

The Heathrow Phenomenon.

Economic Impact Analysis

Final Report

September 2007



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1 Executive Summary

In 2005 SEEDA, together with the Thames Valley and Surrey Economic Partnerships, jointly commissioned Deloitte to identify 'strategies and solutions' for sustaining success in the Thames Valley and Surrey sub-regions. One of the key findings of the study was the central role of Heathrow in the competitiveness of 'wealth generating' segments of the economy. Another key finding was the notion that constraints on growth could lead the area to a 'tipping point' which may compromise competitiveness with significant consequences.

The scope of the first phase of this study is to extend the analysis carried out in the 2005 report to include West London Boroughs around Heathrow, and in doing so provide a '360' degree' view of the dynamics and drivers of growth around Heathrow. It must be noted that the analysis of environmental and social implications of growth around Heathrow was outside the scope of this study – it focuses only on economic impacts.

The report recognises that there is a clear need to ensure that economic growth is sustainable, obtaining a balance between living within environmental limits, ensuring a strong, healthy and just society, achieving a sustainable economy, and good governance.

The research methodology for this phase included:

- A review of Deloitte's findings in the 2005 report 'Strategies and solutions for sustaining success in the Thames Valley and Surrey sub-regions';
- The collection, quantitative analysis and mapping of economic data for the areas surrounding Heathrow; and
- Consultations with local businesses to elicit key impacts of/issues associated with Heathrow.

Based on the results of this phase, the stakeholders would agree the scope of Phase 2.

The study focuses on West London, the Thames Valley and parts of Surrey. London itself clearly has a major effect on economic outcomes for the study area, and this effect is impossible to separate from the impact of Heathrow. However, economic outcomes for the western corridor are markedly different from East London.

The study suggests that there are three types of economic impact that can be traced to Heathrow: direct on-site effects; indirect effects (through supply chains); and tertiary effects (through business location decision such as HQs or new sites). Economic analysis, undertaken as part of the study (and associated maps), clearly show that the type of impact prevalent in the area determines economic characteristics of the associated geographies.

West London, Thames Valley and parts of Surrey are powerhouses of the regional economy ...

In 2004, Gross Value Added (GVA) for West London, the Thames Valley and Surrey was £40 billion, £30 billion and £27 billion respectively. Together this equates to 9 per cent UK GVA and more than half the GVA of Central London which was £140 billion in 2004.

The successful economy of the area is built on highly skilled workforce, access to Heathrow (a global gateway) and proximity to London. Although there are a number of factors driving the competitiveness of this economic cluster, Heathrow seem to be central to this success as it makes the area an attractive proposition for multinationals and global SMEs.

Although it is difficult to isolate and quantify the exact contribution of Heathrow to the strong economic performance of these areas, it is clear that its economic impact stretches beyond direct and supply chain benefits. This study highlights that global gateways, like Heathrow, play a key role in attracting globally mobile and high value added businesses – referred to as the Heathrow Phenomenon in this report.

It is important to note, however, that the Heathrow Phenomenon is not unified across the study area. The following analysis shows that the economic impact of Heathrow is different in West London compared to the Thames Valley. The Thames Valley and parts of Surrey seem to be benefiting more in the form of attracting high value added and globally mobile businesses while the impact in West London seems to be, primarily, direct employment and Heathrow related supply chain related activities. The cluster of high value added companies is more developed in the Thames Valley. It was outside the scope of this study to identify why the Thames Valley and parts of Surrey seem to benefit more from Heathrow.

The area consistently attracting high levels of investment (because of Heathrow) ...

Foreign Direct Investment (FDI) accounts for 220,000 jobs in the study area (West London, the Thames Valley and parts of Surrey). It is crucial to economic success of the area and global connectivity through Heathrow seems to play a key role in this. A recent Oxford Economic Forecasting (OEF) report suggested that proximity to air services was an important factor for 25% of companies considering UK as a business location¹.

Think London, the investment agency for London, suggest 3 main reasons why companies choose the area²:

- Prestige/presence in a global city;
- Networking with other world-class companies who have also chosen London; and
- The accessibility of markets and other cities;

The 3rd point is most critical: London is an entry point not just for the UK, but also to Europe and beyond to North America and growth economies including China, India and Brazil.

... and benefiting from high levels of company formation.

Although levels of enterprise are Central London focused, Slough and Reading are high performers in terms of new business formation and the area clearly outperforms the national average. The performance of West London is less impressive compared with the Thames Valley but still better than the national average.

Activity rates are high around Heathrow and in the Thames Valley ...

Direct on-site employment and supply chain links help to make Hillingdon and Hounslow quite different from surrounding London boroughs because of employment opportunities at Heathrow – activity rates are clearly higher than they otherwise would be. Activity rates are highest in the Thames Valley and are amongst the highest in the UK.

... employment has grown significantly, especially in key knowledge economy sectors ...

Employment growth has been concentrated in Hillingdon and areas of the Thames Valley. In general, employment growth in other parts of West London has been slow compared with the Thames Valley. The key sectors in the wider area surrounding Heathrow include:

- Transport & logistics (specifically around Heathrow);

¹ OEF research is not specific to Heathrow as its scope was more generic. It was not part of this study to audit the robustness of the OEF research but its conclusions that air services are important for business operating in a global economy are well supported by anecdotal evidence.

² This study did not audit the research methodologies deployed in Think London surveys.

- Financial and business services;
- ICT;
- Communications; and
- Pharmaceuticals & Life Sciences.

... and there is a clear link with earnings.

The same areas are associated with higher workplace wages relative to the earnings of residents. In other words people are commuting to areas of opportunity to earn higher wages – although sometimes at the expense of residents. This is also the case in the major centres of the Thames Valley and Surrey such as Reading and Guildford.

Forecasts for growth seem strong but the area needs to keep adding value ...

Independent forecasts show strong growth prospects, but these are not as strong as historical rates. Moreover, growth is expected to be higher in the Thames Valley than West London. On the basis of the above evidence and these forecasts it could be concluded that prospects are good for the region, but key demand side success factors such as levels of FDI, the harnessing of globalisation and high value added sectors, all of which are linked to Heathrow, will be crucial.

... but unemployment and low skill levels show up in some areas

Although the area is a strong performer, significant challenges remain. Unemployment and low skill levels are very much a fact of labour markets in London, despite the growth afforded by Heathrow. Thames Valley, however, only has pockets of similar problems in urban centres such as Slough and Reading.

... by getting the supply-side right, not least because the area does not compete on cost.

The area's services, products and labour will only be in demand, through FDI for example, if people continue to want to locate their businesses here. Pressures on local housing, infrastructure and the labour market could reach a critical point where the area reaches a potential tipping point leading to business relocation and an exodus of skilled workers.

To maintain growth, supply-side interventions are required to facilitate improvements and ensure the area remains competitive in a global marketplace. This is because businesses do not come to the area for low rent or low wages, they come because of locational and connective advantage, if that is eroded there could be serious implications for the area's potential to be a global leader in terms of high value added economic activity.

Business opinion on proximity of the 'Tipping Point' differs ...

Consultees expressed the opinion that it was very difficult to say whether the area is nearing a tipping point and views included positive and negative outlooks on the issue. Some consultees made the link between a lack of public funding in the area and the likelihood of reaching a tipping point. It is felt that resources go disproportionately to East London.

On balance, the business view is that the area is not at a tipping point just yet, but that levels of economic growth expected in West London coupled with some of the prevailing constraints highlighted by businesses, could create problems in the future. However, the timing and the scale of a potential 'tipping point' is not a real issue as it would be too late to respond to that when it happens. It is always easier to sustain success than to deal with decline and the policy debate should be about dealing with the key challenges facing the area.

... transport was seen as the major issue ...

Nearly all businesses identified transport infrastructure as the most significant current and prospective issue facing them in West London. Some specific issues included:

- Congestion has visibly worsened over the last decade;
- Congestion costs for staff and deliveries are high;
- There is a forced reliance on the car due to inadequate and unconnected public transport

There is a clear consensus amongst business around this topic: the intervention required is one that will discourage car use by providing real alternatives, not least because congestion is expected to worsen in future.

Skill levels are also viewed as a key challenge

Whilst workforce skills are considered a major issue for the majority of the businesses sampled, their views about general labour shortages and specific occupational skills differ. Some organisations suggested that the area was at full employment already and that a shortage of labour was adversely affecting plans for growth. Some had to teach English to new Eastern European recruits to tackle the problem. The others implied that it is not general labour supply that is causing the problem; it is the lack of specific skills. The data analysis suggests that the area is near full employment (apart from some pockets of economic inactivity).

Going forward...

The successful economy of the area is built on highly skilled workforce, access to Heathrow (a global gateway), proximity to London and an outstanding quality of life. Although there are a number of factors driving the competitiveness of this economic cluster, Heathrow is central to this success as it makes the area an attractive proposition for multinationals and global SMEs (the 'Heathrow phenomenon'). Therefore it is vital that this asset remains accessible and not become a source of competitive disadvantage.

The economic success of the area must be viewed in a global context and the area faces competitive pressures not only from emerging economies such as India, China and Brazil but also from other developed economies aspiring to sustain their economic performance to retain and enhance their 'wealth generating' economic functions.

As part of the Phase 2, the following should be explored further:

- Explore underlying reasons to establish why the Thames Valley seems to benefit more from the Heathrow Phenomenon (in terms of Heathrow's role in attracting wealth generating activities to the area);
- Identify strategic initiatives to maximise the economic potential of Heathrow across the area (including West London), especially in the light of globalisation where the role of international gateways is becoming even stronger;
- In addition to resolving infrastructure challenges, initiatives such as providing business internationalisation support to establish a cluster of 'global SMEs' around Heathrow should be explored. This could include support for businesses to tap into opportunities in global markets, including India and China;
- As the study area included parts of London and the South East, there is a need to establish a framework for 'cross-border' joint working; and
- Although this study has identified economic growth patterns and trends in areas around Heathrow and highlighted Heathrow's role in attracting high value added activities to the surrounding areas, it is not possible to quantify this impact. There is a merit in undertaking a more extensive survey with businesses to strengthen the evidence base further.

2 Introduction & Terms of Reference

In 2005 SEEDA, together with the Thames Valley and Surrey Economic Partnerships, jointly commissioned Deloitte to identify ‘strategies and solutions’ for sustaining success in the Thames Valley and Surrey sub-regions. One of the key findings of the study was the central role of Heathrow in the competitiveness of ‘wealth generating’ segments of the economy. Another key finding was the notion that constraints on growth could lead the area to a ‘tipping point’ which may compromise competitiveness with significant consequences.

The scope of the first phase of this study is to extend the analysis carried out in the 2005 report to include West London Boroughs around Heathrow, and in doing so provide a 360° view of the dynamics and drivers of growth around Heathrow. The exact specification of phase 2 is still to be determined.

2.1 Objectives (Phase 1)

It is within this context that Deloitte was commissioned by West London Business to:

- Provide further analysis of the key drivers of economic growth / change around Heathrow to include relevant London Boroughs;
- Assess how the Heathrow Phenomenon influences economic growth in the area;
- Consider the potential impact of changing global business models on the economy of the area; and
- Identify key opportunities and challenges facing areas around Heathrow in the light of globalisation.
- The analysis of environmental (including air quality and noise) and social implications of growth around Heathrow was outside the scope of this study.

2.2 Our approach

The project has involved extensive primary and secondary research consisting of:

- A brief synthesis of Deloitte's findings in the 2005 report ‘Strategies and solutions for sustaining success in the Thames Valley and Surrey sub-regions’;
- The collection, quantitative analysis and mapping of economic data for the areas surrounding Heathrow; and
- Consultations with local businesses to elicit key impacts of/issues associated with Heathrow.

2.3 Structure of the report

The report is structured as follows:

Chapter 3 investigates the current economic fabric of the area with reference to Heathrow;

Chapter 4 concludes the report by assessing the threats and opportunities for the area moving forward.

3 Current economic position

This section presents an economic overview of areas surrounding Heathrow, founded on secondary data from regional, national and European sources. This represents an update and extension of our previous work on The Thames Valley and Surrey economies.

Historical analysis shows that the areas around Heathrow have benefited from a competitive advantage, growing at rates above the national average, some of this could be due to the Heathrow phenomenon.

3.1 Study area

The West London Business area covers the London Boroughs immediately surrounding and to the east of Heathrow:

- Brent;
- Ealing;
- Hammersmith & Fulham;
- Harrow;
- Hillingdon; and
- Hounslow.

In addition, the original study area (the Thames Valley parts of Surrey are covered:

- Basingstoke & Deane;
- Bracknell Forest;
- Elmbridge;
- Epsom & Ewell;
- Guildford;
- Hart;
- Mole Valley;
- Reading;
- Newbury;
- Runnymede;
- Slough;
- South Buckinghamshire;
- Spelthorne;
- West Berkshire;
- Windsor & Maidenhead;
- Woking;
- Wokingham; and
- Wycombe

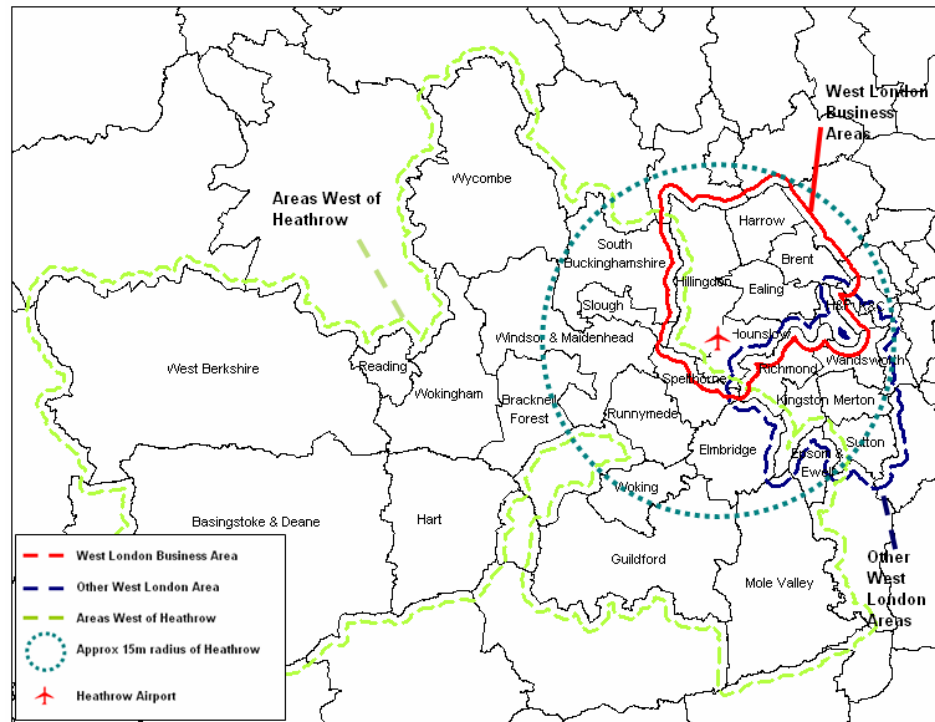
As well as other areas of West London, which are covered to establish wider economic and agglomeration impact of Heathrow.

- Kensington & Chelsea;

- Kingston-upon-Thames;
- Merton;
- Richmond-upon-Thames;
- Sutton; and
- Wandsworth.

These areas are shown on the map below:

Figure 3.1.a – The study area



Source: Deloitte Analysis, 2007

Thus, the definition of 'Areas West of Heathrow' encompasses the Thames Valley and parts of Surrey. In all charts we have included a 15 mile radius around Heathrow for presentation purposes only.

