GLAECONOMICS

London labour market projections (2024-based update)

Yiqiao Chen

March 2026

MAYOR OF LONDON

copyright

Greater London Authority
March 2026

Published by
Greater London Authority
City Hall
Kamal Chunchie Way
London E16 1ZE

www.london.gov.uk
Tel 020 7983 4000

Minicom 020 7983 4000

Cover photograph

For more information about this publication, please contact:

GLA Economics

Tel 020 7983 4000

Email glaeconomics@london.gov.uk

Contents

Executive summary

The Greater London Authority has regularly updated trend-based long-term employment projections to inform policy making and city planning in London. This 2024-based[1] update forms part of the evidence base for the forthcoming London Plan and builds on the 2017 and 2022 projections.

This report presents estimates of the number of jobs in London from 2025 to 2050, broken down by industry sector and by local authority. It presents a central (baseline) projection, sensitivity scenarios, and comparisons with alternative estimates to support interpretation.

The 2024-basedupdate indicates that:

- Workforce jobs across London will grow from 6.4 million in 2024 to 7.3 million in 2050, an increase of 869,000 jobs (13.6%). This represents a higher level of projected employment than in the 2017 and 2022 projection rounds, largely reflecting a higher post-pandemic starting point rather than faster long-run growth.

- London's labour market will continue to be shaped by the long-term structural shift towards business services, with Professional, Scientific, Technical and Real Estate activities (+373,000 jobs from the 2024 level) and Information and Communication (+164,000) accounting for around half of the projected increase between 2024 and 2050.

- Four sectors are projected to see declines over the projection period: Manufacturing (-37,000 jobs), Transportation and Storage (-34,000), Wholesale (-32,000), and Retail (-32,000).

- Inner London, particularly City of London, Tower Hamlets, and Southwark, will see the strongest growth in jobs. This reflects a continuation of pre-existing spatial trends.

All long-term projections are subject to uncertainty. Sensitivity analysis suggests that the central projection sits within a plausible range of outcomes and is consistent with population-based employment projections and other benchmarks.

[1] Full-year 2024 is the baseline for these projections being the latest available data at the time of writing.

Note: Relationship to the National Planning Policy Framework and Government's standard method for calculating housing need

This report has been prepared based on historical data and in advance of any separate analysis of the impact of the 2024 National Planning Policy Framework and the Government's standard method for calculating housing need.

Under that framework, London has an indicative housing need for 88,000 homes a year at the time of writing. The South East region, from which around 1 million people commute to work in London, has an indicative housing need figure of 71,000 homes a year, and the East of England has an indicative housing need figure of 45,000 homes a year.

These housing need figures are significantly above historical delivery rates. If they were met, they could support a higher level of workforce jobs in London than is projected in this report. However, this would only occur if higher housing delivery is accompanied by higher net migration to London or its commuter belt.

If housing delivery in the rest of the country instead made housing relatively more affordable outside London, and/or raised productivity and job opportunities in those areas, the number of workforce jobs in London could be lower than projected.

The implications of future housing delivery for workforce jobs in London will be considered alongside other London Plan evidence in subsequent analysis.

Chapter 1: Introduction

The Greater London Authority (GLA) has regularly published trend-based long-term employment projections since 2002 to help inform policy making and city planning within the GLA and externally.

This report presents estimates of the number of workforce jobs in London from 2025 to 2050, broken down by industry sector and by local authority, as well as by borough-by-sector. It presents a central (baseline) projection, sensitivity scenarios, and comparisons with alternative estimates.[2]

As in previous publications, the projections use a trend-based approach and the latest available data. The projections estimate jobs in future years based on the historical relationship between output and jobs (i.e. labour productivity), and an assumed path for future output growth. They are intended to provide broad indications of the future labour market size, serving as a long-term planning tool rather than a precise year-by-year forecast.

The most recent update was published in 2022,[3] and the projections supporting the current London Plan were published in 2017.[4] As this update provides initial evidence for the forthcoming London Plan, the following sections compare this new round of results with both the 2017 and 2022 publications.

This report is organised as follows. Chapter 2 explains the methodology for the projection models. Chapter 3 presents results at the London-wide level and robustness checks. Chapter 4 illustrates employment projections at sectoral level. Chapter 5 shows borough-level results. Chapter 6 provides scenario analysis.

We provide more detailed descriptions of our models and results in the appendices. Appendix 1 provides an overview of key changes in London's labour market since the last publication. Appendix 2 further details the data for the projections. Appendix 3 describes the model structure in detail. Appendix 4 explains the selection of historical productivity trends. Appendices 5 and 6 give more detailed sector and borough results. Appendix 7 shows borough-by-sector results and borough by planning use class results.

[2] In this report, we use the terms *employment, jobs and workforce jobs* interchangeably. Jobs, unless specified, include both employee jobs and self-employed jobs located in London. We model jobs as the total of employee jobs and self-employed jobs, so exclude the small and difficult to model HM Forces and Government Trainees categories of the ONS Workforce Jobs series. Overall, the number of jobs we report should be distinguished from the number of people with jobs, as a person can hold more than one job. Throughout this report, the focus in on the number of jobs rather than the number of people.

[3] GLA Economics (2022) London labour market projections 2022

[4] GLA Economics (2017) London labour market projections 2017

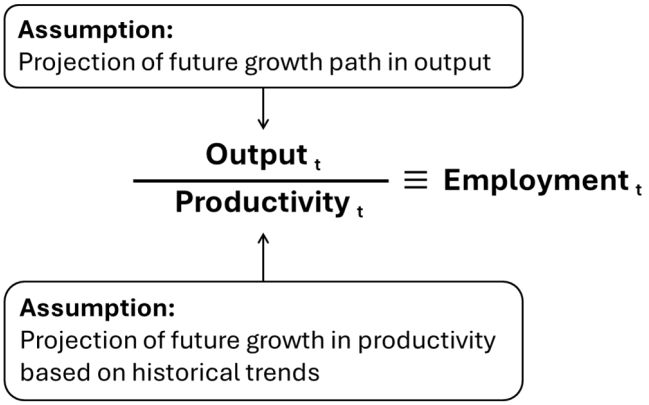
Chapter 2: Methodology

The long-term employment projections for London are trend-based models that estimate workforce jobs in future years based on an assumption about future output growth and the historical relationship between output and jobs (labour productivity).

These projections are designed to provide a guide to the long-run path of employment based on the data available at the time of construction. They are not intended to serve as forecasts for individual years within the projection period.

Our approach rests on the accounting identity that the growth rate of employment is equal to the growth rate of output minus the growth rate of productivity. Given a projection of future output and future productivity, we can derive future employment, as shown in **Figure 1**.

Figure 1: Schematic of methodology



This is a well-established approach for producing long-run employment projections, used for successive rounds of projections over more than 20 years. It only requires data on historical output and employment levels – from which productivity trends can be identified and projected forward – alongside data on future output growth.[5]

The key benefits of the approach are that it requires few assumptions, is transparent about those assumptions, and is computationally straightforward. It has been shown to perform well when compared to other long-term forecasts (albeit with limited out-turn data).[6]

2.1 Data

The main data source used for these projections are:

- London gross value added (GVA) and the London job series, annual from 1971 to 2024
- Borough-by-sector jobs from 1971 to 2022
- The London Employment Sites Database 2024 (LESD 2024, to be published alongside this report).

[5] For the identity to be useful, it requires the assumption that the economic environment and policies will, on average, have similar impacts on jobs growth in the future as they have in the past. This means our trend-based projections do not consider announced policy changes, such as higher housebuilding need figures in London or the South East.

[6] See Performance of GLA Economics' employment projections - 2020 update for discussion of the performance of previous rounds of London employment projections using this methodology.

All monetary values in this report are in 2019 basic prices. Small sectors are aggregated, and section G (Wholesale and retail trade; repair of motor vehicles and motorcycles) is split into G1 (Wholesale) and G2 (Retail).[7]

The LESD 2024 records recently completed employment site developments and those in the pipeline in London boroughs from 2024 to 2050. We use the estimated net employment capacity totals in each borough. Further details on data sources are provided in Appendix 2.

2.2 Model structure

The projection framework contains a set of interrelated models. As in previous rounds of projections, the core components are London-level, sector-level, and borough-level models.

The London model is central to the process. It takes as inputs:

- Historical productivity, derived from the GVA and the London jobs series, from which short-term and long-term trends in productivity are estimated and projected forward.
- An assumed path for future GVA, derived from Office for Budget Responsibility (OBR) projections.

This component model produces projections of workforce jobs at the London level.

For the sector and borough models, there is not an externally validated path for future GVA. Instead, London-level GVA is used to create a productivity measure for sectors and boroughs (defined as London GVA per sector or per borough job). As with the London model, we identify historical trends in this measure and project forward. These projections are then constrained so that the total sector and total borough jobs match the London model totals.

Borough projections also distinguish between employee jobs and self-employment jobs. Trends are estimated separately and combined with data from LESD 2024 on spatial capacity. More details on model structures are provided in Appendix 3.

2.3 Model assumptions

The key assumptions[8] underlying the models are:

- The assumed path for London GVA, informed by OBR estimates.
- Historical trends in labour productivity.

GVA input assumptions

In line with previous updates, our GVA growth assumptions are guided by the OBR's most recent Long-term Economic Determinants, published in May 2025 following its Economic and Fiscal Outlook (EFO) of March 2025. The OBR's UK forecasts provide a consistent reference point for medium-term GVA assumptions to 2030 and long-term assumptions to 2050.

While London GVA grew faster than UK GDP up to the mid-2010s, growth rates have been near identical since 2014. Given wider shifts since the financial crisis – including slower productivity growth and reduced

[7] Section T (Activities of households as employers; undifferentiated goods-and-services-producing activities of households for own use) and section U (activities of extraterritorial organisations and bodies) are excluded.

[8] See Appendix 1 for a more detailed discussion of changes to London's economy following the pandemic and their impacts on the model assumptions.

projected growth in labour supply[9] – it is reasonable to assume London will broadly align, rather than outperform, the UK over the long term, albeit from a higher base and without significantly underperforming.

For the very short-term (2024-2025) we use estimates from London's Economic Outlook (LEO) published by GLA Economics in Spring 2025.

Together, these assumptions imply GVA growth of 1.2% in 2024, rising to 1.6% in 2025 (as in LEO Spring 2025), reaching around 2.0% in the 2030s (in line with the OBR EFO March 2025). It then gradually declines to 1.7% by 2050 (following the OBR's long-term economic determinants).[10,11,12]

This 2025 update introduces changes relative to the 2017 and 2022 projections (see **Table 1**). In particular:

- The long-term GVA growth rate assumed in the 2017 projections was higher (2.5%), reflecting the OBR's outlook at the time.
- The 2022 publication adjusted for short-term COVID-19 impacts by assuming the level of GVA and of employment in its first projected years. It also measured historical productivity trends up to 2019. This update is based on historical data up to 2024 and the first projected year is 2025.[13]

Overall, the cumulative level of GVA growth from 2025-2050 in London implied by our assumptions is the same as that implied for the UK by the OBR.

Productivity trend assumptions

As in previous rounds of projections, we first identify historical productivity trends in London and then combine trends representing more recent experience with the longer-run outcomes.

Labour productivity in London has suffered from over a decade of low growth following the global financial crisis in 2008-09. Productivity growth during this period has also lagged behind the rest of the UK.[14] Before the crisis, productivity growth trend was strongly positive from the 1980s onwards.

We combine our estimate of the historical long-term (1981-2007) growth rate of 2.8% per year with our estimate of the short-term (2008-2023) growth rate of minus 0.3% per year. Using a 55/45 weighting – which places more weight on recent experience than in earlier publications – we assume productivity growth of 1.4% per year from 2025 onwards. Details of the trend selection are in Appendix 4.

[9] London's productivity level remains highest among UK regions, but its growth rate has lagged behind since the 2008 financial crisis. Between 2010 to 2019, London's average annual productivity growth was 0.6%, compared to 0.9% in the UK. From 2020 to 2023, London's annual productivity growth fell to -0.5% while the UK grew at 0.5%. For labour supply, GLA population projections estimated annual growth of working age (aged 16-64 years) population is projected to be between 0.3% to 0.4% from 2025 to 2050, while the average annual growth was 0.9% from 2010 to 2023.

[10] GLAE (2025) London's Economic Outlook.

[11] OBR (2025) Economic and fiscal outlook – March 2025.

[12] OBR (2025) Long-term economic determinants.

[13] Our medium-term projection for GVA and jobs growth is slightly below the GLAE medium term forecast (LEO Spring 2025) as our projection 'looks through' the business cycle while LEO forecasts the business cycle.

[14] Despite London's productivity level remaining highest among UK regions, its growth rate has lagged behind since the 2008 financial crisis. Between 2010 to 2019, London's average annual productivity growth was 0.6%, compared to 0.9% in the UK. From 2020 to 2023, London's annual productivity growth fell to -0.5% while the UK grew at 0.5%.

The 1.4% productivity growth rate is just below the OBR's Spring 2025 long-term UK labour productivity assumption and is in line with our previous rounds of long-term employment projections.[15] It reflects a balance between stronger pre-2008 performance and weaker post-crisis outcomes.

Table 1: Model assumptions compared

Model Assumption	Published 2017	Published 2022	2025 Update
Short-term GVA	2.1% per year in 2016-18	2.5% per year in 2021-24	1.1% per year in 2024 to 1.6% per year in 2025
Short-term productivity (GVA per job)	0.6% per year in 2016-18	1.5% per year in 2021-24	0.2% per year in 2024
Long-term GVA	Rises from 2.0% per year in 2017 to 2.5% per year in 2050	Declines from 2.5% per year in 2025 to 1.5% per year in 2051	Rises from 1.6% per year from 2025 to 2.0% in 2030s, then declines to 1.7% per year in 2050
Long-term productivity (GVA per job)	All trend 1993-2016: growth rate of 1.6% per year	60/40 mix of trends from 1981-2007 and 2008-19: growth rate of 1.4% per year	55/45 mix of trends from 1981-2007 and 2008-23: growth rate of 1.4% per year

Created with Datawrapper

[15] Note that while OBR publishes a forecast twice a year, and it downgraded its short-term productivity forecast in November 2025, its long-term economic determinants are usually only published once a year.

