford - Mount
Chingford - North
Chislehurst
Chiswick
Chiswick - Gunnersbury
Avenue Retail Park
Clapham - High Street
Clapham - Lavender Hill
Clapham Junction
Colling Dow
Couledon
Coulsdon
Crayford
Cricklewood
Crouch End
Croydon
Croydon - Purley Way
Dagenham
Dagenham - Gorsebrook Dalston - Kingsland High
Road
Deptford
Downham
Dulwich - Lordship Lane
Ealing Broadway
Earls Court
Earlsfield
East Barnet Village
East Croydon
East Finchley
East Ham
East Sheen
Eastcote
Edgware
Edgware - Apex Corner

Edgware - Canons Corner Edgware - Capitol Retail Park Edgware - Deansbrook Road Edgware - Hale Lane Edmonton Edmonton - Ravenside Retail Park Elephant & Castle Eltham Enfield Enfield - Colosseum Park Enfield Highway Enfield Wash Erith Euston (London) Farringdon Feltham Feltham - Apex Retail Park Fenchurch Street Finchley Finchley - Holders Hill Road Finsbury Park
Park Edgware - Deansbrook Road Edgware - Hale Lane Edmonton Edmonton - Ravenside Retail Park Elephant & Castle Eltham Enfield Enfield - Colosseum Park Enfield - Lancaster Road Enfield Highway Enfield Wash Erith Euston (London) Farringdon Feltham Feltham - Apex Retail Park Fenchurch Street Finchley - Holders Hill Road Finsbury Park Finsbury Park Finsbury Park Finsbury Park Finest Gate Forest Gate Forest Hill Friern Barnet
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Enfield - Colosseum Park Enfield - Lancaster Road Enfield Highway Enfield Wash Erith Euston (London) Farringdon Feltham Feltham - Apex Retail Park Fenchurch Street Finchley - Holders Hill Road Finsbury Park Finsbury Park - Stroud Green Road Fleet Street Forest Gate Forest Hill Friern Barnet Friern Barnet - Colney Hatch Lane
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Friern Barnet - Colney Hatch Lane
Hatch Lane
Fulham - Fulham Palace Road
Fulham - High Street
Fulham - Hurlingham Retail Park
Fulham - Munster Road
Fulham - New Kings Road
Fulham - North End Road
Fulham - Wandsworth Bridge Road
Fulham Road
Gants Hill
Gloucester Road
Golborne Road

Centre Name Golders Green Goodmayes Green Lane Greenford Greenford - Westway Shopping Park Greenwich Greenwich Peninsula - Greenwich Shopping Park Hackney - Mare Street Hainault - Manford Way Hammersmith - King Street Hampstead Hampton Hill Hanwell Harlesden Harold Hill Harringay - Green Lanes Harrow Harrow - High Road Retail Park Harrow Road Hatch End Hayes Hayes - Glencoe Road Retail Park Hayes - Hayes Bridge Retail Park Hayes - Hayes Road Retail Park Heathrow Airport Hendon - Brent Street Hendon - Childs Hill Hendon - Grahame Park Hendon - Market Place Hendon Central Highbury - Blackstock Road Highbury - Highbury Park Holborn Holborn - Lambs Conduit Street Holborn - The Brunswick Holloway Hornchurch	
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Hendon Central Highbury - Blackstock Road Highbury - Highbury Park Holborn Holborn - Lambs Conduit Street Holborn - The Brunswick Holloway	Hendon - Grahame Park
Highbury - Blackstock Road Highbury - Highbury Park Holborn Holborn - Lambs Conduit Street Holborn - The Brunswick Holloway	Hendon - Market Place
Road Highbury - Highbury Park Holborn Holborn - Lambs Conduit Street Holborn - The Brunswick Holloway	
Highbury - Highbury Park Holborn Holborn - Lambs Conduit Street Holborn - The Brunswick Holloway	
Holborn Holborn - Lambs Conduit Street Holborn - The Brunswick Holloway	
Holborn - Lambs Conduit Street Holborn - The Brunswick Holloway	
Street Holborn - The Brunswick Holloway	
Holloway	
•	Holborn - The Brunswick
Hornchurch	Holloway
	Hornchurch

Centre Name
Hornsey
Hounslow
Hoxton
Ickenham
Ilford
Ilford - Ilford Lane
Islington - Chapel Market
Kennington
Kennington - Brixton Road
Kensal Rise
Kensington
Kensington - Olympia
Kentish Town
Kenton
Kew
Kilburn
Kings Cross (London)
Kingsbury
Kingston upon Thames
Knightsbridge
Ladbroke Grove
Lewisham
Leyton
Leyton - High Road Leyton
Leyton - Leyton Mills Retail
Park
Leytonstone
Limehouse - Burdett Road
Limehouse - Salmon Lane
Liverpool Street &
Bishopsgate
London Bridge
London City Airport
London West End
Lower Holloway
Ludgate Hill & St Pauls
Maida Vale
Manor Park Manor Park - High Street
North
Maryland
Merton - Merton Industrial
Park
Merton - Priory Retail Park
Mill Hill

Mitcham

Centre Name
Morden
Muswell Hill
Neasden
New Addington
New Barnet
New Barnet - Great North
Road New Cross
New Cross
New Malden New Malden - Shannon
Corner Retail Park
New Southgate
Newbury Park
Newbury Park - King
George Avenue Retail Park
Newington Green
Norbiton
Norbury
North Cheam
North Harrow
Northfields
Northwood
Northwood Hills
Notting Hill Gate
Old Brompton Road
Orpington
Orpington - Springvale Retail Park
Paddington (London)
Palmers Green Park Royal - North Circular
Road
Parsons Green
Peckham
Peckham - Cantium Retail
Park
Penge
Petts Wood
Pimlico
Pinner
Poplar
Portobello Road
Preston Road
Purley
Putney
Putney - Lower Richmond Road
Noau

Centre Name
Queens Park
Queensbury
Queensway
Richmond (London)
Richmond (London) - Kew
Retail Park
Roehampton
Roman Road
Romford - Eastern Avenue
Retail Park
Romford - Gallows Corner
Retail Park
Romford - Rom Valley Way Retail Park
Retail Park Romford - Roneo Corner
Retail Park
Ruislip
Ruislip - Victoria Retail
Park
Ruislip Manor
Selsdon
Seven Sisters
Shad Thames
Shepherds Bush
Shepherds Bush - Uxbridge Road
Shoreditch
Sidcup
Sidcup - Crittalls Corner
Retail Park
Sloane Street
South Ealing
South Harrow
South Norwood
South Woodford
Southall
Southall - Great Western
Industrial Park
Southfields
Southwark Southarnward
Southwark - Southernwood Retail Park
St Johns Wood
St Katharines Dock
Stamford Brook
Stanmore
Stockwell

Ce	ntre Name
	oke Newington
	atford
	eatham
	eatham - Mitcham Lane
	rbiton
	rrey Quays tton
	riss Cottage
	denham
	ddington
	mple Fortune
	amesmead
	ornton Heath
	lworth
	oting
	oting - Tooting Bec
	ttenham
	ttenham - High Road ttenham Hale -
	ttenham Hale Retail
Pa	
	rickenham
	rickenham - Ivybridge tail Park
	rickenham - St Margarets
	minster
	per Norwood
	ton Park
	ton Park - Green Street
	bridge
	uxhall
	toria Street
	allington & Beddington
	althamstow
	althamstow - Wood
	eet
Wa	alworth Road
	andsworth Dallaring
Wa Ro	andsworth - Bellevue ad
Wa	andsworth - Merton Road andsworth - Smugglers
Wa	ay Retail Park
Wa	anstead
Wa	aterloo (London)
Wa	atney Market

Centre Name
Wealdstone
Welling
Wembley
Wembley - Sudbury Wembley - The Junction
Wembley - The Junction
Wembley Retail Park
Wembley Park
West Croydon
West Drayton & Yiewsley
West Ealing
West Hampstead
West Hendon
West Norwood & Tulse Hill
West Wickham
Westfield London
Westfield Stratford City
Westminster - Blenheim
Terrace
Westminster - Boundary Road
Westminster - Clifton Road Westminster - Crawford
Street
Westminster - Fernhead
Road
Westminster - Kilburn Lane Westminster - Lauderdale
Road
Westminster - Lisson
Grove
Westminster - Nugent Terrace
Westminster - Shirland
Road
Westminster - Westbourne
Green Westminster - Westbourne
Park Road
Whetstone
Whitechapel - Anchor
Retail Park
Whitechapel - High Street
Whitechapel - Whitechapel
Road
Whitton
Willesden - Church Road
Willesden - High Road Retail Park
Willesden Green
Wimbledon

Centre Name
Wimbledon - Plough Lane
Wimbledon Village
Winchmore Hill
Winchmore Hill - Green
Lanes
Wood Green
Wood Green - Green
Lanes
Woodgrange Park
Woolwich
Worcester Park

Figure 95. Centres included in Modelling: GLA Names.

GLA Centre Name	GLA Centre Type	GLA Centre Name	GLA Centre Type		
Acton	District	Colindale/ The Hyde	District		
Addiscombe	District	Collier Row	District		
Angel	Major	Colliers Wood	Potential District		
Angel Edmonton	District	Coulsdon	District		
Archway	District	Covent Garden/ Strand	CAZ Frontage		
Baker Street (part)	CAZ Frontage	Crayford	District		
Bakers Arms	District	Cricklewood	District		
Balham	District	Crossharbour	Potential District		
Bankside and The		Crouch End	District		
Borough	Unclassified	Croydon	Metropolitan		
Barking	Major	Dagenham and	1		
Barking Riverside	Potential District	Heathway	District		
Barkingside	District	Dalston	Major		
	Potential CAZ	Deptford	District		
Battersea	Frontage	Downham	District		
Beckenham	District	Dulwich - Lordship			
Bethnal Green	District	Lane	District		
Bexleyheath	Major	Ealing	Metropolitan		
Blackheath	District	Ealing Road	District		
Borough High Street	CAZ Frontage	Earls Court Road	District		
5	Regional Shopping	Earlsfield	District		
Brent Cross	Centre	East Beckton	District		
Brent Street	District	East Finchley	District		
Brentford	District	East Greenwich	District		
Brick Lane	District	East Ham	Major		
Brixton	Major	East Sheen	District		
Bromley	Metropolitan	Eastcote	District		
Bruce Grove/	District	Edgware	Major		
Tottenham High Road Burnt Oak		Edgware Road South	CAZ Frontage		
	District	Edgware Road/ Church	B		
Camberwell	District	Street	District		
Camden Town	Major	Edmonton Green	District		
Canada Water	District	Elephant and Castle	District		
Canary Wharf	Major	Elm Park	District		
Canning Town	District	Eltham	Major		
Carshalton Villiage	District	Enfield Town	Major		
Catford	Major Erith		District		
Chadwell Heath	District	Euston Road (part)	CAZ Frontage		
Charing Cross Road (part)	CAZ Frontage	Feltham High Street	District		
Cheam Village	District	Finsbury Park	District		
Cheapside	CAZ Frontage	Fleet Street	CAZ Frontage		
Chipping Barnet	District	Forest Gate	District		
Chiswick		Forest Hill	District		
	Major District	Fulham	Major		
Church End Finchlov	District	Fulham Road (east)	District		
Church End, Finchley	District	Fulham Road (west)	District		
Clapham High Street	District	Gants Hill	District		
Clapham Junction	Major Determined District	Golders Green	District		
Clapham South	Potential District]	1 2000		