3.2 The evidence base

3.2.1 Both West London and the Thames Valley are powerhouses of the UK economy, and ...

The evidence-base collected as part of this study confirms that the areas surrounding Heathrow are key drivers of the UK economy. Both West London and the Thames Valley are economic centres in their own right and acts as an economic driver of the South East.

West London is the third largest economy in the UK after Central London and Birmingham. In 2004 it contributed around £40 billion of Gross Value Added (GVA)³ – a little short of a fifth of the capital's economic output.

³ The only available robust data on GVA and productivity relates to West and North London – a NUTS 3 area, the lowest geographical area of coverage for such datasets. It includes the boroughs of Barnet, Brent, Ealing, Harrow, Hillingdon, Hounslow and Richmond upon Thames.

Although not classed as a standalone area for statistical purposes the Thames Valley accounted for over a fifth of the regional GVA (over £30 billion in 2004). Moreover, Surrey's GVA in 2004 was £27 billion.

3.2.2 ... areas contiguous to Heathrow perform strongly in economic terms ...

In terms of current GVA per capita levels and growth over the last decade, West London performs particularly strongly, and is followed closely by areas in the Thames Valley.

Figure 3.2.a – GVA per Capita, 1995-2004

| GVA per capita (€), 1995 | | | |
|---|-----------------------|--|-----------------|
| EU Rank (from 1231) | UK Rank (from 133) | European Union (27 countries) New Member States | 14,581 3,123 |
| 1 | | Frankfurt am Main | 63,787 |
| 2 | | 1 Inner London - West | 62,129 |
| 3 | | Paris | 57,903 |
| 4 | | Düsseldorf | 56,609 |
| 5 | | Ludwigshafen am Rhein | 54,976 |
| 324 | | 7 Berkshire | 19,689 |
| 586 | | 24 Surrey | 16,262 |
| 598 | | 26 Outer London - West and North West | 16,151 |
| GVA per capita (€), 2004 | | | |
| EU Rank (from 1325) | UK Rank (from 133) | European Union (27 countries) New Member States | 21,503 6,601 |
| 1 | | 1 Inner London - West | 120,911 |
| 2 | | München | 85,023 |
| 3 | | Paris | 74,944 |
| 4 | | Frankfurt am Main | 73,860 |
| 5 | | Hauts-de-Seine | 68,636 |
| 32 | | 3 Berkshire | 46,077 |
| 70 | | 11 Surrey | 37,755 |
| 107 | | 20 Outer London - West and North West | 34,060 |
| GVA per capita, Annual Average Growth (%) 1995-2004 | | | |
| EU Rank (from 1231) | UK Rank (from 133) | European Union (27 countries) New Member States | 4.4 8.7 |
| 1 | | Vilnius (Apskritis) | 18.7 |
| 2 | | Telsiu (Apskritis) | 16.4 |
| 3 | | Kauno (Apskritis) | 16.2 |
| 4 | | Riga | 16.2 |
| 5 | | Põhja-Eesti | 16.2 |
| 43 | | 3 Berkshire | 9.9 |
| 47 | | 5 Surrey | 9.8 |
| 89 | | 19 Outer London - West and North West | 8.6 |

Source: Deloitte Analysis, Eurostat [GVA in current prices]

Heathrow is located in Outer London – West & North West in the NUTS classification system and in GVA per capita terms the area improved its ranking from 598th in 1995 to 107th in 2004 on the back of significant levels of growth.

The other areas surrounding Heathrow, namely Berkshire, Surrey and most notably Inner London West continue to demonstrate some of the highest levels of GVA per capita in the European Union.

3.2.3 ... and areas around Heathrow show a real concentration of business activity across a broad range of sectors.

West London has more than 50,000 registered businesses which provide around 700,000 jobs.⁴

It is home to some internationally important growth sectors and has seen strong growth in knowledge-based industries. Its economic profile has some distinctive features including a concentration of jobs in the following sectors: ⁵

- Transport & Logistics;
- Recreational & Cultural;
- R&D;
- Communications; and
- Food manufacturing;

In the Thames Valley, previous studies have highlighted the existence of successful clusters in the sub-region based on the following 'traditional' sectors⁶:

- ICT & Software;
- R&D;
- Utilities;
- Communications; and
- High Value Added Manufacturing (including Pharmaceuticals);

Potential new clusters also appear to be emerging within the sub-region including⁷:

- Media and creative industries;
- Food sciences;
- Chemistry; and
- Energy and the environment.

The existence of clusters indicates a relatively high degree of innovation, research, specialist inputs, local cooperation and competitiveness which is a symptom of, and may mutually reinforce, a successful sub-regional economy.

3.2.4 The sub-region consistently attracts major organisations and shows high levels of entrepreneurial activity

Foreign Direct Investment is crucial to the Thames Valley and West London. According to the latest research by Oxford Economic Forecasting (OEF) published in December 2006, access to air services is an important factor for 25% of companies across the whole

⁴ Source: ABI

⁵ Please see Annex 2 for location quotient analysis of major industries in West London and the Thames Valley.

⁶ Previous studies include Conduit Partners, "Encouraging vitality of the Thames Valley region", 2006 and "Implementing the Economic Strategy for the Thames Valley", 2002.

⁷ Conduit Partners, 'Encouraging the vitality of the Thames Valley region', 2006

economy in influencing where they locate their operations within the UK⁸. Also affects the decisions of 10% of companies as to whether they invest in the UK at all.

Think London, the inward investment agency responsible for attracting firms to the London area, have recently conducted a survey of businesses adding to their extensive knowledge of the drivers of firms decisions to locate in the area. Recent estimates included in Think London's London Focus suggest:

- Foreign direct investment (FDI) contributes more than £52 billion each year to London's economy – accounting for 27% of London's economic output;
- FDI has brought more than 500,000 jobs to London, representing 13% of all jobs;
- Foreign-owned firms created 42% of London's economic growth between 1998 and 2004;
- Employees of foreign-owned companies are more than twice as productive as other London workers when measured across all sectors;
- More than 90% of respondents say London plays an important role in their company's global strategy; and
- On average, FDI companies have grown by 165 per cent since they first invested in London, and only 6 per cent have considered leaving.

Much of this FDI is concentrated in West London (c. 20 per cent) and Central London (> 50 per cent). Due to the complexities of the economic offer and data availability issues, it is not possible to assess the exact extent to which this investment is linked with Heathrow's status as international hub. It is, however, clear from Think London information, that Heathrow is a key factor in London's overall offer to investors.

The Business View

Think London works both with existing and prospective investors, and consultations at executive level with these organisations suggest that Heathrow is vital to both to West London and the London economy as a whole, and as such is of critical importance to the national economy.

Think London suggest that there are three main reasons why companies choose London:

1. The prestige of a presence in a global city;
2. The draw of being able to build networks with other world-class companies who have also chosen London; and
3. The accessibility of markets and other cities;

Heathrow is clearly of major significance to prospective investors. The presence of the airport indirectly affecting the first two reasons, and an integral facet of the third.

Over half the companies sampled in Think London's recent London Focus report chose London because it is an entry point to the UK and Europe making it critical that Heathrow stays competitive as a global hub in the international market.

Anecdotally, Think London suggested that in initial discussions with investors they often think of London as the area between the City in the East, and through to past Heathrow in the West – into the Thames Valley.

This is played out in the most popular locations which are: Central London, followed closely by West London, and in particular along the M4 corridor, and around Heathrow.

Our consultations also suggested that Heathrow played a key role in location decisions, in spite of current congestion levels and perceived downsides.

The picture is little different in the Thames Valley with significant numbers of multinational corporations choosing to locate outside the M25 rather than inside. In fact, many of the

⁸ Auditing the methodologies of studies such as OEF and Think London was outside the scope of this study.

points raised by London Focus are applicable also to the Thames Valley. London, and Heathrow Airport, is still an equally important draw for firms locating further afield than West London.

The Business View

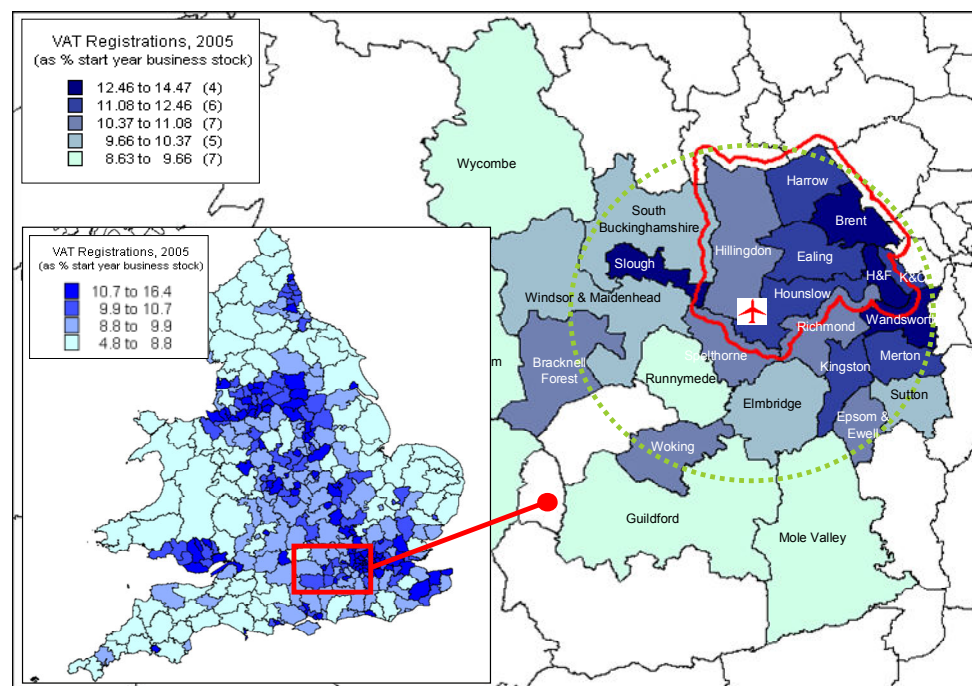
“Each year around 70% of foreign owned businesses establishing a UK presence for the first time locate their office within one hour of Heathrow. The access to market that Heathrow provides as an international hub is a principal driver for location choice in the Thames Valley, and wider South East, helping to secure significant investment by many of the world’s leading global brands.”

Paul Britton, Thames Valley Inward Investment Manager

The interviews conducted as part of this study confirmed this view, with 6 of the 9 firms interviewed in this study suggesting that Heathrow did play a significant role in the original location decision. Those that did also favoured West London over Central London and the Thames Valley because West London conferred more space for a lower cost than Central London and some felt that the Thames Valley was a little too far from Central London. It must be noted that the sample size for this business survey was very small and the results should be viewed in this context.

In terms of indigenous enterprise, West London and the Thames Valley each have high levels of business density and above national average start-up rates. In 2005 each of the six Boroughs had VAT registrations totalling more than 10 per cent of start year business stock.

Figure 3.2.b – VAT registrations in 2005



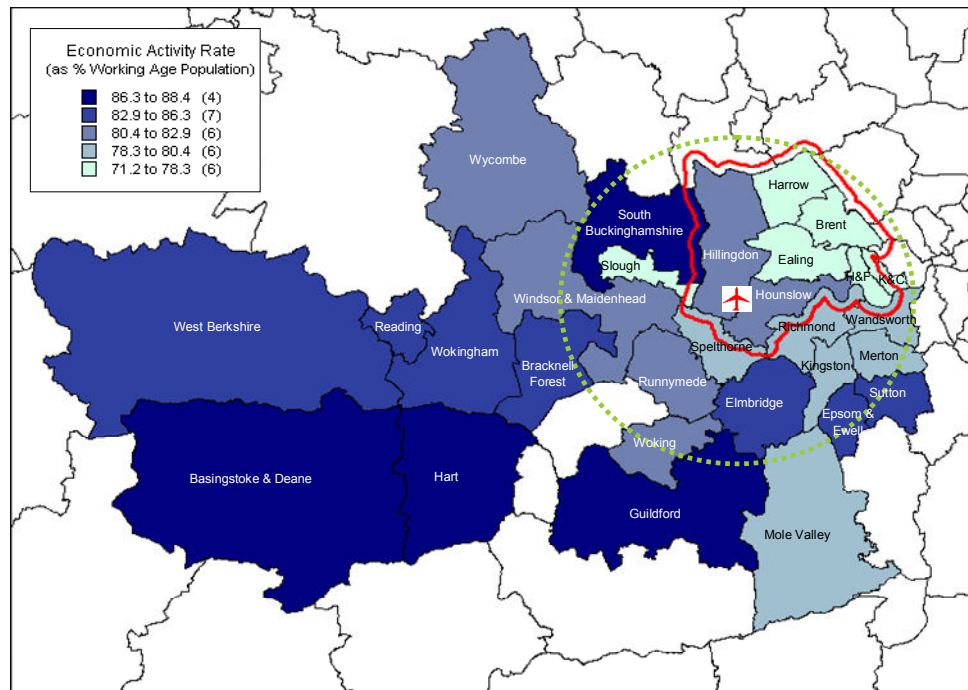
Source: Deloitte Analysis, Small Business Survey

The concentration is focused on Central London rather than Heathrow (as can be seen more clearly on the inset of figure 3.2.b). However, Slough, the part of the Thames Valley most closely linked to Heathrow sees significantly higher than average start-up rates at 13 per cent, whilst start-up rates in Reading are also significantly higher than the norm at 11 per cent per annum.

3.2.5 Activity rates are highest in the Thames Valley and directly around Heathrow

The influence of Heathrow on the local economy is particularly reflected in prevailing economic activity rates in areas surrounding Heathrow.

Figure 3.2.c – Percentage of working age population who are economically active



Source: Annual Population Survey, 2006

It appears that Hillingdon and Hounslow benefit significantly from the presence of the airport and its associated business activity with economic activity rates up to 10 per cent higher as a proportion of working age population than other West London Business Area Boroughs (Brent, Ealing, Harrow, Hammersmith and Fulham) and the bordering authority of Slough.

The map also clearly shows that economic activity rates in Hillingdon and Hounslow are higher than other relatively prosperous London Boroughs such as Richmond-upon-Thames.

Whilst identifying a counterfactual outcome (i.e. the absence of Heathrow) is impossible, it would be hard to argue that activity rates would be so noticeably different to other areas in the vicinity in the absence of the airport.

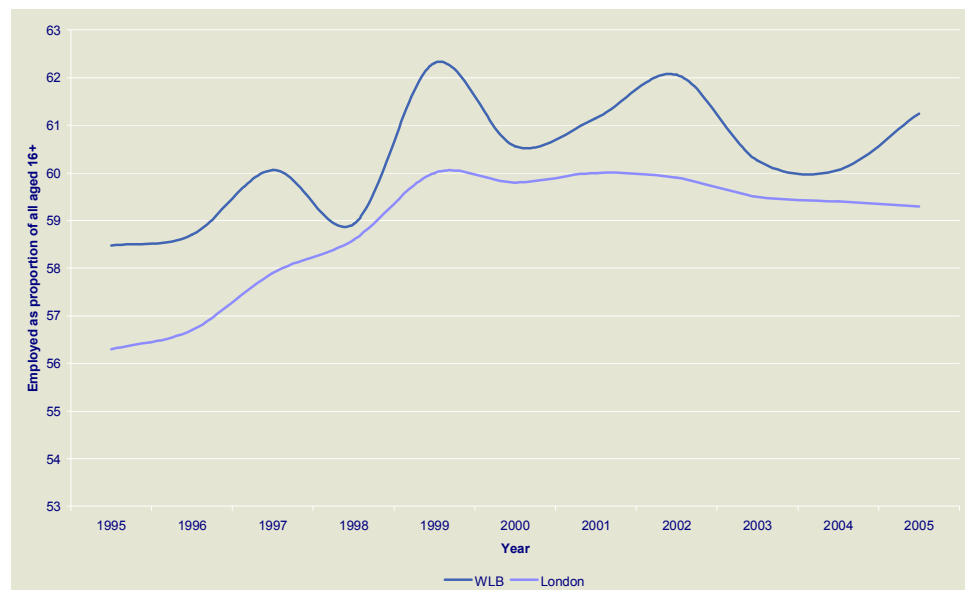
The Thames Valley has some of the highest economic activity rates in the country, and with the exception of Slough is markedly different to the majority of West London.

