GLAECONOMICS

Working Paper 75

Trends in the demand for labour and skills across London as a whole

Joel Marsden and Hadyn Hitchins

May 2016

MAYOR OF LONDON

copyright

Greater London Authority
May 2016

Published by
Greater London Authority
City Hall
The Queens Walk
London SE1 2AA

www.london.gov.uk
Tel 020 7983 4922

Minicom 020 7983 4000

ISBN 978-1-84781-621-4

Cover photograph

For more information about this publication, please contact:

GLA Economics

Tel 020 7983 4922

Email glaeconomics@london.gov.uk

Contents

Executive Summary

This report is aimed at assisting the London area based reviews of the Further Education (FE) sector, by providing a range of data and analysis on the current and future trends of the labour market across London as a whole. A separate report is available for each of the four sub-regions.

An important aspect of these reports is that the analysis has been completed at an appropriate level of detail, given the limitations of the data sources that are available. This means that the analysis focuses, insofar as possible, on the long-run trends in the demand for an industry's products and services in the first instance, before turning to investigate the revealed patterns of demand for jobs and skills that follow. This demand-led approach to the analysis means looking at jobs in workplaces across London, regardless of whether they are held by London residents. In so doing, it seeks to highlight areas of economic activity in which large numbers of people are employed relative to the rest of the country or region, and areas where there have been, or there are expected to be, significant changes in employment over time.

In particular, this report outlines the following trends:

- Over the past 30 years, London has become increasingly connected to the global economy. As a result, it has specialised in what might be considered 'high value business services': finance and insurance, real estate, professional and technical service activities, and information and communication sectors. In contrast, there has been a significant decline in manufacturing.

- Many of these specialised activities have grouped together in specific areas of London, and means that some areas (particularly central) have relatively high levels of employment compared to the London average. Reflecting the higher demand for specialist skills, the jobs within these specialisations generally have higher annual pay compared to the London average. The higher earnings prospects, together with high levels of transport connectivity, mean that employers can draw on a broad pool of labour. Generally less than half of London's workforce works in the same sub-region they live in.

- The concentration of specialised activities – and the inflows of people and workers it attracts – also generates demand for further economic activities in other parts of London and the rest of the UK. In addition, London's growing population generates a demand for localised services (such as education, healthcare, retail and other customer services). These industries are likely to continue to grow in line with London's future population.

- The November 2015 release of the GLA economic short-term forecasts predict that workforce jobs in London will increase by 1.2 per cent in 2016 and 0.7 per cent in 2017. This growth is forecast to be predominantly driven by increases in business and administration services, retail, wholesale, accommodation and food services, and construction.

- In the longer term, GLA Economics labour market projections suggest that total workforce jobs in London are likely to increase from 5.5 million in 2014 to 6.4 million in 2036, an annual average increase of 41,000 jobs per year (or 0.69 per cent per year over the period). This growth in the labour market is projected to be underpinned by increases in professional, real estate, scientific and technical services, administrative and support services, accommodation and food services, and information and communication.

- As a result of the increasing specialisation as well as the increased demand for localised services, GLA Economics labour market projections suggest that there is likely to be a changing composition of jobs across occupations. Professionals, skilled trades, and managers, directors and senior officials are each projected to increase their share of total London employment from 2014 to 2036. This further shift

towards more professional and senior roles is likely to be associated with increasing demand for higher level skills and qualifications. In 2014, 58 per cent of jobs in London were held by workers with higher education qualifications or above (NVQ4+), and is projected to rise to 68 per cent by 2036. Currently 49 per cent for London's total working age resident population holds higher education qualifications or above.

- The proportion of jobs in administrative and secretarial occupations, in contrast, is projected to decrease substantially (from 10.5% to 3.3% of total London jobs) from 2014 to 2036. This may present some challenges to the employment prospects of London's lower skilled labour force. In particular, this decrease in jobs in administrative and secretarial roles occurs at the same time as there is projected to be a large increase in elementary occupations in accommodation and food, and administrative and support services (which has seen recent growth in temporary roles).

- Even though the projections suggest there will be a high level of structural change in London's labour market in the future, GLA Economics estimate that more than half a million people leave their occupation each year, and projects that this will increase in the future. There is a potentially significant level of training and skills requirements associated with the need to replace those leaving their roles.

Overall this report provides an initial baseline for exploring the subsequent aspects of the area based reviews. These aspects include the exploration of local labour market intelligence at the borough level, and the supply side analysis of the education sector, which involves analysing different learner categories and levels of qualifications and achievement using data sourced from the government's Joint Area Review Delivery Unit (JARDU).

Introduction

The purpose of this report is to assist with the London area based reviews of the Further Education (FE) sector. It provides baseline information primarily on the demand for jobs and skills within the labour market to inform further analysis and research of the FE sector in the London review areas. This report is one of a series that will be produced for each of the sub-regional review areas. The report itself is divided into four sections:

1. A brief overview of the area reviews for the FE sector, and its link to economic needs within the London labour market.

2. Analysis and discussion of the long-term and recent trends in the labour market in London as a whole.

3. An outline of the findings of economic forecasts and labour market projections produced by GLA Economics at the London, and the assumptions that have been used to produce them.

4. In relation to the supply of learners and learning opportunities in London, which is the main focus of the subsequent stages of the FE sector review, an overview of the projected population in London is provided, along with details of the level of qualifications held by the working-age population of London. Together this information can serve as an indicator of the potential size of cohorts of learners over time. Key findings from the UKCES Employer Perspectives Survey are also presented in this section. Further analysis of the potential implications for learners and learner funding is beyond the scope of this economic analysis.

Appending the final report will be a spreadsheet which provides access to the underlying data used to produce the tables and figures in this report. Overall, this information will provide an up-to-date overview of London's labour market and the potential trends over the next decades, and provides context for more in-depth analysis of London's labour market and how it interrelates with the FE sector.

1 Overview of Area Based Reviews

The area based reviews process has been implemented by the government as an initial step to developing and establishing a fit-for-purpose FE sector. The concept is that a range of stakeholders with links to the FE sector will work together to redevelop it by: improving the quality and robustness of the FE institutions themselves, increasing the responsiveness to business demand, and ensuring there is a clear route to employment for learners. Achieving these aims will assist in ensuring that the FE sector is delivering skills that meet local economic needs[1].

The first phase of the review is to develop an understanding of what the economic needs are within the broad London economy, in particular what jobs and skills are currently required, and what jobs and skills might be needed in the future as the economy continues to develop and change. Sections 2 and 3 of this report describe labour market trends and projections for London, while section 4 provides an overview of the population projections and qualification levels, and analysis from the employer perspectives survey, which is more related to the supply of learning.

Together this information provides a basis for further analysis of the demand for skills and the role of the FE sector. The London boroughs included in the different sub-regional areas are shown in **Table 1** and **Map 1** below. As stated previously this report focuses on the overall London labour market. Separate reports are provided for each of the four sub-regional areas.

Table 1: Review area groupings of London boroughs

Review Areas			
Central	**West**	**South**	**East***
Camden	Barnet	Croydon	Barking and Dagenham
City of London	Brent	Kingston upon Thames	*Bexley*
City of Westminster	Ealing	Merton	*Bromley*
Hackney	Hammersmith and Fulham	Richmond upon Thames	Enfield
Haringey	Harrow	Sutton	*Greenwich*
Islington	Hillingdon		Havering
Kensington and Chelsea	Hounslow		Newham
Lambeth			Redbridge
Lewisham			Waltham Forest
Southwark			
Tower Hamlets			
Wandsworth			

*Source: London Further Education Review Steering Group. Notes: *The three boroughs in italics are located in South-East London, and will be analysed separately where there is an appropriate level of robust data available.*

[1]HM Treasury, Reviewing post-16 education and training institutions: guidance on area reviews, September 2015, accessed on 12/01/16.

Map 1: Review area groupings of London boroughs

Source: London Further Education Review Steering Group

2 Trends in the London labour market

Summary - London

- London is a thriving global city with a strong, growing economy and increasing population. Particular industries in London have tended to group together into different parts of London; this trend is particularly strong in central areas. Recent analysis has shown that less than half of London's workforce works in the same sub-region they live in.

- The economic success of the capital has been driven by an increasingly connected and global economy, which has made it more economically viable to specialise. As a result, London's industrial structure has changed significantly in the last three decades, with a strong shift towards professional and technical service activities. In contrast, the level of employment in manufacturing has almost halved between 1996 and 2014. Overall, there were over 5.5 million workforce jobs in London in 2014, 4.7 million of these were employee jobs (which only include workers who are employed by a company or organisation).

- As of 2014, the six industry sectors with the largest number of jobs include:

  - Professional, real estate, scientific and technical activities
  - Administrative and support services
  - Health and social work
  - Retail
  - Education
  - Information and communication

- Collectively these sectors account for over 60 per cent of London's total number of jobs, and are all amongst the highest in terms of absolute growth in the post-recessionary period from 2009 to 2014. Furthermore, there was substantial variation in the level of growth within the industries that make up these six sectors. Overall, this suggests that these sectors are a combination of London's specialised industries, as well as industries that provide services to London's large and rapidly growing population.

- In terms of occupations, professionals (irrespective of sector) accounted for 25 per cent of all jobs in London in 2014, and have grown significantly since 2004. However, a range of other occupations (both high and low skilled) have also grown substantially between 2004 and 2014, indicating that growth has not been limited to professional occupations.

- Workers in London generally have high levels of qualifications compared to the rest of the UK, with a larger proportion of the workforce attaining qualifications at higher education and above.

- Workers employed as managers, senior officials or in professional roles, are much more likely to hold higher education qualifications or above when compared to workers in other occupations. Conversely, those employed in service, sales and skilled trade occupations are more likely not to hold any formal qualifications.

- Analysis from the Centre for Economic and Social Inclusion show that for the largest occupational groups, median pay is generally higher for higher skilled occupations, although there is substantial variation in the level of change between 2011 and 2014 across different occupations in terms of median annual pay and employment.

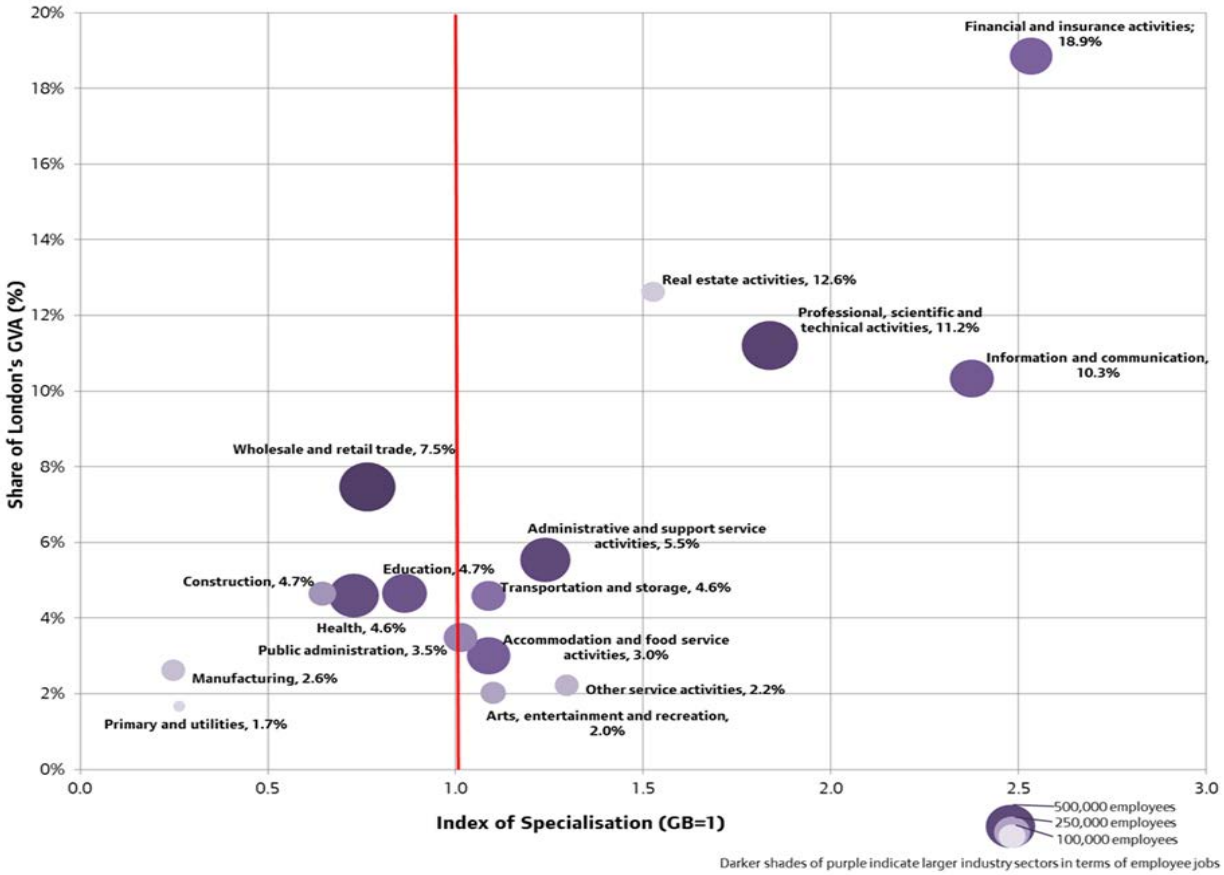
- The 2013 UKCES employer skills survey found that the highest densities of skills shortage vacancies were reported to be in skilled trades, and caring, leisure and other service staff. The most common skill shortages related to technical, practical or job-specific skills.

London is a thriving global city with a strong, growing economy and increasing population. The economic success of the capital has been driven by an increasingly connected and integrated global economy. As markets have opened and trade expanded, the size of the market that businesses can sell into has made it more economically viable to specialise in the types of products or services in which London has a comparative advantage (i.e. that London is relatively better at than its trading partners). For London, this has meant increasingly specialising in professional and technical service activities. This specialisation has in turn created a strong demand for highly skilled, highly productive labour, and generates demand for further economic activities in other parts of the UK[2] as well as for localised services.

London's current industrial structure reflects this process of increasing specialisation, and is demonstrated in the index of specialisation shown in **Figure 1**. This shows that if London reflected the same employee proportions as Great Britain (GB) as a whole, then all the sectors shown would be located on the vertical red line in the diagram. The vertical axis looks at the proportion of London's total output (or gross value added – GVA) that each individual sector contributes. The diagram demonstrates that London's economic activity is, in the main, concentrated in, what might be considered as high value business services (those in the top right quadrant with high specialisation and a relatively high proportion of total output). This includes financial and insurance services, information and communication, professional, scientific and technical services, and real estate activities, which together, accounted for more than half (54%) of London's economic output in 2014. A forthcoming report shows that ONS estimates London's total nominal gross value added (GVA) at over £364 billion in 2014[3].

[2] GLA Economics, Growing Together II: London and the UK economy, September 2014
[3] GLA Economics, 2016 (forthcoming), Regional, sub-regional and local gross value added estimates for London, 1997-2014

Figure 1: London's index of specialisation and share of London's total output, 2014[4]



Source: Business Register and Employment Survey (BRES) - ONS, UK Regional Accounts – ONS.

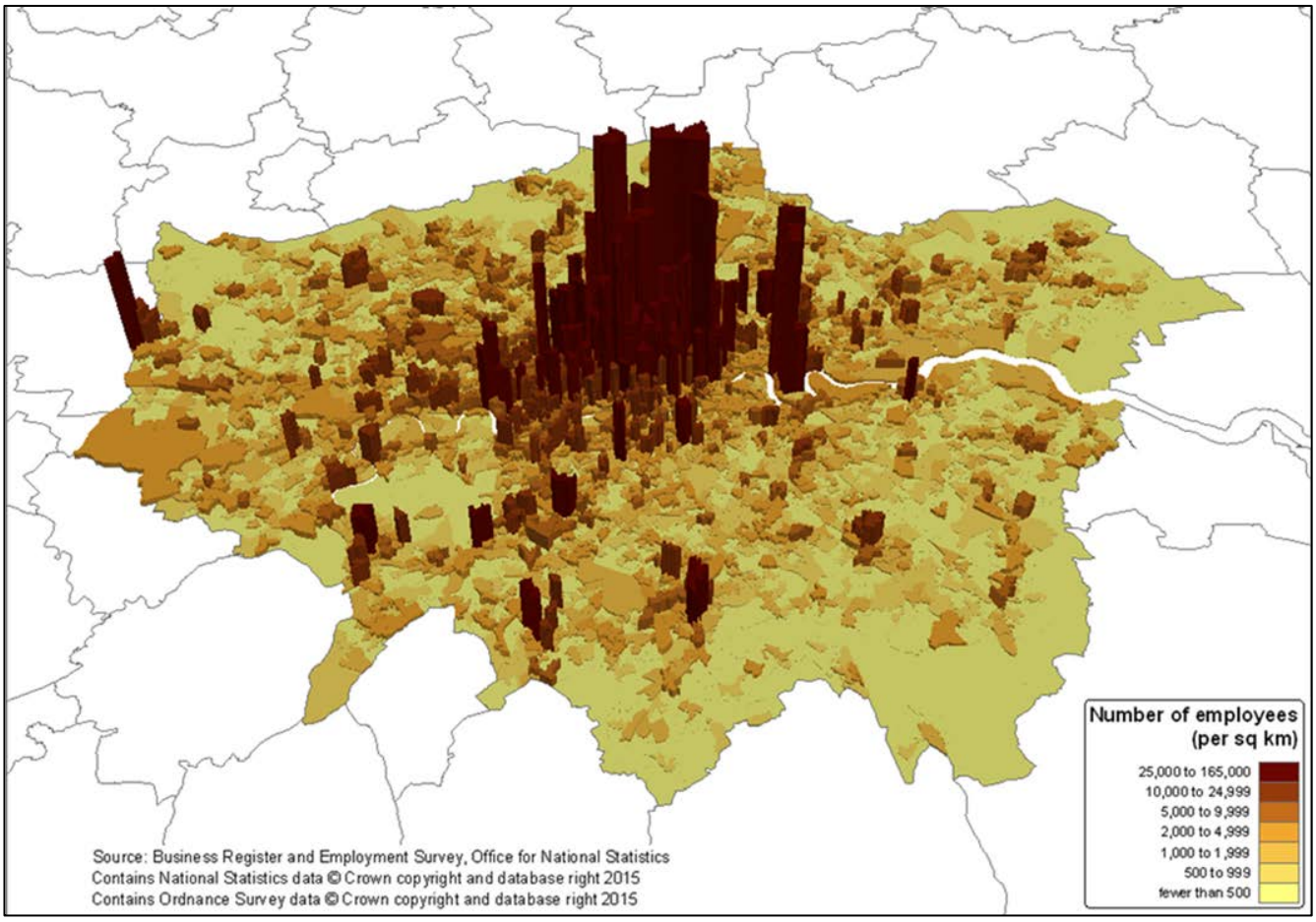
These broad sector headings hide a range of economic activity and differing degrees of specialisation within a particular sector. When examined at a more disaggregated level, it can be seen that London specialises in such things as securities broking/fund management, television programming and broadcasting, media activities including advertising for example. Outside of the high value business services, it also shows that London is relatively specialised in air transport, private security and creative arts and entertainment. GLA Economics have also researched a number of cross-cutting sectors such as tourism[5], science and technology[6] and creative industries[7], which incorporate parts of various – and sometimes overlapping – industries.