GLA Centre Name	GLA Centre Type	GLA Centre Name	GLA Centre Type		
Green Lane	District	Moorgate	CAZ Frontage		
Green Lanes	District	Morden	District		
Green Street/ Upton		Muswell Hill	District		
Park	District	Nags Head	Major		
Greenford	District	Neasden	District		
Greenwich West	District	New Addington	District		
Hackbridge	Potential District	New Barnet	District		
Hackney Wick	Neighbourhood Centre	New Cross	District		
Hammersmith	Major	New Cross Gate	Unclassified		
Hampstead	District	New Malden	District		
Hanwell	District	Norbury	District		
Harlesden	District	North Cheam	District		
Harold Hill	District	North Chingford	District		
Harrow	Metropolitan	North Finchley	District		
Harrow Road	District	North Greenwich	Potential District		
Hayes	District	North Harrow	District		
Hendon Central	District	Northwood	District		
Herne Hill	Potential District	Notting Hill Gate	District		
High Holborn/		Orpington	Major		
Kingsway	CAZ Frontage	Palmers Green	District		
Highams Park	District	Paimers Green Peckham			
Hornchurch	District		Major		
Hounslow	Metropolitan	Penge	District		
Ilford	Metropolitan	Petts Wood	District		
Kensington High Street	Major	Pinner	District		
Kentish Town	District	Plumstead	District		
Kenton	District	Portobello Praed Street/	District		
Kilburn	Major	Praed Street/ Paddington	District		
King's Cross/ St		Preston Road	District		
Pancras	CAZ Frontage	Purley	District		
King's Road (east)	Major	Putney	Major		
King's Road (west)	District	Queensway/	Iviajoi		
Kingsbury	District	Westbourne Grove	Major		
Kingston	Metropolitan	Rayners Lane	District		
Knightsbridge	International	Richmond	Major		
Lavender Hill/		Roman Road (east)	District		
Queenstown Road	District	Roman Road (west)	District		
Leadenhall Market	CAZ Frontage	Romford	Metropolitan		
Lee Green	District	Rosehill	District		
Lewisham	Major	Ruislip	District		
Leyton	District	Selsdon	District		
Leytonstone	District	Shepherds Bush			
Liverpool Street	CAZ Frontage	(excluding Westfield)	Metropolitan		
London Bridge	CAZ Frontage	Sidcup	District		
Lower Marsh/ The Cut	CAZ Frontage	South Chingford	District		
Mare Street	District	South Harrow	District		
Marylebone High Street	CAZ Frontage	South Kensington	District		
Marylebone Road	CAZ Frontage	South Norwood	District		
Merrielands Crescent	Potential District	South Woodford	District		
Merry Fiddlers	Potential District	Southall	Major		
Mill Hill	District	Southfields	Potential District		
Mitcham	District	Southgate	District		

GLA Centre Name	GLA Centre Type
St John's Wood	District
Stanmore	District
Stockwell	District
Stoke Newington	District
Stratford (LLDC)	Metropolitan
Stratford (Newham)	Metropolitan
Streatham	Major
Surbiton	District
Sutton	Metropolitan
Swiss Cottage/	District
Finchley Road	District
Sydenham	District
Teddington	District
Temple Fortune	District
Thamesmead	District
Thornton Heath	District
Tolworth	District
Tooting	Major
Tottenham Court Road	
(part)	CAZ Frontage
Tottenham Hale	Potential District
Twickenham	District
Upminster	District
Upper Norwood/	5
Crystal Palace	District
Uxbridge	Metropolitan
Vauxhall	Potential District
Victoria Street	CAZ Frontage
Wallington	District
Walthamstow	Major
Walworth Road	District
Wandsworth	Major
Wanstead	District
Warwick Way/	
Tachbrook Street	CAZ Frontage
Watney Market	District
Wealdstone	District
Welling	District
Wembley (Excluding	NA. C.
Designer Outlet)	Major
Wembley Designer	Unclassified
Outlet Weepbley Park	District
Wembley Park Wentworth Street	
	CAZ Frontage International
West End West Green Road/	memational
Seven Sisters	District
West Hampstead	District
West Norwood/ Tulse	טוטנווטנ
Hill	District
West Wickham	District
Westfield London	Metropolitan
Whetstone	District
VVIICIGIOTIG	District

GLA Centre Name	GLA Centre Type
Whitechapel	District
Whitton	District
Willesden Green	District
Wimbledon	Major
Wood Green	Metropolitan
Wood Street	District
Woolwich	Major
Worcester Park	District
Yiewsley/ West	
Drayton	District

Figure 96. Data objects in impact model.

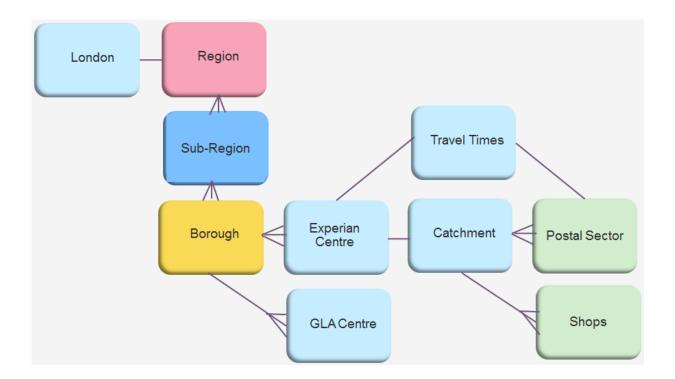


Figure 97. Dimensions of the impact model.



Figure 98. Baseline Scenario Floorspace requirements 2015 – 2041 (Base Spend).

Zone	Gross Floorspace requirements at differing productivity levels (m²)				Net Floorspace requirements at differing productivity levels (m ²)			
	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
Barking and Dagenham	27,579	18,789	8,902	-10,039	7,291	-1,500	-11,385	-30,326
Barnet	226,336	170,838	108,412	-11,171	172,116	116,618	54,192	-65,392
Bexley	54,955	38,404	19,786	-15,878	30,344	13,793	-4,823	-40,487
Brent	95,178	69,374	40,349	-15,251	61,977	36,171	7,149	-48,452
Bromley	110,972	77,237	39,291	-33,399	80,262	46,527	8,583	-64,110
Camden	67,240	51,141	33,032	-1,657	35,269	19,170	1,058	-33,630
City of London	56,672	40,843	23,039	-11,067	22,723	6,894	-10,911	-45,016
Croydon	204,753	149,786	87,958	-30,481	141,644	86,676	24,848	-93,589
Ealing	89,098	65,577	39,161	-11,344	58,789	35,268	8,854	-41,656
Enfield	98,455	68,259	34,294	-30,769	70,406	40,210	6,245	-58,818
Greenwich	76,994	56,086	32,567	-12,484	49,172	28,263	4,745	-40,308
Hackney	37,323	27,095	15,590	-6,448	12,808	2,581	-8,923	-30,962
Hammersmith and Fulham	182,408	144,767	102,427	21,321	153,679	116,036	73,694	-7,408
Haringey	83,013	59,871	33,841	-16,023	58,314	35,172	9,140	-40,722
Harrow	60,844	43,876	24,789	-11,772	38,994	22,025	2,939	-33,622
Havering	116,738	81,459	41,775	-34,242	88,865	53,585	13,901	-62,116
Hillingdon	112,442	77,273	37,714	-38,064	82,233	47,063	7,505	-68,274
Hounslow	81,014	59,352	34,985	-11,690	58,775	37,112	12,745	-33,931
Islington	67,560	50,001	30,249	-7,586	38,049	20,489	740	-37,096
Kensington and Chelsea	297,943	236,508	167,403	35,026	258,841	197,407	128,299	-4,075
Kingston upon Thames	114,214	84,988	52,113	-10,862	91,625	62,397	29,522	-33,452
Lambeth	59,275	45,231	29,433	-829	14,786	742	-15,057	-45,319
Lewisham	61,051	43,594	23,958	-13,657	31,781	14,321	-5,313	-42,928
Merton	86,296	65,592	42,303	-2,309	71,217	50,513	27,222	-17,389
Newham	172,668	124,438	70,186	-33,737	128,048	79,817	25,569	-78,357
Redbridge	77,695	54,174	27,717	-22,965	47,545	24,026	-2,433	-53,114
Richmond upon Thames	69,259	52,544	33,743	-2,273	51,078	34,364	15,563	-20,454
Southwark	75,188	55,976	34,366	-7,030	42,138	22,928	1,317	-40,080
Sutton	54,993	38,651	20,268	-14,946	16,274	-67	-18,452	-53,663
Tower Hamlets	74,996	55,597	33,776	-8,024	45,936	26,538	4,717	-37,083
Waltham Forest	51,913	37,004	20,234	-11,890	23,064	8,155	-8,614	-40,739
Wandsworth	133,524	106,863	76,874	19,427	92,845	66,185	36,193	-21,253
Westminster	611,859	464,865	299,521	-17,211	431,684	284,693	119,350	-197,382

Figure 99. Baseline Scenario Floorspace requirements 2015 – 2041 (Base Spend) – Zone Totals.

Zone	Gross Floorspace requirements at differing productivity levels (m²)				Net Floorspace requirements at differing productivity levels (m²)			
Totals	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
London	3,790,447	2,816,052	1,720,056	-379,324	2,608,572	1,634,172	538,179	-1,561,203
CAZ	834,258	633,669	408,038	-24,177	594,146	393,556	167,924	-264,289
Inner London	1,792,293	1,358,238	869,994	-65,277	1,204,080	770,028	281,784	-653,489
Outer London	1,998,154	1,457,815	850,061	-314,047	1,404,492	864,144	256,395	-907,714
Central	1,235,737	944,565	617,043	-10,354	843,490	552,323	224,796	-402,598
East	751,912	536,639	294,491	-169,363	464,854	249,579	7,441	-456,420
South	774,011	575,661	352,548	-74,842	544,945	346,595	123,479	-303,910
West	620,984	460,219	279,427	-66,801	454,447	293,675	112,886	-233,343
North	407,803	298,968	176,547	-57,963	300,836	192,000	69,577	-164,932

Figure 100. Pipeline Scenario Floorspace requirements 2015 – 2041 (Base Spend).