3.2.6 Employment has increased ...

Examining West London Business Areas together, the period 1995-2005 saw a consistently higher proportion of residents aged 16 or above employed, than across the London region as a whole.

In the Thames Valley employment rates have also increased but not to the extent seen in West London because they have been higher than average for some time.

Figure 3.2.d – Proportion of people aged 16 plus in employment, 1995-2005



Source: Deloitte Analysis, Labour Force Survey

Spatially, growth in the number of employees has been particularly strong around directly around Heathrow (Hillingdon); although according to the Annual Business Inquiry Hounslow saw a contraction in the number of workplace employees over the period 1998-2005.⁹

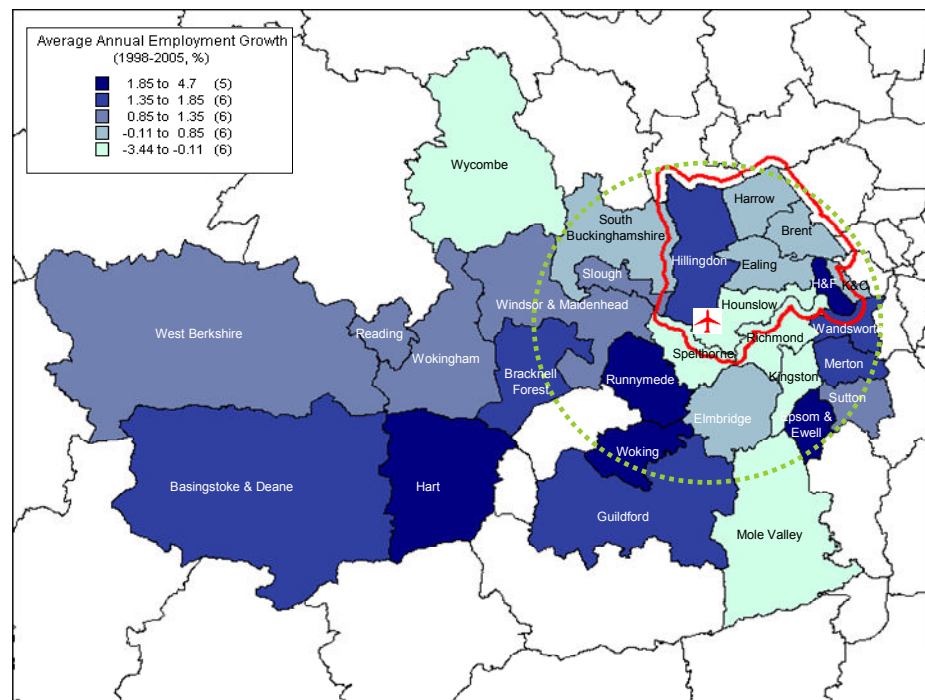
Other areas showing significant levels of growth are predominantly in the southern reaches of the Thames Valley and Northern Surrey, these include:

- Runnymede;
- Woking;
- Hart;
- Guildford;
- Bracknell Forest; and
- Basingstoke & Deane;

As figure 3.2.e shows, the difference in performance between the Heathrow area and surrounding areas is marked spatially. With the exception of Hillingdon most West London areas have seen low levels of growth, and areas in the Thames Valley have generally grown at faster rates.

⁹ We are aware that historically there have been problems with allocating Heathrow related jobs between Hillingdon and Hounslow in the Annual Business Inquiry, but that these problems have since been rectified.

Figure 3.2.e – Average Annual Employment Growth, 1998-2005



Source: Deloitte Analysis, Annual Business Inquiry

Though not all of these additional jobs are directly attributable to Heathrow Evidence from BAA suggests that airport jobs are vital to the local community - one in ten people in employment in Hounslow work at the airport. Heathrow Airport contributes to direct employment of around 70,000¹⁰ and nearly half of these employees come from the five boroughs directly surrounding the airport – Ealing, Hillingdon, Hounslow, Slough and Spelthorne¹¹).

Moreover, Heathrow is thought to account for a further 100,000 indirect jobs¹² by attracting further investment. These funds are channelled into the areas surrounding the airport to support on-site and off-site businesses located in the area because of Heathrow.

The Business View

One business suggested that whilst it used Heathrow airport only moderately for day-to-day business purposes, the airport is responsible for in excess for a fifth of the jobs supported by the company in the wider area. Crucially these are indirect jobs down the supply chain: in this instance the firm in question was providing support to another firm with a significant on-site presence at Heathrow.

3.2.7 ... particularly in banking, finance & insurance and transport & communications.

Growth sectors in the knowledge economy, IT-sphere, business services and leisure & hospitality are thriving in West London and along the M4 corridor into the Thames Valley.

¹⁰ Heathrow Staff Survey, 2006

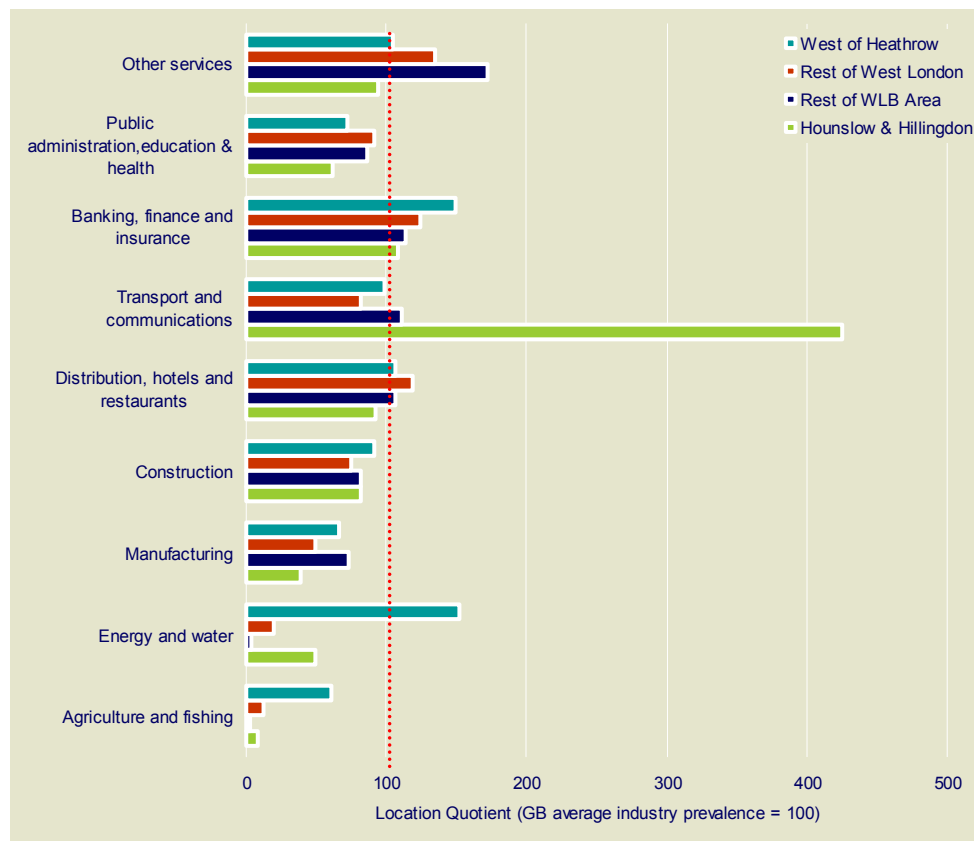
¹¹ Heathrow Airport Employment Survey, 2004

¹² Economic benefits of Heathrow airport - BAA

These business are intimately related to the area's location, its logistics and connectivity through transport infrastructure. The knowledge economy and innovation are further supported by 3 universities in the West London sub-region.

That said, the area immediately surrounding Heathrow understandably continues to be dominated by the transport sector. Figure 3.2.f shows how the sectoral composition of each economy in the area differs by using location quotients.¹³

Figure 3.2.f – Employment Location Quotients, 2005



Source: Deloitte Analysis, Annual Business Inquiry

The concentration of transport related jobs means that all other industries in Hounslow and Hillingdon account for a lower proportion of employment than the national average, apart from jobs in banking, finance and insurance.

The proportion of jobs dedicated to finance, banking and insurance activities increases with distance from Heathrow, this being a particular specialism of firms operating to the west of Heathrow in the Thames Valley. Another specialism of the Thames Valley being Utilities.

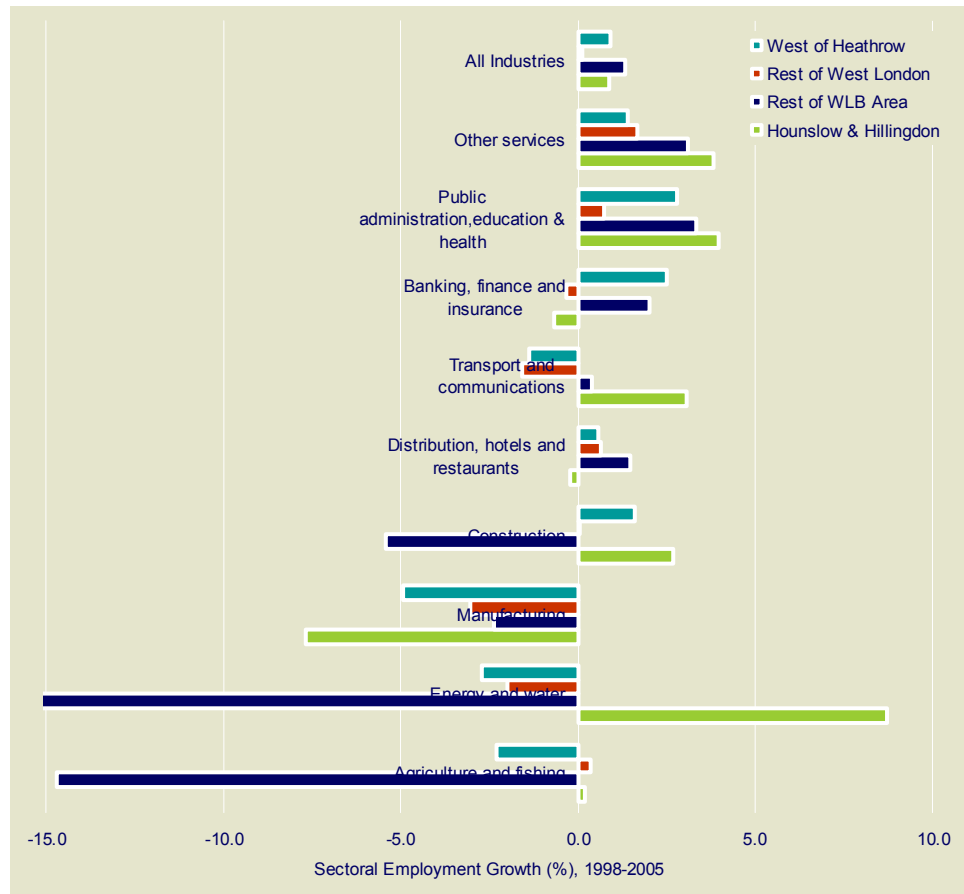
Traditional industries such as construction, manufacturing and extractive industries account for comparatively low levels of local employment.

¹³ Location quotients show the proportion of a certain type of industry in an area to the proportion of that type of industry at the national level. In this instance the location quotient for Transport & Communications in Hillingdon & Hounslow is 420, which shows that the proportion of all jobs in that industry in the area is 4.2 times that at the national level. Conversely a location quotient of 8 for Agriculture indicates that proportion of jobs in that sector in Hounslow & Hillingdon is more than 10 times lower than the national average. A location quotient of 100 implies that the industry accounts for the same proportion of employment locally as nationally.

Figure 3.2.g, below, shows that over the last 7 years employment growth in areas surrounding Heathrow has been predominantly concentrated at the top of the chart in service sectors.

The big decline seen in manufacturing has gone some way to offset strong growth in other sectors, but as the chart shows through growth at the national level, this is symptomatic of wider trends.

Figure 3.2.g – Average Annual Sectoral Employment Growth Rates, 1998-2005



Source: Deloitte Analysis, Annual Business Inquiry

The strongest levels of growth over this period have been in Energy and Water, followed by other mainly public services, transport and communications, and construction also showing strongly.

Banking, Finance & Insurance has expanded in both the Thames Valley and West London Business Area.

3.2.8 But the unemployment picture is markedly varied at sub-regional level ...

West London Boroughs suffer from relatively high claimant count and international labour organisation defined unemployment rates.¹⁴

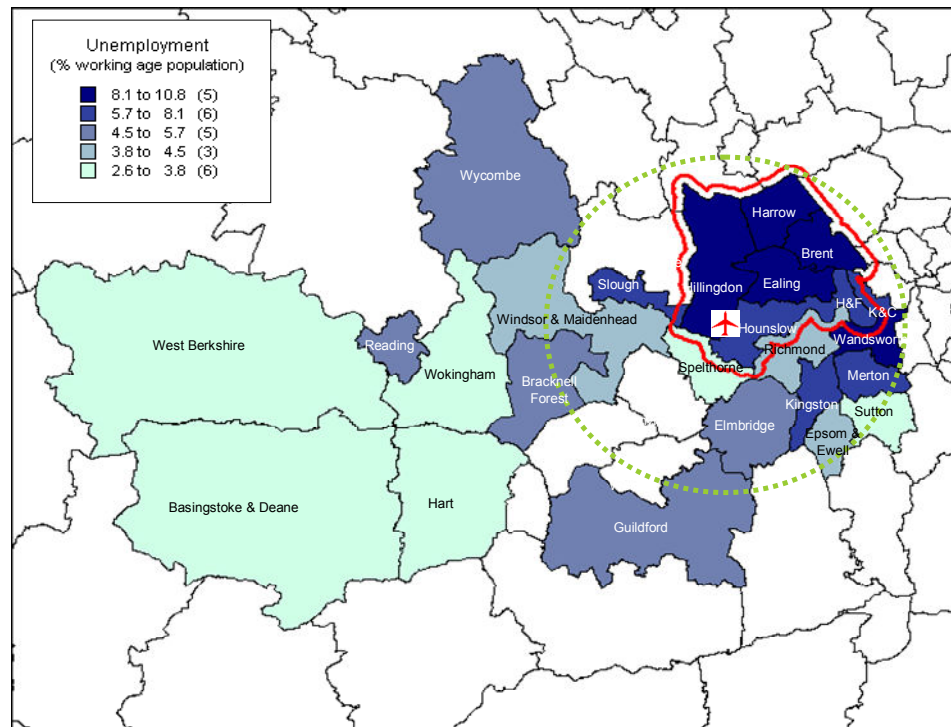
¹⁴ ILO defined unemployment tends to be higher than the claimant count measure as it includes those individuals seeking working work rather than just those individual claiming unemployment benefit.

In common with London as a whole there are worsening problems of worklessness in West London with lower rates of employment than in England as a whole.

