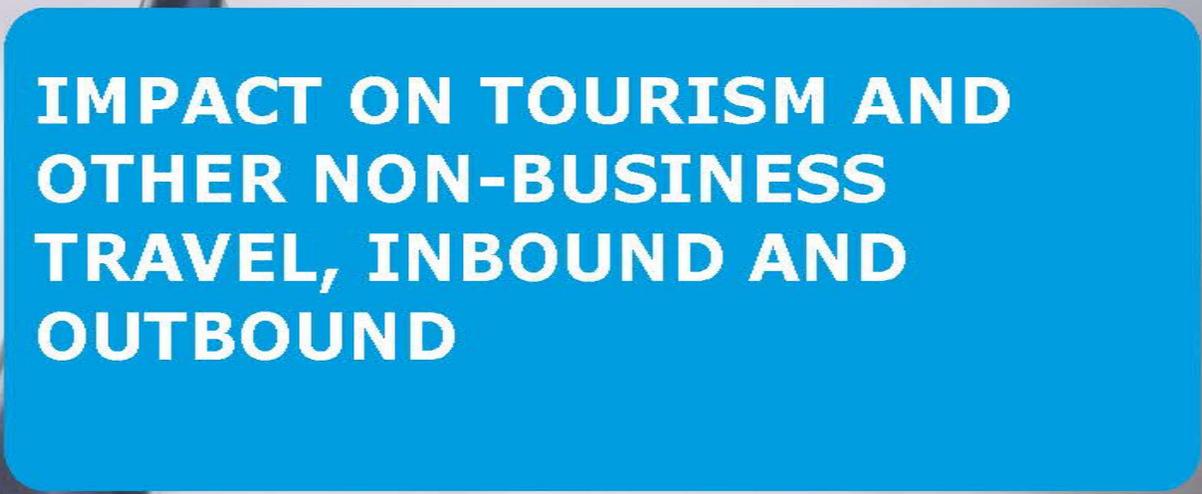


The logo for Ramboll, featuring the word "RAMBOLL" in a white sans-serif font on a dark rectangular background.

RAMBOLL

The logo for Oxford Economics, featuring a blue globe icon to the left of the text "OXFORD ECONOMICS" in a blue sans-serif font.

OXFORD  
ECONOMICS

A large, solid blue rounded rectangle containing the title text in white.

**IMPACT ON TOURISM AND  
OTHER NON-BUSINESS  
TRAVEL, INBOUND AND  
OUTBOUND**



**IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL,  
INBOUND AND OUTBOUND**



# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

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# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

## 1. EXECUTIVE SUMMARY

Globally, the number of tourists passed 1 billion in 2012; more than double the 435 million registered in 1990, with an annual growth rate of more than 4%. The economic impact of traveling and tourism is large and the Authority on World Travel and Tourism estimates that in 2012 the direct contribution of the travel and tourism sector to world Gross Domestic Product (GDP) was around US\$ 2.1 trillion and provided 101 million jobs.

In this technical note we have analysed how additional airport capacity in London might contribute to economic growth in London and the United Kingdom by affecting the inbound and outbound tourism flows, and the number of tourists visiting the UK each year. The presented analysis is focused around outbound and inbound visitors who are taking a trip for purposes other than conducting business related or professional activities. The analyses include a comparison between a situation with and without any additional airport capacity, but do not identify any distinctions between the three proposed hub airport options (Stansted, Inner Estuary, and Outer Estuary).

### **Non-business travelling accounts for 76 % of all inbound visits to UK**

Visit Britain estimates that travel for leisure, recreation and holidays accounted for 38 % of inbound visits to the United Kingdom in 2012. Some 24% of international inbound visitors reported travelling for business and professional purposes, 29% travelled for other purposes, such as visiting friends and relatives, 2% travelled for study purposes and the remaining 7% of international arrivals was not specified. At Heathrow the proportion of business travellers is much higher than the average for both the UK and the World. In 2011 31% of inbound visitors arriving at Heathrow were business travellers. The relatively high share of business travellers in London in general might be explained by London's status as one of the world's leading financial districts, the relative higher share at Heathrow airport as compared to the rest of the UK might be explained by the fact that the share of low-cost airlines is relatively higher than in other airports

### **Tourism has a significant economic impact**

Travel and tourism have a significant economic impact - via their direct contribution to economic output (accommodation, attractions, etc.) and the supply chain for these direct impacts. In terms of trip volume or expenditure generated by trips, non-business travel (holidays, Visiting Friends and Relatives (VFR) travel, and travel for other private reasons) by far exceeds the spending of business and professional travellers.

In 2012, leisure travel spending (inbound and domestic) 64% of GDP was attributed directly to the leisure travel and tourism industry in 2012 (GBP 52.5 billion), compared with 36% for business travel spending (GBP 29.4 billion). A relatively large proportion of the inbound leisure travel spending is attributable to tourists, who arrive to the UK by plane. 73 % of the 31 million visitors to the UK arrived via an airport and subsequently generated 84 % of the £18 billion spent by overseas visitors. Furthermore, leisure travel spending in the UK is expected to rise annually by 5 % to GBP 86.5 billion in 2023.