	Gross Flo	orspace req productivity	uirements at levels (m²)	t differing	Net Floo	Net Floorspace requirements at differing productivity levels (m²)			
Zone	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	
Barking and Dagenham	3,492	-5,298	-15,186	-34,126	-16,796	-25,586	-35,474	-54,414	
Barnet	212,349	156,851	94,425	-25,158	158,130	102,630	40,205	-79,378	
Bexley	45,151	28,600	9,982	-25,682	20,541	3,990	-14,628	-50,292	
Brent	74,461	48,657	19,632	-35,969	41,261	15,456	-13,567	-69,167	
Bromley	91,141	57,406	19,459	-53,230	60,431	26,695	-11,251	-83,940	
Camden	48,041	31,942	13,833	-20,857	16,069	-28	-18,138	-52,830	
City of London	50,046	34,218	16,414	-17,692	16,097	269	-17,535	-51,640	
Croydon	193,083	138,116	76,287	-42,151	129,973	75,006	13,177	-105,263	
Ealing	76,275	52,754	26,338	-24,168	45,966	22,443	-3,974	-54,478	
Enfield	83,287	53,092	19,127	-45,936	55,237	25,043	-8,922	-73,986	
Greenwich	55,934	35,026	11,507	-33,545	28,111	7,204	-16,315	-61,367	
Hackney	29,189	18,961	7,456	-14,582	4,676	-5,553	-17,057	-39,096	
Hammersmith and Fulham	193,544	155,903	113,563	32,457	164,815	127,172	84,833	3,725	
Haringey	76,225	53,084	27,053	-22,811	51,525	28,384	2,354	-47,512	
Harrow	47,645	30,677	11,591	-24,971	25,795	8,827	-10,258	-46,820	
Havering	109,765	74,486	34,802	-41,215	81,891	46,612	6,927	-69,089	
Hillingdon	123,226	88,057	48,498	-27,280	93,017	57,846	18,288	-57,488	
Hounslow	65,057	43,395	19,029	-27,647	42,818	21,155	-3,212	-49,887	
Islington	59,489	41,930	22,179	-15,656	29,980	12,420	-7,331	-45,167	
Kensington and Chelsea	247,335	185,899	116,794	-15,583	208,231	146,798	77,692	-54,684	
Kingston upon Thames	105,916	76,690	43,815	-19,160	83,326	54,100	21,225	-41,750	
Lambeth	43,443	29,398	13,601	-16,661	-1,046	-15,090	-30,889	-61,150	
Lewisham	44,214	26,757	7,121	-30,493	14,944	-2,514	-22,150	-59,765	
Merton	83,506	62,802	39,513	-5,099	68,427	47,722	24,432	-20,180	
Newham	137,076	88,846	34,595	-69,328	92,459	44,226	-10,028	-113,949	
Redbridge	63,654	40,132	13,675	-37,007	33,504	9,982	-16,475	-67,156	
Richmond upon Thames	59,067	42,352	23,551	-12,465	40,887	24,171	5,372	-30,643	
Southwark	55,641	36,429	14,819	-26,578	22,589	3,378	-18,232	-59,629	
Sutton	40,922	24,580	6,197	-29,016	2,204	-14,139	-32,521	-67,735	
Tower Hamlets	48,994	29,595	7,774	-34,026	19,934	534	-21,287	-63,085	
Waltham Forest	42,447	27,538	10,768	-21,356	13,596	-1,310	-18,079	-50,205	
Wandsworth	96,638	69,977	39,988	-17,459	55,961	29,299	-693	-58,138	
Westminster	653,784	506,791	341,446	24,714	473,610	326,618	161,275	-155,459	

Figure 101. Pipeline Scenario Floorspace requirements 2015 – 2041 (Base Spend) – Zone Totals.

Zone	Gross Flo	orspace req		t differing	Net Floorspace requirements at differing productivity levels (m²)			
Totals	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
London	3,360,036	2,385,642	1,289,645	-809,734	2,178,163	1,203,760	107,764	-1,991,617
CAZ	813,836	613,247	387,616	-44,599	573,720	373,135	147,503	-284,713
Inner London	1,569,824	1,135,769	647,526	-287,746	981,615	547,561	59,312	-875,959
Outer London	1,790,212	1,249,873	642,119	-521,988	1,196,548	656,199	48,452	-1,115,658
Central	1,157,780	866,607	539,085	-88,312	765,530	474,365	146,842	-480,559
East	579,915	364,642	122,494	-341,360	292,860	77,585	-164,566	-628,418
South	670,273	471,922	248,810	-178,581	441,209	242,854	19,741	-407,649
West	580,208	419,443	238,651	-107,577	413,672	252,899	72,110	-274,115
North	371,862	263,027	140,605	-93,904	264,892	156,057	33,637	-200,876

Figure 102. Future Potential Network Changes Scenario Floorspace requirements 2015 – 2041 (Base Spend).

		orspace req productivity	uirements at levels (m²)	t differing		rspace requ productivity	irements at o levels (m²)	differing
Zone	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
Barking and Dagenham	2,515	-6,275	-16,162	-35,103	-17,773	-26,564	-36,450	-55,390
Barnet	210,770	155,273	92,847	-26,736	156,550	101,052	38,625	-80,955
Bexley	43,906	27,355	8,737	-26,926	19,295	2,745	-15,873	-51,536
Brent	73,636	47,832	18,807	-36,793	40,435	14,632	-14,394	-69,995
Bromley	89,080	55,345	17,399	-55,291	58,371	24,635	-13,312	-86,001
Camden City of	47,124	31,024	12,915	-21,774	15,152	-949	-19,059	-53,747
London	48,921	33,093	15,288	-18,818	14,971	-858	-18,662	-52,767
Croydon	190,227	135,260	73,431	-45,007	127,117	72,150	10,322	-108,117
Ealing	75,585	52,063	25,648	-24,858	45,275	21,752	-4,662	-55,168
Enfield	81,994	51,798	17,833	-47,230	53,943	23,750	-10,218	-75,280
Greenwich	59,478	38,569	15,051	-30,001	31,656	10,746	-12,773	-57,825
Hackney	27,984	17,756	6,251	-15,787	3,470	-6,758	-18,263	-40,301
Hammersmith and Fulham	196,935	159,294	116,954	35,848	168,207	130,562	88,224	7,117
Haringey	75,202	52,061	26,030	-23,833	50,503	27,362	1,331	-48,534
Harrow	47,315	30,347	11,260	-25,301	25,467	8,497	-10,589	-47,150
Havering	107,951	72,672	32,988	-43,029	80,077	44,797	5,116	-70,904
Hillingdon	122,920	87,752	48,193	-27,585	92,708	57,541	17,981	-57,796
Hounslow	64,636	42,975	18,608	-28,067	42,397	20,735	-3,632	-50,307
Islington	58,313	40,754	21,003	-16,832	28,802	11,243	-8,508	-46,342
Kensington and Chelsea	243,523	182,087	112,982	-19,394	204,420	142,986	73,878	-58,496
Kingston upon Thames	105,143	75,916	43,042	-19,933	82,554	53,326	20,452	-42,524
Lambeth	42,095	28,050	12,252	-18,010	-2,394	-16,439	-32,237	-62,499
Lewisham	42,143	24,686	5,050	-32,564	12,871	-4,588	-24,223	-61,837
Merton	82,617	61,913	38,624	-5,988	67,537	46,833	23,544	-21,069
Newham	141,015	92,785	38,534	-65,389	96,395	48,166	-6,085	-110,007
Redbridge	61,861	38,340	11,882	-38,799	31,710	8,190	-18,268	-68,949
Richmond upon Thames	58,427	41,713	22,911	-13,104	40,248	23,533	4,731	-31,284
Southwark	68,542	49,330	27,720	-13,676	35,492	16,280	-5,331	-46,729
Sutton	40,566	24,224	5,841	-29,373	1,848	-14,494	-32,878	-68,091
Tower Hamlets Waltham	57,054	37,655	15,834	-25,965	27,994	8,596	-13,227	-55,027
Forest	41,379	26,470	9,700	-22,424	12,529	-2,378	-19,148	-51,272
Wandsworth	94,855	68,195	38,205	-19,242	54,175	27,514	-2,476	-59,921
Westminster	646,435	499,441	334,097	17,365	466,268	319,269	153,924	-162,808

Figure 103. Future Potential Network Changes Scenario Floorspace requirements 2015 – 2041 (Base Spend) – Zone Totals.

Zone		orspace req		t differing	Net Floorspace requirements at differing productivity levels (m²)			
Totals	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
London	3,350,148	2,375,753	1,279,756	-819,623	2,168,270	1,193,864	97,860	-2,001,511
CAZ	805,139	604,550	378,919	-53,296	565,024	364,433	138,803	-293,413
Inner London	1,577,482	1,143,427	655,183	-280,088	989,272	555,208	66,958	-868,306
Outer London	1,772,666	1,232,326	624,573	-539,535	1,178,998	638,656	30,902	-1,133,205
Central	1,154,953	863,780	536,258	-91,139	762,711	471,532	144,005	-483,388
East	585,287	370,014	127,866	-335,988	298,224	82,952	-159,194	-623,048
South	660,915	462,565	239,453	-187,938	431,850	233,497	10,383	-417,007
West	581,027	420,262	239,470	-106,758	414,489	253,719	72,928	-273,299
North	367,966	259,132	136,710	-97,799	260,996	152,164	29,738	-204,769

Figure 104. Quality Adjustment Scenario Floorspace requirements 2015 – 2041 (Base Spend).