Unemployment is a problem in all boroughs but is particularly pronounced in Brent; Ealing; Harrow and Hillingdon (despite the latter being the location of Heathrow) where ILO unemployment levels are 8.1-10.8 per cent of the working age population.

This is in marked contrast to areas in the Thames Valley, where unemployment falls as low as 2.6 per cent, amongst the lowest rates in the country. That said, both Slough and Reading suffer from higher levels of unemployment than the Thames Valley average.

Figure 3.2.h – ILO unemployment as a proportion of working age population, 2005



Source: Annual Population Survey

It should also be noted that the proportion of local staff at Heathrow declined from 61 to 45 per cent over the period 1976-2006, which means that despite the airport's employment base having risen from 51,000 to 73,000 over the period, the number of local residents working at the airport has remained static at circa 30,000.¹⁵ Many local residents may be employed in ancillary or supply-chain related jobs but evidence to substantiate the number is not available.

Figure 2.2.i below shows that West London Business areas currently have higher claimant count unemployment than other areas around Heathrow in both and that the difference has increased. The claimant count is also higher than the South East average but lower than the average for London in both years.

There has, however, been across-the-board improvement over the decade, with all areas realising significant falls in claimant count employment.

¹⁵ Heathrow Employment Survey

Figure 3.2.i – Claimant Count as a proportion of resident working age population 1997-2007

| Area | 1997 (%) | 2007 (%) | Change 1997-2007 (%) |
|----------------------------|----------|----------|----------------------|
| West London Business areas | 5.5 | 2.9 | -2.7 |
| Other West London areas | 4.5 | 1.7 | -2.8 |
| Areas West of Heathrow | 2.0 | 1.2 | -0.8 |
| London | 6.5 | 3.1 | -3.4 |
| South East | 3.2 | 1.6 | -1.6 |
| England | 4.8 | 2.5 | -2.3 |

Source: ONS, 2007

This information is potentially indicative of two things

- the labour market is significantly tighter than it was a decade ago; but
- the scale of unemployment in West London (relative to other areas such as the Thames Valley) indicates that the labour market is not yet operating at its full capacity.

However, although long term unemployment rates have fallen in West London since 1995, and are lower than regional and national averages, current levels of unemployment are at least in part due to the high incidence of long-term unemployment– in 2006-7 16 per cent of the local unemployed had been claiming JSA for over 12 months – equal to the national average.

This could indicate that the labour market is tighter than standard unemployment data suggests.

The Business View

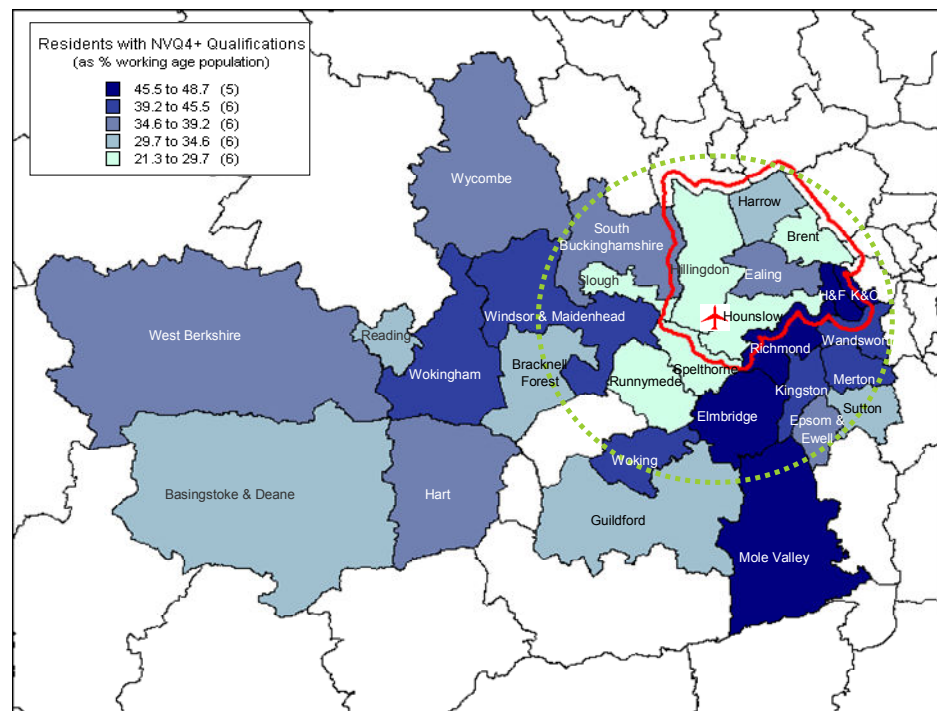
More than one business suggested that the area was effectively at full employment already. One firm went further to suggest that they had significant problems attracting staff of any skill/qualification level even in spite of continued economic in-migration from the EU accession countries. More details of the skills issue are provided in the next section and chapter 5.

3.2.9 ... as are workforce qualification levels.

Low skill levels as a particular barrier to employment in the West London area. Resident qualifications tend to be much higher in some of the more affluent South London boroughs, Surry and parts of the Thames Valley.

In Hillingdon, for example, 26 per cent of residents are qualified to NVQ level 4+ (degree qualified or equivalent), which puts it on a par with the national average but, as the map below shows, well below the average for the areas surrounding Heathrow.

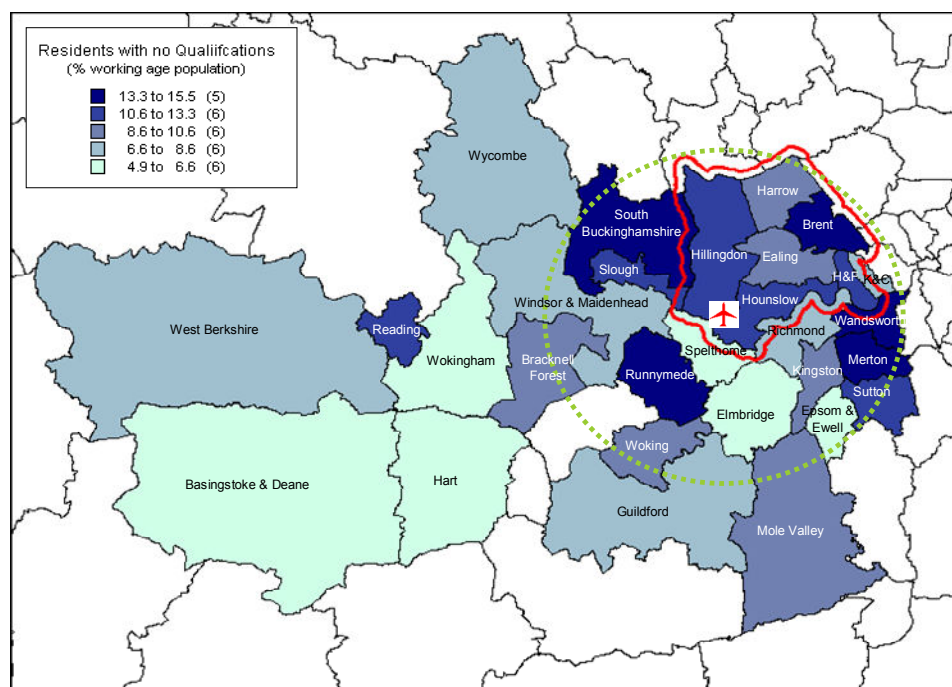
Figure 3.2.j – Percentage of working age population with NVQ4+ qualifications



Source: Labour Force Survey, 2006

At the other end of the skills spectrum the story for the areas immediately surrounding Heathrow is similar. Brent, where 13 per cent of the working age population have no qualifications, is similar to the UK average of 14 per cent, but the West London Business area as a whole has a higher proportion of residents with no skills than the majority of areas elsewhere in West London and, in particular, the Thames Valley.

Figure 3.2.k – Percentage of working-age population with no qualifications



Source: Annual Population Survey, 2006

As shown above there is clear evidence of a resident skills gap in West London, even if only relative to surrounding areas such as the Thames Valley rather than the UK as a whole.

Around 20 per cent of residents have lower than NVQ level 2 skills but only around 10 per cent of jobs require a low level of skills. Whilst 50 per cent of jobs are require 'high' skill levels compared with 45 per cent of the West London workforce¹⁶. Forecasts indicate that that future skills and employment needs of the economy will be at an increasingly high level, predicting that there is likely to a greater demand for skills at NVQ level 4 or above¹⁷.

However, it is also recognised that many service- sector jobs in West London are relatively low skilled or require no particular skills so there is an opportunity (albeit limited) to match the supply of workers with no skills, with demand for such workers.

Employers in West London face recruitment problems associated with skill shortages. Of the 12,000 vacancies reported by employers in the London West LSC area in 2005, 80 per cent were hard to fill due to skill shortages in comparison to 60 per cent nationally. Employers also have problems with existing staff, with a reported 6.9 per cent of workers regarded as having gaps in their skill sets (5.4 per cent across London)¹⁸.

Despite these problems, the 2005 National Employers Skills Survey (NESS) found that more than 50 per cent of employers in the West London did not have a training plan for their staff and only 60 per cent of employers provided any training at all during the year. These figures had hardly changed since the previous year and were marginally below the levels for London.

The Business View

The majority of businesses included in our consultations highlighted skills and the recruitment and retention of skilled labour as one of the 3 major issues facing businesses operating around Heathrow today. This is substantiated by the evidence presented in this section although the issue is much less clear cut and sees much less consensus amongst business that the issue around transport infrastructure.

3.2.10 Heathrow and associated activity attracts a significant number of in-commuters ...

The previous maps have shown that Hillingdon, and to a lesser extent Hounslow, has a significantly different labour market to other areas of West London – with higher employment growth levels and activity rates (but also relatively high levels of unemployment and a higher than average incidence of residents with no qualifications).

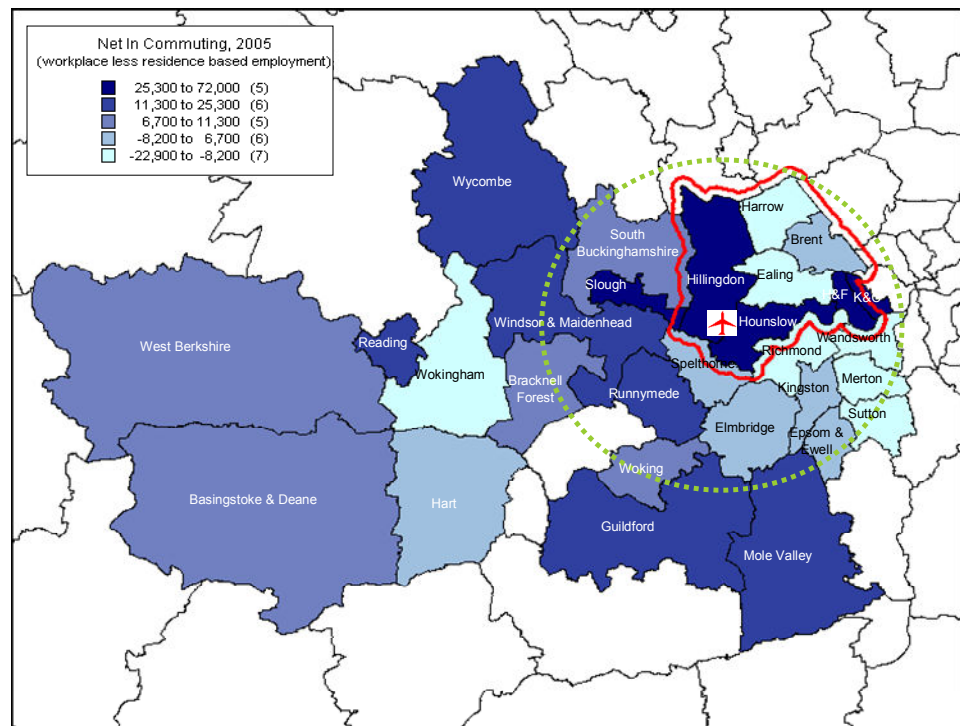
However, the Heathrow Phenomenon is perhaps better evidenced by the high levels of net in-commuting seen in figure 2.2.1 (the surplus of workplace based employment over the number of local residents in work).

¹⁶ West London Working: Cities Strategy Pathfinder, Interim Business Plan December 2006.

¹⁷ Working Futures, 2004-2014: Spatial Report, Skills for Business

¹⁸ Survey West London LSC, 2005.

Figure 3.2.I – Net in-commuting, 2005



Source: Deloitte Analysis, ASHE, LFS and ONS

As the map clearly shows Hillingdon, Hounslow, Slough and the Central London areas of Kensington & Chelsea and Hammersmith & Fulham are all significant net importers of Labour. In spatial terms there is a clear pattern in terms of commuting trends, with all other West London boroughs exporting labour.

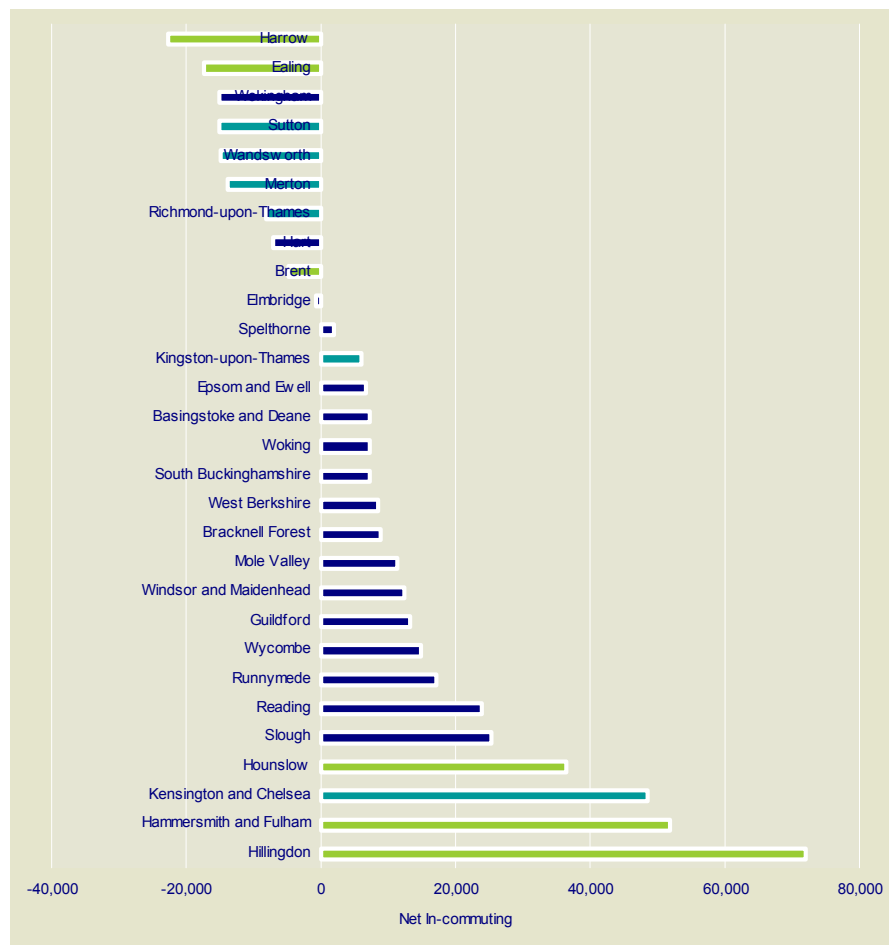
This is again an instance where a counterfactual is unavailable to confirm whether the above situation has arisen because of Heathrow, but again it would be very hard to argue that such high levels of net in-commuting would be supported without the airport given the lack of equivalent employment centres inside the M25 but outside Central London.