This sectoral specialisation has also, to a degree, manifested itself in a spatial concentration whereby particular (and many) functions of London's economy have tended to locate in certain areas of London – particularly in the centre. The resulting concentrations of businesses and skilled labour bring benefits to the economy over and above those that accrue to the individual firms themselves: so-called agglomeration benefits. **Map 2** below shows that while the number of jobs is highly concentrated in the Central Activities

[4] Index of specialisation calculations are based on BRES data that include country-level data on employee jobs for Great Britain: England, Scotland and Wales. The index of specialisation is calculated as follows: (sector employee jobs in London / all employee jobs in London) / (sector employee jobs in Rest of GB / all employee jobs in Rest of GB). Both GVA and employee jobs numbers refer to 2014.
[5] GLA Economics, March 2015, The value of cultural tourism to London, Current issues note 44
[6] GLA Economics, March 2015, The science and technology category in London, Working paper 64
[7] GLA Economics, October 2015, The creative industries in London, Working paper 70

Zone (CAZ) and Northern Isle of Dogs[8], some industrial areas and various town centres, such as Uxbridge also see high levels of employment concentration.

Map 2: Number of employees per square kilometre in London, 2013



This concentration of specialised, economic activities serves to draw in workers from across London and beyond. London's significant population also generates further demand for localised services (such as schooling, healthcare, retail and other customer services). The opportunities for employment available to learners in a particular London sub-regional area will therefore often derive from the demand for skilled labour in the wider region as employers are able to draw on a broader pool of labour, beyond those in the immediate vicinity. Analysis of the 2011 Census shows that, of those working in London as their main job, less than half (48%) work in the same sub-region as they live, while 18 per cent commuted in from outside London. The other 34 per cent either worked in a different sub-region from where they lived, or worked across the wider area with no fixed place of work[9].

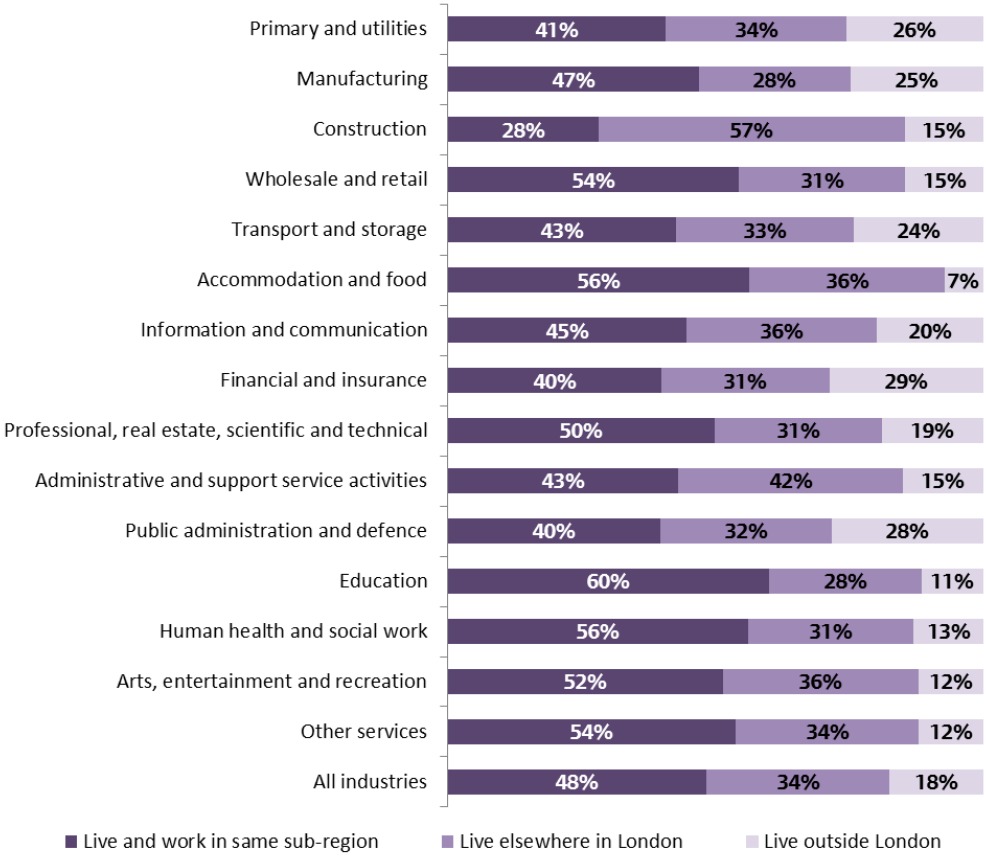
Figure 2 shows that these patterns of commuting vary by industry for London. For example, a majority of Londoners working in the construction industry have no fixed place of work, or work in a different London sub-region to where they live, with only 28 per cent working in their home sub-region. In contrast, 60 per cent of those working in education lived in the same sub-region as their place of work, with 28 per cent

[8] Further information on clustering of employment activities within the CAZ and the Northern Isle of Dogs is provided in: GLA Economics, August 2015, Work and life in the Central Activities Zone, northern part of the Isle of Dogs and their fringes, Working paper 68

[9] Taken at Borough level, this pattern of employers drawing in labour from across the wider region is magnified with only 27% of workers in London living in the same Borough as their place of work, with a further 55% commuting in from elsewhere in London, or having no fixed place of work.

commuting to work from another London sub-region. London's highly specialised, financial and insurance sector draws in the highest proportion (29%) of its workers from outside London.

Figure 2: Place of usual residence of London workers by industry, 2011



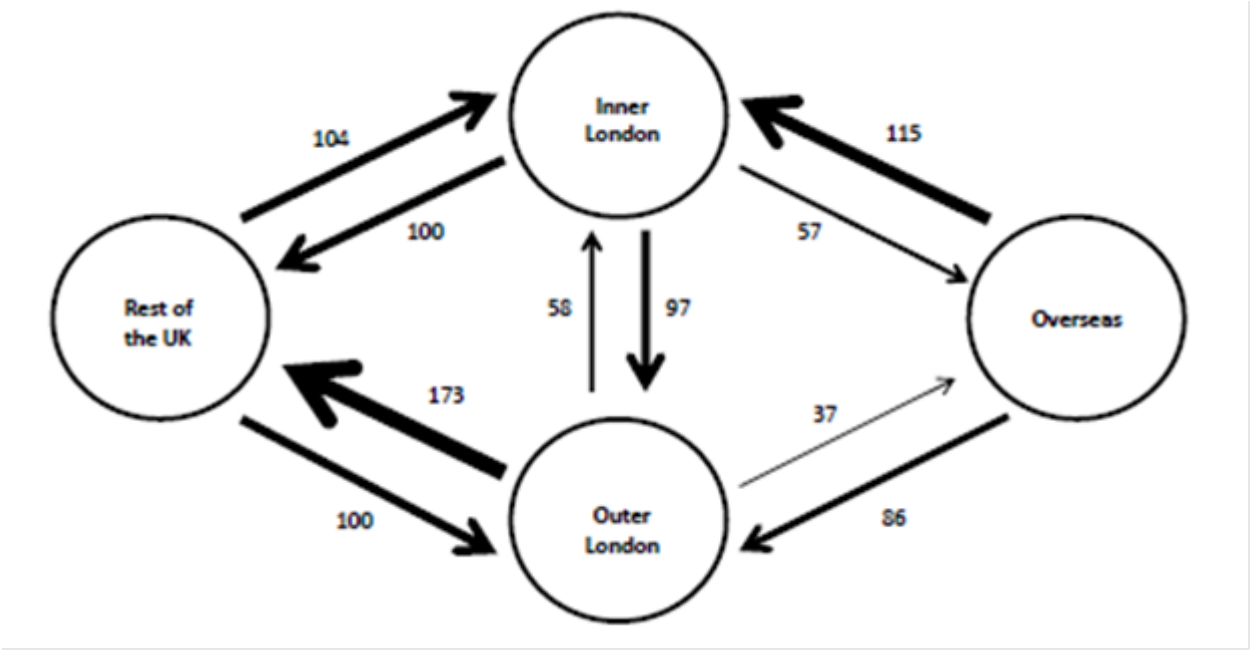
Source: ONS 2011 Census. Notes: Data includes those working at no fixed place (equivalent to 9% of all workers) as working elsewhere in London, while those reporting to mainly work from home are included in those living and working in the same sub-region.

A caveat with this analysis is that because this data is drawn from the Census, it is a snapshot in time and does not capture the dynamic nature of the labour market as people are continually changing where they live and where they work.

London also draws in labour from across the UK and the rest of the world. **Figure 3** shows the pattern of internal and international migration flows in relation to London (split here by inner and outer London)[10] for mid-2014. This figure indicates that 201,000 people moved to London from overseas, and 204,000 people relocated from other regions of the UK in 2014. These inflows are partly offset by flows of 273,000 people moving from London out to the rest of the UK, as well as 94,000 people leaving the UK. Those moving out of London into nearby regions may still however choose to commute back into London for work. This pattern suggests that the role of migration and commuting flows both play an important role in shaping London's labour supply, and its ability to meet the demand for new workers.

Figure 3: London migration flows, mid-2014

[10] Inner London includes: City of London, Camden, Hackney, Hammersmith and Fulham, Haringey, Islington, Kensington and Chelsea, Lambeth, Lewisham, Newham, Southwark, Tower Hamlets, Wandsworth, and Westminster.
Outer London includes: Barking and Dagenham, Barnet, Bexley, Brent, Bromley, Croydon, Ealing, Enfield, Greenwich, Harrow, Havering, Hillingdon, Hounslow, Kingston upon Thames, Merton, Redbridge, Richmond upon Thames, Sutton, and Waltham Forest.



Source: ONS Mid-year population estimates, ONS internal migration estimates

The following sections describe the composition of demand for jobs and skills in London, and how it is changing in terms of: the number of jobs, the type of work, the qualifications held and the wages earned. It also provides indications of unmet demand in terms of job vacancies.

2.1 Industry structure

This section presents an analysis of how the number of jobs across different industries in London has changed over time. It begins with a broad outline of how the number of jobs in London has changed over the long term (1984-2014), before exploring how the number of jobs has changed in recent years (from 2009-2014) based on data available at more detailed industry levels within London.

This section provides some context around London's labour market and provides a benchmark for further analysis on the demand for skilled labour. The long-term data on London is drawn from the ONS workforce jobs series, which includes self-employed as well as workers employed by a company or organisation (known as 'employee jobs'[11]). This data is however unavailable for the London sub-regions, so instead the detailed industry sector analysis uses data from the ONS Business Register Employment Survey (BRES)[12], which only includes the number of employee jobs. This BRES data is used for the detailed industry sector analysis for both London and the sub-regions to ensure these areas are compared on a consistent basis. Both the workforce jobs and employee jobs present counts of the number of jobs located in London, irrespective of whether or not they are held by London residents, which includes both full-time and part-time jobs[13].

[11] An employee is defined as anyone working who is aged 16 years or over, that an entity pays directly from its payroll, in return for carrying out full-time or part-time work or engaging with a training programme.
[12] BRES is the primary source for employee estimates at a detailed regional and industrial level. However, as it is a sample survey it means that the margin of error is larger at the more detailed geographies. This means that the jobs estimates at the London geography will be more robust than those for the sub-regional review areas.
[13] For further information on the role of part-time jobs in London in the recent past, see: GLA Economics, January 2015, 'Part-time employment in London', Current issues note 42.

This report does not specifically examine changes within London's business population; however GLA Economics has conducted previous research into this area through the London Business Survey[14].

Industry structure – London

Figure 4 shows that overall London workforce jobs have increased substantially from 4.1 million in 1984, and reached 5.5 million workforce jobs in 2014. However, the overall level of growth of London's workforce has varied over time, with relatively higher levels of job growth in the recent period from 2010 to 2014, following the 2008/09 recession when workforce jobs declined by 100,000 to 4.8 million in 2009.

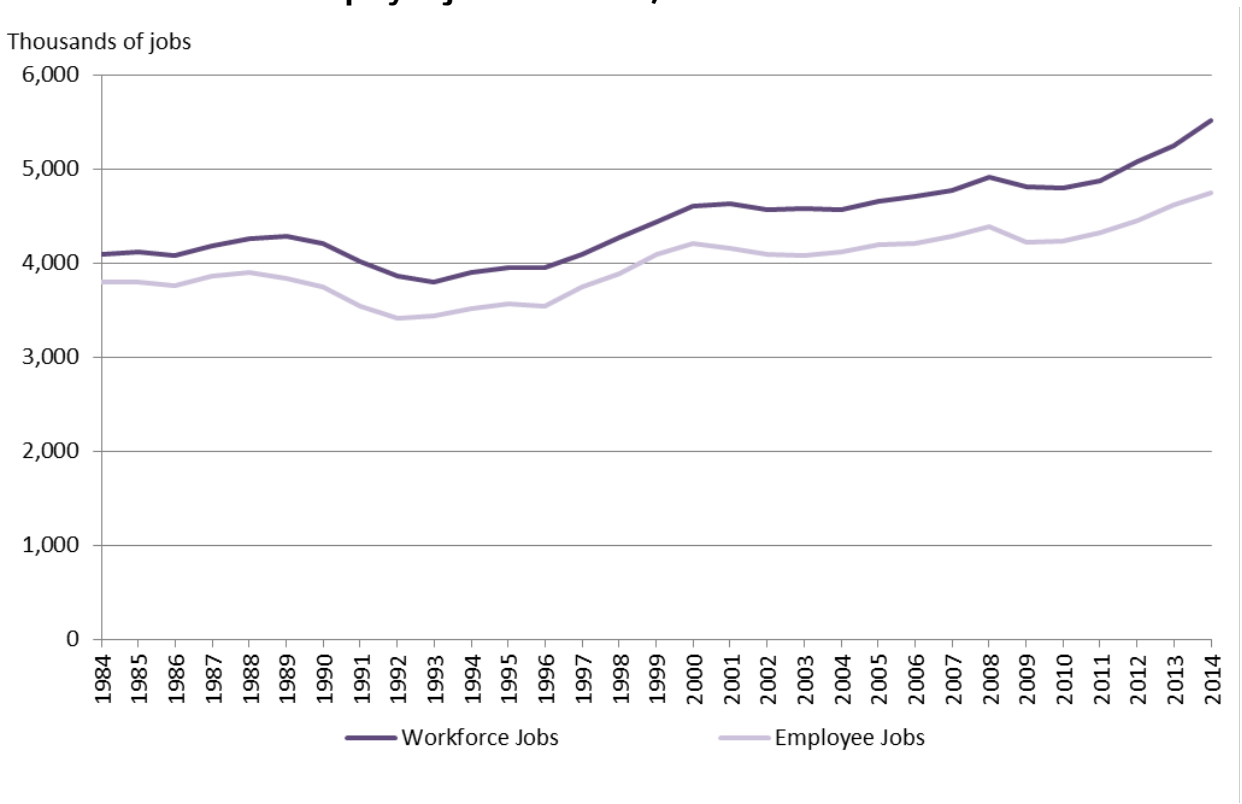
Since the 2008/09 recession output growth has been sluggish by historical post-recession standards while employment growth has been uncharacteristically and unexpectedly strong (see **Figure 4**). This has led to a stalling in productivity growth. It has been argued that at least some of the strength seen in the labour market has come from increased labour market flexibility and, within that, potentially less stable employment. For example, a 2015 GLAE report on London's changing economy since 2008 found that:

"In 2014, part-time jobs in London accounted for around 29 per cent of total workforce jobs, up from 26 per cent in 2008, whilst self-employment jobs contributed towards 14 per cent of the total, a rise from around 12 per cent in 2008. In comparison, in the UK as a whole part-time accounted for around a third of all jobs in 2014 (around 31 per cent in 2008), whilst self-employment jobs made up around 14 per cent of all jobs (a rise from 12 per cent in 2008)[15]."

The same report also found that wages have generally failed to keep up with rising costs of living since 2008[15].

[14] GLA Economics, November 2014, London Business Survey: Main Findings.
[15] GLA Economics, October 2015, 'London's changing economy since 2008'.

Figure 4: Workforce and employee jobs in London, 1984 to 2014



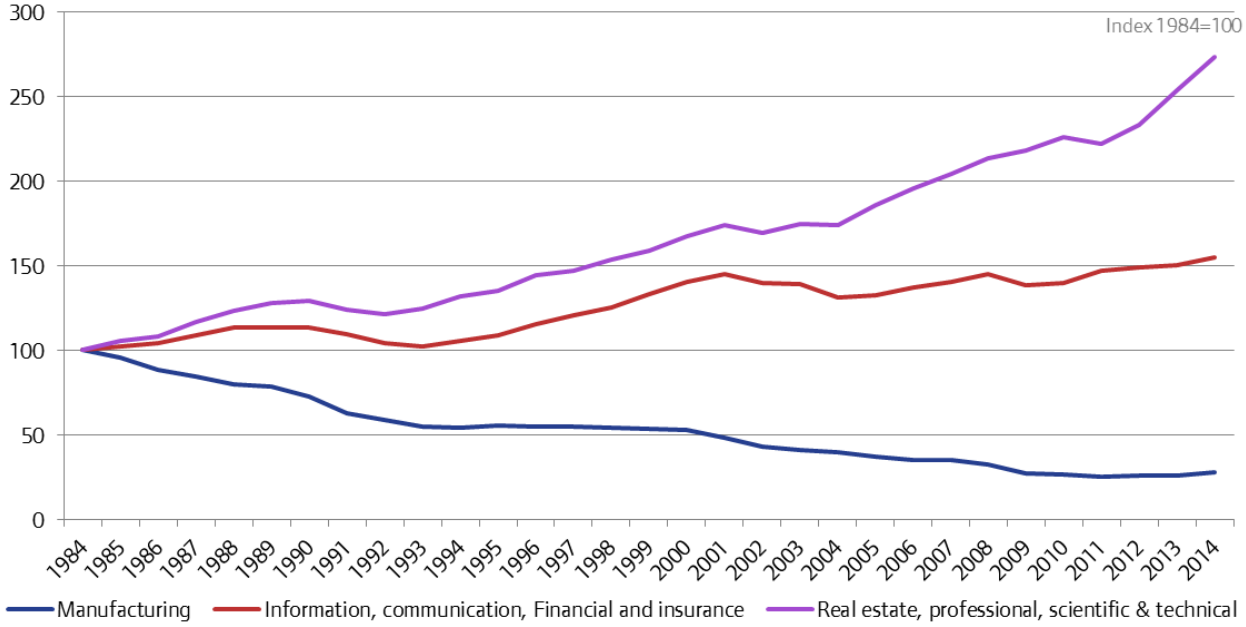
Source: GLA Economics calculations based on ONS workforce jobs series.