Chapter 3: London-level projections

Summary

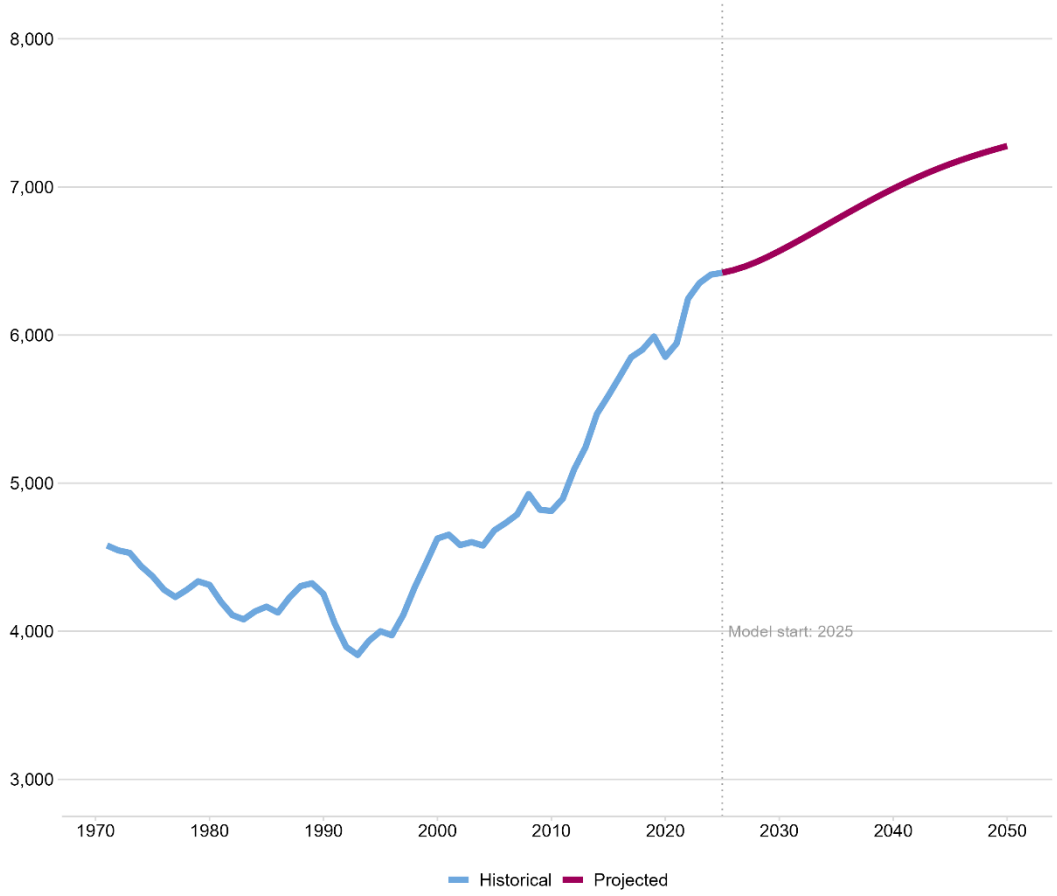
This chapter presents the London-wide projections of workforce jobs growth to 2050, comparing them with previous rounds and other benchmarks.

- London's workforce jobs are projected to grow steadily to 2050, reaching 7.3 million, a rise of 869,000 jobs from the 2024 base year.
- This result is higher than both the 2017 and 2022 projections, mainly reflecting a higher post-pandemic starting point rather than faster growth over the projection period.
- Population-based and external comparisons provide reassurance that the results are credible, though external forecasters tend to assume faster growth in the short to medium term.
- Analysis of uncertainty in the model suggests a plausible range of around 6.4 million to 8.3 million jobs in 2050.

3.1 Overview

London is expected to see workforce jobs rise from 6.4 million in 2024 to 6.6 million (up 2.5%) in 2030, 7.0 million (up 9.1%) in 2040, and 7.3 million (up 13.6%) in 2050. This implies gradual short-term growth, faster medium-term growth and steady long-term growth (Figure 2).

Figure 2: London's historical and projected employment (000s), 1971-2050



The result implies an upward revision of both our 2022 publication (up 5.4%, or 376,000 jobs) and 2017 publication (up 1.2% or 88,000 jobs). A large part of this uplift reflects higher-than-expected jobs growth following the pandemic, which has increased the starting (2024) level of jobs (see Appendix 1 for detailed discussion).

In terms of compound annual growth rates (CAGR) of GVA, productivity and jobs, the 2025 updates are lower than in the 2017 projection and broadly aligned with the 2022 projection over 2025 to 2050 (see Table 2).

Table 2: Comparisons with previous projections, 2025-2050

CAGR	Published 2017	Published 2022	2025 Update	Direction of Change
Jobs	0.6%	0.4%	0.5%	Lower than 2017, higher than 2022
GVA	2.4%	1.9%	1.9%	Lower than 2017, in line with 2022
Productivity	1.8%	1.4%	1.4%	Lower than 2017, in line with 2022

Created with Datawrapper

3.2 Comparisons with alternative estimates

We benchmark results against a range of alternative models.

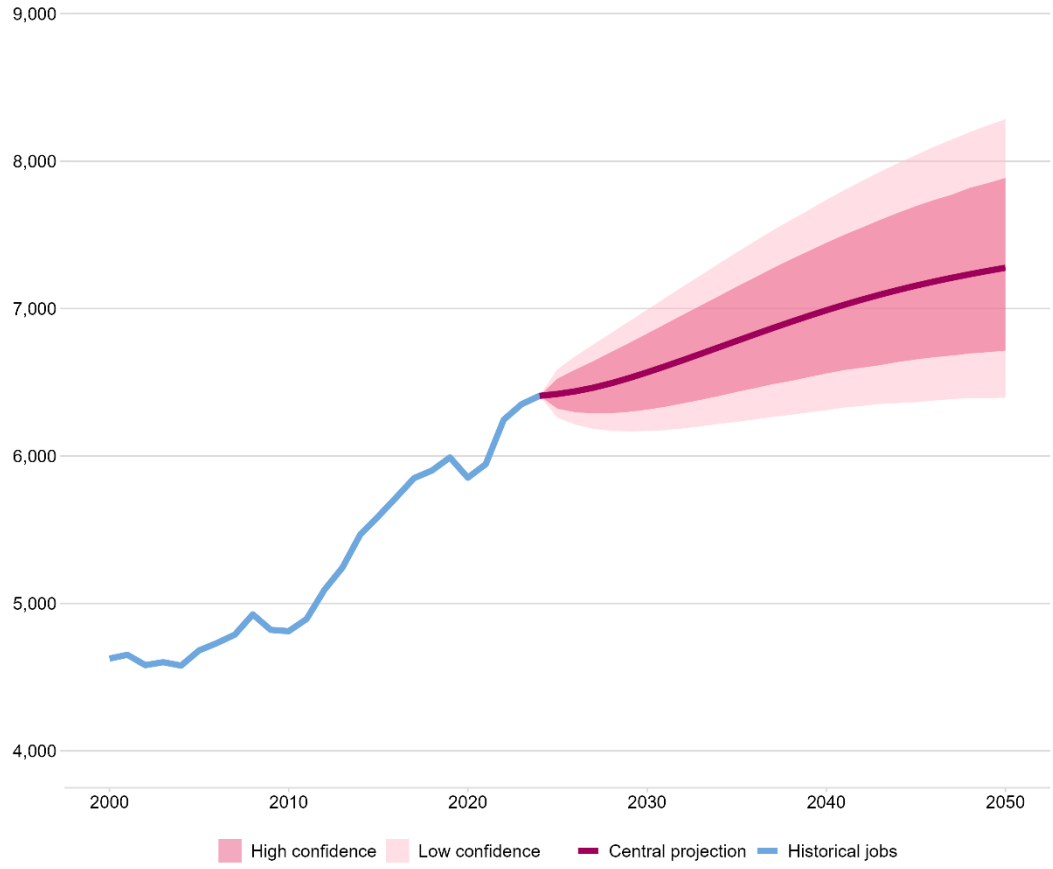
Uncertainty

All long-term projections involve uncertainty. To illustrate a range of outcomes, we model possible results when productivity growth has a random component that is additive to the historical trends.[16]

These simulations show that, even if our assumed productivity and GVA paths are correctly specified, a wide range of outcomes is still possible. Figure 3 shows that there is a four-in-ten chance that the number of jobs in 2050 will lie between 6.7 million and 7.9 million, and six-in-ten chance that it will lie between 6.4 and 8.3 million.

[16] We treat our central projection for productivity as a function of time, y=f(t), and assume that realisations of the function involve a random error term, e(t), which is normally distributed with a mean of zero and a standard deviation equal to the historical standard deviation of measured productivity around its linear trend. We then run 10,000 simulations of y(t)=f(t)+e(t) to generate estimates of time series of productivity growth. For each simulation, we calculate workforce jobs by assuming the GVA path remains the same as in the central scenario.

Figure 3: London's long-term employment projection with uncertainty



Population-based projections

We also test results against a population-based projection. This applies age- and sex-specific employment rates from current data to the GLA's latest demographic projections.[17]

As shown in **Figure 4**, our main model result (the blue line) is consistent with population-based workforce job projections on the GLA's 2024-based demographic projections.[18] The three core scenarios in the demographic projections are:

- Mid: principal fertility, principal life expectancy, 10 years past migration
- High: high fertility, high life expectancy, 15 years past migration
- Low: low fertility, low life expectancy, 5 years past migration

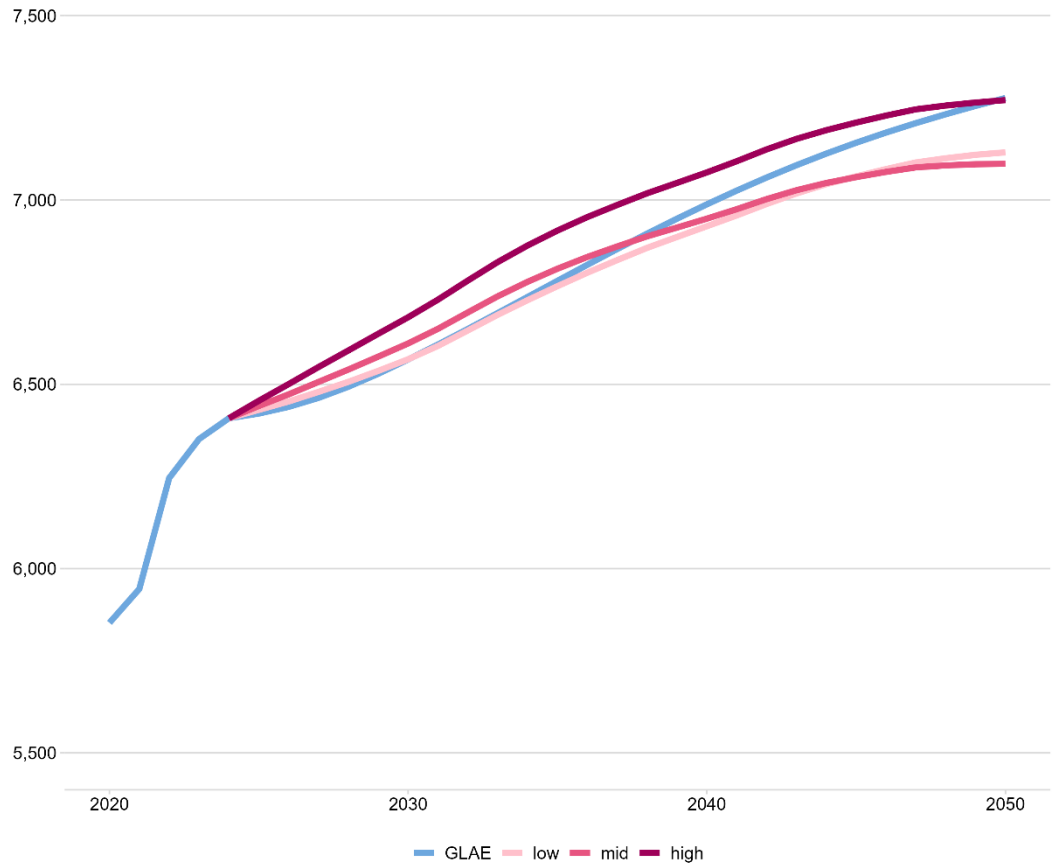
[17] We have explored the impact of hybrid working on workforce job growth and found that workforce job growth is not influenced by the changing commuting patterns. Since the pandemic, the commuting patterns of London's workers and residents have shifted. Nevertheless, the growth in workforce job numbers has closely mirrored the growth in local workers. This supports the continued validity of the population model, which assumes that employment growth (growth of London residents in employment) corresponds to workforce job growth. However, the reduction in net (in-) commuters alongside the increase in jobs in the past years can be explained by the rise of hybrid working. While many jobs remain based in London, a significant portion now allows for working from home. As a result, the use of office space has changed, and the relationship between workforce job numbers and the demand for office space is shifting.

[18] GLA (2025). GLA 2024-based population projections – research outputs. Available at: https://data.london.gov.uk/blog/gla-2024-based-population-projections-research-outputs/

Total population in London is projected to reach between 10.0 million and 10.4 million by 2050, with annual average growth rates ranging from 0.3% to 0.5% over 2025-50. The working age population (aged 16-64 years) is projected to range from 6.7 million to 6.9 million, growing at an annual average rate of 0.3% to 0.4%.

In our London employment model, annual jobs growth averages 0.5% from 2025 to 2050. This is higher than the projected growth of the working-age population but remains within the bounds of total population growth. This could imply higher net in-commuting, increased participation, more multiple-job holding, or a combination of these factors.

Figure 4: Population-based employment projections, 000s, 2020-2050



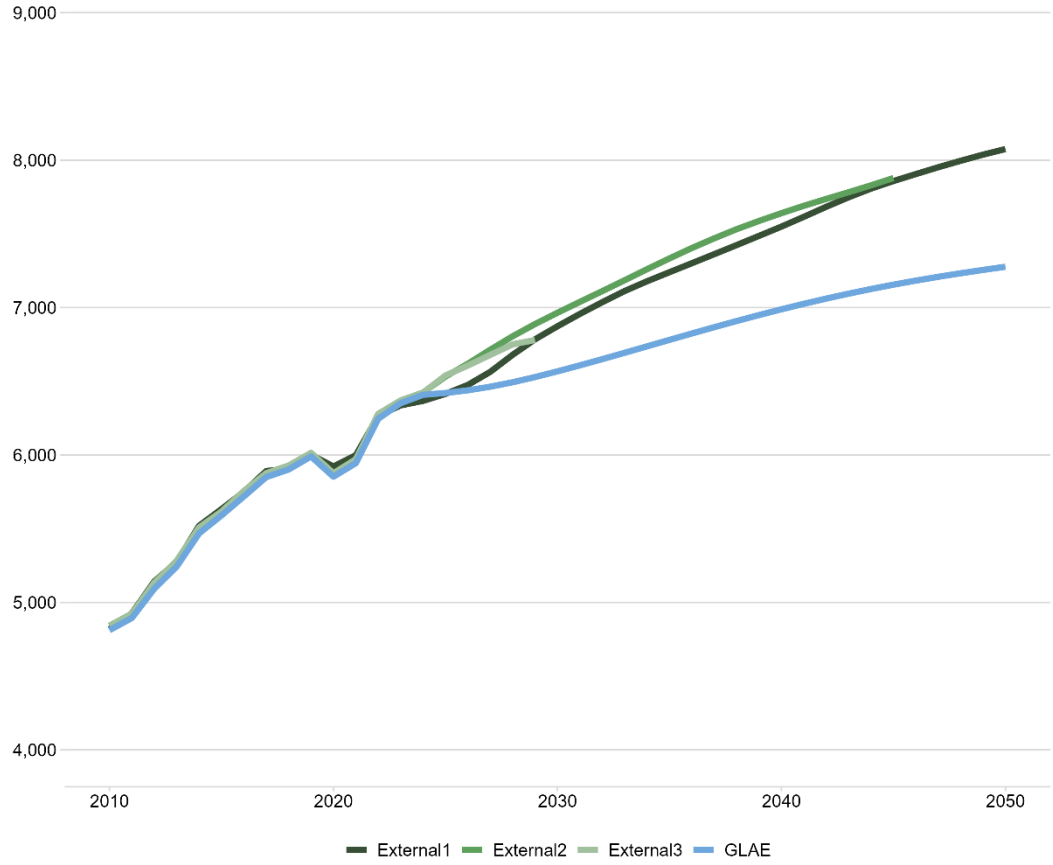
Comparisons with external forecasters

We also benchmark our results against three external forecasting organisations that use different modelling approaches and assumptions (**Figure 5**). Our central result is lower than these forecasters, mainly because they assume faster GVA growth and weaker productivity growth before 2030. In effect, their results imply higher employment growth is needed to match output growth.