### **Potential of increased tourism from emerging markets**

After a slow recovery from the late-2000s recession, international tourist numbers are increasing again. This trend has been greatly influenced by an increase in tourists traveling from emerging economies, which have not been hit by the economic crises as the western countries have. The middle class in these emerging countries is expected to grow rapidly in the future (growth rates ranging from 100%-500% compared to 2% in Europe), creating new potential to attract tourists

## **IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND**

to the UK. In China, the propensity to travel is strongly related to disposable incomes 47% of outbound travellers in China earn more than £520 a month and this group is projected to increase from 175 million in 2012 to 1.4 billion in 2030. London and the UK seem to be developing much more slowly as a destination for the potentially huge emerging tourism markets of Asia than other countries in Europe. Recent figures show that between 2006 and 2010 airline seat capacity from emerging markets to the UK increased by 2.9%. By comparison, the equivalent figures for France and Germany were 6.3% and 5% respectively.

### **Additional airport capacity will increase the number of visitors in London significantly**

Heathrow airport is already operating at full capacity, therefore it is unlikely that the number of international tourists travelling to and from London will increase significantly beyond current levels, if no additional airport capacity is built. This means that London cannot benefit fully from the increasing demand for leisure travel. If, however, additional airport capacity is built, it is expected that there will be 94 million passengers more (293.9 million total) in London airports (LHR, LGW, STN, LTN, LCY & SEN) in 2050 compared to a situation with unchanged capacity (199.7 million total). 76%, or 73 million, of these additional passengers are expected to be non-business travellers. Given the economic impact of tourism on GDP, the economic consequences incurred by the "loss" of these tourists may be quite substantial.

# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

## 2. INTRODUCTION

On December 13 2012, the World Tourism Organisation (UNWTO) announced the world's one-billionth tourist travelling in 2012 (UNWTO, 2012a). The unprecedented number of tourists in 2012, more than double the 435 million travellers registered back in 1990, is an undisputable indication of the growing demand for international travel, spurred by the global rise in living standards and the increased affordability of air travel.

The impacts of travel and tourism run deep into the economies of inbound and outbound markets. The direct contribution of the travel and tourism sector to world GDP and employment in 2012 was US\$ 2.1 trillion (2012 prices) and 101 million jobs (WTTC, 2013a).

The main objective of this technical note is to analyse how a new hub airport in London might affect the inbound and outbound tourism flows, and how the number of tourists visiting the UK each year might change due to the additional airport capacity.

The technical note is structured as follows:

Section 3 gives a brief description of the economic benefits of non-business travelling and how aviation supports inbound and outbound non-business travelling.

Section 4 then discusses how additional airport capacity in the UK might affect the inbound and outbound tourism flows. The starting point of the discussion is forecasts of the development in the expected number of passengers in a constrained and unconstrained scenario.

# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

## 3. THE BENEFITS OF NON-BUSINESS TRAVEL

### 3.1. What do we mean by 'non-business travel'

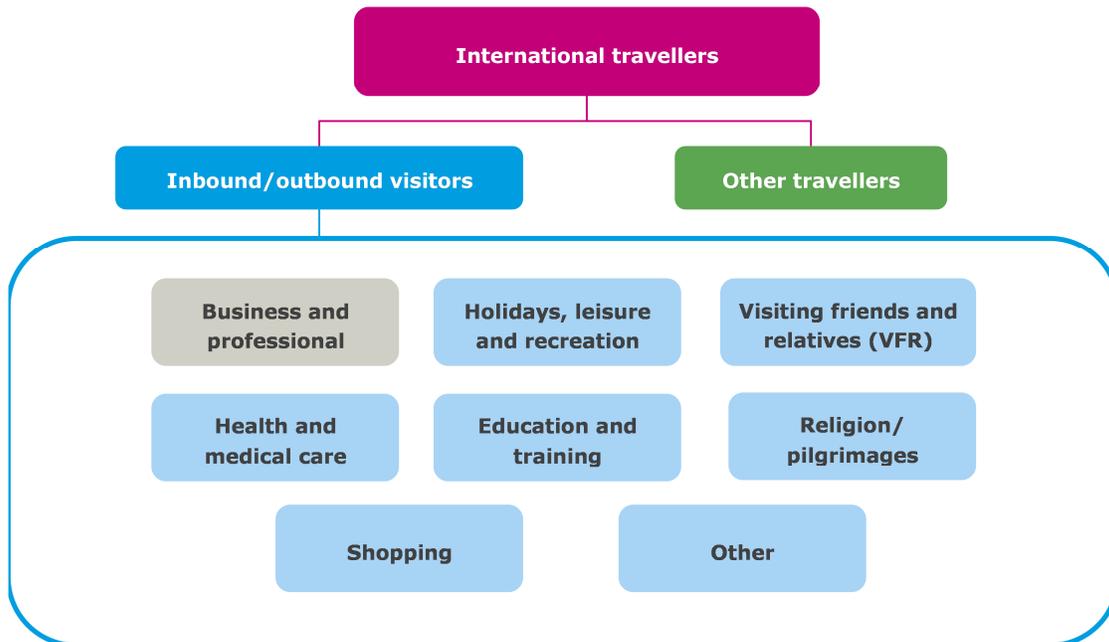
The subject of this technical note is a subset of international travellers: non-business inbound and outbound visitors. Here we use the definition of visitor provided by the UNWTO's International Recommendations for Tourism Statistics:

A visitor is a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited.

Based on the purpose of their visit, visitors can be classified as shown in Figure 3-1; for the following analysis we will focus on those outbound/inbound visitors who are taking a trip for a purpose other than conducting business related or professional activities.

Source: UNWTO, International Recommendations for Tourism Statistics 2008

Note: Other travellers not considered as inbound/outbound visitors include: Military personnel, season workers, border workers, nomads and refugees, transit passengers not entering the economic and legal territory, crews on public modes of transport, diplomats and consular staff.