Examining the trends from 1984 to 2014 at an industry level shows that the structure of London's economy has changed substantially in the last three decades with a marked decline in manufacturing, and a strong shift towards business, financial and some other services. This is demonstrated by **Figure 5** which shows the indexed changes in London's industrial structure between 1984 and 2014.

Overall, the number of jobs in manufacturing has fallen from around 476,000 in 1984 to around 134,000 in 2014; while jobs in professional, real estate, scientific and technical activities have more than doubled to around 880,000 over the same period[16]. Since the late 1990s, previous GLA Economics analysis of sectors[17] suggests that growth in this sector has been largely driven by the rise in the number of jobs in head office and management consultancy activities supported by growth in real estate, and legal and accounting services.

[16] Figures for manufacturing jobs in 1984 are based on modelled estimates. In contrast, the latest figures for manufacturing jobs are based on official workforce jobs statistics published by the Office for National Statistics (ONS).
[17] GLA Economics, March 2015, 'London's sectors – more detailed jobs data', Working Paper 65

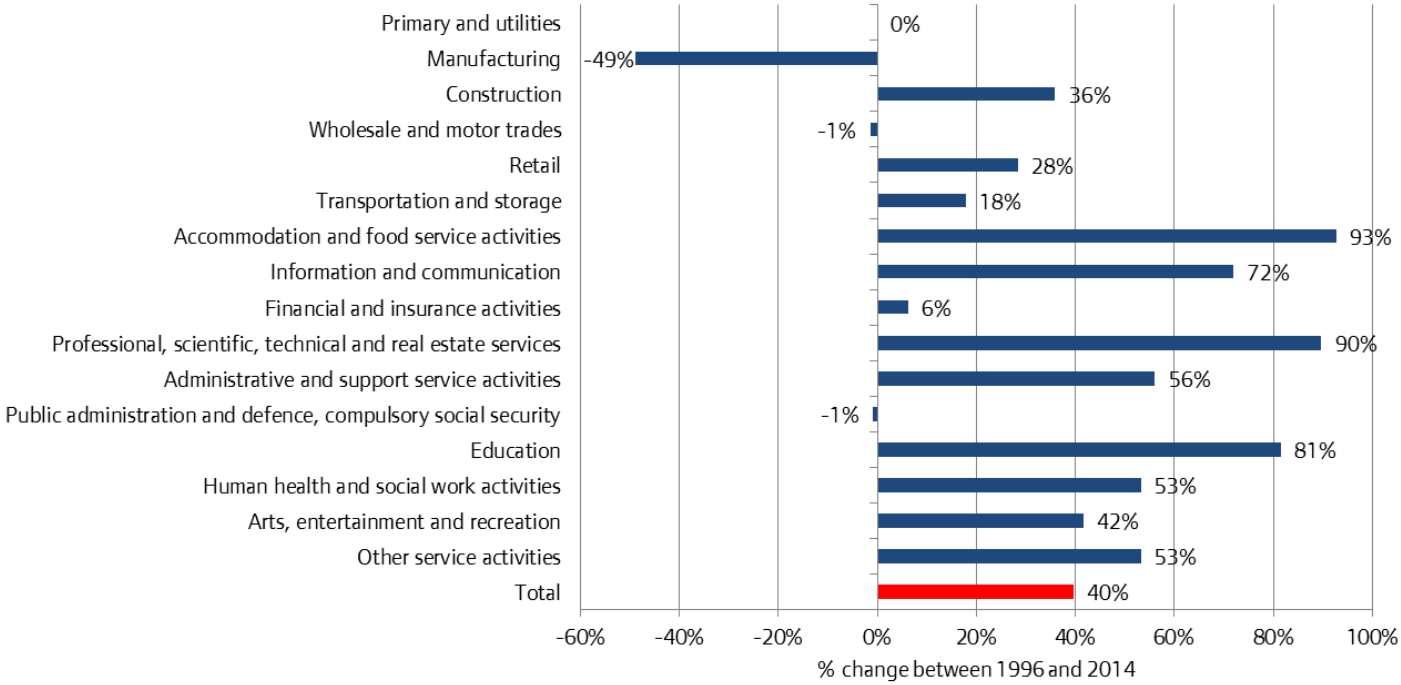
Figure 5: Index of Employment in London by sector over time 1984 to 2014, (index – 1984=100)



Source: Workforce Jobs, ONS and GLA Economics modelling.

Figure 6 also shows that professional, scientific and technical activities expanded substantially from 1996 to 2014 and reached 771,000 jobs in 2014 (a 90% increase, up 376,000 jobs). There were also large increases in workforce jobs in accommodation and food service activities (a 93% increase, up 189,000 jobs to 393,000 jobs), education activities (81% increase; up 185,000 jobs to 412,000 jobs) and information and communication (72% increase; up 177,000 jobs to 423,000 jobs).

Figure 6: Changes in jobs in London by sector between 1996 and 2014, (1-digit SIC sector)



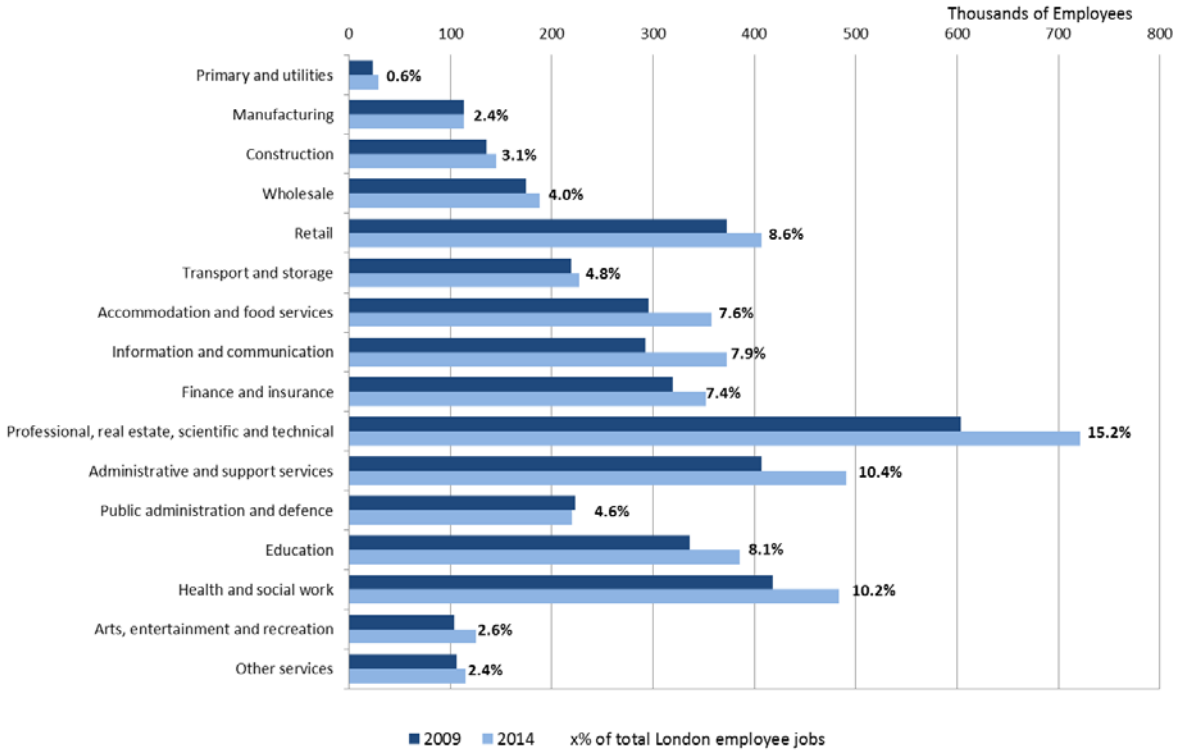
Source: Workforce jobs, ONS.

To provide a more detailed analysis of the changes in the number of jobs across different industries in London, this section uses more detailed data from the Business Register Employment Survey (BRES). The BRES data only includes employee jobs, and has a limited data range from 2009 to 2014[18]. However, it does provide a more detailed perspective of industry employment within London, and allows for an exploration of how the number of jobs has changed since the recession from 2008/09.

The BRES data shows that total employee jobs in London increased from 4.1 million in 2009 to 4.7 million in 2014, a 10 per cent increase over this time period. **Figure 7** shows the level and change in employee jobs by broad industry in 2009 and 2014. It shows that between 2009 and 2014 professional, real estate, scientific and technical services increased by 118,000 employee jobs (a 20% increase) to reach 722,000 employee jobs in 2014, accounting for 15.2 per cent of total London employee jobs, the largest industry sector in London. Administrative and support services also increased substantially, increasing by 83,000 employee jobs (a 20% increase) from 2009 to 2014 to reach 491,000 in 2014 to become the second largest industry sector in London. The information and communication sector increased by 81,000 employee jobs (a 28% increase) from 2009 to 2014, to 373,000 employee jobs (the 6th largest sector in London).

The overall level of growth for the other large sectors in London was lower than the industries noted above; however, these remained important sources of jobs growth in London. For instance between 2009 and 2014, health and social work (the 3rd largest industry sector) increased by 66,000 employee jobs (a 16% increase) to reach 484,000 employee jobs, education (the 4th largest sector) increased by 49,000 employee jobs to reach 386,000 employee jobs. Finally, retail, the 5th largest industry sector in London reached 407,000 employee jobs in 2014, up by 34,000 jobs (a 9% increase) from 2009 to 2014.

Figure 7: Employee jobs in London by broad industry sector (1-digit SIC sector), 2009 and 2014



Source: ONS Business Register Employment Survey. Notes: Figures rounded to nearest 1,000 (after suppression rules applied in accordance with ONS disclosure requirements).

[18] Provisional ONS BRES data for 2015 will not be published until 22 September 2016. Release dates for other official labour market statistics are available at: https://www.nomisweb.co.uk/home/release_dates.asp, accessed on 16 February 2016.

Together the six sectors summarised in **Table 2** represent the largest industries sectors in London (in absolute terms) and are also among the highest in terms of absolute growth in recent years. Collectively these industries account for over 60 per cent of total employee jobs in London.

Table 2: Summary of the six largest sectors in London by employee jobs (1-digit SIC sector) 2009 to 2014

Sector	2014 employee jobs	Employee jobs rank (1-16)	Share of total London employee jobs (%)	Share of total London employee jobs (1-16)	Growth in employee jobs (2009-2014)	Growth rank (1-16)
Professional, real estate, scientific and technical activities	722,000	**1**	15.2%	**1**	118,000	**1**
Administrative and support services	491,000	**2**	10.4%	**2**	84,000	**2**
Health and social work	484,000	**3**	10.2%	**3**	66,000	**4**
Retail	407,000	**4**	8.6%	**4**	34,000	**7**
Education	386,000	**5**	8.1%	**5**	49,000	**6**
Information and communication	373,000	**6**	7.9%	**6**	81,000	**3**
Total employee jobs	**4,733,000**		**100.0%**		**589,000**	

Source: ONS Business Register Employment Survey. Notes: Figures rounded to nearest 1,000 (after suppression rules applied in accordance with ONS disclosure requirements).

The following section breaks down the selected sectors into more detail, using the 2-digit or 3-digit standard industrial classification (SIC) where appropriate.

Professional, real estate, scientific and technical activities (722,000 employee jobs in 2014):

- The largest sub-sector in this industry is activities of head offices; management consultancy activities, which accounted for 222,000 employee jobs in 2014, up 57,000 from 2009. This recent growth consisted of increases in business and other management consultancy (up 31,000 employee jobs, a 26% increase to 147,000 employee jobs in 2014) and activities of head offices (up 27,000 jobs, a 56% increase to 75,000 employee jobs in 2014).

- Other large sub-sectors within this industry include legal and accounting activities (173,000 employee jobs in 2014) of which 87,000 employee jobs were in accounting, bookkeeping, auditing and tax consultancy, and 86,000 employee jobs were in legal activities; real estate activities (108,000 employee jobs in 2014), architectural and engineering activities; technical testing and analysis (74,000 employee jobs in 2014) and advertising and market research (70,000 employee jobs in 2014).

Administration and support services (491,000 employee jobs in 2014):

- The largest sub-sector within this industry is employment activities, which accounted for 164,000 employee jobs in 2014, up 141,000 from 2009. This recent growth consisted largely of an increase in temporary employment agency activities (up 21,000 employee jobs, a 20% increase to 127,000 jobs) which include temporary employees working across a range of industry sectors.

- Office administrative, office support and other business support activities accounted for 89,000 employee jobs in 2014, up 34,000 from 2009 (a 62% increase).

- Other large sub-sectors in this industry include services to buildings and landscape activities (143,000 employee jobs in 2014) and security and investigation services (56,000 employee jobs in 2014).

Health and social work (484,000 employee jobs in 2014):

- The largest sub-sector within this industry is human health activities, which accounted for 280,000 employee jobs in 2014, up 51,000 jobs from 2009. This recent growth consisted largely of an increase in hospital activities (up 28,000 employee jobs, an 18% increase to 186,000 employee jobs in 2014) and medical and dental practice activities (up 20,000 employee jobs, a 73% increase to 46,000 employee jobs in 2014).

- Other large sub-sectors in this industry include social work activities without accommodation (140,000 employee jobs in 2014) and residential care activities (64,000 employee jobs in 2014).

Retail (407,000 employee jobs in 2014):

- The largest sub-sector in this industry is retailing in non-specialised stores (including supermarkets and department stores) which accounted for 161,000 employee jobs in 2014, up 12,000 jobs from 2009 (an 8% increase).

- Retailing of other goods in specialised stores accounted for 130,000 employee jobs in 2014, up 14,000 from 2009 (a 12% increase). Recent growth in this sub-sector was in part due to increases in the number of jobs in clothing stores (up 8,000 employee jobs, a 13% increase to 69,000 employee jobs in 2014) and dispensing chemists (up 2,000 employee jobs, a 31% increase to 10,000 employee jobs in 2014).

- Other large sub-sectors in this industry include retailing of household goods in specialised stores (32,000 employee jobs in 2014) and food and beverage retailing in specialised stores (26,000 employee jobs in 2014).

Education (386,000 employee jobs in 2014):

- The largest sub-sector within this industry is primary education, which accounted for 144,000 employee jobs in 2014, up 13,000 employee jobs from 2009 (a 10% increase).

- Higher education accounted for 80,000 employee jobs in 2014, up 14,000 employee jobs from 2009 (a 20% increase).

- Secondary education is another large sub-sector in this industry accounting for 103,000 employee jobs in 2014, up 3,000 employee jobs since 2009 (a 3% increase).

Information and communication (373,000 employee jobs in 2014):

- The largest sub-sector in this industry is computer programming, consultancy and related activities which accounted for 161,000 employee jobs in 2014, up 47,000 from 2009. This recent growth consisted of increases in computer consultancy activities (up 22,000 employee jobs, a 32% increase to 89,000 employee jobs in 2014) and computer programming activities (up 21,000 employee jobs, a 110% increase to 40,000 employee jobs in 2014).

- Other large sub-sectors within this industry include motion picture, video and television programme activities (53,000 employee jobs), and other telecommunications activities (37,000 employee jobs in 2014).

These selected sectors are important to London's economy for different reasons. Some of these sectors, such as professional services, real estate, administration and support services and information and communications are large and are relative specialisations of London's broader economy (see **Figure 1**). In contrast, other sectors such as retail, education and health serve London's large population, which is projected to continue to grow rapidly in the future (see section 4).

2.2 Occupations and qualifications

This section presents data from the Annual Population Survey (APS), which provides information on the type and nature of work carried out and the qualifications held by the workforce. The APS is a household survey relying on self-reporting and self-classification, and is therefore subject to survey error and is not directly comparable to the BRES series presented in the previous section. Due to these caveats, the analysis presented in this section is focused towards a high level analysis of occupations and qualifications in London, and caution needs to be taken when interpreting results.

Although the APS is a household survey, information is also recorded on the place of work of those within the household who are in-work, and it is this information which is used to understand the occupational structure and level of formal qualifications held by workers in London. Therefore, this section presents data on the occupation and qualification structure of where people work, rather than their place of residence. The APS series began in 2004 and so the data in this section includes data from 2004 to the latest available data in 2014[19].