It should be noted that these three external forecasters, for which we have access to detailed data, tend to assume higher growth than other independent forecasters in the very short term.[19] For example, previous updates from our comparison group forecast London's workforce jobs in 2024 at around 6.7 million, compared with an actual outturn figure of 6.4 million.

[19] A comparison with other independent forecasters at the UK level, see Forecasts for the UK economy: July 2025

Figure 5: Projected London jobs growth, core model growth rate compared to external forecasters



Chapter 4: Sector-level projections

Summary

London's labour market continues to be shaped by long-term structural shifts.

- Jobs growth (2024 to 2050) will remain concentrated in the largest sectors.
- By 2050, professional, real estate, scientific and technical activities will add 373,000 jobs, information and communication 164,000, and health and social work 130,000.
- However, four sectors are projected to decline: manufacturing (-37,000 jobs), transport and storage (-34,000), wholesale (-32,000) and retail (-32,000).
- Comparisons with previous projections and external forecasters support confidence in our projections.

4.1 Overview

The industrial composition of London's labour market has evolved over the past decades, shaped by long-term structural trends and recent shocks.[20] Since 2004, growth has been strongest in professional services, health, and information and communication, while manufacturing, wholesale and retail have contracted. This pattern is set to continue. Although AI could transform the sectoral structure of the economy, as well as types of jobs within sectors, its effects remain uncertain. This historical trend-based model is not designed to predict these types of impacts.

As shown in **Table 3**, professional, scientific, technical and real estate activities will continue to be the largest sector in 2050, reaching 1.5 million jobs (20.7% of the total). This means it will add 373,000 jobs from its 2024 level. The second largest sector in 2050 is projected to be health and social work, with 833,000 jobs (11.4% of the total), an increase of 130,000 jobs from its 2024 level. Information and communication (718,000 jobs), along with administrative and support services (700,000 jobs), are also among the largest sectors by 2050, each accounting for around 10% of total jobs.

The largest sectors are the same as in the previous projections and those identified by external forecasters.

[20] Cominetti, N., Costra, R., Eyles, A., Moev, T., & Ventura, G. (2022). Changing jobs: Change in the UK labour market and the role of worker mobility. *Resolution Foundation.*

Table 3: Summary of sector projections

Sector	Jobs (000s, 2050) ▼	Job shares (2050)	Jobs added (000s, 2024-2050)	CAGR (2024-2050)
Professional & property	1,503	20.7%	373	1.1%
Health	833	11.4%	130	0.7%
Information & Communication	718	9.9%	164	1.0%
Administrative & support service	700	9.6%	72	0.4%
Accommodation & food service	541	7.4%	96	0.8%
Financial & insurance activities	522	7.2%	63	0.5%
Education	457	6.3%	37	0.3%
Retail	372	5.1%	−32	−0.3%
Construction	313	4.3%	26	0.3%
Public Admin & defence	298	4.1%	15	0.2%
Transport & Storage	271	3.7%	−34	−0.5%
Arts & recreation	246	3.4%	10	0.2%
Other services	198	2.7%	13	0.3%
Wholesale	159	2.2%	−32	−0.7%
Manufacturing	102	1.4%	−37	−1.2%
Primary & utilities	43	0.6%	5	0.5%

Created with Datawrapper

4.2 Growing sectors

The strongest compound annual growth rates (CAGRs) from 2024 to 2050 are expected to be seen in professional and real estate services (1.1%), information and communication (1.0%), and accommodation and food services (0.8%). Together, these sectors will account for over 70% of London's total employment increase from 2024 to 2050.

Compared to the previous projections, stronger growth is projected in financial and insurance activities and in public administration and defence (**Figure 6**). Employment in both sectors has risen sharply since

reaching a low point in the 2010s. With a higher growth trend, the financial sector is projected to grow from 459,000 jobs in 2024 to 522,000 jobs by 2050, with the job share staying at 7.2%. Public administration and defence is projected to increase from 283,000 jobs in 2024 to 298,000 jobs by 2050, although its share of total jobs decreases from 4.4% to 4.1%.

4.3 Declining sectors

Four sectors are projected to decline by 2050 compared to 2024 levels: manufacturing (-37,000 jobs), transport and storage (-34,000), wholesale (-32,000) and retail (-32,000).

Relative to previous projections, primary and utilities and public administration and defence are no longer among the declining sectors. Primary and utilities has seen jobs growth and a stable job share in recent years. It is projected to retain a similar job share, with only a small increase in employment (fewer than 5,000 jobs) between 2024 to 2050. Public administration and defence has experienced rapid jobs growth since the mid-2010s, with an annual growth rate of 2.9% from 2016 to 2024, above the overall jobs growth.

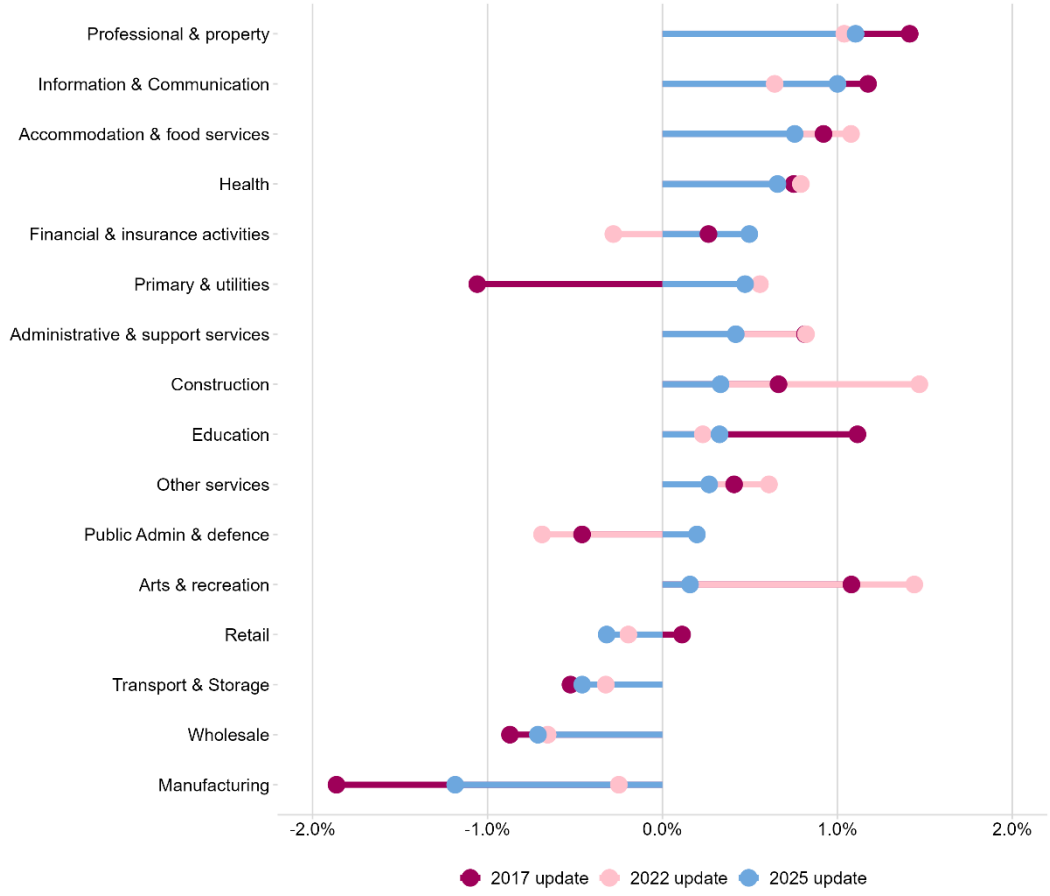
We expect weaker jobs growth in construction and in arts and recreation compared with previous projections. It should be noted that jobs in these sectors are not expected to decline in absolute terms, but rather to grow at slower rates.

The construction sector has seen a declining share of jobs following the financial crisis and Brexit.[21,22] Based on past trends, the number of workforce jobs in this sector is projected to increase from 287,000 (4.5% of London jobs) in 2024 to 313,000 (4.3%) by 2050. The projections are based on historical trends only so policy changes, such as the Government's higher indicative housing need figures, are not considered.

The arts and recreation sector saw sustained growth from the 1970s to the mid-2010s, when its share of London jobs peaked at 3.6%. Following a decline after the COVID-19 pandemic, workforce jobs in this sector is expected to reach 246,000 by 2050, accounting for 3.4% of London's total employment.

[21] Financial Times (2025). Who will build Britain?
[22] The Migration Observatory (2025). EU Citizens in the UK Labour Market.

Figure 6: CAGR comparisons with previous projections



Chapter 5: Borough-level projections

Summary

- All local authorities in London are projected to have positive jobs growth over the 2024-2050 period. This is the case using trend-only based projections for boroughs, or taking into account new employment site capacity identified in the London Employment Sites Database (LESD) 2024.

- Final results (which include the site capacity adjustment) see Inner London boroughs projected to grow faster (0.6% per year on average) than Outer London boroughs (0.3% per year on average). over the period.

- The City of London (+192,000 jobs or 0.9% per year), Tower Hamlets (+101,000, or 1.0% per year), and Southwark (+79,000 or 0.8% per year) are expected to add the largest numbers of jobs.

- However, some Outer London boroughs where large amounts of new site capacity have been identified are also projected to grow relatively fast.

5.1 Final total jobs

Final borough-level projections – after accounting for employment site capacity and including both employees and self-employed – show that jobs remain concentrated in central boroughs. The City of London, Westminster, and Camden combined are projected to account for over 30% of total London jobs in 2050 (**Table 5**).

All 33 boroughs are projected to experience positive growth between 2024 and 2050.

Overall, Inner London boroughs are projected to grow by 17.2% relative to their 2024 levels (adding 704,000 jobs), compared with slower growth of 7.2% (164,000 jobs) in Outer London boroughs (**Table 4**).

Employment in the Central Activities Zone (CAZ) is projected to grow by 16.3% from its 2024 level, adding 405,000 jobs. The Northern Isle of Dogs (NIOD) is expected to add 42,000 jobs, an increase of 31.1%. The Old Oak and Park Royal Development Corporation (OPDC) area is projected to grow by 9.2%, adding around 5,000 jobs.[23]

In absolute terms, the City of London (+192,000), Tower Hamlets (+101,000), and Southwark (+79,000) are expected to add the largest numbers of jobs relative to their 2024 levels (**Table 5**). Southwark, for instance, has seen fast growth for over a decade, and the LESD identifies significant additional employment capacity over the projection period.

In percentage terms, boroughs with the fastest jobs growth include Tower Hamlets (+31.1%), the City of London (+27.4%), and Barking and Dagenham (+26.7%). The smallest jobs growth rates are projected for Bromley (+0.5%), Bexley (+2.3%), and Havering (+3.1%) (Figure 7).

[23] The CAZ, NIOD and OPDC cover portions of the London boroughs. Using the same method as in the 2017 and 2022 projections, we apportion borough jobs to these bespoke areas.

Table 4: Summary of bespoke area results

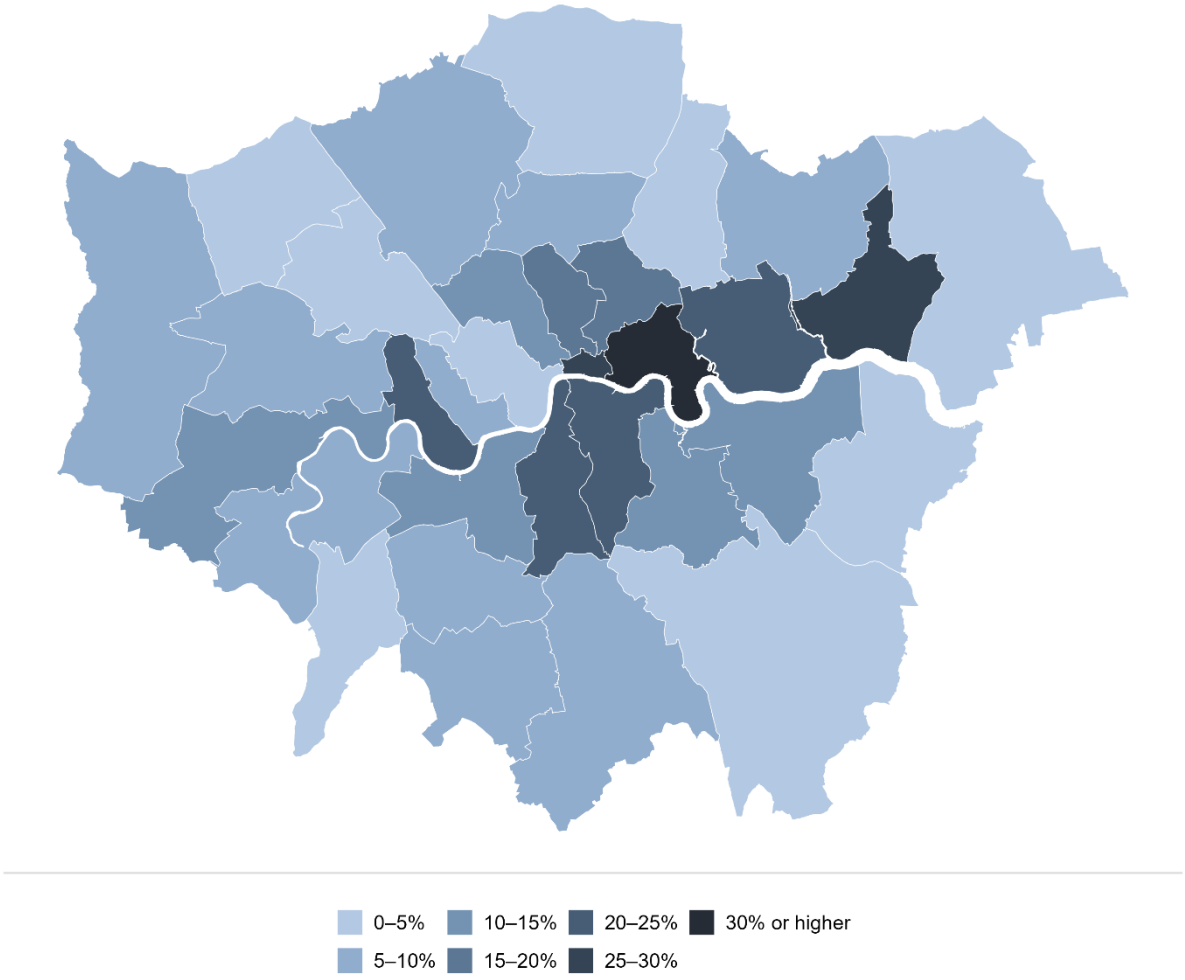
Area	Jobs (000s, 2050)	Job shares (2050)	Jobs added (000s, 2024-2050)	CAGR (2024-2050)
Inner London	4,827	66.3%	704	0.6%
Outer London	2,450	33.7%	164	0.3%
CAZ	2,888	39.7%	405	0.6%
NIOD	178	2.4%	42	1.0%
OPDC	54	0.7%	5	0.3%