	Gross Flo	orspace req productivity	uirements at levels (m²)	t differing	Net Floorspace requirements at differing productivity levels (m²)			
Zone	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
Barking and Dagenham	1,612	-7,178	-17,066	-36,006	-18,677	-27,465	-37,355	-56,295
Barnet	189,898	134,401	71,975	-47,608	135,677	80,181	17,752	-101,826
Bexley	43,745	27,194	8,577	-27,087	19,136	2,584	-16,033	-51,697
Brent	65,410	39,607	10,581	-45,019	32,211	6,406	-22,616	-78,219
Bromley	92,523	58,788	20,842	-51,848	61,814	28,078	-9,866	-82,55
Camden	47,471	31,372	13,263	-21,427	15,498	-600	-18,711	-53,39
City of London	51,736	35,908	18,103	-16,002	17,785	1,958	-15,846	-49,95
Croydon	192,295	137,328	75,499	-42,939	129,183	74,218	12,389	-106,04
Ealing	75,071	51,549	25,134	-25,372	44,760	21,241	-5,176	-55,68
Enfield	75,674	45,479	11,514	-53,549	47,625	17,428	-16,537	-81,59
Greenwich	59,406	38,498	14,979	-30,073	31,584	10,676	-12,844	-57,89
Hackney	25,979	15,751	4,246	-17,792	1,465	-8,764	-20,267	-42,30
Hammersmith and Fulham	209,242	171,601	129,261	48,155	180,512	142,871	100,531	19,42
Haringey	72,626	49,484	23,454	-26,410	47,925	24,784	-1,247	-51,11
Harrow	52,574	35,606	16,520	-20,042	30,724	13,757	-5,330	-41,89
Havering	114,239	78,959	39,276	-36,742	86,364	51,084	11,401	-64,61
Hillingdon	117,387	82,218	42,659	-33,119	87,176	52,008	12,449	-63,32
Hounslow	67,357	45,695	21,329	-25,347	45,115	23,455	-913	-47,58
Islington	60,921	43,362	23,611	-14,225	31,411	13,852	-5,899	-43,73
Kensington and Chelsea Kingston	262,706	201,271	132,166	-211	223,603	162,167	93,064	-39,31
upon Thames	117,427	88,201	55,326	-7,649	94,837	65,611	32,735	-30,23
Lambeth	42,074	28,030	12,232	-18,030	-2,415	-16,460	-32,259	-62,52
Lewisham	43,906	26,450	6,814	-30,801	14,634	-2,823	-22,459	-60,07
Merton	75,615	54,910	31,621	-12,991	60,535	39,831	16,542	-28,07
Newham	147,501	99,271	45,019	-58,904	102,881	54,652	400	-103,52
Redbridge	63,579	40,058	13,600	-37,081	33,429	9,907	-16,553	-67,23
Richmond upon Thames	54,724	38,010	19,209	-16,807	36,544	19,828	1,027	-34,98
Southwark	59,408	40,196	18,586	-22,810	26,358	7,147	-14,463	-55,86
Sutton	45,783	29,440	11,058	-24,156	7,064	-9,279	-27,661	-62,87
Tower Hamlets Waltham	55,488	36,089	14,268	-27,532	26,429	7,031	-14,793	-56,59
Forest	40,900	25,991	9,221	-22,903	12,052	-2,856	-19,628	-51,75
Wandsworth	95,004	68,343	38,354	-19,093	54,323	27,665	-2,328	-59,77
Westminster	726,187	579,194	413,849	97,117	546,016	399,021	233,677	-83,05

Figure 105. Quality Adjustment Scenario Floorspace requirements 2015 – 2041 (Base Spend).

Zone	Gross Flo	orspace req		t differing	Net Floorspace requirements at differing productivity levels (m²)			
Totals	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
London	3,445,468	2,471,074	1,375,077	-724,302	2,263,578	1,289,194	193,183	-1,906,173
CAZ	899,905	699,316	473,685	41,470	659,790	459,202	233,571	-198,642
Inner London	1,677,787	1,243,732	755,489	-179,783	1,089,572	655,522	167,272	-767,988
Outer London	1,767,681	1,227,342	619,588	-544,519	1,174,006	633,672	25,911	-1,138,185
Central	1,250,504	959,331	631,809	4,412	858,256	567,085	239,563	-387,827
East	596,354	381,082	138,934	-324,920	309,297	94,026	-148,131	-611,978
South	673,371	475,021	251,908	-175,482	444,300	245,952	22,838	-404,549
West	587,041	426,276	245,484	-100,744	420,498	259,738	78,945	-267,284
North	338,199	229,364	106,942	-127,567	231,227	122,393	-32	-234,535

Figure 106. Addressing Gaps in Provision Scenario Floorspace requirements 2015 – 2041 (Base Spend).

		orspace req productivity	uirements at levels (m²)	differing	Net Floo	Net Floorspace requirements at differing productivity levels (m²)			
Zone	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	
Barking and Dagenham	33,127	24,336	14,449	-4,491	12,841	4,049	-5,840	-24,779	
Barnet	234,065	178,567	116,141	-3,442	179,845	124,344	61,921	-57,661	
Bexley	50,101	33,549	14,932	-20,732	25,489	8,940	-9,679	-45,342	
Brent	70,671	44,867	15,842	-39,758	37,470	11,667	-17,357	-72,958	
Bromley	109,004	75,270	37,323	-35,367	78,295	44,560	6,613	-66,077	
Camden	46,425	30,326	12,217	-22,472	14,454	-1,647	-19,756	-54,444	
City of London	49,259	33,431	15,627	-18,479	15,309	-519	-18,324	-52,429	
Croydon	189,553	134,587	72,758	-45,680	126,442	71,476	9,647	-108,791	
Ealing	142,498	118,977	92,561	42,055	112,189	88,667	62,251	11,744	
Enfield	86,541	56,346	22,380	-42,683	58,490	28,296	-5,671	-70,732	
Greenwich	51,190	30,282	6,763	-38,289	23,367	2,459	-21,060	-66,111	
Hackney	26,965	16,737	5,233	-16,806	2,451	-7,776	-19,281	-41,320	
Hammersmith and Fulham	189,611	151,970	109,630	28,524	160,881	123,240	80,900	-206	
Haringey	69,380	46,239	20,208	-29,656	44,681	21,537	-4,492	-54,356	
Harrow	45,269	28,301	9,215	-27,346	23,420	6,452	-12,634	-49,199	
Havering	100,132	64,853	25,169	-50,848	72,257	36,978	-2,704	-78,723	
Hillingdon	116,281	81,112	41,553	-34,225	86,071	50,903	11,344	-64,435	
Hounslow	62,164	40,502	16,136	-30,540	39,922	18,262	-6,104	-52,780	
Islington	56,334	38,775	19,024	-18,812	26,824	9,265	-10,485	-48,321	
Kensington and Chelsea	241,969	180,534	111,429	-20,948	202,868	141,432	72,327	-60,051	
Kingston upon Thames	104,493	75,267	42,392	-20,582	81,903	52,677	19,803	-43,172	
Lambeth	42,231	28,187	12,389	-17,873	-2,258	-16,302	-32,100	-62,362	
Lewisham	48,750	31,294	11,658	-25,957	19,478	2,022	-17,616	-55,227	
Merton	88,731	68,027	44,738	126	73,651	52,946	29,657	-14,955	
Newham	125,534	77,304	23,053	-80,870	80,914	32,686	-21,569	-125,490	
Redbridge	56,999	33,478	7,020	-43,661	26,849	3,329	-23,130	-73,811	
Richmond upon Thames	57,527	40,812	22,011	-14,005	39,347	22,632	3,832	-32,184	
Southwark	53,504	34,292	12,682	-28,714	20,455	1,244	-20,367	-61,763	
Sutton	40,229	23,886	5,503	-29,710	1,509	-14,833	-33,215	-68,430	
Tower Hamlets	44,986	25,587	3,766	-38,034	15,927	-3,473	-25,294	-67,093	
Waltham Forest	67,858	52,949	36,179	4,055	39,009	24,100	7,331	-24,792	
Wandsworth	94,756	68,095	38,105	-19,342	54,077	27,418	-2,575	-60,021	
Westminster	638,202	491,208	325,864	9,132	458,030	311,035	145,691	-171,041	

Figure 107. Addressing Gaps in Provision Scenario Floorspace requirements 2015 – 2041 (Base Spend) – Zone Totals.

Zone	Gross Flo	orspace req productivity	uirements at levels (m²)	t differing	Net Floorspace requirements at differing productivity levels (m²)			
Totals	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%	Low 1.5%	Base 2.0%	High 2.5%	Very High 3.32%
London	3,434,340	2,459,945	1,363,948	-735,431	2,252,457	1,278,066	182,064	-1,917,312
CAZ	794,503	593,914	368,283	-63,932	554,388	353,799	128,169	-304,044
Inner London	1,520,107	1,086,051	597,808	-337,464	931,896	497,844	9,591	-925,673
Outer London	1,914,233	1,373,894	766,140	-397,967	1,320,561	780,222	172,473	-991,639
Central	1,127,925	836,753	509,231	-118,166	735,682	444,508	116,986	-510,411
East	605,642	390,369	148,221	-315,633	318,582	103,314	-138,842	-602,688
South	684,293	485,943	262,830	-164,560	455,224	256,876	33,762	-393,630
West	626,494	465,729	284,937	-61,291	459,953	299,191	118,400	-227,834
North	389,986	281,151	158,729	-75,780	283,016	174,177	51,758	-182,749

Figure 108. List of proposed comparison goods retail developments in London (all pipeline developments).

Borough Name	Net Additio nal Compar ison Goods Retail Floorsp ace (m²)	Permission Reference	Site/Scheme Name	Postcode	Estimat ed Openin g Year	Status at January 2017
Barnet	55,000	North	Brent Cross Extension (North)	NW4 3FP	2022	Not Started
Hammersmith and Fulham	46,998	2013/05115/OUT	Land North Of Westfield Shopping Centre	W12	2017	Not Started
Tower Hamlets	29,662	PA/13/02966	Wood Wharf	E14 9SF	2021	Not Started
Ealing	16,040	P/2008/3981	Southall Gas Works	UB1 1QZ	2017	Not Started
Wandsworth	12,837	2009/3575	Battersea Power Station	SW8	2017	Under Construction
Greenwich	12,825	11/3033	The O2	SE10 0DX	2017	Not Started
Bexley	12,006	10/01712/OUTM	B&Q Plc, Land At Crittall's Corner	DA14 6LX	2016	Not Started
Hammersmith and Fulham	10,182	2011/02001/OUT	Earls Court 2, Exhibition Centre And Adjoining Land	SW6 1TR	2016	Not Started
Barking and Dagenham	8,620	04/01230/OUT	Barking Reach	IG11 0XF	2017- 2022	Under Construction
Havering	8,422	P1582/11	Liberty Shopping Centre, 44- 52	RM1 3ER	2017	Under Construction
Tower Hamlets	8,096	PA/11/03670B	Asda, 151 East Ferry Road	E14 3BT	2020	Not Started
Havering	7,860	P1468/12	Site At Romford Ice Rink	RM17 0AE	2017	Under Construction
Merton	7,740	13/P1802	88 Bushey Road	SW20 0JH	2017	Not Started
Croydon	7,635	12/02542/P	Whitgift Centre redevelopment	CR0 1LU	2020	Not Started
Camden	6,682	2004/2307/P	Kings Cross Railway Lands	NW1	2017	Under Construction
Haringey	6,580	2013/1897	Tottenham Hale Retail Park	N15 4QD	2017	Not Started
Westminster	5,782	12/09915/FULL	26-32 Oxford Street	W1C 2DZ	2017	Under Construction
Croydon	5,614	15/00424/P	2 & 4 Trojan Way	CR0 4XL	2018	Not Started
Enfield	5,112	P12-01399PLA	6 Glover Drive	N13 5NQ	2018	Not Started
Wandsworth	4,896	2014/2810	New Covent Garden Market , Nine Elms Lane, SW8 QU	SW8	2018	Not Started
Hackney	4,835	2013/1825	88-96 Morning Lane	E9 6NA	2018	Not Started
Westminster	4,629	13/04844/FULL	Western District Office, 35-50	W1T 1AA	2017	Under Construction
Croydon	4,546	11/00631/P	Land Adj East Croydon Station	CR0 2NF	2020	Under Construction
Islington	4,436	P052245	Former North London Mail Centre, 116	N1 1AA	2017	Under Construction
Newham	4,241	11/00662	Hallsville Quarter Phase 1		2017	Under Construction
Kingston upon Thames	4,150	12/12754/FUL	70-78 Eden Street	KT1 1DJ	2017	Under Construction
Westminster	4,140	15/01643/FULL	89 Oxford Street	W1D 2EZ	2017	Under Construction
Southwark	4,030	12-AP-4126	Decathlon And What	SE16 2XU	2017	Under Construction
Hammersmith and Fulham	3,916	2013/05200/RES	Lillie Bridge Rail Depot	SW6 1TW	2017	Not Started
Hounslow	3,770	00607/BA/P2	Land To The South Side Of Brentford High Street And Watersid	TW8 8EW	2019	Not Started