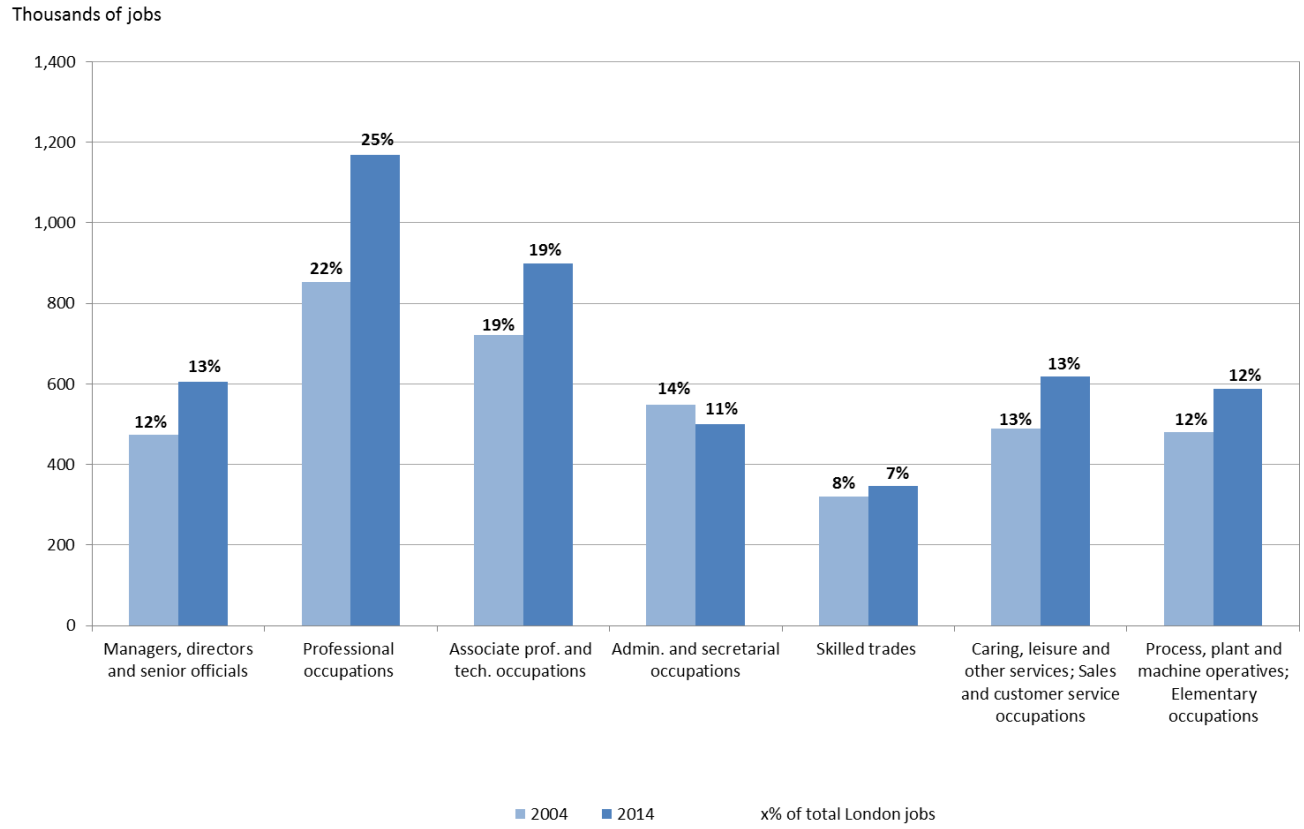
Formal qualifications are a key pathway through which people develop skills and the attainment of qualifications can act as a signal to employers of an employee's prerequisite skills. Therefore, at an aggregate level, formal qualification levels of a workforce can act as indicator of the availability of skilled labour within the economy. They do not however easily account for the skills people acquire within the workplace or through informal learning, while the possession of a particular qualification level does not mean that these skills are necessarily in demand or used in the workplace. Information on the occupational structure, which better reflects the nature of work and work tasks, provides an alternative indicator of the demand for skilled labour. This is why the occupation data presented in this section is particularly useful for understanding skill levels, as it can serve as an indicator of an individual's wider knowledge, skills and competencies, giving a more rounded view of the skill level necessary to undertake the job.

Occupational structure – London

Figure 8 provides a breakdown of the number of people employed in different broad occupational groups (1-digit SOC category) across London in 2004 and 2014. It shows there were 1.2 million jobs (25% of all London jobs) in professional occupations in 2014. A further 19 per cent (926,000 jobs) were in associate professional and technical occupations. Between 11 and 13 per cent of jobs (500,000 and 630,000 jobs) were in managerial; administrative; caring, leisure, sales and service; or process, plant and elementary occupations. The remaining 7 per cent of jobs (345,000 jobs) related to jobs in skilled trades (such as mechanics, electricians and chefs). Overall since 2004, the share of jobs across most occupations has remained relatively stable, with the only substantial changes occurring in professional occupations (22% to 25%) and administrative and secretarial occupations (14% to 11%).

[19] ONS APS data for 2015 will not be published until 20 April 2016. Release dates for other official labour market statistics are available at: https://www.nomisweb.co.uk/home/release_dates.asp, accessed on 16 February 2016

Figure 8: Number and proportion (%) of jobs in London (main and secondary jobs) by broad occupational group (1-digit SOC), 2004 and 2014



Source: ONS Annual Population Survey

To explore these trends in more depth, **Table 3** outlines the change in broad occupational groups from 2004 to 2014. This table excludes secondary jobs, to provide a clearer view on the level of skills within London and the highlighted cells refer to occupational groups that have increased significantly from 2004 to 2014. The other occupations (not in highlighted cells) did not experience a statistically significant change in the number of jobs between 2004 and 2014 (at the 95% confidence level).

Table 3 also shows that overall there has been growth across all occupations over this time. The occupations which increased the most in absolute terms over this 10-year period include more senior and highly skilled roles including: professional occupations (315,000 jobs, 37% growth to 1.17 million jobs), associate professional and technical occupations, (178,000 jobs, 25% growth to 900,000 jobs), and managers, directors and senior officials (133,000 jobs, 28% growth to 606,000 jobs). All of these occupational groups grew significantly over 2004-2014. There was also significant growth among some of the smaller occupational groups, with sales and customer service occupations (which mainly include retail workers), caring, leisure and other service occupations (which mainly include people who work in health and education such as teaching assistants, carers and hospital workers), and elementary occupations increasing to 292,000 jobs (up by 16%), to 325,000 jobs (up by 37%) and to 395,000 jobs (up 31%) respectively.

Table 3: Number of jobs (thousands) in London by occupation of job holder (main job), all persons and all ages, 2004, 2009-2014 (broad occupational groups, 1-digit SOC)

Occupation	2004	2009	2010	2011	2012	2013	2014	Change (2004-14)	% Change (2004-14)
Managers, directors and senior officials	**473**	**494**	**508**	**526**	**568**	**585**	**606**	**133**	**28**
Professional occupations	**854**	**991**	**1,022**	**1,101**	**1,112**	**1,168**	**1,169**	**315**	**37**
Associate professional and technical occupations	**722**	**819**	**827**	**822**	**849**	**845**	**900**	**178**	**25**
Administrative and secretarial occupations	548	509	487	459	492	480	499	-49	-9
Skilled trades	319	336	305	311	308	323	346	27	8
Caring, leisure and other services	**238**	**285**	**296**	**288**	**300**	**330**	**325**	**87**	**37**
Sales and customer service occupations	**251**	**261**	**286**	**254**	**261**	**288**	**292**	**41**	**16**
Process, plant and machine operatives	179	181	175	181	178	181	193	14	8
Elementary occupations	**301**	**335**	**324**	**363**	**367**	**354**	**395**	**94**	**31**
Total jobs	**3,885**	**4,211**	**4,229**	**4,304**	**4,434**	**4,554**	**4,724**	**839**	**22**

Source: ONS Annual Population Survey. Notes: Rounded to nearest 1,000 or 1 per cent. Blue highlighted occupational groups indicate that growth between 2004 and 2014 was significant at the 95% confidence level.

To understand the types of occupations underpinning growth in these areas, we turn to look at more detailed occupational groups using the 2-digit level standard occupational classification (SOC). At this level of analysis, the ONS further classifies occupations by approximate skill level, based on the typical level and depth of specialised knowledge, qualifications and experience required to perform a role. These skill level groups are outlined in **Box 1**.

Box 1 - Classification of occupations by skill level

The ONS classifies occupations by skill level across the following four groups:

High – This skill level is normally acquired through a degree or an equivalent period of work experience. Occupations at this level are generally termed 'professional' or managerial positions, and are found in corporate enterprises or governments. Examples include senior government officials, financial managers, scientists, engineers, medical doctors, teachers and accountants.

Upper-middle – This skill level equates to competence acquired through post-compulsory education but not to degree level. Occupations found at this level include a variety of technical and trades occupations, and proprietors of small business. For the latter, significant work experience may be typical. Examples of occupations at this level include catering managers, building inspectors, nurses, junior police officers, electricians and plumbers.

Lower-middle – This skill level covers occupations that require the same competence acquired through compulsory education, but involve a longer period of work-related training and experience. Examples of occupations at this level include machine operation, driving, caring occupations, retailing, and clerical and secretarial occupations.

Low – This skill level equates to the competence acquired through compulsory education. Job-related competence involves knowledge of relevant health and safety regulations and may be acquired through a short period of training. Examples of occupations at this level include postal workers, hotel porters, cleaners and catering assistants.

In terms of these occupational skill levels, approximately 34 per cent of all jobs in London related to occupations which can be classed as high skilled occupations. A further 30 per cent were classed as upper-middle skilled occupations, 28 per cent as lower-middle skilled occupations and 8 per cent were classed as low skilled occupations.

Adapted from ONS, Request for highly skilled and low skilled job statistics and SOC volume 1: structure and descriptions of unit groups, accessed on 01/02/16.

Table 4 shows the trends in the number of jobs by occupation in London at a more detailed occupational category (2-digit SOC). Like **Table 3** this table excludes secondary jobs, to provide a clearer view on the level of skills within London. The highlighted cells refer to occupations which have increased significantly between 2004 and 2014. The other occupations did not experience a statistically significant change in the number of jobs between 2004 and 2014 (at the 95% confidence level). Overall there were significant increases in the number of jobs between 2004 and 2014 in 13 occupational categories, the largest increases include:

- Business, media and public service professionals – an increase of 135,000 jobs to 461,000 jobs (up 42%).
- Business and public service associate professionals – an increase of 104,000 jobs to 500,000 jobs (up 26%).
- Corporate managers and directors – an increase of 88,000 jobs to 445,000 jobs (up 25%).
- Elementary administration and service occupations – an increase of 82,000 jobs to 353,000 jobs (up 30%).
- Science, research, engineering and technology professionals – an increase of 80,000 jobs to 312,000 jobs (up 34%).
- Caring personal service occupations– an increase of 59,000 jobs to 213,000 jobs (up 38%).
- Teaching and educational professionals – an increase of 56,000 jobs to 222,000 jobs (up 34%).

Table 4: Number of jobs (thousands) in London by occupation of job holder (main job), all persons and all ages, 2004, 2009-2014 (detailed occupational groups, 2-digit SOC occupational category)

Occupation	Skill level	2004	2009	2010	2011	2012	2013	2014	Change (2004-14)	% Change (2004-14)
Corporate Managers and Directors	**high**	**357**	**378**	**392**	**393**	**431**	**429**	**445**	**88**	**25**
Other Managers and Proprietors	**upper middle**	**116**	**115**	**116**	**133**	**137**	**156**	**160**	**45**	**38**
Science, Research, Engineering and Technology Professionals	**high**	**232**	**272**	**275**	**272**	**280**	**291**	**312**	**80**	**34**
Health Professionals	**high**	**131**	**145**	**151**	**167**	**159**	**188**	**174**	**44**	**33**
Teaching and Educational Professionals	**high**	**166**	**191**	**203**	**210**	**221**	**230**	**222**	**56**	**34**
Business, Media and Public Service Professionals	**high**	**325**	**384**	**394**	**452**	**453**	**458**	**461**	**135**	**42**
Science, Engineering and Technology Associate Professionals	upper middle	76	68	69	72	77	83	69	-7	-9
Health and Social Care Associate Professionals	**upper middle**	**47**	**52**	**59**	**69**	**57**	**61**	**70**	**23**	**49**
Protective Service Occupations	upper middle	50	64	65	64	57	55	60	10	20
Culture, Media and Sports Occupations	**upper middle**	**154**	**175**	**174**	**183**	**178**	**174**	**202**	**48**	**31**
Business and Public Service Associate Professionals	**upper middle**	**396**	**460**	**461**	**434**	**481**	**472**	**500**	**104**	**26**
Administrative Occupations	lower middle	383	361	347	343	374	359	377	-6	-2
Secretarial and Related Occupations	lower middle	165	147	140	116	118	121	122	-42	-26
Skilled Agricultural and Related Trades	upper middle	11	17	13	11	14	12	18	7	64
Skilled Metal, Electrical and Electronic Trades	upper middle	101	101	97	86	78	82	94	7	-7
Skilled Construction and Building Trades	upper middle	123	145	121	134	133	144	142	19	15
Textiles, Printing and Other Skilled Trades	upper middle	84	73	75	80	84	86	91	7	8
Caring Personal Service Occupations	**lower middle**	**154**	**195**	**206**	**200**	**204**	**222**	**213**	**59**	**38**
Leisure, Travel and Related Personal Service Occupations	**lower middle**	**84**	**90**	**90**	**88**	**96**	**108**	**112**	**28**	**33**
Sales Occupations	**lower middle**	**191**	**186**	**207**	**198**	**202**	**221**	**221**	**31**	**16**
Customer Service Occupations	lower middle	60	75	80	56	59	68	71	11	18
Process, Plant and Machine Operatives	lower middle	51	39	49	48	42	46	46	-6	-10
Transport and Mobile Machine Drivers and Operatives	lower middle	127	143	126	133	135	135	147	20	16
Elementary Trades and Related Occupations	low	31	30	30	35	29	33	42	12	35
Elementary Administration and Service Occupations	**low**	**271**	**305**	**293**	**328**	**338**	**320**	**353**	**82**	**30**
Total jobs		**3,885**	**4,211**	**4,229**	**4,305**	**4,434**	**4,553**	**4,725**	**839**	**22**

Source: ONS Annual Population Survey. Notes: Rounded to nearest 1,000 or 1 per cent. This table may not sum to the 1-digit level due to rounding. Highlighted occupational groups indicate that growth between 2004 and 2014 was significant at the 95% confidence level.

Qualifications and occupations – London

The qualification data used in this section has been standardised following the UK government's guidance on comparing different qualifications[20]. In this section the APS data presented includes main and secondary jobs, which means the totals are higher when compared with the previous section which described the occupational data.

Table 5 outlines that in 2014, 58 per cent of London's workforce had higher education qualifications or above (NVQ4+), with a further 17 per cent having qualifications at GCE, A-level or equivalent. In contrast, the rest of the UK had a higher proportion of workers with A-level or equivalent qualifications (25%) and GCSE grades A*-C or equivalent (22%), but a lower level of higher education qualifications or above (39%).

Table 5: Number of jobs in London by highest qualification of job holder (main and secondary jobs), all persons and all ages, 2014 (thousands of jobs)

Highest qualification (Level)	Number of jobs in London	Proportion of jobs in London %	Number of jobs in the rest of the UK	Proportion of jobs in the rest of the UK %
Degree or equivalent	2,432	50	7,568	29
Higher education	379	8	2,679	10
GCE, A-level or equivalent	805	17	6,495	25
GCSE grades A*-C or equivalent	606	13	5,649	22
Other qualifications	424	9	2,199	8
No qualification	201	4	1,532	6
Total jobs	**4,847**	**100**	**26,123**	**100**

Source: ONS Annual Population Survey. Note: Rounded to nearest 1,000 or 1 per cent. NVQ level 1 is combined with other qualifications and trade apprenticeships are split 50:50 across GCSE and A-level equivalents.

[20] For clarity 'Degree or equivalent' and 'Higher education' equates to National Vocational Qualification (NVQ) level 4 and above, 'GCE, A-level or equivalent' equates to NVQ level 3, GCSE grade A*-C or equivalent' equates to NVQ level 2, and 'other qualifications' equates to NVQ level 1, as well as other entry level qualifications. Government guidance is available at https://www.gov.uk/what-different-qualification-levels-mean/compare-different-qualification-levels (Accessed on 9th February 2016).

Table 6: Number of jobs in London by occupational group and highest qualification of job holder (main and secondary jobs), all persons and all ages, 2014 (thousands of jobs)

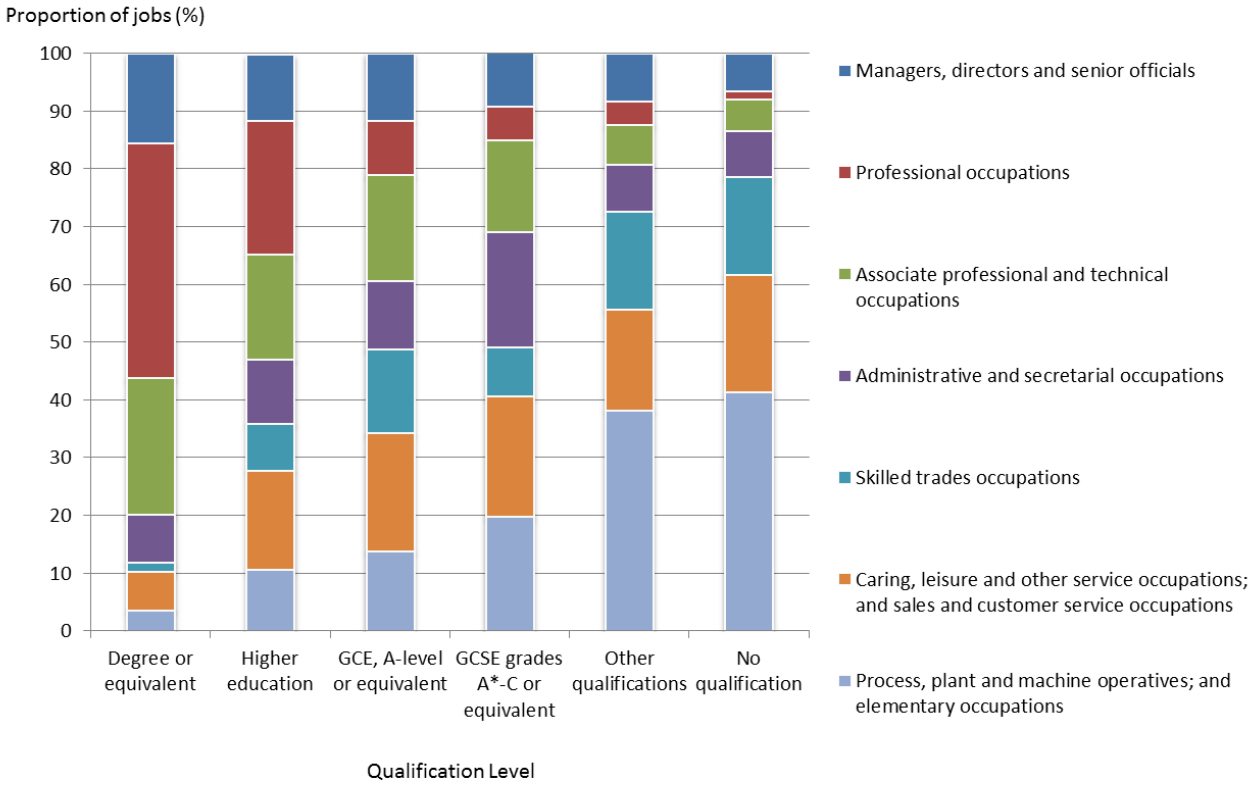
Highest qualification (Level)	Managers, directors and senior officials	Professional occupations	Associate professional and technical occupations	Admin. and secretarial occupations	Skilled trades occupations	Caring, leisure and other service; and sales and customer service occupations	Process, plant and machine operatives; and elementary occupations	Total in all occupations
Degree or equivalent	375	988	574	201	39	160	87	2,425
Higher education	43	88	69	42	31	65	40	379
GCE, A-level or equivalent	94	75	148	94	117	164	111	803
GCSE grades A*-C or equivalent	57	35	96	120	52	126	119	604
Other qualifications	35	17	29	34	72	73	161	421
No qualification	13	3	11	16	34	41	83	201
Total jobs	**618**	**1,207**	**926**	**507**	**345**	**630**	**601**	**4,833**

Source: ONS Annual Population Survey. Notes: Rounded to nearest 1,000, there is some variation in the figures of Table 4 and Table 5; this is due to the levels of non-response across the different questions of the survey. NVQ level 1 is combined with other qualifications and trade apprenticeships are split 50:50 across GCSE and A-level equivalents.