Created with Datawrapper

Table 5: Summary of borough results

Borough	Jobs (000s, 2050) ▼	Job shares (2050)	Jobs added (000s, 2024-2050)	CAGR (2024-2050)
City of London	894	12.3%	192	0.9%
Westminster	866	11.9%	27	0.1%
Camden	490	6.7%	56	0.5%
Tower Hamlets	428	5.9%	101	1.0%
Southwark	423	5.8%	79	0.8%
Islington	340	4.7%	53	0.7%
Hillingdon	237	3.3%	20	0.3%
Hackney	227	3.1%	37	0.7%
Lambeth	225	3.1%	41	0.8%
Hounslow	201	2.8%	22	0.5%
Hammersmith and Fulham	194	2.7%	33	0.7%
Newham	193	2.7%	36	0.8%
Barnet	177	2.4%	12	0.3%
Wandsworth	168	2.3%	19	0.5%
Kensington and Chelsea	166	2.3%	8	0.2%
Ealing	165	2.3%	12	0.3%
Croydon	161	2.2%	14	0.3%
Brent	150	2.1%	6	0.2%
Bromley	130	1.8%	1	0.0%
Enfield	128	1.8%	4	0.1%
Greenwich	115	1.6%	12	0.4%
Sutton	113	1.6%	10	0.4%
Haringey	110	1.5%	9	0.3%
Havering	109	1.5%	3	0.1%
Richmond upon Thames	104	1.4%	6	0.2%
Redbridge	103	1.4%	8	0.3%
Lewisham	99	1.4%	9	0.4%
Waltham Forest	96	1.3%	4	0.2%
Kingston upon Thames	94	1.3%	3	0.1%
Merton	94	1.3%	5	0.2%
Barking and Dagenham	93	1.3%	20	0.9%
Harrow	93	1.3%	3	0.1%
Bexley	91	1.2%	2	0.1%

Figure 7: Employment projections for London boroughs, % increase, 2024-2050



5.2 Self-employed jobs

As described in more detail in Appendix 3, the borough-level projections are constructed in two parts: employee jobs and self-employed jobs.[24] Here we present results for self-employed jobs

At the London-level, the share of self-employed jobs has gradually increased from just below 6% in the early 1970s to a peak of around 13% between 2012 and 2019. After the pandemic, however, self-employed jobs decreased both in number and share, from 683,000 (11.7%) in 2020 to 633,000 (10.0%) in 2023.

We assume that the share of self-employed jobs will gradually recover to the five-year average over 2019–2023, at 11.2% in London. This share is below the previous projections of 14.4% (2022) and 16.2% (2017), reflecting data that suggest an end to the previous period of consistent growth.

By 2050, self-employed jobs in London are projected to reach around 817,000.

[24] This is because the ONS Workforce Jobs series is not available at the borough level. Instead, borough-level jobs data comes from the ONS Business Register and Employment Survey and covers only employee jobs. Self-employed jobs data separately comes from ONS Annual Population Survey.

5.3 Employee jobs (trend-based)

In 2050, 88.8% of total workforce jobs in London are projected to be employee jobs, at around 6.5 million. Employee jobs at borough level are first estimated based on productivity trends and then combined with borough-level employment site capacity. This section presents the initial, trend-based results; final capacity-constrained results are presented in Section 5.1.[25]

Based on these trend-based estimates alone, most additions to employee jobs from 2024 to 2050 are projected to occur in the City of London, Islington, and Tower Hamlets. These three boroughs account for 286,000 of the 722,000 net increases in employee jobs over the projection period. All three have experienced strong jobs growth since around 2010.

By contrast, the boroughs with the smallest increase in employee jobs are Enfield, Kingston upon Thames and Harrow. Their shares of total London jobs have declined for at least 20 years (**Table 6**).

Table 6: Share of employee jobs in selected boroughs

Growth rank	Borough	2010	2015	2025	2050
1	City of London	8.2%	8.9%	10.7%	11.1%
2	Tower Hamlets	5.0%	5.6%	5.4%	6.3%
3	Islington	4.4%	4.5%	4.7%	5.5%
31	Enfield	2.2%	2.1%	1.9%	1.7%
32	Kingston upon Thames	1.8%	1.7%	1.4%	1.2%
33	Harrow	1.6%	1.4%	1.3%	1.2%

Created with Datawrapper

[25] Both trend-based and final borough results are available in the supplementary data tables.

Chapter 6: Scenario analysis

Summary

- Historical scenarios apply output and productivity growth rates from different economic cycles to project workforce jobs in London, producing a range from 6.4 million (-12%) in the 1979-1990 scenario to 10.2 million (+40%) in the 2009-2019 scenario.

- Our central projection delivers a balance of historical outcomes – with productivity improving relative to recent cycles but not returning to pre-2008 highs, and jobs growth higher than in the 1980s but slower than in later periods.

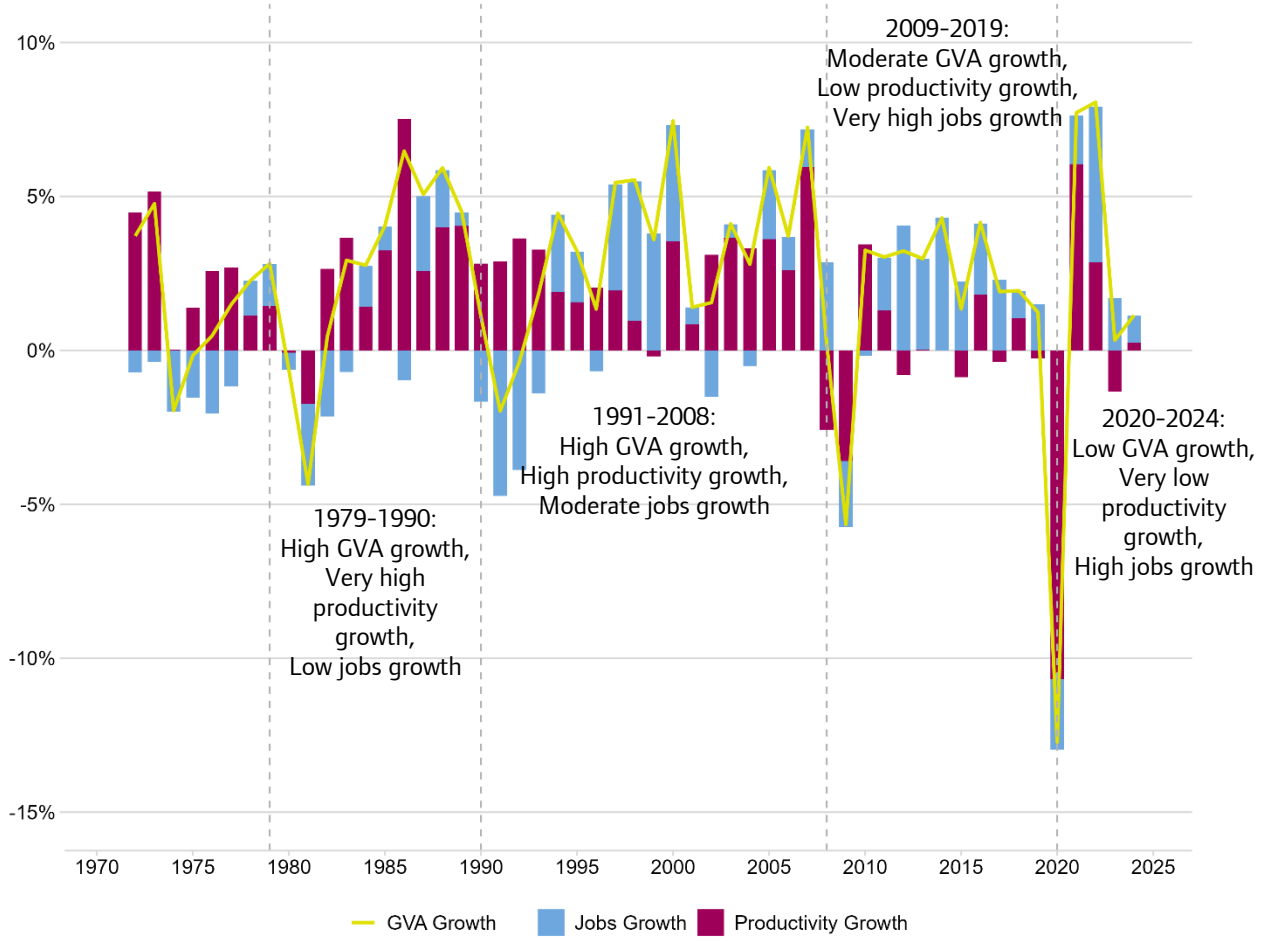
- GVA growth scenarios apply higher and lower GVA assumptions, resulting in an additional 569,000 jobs in the high scenario and 369,000 fewer jobs in the low scenario by 2050.

6.1 Historical scenarios

Economic outcomes in London since the 2007-2008 financial crisis have diverged from previous experience. The 2008-2019 period was characterised by low productivity growth, moderate output growth and high jobs growth. The 2020-2024 period, taking in the COVID-19 pandemic and subsequent recovery, has seen even lower (negative) productivity growth and low output growth, but until very recently exceptionally high jobs growth. Earlier economic cycles followed different trajectories, not only for jobs but also for productivity.

As a sensitivity test for this projection round, we run four alternative scenarios using the output and productivity growth rates observed in London's most recent economic cycles: 1979-90, 1990-2008, 2008-2019 and 2020-2024 (see **Figure 8**).

Figure 8: London GVA growth and components, % per year



The upper panel of **Table 7** summarises the annual average growth rates recorded during each period, alongside those assumed for the 2025-50 projection period. The lower panel shows the implied outcomes in 2050 under each scenario, expressed relative to our central projection.

The first three scenarios all deliver higher levels of economic output (GVA) in 2050 than the central projection, while the final scenario results in a much lower GVA. Our central productivity growth assumption lies between the higher rates observed before 2008 and the weaker rates recorded since the financial crisis.

Given the strong empirical link between output per job and average wages, the scenarios imply different living-standards outcomes. The 1979-90 scenario would likely deliver the highest living standards for residents; the 1991-2008 scenario follows closely on living standards and with many more jobs; the 2009-2019 scenario is associated with lower living standards and a huge increase in jobs; and the 2020-2024 scenario would imply worse living standards alongside substantial jobs growth.

Under the different GVA and productivity growth rate assumptions in these scenarios, the projected employment in 2050 ranges from 6.4 million (-12%) in the 1979-1990 scenario to 10.2 million (+40%) in the 2009-2019 scenario.

Our central projection therefore represents a middle path across historical experience, with productivity growth improving from recent lows but not reaching previous highs, and jobs growth stronger than in the 1980s, but slower than in more recent periods.

Table 7: Scenarios from historical periods

Scenarios	GVA	GVA per job	Employment
Average annual growth rates			
Central	1.9%	1.4%	0.5%
1979-1990	2.6%	2.6%	0.0%
1991-2008	3.2%	2.3%	0.9%
2009-2019	2.0%	0.2%	1.8%
2020-2024	0.9%	-0.6%	1.4%
Out-turn in 2050 (scenarios relative to out-turn for central projection)			
Central	£776bn	£106,625	7.3m
1979-1990	+20%	+36%	-12%
1991-2008	+39%	+26%	+11%
2009-2019	+3%	-27%	+40%
2020-2024	-23%	-40%	+30%

Created with Datawrapper

6.2 GVA growth scenarios

The historical scenarios illustrate the wide range of potential long-run outcomes for employment but are less informative about the sensitivity of our central projection to small changes in assumptions. Because employment growth in the model is determined by the relationship between output growth and productivity growth, we also assess sensitivity by varying GVA growth while holding productivity assumptions constant.

We therefore model two additional scenarios: one with higher GVA growth and one with lower GVA growth.[26] Productivity growth assumptions are unchanged across scenarios. These alternative GVA paths are drawn from previous projection updates to provide a realistic and policy-relevant range of outcomes.

Under our central projection (as described in Chapter 2), GVA growth rises from 1.6% in 2025 to around 2.0% in the early 2030s before declining to 1.7% in 2050. This implies cumulative growth of 63% over the period, consistent with the OBR's long-term economic determinants.

- In the high-growth scenario, we apply the GVA growth path used in the 2017 projections, with GVA growth rising to 2.0% by 2030 and then increasing steadily to 2.5% by 2050.
- In the low-growth scenario, we apply the long-term GVA growth path used in the interim 2022 publication, with growth rising to 1.8% in the 2030s before declining to 1.5% in 2050.

Although these changes in GVA growth rates are modest – they equate to just a 0.3 percentage point average annual increase in GVA growth in the high scenario and a 0.2 percentage point decrease in the low

[26] These results further support the economic and infrastructure demand and supply study for the forthcoming London Plan

scenario – the impacts on workforce jobs are substantial. Compared to the central scenario, the high-growth scenario results in 569,000 additional jobs by 2050, while the low-growth scenario results in 369,000 fewer jobs (**Table 8**).

Table 8: Scenarios from different GVA assumptions

Scenarios	Jobs (2050)	Annual added jobs (2024-2050)	Average annual growth rate (2024-2050)
Central	7,277,000	33,000	0.5%
Higher	7,846,000	55,000	0.8%
Lower	6,907,000	19,000	0.3%

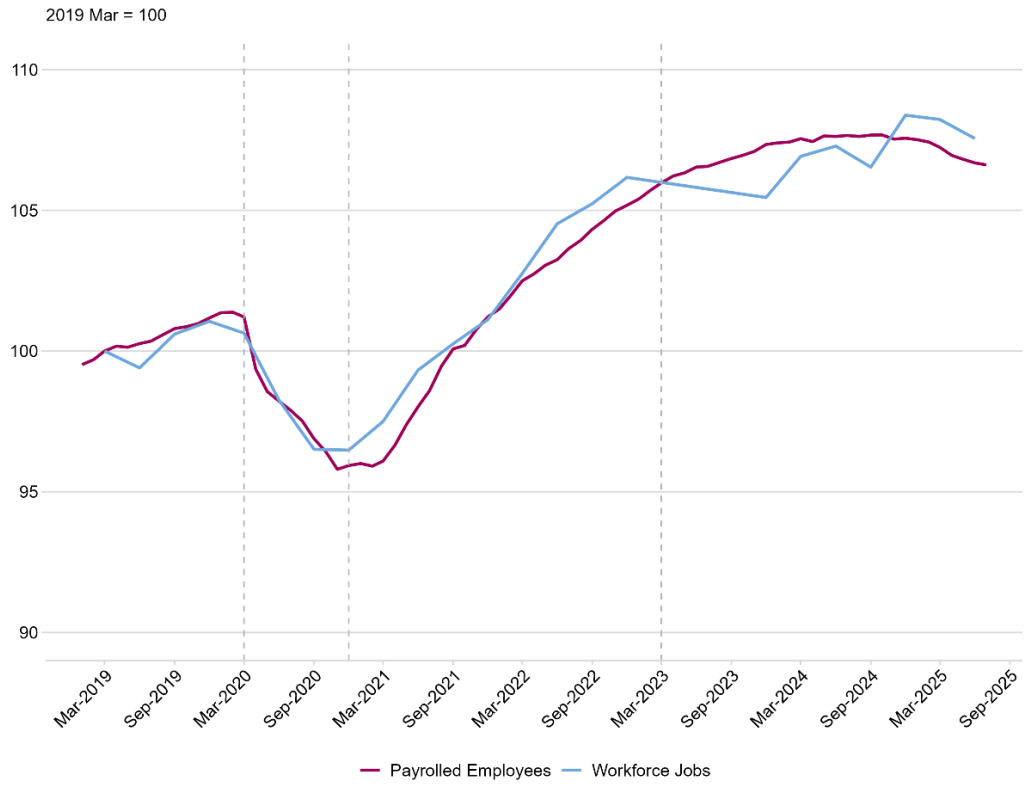
Created with Datawrapper

Appendix 1: Key changes since the pandemic

Jobs growth since the last publication in 2022 (which was based on historical data up to 2021) has been unexpectedly fast.