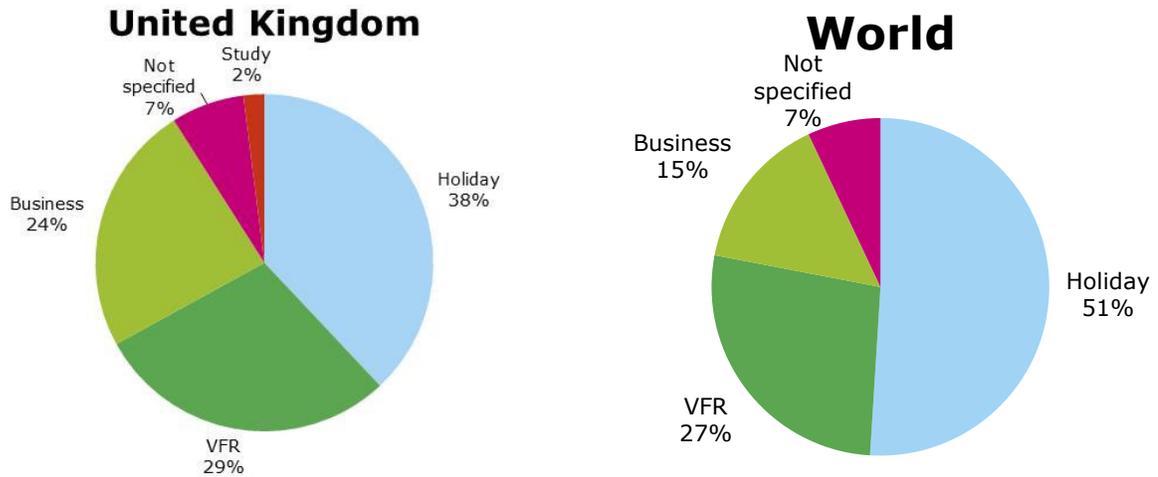
**Figure 3-1 Classification of visitors by purpose**

Estimates by UNWTO for 2011 show that 85% of worldwide inbound visits are non-business related, i.e. for the purpose of holidays, leisure and recreation, visiting friends and relatives (VFR), or other reasons. Only 15% are attributed to business or professional visitors (see Figure 3-2). According to Visit Britain, the share of inbound business travellers is higher in the UK relative to World figures. In 2012 approximately 76% of inbound visitors were non-business related (Visit Britain, Inbound tourism facts) (see Figure 3-2). At Heathrow airport the proportion

## IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

of business travellers arriving annually is much higher than the average for both UK and the World. In 2011 31% of inbound visitors arriving at Heathrow airport were business travellers, while the percentage of leisure travellers was 69%.

Source: UNWTO, World Tourism Barometer 2012, Visit Britain, Inbound tourism facts  
 Note: Latest available data for UK is from 2012 and world data is available from 2011



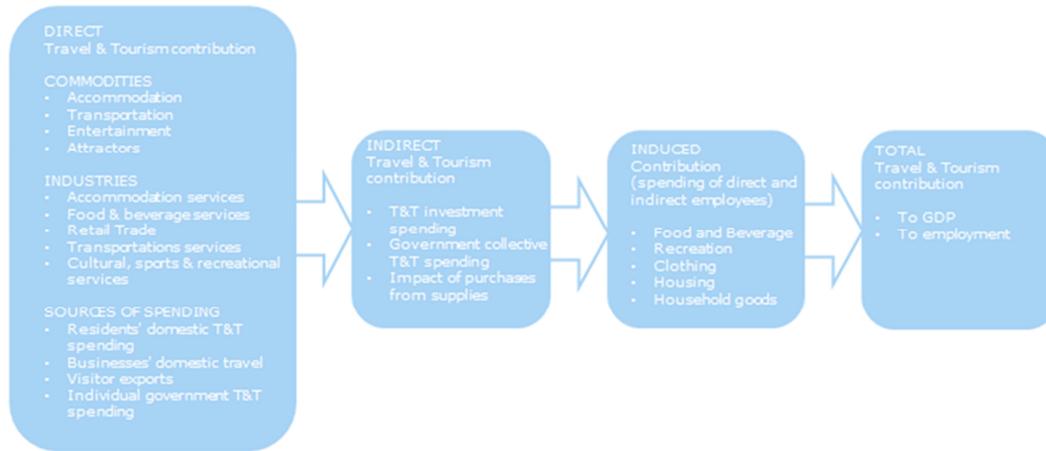
**Figure 3-2 Inbound tourism by purpose of visit**

### 3.2 Economic benefits of non-business tourism

Travel and tourism have a significant economic impact; via their direct contribution to economic output and their indirect (investment and government spending) and induced (spending of direct and indirect employees) contribution (UNWTO, 2012b). Figure 3-3 shows the breakdown of direct, indirect and induced impacts of travel and tourism<sup>1</sup>.

<sup>1</sup> The definition of direct, indirect and induced effects of travel and tourism used in this technical note is different than the definition of direct, indirect and induced effect used in TN6.