Figure 9 and
Table *6* show the number and proportion of jobs in London by qualification and occupation[21]. Together they show that workers employed as managers, senior officials or in professional roles are much more likely to hold higher education qualifications or above, when compared to other occupations. Conversely, those employed in service, sales and skilled trade occupations are more likely not to hold any formal qualifications. Workers with GCE, A-level or equivalent qualifications are allocated relatively evenly across each of the occupational categories, with the exception of professional occupations. This suggests that while different types of work are more typically associated with different levels of qualification, London job holders in each occupational group are associated with a wide range of qualification pathways.

[21] This type of breakdown is unavailable for the sub-regions. This is due the small sample sizes within the APS survey leads to high margins of error at the sub-regional level.

Figure 9: Proportion of jobs (%) in London by occupational group and highest qualification of job holder, all persons and all ages, 2014



Source: ONS Annual Population Survey. Note: data on qualifications includes records for main and secondary jobs. NVQ level 1 is combined with other qualifications.

2.3 Earnings growth and occupations

This section uses data from the ONS Annual Survey of Hours and Earnings (ASHE) to provide an overview of how pay levels in London vary across different occupational categories and how these have changed over time. Due to the small sample size of the survey, ASHE earnings data broken down by occupations is not considered sufficiently reliable for detailed analysis at sub-regional level. Earnings or pay levels referred to in this section are measured in terms of median (average) gross annual pay, as this best reflects the labour employers are buying in the marketplace. This incorporates earnings of both full and part-time workers, and excludes overtime.

Earnings provide an alternative indicator of demand for skills and in the view of the UK Migration Advisory Committee serve as "arguably the best single indicator of the value of skills in an open labour market"[22]. In other words, we would expect the demand for specialist skills to be reflected in the wage on offer. Information on the level and change in average earnings may also provide a signal to learners and jobseekers, (as well as their parents and career advisors) of increased rewards associated with different types of work. Relatively higher earnings should boost the number of people willing and able to work in a particular role. This is because, as wages rise, other workers will be attracted to enter the industry or switch into the occupation, while those without work (including those in education) will also respond to the incentive of higher rewards.

[22] Source: Migration Advisory Committee, 'MAC review of Tier 2 migration', January 2016.

To explore the relationship between earnings and occupations, a previous publication by the Centre for Economic and Social Inclusion (CESI), used ASHE earnings data to examine the change in annual earnings across different occupations between 2011 and 2014[23]. This provides an overview of the level and change in median pay for London workers in the 2011-2014 periods alongside median pay levels in April 2014. Across all occupations, median pay levels in London were around £30,000 as of April 2014[24].

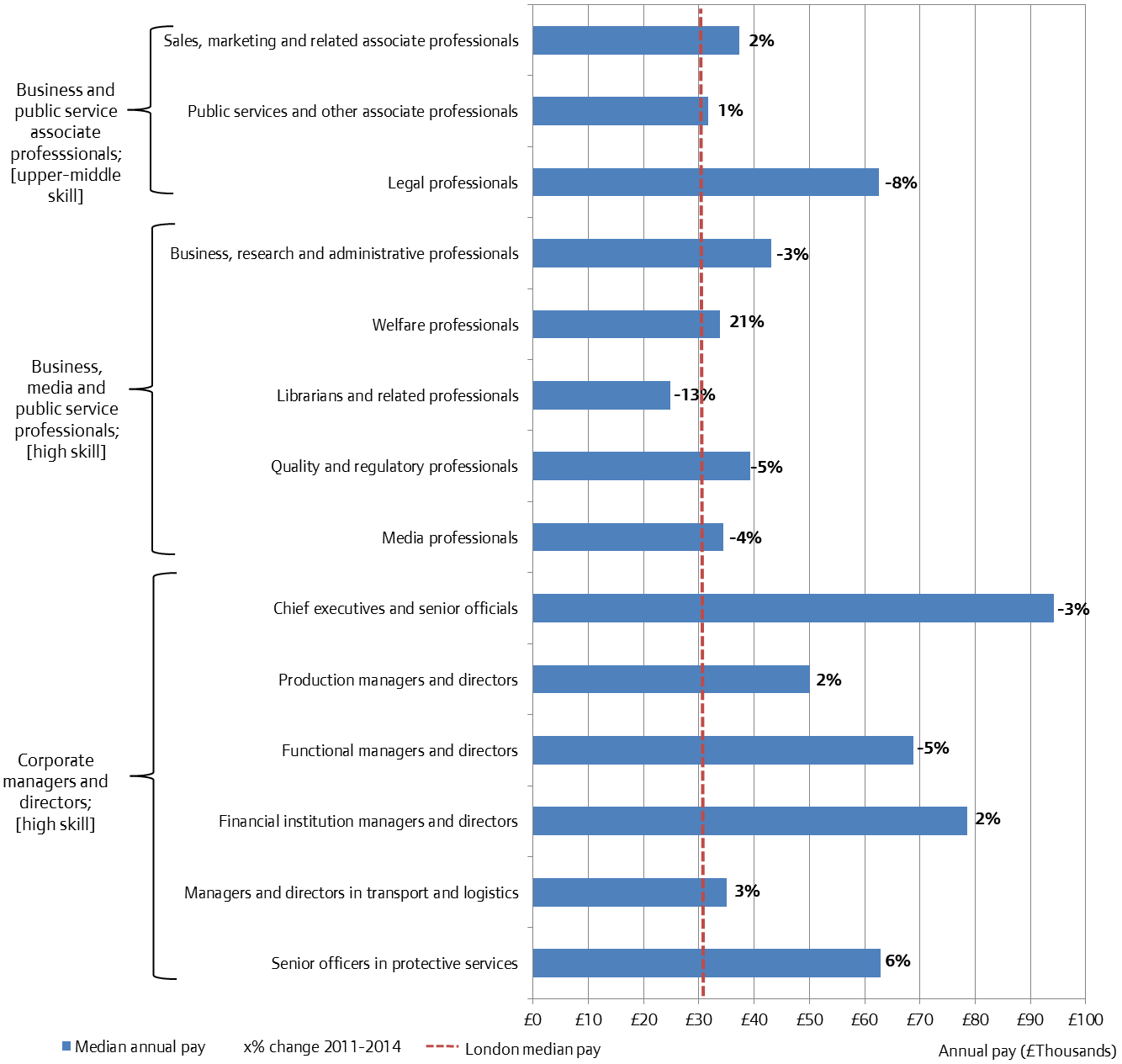
Figure 10 and **Figure 11** show that almost all of the occupations that make up the three largest 2-digit occupations in London (as identified in section 2.2) have an annual pay level above London's median pay. In contrast, the pay levels across the fourth and fifth largest occupations in London are below the London average. This could be due to the differences in skill level between these occupations, as the three largest occupations are all of upper-middle to high skill level, while the fourth and fifth largest occupations are at relatively lower skill levels.

Figure 10 and **Figure 11** also show that within the largest occupational groups, median annual pay levels did not increase substantially between 2011 and 2014. There are however several exceptions to this including: welfare professionals in London, whose annual earnings increased by an estimated 21 per cent (an increase of £5,700), elementary administration occupations (up 10%; £2,300), other elementary service occupations (an increase of 8%; or £800), senior officers in protective services (up 6%; £3,800) and elementary security occupations (up 5%; £1,000).

The previous analysis of occupations at the London level also show that the number of jobs across all five of the largest 2-digit occupational groups increased over 2011 to 2014. In particular, business and public service associate professionals, and corporate managers and directors increased significantly by 66,000 jobs and 52,000 jobs respectively.

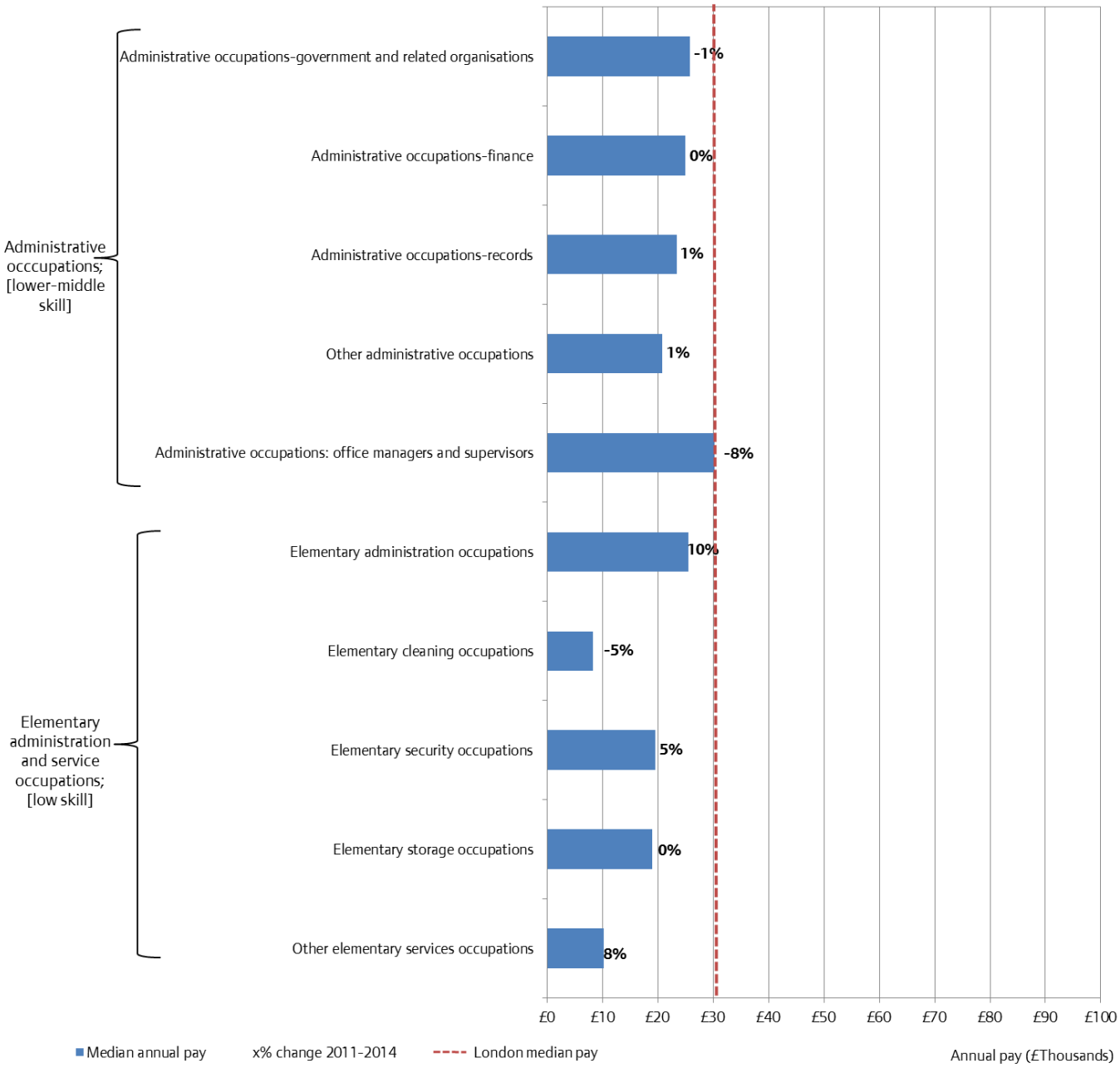
[23] CESI, London Labour Demand – Understanding the demand for skills in London's Labour Market, December 2015, Report for the London Enterprise Panel, accessed on 12/01/16.
[24] The equivalent median earnings across the Boroughs ranged from approximately £19,000 in Harrow to £52,000 the City of London in April 2014.

Figure 10: Gross annual pay level (2014) and percentage change (2011-2014) for first, second and third largest 2-digit occupational groups in London



Source: ONS Annual Survey of Hours and Earnings (ASHE) via CESI.

Figure 11: Gross annual pay level (2014) and percentage change (2011-2014) for fourth and fifth largest 2-digit occupational groups in London



Source: ONS Annual Survey of Hours and Earnings (ASHE) via CESI.

Within ASHE, the ONS also publish employment numbers with the caveat that they are 'for indicative purposes only and should not be considered an accurate estimate of employee job counts'. However, the 2-digit and 3-digit SOC estimates for London generally have low coefficients of variation, which indicate reasonably reliable data, which can help to illustrate general trends at that level of occupational detail.

Figure 12 reproduces a chart produced by the Centre for Economic and Social Inclusion (CESI) from the same report that presented the analysis for the two previous gross annual pay charts[25]. This figure uses

[25] CESI, London Labour Demand – Understanding the demand for skills in London's Labour Market, December 2015, Report for the London Enterprise Panel, accessed on 12/01/16.

ASHE data to show the change in estimated employment levels (horizontal axis) and annual pay (vertical axis) across all 3-digit occupations in London from 2011-2014. The size of the bubbles refer to the level of employment in each occupation in thousands of jobs, while the colours indicate the general skill level of the occupation from the ONS skill classification (higher levels of skill are darker blue, while relatively lower levels of skill are lighter blue).

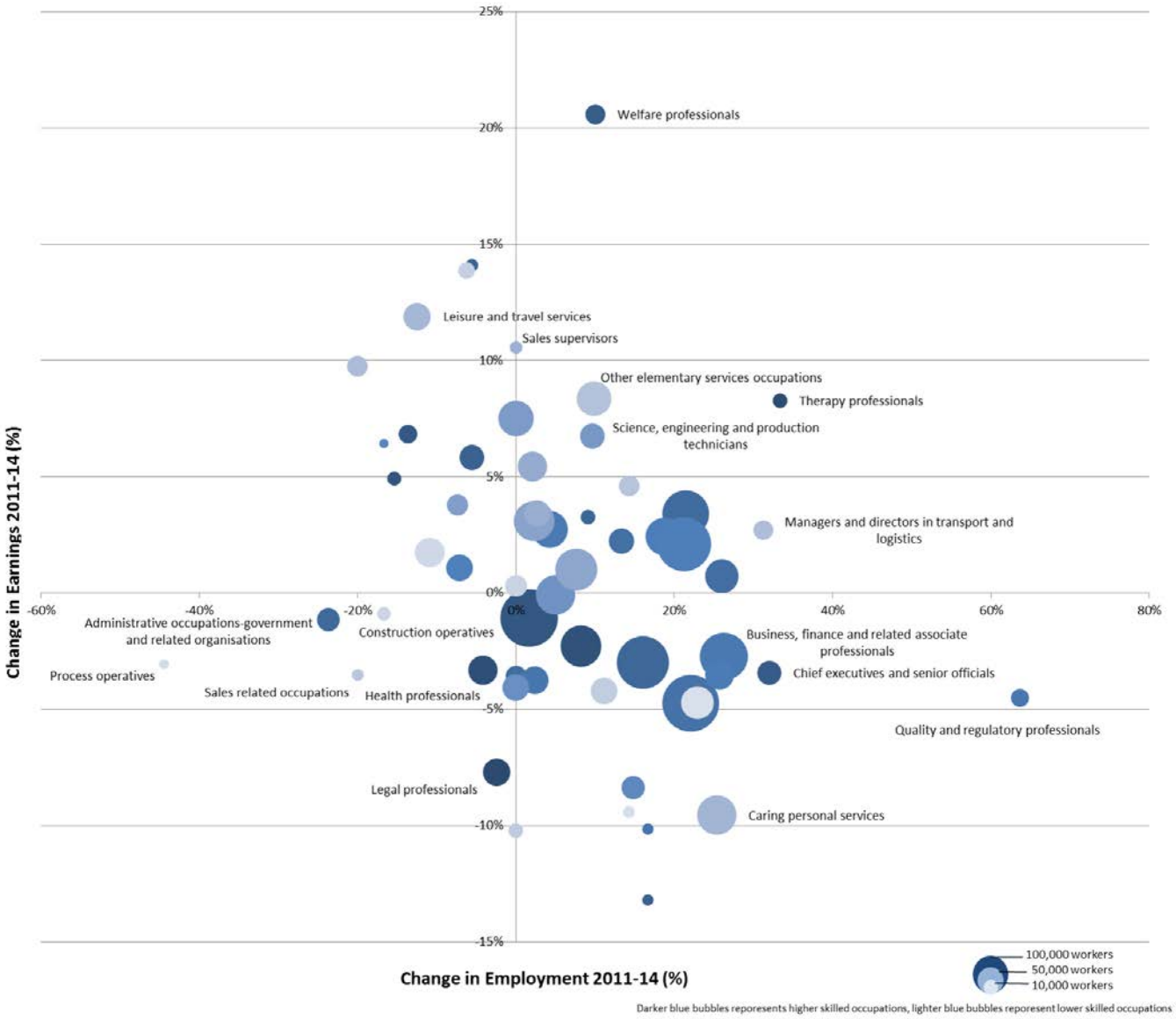
The occupations in the top right quadrant have therefore increased in terms of both job numbers and annual pay in the 2011 to 2014 period. This category includes sales supervisors and other elementary services occupations. CESI however notes that earnings growth in these occupations could have been due to the increases in the national minimum wage, rather than as a result of competitive pressures arising from increased demand for labour.

The lower right hand quadrant includes occupations which experienced growth in jobs numbers over this time period, without a corresponding increase in pay. These include a range of professional occupations such as quality and regulatory professionals, and finance and related professionals, as well as chief executives and senior officials, and caring and personal services. CESI note that the absence of pay rises in this quadrant may be symptomatic of an 'over-supply' of workers moving into growing occupations, or as a result of the public sector holding down pay for non-market reasons. It is also however possible that this reflects compositional effects resulting from possible shifts towards more part-time work or a younger workforce with relatively lower initial earnings, which thereby holds down average wages.