Starting from the pandemic low of 5.8 million jobs in December 2020, there was a post-pandemic job boom with London-level employment returning to its pre-pandemic (March 2020) level in early 2022. It continued to rise rapidly through to March 2023. Since then, there has been little growth. The total has fluctuated but, as of March 2025, was only very slightly above its level of two years previously (**Figure 9**).

Figure 9: Post-pandemic job boom comes to an end



Source: ONS Workforce Jobs, HMRC PAYE RTI

The fast post-pandemic jobs growth in London has been associated with changes in the level and sectoral structure of immigration.[27]

HMRC data from payrolls show (distinct from the Workforce Jobs data that we use in the rest of this report) that the count of employments held by UK nationals fell by 10,000 between the eve of the pandemic in February 2020 and December 2024, the count held by EU nationals fell by 130,000 – and the count held by other nationals rose by 429,000.[28] Many of the industries in which these employments grew fastest, such as health and social work; information and communication; and administration and support services are also the industries which have seen the fastest overall growth in Workforce Jobs over the period.

Factors such as immigration, the pandemic, and low productivity have all influenced London's economy since the recent rounds of employment projections. This matters for our projections because the starting

[27] The Migration Observatory (2024). Migrants in the UK Labour Market: An Overview.
[28] GLAE (2025). PAYE employments by nationality - August 2025.

values have a big impact on the long-term – both from a level-shift effect and from the historical trend used to inform the growth rates we assume in the future.

Table 9 shows how the starting position for our new estimates for GVA, labour productivity and job numbers have changed since the 2017 and 2022 publications.

- The London-level GVA outturn in 2024 was £476 billion, £23 billion lower than projected in 2017 and £30 billion lower than the 2022 projection. The lower GVA will tend to shift projections downwards.
- Job numbers in 2024 exceed both previous projections by 184,000 and 217,000, respectively. The post-pandemic job boom has shifted the starting point of this round of projections upwards.
- Taken together, this means that Labour productivity (i.e., GVA per job) in 2024 stood at £74,282, which is £5,892 lower than the 2017 projection and £7,493 lower than the 2022 projection. This lower productivity will tend to shift projections upwards.

Table 9: Projections vs. outturns of key variables

Estimates for 2024	GVA (billion, at 2019 level)	Productivity (GVA/Jobs)	Jobs (thousand)
2017 Publication	499	80,174	6,224
2022 Publication	506	81,775	6,191
Actual out-turn	476	74,282	6,408

Created with Datawrapper

Appendix 2: Data note

The projection models are based on the data available at the time of construction (August 2025 in this update). Most datasets have been updated to 2024, while borough-level data is available up to 2022 and nowcast estimates to 2025.

The main data for projections include:

- London GVA series (1971-2024): GLAE nowcast based on Economic Statistics Centre of Excellence UK regional nowcasting estimates and ONS regional GVA
- London jobs series (total and by sectors, 1971-2024): ONS Workforce Jobs (WFJ)
- Wholesale and retail jobs by employment type (1996 – 2023): GLAE data request based on ONS WFJ
- Employee and self-employed jobs (1971-2024): ONS WFJ
- Self-employed jobs by local authority (2008-2022): ONS Annual Population Survey
- Sector-by-borough employee jobs (1971-2022): GLAE calculation based on ONS Business Register and Employment Survey (BRES) and ONS WFJ
- London employment sites database (2024-2050): GLA Planning

All GVA values in this model are at 2019 basic prices. The GVA series combines the UK regional nowcasting estimates (Economic Statistics Centre of Excellence) for 1971–1997, ONS Regional GVA for 1998–2022, and GLAE estimates for 2023–2025, as in London's Economic Outlook (Spring 2025).[29]

The jobs series was constructed using a variety of official data for 1971-1995 and ONS WFJ for 1996-2024. Small sectors were aggregated, and section G (Wholesale and retail trade; repair of motor vehicles and motorcycles) was split into G1 (Wholesale) and G2 (Retail). Section T (Activities of households as employers; undifferentiated goods-and-services-producing activities of households for own use) and section U (activities of extraterritorial organisations and bodies) are excluded.

The London employment site database (LESD 2024) records recently completed employment developments and those in pipeline in London boroughs from 2024 to 2050. We use the estimated net employment capacity totals in each borough.

[29] London's Economic Outlook: Spring 2025. Available in: https://data.london.gov.uk/download/9b16ee6c-4275-4de4-9c0b-d9803dfeb191/45c9813a-fa9f-4cef-9cbb-a622d3709ce4/LEO-Spring-2025.pdf

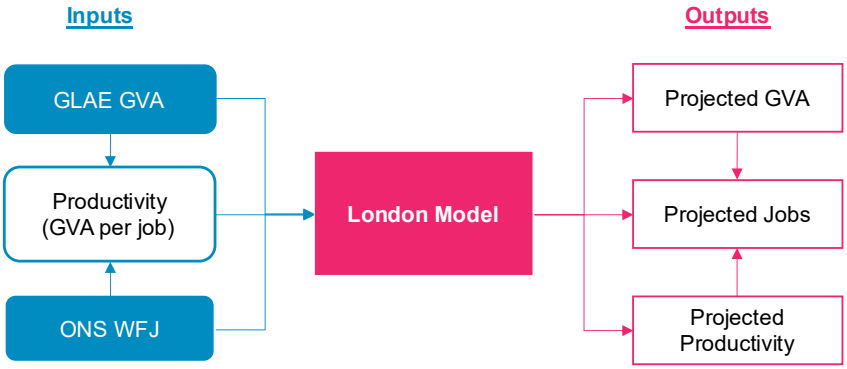
Appendix 3: Model structure

The projection framework contains a set of interrelated models. The core components are London model, sector model and borough model.

London model

London model is as **Figure 10**. Three main inputs are historical GVA, workforce jobs, and labour productivity. Three main outputs are projected GVA, productivity, and jobs.

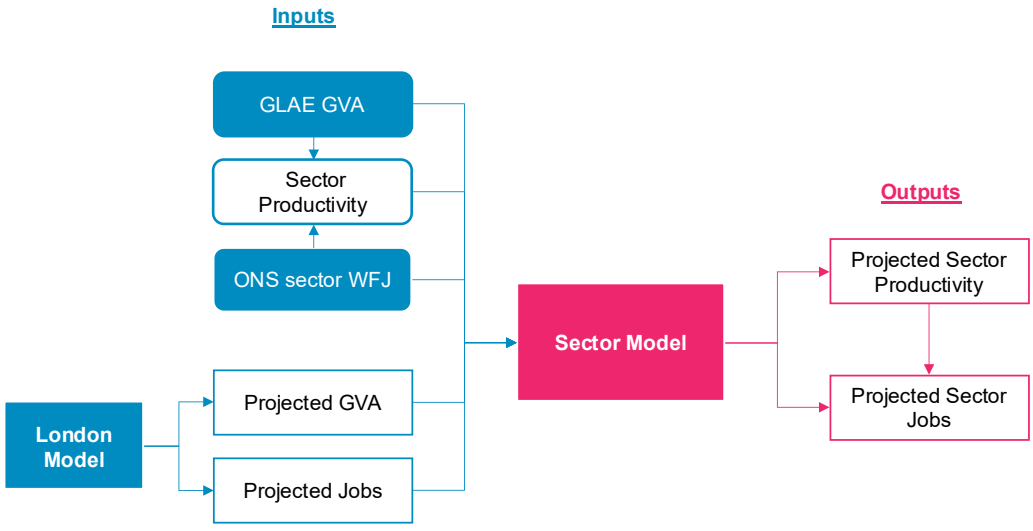
Figure 10: London model structure



Sector model

Main inputs for sector model are historical London GVA, workforce jobs by sector, sector productivity, and the projected GVA and total jobs from London model. Two outputs are projected sector productivity and jobs, as shown in **Figure 11**.

Figure 11: Sector model structure



The sector model first calculates the job numbers based on the relationship between London-level output and sector productivity to get unconstrained sector results. Then final sector jobs in each year are constrained to the total projected London jobs.

The sector model is similar to the London model but with a different measurement of sector productivity. Instead of using sector GVA per sector job, we measure sector productivity by London-level GVA per sector job. By using this approach, we do not need to project GVA growth in each sector.

For some sectors we supplement our analysis using the GLA Economics detailed jobs series for 1998-2022 and monthly labour market update to inform sector judgements. The fast-growing sectors are professional services, information and communication, as well as accommodation and food services. These sectors all see continuous growth in jobs and their share of total London jobs.

In contrast, the slowest growing sectors are manufacturing, wholesale, transport and storage and retail. Manufacturing has experienced continuous contraction for decades. The other three sectors saw an increase in job numbers but a declining share of jobs in recent years. As overall growth slows, these sectors are projected to shrink.

We carry out the trend selection (details in Appendix 4) to determine the appropriate trends to project forward in each sector. **Table 10** provides the trend selection assumptions for sectors.

Table 10: Productivity trend selection for sectors

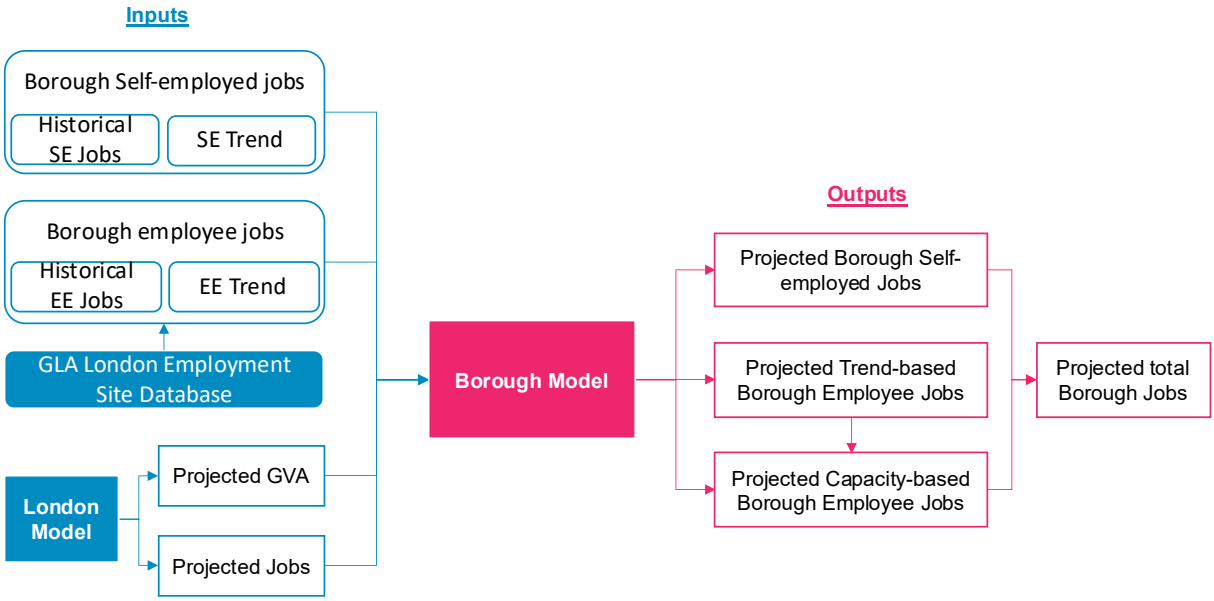
Sector	Long-term start year	Long-term trend weight	Short-term start year	Short-term trend weight	Weighted productivity ▲
Professional & property	1988	0.55	2008	0.45	−0.1%
Information & Communication	2001	0.30	2009	0.70	0.0%
Accommodation & food service	1999	0.65	2013	0.35	0.2%
Health & Social Care	2001	0.40	2009	0.60	0.3%
Primary & utilities	2003	0.95	2015	0.05	0.5%
Financial & insurance activities	2004	0.90	2013	0.10	0.5%
Administrative & support service	2002	0.25	2009	0.75	0.5%
Construction	2010	0.65	2017	0.35	0.6%
Education	1991	0.20	2009	0.80	0.6%
Other services	1997	0.80	2017	0.20	0.7%
Public Admin & defence	2002	0.60	2016	0.40	0.8%
Arts & recreation	2003	0.10	2014	0.90	0.8%
Retail	1981	0.15	2007	0.85	1.3%
Transport & Storage	1986	0.40	2010	0.60	1.4%
Wholesale	1995	0.20	2007	0.80	1.7%
Manufacturing	1995	0.10	2009	0.90	2.2%

Borough model

In the borough model (**Figure 12**), trends are separately calculated for employee and self-employment jobs. We projected employee jobs and self-employment jobs separately before adding them up. To estimate borough jobs, we used the results from the London model and borough labour productivity growths to first

produce a trend-based projection in three steps. The trend-based results are then further bi-angulated with estimates of employment capacity associated with development sites from the LESD 2024 which incorporate planning permissions, local plan site allocations and spatial constraints.

Figure 12: Borough model structure



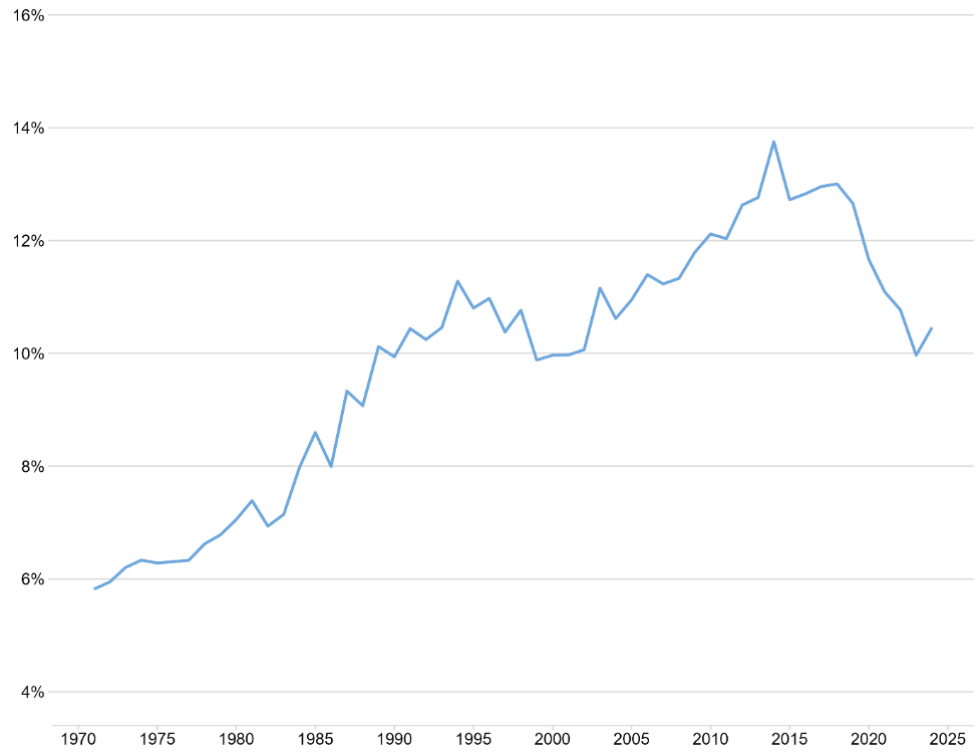
Step 1: London employee and self-employed jobs

We combine historical trends in London output per job in each type of employment to project the share of self-employment in total jobs over time and then apply these shares to the total jobs in London from the London model. This process is mathematically equivalent to projecting the shares of jobs held by employees and the self-employed.