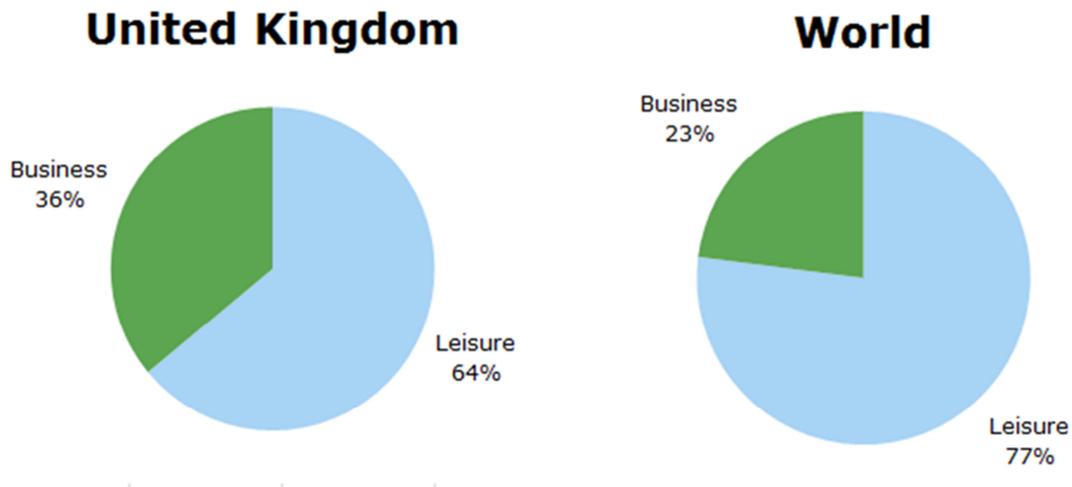
# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND



**Figure 3-3 Direct, indirect & induced effect of travel & tourism**

In terms of trip volume or expenditure generated by trips, non-business travel (holidays, VFR travel, and travel for other private reasons) by far exceeds the spending of business and professional travellers. According to data by the UNWTO, in 2012, worldwide leisure travel spending (inbound and domestic) generated 76 % of the direct contribution of the sector to GDP (US\$ 3,222bn), whereas business and professional travellers generated 24% or US\$ 1,017bn of the global travel and tourism spending (see Figure 3-4). This analysis focuses only on direct spending by the travellers. It should, however, be noted that business travellers may be developing trading relationships that have much greater impacts than their visitor spend alone.

Source: WTTC (2013b,c)



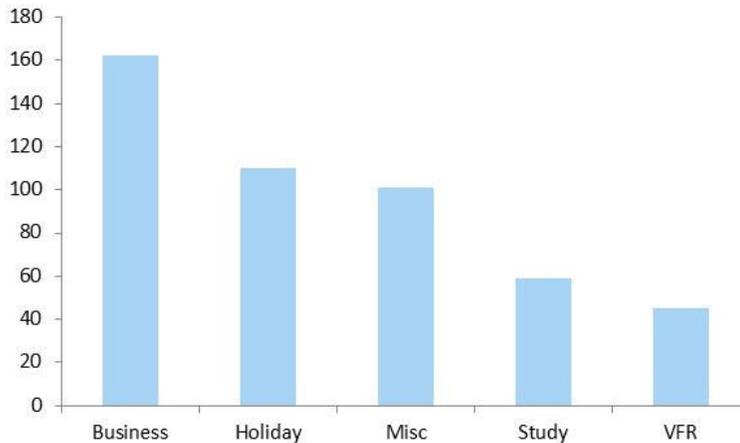
**Figure 3-4 Travel and tourism direct contribution to GDP – business & leisure travel**

In the UK, the proportions are somewhat different, most likely due to the status of London as an international business and financial services centre. In 2012, leisure travel spending (inbound and domestic) generated 64% of the GDP attributed directly to the travel and tourism industry in 2012

## IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

(GBP 52.5 billion), compared with 36 % for business travel spending (GBP 29.4 billion). The average spend per night differs among the different type of travellers Figure 3-5 shows the breakdown of average spend per night by different visitor groups.

Source: Visit Britain, detailed data for 2012



**Figure 3-5: Average spend per night, UK visitors 2012**

Today, London is one of the top two world's leading city destinations for visitors (the other is New York) attracting around 15 million international and 11 million UK overnight visitors every year. Furthermore, including visitors to other areas of the UK making a daytrip to London, 15.5 million tourists visit London each year. Inbound leisure travel has enabled the UK to flourish as the world's sixth most popular tourist destination.

Over four million long haul passengers a year arrive at Heathrow to visit Britain. This is 80% of all the long haul passengers that come to the country. The GBP 4.4 billion a year spent by these visitors is crucial to the UK tourist industry, making up more than 5% of total spending in the sector (Frontier Economics, 2011).

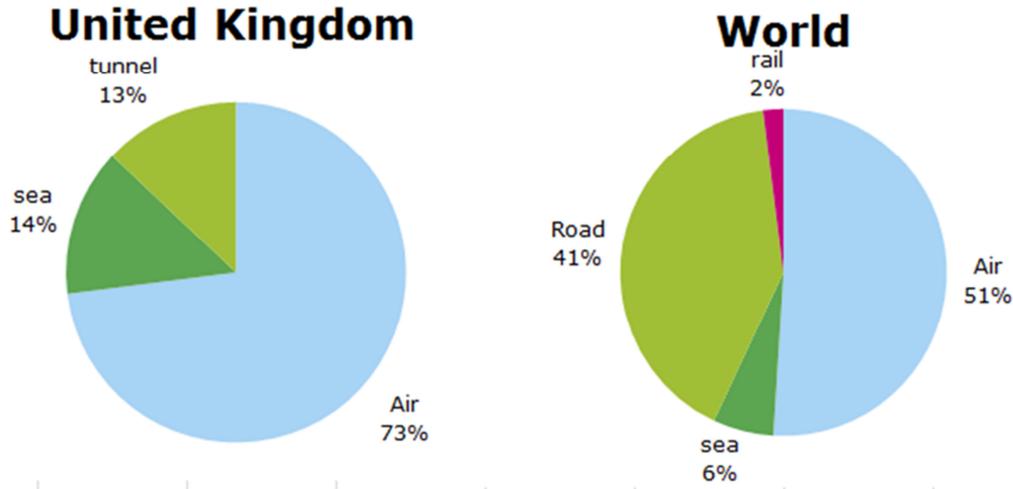
According to WTTC projections for 2013, leisure travel spending in the UK is expected to grow by 1.5% to GBP 53.3 billion, and rise annually by 5.0% to GBP 86.5 billion in 2023 (WTTC, 2013b), whereas business travel spending is expected to increase by 3.0% in 2013 to GBP 30.3 billion, and grow by 3.7% annually to GBP 43.4 billion in 2023.