In contrast, the bottom left hand quadrant includes occupations with declining employment and annual pay over the period. The occupations in this quadrant include process operatives, construction operatives, sales related occupations, legal professionals and health professionals. The top left quadrant shows declining numbers with increasing pay, and includes leisure and travel services. Falling numbers in a particular occupation can provide an indicator of demand for the different types of work due to dynamic changes in the labour market, including technical changes, as well as changes in general economic activity. What distinguishes the lower left quadrant is the absence of an employer pay response, which CESI notes could be due to a structural fall in demand for such workers, or a result of employers not being able or willing to respond to any recruitment needs through increases in pay.

Overall, there is therefore a complex picture of changes in average earnings across specific occupations in London, and it is difficult to untangle the drivers of observed changes in earnings and detect a clear relationship to the demand for particular skills-sets based on this information alone.

Figure 12: Occupations by employment change and earnings change, London, 2011-2014 (3-digit occupational group)



Source: ONS Annual Survey of Hours and Earnings (ASHE) via CESI

2.4 Job vacancies

Employer skills survey - London

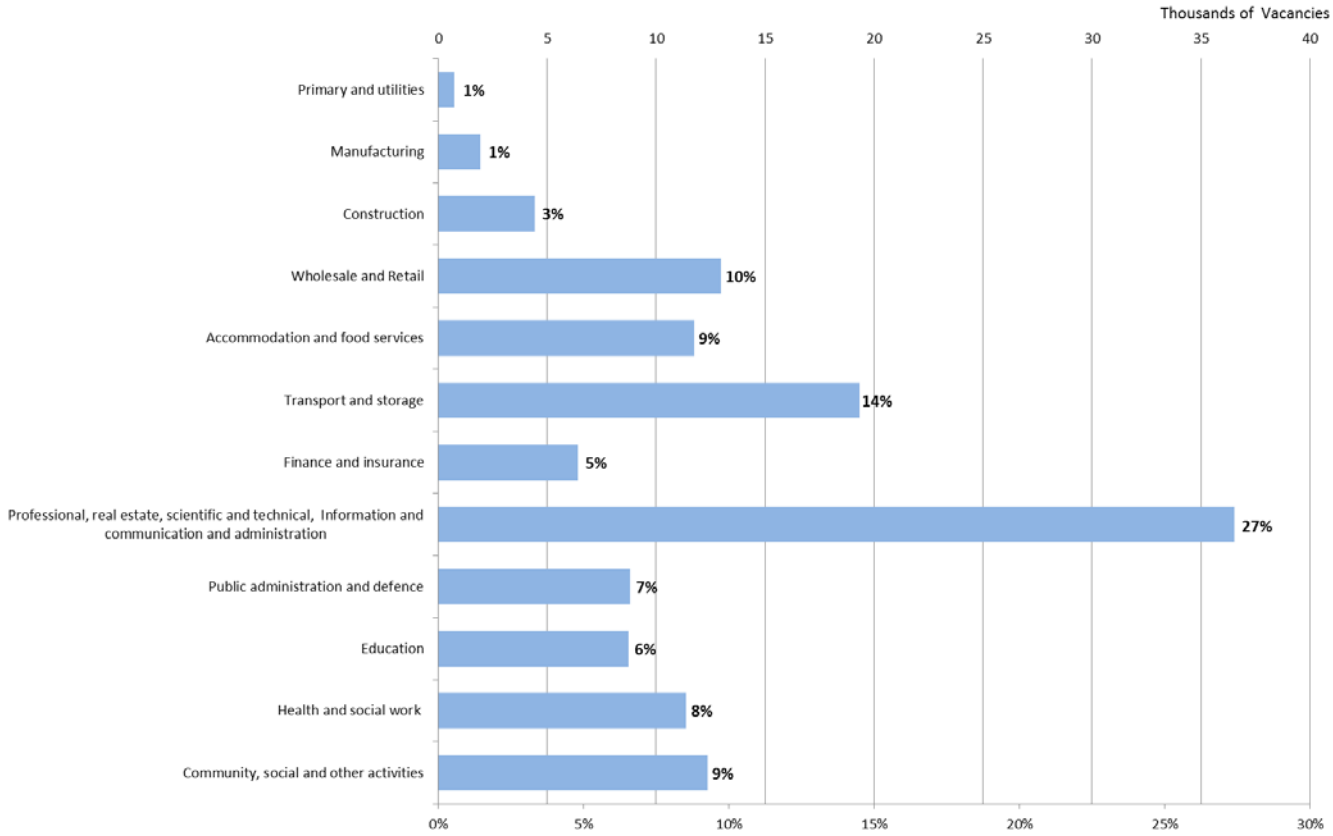
An alternative set of indicators on the types of job opportunities available and the skills that are in demand, is available from employer skills surveys that seek to assess employers' perceptions and experience of their existing workforce skills, their skills needs and details of the vacancies held. This section reports on the results of the UK Commission for Employment and Skills (UKCES) employer skills survey[26], which aims at understanding the overall level of skills (as well depth of skill shortages) in the UK economy. The results presented relate to the most recently published results based on 2013 data, as regional results from the 2015 survey will not be released until late March 2016.

[26] UKCES, 2013, Employer Skills Survey

The level of vacancies can provide an indicator of growing demand for particular types of work at a particular moment in time, though a high level of vacancies may also reflect a high level of labour market turnover or 'churn' as a result of employees leaving their current post, in need of replacement[27]. Depending on the timing of the survey, it may also capture (or fail to reflect) seasonal employment patterns in industries which increase recruitment levels at peak times every year. Based on a sample of over 10,000 employers based in London[28], the 2013 UKCES Employer Skills Survey reported just over 135,000 vacancies in London in 2013. The results presented in this section are rounded to the nearest thousand, or the nearest 1 per cent.

Figure 13 shows that 27 per cent (36,500) of all London vacancies were in the UKCES broad sector 'business services' (comprised of professional, real estate, scientific and technical, information and communication and administration). A further 14 per cent (19,000) were in transport and storage, and 10 per cent (13,000) in wholesale and retail. The level of vacancies in each sector broadly corresponds with the size of that industry in terms of the number of jobs in London (as shown in section 2.1). The only exception is in transport and storage, which makes up 14 per cent of all vacancies, but only five per cent of jobs in London. This could either be an indicator of growing demand at the time of the survey, or due to a higher level of turnover in this industry.

Figure 13: Number and proportion (%) of total vacancies in London by industry, 2013



Source: UKCES Employer Skills Survey, 2013

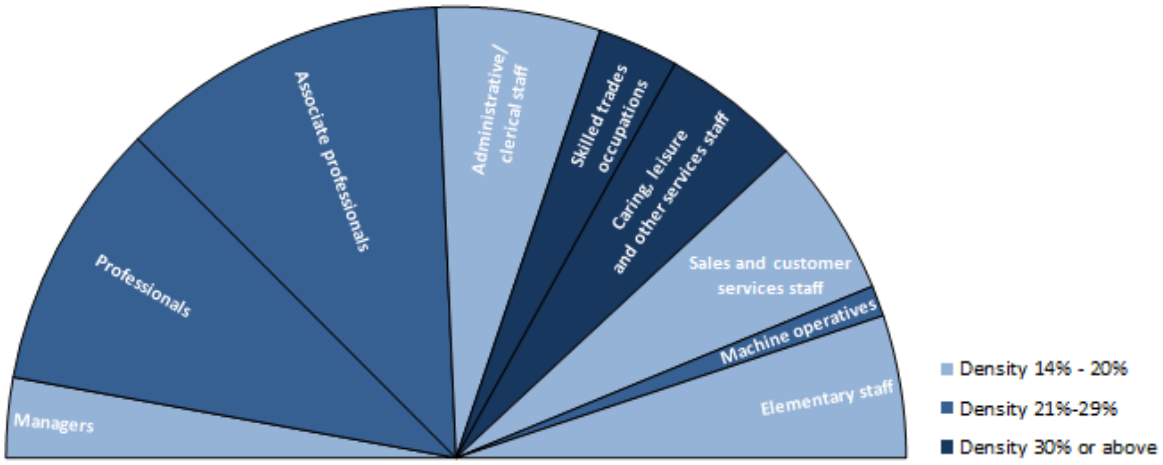
[27] Some people will retire, some will choose to leave London (and not commute back in), some will take time off work to have children, some will shift from one occupation or sector to another, some will fall long-term sick and some will die.

[28] The scope of the survey included all businesses with at least two people working at them (regardless of the ownership structure). The sampling unit was the establishment, rather than the head office, as the UKCES identified that this is the level at which skill shortages are both experienced and managed. For further technical information, see the UKCESS 2013 Technical Report, accessed on 12/01/16.

Figure 14 shows the proportions of vacancy by occupation as well as the density of skills shortages in different occupations. In this survey, skills shortage vacancies are caused by employers being unable to find people with the relevant skills, qualifications or experience for the role. Reported difficulties in filling these vacancies are often seen as an indicator of unmet demand for skills. Such employer reports should however be treated with a degree of caution as there are a number of reasons why employers may not be able to attract the quality of applicants they seek, including (among other things) insufficient remuneration, anti-social working hours, an unattractive working environment, or perceptions thereof.

Figure 14 also shows the highest proportion of job vacancies were in 'associate professional' (24%) and 'professional' (19%) occupations, which are also the largest occupations in London in terms of the overall number of jobs. The highest densities of skills shortage vacancies (shaded in dark blue) were in skilled trades, and caring, leisure and other service staff.

Figure 14: Vacancies by occupation and density of skills shortages, London, 2013

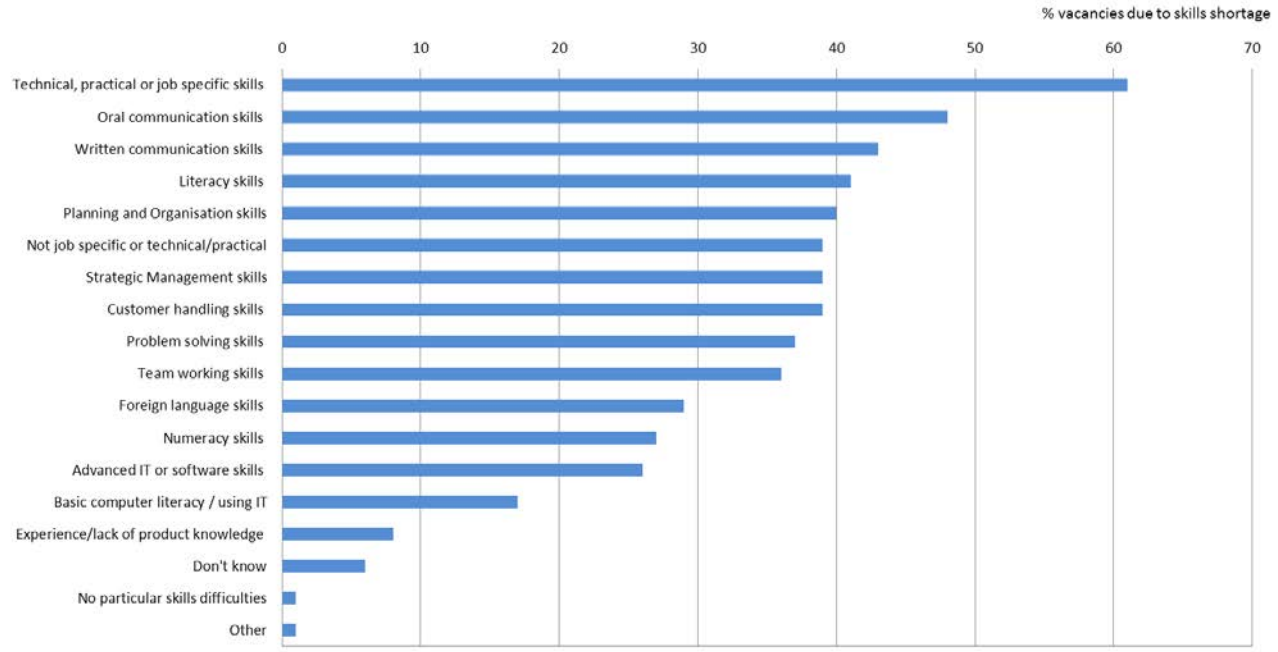


Source: UKCES Employer Skills Survey, 2013. Base: All establishments with vacancies. Notes: the density of skills shortages is measured as the number of skill-shortage vacancies as a proportion of all vacancies in that occupational group.

An overview of the types of skills shortages reported by London-based employers is provided in **Figure 15**. This indicates that the most common skill shortages related to technical, practical or job-specific skills (61 per cent)[29]. Employers also reported shortages in oral and written communication skills (48% and 43% respectively) and literacy skills (41%).

[29] Following an NIESR review, the skills descriptors have been expanded in the 2015 employer skills survey, which might provide further information on the nature of skills that are reported to be lacking. For further information see: UKESS 2015 technical report, January 2016, p.13-16

Figure 15: Skills found difficult to obtain from applicants (all skill shortage vacancies), London, 2013



Source: UKCES Employer Skills Survey (ESS), 2013

Some London employers also experienced a lack of proficiency within their existing workforce, known as skills gaps. While 5 per cent of establishments (14,000) in London reported having a skills shortage vacancy in 2013, skills gaps were more widespread; 15 per cent (37,000) of employers suffered from skills gaps within their existing workforce. In total, there are almost 240,000 cases where London employers considered existing staff not to be fully proficient in their roles (equivalent to almost 6% of all those employed). As a proportion of all employment, these skills gaps were most prevalent in elementary, sales and customer service occupations, which together make up a relatively high proportion of London's jobs (25% of all jobs).

Alongside reported skills gaps and skills shortages, there is also evidence to suggest that there is a relative lack of employer engagement and investment in skills training across the UK, and in London in particular. For example, a higher proportion of employers in London (36%) did not fund or arrange any training for staff in the 12 months to mid-2013 (compared to 34% in the rest of England). Evidence from ESS 2013 also suggests that employer investment in training had been in decline. In 2012/13, London employers invested an estimated £7.1 billion in workforce training, down 30 per cent from £10.1 billion in 2010/11 (compared to a 5% fall in employer investment in training for the UK as a whole – from £45.3 billion to £42.9 billion)[30].

[30] Note: UKCES report that this fall in total training expenditure is mainly driven by a fall in expenditure among large employers with 100 or more staff, and employers in public administration and in education. These figures include estimates of the cost of employer time. Particular challenges in London are that labour costs of trainees tend to be higher, and that employers find it hard to find time to organise training. Sources: UKCES Employer Skills Survey 2013, January 2014, and London training investment figures have been provided by the UKCES.

3 Short-term Economic Forecasts and Labour Market Projections

Summary – London

- GLA Economics publishes London's Economic Outlook (LEO) every six months. This provides a set of economic forecasts aimed to assist with short to medium term planning and policy decisions. The November 2015 release forecasts that workforce jobs in London will increase by 1.2 per cent in 2016 and 0.7 per cent in 2017. This growth is forecast to be predominantly driven by increases in business and administration services, retail, wholesale, accommodation and food services, and construction.
- GLA Economics also publishes labour market projections to provide a broad indication of its possible long-term future growth path. These suggest that workforce jobs in London are likely to increase from 5.5 million in 2014 to 6.4 million in 2036, an annual average growth rate of 0.69 per cent over the period.
- This growth is projected to be underpinned by substantial increases in professional, real estate, scientific and technical services, administrative and support services, accommodation and food services, and information and communication.
- By 2036 the number of jobs in professional occupations (irrespective of sector) is projected to increase by 504,000 from 1.2 to 1.7 million jobs. The number of jobs in the managers, directors and senior officials category is also expected to increase by 203,000 jobs by 2036, with increases also in skilled trades (up 166,000 jobs), process, plant and machine operatives and elementary occupations (up 131,000 jobs), and associate professional and technical occupations (up 63,000 jobs).
- In contrast, the number of jobs in caring, leisure and other service occupations; and sales and customer service occupations is projected to remain relatively stable, while administrative and secretarial occupations are projected to decrease by 319,000 jobs.
- In line with the continued shift towards professional service sectors and professional occupations, the number of jobs associated with degree level, and higher level qualifications is projected to increase substantially by 2036. The number of jobs associated with other qualification (including NVQ level 1) is also expected to increase. In contrast, the number of jobs associated with GCE, A-level or equivalent, GCSE A*-C and no qualifications is projected to decrease.
- Even though the projections suggest there will be a high level of structural change in London's labour market in the future, GLA Economics estimate that more than half a million people leave their occupation each year, and projects that this will increase in the future. There is a potentially significant level of training and skills requirements associated with the need to replace those leaving their roles.

This section presents the findings of short-term economic forecasts and the long term labour market projections produced by GLA Economics. This analysis will assist with the forward planning aspects of the Further Education area reviews by providing some context around the economic trends that are most likely to arise over the medium to long term.

3.1 Short-term economic forecasts for London

GLA Economics publishes a report called London's Economic Outlook (LEO) every six months, which is a set of economic forecasts aimed to assist with short to medium term planning and policy decisions. The forecasts themselves are based on an in-house model built by Volterra Consulting Limited, and are

presented below. In addition to the GLA forecasts, London's Economic Outlook also presents a 'consensus' forecast from a review of other independent economic forecasters, and is available in the main LEO report[31].

As with any economic forecast, model and data uncertainty as well as unpredictable events contribute to errors in forecasting. While GLA Economics takes steps to minimise these sources of error, these forecasts should be seen as an indication of what is in GLA Economics' view given the information available, most likely to happen, not what will definitely happen.

GLA Economics forecasts that overall growth in workforce jobs in London (employee jobs and self-employed) will increase from 5.65 million in 2015[32] to 5.75 million in 2017. This increase will be driven by an overall increase in workforce jobs of 1.2 per cent in 2016 and 0.7 per cent in 2017.