The share of self-employment jobs in London has risen from 6% in 1971 to a peak of 14% in 2014, see **Figure 13**. Since then, self-employment has ticked down to 13% in 2019 before the pandemic. There has also been a further decline since around the start of the pandemic. Self-employment jobs accounted for 10% of the total in 2023. Given the strong downward trend in the self-employment share since the pandemic, we project a shallower rate than previously.

We take the average of self-employment share from 2019 to 2023, at 11%, as the long-term self-employment share in the next decades.

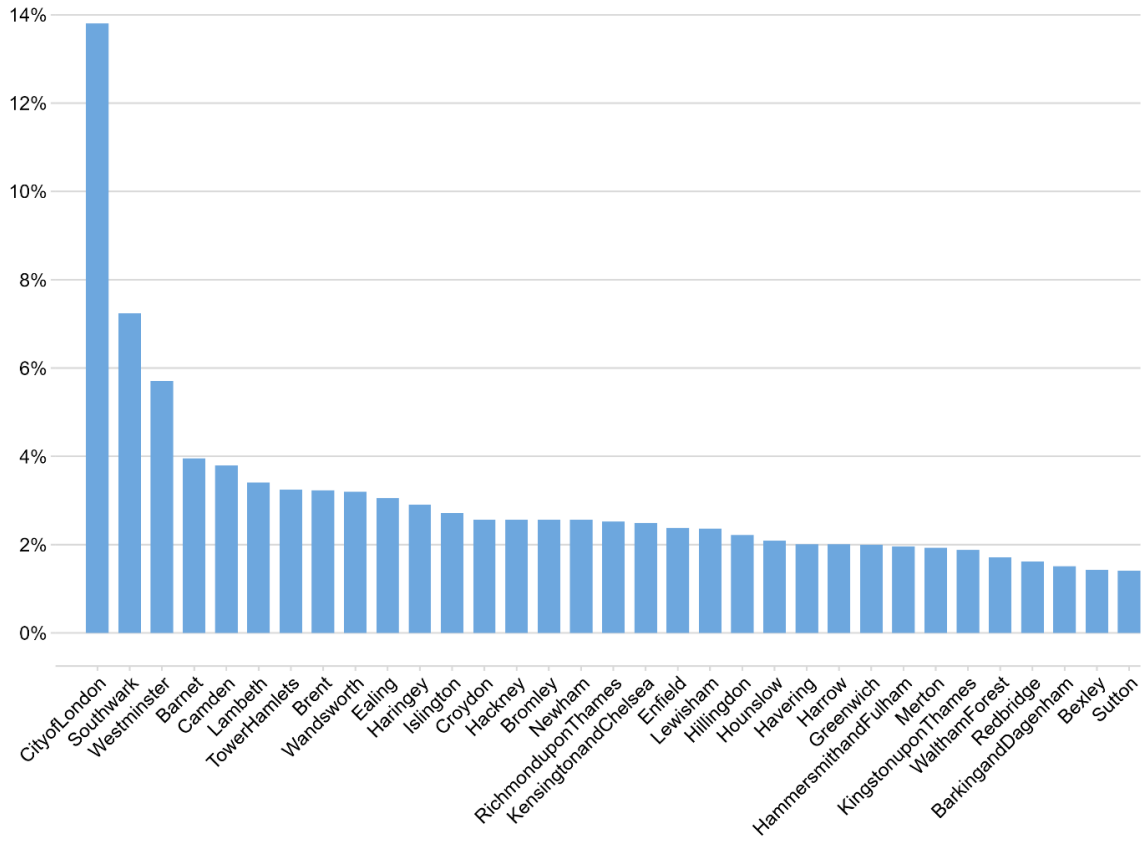
Figure 13: Share of self-employed jobs in London



Step 2: Borough self-employment jobs

We take the 2006-2022 borough shares of total London self-employment jobs and assume that these shares return to their 2018-2022 average over the following five years and then remain at that level from 2028 to 2050. **Figure 14** shows the 2018-2022 average shares for each borough. We apply these shares to the total London self-employment jobs projected from Step 1.

Figure 14: Average share of self-employed Jobs, by borough, 2018-2022



Step 3: Trend-based borough employee jobs

We input the borough labour productivity growth trends (similar to the calculation of sector productivity trends, this uses London GVA per borough job) and GLAE's borough-by-sector employee job series. The borough-by-sector employee job series are calculated by aligning borough-by-sector shares from the Business Register and Employment Survey (BRES) to sector employee jobs number from WFJ as the two data sources provide different employee data due to their methodology and coverage. To create a jobs series for boroughs and sectors that is consistent over time, we use the technique of Iterative Proportion Fitting to adjust each borough-by-sector share until they sum to the control totals of borough employee jobs and sector employee jobs.

Projecting borough productivity growth rates forward through same methodology as for the London and sector models and constraining the totals to the total London employee projections from Step 1 provides our estimate of borough employee jobs. More details on the borough productivity trends can be found in **Table 11**.

Table 11: Productivity trend selection for boroughs

Borough	Long-term start year	Long-term trend weight	Short-term start year	Short-term trend weight	Weighted productivity
Islington	1996	0.90	2011	0.10	0.6%
Newham	1999	0.60	2010	0.40	0.6%
Tower Hamlets	1975	0.70	1996	0.30	0.6%
Hackney	2003	0.90	2013	0.10	0.7%
Hillingdon	1995	0.70	2015	0.30	0.9%
City of London	1994	0.65	2008	0.35	1.0%
Hammersmith and Fulham	1999	0.50	2009	0.50	1.1%
Redbridge	1989	0.50	2006	0.50	1.1%
Sutton	1992	0.80	2016	0.20	1.1%
Camden	1997	0.60	2005	0.40	1.2%
Haringey	1989	0.40	2013	0.60	1.2%
Lambeth	1985	0.30	2006	0.70	1.2%
Southwark	1986	0.70	2007	0.30	1.2%
Wandsworth	1975	0.60	2014	0.40	1.2%
Barking and Dagenham	1984	0.30	2007	0.70	1.3%
Croydon	1983	0.40	2013	0.60	1.3%
Greenwich	1992	0.70	2013	0.30	1.3%
Havering	1986	0.50	2007	0.50	1.3%
Bexley	1987	0.50	2010	0.50	1.4%
Hounslow	1995	0.50	2009	0.50	1.4%
Lewisham	1996	0.40	2010	0.60	1.4%
Merton	1975	0.50	2005	0.50	1.4%
Richmond upon Thames	1998	0.10	2008	0.90	1.4%
Waltham Forest	1998	0.50	2011	0.50	1.4%
Barnet	1996	0.40	2007	0.60	1.5%
Brent	1996	0.50	2006	0.50	1.5%
Bromley	1983	0.50	2011	0.50	1.5%
Kensington and Chelsea	2001	0.20	2008	0.80	1.5%
Westminster	1988	0.50	2008	0.50	1.5%
Ealing	1997	0.30	2011	0.70	1.6%
Harrow	1986	0.40	2007	0.60	1.6%
Kingston upon Thames	1996	0.00	2008	1.00	1.6%
Enfield	1991	0.50	2007	0.50	1.7%

Step 4: Borough employee jobs constraints

The spatial distribution of jobs also depends on the capacity of employment sites by borough. For this we use information in the LESD. We calculate the employee jobs capacity of employment sites in the LESD. Then we average ("bi-angulate") the capacity results and the trend-based results in each borough. The sum of all boroughs employee totals is then constrained to the London employee total to produce the final result for employee jobs. Note that bi-angulation applies only to employee jobs because self-employed jobs are more weakly linked to employment sites.

Step 5: Final borough employment

Once the trend-based and capacity-based employee average is found, the borough trend self-employment jobs are added back to create the final jobs projection for boroughs.

Appendix 4: Productivity trend selection

Our approach to identifying London, sector and borough trends in productivity and turning points has been based on statistical approaches and informed judgements to identify the years that bookend short-term and long-term trends. We have then chosen a weighting of these trends to provide the key productivity growth assumption.

This publication updated London-wide, sector and borough productivity trends. We first calculated the productivity as London GVA per job. Breakpoints and trends between breakpoints are identified from historical time series data on productivity using the Bai and Perron (2003)[30] algorithm.

The Bai and Perron (2003) approach splits a linear regression across all points in a time series into an arbitrary number of segments and then minimises the Bayesian Information Criterion (BIC) to endogenously pinpoint the breakpoints. The BIC is a commonly used measure in model selection that prevents 'over-fitting' by penalising the addition of parameters (i.e. additional breakpoints in our context).

The approach is a generalisation of the simple Chow test which tests whether a single linear regression or a segmented regression with an exogenously given breakpoint best fits the data (an F-test that compares the residual sum of squares for the full versus segmented models).

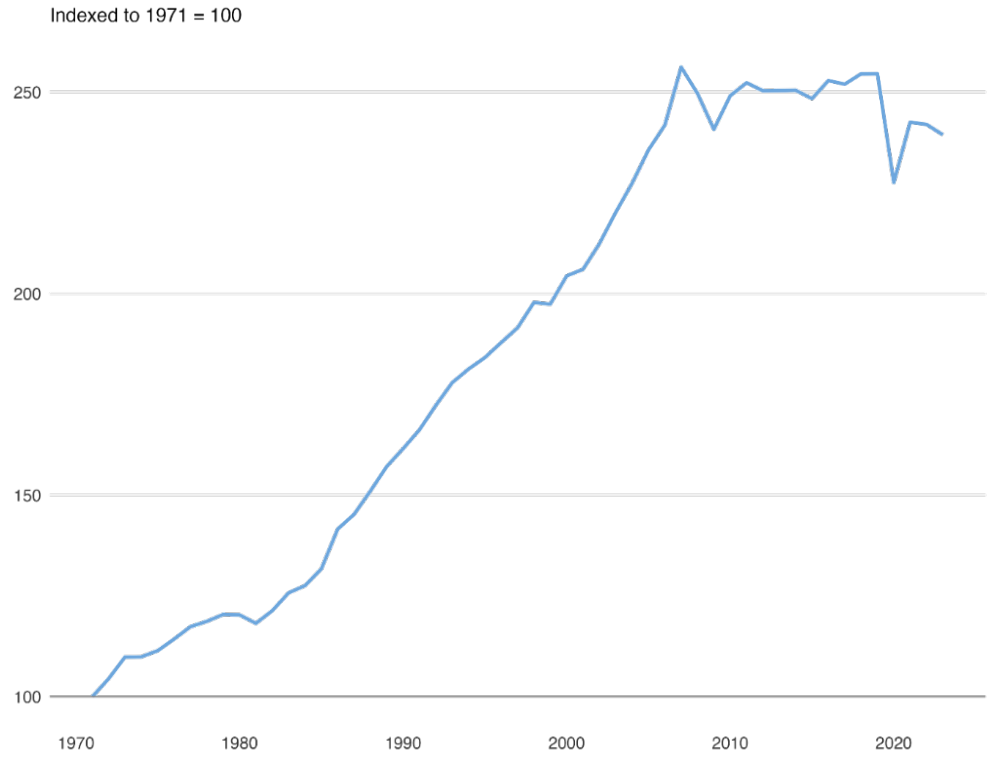
The statistical results are sense-checked and adjusted based on judgements relating to the wider economic characteristics.

London and sector productivity trends are based on the 1971-2023 GVA and job series, while borough employee job growth rates are calculated from 1975-2022 data.

At London level, the evolution of productivity (output per job) from 1971 to 2023 shows an increasing and then flattening trend (see **Figure 15**). We identify the trends from this productivity measure.

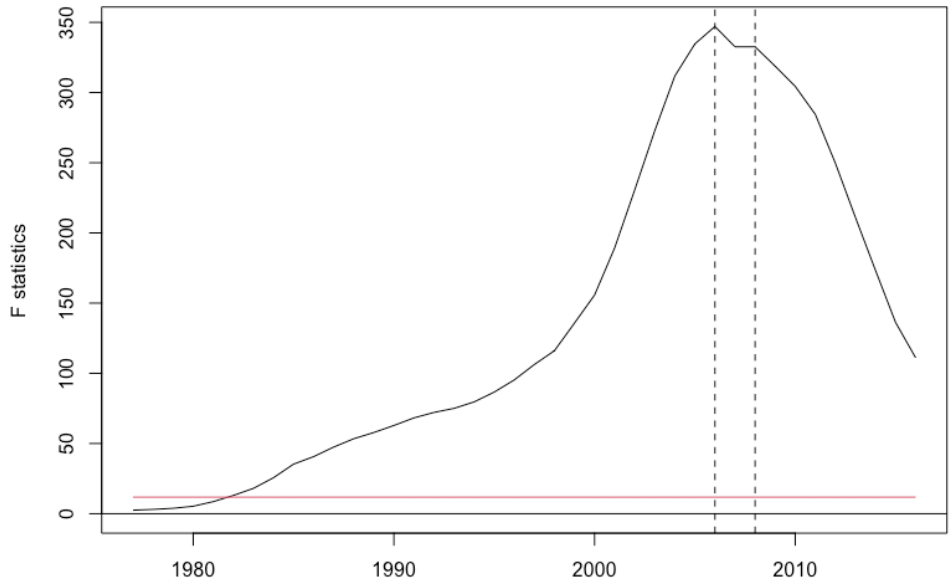
[30] Bai, J., & Perron, P. (2003). Critical values for multiple structural change tests. The Econometrics Journal, 6(1), 72–78. http://www.jstor.org/stable/23113649

Figure 15: Historical productivity trend in London, 1971-2023



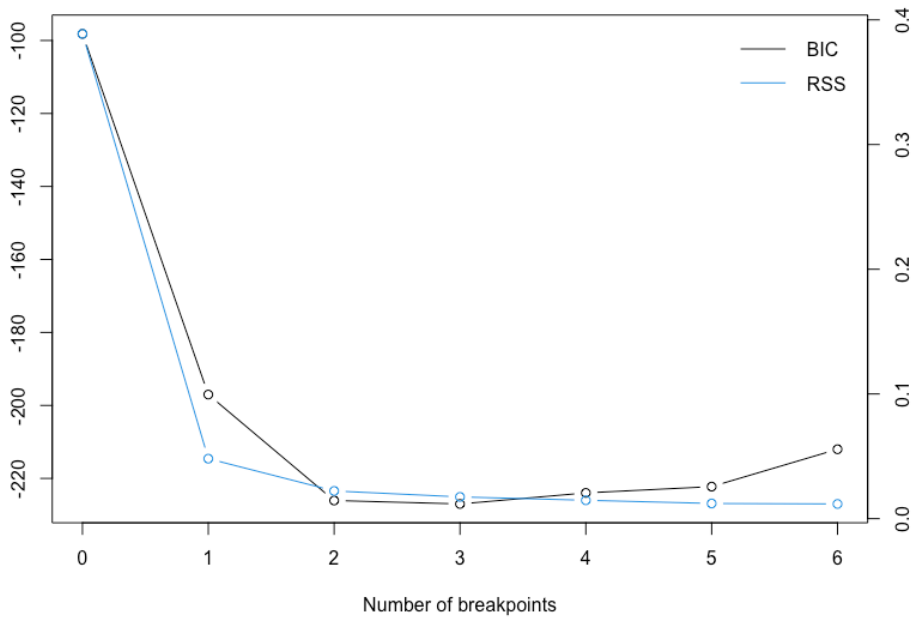
The first step is to plot the F-statistics associated with a Chow test of a single structural break for each year in the series, as shown in Figure 16. Inspection of the results indicates a peak starting around 2006 and continuing through to 2008. This fits with wider evidence of a productivity slowdown at or before the start of the financial crisis.