Other areas seeing significant levels of in-commuting (and thus represented centres of economic activity) include:

- Slough;
- Reading;
- Runnymede;
- Wycombe; and
- Guildford.

The quantum of net in-commuting by area is shown below along with time-series net-in commuting for the areas in total. Green bars represent boroughs in the West London Business Area, light-blue bars represent other areas of West London, whilst dark-blue bars show areas to the west of Heathrow.

Figure 3.2.m – Net In-commuting, 2005

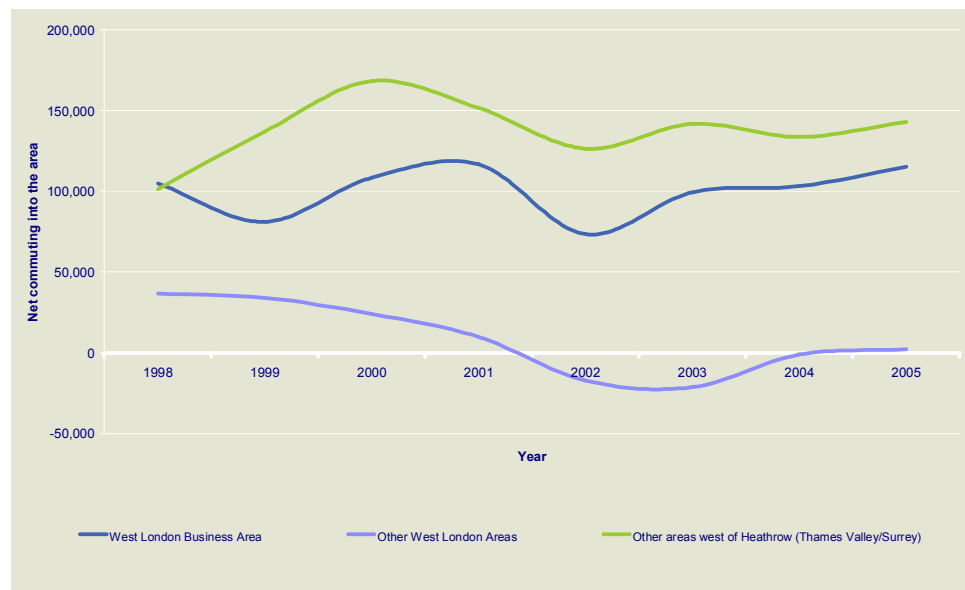


Source: Deloitte Analysis, ABI and LFS

In-commuting levels tend to be highest into West London Business Areas, whilst net in-commuting to other areas of West London are comparatively low, both in relation to the West London Business area and the Thames Valley/Surrey region.

This alternative depiction, overleaf, looks at the three areas included in this study in aggregate and clearly shows that the West London Business Area imports more labour from elsewhere than the remaining areas in West London. However, the level of import is lower compared with the Thames Valley and Surrey.

Figure 3.2.n – Net in-commuting, 2005



Source: Deloitte Analysis, LFS, 2006

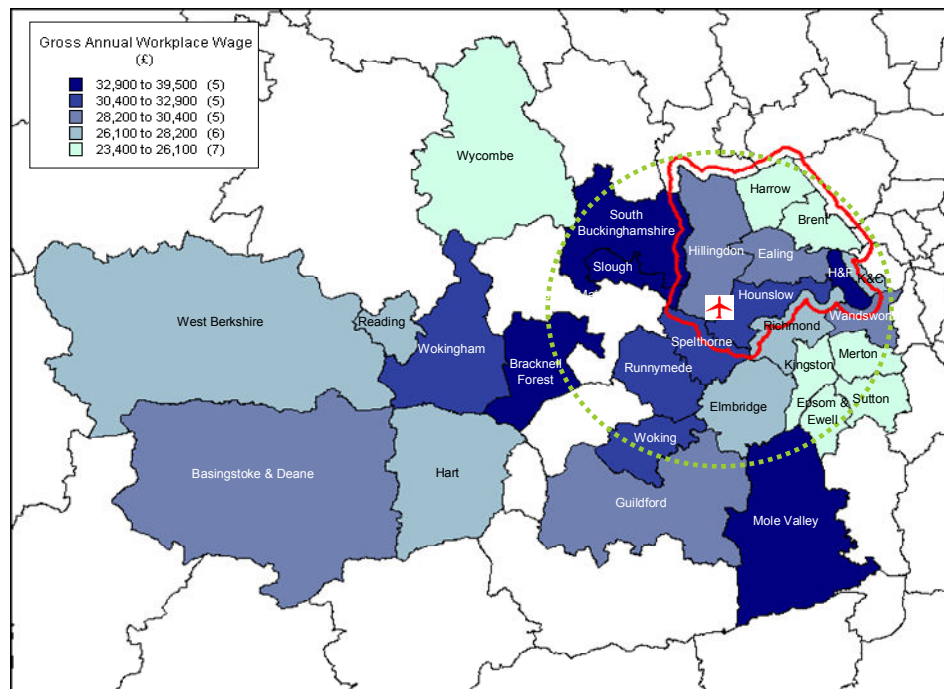
3.2.11 ... due in part to wages

Figure 3.2.o shows that the highest workplace wages in the region are to be found in

- Slough;
- Bracknell Forest;
- Hammersmith & Fulham;
- South Buckinghamshire; and
- Mole Valley.

Within a 15 mile radius of Heathrow (shown by the green circle) workplace wages tend to be higher in the vicinity of Heathrow with lower earnings found to the periphery of the area and particularly in London Boroughs (in Brent, Harrow, Merton and Kingston).

Figure 3.2.o – Gross annual workplace wages, 2005

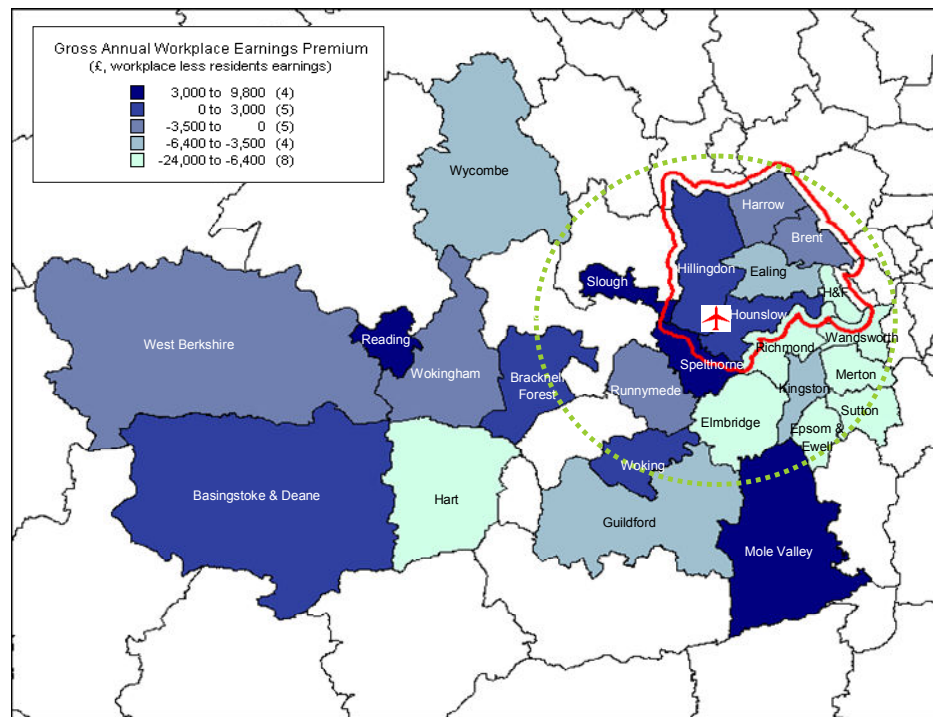


Source: Deloitte Analysis, Annual Survey of Hours and Earnings

Moreover, when workplace earnings are compared to residence based earnings it is evident that there are higher differentials in some West London business areas – where workplace wages exceed the average wages of residents of those areas. In fact, Slough, Spelthorne, Hillingdon, and Hounslow (all contiguously linked to Heathrow) have higher workplace wages than resident wages.

Comparing the map below with previous skills maps may suggest that local residents do not always have the requisite level of skills or access to jobs around the area, for instance just 11.5 per cent of Heathrow staff live in Hillingdon.

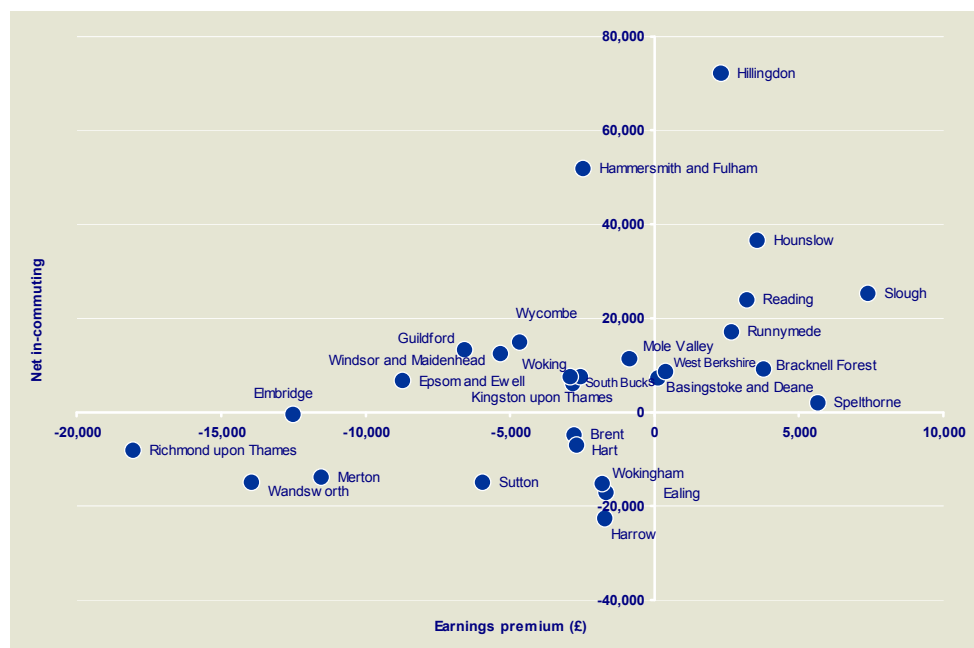
Figure 3.2.p – Earnings premium, 2005



Source: Deloitte Analysis, ASHE, ABI and LFS.

So does Reading, and this is consistent with the net commuting patterns highlighted earlier. Wages offered in areas immediately around Heathrow, and in Spelthorne, Slough and Reading are higher than wages offered in immediately surrounding areas and furthermore are above the average earnings of residents (many of whom are likely to work elsewhere or not at all) attracting in people from farther afield. This positive relationship between the two is summarised below.

Figure 3.2.q – Comparing levels of net in-commuting and the earnings premium, 2005



Source: Deloitte Analysis, ASHE, ABI, LFS.

Hillingdon, Hounslow, and Slough, all contiguous with Heathrow are all in the top right quadrant of the chart, meaning they have relatively high levels of net in-commuting and a significant workplace earnings premium.

3.2.12 Summary

The wider region, encompassing the West London Business Area, the Rest of West London, and the Thames Valley has performed well over the last decade and has significantly improved its standing in European terms over that period. In 2004 Berkshire, Surrey and Outer London West/North West were respectively ranked 32nd, 70th and 107th of 1,325 EU sub-regions.

The region as a whole performs strongly and helps to drive the economy of the Greater South East and the UK – contributing around 7 per cent of UK GVA - and Heathrow is clearly a crucial driver of this.

The Thames Valley tends to perform well on all the economic indicators included in this chapter, and certainly better than West London on most of them. This shows that whilst the region as a whole is a locomotive to the UK economy, there are reasonably wide variations among it. These are most notable in terms of unemployment rates and skill levels.

Spatially, there are three key indicators which demonstrate most fully the way in which areas immediately surrounding Heathrow differ from other areas in the vicinity. In particular the maps associated with these variables clearly show a difference between Hillingdon & Hounslow and other areas of West London. These are

- Economic activity (higher around Heathrow)
- In-commuting (higher around Heathrow)
- Earnings (higher around Heathrow)

These indicators go a long way to showing how Heathrow has influenced local economic outcomes for the better. To a lesser extent there is a spatial relationship between recent levels of employment growth and proximity to Heathrow within London. The indicators here are equally influenced by direct on-site activity, supply chain activity, and business location, whilst in the Thames Valley the effects are potentially due to the tertiary effects of businesses deciding to locate in the region.

Whilst it is not possible to attribute specific levels of or changes in London or Thames Valley's performance to Heathrow, it would be hard, for instance, to argue that Hillingdon/Hounslow would represent an economic centre without Heathrow and the phenomenon associated with it.

Indeed, Think London suggests that the three main reasons why companies choose London and the Thames Valley are inextricably linked to Heathrow. Over half the companies sampled in Think London's recent London Focus report chose the area because it is an entry point to the UK and Europe.

This is the major reason why it is critical that Heathrow stays competitive as a global hub in the international market.

4 Future opportunities & challenges for the area

Globalisation will continue to offer tremendous opportunities for firms located in the region.

However, there is evidence to suggest that businesses in West London and the Thames Valley may not be in a position to capitalise on advantages to the extent they would like due to supply-side limits to growth.

4.1 Background: A potential ‘tipping point’?

The Business View

“There is a tipping point: we may know it is coming when the pace of life, congestion and the higher cost of living outweigh the benefits of the area”

A quote from a consultee in Deloitte's original Thames Valley Study, 2005.

The evidence presented in sections 3 and 4 clearly indicates a successful sub-region with distinct locational advantages, much of which is attributable to excellent connectivity, and other substantial assets. However, it is possible that these advantages may be being eroded by the levels of success that have been generated.

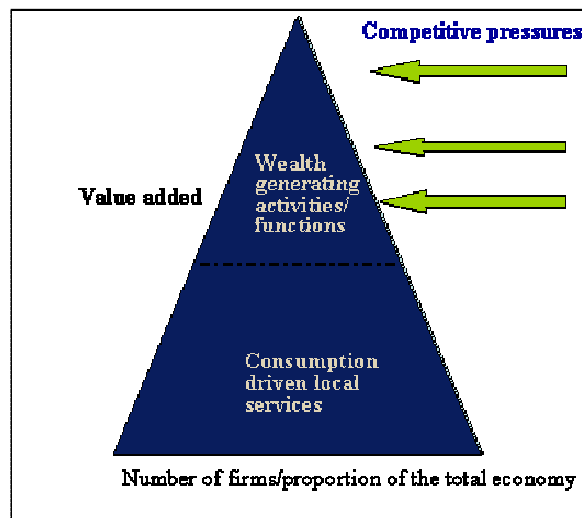
Future prospects are linked with demand for the goods, services and labour force of the region. Key demand-side success factors include:

- FDI
- Globalisation & new markets
- High Value Added Sectors

Heathrow is strongly linked to all the above.

As figure 4.1.a (overleaf) shows, value added is generated by demand for goods and services at the top of the triangle, rather than through consumption driven activities.