In addition to the positive impact of inbound tourism on the economy, outbound tourism also entails economic benefits, in that it supports jobs in the travel and airline industries and increases the opportunities of residents to travel to faraway places (Airports Commission, 2013).

Perhaps the most important element for the development of tourism is the transport sector, and air transport in particular. As an island, air transport is particularly important to the development of tourism in the UK. UNWTO data shows that in 2011, tourism by means of air transport accounted for the majority of tourism trips (see Figure 3-6).

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Source: UNWTO, World Tourism Barometer 2012, Visit Britain, Inbound tourism facts  
 Note: Latest available data for UK is from 2012 and world data is available from 2011



**Figure 3-6 Inbound tourism by mode of transport, United Kingdom 2012 and worldwide, 2011**

In the UK, particularly, inbound tourism is heavily reliant on air. In 2012, 73% of the 31 million visitors to the UK arrived via an airport and subsequently generated 84% of the GBP 18 billion spent by overseas visitors (Airports Commission, 2013).

### 3.2. Non-economic benefits

As a concluding remark to this current section one could add that travel and tourism, in addition to the pure economic benefits, also generate indirect benefits of a social and cultural nature.

Culture and tourism have a mutually beneficial relationship. Culture is an increasingly important element of the tourism product, and creates distinctiveness in a crowded global marketplace. At the same time, tourism generates income which can support cultural heritage, cultural production and creativity (OECD, 2009). What is more, strong consumer demand provides a powerful economic reason for conservation of historical landmarks and development of cultural attractions. Ultimately, theatre, museum and historical sites benefit both the consumer and the provider (MacKercher & du Cross, 2002).

The wider benefits of travel and tourism are related to improvements in quality of life. For instance, through travel and tourism, people’s leisure and cultural experiences are broadened.

# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

## 4. THE BENEFITS OF ADDITIONAL AIRPORT CAPACITY

Aviation plays a crucial role in contributing to the growth of the wider economy of a country through facilitating the movements of goods and services, workers and tourists, investment and ideas. In the UK aviation connects the industry and consumers and tourists with the global market and provides the fastest way for people and goods to travel across long distances (Airports Commission, 2013). Thus, in order to support continuing economic growth, additional airport capacity might be needed.

In this section the main focus is on the expected implications of additional capacity in London for the inbound and outbound tourism flows.

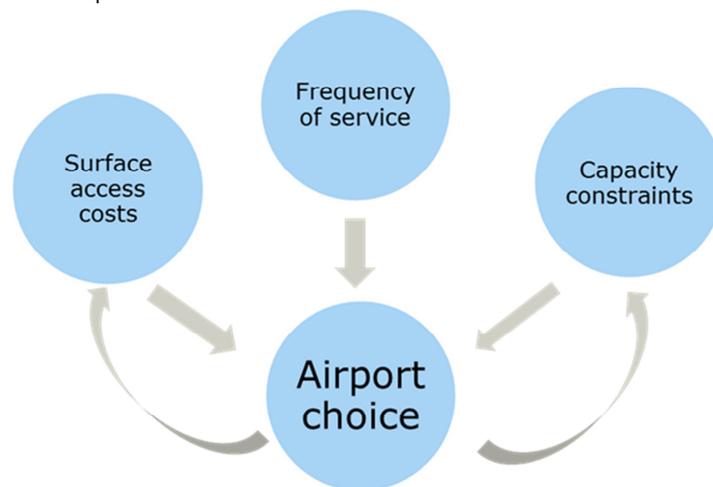
### 4.1. The effect of additional capacity

Additional capacity means more destinations can be reached, more frequently, and at a lower cost. Demand for outbound leisure trips is often assumed to be partly driven by consumer spending, and to some extent affected by air fares. Research has repeatedly found that there are two key drivers of passenger choice of airport: (Department for Transport UK aviation forecast, Pels et al 2001, Hess and Polak 2005, Skinner 1976)

- The cost of travelling to airports.
- The frequency of services offered at airports.

The relative importance of cost, frequency, and capacity constraints is outlined in Figure 4-1.

Source: Department for Transport UK aviation forecast



**Figure 4-1: The relative importance of cost, frequency, and capacity constraints in outbound passenger's choice of airport**

## **IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND**

A passenger is more likely to use an airport that costs relatively less in terms of both time and money than an airport that is more difficult to access. Furthermore, passengers prefer to use an airport that has more regular services to one that has less frequent services, as the likelihood of finding a flight at the time that best suits their needs increases. When the number of passengers choosing an airport exceeds the capacity at that airport, the costs of using that airport increases. This has two effects:

- Some passengers will choose an alternative airport; and
- Other passengers will choose not to fly.