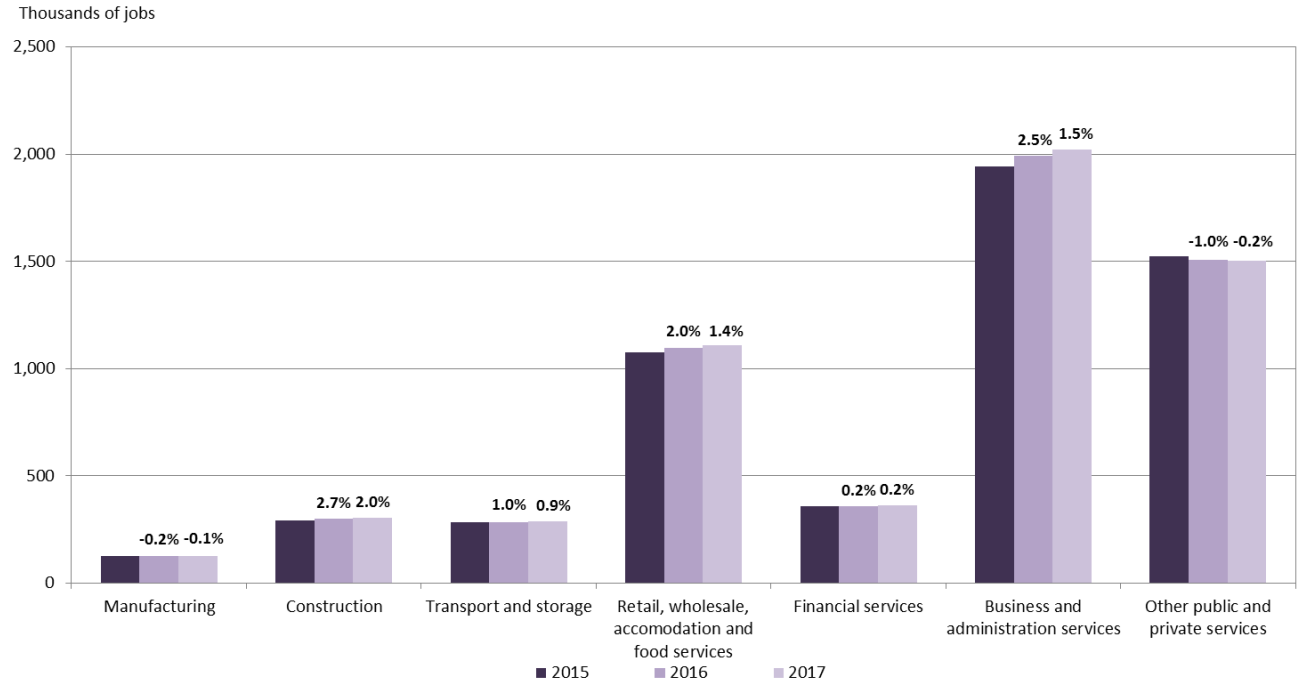
Figure 16 shows that business and administration services[33], is forecast to grow by 2.5 per cent in 2016 and 1.5 per cent in 2017, adding 78,000 workforce jobs. Retail, wholesale, accommodation and food services is expected to grow by 37,000 workforce jobs (growing by 2% in 2016 and 1.4% in 2017). Other sectors that are also expected to grow between 2015-2017 include construction (14,000 workforce jobs), transport and storage (5,500 jobs) and financial services (1,600 workforce jobs).

In contrast, **Figure 16** also shows that other public and private services[34] are forecast to decrease by 19,000 workforce jobs to 1,503,000 jobs. This decrease is forecast to occur from a 1.0 per cent decrease in 2016 and a 0.2 per cent decrease in 2017. Manufacturing is also expected to experience a very small decrease by 300 workforce jobs.

Overall, this forecast suggests that business and administrative services; retail, wholesale, accommodation and food services, construction and transport and storage are likely to be a substantial source of growth in the medium term. On the other hand, workforce jobs in other public and private services and manufacturing are forecast to decrease from 2015 to 2017. However, due to its combined size, other public and private services sector is likely to be a source of replacement demand, even if there is an absolute decrease in workforce jobs.

[31] GLA Economics, November 2015, London's Economic Outlook: Autumn 2015, The GLA's medium-term planning projections
[32] Since the publication of London's Economic Outlook, the overall level of workforce jobs in 2015 has been revised down to 5.58 million. The forecast is therefore subject to revision as a result. The next LEO forecast is due for release in May 2016.
[33] This sector includes the professional, real estate, scientific and technical services, information and communication, and administration and support services.
[34] This sector includes the public administration, education, health, arts, entertainment and recreation and other services industries.

Figure 16: Forecast number and annual percentage growth (%) of workforce jobs in London, by sector, 2015-2017



Source: GLA Economics, London Economic Outlook, November 2015

3.2 Labour Market Projections

GLA Economics publishes labour market projections at both the London and Borough level to provide a description of the current structure of London and a broad indication of its possible long-term future growth path. This projection does not take into account cyclical fluctuations or other economic effects which may affect London's growth over the short to medium term.

GLA Economics will publish a full revision of employment projections around mid-2016, because of this; the projections presented in this section should be considered provisional estimates. These updated projections will extend to 2041. The projections presented here are drawn from two previous reports, including the recent 2015 projections update which is focused towards broad labour market trends[35], as well as the more detailed 2013 labour market projections report which incorporates projections on occupations, qualifications and replacement demand[36]. The 2013 projections cover the period from 2011 to 2036, while the 2015 projections cover the period 2014 to 2036.

These employment projections are based on a number of simplifying assumptions. Most notably, they look at the historical relationship between economic output and employment and project this forward into the future. In short, employment projections assume that past economic trends are a reasonable indicator of future changes in the economy. These projections also assume that output will increase by an average of 2.5 per cent per annum over the 25 year period. A more detailed description of how these projections are constructed is available in the methodology section of the 2015 and 2013 labour market projection reports[35]. Overall, while these projections provide a broad indication of how London's economy may be structured in the future; they should not be interpreted as an exact forecast of the path of future growth.

[35] 2015 projections - GLA Economics, July 2015, Updated employment projections for London and trend-based projections by borough, Working paper 67.
[36] 2013 projections - GLA Economics, April 2013, London labour market projections.

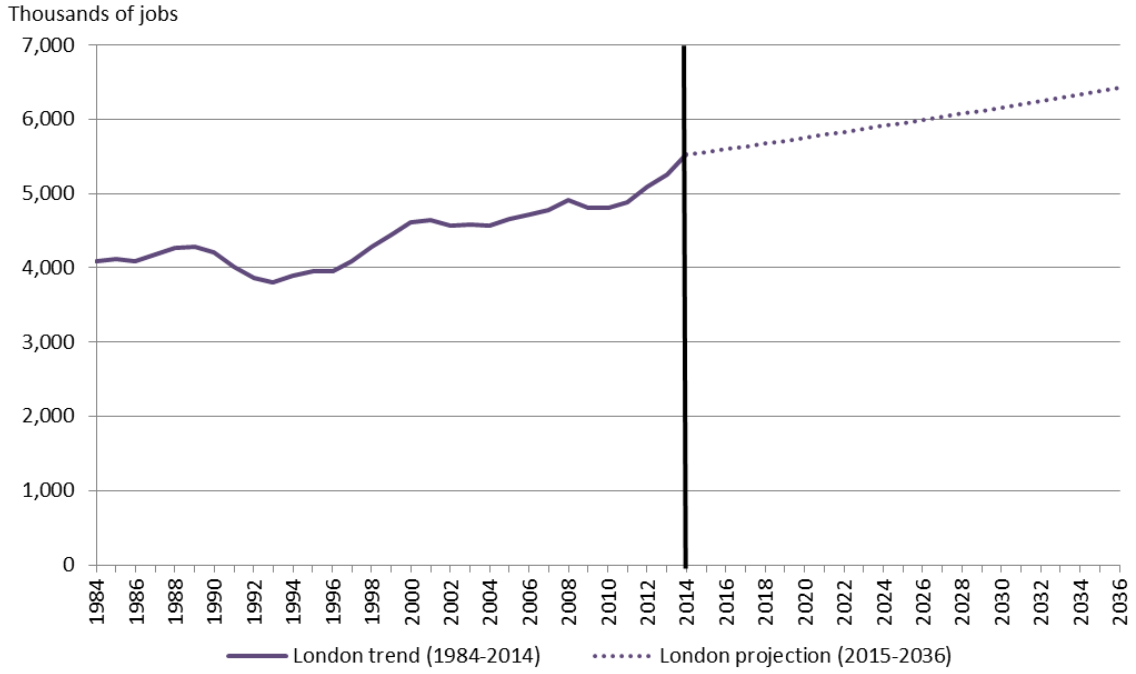
The baseline data for the total employment projections is the ONS workforce jobs series which includes both employee jobs and self-employed workers, and corresponds to the workforce jobs measure presented in section 2.1 of this report. The time period these projections are based on is 1984-2014.

The data on occupations and qualifications is drawn mainly from the Annual Population Survey and corresponds to the data presented in section 2.2 of this report. The time period these projections are based on is 2001-2011.

London employment projections – total workforce jobs and industry structure

Figure 17 shows the total workforce jobs (employee jobs and self-employed) projection for London. It indicates that total workforce jobs at the London level are projected to increase from 5.5 million in 2014 to 6.4 million in 2036, an annual average growth rate of 0.69 per cent and equivalent to 41,000 jobs per year.

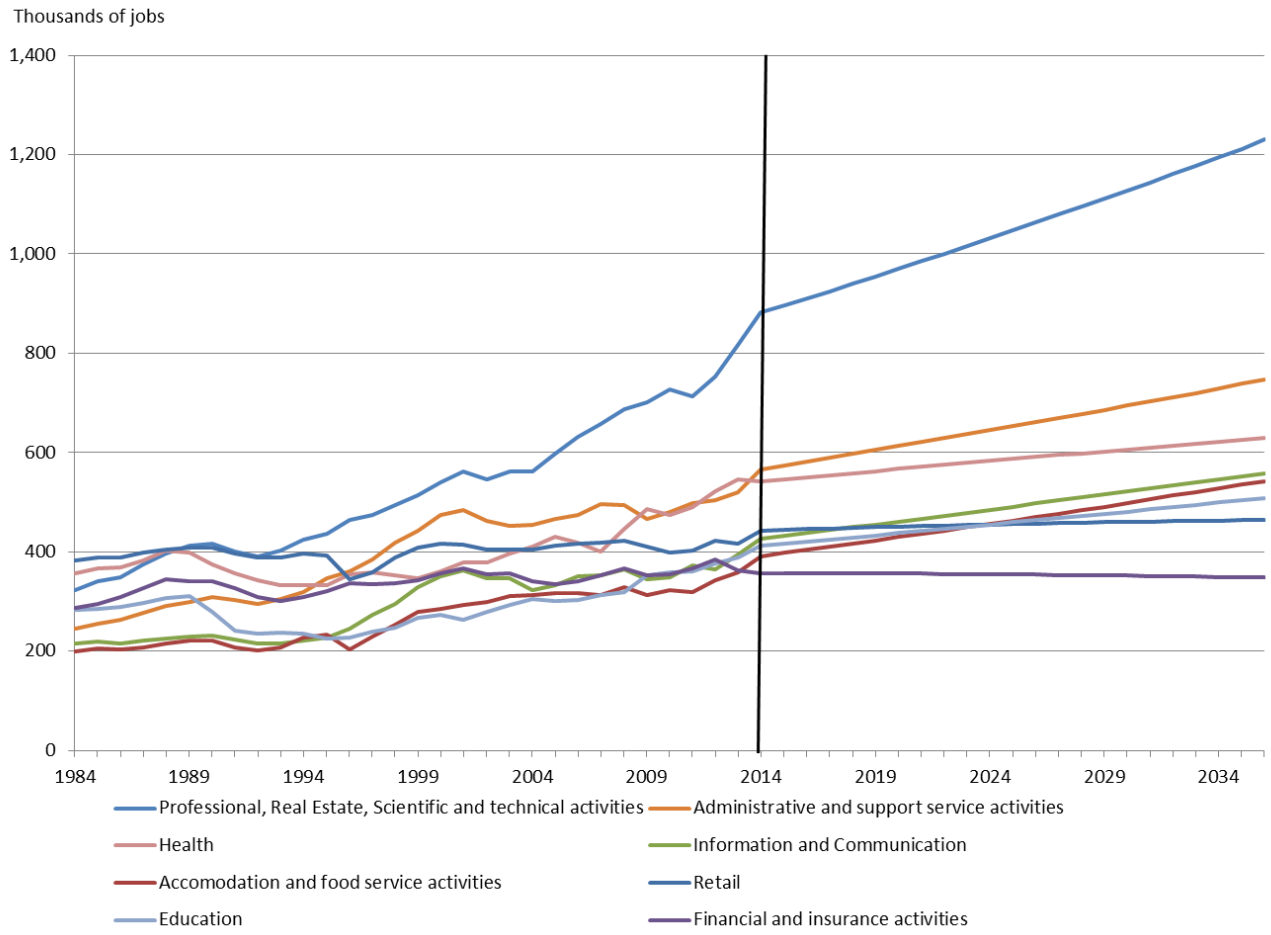
Figure 17: Historic and projected workforce jobs in London (thousands), 1984-2036



Source: GLA Economics, July 2015, updated employment projections for London and trend-based projections by borough

Figure 18 outlines the projected employment growth for London's largest industry sectors. It shows that that professional, real estate, scientific and technical services sector is projected to grow by 334,000 jobs to reach 1.23 million jobs in 2036 (an annual average increase of 1.5% per year). Other sectors that are projected to grow over this time period include administrative and support services (173,000 jobs, a 1.3% increase per year), accommodation and food services (144,000 jobs, a 1.5% increase per year), and information and communications (126,000 jobs, a 1.2% increase per year). Smaller increases in employment are projected in the education, health and retail sectors. Employment in the financial and insurance activities is expected to remain relatively stable from 2015-2036, with a small decrease of 9,000 jobs.

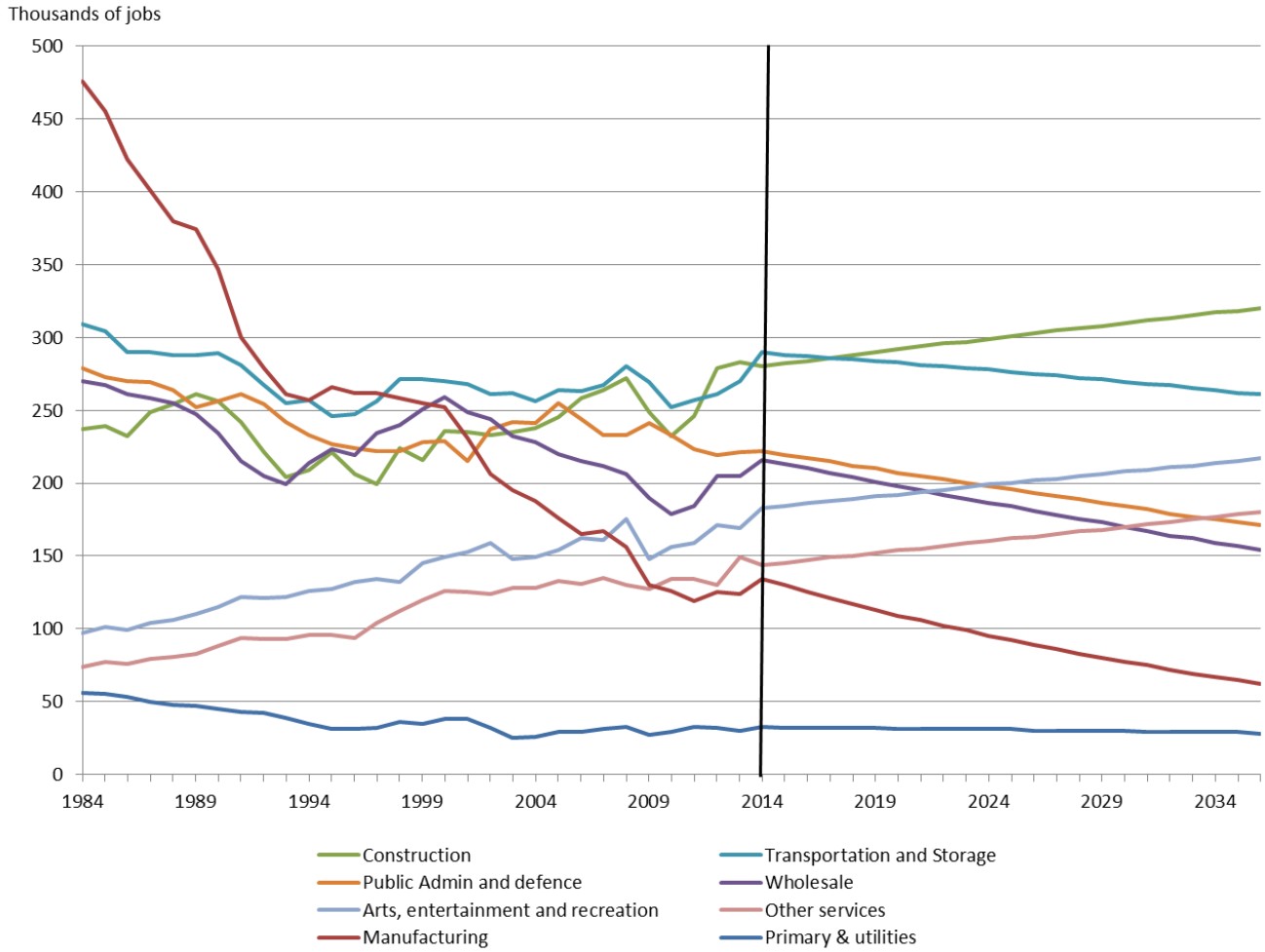
Figure 18: Historic and projected workforce jobs in London's largest broad industry sectors, (thousands), 1984-2036



Source: GLA Economics, July 2015, updated employment projections for London and trend-based projections by Borough

Figure 19 outlines the projected employment growth for London's relatively smaller industry sectors (which are presented separately to more readily identify trends). It shows that that the construction sector is projected to grow by 38,000 jobs to reach 320,000 jobs in 2036 (an annual average increase of 0.6% per year). Other sectors that are projected to grow over this time period include other services (up 35,000 jobs, an average increase of 1.0% per year) and arts, entertainment and recreation services (up 33,000 jobs, a 0.8% increase per year). All the other smaller sectors are projected to decrease in total employment between 2015 and 2036. These include manufacturing (down 68,000 jobs, a 3.5% decrease per year), wholesaling (down 59,000 jobs, a 1.5% decrease per year), public administration and defence (down 48,000 jobs, a 1.2% decrease per year), transport and storage (down 27,000 jobs, a 0.5% decrease per year) and primary and utilities (down 4,000, jobs, a 0.6% decrease per year).

Figure 19: Historic and projected workforce jobs in London's smaller broad industry sectors, (thousands), 1984-2036



Source: GLA Economics, July 2015, updated employment projections for London and trend-based projections by Borough.

Projections by occupation in London

Table 7 uses information from the 2013 London labour market projections report to estimate the number of jobs across different occupations in London. The projection itself (shown in the last row) is drawn from the report and provides an overall annual rate of change over the period 2011 to 2036. This projection is based on a forward projection of the trends in occupational change from 2001-2011. Due to the lack of further historic series, these results are therefore less robust compared to the total employment projections for London and the sub-regional level, and those by industry. The projection is applied directly to the current levels of jobs by occupational group outlined in **Table 3**.