Figure 4.1.a – Adding Value



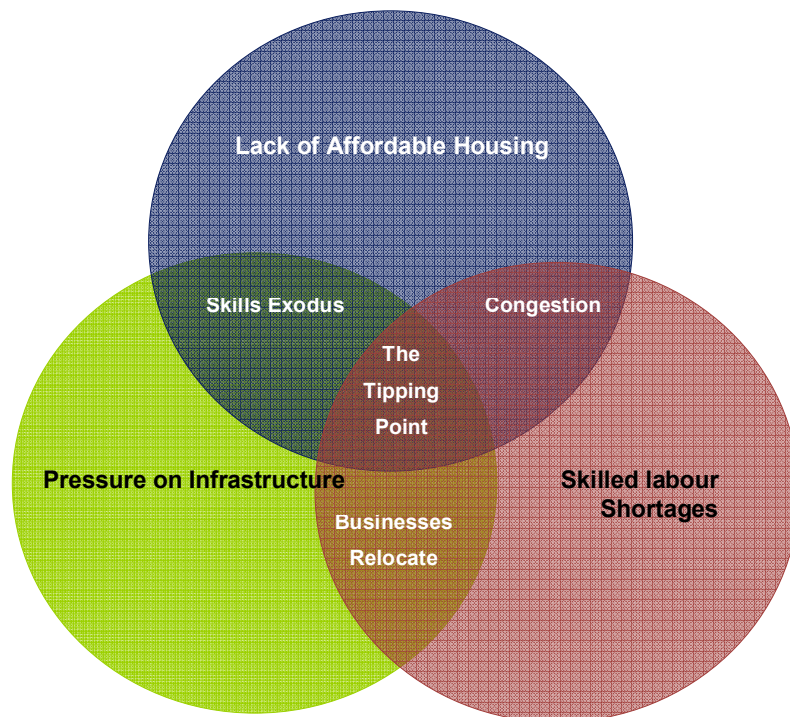
Source: Deloitte

If competitive pressures prevent 'top of the triangle' wealth generating functions from growing there are potential limiters to growth for the area.

Deloitte's 2005 study, 'Strategies and Solutions for Sustaining Success in Surrey and the Thames Valley', discussed the delicate balance and interrelationships among economic and environmental resources in that sub-region. While the area's natural beauty, excellent transport links, and strong skills base may have served as drivers for growth and economic prosperity up to this point, these same advantages may now be eroding. For example, growth without commensurate investment in housing and alternative transport infrastructure will lead to further increases in house prices (and associated affordability issues), contribute to increased levels of commuting, congestion and skills shortages.

Figure 4.1.b, overleaf illustrates the factors previously identified by Deloitte which may converge to create a possible 'tipping point' scenario. For instance, when 'lack of affordable housing' and 'poor transport infrastructure' converge in an area, the businesses in that area may have trouble recruiting due to the correlated 'skills exodus'. In a similar manner, lack of affordable housing and skills shortages combined may result in increasing numbers of commuters (congestion).

Figure 4.1.b - The 'Tipping point'



Source: Deloitte

At a certain point, an increasing number of disadvantages may result in a 'tipping point', making the area a less desirable place to live and to work, and thus triggering decline.

Similar issues were also highlighted by in the West London Economic Development and Implementation Plan – which deemed the following be the key challenges facing going forward:

- Equipping residents with the right skills;
- Delivering housing;
- Ensuring there is adequate supply of strategic employment land; and
- Maintaining efficient transport and communication connections (including surface access to Heathrow and capacity at the airport itself).

The West London Sub-Regional Development Framework (SRDF), May 2006, notes that West London occupies a critical position in the overall structure of London including:

- acting as a gateway to the world through Heathrow; and
- complementing the dynamism of financial and government centre of Central London and expansion opportunities of the East.

The framework predicts long term growth in population, homes and jobs – enormous potential but faces the challenge of meeting significant changes if it is to realise this to the full. According to the SRDF, the first challenge is to manage this growth and outlines policy for directing growth to town centres, maximise use of transport capacity, and address deprivation.

The conclusions from this report, our earlier study, and the various plans in place for the area are thus mutually reinforcing. Supply side constraints need to be addressed to provide the conditions for continued growth.

Critics of this 'tipping point' hypothesis question whether this will ever occur given the continued success of areas such as Silicon Valley which have long had such problems, and whilst this is a valid viewpoint there are a number of factors which mean that inaction could be costly.

Firstly, waiting to find out whether we will hit the 'tipping point' is not a sensible option. By the time such a situation becomes apparent it may be too late to take appropriate action – infrastructure, housing and labour skills are all long-term undertakings rather than quick fix remedies.

Secondly, economic hysteresis (the delayed recovery of a system beyond equilibrium) will make recovery from a tipping point impossible. For example, if West London experiences an erosion of its competitive advantage (e.g. excellent connectivity), there may be little reason for firms to locate in the region. Subsequent transport regeneration may attract new firms but will not incentivise established firms to re-locate to London.

Figure 4.1.c shows the cost of prime industrial rent in the Heathrow area is significantly higher than equivalent space elsewhere in the country and also more expensive than the Thames Valley. Wages are also significantly higher in the area.

Figure 4.1.c - Average business input costs in selected areas of the UK



Source: Deloitte

The chart highlights that the competitiveness of West London as a UK and Global location lies not in cost advantages, so advantage is related to the quality of the area as a business location, its connectivity and proximity to Central London.

The Business View

The consensus amongst businesses was that it is very hard to say whether the area is nearing a tipping point. Views differed as to exactly where the area finds itself at the moment with quotes including the positive:

“It is hard to say. There is no real danger of losing the area losing its competitive advantage as long as firms are willing to be adaptive and smart in future”

And the negative:

“Personally I think the area probably is, but my evidence is anecdotal. For our business it is difficult to hire the number of people we need to realise our growth plans, so local constraints are putting a limit on growth already”

“We’ve only been in the area a short time but things have undoubtedly become more congested in that time”

“Not yet, but there is no doubt that the area is a victim of its own success”

One consultee made the link between a lack of public funding and the likelihood of reaching a tipping point.

“I don’t think we are there yet but my worry is that if Ken (Livingstone) and the LDA keep prioritising East London and North London over West London, then there is a danger that we could reach it. It is about time we started investing in winners”

Another way of framing the question was to ask whether they had considered alternative locations in light of local issues. Only one business stated that they had adopted this course of action. Another said they wouldn’t rule it out as they are always reassessing their situation, whilst one business said that if they were to expand in future they would almost certainly do so elsewhere.

On balance one would have to conclude that the area is not at a tipping point just yet, but that levels of economic growth expected in West London coupled with some of the prevailing constraints highlighted by businesses could create problems in the future. The remainder of this chapter examines some of these issues in more detail.

4.2 Expectations of growth ...

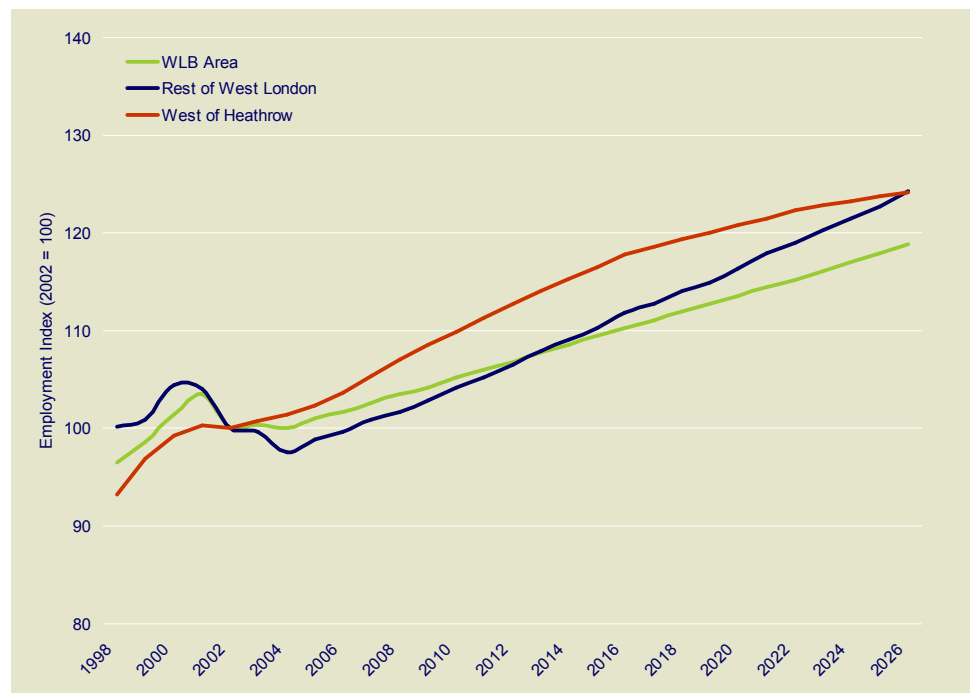
Forecasters expect all three areas included in our study to continue growing over the next two decades and in doing so to grow at levels in excess of the UK average. This is unsurprising given each area’s track record as an engine of growth for the UK economy.

Over the period 2006-2026 employment growth is projected to average:

- 0.8 per cent per annum in the West London Business Area
- 1.1 per cent per annum in the Rest of West London; and
- 0.9 per cent per annum in West of Heathrow;

As figure 4.2.a shows growth is expected to be fairly uniform in the West London Business Area and the Rest of West London, whilst West of Heathrow (predominantly the Thames Valley and Northern Surrey) is thought to have better growth prospects over the first decade to 2016.

Figure 4.2.a, Projected Employment Growth



Source: Experian, GLA Economics, Deloitte Calculations

It is anticipated that productivity growth will be broadly equal across these areas leading to average annual growth in Gross Value Added of:

- 3.0 per cent per annum in the West London Business Area
- 3.3 per cent per annum in the Rest of West London; and
- 3.2 per cent per annum in West of Heathrow;

This is in excess of the long-term trend growth rate of 2.7 per cent per annum for the UK.

The Heathrow City Partnership – an economic development partnership consisting of 12 wards encompassing Yiewsley and Hayes (within Hillingdon), Southall (within Ealing), and Heston, Cranford and Feltham (within Hounslow) – has benefited from over £40 million in funding since inception in 1997. The partnership will be underpinned further expenditure to 2010 and will lead to the economic development and regeneration of area in questions. This is a good example of Heathrow airport being a catalyst for economic growth and providing further employment opportunities.

On the face of it, these plans as well as the employment and GVA forecasts paint a positive future for the areas in question over the next two decades. Such levels of economic growth may be attainable without significant investment in things such as infrastructure, but the pressure created by the economy on that infrastructure would be substantial.

However, developments need demand from tenants and projections are based upon estimates of working age population growth, economic activity rates and productivity growth, all of which are extrapolated in some way from past trends, be that through trend-based population projections or through model parameters that are estimated on historical data.

This means that any unanticipated change in driver variables or a future change in the relationships between driver variables and GVA or employment could over (or under)-estimate future growth.

At the micro-level the future success of the above economies is crucially dependent upon the interactions between customers and businesses and businesses and employees. With this in mind we consulted with a limited number of major firms based in proximity to Heathrow to ascertain their opinion on the state of the area and future prospects for them in the area.

The remainder of this chapter explores further insights from those consultations along with other available evidence.

4.3 ... are linked with the future of Heathrow

Sir Rod Eddington's Transport Study stresses that a healthy economy must have excellent transport systems at its backbone, and that infrastructure investment is needed to deliver global connectivity and drive economic development. stating, "Tellingly, investors rate London as the most attractive city to do business in Europe and view the quality of its international connections, and its domestic networks, as a key element of its advantage."

Pressure will increase as air travel continues to be important to competitiveness. Oxford Economic Forecasting found that 90% of businesses in London or the counties surrounding Heathrow rated the airport as either "vital" or "very important" to their business. Aviation is particularly important for service industries and other key growth sectors of the economy.

Business View

All but one of the businesses consulted as part of the study saw increasing levels of the expansion of Heathrow as a positive for their business, contingent on the necessary connecting infrastructure being developed.

The one business undecided as to whether it would be beneficial for them had recently lost a number of key skilled engineers to companies operating at Heathrow, and understandably feared that further expansion may make it harder for them to retain as well as attract staff.

One business suggested that as tourism played such an important role in the firm's fortunes, their future success would be directly affected by Heathrow throughput.

However, Heathrow is in an increasingly uncompetitive position in relation to other major European airports. Although it handles more passengers per year than any other European airport, it has less runway capacity than competing major European hub airports. At a time when China is predicted to become the largest economy in the world by 2050, Heathrow is full, operating two runways at 98.5% of their permitted capacity. By contrast, Frankfurt has three runways, Paris CDG has four runways and Amsterdam Schipol has five – all operating at less than 75% of capacity.

Figure 3.2.r – Comparison of major European hub airports

| European hub airports | Passenger numbers (mppa) | Runways | Destinations Served | Efficiency of runway use – (passengers per flight) | Current air traffic movements per hour (and targeted) | Projected 2010 Capacity – Average number of passengers per flight | Full % - Current flights as proportion of 2010 Capacity |
|-------------------------|--------------------------|---------|---------------------|--|---|---|---|
| London Heathrow | 67.7 | 2 | 180 | 146 | 80 | 480,000 | 98.5 |
| Frankfurt/Main | 51.9 | 3 | 262 | 113 | 80 (120) | 660,000 | 74.2 |
| Paris Charles de Gaulle | 53.5 | 4 | 223 | 113 | 120 | 710,000 | 73.5 |
| Amsterdam Schiphol | 44.1 | 5 | 222 | 112 | 90 (120) | 600,000 | 70 |

Source: Department for Transport, The Future of Air Transport, December 2006, BAA.

Capacity constraints at Heathrow are beginning to take hold. Since 1990 the number of destinations served from Heathrow has fallen from 227 to 180. Over the same period, Frankfurt, Amsterdam and Paris have all increased their destinations significantly.

Heathrow is effectively limited to 480,000 air traffic movements per annum and at present handles 473,000. That limit has effectively served to reduce the number of destinations served by Heathrow (see above), such that Heathrow is now ranked the 5th largest in European terms having been 2nd in 1990. By 2010 it is expected to fall to 7th place. This projected decline cannot be reversed within the existing limits on the airport, even with increasing passenger numbers at Terminal 5.

Without additional runway capacity, Heathrow's competitive position could diminish to the disadvantage of the UK economy and to the advantage of continental hub airports which are continuing to grow¹⁹.

As such, outcomes from the debate around ways to enhance capacity are likely to be crucial to the continued prosperity of the area.

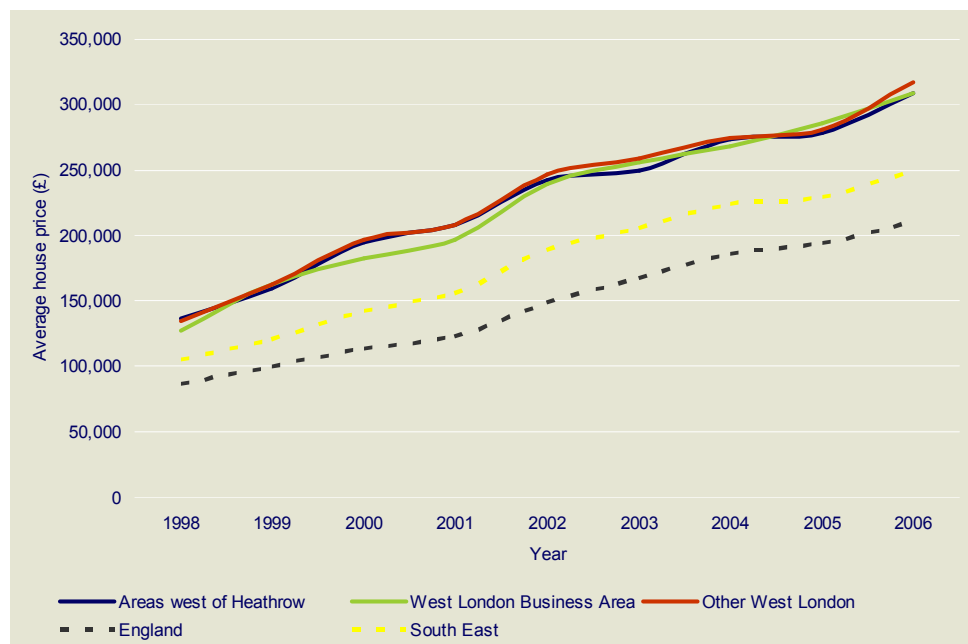
4.4 Evidence of a lack of affordable housing

4.4.1 House prices are higher than the South East average

House prices have increased markedly in all areas of the region over the last decade. Average prices in the West London Business area, other areas of West London and areas to the West of Heathrow have all moved in near lockstep and now find themselves over £300,000. This is some way in excess of the average price in the South East and in England as a whole.