In both cases the demand will drop back to capacity at the congested airport.

### **4.2. Inbound tourism to the United Kingdom**

Improved airport facilities in London will, other things being equal, stimulate both in-and outbound tourism. Accessibility and price are some of the main drivers of international tourism. Generally, tourists will use any transportation mode depending on time and income constraints. Air transport is, however, the preferred choice for international long distance tourists.

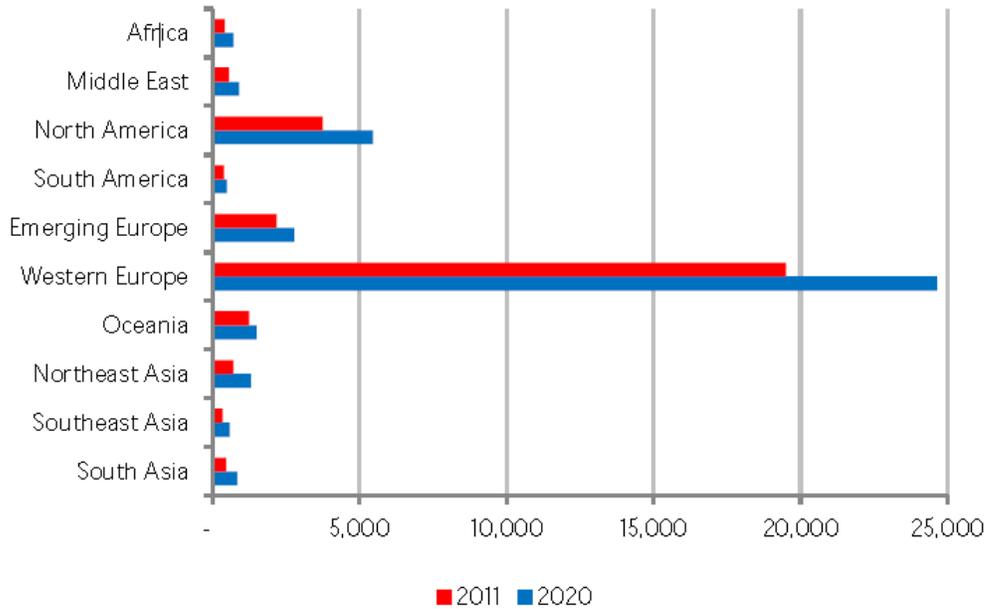
It is anticipated that the European aviation market will "mature", becoming progressively less responsive to changes in its key drivers. For example, growth in domestic air travel in the UK has slowed, as it has in some of the European markets first served by the low cost carriers. A reason for the slow growth in air travel in the European market is considered to be the European economy, which is expected to grow very weakly in the foreseeable future.

Figure 4-2 depicts the number of visits to Britain by world region in 2011 alongside the projection of the number by 2030 and 2050. It is immediately evident that Europe is, and is set to remain, the dominant source market for visits to Britain.

# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

Source: Foresight Issue 100, Visit Britain

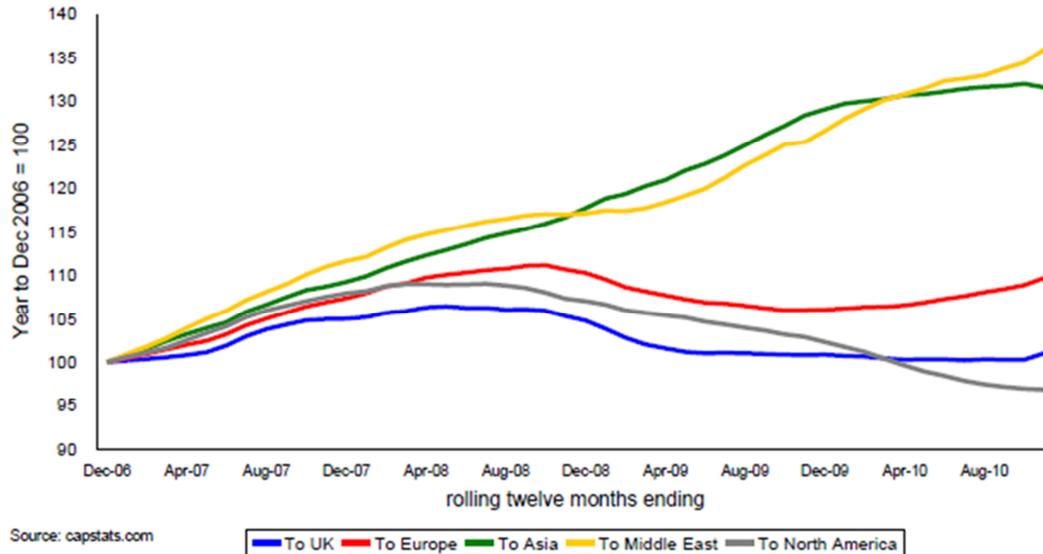
Note: The forecast builds upon an assumption of unconstrained airport capacity



**Figure 4-2 Forecast of visits to Britain by world region (mpps)**

London and the UK seem to be developing much more slowly as a destination for the potentially huge emerging tourism markets of Asia than other countries in Europe, (see Figure 4-3). This is reflected in the concern that Visit Britain has expressed about the relatively slow growth in overall UK airline seat capacity. Recent figures show that between 2006 and 2010 international inbound airline seat capacity to the UK increased by 2.9%. By comparison, the equivalent figures for France and Germany were 6.3% and 5% respectively (Greater London Authority, 2011). It is thus necessary to focus on attracting tourists from emerging economies from which outbound tourism is expected to grow rapidly.

## IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

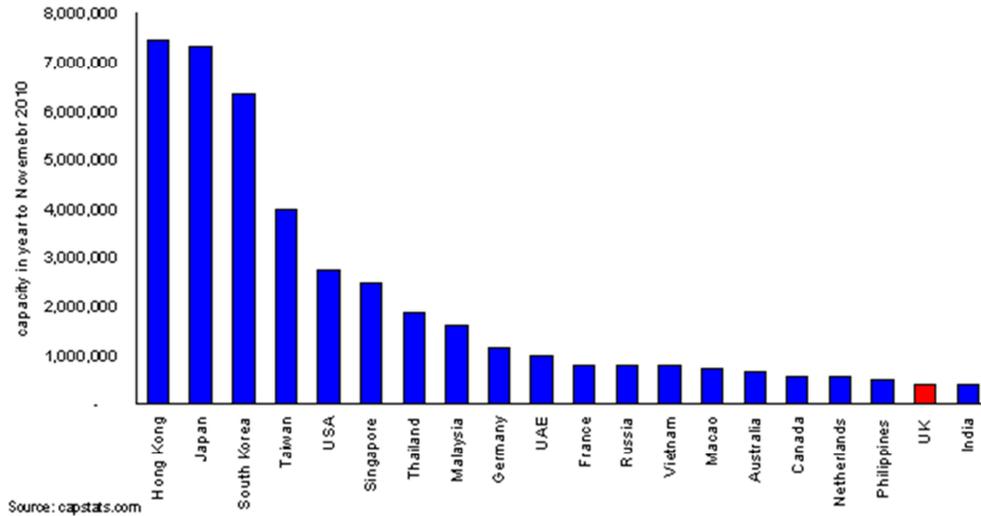


**Figure 4-3 Global seat capacity trends**

Furthermore, since the UK’s hub airport at Heathrow is at full capacity, Britain is falling behind its European competitors; there are, for example, 21 Emerging Market destinations with daily flights from other European hubs that are not served from Heathrow. These include destinations such as Manila, Guangzhou, and Jakarta. (Frontier Economics, 2011)

In 2012, China became the largest spender in international tourism globally with US\$102 billion, surpassing Germany and the United States, both close to US\$ 84 billion in 2012 (UNWTO 2013). Tourists from China and other emerging economies have significantly increased their spending over the past decade, with Russia and Brazil as other noteworthy examples. In 2010 The UK was one of the top 20 destinations for seat capacity from China, below other European destinations such as Germany and France, see Figure 4-4. In China, the propensity to travel is strongly related to disposal incomes 47% of outbound travellers in China belong to the middleclass earning more than GBP 520 a month, the Chinese middle class is projected to increase from 175 million consumers in 2012 to around 1.4 billion by 2030 (UNWTO 2013). Furthermore, the middle class in other emerging economies are expected to grow rapidly in the future (growth rates ranging from 100%-500% compared to only 2% in Europe, cf. TN3), creating new potential to attract tourists to the UK (see Technical Note 3 for a further description of the development in the emerging economics). As China and other emerging economies experience positive growth rates it is expected that the global number of potential tourist from these areas will continue to increase as the number of people who can afford to make foreign trips increases. As such, it is expected that these markets will have significant scope for further growth.

# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND



**Figure 4-4 Top destinations for seat capacity from China, 2010**

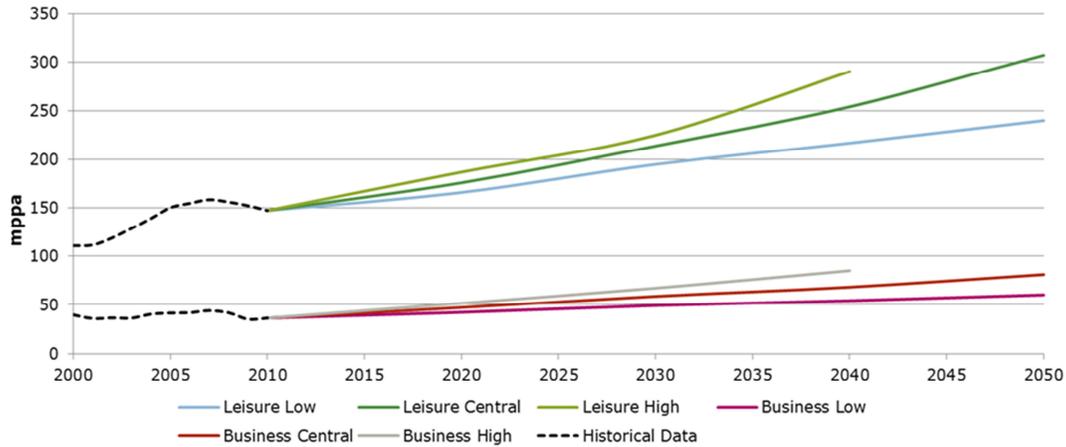
### 4.3. Constrained scenario

The Department for Transport UK (DfT) has produced aviation demand forecasts to 2050.

According to the DfT forecast, the major South East airports are forecast to reach full capacity by 2030 (in a constrained scenario, where the airport capacity is unchanged). However, there is a range around this projection and they could be at full capacity as soon as 2025 or as late as 2040. Heathrow remains at full capacity across all the demand cases considered.