Borough Name	Net Additio nal Compar ison Goods Retail Floorsp ace (m²)	Permission Reference	Site/Scheme Name	Postcode	Estimat ed Openin g Year	Status at January 2017
Sutton	3,763	B2013/68306	Old Gas Works, 287 - 323	SM1 1LG	2017	Under Construction
Westminster	3,752	12/02540/FULL	Trocadero, 13	W1W 7DH	2017	Under Construction
Hillingdon	3,566	66819/APP/2014/ 1600	Former Arla Food Depot	HA4 0HF	2017	Under Construction
Greenwich	3,556	14/2550	Land North Of Woolwich Road Opposite	SE7 7ST	2017	Under Construction
Lambeth	3,355	14/05064/VOC	Sainsbury's, 62	SW8 2LF	2017	Under Construction
Westminster	3,330	13/01594/FULL	70-88 Oxford Street	W1D 1BS	2016	Not Started
Hillingdon	3,200	59872/APP/2012/ 1838	The Old Vinyl Factory Site	UB3 1BW	2016	Not Started
Lambeth	3,200	16/02973/FUL	Waterloo Station		2019	Not Started
Hammersmith and Fulham	3,092	2013/01074/FUL	Westfield (Kidzania)		2017	Not Started
Hammersmith and Fulham	3,058	2011/00407/COM B	Hammersmith Embankment	W6	2017	Under Construction
Westminster	3,033	08/08205/FULL	Buildings 5 6b And 7a	SW1V 1JR	2017	Under Construction
Lewisham	3,000	06/62375	Lewisham Gateway Site	SE13	2017	Under Construction
Hillingdon	2,853	33667/APP/2012/ 3214	Sainsbury Store And Land Adjacent To	HA4 0HQ	2016	Not Started
Camden	2,695	2012/4628/P	Hawley Wharf	NW1 8NZ	2017	Under Construction
Hounslow	2,669	00505/BF/P11	963 Great West Road	TW8 9AU	2015	Under Construction
Islington	2,629	P090774	Royal Mail Sorting Office, 5-6	N1	2017	Under Construction
Barking and Dagenham	2,624	14/00966/OUT	Merrielands Development Site	RM9	2018	Not Started
Hammersmith and Fulham	2,602	2013/02870/FUL	Hurlingham Retail Park, 362	SW6 3DU	2017	Not Started
Lambeth	2,495	14/05597/VOC	Land Bounded By	SW8	2016	Not Started
Greenwich	2,480	14/3158	Unit 1a & 1b Stonelake Retail Park, 601	SE7 8LU	2017	Not Started
Hammersmith and Fulham	2,410	2015/02565/VAR	Land North Of Westfield Shopping Centre	W12 7SL	2018	Not Started
Westminster	2,397	15/11925/FULL	421 Oxford Street	W1C 2PJ	2017	Under Construction
Enfield	2,348	P14-02068PLA	6 Crown Road	EN1 1TH	2015	Not Started
Greenwich	2,348	15/0716	Land At	SE10	2035	Not Started
Greenwich	2,333	08/1121	The Warren Phase 1 & 2	SE18	2017	Under Construction
Greenwich	2,327	14/2607/F	Kidbrooke Village Phase 3	SE3	2017	Under Construction
Kingston upon Thames	2,277	14/12135/FUL	The Bentall Centre 4	KT1 1TP	2017	Under Construction
Islington	2,268	P120484	Charter House, 2	EC1M 3HP	2017	Under Construction
Westminster	2,257	14/04766/FULL	25-33 Berners Street	W1T 3LR	2017	Under Construction
Barking and Dagenham	2,220	14/00703/OUT	Gascoigne Estate East	IG11	2017	Under Construction
Greenwich	2,191	06/1751	Land At	SE18 6HQ	2017	Under Construction
Westminster	2,064	11/10043/FULL	1-6 Falconberg Mews	W1D 2DN	2017	Under Construction
Westminster	2,003	12/07691/FULL	Communications House, 48	WC2H 7LT	2017	Under Construction

Borough Name	Net Additio nal Compar ison Goods Retail Floorsp ace (m²)	Permission Reference	Site/Scheme Name	Postcode	Estimat ed Openin g Year	Status at January 2017
Hackney	1,974	2013/4123	107-117 And 133-141	E9 6LG	2017	Under Construction
Lewisham	1,937	DC/13/83358	Convoys Wharf		2019	Not Started
Westminster	1,868	12/00853/FULL	123 Buckingham Palace Road	SW1W 9DZ	2017	Not Started
Hammersmith and Fulham	1,856	2012/02454/OUT	Former Dairy Crest Site, 58	W12	2017	Not Started
Newham	1,784	14/00147/REM	Phase 2, Plots B, C1 & C2, Area 7 And 1c	E16 1EN	2017	Under Construction
Hillingdon	1,728	1942/APP/2013/3 565	Hayes Swimming Pool	UB3 2BG	2017	Not Started
Hackney	1,714	2012/3871	Land Bounded By	EC2A 3LS	2017	Under Construction
London Legacy DC	1,688	11/90621/OUTOD A/PDZ1	Pdz1, Adjacent To The Aquatics Centre	E20	2022	Not Started
Waltham	1,680	2014/0991	Selborne Walk (Shopping	E17 7JR	2016	Under
Forest Tower	1,678	PA/14/00944	Centre) South Quay Plaza, 183-189	E14	2018	Construction Not Started
Hamlets Merton	1,670	15/P0212	Kings College School	SW19 4TT	2018	Not Started
Westminster	1,663	13/04041/FULL	Reed House, 82-84	W1J 8JB	2017	Under Construction
Westminster	1,620	13/06028/FULL	Site At Mercers Covent Garden Estate - Block C	WC2	2017	Under Construction
Sutton	1,610	C2014/68755	190 London Road	SM6 7EL	2019	Not Started
Bexley	1,609	12/00267/FUL	Block D, Norman Park	DA17 6FD	2017	Under
Redbridge	1,567	0386/12	Between 193 High Road	IG1 1LX	2017	Under Construction
Tower	1,526	PA/16/00772/P1	Wood Wharf, Plot: A1, A4, B3	E14	2018	Under
Hamlets Westminster	1,500	14/10918/FULL	0	W1U 4AR	2019	Construction Not Started
Hillingdon	1,500	585/APP/2009/27	Raf Uxbridge	UB10 0RZ	2017	Under
Brent	1,497	52 103072	103-107, 103a, 109-119 Odds,	NW	2017	Under
Westminster	1,465	12/08003/FULL	121-123 110-118 Inc 38 King Street	WC2E 8JS	2017	Under
Hackney	1,460	2012/3792	187 - 193	E1 6HU	2017	Construction Under
Ealing	1,450	PP/2013/5186	Former Gsk Site	UB6 0HE	2017	Construction Under
Hackney	1,427	2015/1685	13 - 14	EC2A 2NB	2018	Construction Not Started
Camden	1,424	2009/0802/P	Morrisons Supermarket	NW1 8EH	2017	Under
Greenwich	1,393	08/2782/O	Formerly Ferrier Estate	SE3	2017	Construction Under
Westminster	1,388	14/08182/FULL	19-29 Floral Street	WC2E 9DS	2017	Construction Under
City of London	1,364	09/00192/FULMAJ	117, 119 & 121	EC2M 3TH	2018/19	Under Construction
Camden	1,359	2013/1957/P	Centre Point Tower, 101-103	WC2H 8LN	2017	Construction Under
Westminster	1,339	13/01715/FULL	(Scheme A) 29-30 Old Burlington Street	W1S 3AR	2017	Under Construction
Westminster	1,333	14/02855/FULL	26-28 Broadwick Street	W1F 8JB	2017	Construction Under
Camden	1,329	2013/0786/P	14 Gray's Inn Road	WC1X 8HN	2017	Construction Under
Enfield	1,299		273 Fore Street	N9 0PD	2016	Construction Under
-	,	14/03964/FUL			1	Construction

Borough Name	Net Additio nal Compar ison Goods Retail Floorsp ace (m²)	Permission Reference	Site/Scheme Name	Postcode	Estimat ed Openin g Year	Status at January 2017
Hounslow	1,290	00610/BB/P1	26a-34 And 44-52	TW3 1TA	2014	Under Construction
Ealing	1,245	P/2004/5577	Phase 2, Part Of South Acton Estate	W3	2017	Under Construction
Westminster	1,215	12/07764/FULL	Grosvenor Gardens House, 35-37	SW1W 0BS	2019	Under Construction
Lambeth	1,190	14/05538/FUL	Arches 3 - 18	SW8 1RG	2018	Not Started
Westminster	1,175	15/11418/FULL	30-30a	W1S 2FH	2019	Not Started
Barnet	1,169	W01731JS/04	Grahame Park Estate	NW9 5UP	2017	Under Construction
Southwark	1,168	11-AP-2012	Brandon House, 180	SE1 1LW	2017	Under Construction
Wandsworth	1,165	2012/5286	The Ram Brewery Site	SW18	2017	Under Construction
Newham	1,162	14/00618/OUT hybrid	Land North Of Royal Albert Dock (Phase 1a and 1b)	E16	2018	Not Started
Wandsworth	1,123	2015/4675	100 & 112 York Road, SW11 3RD	SW11 3RD	2019	Not Started
Sutton	1,122	C2009/62175	190 London Road	SM6 7EL	2019	Under Construction
Tower Hamlets	1,116	PA/14/02817	South East Block, Goodmans Fields, 74	E1	2018	Not Started
Southwark	1,116	08-AP-2403	Castle Industrial Estate	SE17 1LA	2017	Under Construction
Haringey	1,113	2013/0251	Royal Mail Sorting Office Arena Shopping Park	N4 1ED	2017	Under Construction
Westminster	1,107	14/06759/FULL	3 St James's Square	SW1Y 4JU	2017	Under Construction
Camden	1,101	2010/6873/P	Saatchi Block, 80	W1T 4QP	2017	Under Construction
Brent	1,099	122166A	Phase 1 Former Oriental City, 399	NW9	2017	Under Construction
Westminster	1,079	08/08518/FULL	Arundel Great Court	WC2R 2NE	2018	Under Construction
Westminster	1,074	14/07461/FULL	24 Nutford Place	W1H 5YQ	2018	Not Started
Tower Hamlets	1,067	PA/13/00218	Aldgate Place	E1	2017	Under Construction
Merton	1,061	15/P0557	131 High Street Colliers Wood	SW19 2PP	2018	Not Started
Camden	1,054	2014/5946/P	21 New Oxford Street	WC1A 1BA	2017	Under Construction
Newham	1,050	12/00336/LTGOU T	Strand East	E15 2QS	2017	Under Construction
Westminster	1,029	14/00784/FULL	22-24 Bruton Lane	W1S 4EN	2017	Not Started
Hounslow	1,020	00610/263-277/P1	263-277	TW3 1EF	2015	Under Construction
Westminster	1,019	15/06742/FULL	431-433	W1C 2DA	2019	Not Started
Westminster	1,004	12/03946/FULL	17-19 Bedford Street	WC2E 9HE	2017	Under Construction
Lewisham	1,000	11/76357	Surrey Canal Triangle To The North Of	SE14	2024	Not Started
Southwark	1,000	14-AP-3844	Aylesbury Estate	SE17	2018	Not Started
Hammersmith and Fulham	998	2014/04726/OUT	M&S White City Site, 54 Wood Lane		2017	Not Started
Westminster	994	03/03463/FULL	285 - 329	W2 1DH	2017	Under Construction
Camden	965	2005/4882/P	Land Adjacent To Stables Market (Site/Building D)	NW1	2017	Under Construction
Islington	959	P092492	City North (Islington Trading Estate)	N4 3HF	2017	Under Construction