Figure 16: F-statistics of trend selection



We then use the algorithm. The optimal number of breaks is a two-break division (Figure 17). The minimum BIC analysis shows that two or three breakpoints have similar explanatory power as four breaks. Common breaks from the algorithms are 1981 and 2007. As the entire 1981-2008 period had a constant productivity annual growth rate of around 2.5%, there is no need to further break down this period. Given the traditional dating of the global financial crisis slowdown to 2007-08, we take the periods of 1981-2008 and 2009-2023 as our trend periods.

Figure 17: BIC and residual sum of squares

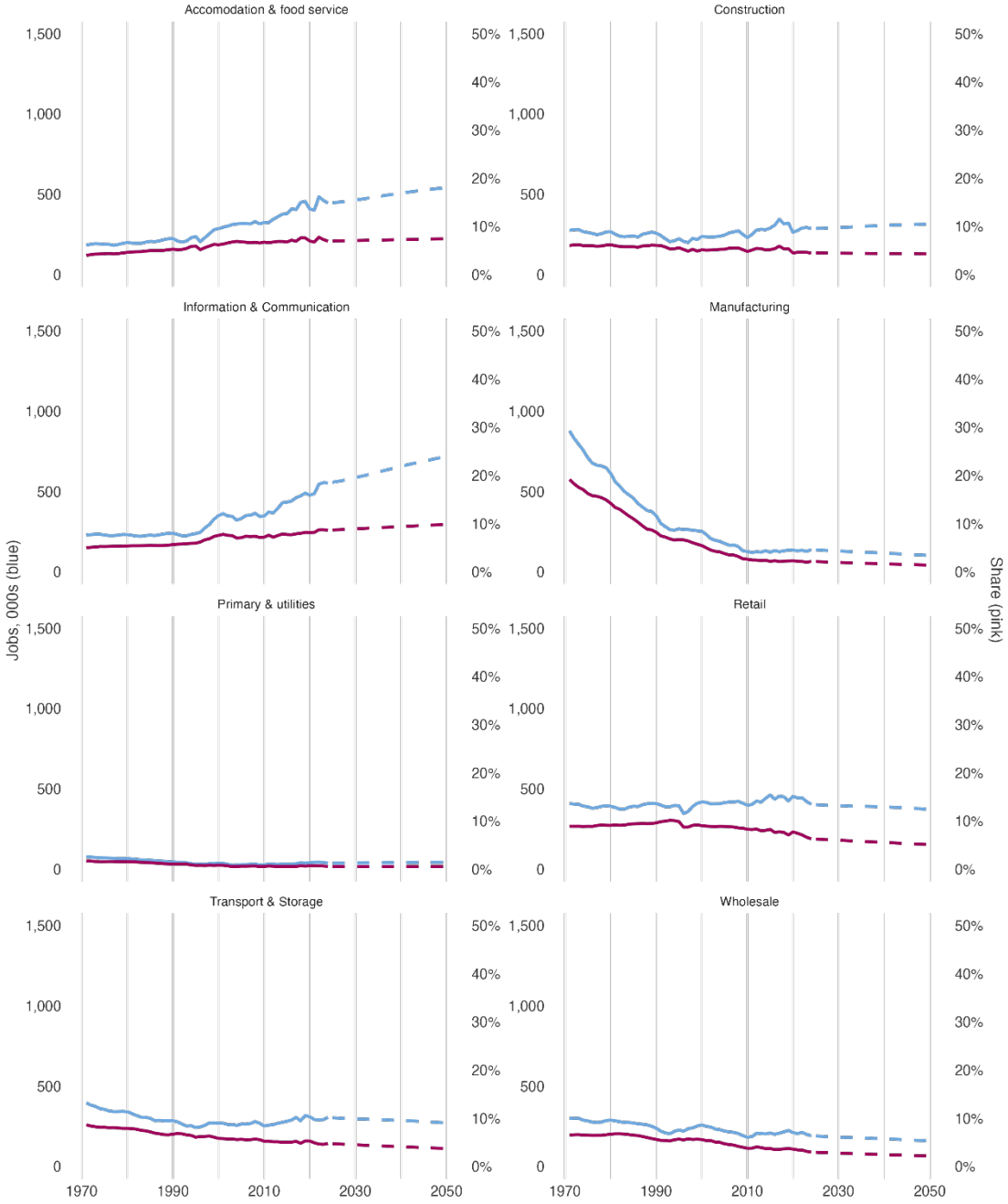


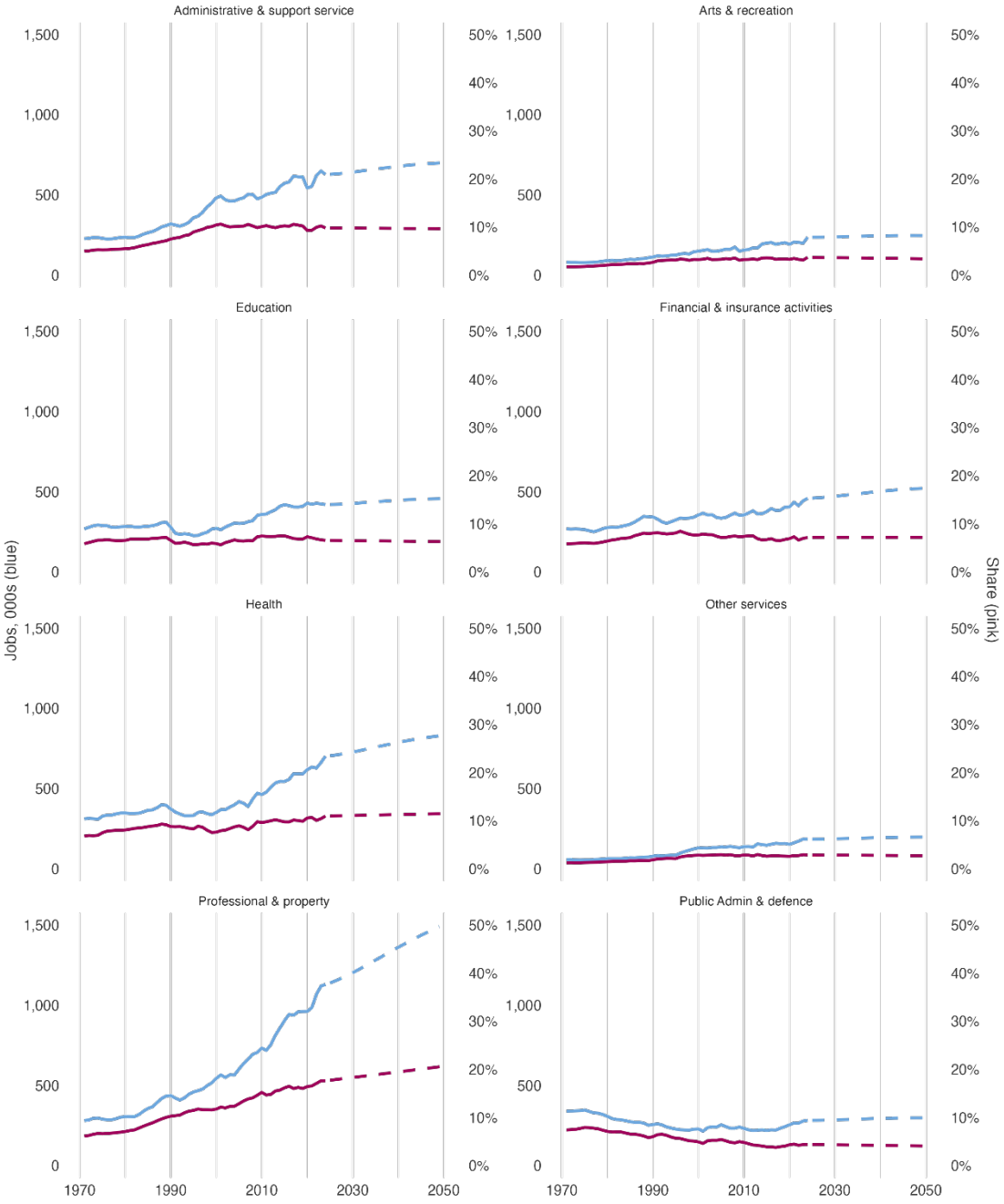
Finally, we are left with a judgement as to how much weight to assign the short-term and long-term trend productivity growth rates. We settle on a 55/45 split, lower weights for the highly uncertain recent trends. This implicitly assumes that productivity will rise faster than the low recent experience, while striking an appropriate balance between the historical record and the recent period. As a result, the London level productivity trend remains the same as the 2022 publication (at 1.4% per year), but lower than the 2017 publication, at 1.6% per year.

Sector and borough productivities all follow the same methodologies.

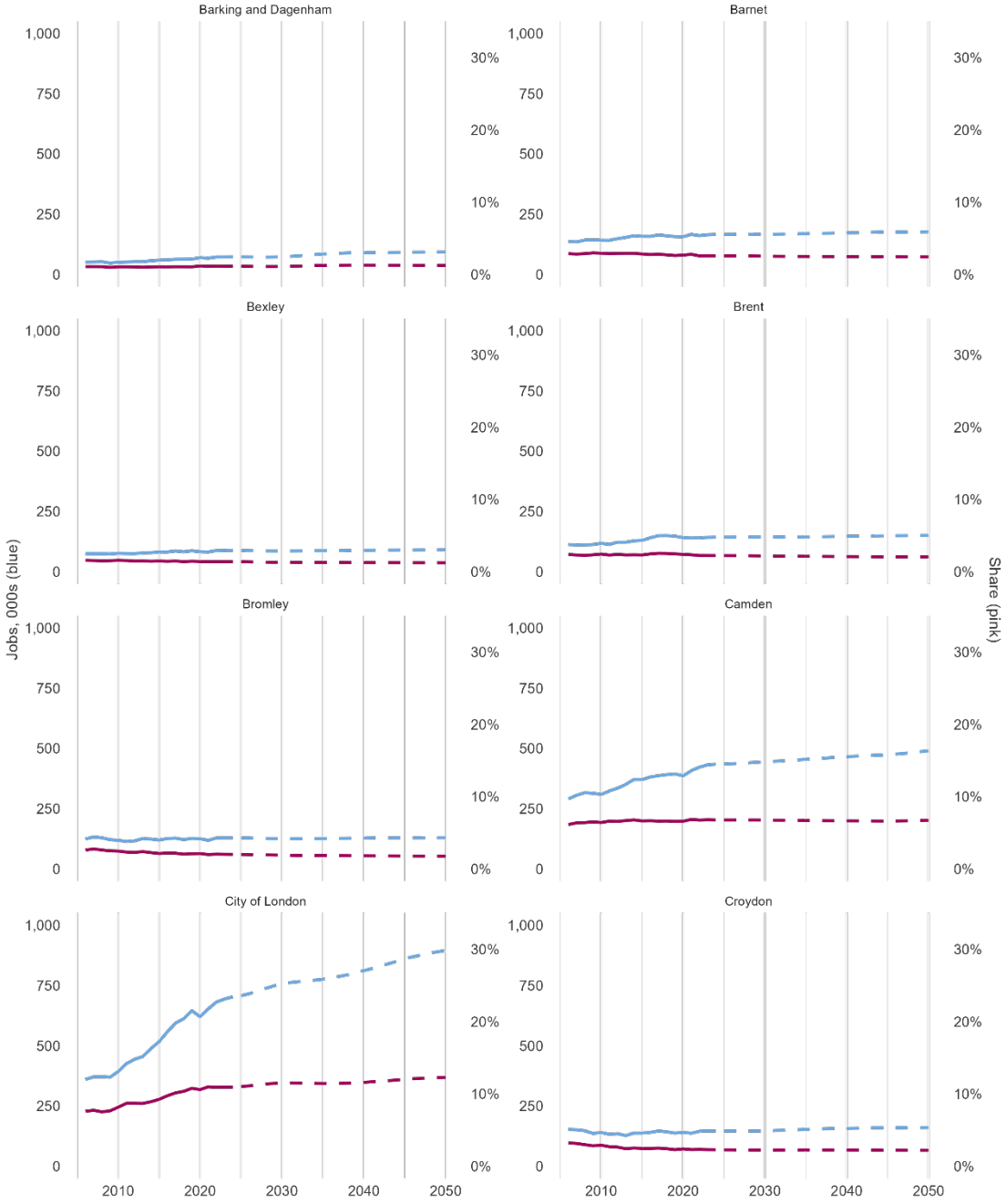
Note, however, that as described above, productivity in these cases is a proxy measure defined as the ratio of London GVA and sector (borough) employment. In that respect, faster 'productivity' growth in a sector (borough) will mean its share of London employment is falling.