¹⁹ Department for Transport, The Future of Air Transport Progress Report, 2006

Figure 5.3.a – House Prices in areas around Heathrow, 1996-2006



Source: Land Registry

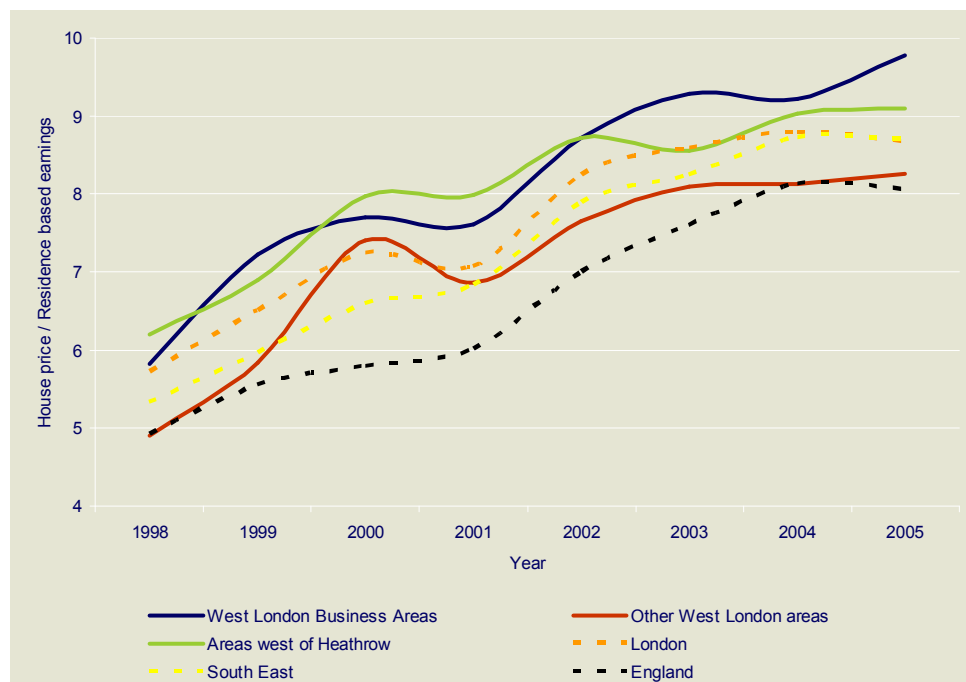
4.4.2 ... therefore housing affordability is increasingly an issue

Encouraging people to move to the area is one way to address the issue of labour supply and skills covered in section 4.4.3. However, housing affordability is a well-documented issue nationally and is particularly acute in the Thames Valley, London and wider South East.

Using data from the Land Registry²⁰ and ASHE it is possible to demonstrate the extent to which affordability is a particular issue in Thames Valley and the South East. In 2005 average house prices in the Thames Valley and West London were over nine times the average annual earnings of residents in the area.

²⁰ Based on the price of properties sold October-December each year.

Figure 5.3.b – The affordability of housing in the region, 1998-2006



Source: Land Registry, ASHE, Deloitte Analysis

This shows just how much the situation has worsened over the last decade.

The Business View

Our interviews suggested that most local business thought that a lack of affordable housing was much less of a potential problem than either congestion or a lack of skilled workers for their business, although they did acknowledge that the issues were interrelated.

However, a major business in the area made the link between the ability of the firm to obtain skilled workers and the lack of affordable housing in the area, stating:

“The intervention best serving our firm’s needs is not one intervention but the whole package. This means decent and affordable housing backed up by decent infrastructure and a sense of community. Simply building housing for £60,000 a time and putting new transport links in will not be enough”

West London's population has increased by 7 per cent since 1995 and official projections from ONS/GAD, based upon the trends of the last five years suggest continued population growth in West London. Growth is expected to be around 0.5 per cent per annum, which is lower than comparable estimates for both Central and South London.

The Greater London Authority (GLA) predicts that by 2016 there will be substantial population growth in West London, an additional 130,000 people living in the sub-region – with higher rates of growth predicted for Brent and Hammersmith & Fulham in particular.

West London is expected to accommodate just over 40,000 additional homes over the next decade, and levels of housing growth contained in the South East plan are thought to be low with respect to the needs of the regional economy. A pertinent question, therefore, is whether the planned level of new homes is enough to support demographic and economic growth given notable changes in household composition and size such as those caused by longevity, increasing propensity to live alone amongst younger cohorts, and divorce.

A lack of affordable housing may lead to a skills exodus, reduced labour supply and contribute to congestion as people try to find more affordable housing outside the area. The latter consequence may be less likely given the fact that affordability is also an issue in London and the Thames Valley's neighbouring South East authorities.

4.5 Evidence of Infrastructure constraints

4.5.1 Local infrastructure problems are widely recognised ...

The West London Economic Development Strategy and Implementation Plan 2007/08-2009/10 stated that transport infrastructure provision is key to West London's economic potential ...

"The lack of high capacity orbital routes, congestion, limited interchange facilities and low public transport accessibility in outer West London compromise future economic prospects. The need to improve the transport infrastructure in West London is fundamental to ensuring that planned economic growth is delivered in a sustainable way. Thames Valley also provides significant employment opportunities for West London residents and contra-peak flow commuting is significant. Hence the planning, economic and transport policies of SEERA and SEEDA also play an important part in setting the strategic context for West London. The problems of high level car use and poor public transport accessibility are more severe in West London than elsewhere in London"

... and highlighting congestion as a major issue for business ...

Congestion is a particular problem across West London's road network, which is compromising business competitiveness and also limiting its ability to attract business investment. Around four million trips are generated in West London in an average weekday. Most of which are made within the region (nearly two-thirds) with the car as the dominant mode of transport (over 50 per cent)²¹. These trends are reinforced by travel to work patterns with 40 per cent of West London residents driving to work compared with the London-wide proportion of 34 per cent. TfL forecasts indicate that highway vehicle trips will increase in West London more strongly than elsewhere in London, which will worsen congestion and air pollution.

... and have led to the WLP 10-point Transport Plan:

The West London Partnership has recently agreed a ten point transport plan which will be used to influence future transport-related investment decisions. It involves:

1. reducing traffic congestion (including reviewing options for road charging as well as softer initiatives to change behaviours);
2. integrating land use planning and transport planning (with a particular focus on strategic hubs and town centres);
3. facilitating orbital movement (recognising that many town centres and other work locations are not located on radial routes);
4. improving interchange facilities;
5. developing and appraising options for new transport infrastructure to address strategic capacity constraints (including Crossrail and Airtrack);
6. improving bus services;
7. improving access to Heathrow;
8. promoting local facilities to support cycling and walking; and
9. improving the efficiency of freight services and customer service.

²¹ The London Plan, Sub-Regional Development Framework, West London.

... in Deloitte's concurrent research with SEEDA regarding the Heathrow Western Access Scoping Study ...

Specific evidence of transport pressures around Heathrow include:

- Road traffic growth has increased by 18.5 per cent over the last decade, well in excess of the national average;
- Average delays on the M4 between junctions 1 and 13 place the road in the worst 10 per cent of journeys in the country;
- the M4 Eastbound is significantly worse than average amongst these worst 10 per cent of journeys;
- Stress levels (average flow to capacity) are particularly bad around Heathrow on the strategic road network (between M4 J4-4b, J4b-8/9, and J8/9-11);

... and through our interviews with local businesses.

The Business View

Nearly all businesses identified transport infrastructure as the most significant current and prospective issue facing them in West London.

"The scale and connectedness of public transport provision is key"

One consultee gave the example of Heathrow opening for business at 4.30am, and the tube network does not start running until 5.30am. This forces people to use cars to work at Heathrow if they are required to be there that early.

Some specific quotes regarding infrastructure related issues included:

"Congestion has visibly worsened over the last decade and is a major problem for us both in terms of deliveries and staff commuting"

"Transport is, without doubt, the intervention that is required the most. The M4 is a nightmare, trains aren't brilliant, and the connectedness between different modes of public transport is not good"

"Without a question transport intervention would best serve our (and the areas) interests. Journeys on all modes are difficult and cross-modal linkages are weak meaning that people have to drive whether they like it or not. The lack of connection means that a multi-modal intervention is required"

"Levels of access are most important to us, but not just access but the levels of connectedness ... in terms of specifics, the A4 is a particular bottleneck"

One firm has worked with TfL to help provide relevant bus services to their base in West London but they felt that things have to improve markedly in terms of public transport provision.

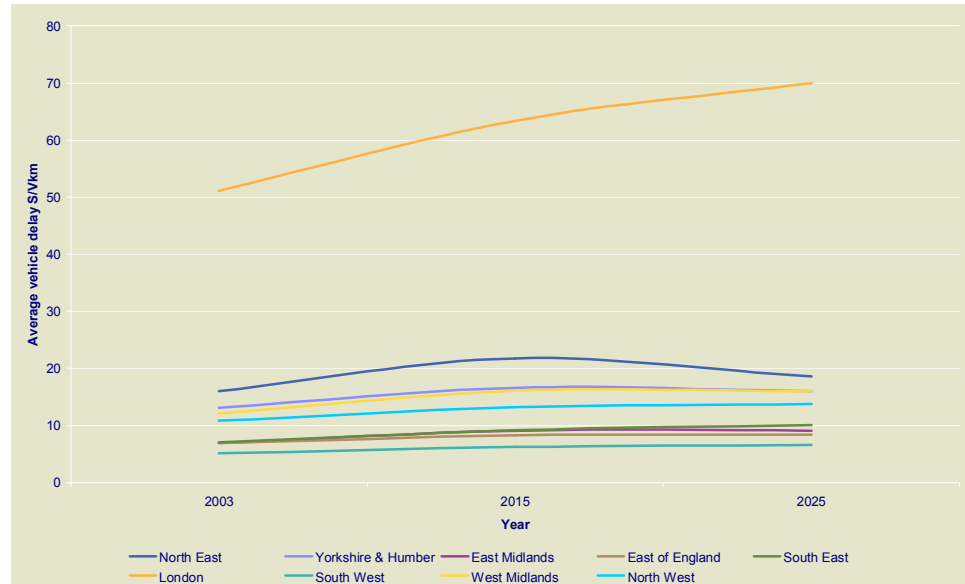
Another issue which came to light through our consultations is with regard to parking. The problem is specifically that parking is effectively prohibited for workers, without the commensurate scale or scope of public transport provision to make it a viable alternative. In this instance it is felt that intervention is effectively preventing private car use for commuting without providing a viable alternative

There is a clear consensus around this topic that something has to be done and that the intervention required is one that will discourage car use by providing real alternatives.

4.5.2 .. and delays and congestion are projected to worsen²²

London already has significantly worse average vehicle delay than any other region in England and the gap is expected to widen.

Figure 5.4.a – Regional Forecasts of Average Delay 2003-2025



Source: Department for Transport, December 2006

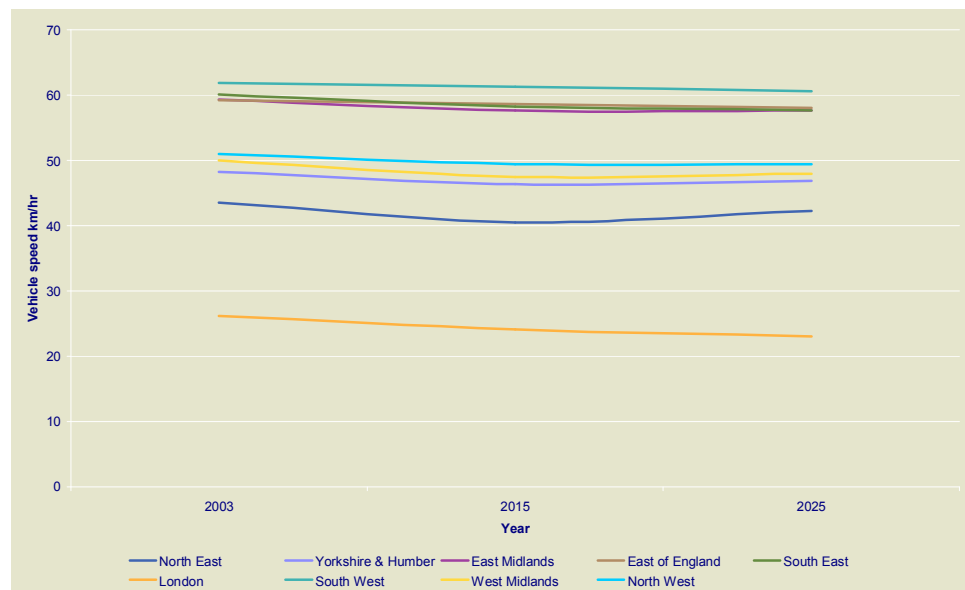
London also has the worst average vehicle speeds of any region in England and this is also expected to decline further to 2025.

²² These forecasts were produced by ITEA Division of the Department of Transport using the National Transport Model (NTM) and formed part of the evidence underlying the Eddington Transport Study which was published in December 2006.

The figures are central forecasts consistent with the Eddington 2015 and 2025 Reference Case Scenarios and are based on percentage changes on base year 2003 values. The scenarios represent a continuation of current policies up to 2025 and are themselves consistent with policies described in the Department of Transport's White paper published in July 2004.

The figures are Indicative only and are provided to illustrate trends. Ranges will exceed plus or minus 5%.

Figure 5.4.b – Regional Forecasts of Vehicle Speed 2003-2025



Source: Department for Transport, December 2006

Our concurrent research on behalf of SEEDA for the Heathrow Western Access Scoping Study suggests that stress levels on major routes around Heathrow and in the Thames Valley (Strategic Road Network) are projected to worsen.

As an example stress levels on the M4 between junctions 4 to 4b of the M4 is currently the worst outside Central London at 147 per cent flow to capacity. Stress levels between junctions 4 and 4b are expected to worsen to 187 per cent by 2026.

Moreover, future congestion will not be helped by the accommodation of additional homes and additional jobs as outlined in the 2006 Draft Further Alterations to the London Plan and the South East of England Plan, unless commensurate additional infrastructure is built or new means of using existing infrastructure in a more optimal fashion is found.

4.6 Evidence of skilled labour shortages

4.6.1 The available workforce appears to lack the required skills

A lack of skilled labour among the working population could work against West London's ability to attract new investment and is also an important factor behind the competitiveness of existing businesses.

Continued in-migration, particularly by Eastern Europeans, is thought to be underpinning increases in the labour supply, often at lower wages than would otherwise be possible. Furthermore, relatively high unemployment rates in the West London Boroughs suggest that there is still an available supply of labour, although this may not be of the calibre required by businesses operating high up the value chain in the region.

The Business View

Whilst workforce skills are considered a major issue for the majority of the businesses sampled, there was a notable lack of consensus regarding the scale of the issue and where it most problematic.