Borough Name			Site/Scheme Name	Postcode	Estimat ed Openin g Year	Status at January 2017
Westminster			70 Berners Street	W1T 3NQ	2017	Under Construction
Havering	ing 922 P0808/14		Former Police Station	RM3 8AE	2018	Not Started
Bexley	917	15/02906/FULM	Former Bt Crayford Tsvc Site,	DA1 4HP	2017	Under Construction
Bexley	906	12/00876/FULM	Southmere Village Phase 3	SE2	2016	Not Started
Bexley	906	04/03641/OUTEA	Southmere Village Phase 2, In The Area Of	SE2 9UG	2017	Under Construction
Westminster	903	13/12466/FULL	Eland House	SW1E 5DU	2017	Under Construction
Barnet	880	H/04017/09	Millbrook Park (Former Inglis Barracks)	NW7 1PX	2017	Under Construction
Hammersmith	863	2014/02531/COM	Former Bbc Television Centre	W12	2018	Not Started
and Fulham Kensington	843	B PP/13/07062	Earls Court Exhibition Centre	SW5 9TA	2019	Under
and Chelsea Hackney	823	2012/1739	(Parcels Wv04 And Wv06) 48 - 76	E8 3AH	2017	Under
Southwark	816	12-AP-1092	The Heygate Estate	SE17	2017	Under
Barking and Dagenham	800	14/01196/OUT	Fresh Wharf Estate	IG11 7	2018	Construction Not Started
London Legacy DC	788	13/00534/FUM/13/ 00536/COU	Here East/I City	E9	2017	Under Construction
Barnet	750	W/13937/04	West Hendon Estate	NW9 7QS	2017	Under Construction
Tower Hamlets	742	PA/14/03547	Wickham House, 69-89	E1	2015	Under
Lewisham	717	15/094039	65 Lewisham High Street	SE13 5JX	2017	Construction Not Started
Barnet	697	W00198AA/04	Former Raf East Camp Site	NW9	2017	Under Construction
Hounslow	693	00616/F/P19	Key Site 1	TW3	2019	Not Started
Westminster	688	14/01295/COFUL	0	SW1W 8PX	2019	Not Started
Hackney	683	2013/3223	Woodberry Down Estate Phases 2 - 8	N4	2017	Under Construction
London Legacy DC	678	12/00146/FUM	Zones 2-5, Chobham Farm	E5	2017	Under Construction
Islington	625	P041261	Kings Cross Triangle Site	N1	2017	Under Construction
Kensington and Chelsea	599	PP/02/01324	Lots Road Power Station And Chelsea Creek	SW10 0QG	2021	Under Construction
Lambeth	599	12/04708/FUL	Shell Centre, 2 - 4	SE1 7NA 2017		Under
Westminster	586	11/12403/OUT	Chalses Barracks SW1W		2017	Under Construction
Ealing	571	PP/2014/6489	Former Ealing Cinema, 59-63	W5 5AH	2017	Under
Brent	568	103221	And Rear Of 49 And 55 First Central	NW10	2017	Under
Wandsworth	562	2011/1815	Former Dhl Site And 12	SW8	2017	Under Construction
City of London	546	15/00764/FULEIA	22 - 24	EC2N 4BQ	2019/20	Under
Hammersmith and Fulham	541	2014/04242/FUL	245 Hammersmith Road	W6 8PW	2018	Construction Not Started
Tower Hamlets	515	PA/13/01276A	News International, 1	E98 1XY	2017	Under
Barking and	497	13/00628/FUL	Morrisons Supermarket, 402	RM10 7RA	2016	Construction Not Started
Dagenham Harrow	434	P/2165/15	Kodak Harrow View	HA1 4TY	2018	Not Started

Borough Name			Site/Scheme Name	Postcode	Estimat ed Openin g Year	Status at January 2017
Kensington and Chelsea	410	PP/13/05341	2 - 18	W8 4EP	2017	Under Construction
London Legacy DC	363	11/90621/OUTOD A/PDZ4	Pdz4, Adjacent To	E20	2022	Not Started
Westminster	354	12/06947/FULL	160 New Bond Street	W1S 2UE	2017	Under Construction
Croydon	352	13/03126/P	Royal Mail Delivery Office, 1 - 5	CR9 6AB	2017	Not Started
London Legacy DC	350	11/90621/OUTOD A/PDZ6	Pdz5, Adjacent To	E20	2022	Not Started
Westminster	343	13/05128/FULL	19a, 22-25	WC2E 9DS	2019	Under Construction
Haringey	337	2013/2019	Hornsey Reuse And Recycling Centre	N8 7QB	2017	Not Started
London Legacy DC	300	11/90621/OUTOD A/PDZ8	Pdz8, Adjacent To	E20	2022	Not Started
Tower Hamlets	300	PA/08/00504	The London Docklands Sport Arena, 36	E14	2015	Under Construction
Westminster	273	12/12408/FULL	11-12 Hanover Square	W1S 1HN	2017	Under Construction
Barking and Dagenham	264	15/01575/FUL	Lidl Stores 62 - 82	IG11 7PG	2019	Not Started
Westminster	262	10/01744/FULL	1-7 William Street	SW1X 7QU	2017	Under Construction
London Legacy DC			Pdz5, Adjacent To	E20	2022	Not Started
Lewisham	240	15/092613	0	SE8 5AW	2019	Not Started
London Legacy DC	225	11/90621/OUTOD A/PDZ2	Pdz2, Adjacent To	E20	2022	Not Started
Tower Hamlets	213	PA/11/02716	Aberfeldy Estate	E14	2025	Not Started
Westminster	198	15/02497/FULL	51-79 Charing Cross Road	WC2H 0NE	2017	Under Construction
Croydon	n 197 14/04794/RES		294 - 330	CR0 4XJ	Unlikely to be built	Not Started
Westminster	182	13/12007/FULL	90-104	W1F 0QB	2017	Under Construction
Westminster	137	12/06207/FULL	138-142	W2 6LS	2017	Under Construction
Westminster	123	14/12787/FULL	1 Tenterden Street	W1S 1RW	2017	Under Construction
London Legacy DC	100	11/90621/OUTOD A/PDZ12	Pdz12, Adjacent To	E20	2022	Not Started
Brent	92 Land 14/4330 Quality		Land Yellow Car Park Adj To Quality Hotel And Dexion House	HA9 0EF	2018	Not Started
Southwark	50	11-AP-1987	London Bridge Station, 64-84	ge Station, 64-84 SE1 2017		Under Construction
Camden	45	2013/3880/P	251-258	W1T 7AB	2017	Under Construction
Barking and Dagenham	0	14/00959/OUT	Sanofi Aventis Site	RM10	2018	Not Started
Harrow	0	P/0412/14	Anmer Lodge & Stanmore Car Park	HA7 3DH	2019	Not Started
Southwark	0	14/AP/3398	87-95 Rye Lane	SE15 5EZ	2017	Not Started
Sutton	0	A2013/67211	388 Malden Road	SM3 8HY	2019	Not Started
Tower Hamlets	0	PA/08/02347	Holland Estate	E1	2015	Under Construction
Westminster	-32	14/11837/FULL	87-89 Cleveland Street	W1T 6PJ	2017	Under Construction
Tower Hamlets	-59	PA/09/02585	Sites E & F, Bound By Shandy Street, White Horse Lane	E1	2015	Under Construction

Borough Name			Site/Scheme Name	Postcode	Estimat ed Openin g Year	Status at January 2017
Bromley			Summit House	BR4 0RJ	2018	Not Started
Hackney	-112	2013/2042	51-57 Kingsland High Street	E8 2JS	2017	Under Construction
Hounslow	-174	00248/408-430/P1	408-430	W4 5TF	2018	Not Started
Westminster	-185	14/11220/FULL	53-59 Bryanston Street	W1	2017	Under Construction
Harrow	-188	P/0737/15	51 College Road	HA1 1AA	2019/20	Under Construction
Greenwich	-220	15/3321/F	Charlton Riverside Place	SE7 7AH	Now closed	Not Started
Westminster	-311	12/10803/FULL	5-9 Cork Street	W1S 3LQ	2017	Under Construction
Westminster	-325	14/03532/FULL	1-1a Cockspur Street	SW1Y 5DL	2017	Under Construction
City of London	-349	11/00905/FULL	Stone House & 128-170	EC2	2018/19	Under Construction
Westminster	-406	13/02044/FULL	1 Cockspur Street	SW1Y 5DL	2017	Under Construction
Croydon	-440	14/04847/RES	294-330	CR0 4XJ	Unlikely to be built	Not Started
Camden	en -478 2012/6858/P St.Giles Circus Site		St.Giles Circus Site	WC2H 8LS	2017	Under Construction
Westminster	-554	13/09224/FULL	380-384 W9 2HU 2017		2017	Under Construction
Hackney	-688	2013/1987	Woodberry Grove	N4	2017	Under Construction
Tower Hamlets	-802	PA/15/00403	106 Commercial Street	E1 6LZ 2018		Not Started
Camden	-803	2015/4683/P	196 Tottenham Court Road	W1T 7LG	2018	Not Started
Tower Hamlets	-816	PA/11/02305	11-31 And 65-67	E1 7NE	2017	Not Started
Hillingdon	-830	69980/APP/2014/ 1620	22-26 Market Square	UB8 1LH	2017	Not Started
Tower Hamlets	-840	PA/13/02722	Peterley Business Centre, 472	E2	2018	Not Started
Hammersmith and Fulham	-848	2011/03004/FUL	101 Farm Lane	SW6 1QJ	2017	Under Construction
Camden	-858	2014/4983/P	1-19 New Oxford Street	WC1A 1NQ	2018	Not Started
Merton	-860	13/P0426	177 - 187	SW19 8AE	2017	Not Started
Haringey	-866	HGY/2015/2517	191-201	N6 5BN	2019	Not Started
Waltham Forest	-878	2012/0045	Kimberley Industrial Estate & Billet Works			Under Construction
Newham	-880	08/02263 and 12/00626	Rathbone Market	E16	2017	Under Construction
Sutton	-880	D2013/67339	13 - 21	SM6 8RG	2017	Under Construction
Newham	-880	14/03021	Land At Corner Of	E16 1HU	2017	Under Construction
Camden	-897	2012/2232/P	Central Cross 18-30	W1T 1BL	2017	Under Construction
Southwark	-925	12-AP-1308	1-6 And 307-311 SE5		2017	Under Construction
Havering	-960	P0439/13	1 Blenheim Court	RM12 5RX	2016	Not Started
Ealing	-961	PP/2014/4426	The Oaks Shopping Centre	W3	2017	Under Construction
Westminster	-1,014	13/02214/FULL	Portland House	SW1E 5EE	2019	Not Started
Enfield	-1,050	15/04171/RE4	4 Burleigh Way	EN2 6AE	2016	Not Started