Table 7 shows that by 2036 the number of jobs in professional occupations is projected to increase by 504,000 from 1.2 to 1.7 million jobs, with an increasing number of professional jobs across sectors. The number of jobs in the managers, directors and senior officials category is also expected to increase by 203,000 jobs by 2036. This increase is largely driven by an increase in the professional, real estate, scientific and technical activities sector. Increases projected in skilled trades (up 166,000 jobs), and associate professional and technical occupations (up 63,000 jobs) are also driven by growth in this industry sector.

Projected growth in jobs in process, plant and machine operatives and elementary occupations (up 131,000 jobs to 2036) is instead concentrated in administrative and support services, and accommodation and food sectors. Administrative and secretarial occupations are instead projected to decrease by 319,000 jobs, while the number of jobs in caring, leisure and other service occupations; and sales and customer service occupations, are projected to remain relatively stable.

As a result, there is likely to be a changing composition of jobs across occupations. Professionals, skilled trades, and managers, directors and senior officials are projected to increase their share of total employment from 2014 to 2036. In contrast, the proportion of jobs in administrative and secretarial occupations is projected to decrease substantially (from 10.5% to 3.3% of total London jobs) over the same time period.

Table 7: Number and proportion (%) of jobs in London, 2014 and 2036 (projected), by occupational group (thousands).

	Managers, directors and senior officials	Professional occupations	Associate professional and technical occupations	Admin. and secretarial occupations	Skilled trades occupations	Caring, leisure and other service; and sales and customer service occupations	Process, plant and machine operatives; and elementary occupations	Total in all occupations
Total jobs, 2014	618	1,207	926	507	345	630	601	4,833
Projected number of jobs, 2036	***821***	***1,711***	***989***	***188***	***511***	***630***	***732***	***5,635***
Proportion of jobs, 2014 (%)	12.8	25.0	19.2	10.5	7.1	13.0	12.4	100.0
Proportion of jobs, 2036 (%)	***14.6***	***30.4***	***17.6***	***3.3***	***9.1***	***11.2***	***13.0***	***100.0***
Annual % change, projected (2011-2036)	**1.3**	**1.6**	**0.3**	**-4.4**	**1.8**	**0**	**0.9**	**0.7**

Source: ONS Annual Population Survey – jobs in 2014; GLA Economics, April 2013, London labour market projections.
Note: number of jobs rounded to nearest 1,000. Projections may not sum due to the inclusion of new data.

Projections by qualification in London

Table 8 uses information from the 2013 London labour market projections report to estimate the number of jobs across different qualifications in London. The projection itself (shown in the last row) is drawn from the report and provides an overall annual rate of change over the period 2011 to 2036. This projection is based on a forward projection of the trends in qualifications held from 2004-2011.However, the growth path for higher qualifications has been constrained as recent large increases in the number of people achieving higher qualifications would make standard projections implausible[37]. The projections are likely to be less robust compared to the industry and total employment projections presented previously. The projection is applied directly to the current levels of jobs by outlined in **Table 8**.

Table 8 shows that by 2036 the number of jobs associated with degree level qualifications is projected to increase by 954,000 jobs, to 3.38 million jobs, and is the only qualification category projected to increase in proportion, from 50 to 60 per cent of total London jobs. Higher education and other qualifications are also expected to increase by 53,000 jobs and 49,000 jobs respectively. This increase is largely due to the projected increase in professional occupations over this time period. Jobs associated with other qualifications are also expected to increase from 421,000 jobs in 2014 to 470,000 jobs in 2036. In contrast,

[37] Further details on this methodology can be found in the 2013 London labour market projections report.

there is projected to be a decrease in the number of jobs associated with GCE, A-levels, GCSE A*-C and no qualifications.

Table 8: Number and proportion (%) of jobs in London, 2014 and 2036 (projected), by qualification (thousands).

	Degree or equivalent*	Higher education	GCE, A-level or equivalent	GCSE grades A*-C or equivalent	Other qualifications	No qualification	Total in all occupations
Total jobs, 2014	2,425	379	803	604	421	201	4,833
Projected number of jobs, 2036	***3,379***	***432***	***786***	***591***	***470***	***192***	***5,635***
Proportion of jobs, 2014 (%)	50.2	7.8	16.6	12.5	8.7	4.2	100.0
Proportion of jobs, 2036 (%)	**60.0**	**7.7**	**13.9**	**10.5**	**8.3**	**3.4**	**100.0**
Annual % change, projected (2011-2036)	***1.5**	**0.6**	**-0.1**	**-0.1**	**0.5**	**-0.2**	**0.7**

*Source: ONS Annual Population Survey (number of jobs); GLA Economics, April 2013, London labour market projections (projection). Note: Number of jobs rounded to nearest 1,000, projections may not sum due to the inclusion of new data, *weighted by the number of jobs with higher and ordinary degrees.*

Replacement demand in London

The employment projections and trends presented throughout this report have broadly identified the potential future path of the stock of employment; however, the labour market is dynamic, with people moving in and out of the labour force, or into different jobs all the time. For example, many people leave their jobs for various destinations. Some people will retire, some will choose to leave London (and not commute back in), some will take time off work to have children, some will shift from one occupation or sector to another, some will fall long-term sick and some will die.

For London's economy to continue to function effectively all these moves out of employment need to be replenished. The annual outflow from employment, which needs to be replaced, is sometimes referred to as the level of gross replacement demand. The majority of this gross replacement demand is usually satisfied from within the labour market - for example, by people moving from one job to another, from people returning to the labour market after a period of absence or unemployment. Replenishment can also come from 'outside' of the current labour market, either from those entering London's workforce from education, or in-migration. These flows highlight that even in sectors or occupational groups which are projected to be in decline, new staff will be required to replenish those leaving their job roles and this is likely to derive education and training requirements.

GLA Economics has modelled these types of changes over time for London, however substantial assumptions were required. Specifically, the levels of inflows and outflows from the broad occupation groups between 2001 and 2012 were averaged and projected forward into the future, and it is assumed that this will remain constant. However, this may well underestimate the actual level of turnover that generates replacement demand and associated education and training requirements. For example, this analysis does not pick up any individuals who leave their role but subsequently take up another job in the same occupational group. It is likely that at least some of these individuals will have formal or informal education and training requirements.

Table 13 shows the projected levels of employment inflows and outflows within each occupation group in 2036. In general, higher levels of total employment are likely to result in an increase in absolute number of workers changing occupations. The table shows that over 575,000 people are projected to leave their

occupation over the course of the year in 2036, up from 513,000 in 2012 - highlighting the potentially substantial and on-going education and training needs across London's workforce[38].

This finding is supported by evidence from UKCES which estimated the UK's replacement demand at between 2 and 4 per cent per annum of the employed workforce, much higher than the level of labour demand from growth in particular sectors (expansion demand).

Table 9: Estimated flows out of and into occupational groups for the year 2036 (thousands), assuming rates from 2001-2012 remain constant.

Occupation	Absolute number leaving the occupation	Met by internal supply*	Net requirement from education / new entrants
Managers, directors and senior officials	80	60	20
Professional occupations	119	94	26
Associate professional and technical occupations	98	83	15
Administrative and secretarial occupations	20	17	3
Skilled trades occupations	47	30	17
Caring, leisure and other service; and sales and customer service occupations	87	67	21
Process, plant and machine operatives; and elementary occupations	127	101	26
Total	**577**	**450**	**127**

*Source: GLA Economics, April 2013, London labour market projections (projection). Note: Number of jobs rounded to nearest 1,000, *"Met by internal supply" means met by all inflows excluding inflows from education and 16 year olds entering the labour market*

[38] UKCES, March 2014, Working futures 2012-2022 Evidence report 83

4 Supply of learners

Summary – London

- In London as a whole, the working-age resident population is projected to increase from 5.85 million in 2014 to 6.77 million in 2041 (up 16%). The age cohorts that are expected to increase the most over this period include 16-22 year olds and those aged 35 years and over.
- This population growth indicates that in 2041, there are likely to be approximately 114,000 more young people across London, within the key learning cohorts of 16-18 and 19-24. Moreover, given the larger working age population aged over 25, other things being equal, there is also likely to be an increase in the number of adult learners, as well as in work skill-based learning.
- In terms of the qualification levels attained by the working age resident population, almost half of those in London (49%) had attained qualifications at higher education or above (NVQ4+), while 15 per cent had attained GCE, A-level or equivalent, 12 per cent attained GCSE grade A*-C or equivalent, 16 per cent had attained other qualifications, and the remaining 8 per cent had not attained any formal qualifications.
- The overall trend in qualifications held by the working age population resident in London is for an increasing proportion of people gaining higher level qualifications, and substantial decreases in the number and proportion of people with lower or no qualifications.
- The age, experience and qualifications of Londoners matter in the labour market. The 2014 UKCES Employer Perspectives Survey found that London employers are significantly less likely than employers in other regions to recruit 16-18 year olds. Only 17 per cent of all London employers who had conducted recruitment in the past year, had recruited someone aged 16-18 in the past 12 months, compared to 27 per cent in the rest of England. London employers were instead twice as likely to have recruited someone to their first job from university or an HE institution in the last 2-3 years (24% of all employers compared to 12% in the rest of England).
- The 2014 Employer Perspectives Survey also found that only 11 per cent of London employers had apprentices on site or offered formal apprenticeships, compared to 16 per cent in the rest of England. Apprenticeships offered in London also tended to be shorter in length with 26 per cent lasting12 months or less, compared to just 10 per cent of apprenticeships in the rest of England.

This section presents an analysis in relation to the supply of learners in London, which is the focus of the subsequent stages of the FE sector area based reviews. Included in this analysis is an overview of projected population changes (focusing on the 16-19, and 20-24 year old age cohorts), and the current level of qualifications held by London residents. Together this information provides some indication of the potential size of learner cohorts in the future.

The main findings of relevance to the FE sector from the UKCES Employer Perspectives Survey are also presented in this section. This survey provides "insight into the thoughts and behaviour of employers as they make decisions about how to engage with training providers, schools, colleges and individuals in the wider skills system, to get the skills they need"[39].

[39] UKCES, November 2014, Employer Perspectives Survey 2014: Technical report, Evidence Report 88

4.1 Population projections and qualifications

The population projections presented in this section are drawn from the 2014 GLA population projections produced by GLA Demography and Policy Analysis. These projections project London's population through to 2041, which covers longer period than the employment projections presented in section 3.2. The updated employment projections to be published in mid-2016 will also align to this extended 2041 projection period. These projections have been capped by the availability of housing, which was estimated through the Strategic Housing Land Availability Assessment (SHLAA)[40].This provides a realistic estimate of future population given the growth constraints in different parts of London. The data on qualifications is drawn from the ONS Annual Population Survey (APS), and is similar to that presented in section 2. However, in this case the data is focused on the supply of qualifications held by residents of working age, rather than those held by workers.

London

Figure 20 shows the working age (16-64 year olds) population projection for London from 2014 to 2041. The working age population is expected to increase from 5.85 million in 2014 to 6.77 million in 2041, an increase of 16 per cent. This population increase is projected to be underpinned by increases in population across the entire working age cohort, particularly among those aged 16-22 year olds and those aged 35 years and over. The 16-18 year old age cohort is expected to increase by 57,000 people from 281,000 in 2014 to 339,000 people in 2041 (a 21% increase). The wider 19-24 year old age cohort is also expected to increase by a similar amount (57,000 people, from 703,000 people in 2014 to 760,000 people in 2041an 8% increase).

Overall, this indicates that in 2041, there are likely to be approximately 114,000 more people within the key learning cohorts of 16-18 and 19-24. Furthermore, given the larger working age population aged over 25, other things being equal, there is also likely to be an increase in the number of adult learners, and may consequently be an increase in demand for work-based learning.

Not only is London's population growing, it is also ageing. By 2041, 16 per cent of London's population is projected to be aged 65 or older, compared with 11 per cent in 2014. The employment rate of this age group (65+) was 11.9 per cent in 2014, up from 7.7 per cent in 2004[41].

[40] GLA Demography and Policy Analysis, 2014 round population projections, SHLAA estimates.
[41] GLA Economics, 2016, Draft Economic Evidence Base, Chapter 6 (page 113)

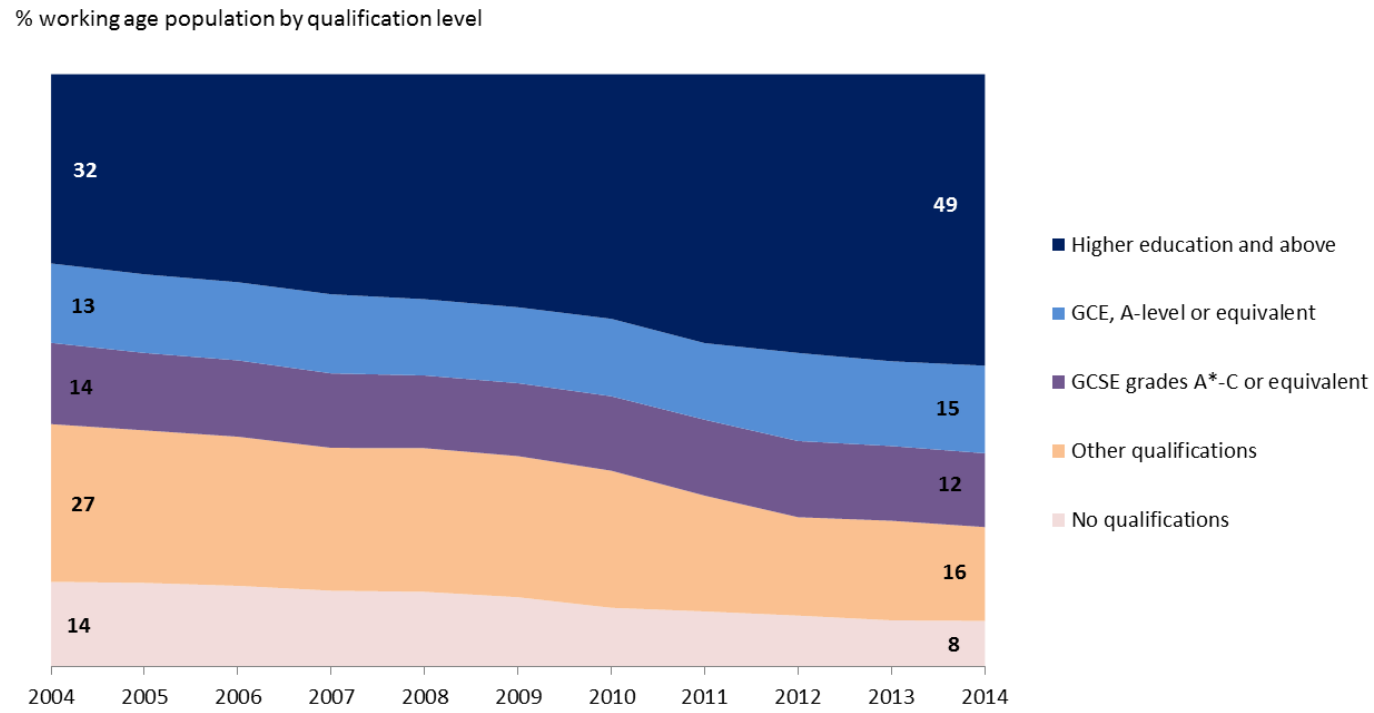
Figure 20: Age structure of London's working age resident population, 2014-2041, (SHLAA constrained projection)

Source: GLA, 2014 SHLAA constrained population projections

Figure 21 outlines the recent trends in qualification attainment of working age residents in London (aged 16-64 years old). It shows that almost half of the population had attained qualifications at higher education or above (formerly NVQ4+), while 15 per cent had attained GCE, A-level or equivalent, 12 per cent attained GCSE grades A*-C or equivalent, 8 per cent had attained other qualifications, and the remaining 8 per cent had attained no qualifications.

Figure 21 also shows that since 2004, when the APS series began, an increasing share of the working age population have attained higher level qualifications or above (up 17 percentage points, from 32% to 49% in 2014) This has been achieved without loss to the share of working age population in London with A-levels or GCSE grades A*-C or equivalents; and instead there has been a corresponding decrease in the proportion of the working age population with low-level or no qualifications. Taking into account this trend and the labour market projections detailed in section 3.2, the number and proportion of people in London with higher levels of qualifications is likely to continue to increase in the future. As well as reflecting increasing attainment levels over time, this trend also reflects London's ability to attract highly qualified people from outside the region, and outside the UK.

Figure 21: Qualifications (%) of London's residents - working age population (16-64), 2004-2014



Source: ONS Annual Population Survey. Note: Rounded to nearest 1,000 or 1 per cent; Trade apprenticeships are split 50/50 between NVQ level 2 and 3. This follows ONS policy for presenting qualifications data in publications. NVQ level 1 is combined with other qualifications.

4.2 UKCES Employer Perspectives Survey

The 2014 UKCES Employer Perspectives Survey conducted interviews with 18,000 UK employers (of which 1,600 were based in London) and sought to understand how employers engage with different schools, colleges, and training providers to get the skills they require for their business.

The survey found that London employers are significantly less likely than employers in other regions to recruit 16-18 year olds. Only 17 per cent of all London employers who had conducted recruitment in the past year (equivalent to 51% of all London employers), had recruited someone aged 16-18 in the past 12 months, compared to 27 per cent in the rest of England. Reflecting the demand for high-level skills in the capital, London employers were instead twice as likely to have recruited someone to their first job from university or an HE institution in the last 2-3 years (24% of all employers compared to 12% in the rest of England).

The Survey also found that 11 per cent of London employers currently had or offered formal apprenticeships on site, compared to 16 per cent in the rest of England. Apprenticeships offered in London also tended to be shorter in length with 26 per cent lasting 12 months or less, compared to just 10 per cent in the rest of England.

Overall, these findings suggest that employers in London differ from those in the rest of England in terms of their perspectives and behaviours in regards to employing young people and apprentices. Coupled with the findings of relatively low levels of employer engagement and investment in training (compared to the rest of England) presented in section 2.4, this may suggest that London employers, generally, tend to seek relatively more experienced staff and those who have completed higher education.

Further data and analysis in relation to the supply of learners and the educational attainment of residents in London and the sub-regional areas is beyond the scope of this economic analysis.

GLAECONOMICS

Greater London Authority
City Hall
The Queens Walk
London SE1 2AA

Tel 020 7983 4922
Fax 020 7983 4674
Minicom 020 7983 4000
Email glaeconomics@london.gov.uk

http://www.london.gov.uk/gla-economics-publications

MAYOR OF LONDON