One organisation suggested that:

“West London is effectively at full employment already”

Which was corroborated by two other organisations which stated:

“We have had significant problems attracting staff of any skill/qualification level even low skilled individuals and in spite of continued economic in-migration from the EU ... we have developed a specific internal training scheme to teach people English”

“For our business it is difficult to hire the number of people we need to realise our growth plans, so local constraints are putting a limit on growth already”

This implies that there is little slack in the local labour pool at all levels.

On the other hand another organisation said:

“Labour shortages and skills issues can be a fallacy. Firms locate around here because staff are available and are generally skilled, there is no shortage of IT people for instance – so we think it is much about which industry you are operating in rather than a ‘West London’ issue”

In practice shortages are as much more about specific occupations with one organisation saying:

“We have particular shortages with regard to engineering and supply-chain professionals, but have no trouble at all sourcing unskilled labour”

As a final point one business was surprised at what they perceived to be low standards of education in West London and the apparent lack of cohesion with local tertiary education establishments and the lack of spin-off and development activities. They thought this was an avenue for further exploration.

So whilst attracting and retaining skilled workers is a key concern for most firms in some capacity, the level of consensus as to what the problem constitutes is not as strong as that on transport infrastructure.

By the same token, the available evidence suggests that the skills gap is no better or worse in West London than other areas of London or the South East. Businesses everywhere are critical of the quality of available labour.

Transport on the other hand is known to be a particularly acute problem in West London relative to other areas of the Greater South East and UK.

4.7 The impact of globalisation – future opportunities

What is globalisation?

A buzz word that refers to the trend for people, firms and governments around the world to become increasingly dependent on and integrated with each other. This can be a source of tremendous opportunity, as new markets, workers, business partners, goods and services and jobs become available, but also of competitive threat, which may undermine economic activities that were viable before globalisation.

The driving force of globalisation has been multinational companies, which since the 1970s have constantly, and often successfully, lobbied governments to make it easier for them to put their skills and capital to work in previously protected national markets.

The Economist

The locational draw of Heathrow and the subsequent presence of multinationals around the airport and along the A4/M4 corridor have been crucial in determining the economic success of West London. Globalisation undoubtedly leads to both threats and opportunities for the economy of West London and these firms.

Opportunities afforded by globalisation involve building on West London's existing strengths as an international business location and gateway, to access new markets.

Threats are mostly centred around the area's competitive platform. According to the West London Economic Development Strategy and Implementation Plan, the fundamental challenge is maintaining a highly competitive economic and business environment in order to compete with emerging economies – and in this respect the issues addressed earlier in this chapter are of paramount importance.

The notion of adaptive capacity is crucial. It is anticipated that to be able to compete in a increasingly global marketplace, firms and individuals will have to have the wherewithal and skills to adapt at short notice to cope with changing trends and demand.

Transport and connectivity has a major role to play in facilitating growth in a global environment. The **Eddington Review** suggests because of globalisation:

1. the importance of reliability grows with wide-spread adoption of just-in-time management techniques;
2. the importance of urban areas as centres of highly-productive service industry growth means an increasing role for transport in supporting agglomeration economies; and
3. transport's role in facilitating trade and attracting and retaining globally mobile resources becomes ever-more important.

The Business View

Of the firms sampled most saw globalisation as a significant opportunity rather than a threat. Asking companies what globalisation meant to them was always answered in the positive, although very few made a direct link between globalisation's effect on their business and Heathrow, perhaps due to increasing technological capabilities, and only two firms hinted that globalisation had changed their business model to any great extent.

However, many stated Heathrow was a useful base in that it has excellent connections to all parts of the globe and so can play a really prominent role when embarking upon new ventures in new markets.

Specific comments about the way globalisation is changing business practices and affording new opportunities include:

"Globalisation couldn't be more apparent than the fact that we were acquired by a major global player in the course of the last year, they are aiming for a bigger market share with global reach all backed up with local knowledge"

"The impact of globalisation is very positively about access to more markets"

"Globalisation offers huge potential returns, but is associated with an equally high level of risk: managing this risk is crucial to our future success"

However, one firm served a reminder that not all firms are affected by globalisation:

"Globalisation isn't really a 'thing' for us, we use internationally produced products but we only serve the domestic market"

In terms of the role Heathrow has played/will play in globalisation the following opinions were offered:

"Heathrow is important for us in the sense that it facilitates the initial contact with overseas contacts and allows us to expand into new markets, but then its links to globalisation as a concept are less clear"

"Globalisation isn't so much a physical phenomenon, so Heathrow's influence is limited. Communications is the key to it and because of communications we are essentially now part of a global village"

"Globalisation is about much more than Heathrow although it clearly has a role to play in it. Moving forward we envisage making much more use of advances in communication – such as video conferencing – to mitigate the environmental consequences of our actions"

Businesses seem to think that Heathrow is a part of globalisation but perhaps not such an important driver as communications.

This suggests that businesses view globalisation as a major opportunity, but that they regard Heathrow only as a contributor to globalisation rather than the major driver.

Other evidence suggests that Heathrow is the key determinant in getting companies to locate in the region - over half the companies sampled in Think London's recent London Focus report chose London because it is an entry point to the UK and 70 per cent of foreign owned businesses establishing a UK presence for the first time locate their office within one hour of Heathrow. Of course, within one hour includes central London and is not limited to the West London. Therefore, this research implies that Heathrow's pull for investors goes beyond West London.

This makes it critical that Heathrow stays competitive as a global hub in the international market.

4.7.1 Summary Conclusions

The successful economy of the area is built on highly skilled workforce, access to Heathrow (a global gateway) and proximity to London. Although there are a number of factors driving the competitiveness of this economic cluster, Heathrow seems to be central to this success as it makes the area an attractive proposition for multinationals and global SMEs (the 'Heathrow phenomenon').

Although it is difficult to isolate and quantify the exact contribution of Heathrow to the strong economic performance of these areas, it is clear that its economic impact stretches beyond direct and supply chain benefits. This study highlights that global gateways, like Heathrow, play a key role in attracting globally mobile and high value added businesses – referred to as the Heathrow Phenomenon in this report.

It is important to note, however, that the Heathrow Phenomenon is not unified across the study area. The following analysis shows that the economic impact of Heathrow is different in West London compared to the Thames Valley. The Thames Valley and parts of Surrey seem to be benefiting more in the form of attracting high value added and globally mobile businesses while the impact in West London seems to be, primarily, direct employment and Heathrow related supply chain related activities. The cluster of high value added companies is more developed in the Thames Valley. It was outside the scope of this study to identify why the Thames Valley and parts of Surrey seem to benefit more from Heathrow.

Globalisation will play a significant role in the success (or otherwise) of the region over the coming decades and this relies on both physical and informational connectivity. The performance of high-value added sectors and levels of FDI will be the demand-side drivers of success in this global world.

Expectations amongst economists and businesses are for continued growth and our consultations with business suggested that although the situation around supply-side pressures has visibly worsened of late, business does not believe a tipping point is imminent.

Moving forward it is imperative that the economic success of the area be viewed in a global context and the area faces competitive pressures not only from emerging economies such as India, China and Brazil but also from other developed economies aspiring to sustain their economic performance to retain and enhance their 'wealth generating' economic functions.

Therefore, whilst Globalisation will bring significant levels of opportunity to the area by way of access to new markets, it will also bring threats as emerging economies become more competitive and engage in higher-value added activities. The area's ability to respond to these threats and compete in a global economy is crucially a function of connectivity and skill levels – and these have to be up to the challenge.

As part of the Phase 2, the following should be explored further:

- Explore underlying reasons to establish why the Thames Valley seems to benefit more from the Heathrow Phenomenon (in terms of Heathrow's role in attracting wealth generating activities to the area);
- Identify strategic initiatives to maximise the economic potential of Heathrow across the area (including West London), especially in the light of globalisation where the role of international gateways is becoming even stronger;
- In addition to resolving infrastructure challenges, initiatives such as providing business internationalisation support to establish a cluster of 'global SMEs' around Heathrow should be explored. This could include support for businesses to tap into opportunities in global markets, including India and China;
- As the study area included parts of London and the South East, there is a need to establish a framework for 'cross-border' joint working; and

- Although this study has identified economic growth patterns and trends in areas around Heathrow and highlighted Heathrow's role in attracting high value added activities to the surrounding areas, it is not possible to quantify this impact. There is a merit in undertaking a more extensive survey with businesses to strengthen the evidence base further.

Annex 1: Interview Participants

To augment the secondary data sources used as part of the study, we conducted interviews with 10 major local businesses. This chapter shows the questions asked of participating businesses, and gives an indication of the type of business included in the study, although all businesses participated on the condition of anonymity.

Questions

Figure A.1– Questions

| | | | | |
|--|----------------------|------------------|----------------------|----------------------|
| Company Name: | <input type="text"/> | Industry Sector: | <input type="text"/> | Further Notes: |
| Contact Name & Position: | <input type="text"/> | | | <input type="text"/> |
| # Sites: near Heathrow & in UK: | <input type="text"/> | | | |
| # Employees: nr Heathrow & in UK: | <input type="text"/> | | | |
| Turnover (£m): | <input type="text"/> | | | |
| Exports (£m): | <input type="text"/> | | | |
| Level of Heathrow usage: | <input type="text"/> | | | |
| What are the three primary reasons for being located in West London?: | <input type="text"/> | | | |
| How crucial has Heathrow been to your success to date, and do you see it as a pivotal driver of your success in future? If so why? | <input type="text"/> | | | |
| To what extent have the forces of globalization impacted on your business model? What is the extent of the link between this and physical connectivity through Heathrow? | <input type="text"/> | | | |
| What are the 3 most significant current/prospective issues facing your business in West London? | <input type="text"/> | | | |
| Do you feel the area is nearing a tipping point (e.g. through a lack of sufficient infrastructure, housing and skilled labour)? What does the 'tipping point' look like? | <input type="text"/> | | | |
| What type of intervention in or around Heathrow would best serve your firm's interests/prevent the tipping point being reached? | <input type="text"/> | | | |
| Have you considered alternative locations in view of local problems, and would the level of development at Heathrow affect future corporate investment decisions? | <input type="text"/> | | | |

Source: Deloitte Analysis.

Participants

The 8 participants ranged in size with 25 to 6,000 employees located at sites in the vicinity of Heathrow airport. In total these businesses accounted for 18,000 jobs locally. This represented some 18 per cent of their combined UK workforce of 103,000 jobs – although this figure was skewed by retail sector inclusion – without which the local jobs would have been 40 per cent UK workforce.

Together, the firms operated out of 16 separate sites in the area and in general had their office type functions in the area rather than a manufacturing base.

Turnover was much more difficult to attribute to specific sites in the Heathrow area than employment. Together the firms in question had global turnover of £12.5 billion in 2006.

The businesses operated in the following industries

- Consumer Products;
- Food & Drink Production (x2);
- Property;
- Retail
- Business Services;
- Advertising; and
- Media/Communications.

As global organisations, some of the firms did not export as they were located in the UK to serve the UK market. One firm was not able to state what proportion of UK production represented exports.

The organisations exporting physical goods preferred alternative means to air-freight due to cost considerations and so business freight usage of Heathrow amongst the sample was limited. The businesses rated their usage of Heathrow for commercial purposes as moderate or moderate/high, although it is appreciated that it is very difficult to benchmark against firms operating in different industries in this case.

Other results pertaining to the questions shown in blue boxes are given at the relevant point in the report as a means of augmented other evidence.

Annex 2: Sectors

This annex shows those industries most prevalent in West London and the Thames Valley based upon employment location quotients. A quotient greater than 100 indicates that the industry in question accounts for a larger share of the regional economy than the national economy. The table thus shows those industries which are more concentrated in the study area (as well as other industries which are not concentrated in the area but account for a significant level of employment).

Figure A.2– Key Industries in 2005 (as defined using employment location quotients)

| West London | | | Thames Valley | | |
|---|--|---------------------|---|--|---------------------|
| Rank | Industry | LQ Employees (2005) | Rank | Industry | LQ Employees (2005) |
| 1 | 62 : Air transport | 1,790 41,507 | 1 | 72 : Computer and related activities | 375 43,056 |
| 2 | 63 : Auxiliary transport activities & travel agencies | 222 26,105 | 2 | 73 : Research and development | 308 7,374 |
| 3 | 92 : Recreational, cultural and sporting activities | 193 37,591 | 3 | 40 : Electricity, gas, steam and hot water supply | 303 4,939 |
| 4 | 73 : Research and development | 153 4,160 | 4 | 64 : Post and telecommunications | 225 26,391 |
| 5 | 51 : Wholesale trade and commission trade | 153 44,945 | 5 | 41 : Collection, purification & distribution of water | 200 1,081 |
| 6 | 72 : Computer and related activities | 148 19,484 | 6 | 51 : Wholesale trade and commission trade | 192 49,454 |
| 7 | 71 : Renting of machinery and equipment | 147 6,061 | 7 | 11 : Extraction of crude petroleum and natural gas, | 190 1,236 |
| 8 | 64 : Post and telecommunications | 142 19,072 | 8 | 30 : Manufacture of office machinery and computers | 155 953 |
| 9 | 15 : Manufacturing of food and beverages | 133 14,396 | 9 | 29 : Manufacture of machinery and equipment NEC | 155 9,643 |
| 10 | 30 : Manufacture of office machinery and computers | 128 897 | 10 | 33 : Manufacture of medical, precision & optical instruments | 151 3,886 |
| 11 | 74 : Other business activities | 125 107,077 | 11 | 71 : Renting of machinery and equipment | 150 5,409 |
| 12 | 22 : Publishing, printing and reproduction of media | 123 10,213 | 12 | 32 : Manufacture of radio, TV and communication equipment | 144 2,011 |
| 13 | 60 : Land transport, transport via pipelines | 115 16,191 | 13 | 90 : Sewage and refuse disposal, sanitation | 141 3,292 |
| 14 | 70 : Real estate activities | 112 13,993 | 14 | 24 : Manufacture of chemicals and chemical products | 140 6,122 |
| 15 | 55 : Hotels and restaurants | 104 49,356 | 15 | 31 : Manufacture of electrical machinery and apparatus NEC | 136 3,886 |
| 16 | 37 : Recycling | 102 472 | 16 | 74 : Other business activities | 136 101,900 |
| Other Significant Industries in terms of Employment | | | Other Significant Industries in terms of Employment | | |
| 85 | Health and social work | 77 65,542 | 52 | Retail trade | 86 58,910 |
| 52 | Retail trade | 81 63,356 | 85 | Health and social work | 68 50,744 |
| 80 | Education | 71 46,883 | 80 | Education | 81 46,477 |
| 75 | Public administration and defence & compulsory social secu | 82 31,277 | 55 | Hotels and restaurants | 93 38,461 |
| 50 | Sale and repair of vehicles & retail sale of fuel | 84 12,300 | 45 | Construction | 76 21,410 |

Source: ABI, Deloitte Analysis.

Annex 3: Disclaimer

This document, which has been prepared by Deloitte MCS Ltd for West London Business ("WLB") in accordance with our terms of engagement, has been prepared for the sole purpose of providing an economic evidence-base for WLB in respect of Heathrow's contribution in sustaining a successful economic cluster around West London and in the Thames Valley. Any analysis of environmental or social impacts of growth around Heathrow was outside the scope of this study.

The core data underpinning the analysis undertaken as part of this engagement was sourced from published sources. Deloitte MCS Ltd has not carried out an audit on this data or the published sources referred to in this document. As such, the conclusions in this document should be reviewed in that context.

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