Net Additio nal Compar ison Goods Retail Floorsp ace (m²)		Additio nal Compar ison Goods Reference Reference Reference Retail Floorsp Site/Scheme Name		Postcode	Estimat ed Openin g Year	Status at January 2017	
Hammersmith and Fulham	Hammersmith -1,108 2014/03920/FUII		1 And 2 Rowley Cottages, 6	W14 8RL	2018	Not Started	
Westminster	-1,120	14/03631/FULL	JLL 63 Buckingham Gate SW1E 6AS 2018		2018	Under Construction	
Hammersmith and Fulham	-1,152	2013/03424/FUL	258 - 264	W12 9PE	2017	Under Construction	
Greenwich	-1,172	13/1529	Matalan, 30	SE7 7SE	2017	Under Construction	
Wandsworth	-1,177	2015/4001	953-959 Garratt Lane, SW17 0LR	SW17 0LR	2018	Not Started	
City of London	-1,190	14/00496/FULMAJ	130 Fenchurch Street	EC3M 5DJ	2021	Not Started	
Sutton	-1,217	B2014/70705	St Nicholas Way	SM1 1AW	2017	Not Started	
Bromley	-1,231	14/00660/FULL1	Intu Bromley The Glades Shopping Centre	BR1 1DN	2017	Not Started	
Lewisham	-1,231	DC/16/095304	Thurston Central	SE13 7SN	2019	Not Started	
Wandsworth	-1,248	2014/4626	208-214	SW11 3SD	2017	Under Construction	
Lewisham	-1,290	15/92295	Crown,Newbaltic,Park,Bridge& Victoriawharves& Land Bounded By	SE8	2017	Under Construction	
Westminster	-1,298	15/05483/FULL	7-14 Coventry Street	W1D 6DG	2018	Not Started	
Islington	-1,328	P121277 85 Canonbury Road N1 2DG 2017		2017	Under Construction		
City of London	London -1,458 08/00824/FULMAJ		76-86 Fenchurch St, 1-7 Northumberland Alley, 1 Carlisle Ave	EC3N 2ES	2019/20	Under Construction	
Greenwich	-1,541	15/2152	Poundland, 168-176	SE9 1BJ	Now closed	Not Started	
Tower Hamlets	-1,548	PA/11/02220	London Fruit And Wool Exchange, 99-101	E1	2018	Not Started	
Lambeth	-1,560	12/01327/FUL	Elizabeth House, 39	SE1 7NQ	2018	Not Started	
Kensington and Chelsea	-1,638	PP/15/04338	196 To 222	SW3 3TW	2019	Not Started	
Croydon	-1,670	14/05061/P	Gallagher Retail Park	CR0 3EU	2018	Not Started	
Wandsworth	-1,721	2012/4983	180-186 Upper Tooting Road, SW17 7EJ	SW17 7EJ	2017	Not Started	
Brent	-1,808	110403	3 Burnt Oak Broadway	HA8 5LT	2017	Under Construction	
Westminster	-1,870	12/08886/FULL	53 - 54 And 56	SW1Y	2017	Under Construction	
Hackney	-1,876	2013/3856	92-94 Stamford Hill	N16 6XS	2017	Under Construction	
Kensington and Chelsea	-1,939	PP/15/03816	99 To 121	W8 5SA	2017	Under Construction	
Westminster	-1,990	11/10045/FULL	135-155	WC2H 0DT	2017	Under Construction	
City of London	-2,176	14/00237/FULMAJ	Land Bounded By			Under Construction	
Ealing	-2,304	PP/2012/3154	The Oaks Shopping Centre And Car Park In Churchfield Road	W3 6RE	2017	Not Started	
Barnet	-2,642	H/05828/14	Homebase NW9 6SS 2018		2018	Not Started	
Greenwich	-2,736	12/0487	Former Co-Op Building, 138- 152			Under Construction	
Hammersmith and Fulham	-2,756	2013/05493/RES	30-52 Goldhawk Road	W12	2018	Not Started	
Brent	-2,829	082823	Land At Junction Of	NW9	2017	Under Construction	
Sutton	-2,886	B2014/69260	100 - 106	SM1 1LF	2017	Under Construction	

Borough Name			Additio nal Compar ison Goods Retail Floorsp Additio Site/Scheme Name Site/Scheme Name		Estimat ed Openin g Year	Status at January 2017	
Barnet	-2,936	14/07670/FUL	1201 High Road	N20 0PD	2018	Not Started	
Kensington and Chelsea	-3,199	PP/10/02817	195 Warwick Road	W14 8PU	2017	Under Construction	
Barnet	-3,506	F/00236/12	886-902	N12 9RN	2017	Under Construction	
Wandsworth	-3,686	2015/0881	Homebase, 198 York Road, SW11	SW11 3SA	2018	Not Started	
City of London	-4,148	11/00935/FULEIA	Bucklersbury House	EC4	2017/18	Under Construction	
Bromley	-5,064	07/03632/FULL1	Land At South Side Of	BR1 1HP	2017	Under Construction	
Havering	-5,580	P0986/14	102 Petersfield Avenue	RM3 9PH	2017	Not Started	
Hackney	-8,150	2015/0877	1-17 Crown Place, 8-16	EC2M 2PS	2018	Not Started	
Greenwich	-8,862	12/0835	Land North Of	SE7	2017	Under Construction	
Barnet	-12,027	South	Brent Cross Extension (South)	NW2 1LS	2022	Not Started	

Figure 109. Flows of shopping spend % from outside London to shopping centres within London boroughs.

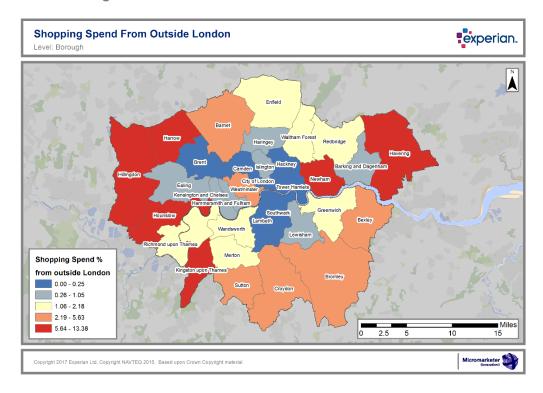


Figure 110. Boroughs with larger percentages of spend to Lakeside.

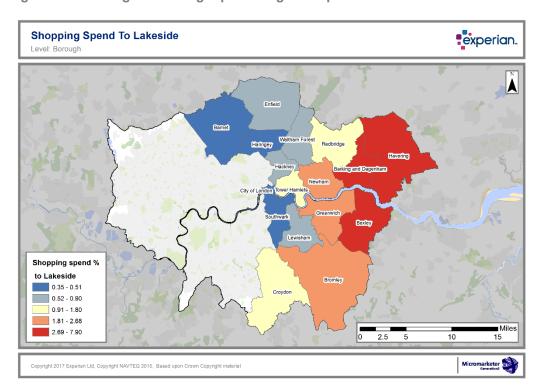
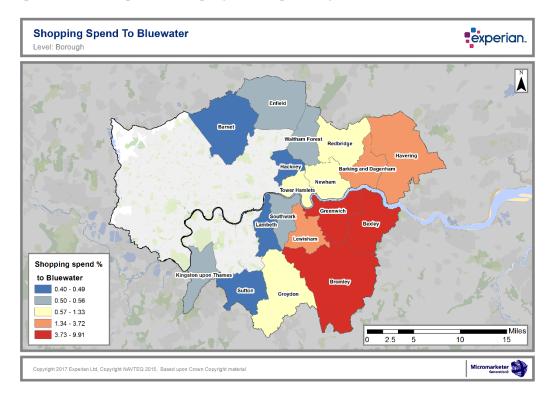


Figure 111. Boroughs with larger percentages of spend to Bluewater.



Appendix 1 – Consumption categories by COICOP component

- Some of the COICOP components appear in more than one category (for example household goods & services). A proportion has been assigned to each component in order to allocate them between the categories. The proportions are given in Table 12.
- Total spending excludes spending abroad.

Convenience: food, non-alcoholic beverages, alcoholic beverages, tobacco, household goods & services, and newspapers;

Comparison - bulky: maintenance & repair of dwellings, furniture & textiles, household goods & services, purchase of vehicles, operation of personal transport equipment, telecommunications services, audio-visual, and other major durables for recreation & culture;

Comparison - non-bulky: clothing & footwear, medical products, other recreational items & equipment, newspapers, personal care, and personal effects.

Comparison: comparison - bulky + comparison - non-bulky

Total retail: convenience + comparison.

Accommodation: restaurants & hotels.

Dine in restaurant or café: restaurants & hotels.

Takeaway: restaurants & hotels.

On licence: restaurants & hotels.

Catering: dine in restaurant or café + takeaway + on licence

Leisure: recreational & cultural services.

Other goods & services: clothing & footwear, maintenance & repair of dwellings, furniture & textiles, household goods & services, purchase of vehicles, operation of personal transport equipment, restaurants & hotels, and personal care.

Other: actual rents for housing, imputed rents for housing, water supply and miscellaneous services relating to the dwelling, electricity, gas & other fuels, household goods & services, medical services, transport services, postal services, telecommunications services, education, insurance, financial services not elsewhere classified, social protection, other services.