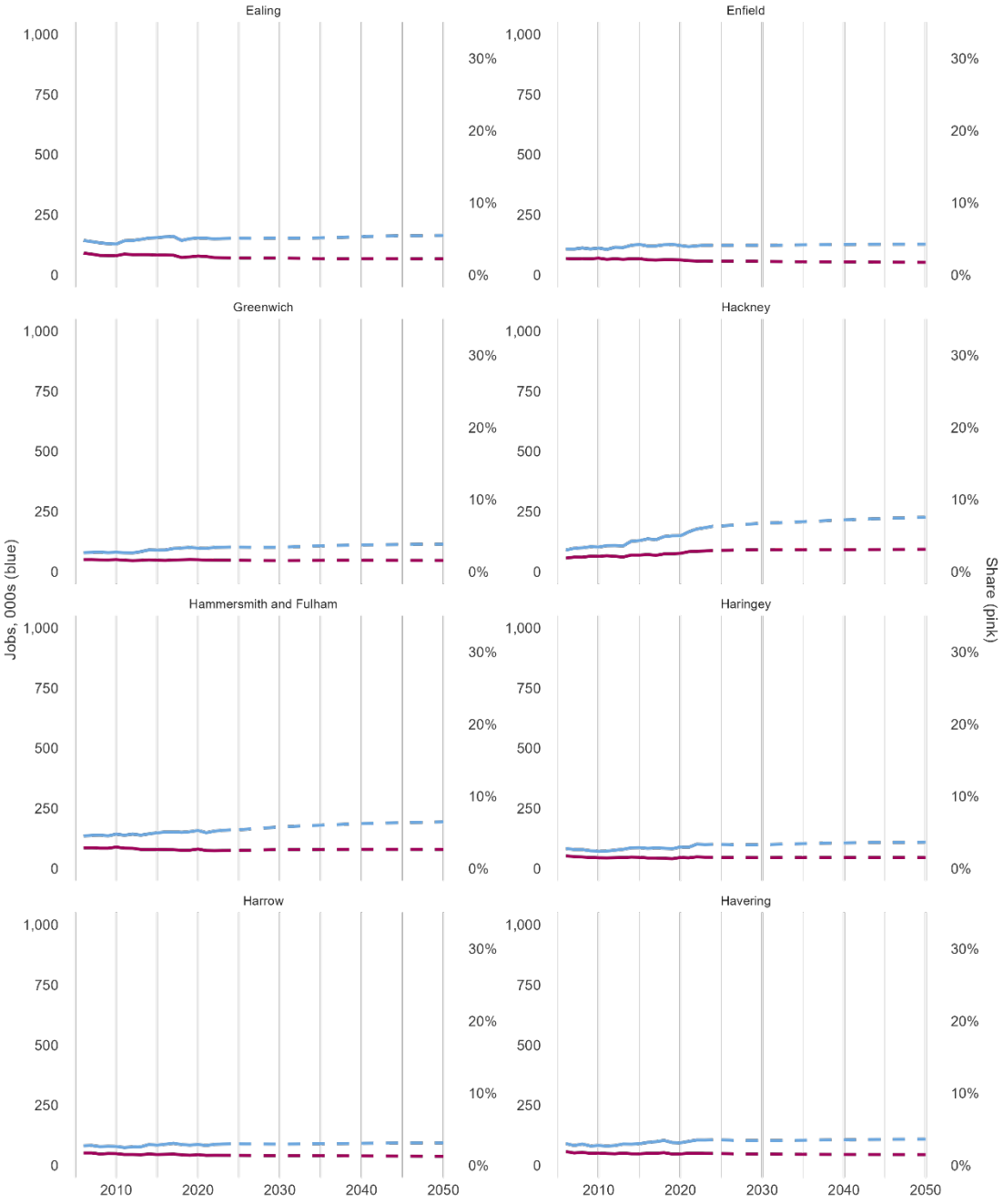
Appendix 5: Detailed sector historical and projected jobs

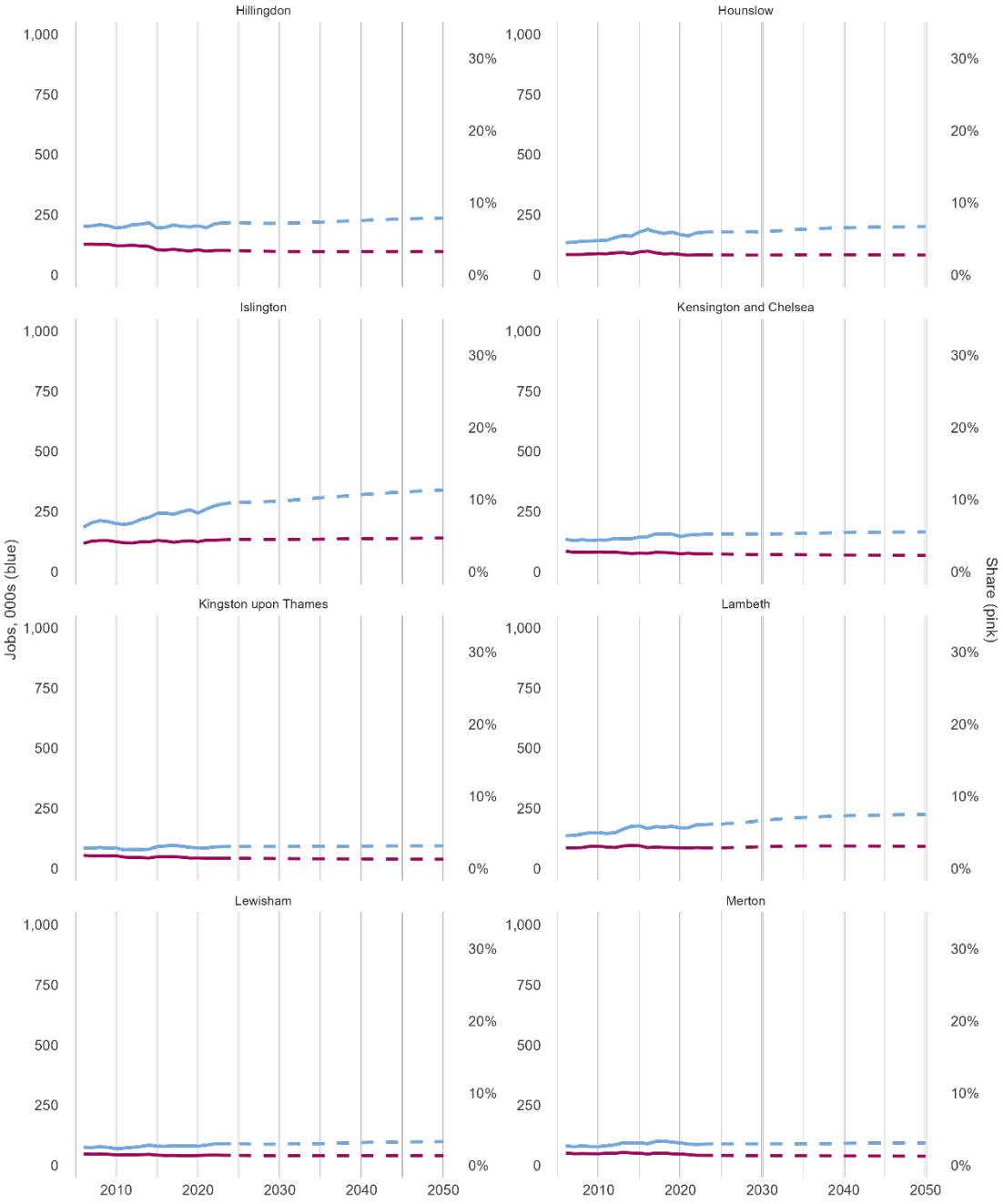


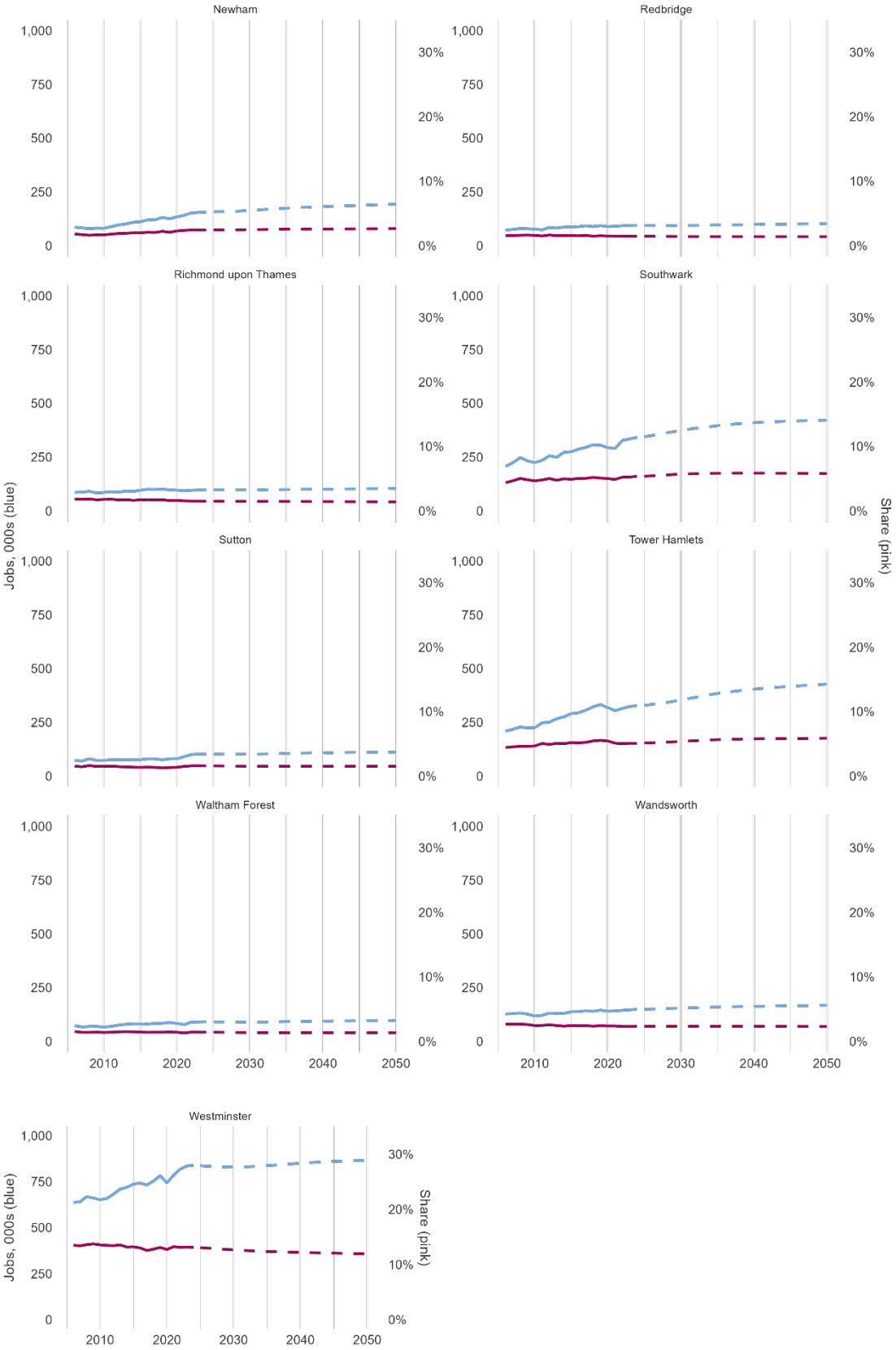

Administrative & support service
Arts & recreation
Education
Financial & insurance activities
Health
Other services
Professional & property
Public Admin & defence
Jobs, 000s (blue)
Share (pink)
1,500
1,000
500
0
50%
40%
30%
20%
10%
0%
1970
1990
2010
2030
2050

Appendix 6: Detailed borough historical and projected final jobs




Ealing
Enfield
Greenwich
Hackney
Hammersmith and Fulham
Haringey
Harrow
Havering
Jobs, 000s (blue)
Share (pink)
1,000
750
500
250
0
30%
20%
10%
0%
2010
2020
2030
2040
2050


Hillingdon
Hounslow
Islington
Kensington and Chelsea
Kingston upon Thames
Lambeth
Lewisham
Merton
Jobs, 000s (blue)
Share (pink)
1,000
750
500
250
0
30%
20%
10%
0%
2010
2020
2030
2040
2050


Newham
Redbridge
Richmond upon Thames
Southwark
Sutton
Tower Hamlets
Waltham Forest
Wandsworth
Westminster
Jobs, 000s (blue)
Share (pink)
1,000
750
500
250
0
30%
20%
10%
0%
2010
2020
2030
2040
2050

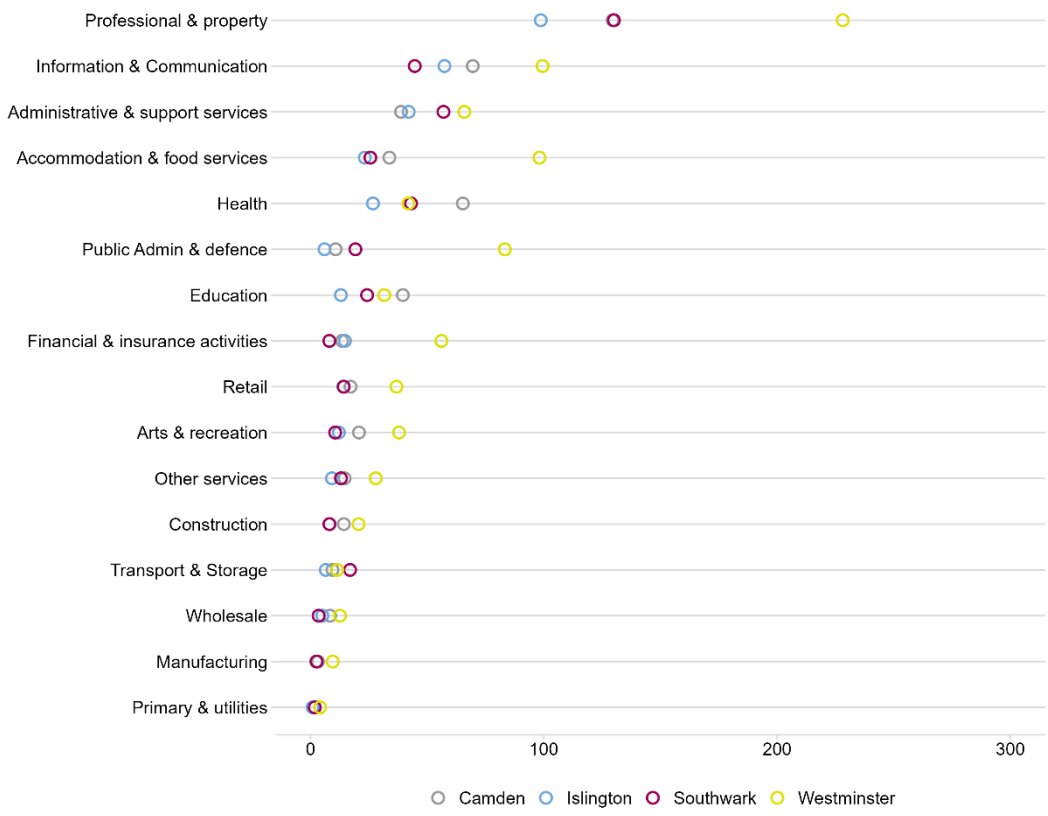
Appendix 7: Borough-by-sector projections

We further breakdown the borough and sector models into a borough-by-sector model to inform evidence for the forthcoming London Plan.

The borough-by-sector methodology is similar to that of the borough-by-sector employee jobs in the borough model. We input borough jobs and sector jobs in projected years as control totals. The borough-by-sector employee jobs in 2024 were input as the initial seeding matrix for the model to start with. This makes the simplifying assumption that borough-by-sector workforce jobs have a similar distribution to borough-by-sector employee jobs. The Iterative Proportion Fitting method is then applied to adjust borough-by-sector jobs until they sum to the control totals.

We project jobs by borough and sector to 2050 (see examples in **Figure 18**).

Figure 18: Borough-by-sector jobs, example boroughs, 2050



GLAECONOMICS

Greater London Authority
City Hall
Kamal Chunchie Way
London E16 1ZE

Tel 020 7983 4000
Minicom 020 7983 4000
Email glaeconomics@london.gov.uk

MAYOR OF LONDON