Total spending = total retail spending + accommodation spending + catering spending + leisure spending + other goods & services + other.

Figure 112. Consumption category weights.

Food		Convenience	Comparison	Comparison	Accommo-	Dine in	Take-	On	Leisure	Other	Other
Food 1						restaurant				goods and	
Non-alcoholic beverages	Food	1								Services	
Deverages											
Alcoholic beverages											
Tobacco		1									
Ciothing and footwear											
Totoward				0.98						0.02	
Actual rentals for housing				0.00						0.02	
Imputed rentals for housing											1
Nousing Nous											
Nousing	Imputed rentals for										1
repair of the dwelling Water supply and miscellaneous services relating to the dwelling Electricity, gas &											
Mater supply and miscellaneous services relating to the dwelling	Maintenance and		0.45							0.55	
Water supply and miscellaneous services relating to the dwelling											
miscellaneous services relating to the dwelling Electricity, gas & other fuels											
Services relating to the dwelling Services Servic											1
the dwelling											
Electricity, gas & other fuels											
Other major durables for recreational items and equipment Conternational items an											
Furniture & Textiles 0.997 0.003											1
Household Goods and Services			0.007							0.000	
Medical Products		0.45									0.00
Medical Products 1 ————————————————————————————————————		0.15	0.57							0.02	0.26
Medical Services				4							
Purchase of vehicles 0.04 0.96 0.96 0.97 0.93 0.97 0.985				1							4
Operation of personal transport equipment O.07 O.07 O.093 O.93 O.93 O.93 O.93 O.95 O.97 O.97 O.97 O.97 O.97 O.97 O.97 O.97 O.97 O.997 O.997 O.997 O.997 O.997 O.997 O.997 O.997 O.998 O.998 O.997 O.998			0.04							0.06	'
personal transport equipment											
Equipment			0.07							0.93	
Transport services											
Postal services											1
Telecommunications Services											
Services Audio-visual 0.997 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0.035								
Other major durables for recreation and culture											
Other major durables for recreation and culture	Audio-visual		0.997								0
durables for recreation and culture 1			0.985								0.02
culture Other recreational items and equipment 1 Image: cultural services and equipment and cultural services 1 Image: cultural services and equipment and cultural services and cultural services and equipment a											
Other recreational items and equipment 1	recreation and										
items and equipment Recreational and cultural services Newspapers 0.28 0.72 Education Restaurants and hotels Personal care Personal effects Insurance Financial services not elsewhere classified Social protection											
equipment 0.28 0.72 1	Other recreational			1							
Recreational and cultural services											
cultural services 0.28 0.72 0.35 0.16 0.22 0.1 Restaurants and hotels 0.17 0.35 0.16 0.22 0.1 Personal care 0.75 0.25 0.25 Personal effects 1 0.25 0.25 Insurance 1 0.25 0.25 Financial services not elsewhere classified 0.25 0.25 0.25 Social protection 0.25 0.25 0.25 0.25	equipment						ļ				
Newspapers 0.28 0.72 Section Section Material Section <									1		
Education 1 Restaurants and hotels 0.17 0.35 0.16 0.22 0.1 Personal care 0.75 0.25 0.25 Personal effects 1 0.25 0.25 Insurance 1 0.25 0.25 0.25 Financial services not elsewhere classified 0.25 0.											
Restaurants and hotels 0.17 0.35 0.16 0.22 0.1 Personal care 0.75 0.25 0.25 Personal effects 1 0.25 0.25 Insurance 1 0.25 0.25 Financial services not elsewhere classified 0 0 0 0 Social protection 1 0		0.28		0.72							
hotels 0.75 0.25 Personal effects 1 0.25 Insurance 1 1 Financial services not elsewhere classified 1 1 Social protection 1 1					0.4-	2.05	0.40	0.00		0.4	1
Personal care 0.75 0.25 Personal effects 1 0 Insurance 1 1 Financial services not elsewhere classified 1 1 Social protection 1 1					0.17	0.35	0.16	0.22		0.1	
Personal effects Insurance				0.75			 			0.05	
Insurance 1 1 Financial services 1 1 not elsewhere classified 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5										0.25	
Financial services not elsewhere classified 1 Social protection 1				1			-				4
not elsewhere classified Social protection 1											
classified											1
Social protection 1											
							 				1
Address Services (1997)	Other services nec						 				1

Appendix 2 – FSS (Financial Strategy Segments) Economics

- 6.1 The FSS segmentation utilises demographic information to split the UK population into 14 broad groups (FSS Groups), and 50 more detailed groups (FSS Types). Each of the types falls within one of the FSS groups based on shared characteristics.
- 6.2 Experian's UK Macro model includes an expenditure forecast by detailed COICOP. This is used to drive a forecast of detailed COICOP expenditure in £'s per household, per week, split by gross income decile. The expenditure by gross income decile data is taken from the Living Costs and Food Survey (for both retired and non-retired households).
- 6.3 The decile expenditure forecasts are converted to expenditure forecasts by detailed COICOP by FSS type, using gross household income bands by FSS type in the FSS segmentation.
- 6.4 The FSS groups and types along with a summary of their key characteristics are given in the table below.

Figure 113. FSS Groups.

Group	Group name	One-line description
Α	Bright Futures	Young professionals building their careers whose incomes have good potential to rise
В	Single Endeavours	Young singles and sharers who are working to establish themselves while enjoying low commitments
С	Young Essentials	Young people in their 20s with low income renting affordable accommodation
D	Growing Rewards	High income families with growing children who are making excellent financial progress
E	Family Interest	Growing families with mid-range incomes and high expenses
F	Accumulated Wealth	Affluent families with the highest incomes, expensive homes and many assets
G	Consolidating Assets	Families in their middle years who have made a good foundation to their financial position
Н	Balancing Budgets	Families in their middle years who have average incomes and need to balance expenses against resources
I	Stretched Finances	Middle aged families who are striving to manage their day to day finances on very limited incomes
J	Established Reserves	Pre-retirement households with good savings whose financial commitments are reducing
K	Seasoned Economy	Pre-retirement households who are experienced in making their money go further
L	Platinum Pensions	Elderly people with good pensions who are enjoying a comfortable retirement
M	Sunset Security	Retired people with the security of home ownership and a modest pension income
N	Traditional Thrift	Ageing people with low incomes and a reliance on state provision

Figure 114. FSS Types.

Type	Type Name	One-line description
Type A01	Equity Ambitions	Single professionals who have pushed themselves to get on the property ladder
A01	Portable Assets	Successful professionals who value the freedom of renting
A02	Early Settlers	Graduate earners who have settled into first homes in their early 20s
B04	First Foundations	Singles and couples setting up home in affordable properties
B05	Urban	Urban singles trading a high cost of living for the opportunities of city life
B03	Opportunities	orban singles trading a riigh cost of living for the opportunities of city life
B06	Flexible Margins	Transient singles who rent privately to give flexibility in life choices
B07	Tomorrow's	Young people who are studying or have recently started their first graduate job
000	Earners	
C08	Entry-level Workers	Young singles starting working life in jobs with limited opportunities
C09	Cash Stretchers	Younger singles often relying on benefits and loans to make ends meet
D10	Career Priorities	Successful couples who have prioritised career progression and financial stability
D11	Upward Movers	Families with two high incomes and expensive house and cars to match their position
D12	Family	Two parents working full-time means income is good but time is short
	Progression	
D13	Savvy Switchers	Comfortable families with committed incomes who look to make savings whenever possible
E14	New Nesters	Young couples establishing themselves in their first family home
E15	Security Seekers	Growing families with school age children who are working hard to achieve financial security
F16	Premier Portfolios	The wealthiest households with very high income and extensive assets
F17	Fast-track	High-achieving couples who have attained financial success relatively early in their careers
	Fortunes	
F18	Asset Accruers	Maturing families who have accrued considerable assets in their careers so far
F19	Self-made Success	Older families who have achieved high incomes often through building their own business
F20	Golden Outlook	Affluent families winding down to retirement with excellent investments in place
G21	Sound Positions	Maturing families with two good salaries who have made a good start to their savings portfolio
G22	Single Accumulators	Singles in their 40s with good professional incomes and equity in their homes
G23	Mid-range Gains	Couples with teenage children on mid-range incomes who have benefitted from buying homes at the right time
G24	Extended Outlay	Middle income families supporting older children with less capacity to save
H25	Modest Mortgages	Older families who have used average salaries sensibly to pay down their mortgage
H26	Overworked	Families with average incomes but heavy financial commitments
1107	Resources	
H27	Self-reliant Realists	Single homeowners who have been good at managing their money from an unexceptional salary
H28	Canny Owners	Middle-aged homeowners who have achieved security through purchasing affordable homes
H29	Squeezed Families	Families with older children who have stretched themselves to buy inexpensive terraces
130	Pooled Kitty	Families with older children who pool incomes and benefits to get by
I31	High Demands	Families with limited income striving to manage when financial commitments often outweigh resources.
132	Value Hunters	Families juggling their budget to make ends meet
133	Low cost Living	Middle-aged singles with very little left over after paying essential bills
J34	Guaranteed Provision	Older families with a comfortable financial position who can look forward to retirement
J35	Steady Savers	Pre-retirement families who have been prudent savers on moderate incomes
J36	Deferred Assurance	Older families who may have to work longer to achieve the financial security they want
J37	Practical Preparers	Older singles whose sensible approach means they have adequate retirement savings
K38	Persistent Workers	Families heading to retirement with adequate day to day incomes but little left over for saving
K39	Lifelong Low-	Lower income older couples whose sensible spending habits allow them to save modestly
K40	spenders Experienced Renters	Low income older singles who are unable to make provisions for the future
L41	Sage Investors	Retired couples with substantial savings and equity who are enjoying a comfortable lifestyle
L42	Dignified Elders	Elderly couples with good retirement incomes who are free to contribute to community life
L43	Comfortable	Elderly singles with good levels of savings who manage their finances carefully
	Legacy	, 5

Figure 114 (cont'd). FSS Types.

Type	Type Name	One-line description
M44	Semi-retired Families	Households partly retired with someone still in employment who boosts household income
M45	Cautious Stewards	Elderly couples benefitting from two pensions and a cautious financial approach
M46	Classic Moderation	Elderly singles with acceptable incomes whose assets are mostly tied up in their homes
M47	Quiet Simplicity	Elderly single owners of small properties who have limited income and savings
N48	Senior Sufficiency	Retired couples owning modest homes whose combined income is just sufficient for daily needs
N49	Ageing Fortitude	Older people unable to work with very few savings to fall back on
N50	State Veterans	Elderly singles dependent on the state pension whose frugality allows them to get by

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Greek

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Turkish

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Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ 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 ফোন্ নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

Urdu

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Arabic

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

Gujarati

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

MAYOR OF LONDON