As Heathrow airport is operating at full capacity today the constrained scenario will lead to the tourist travel to and from London remaining around the current level in the future. Given the increased demand of leisure traveling from, for example the emerging economies, London cannot receive all the tourists that want to visit London. Hence, the UK can be expected to lose the revenue which the tourists could have spent in the UK.

## IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND



**Figure 4-5 Constrained international forecasts of passengers in the UK, 2000-2050 by purpose**

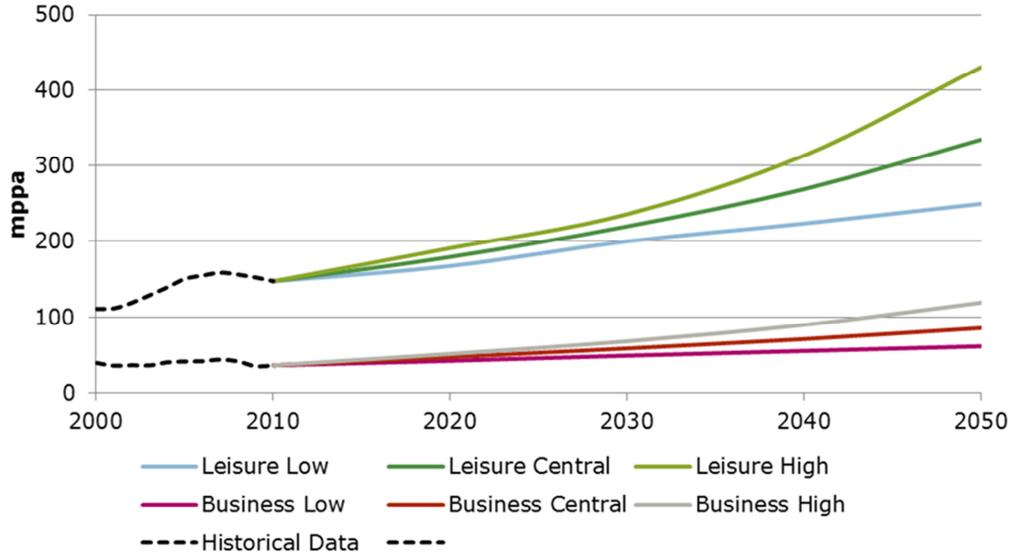
### 4.4. Unconstrained scenario forecasts

The unconstrained forecast, which represents a situation with additional airport capacity/a new hub airport, implies that, in the absence of capacity constraints, the growth rate in the number of international trips made per UK resident would fall from a long run average of around 4% a year, to just over 2% a year in the high demand case, 1.5% a year in the central demand case and just over 0.5% a year in the low demand case.

Figure 4-6 over page shows UK and foreign resident passengers split between business and leisure journey purposes for international journeys. At present 80% of air passenger journeys beginning or ending in the UK are for leisure purposes, and in Heathrow the equivalent number is 69%. This split is forecast to change only very slightly by 2050 with leisure purposes continuing to represent 79% of international air trips to and from the UK across the forecast range of demand. However, leisure passengers are more likely to switch airport and make longer airport access journeys as congestion rises at, for example Heathrow airport.

# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

Source: Department for Transport UK aviation forecast

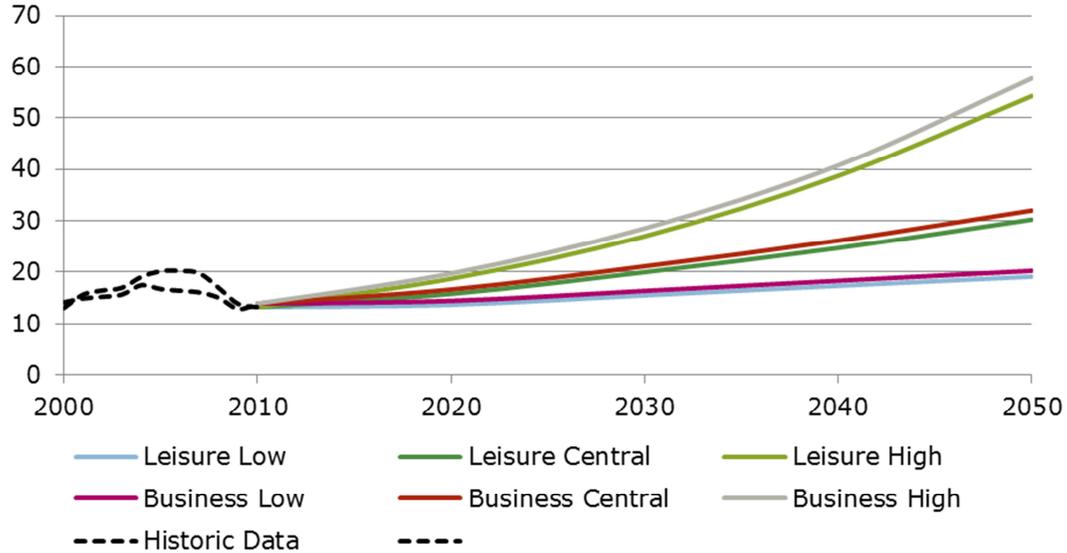


**Figure 4-6: International passengers 2000 to 2050 (mpps) by journey purpose (unconstrained)**

Figure 4-7 provides a similar analysis for the forecast range of domestic air passengers. Domestic flights are much more evenly split between business and leisure purposes. This split is not forecast to change greatly, but the share of business passengers is expected to grow modestly over time. This analysis is confined to passengers travelling internally within the UK. It excludes passengers using domestic flights to transfer to international connections who are counted in the international forecasts. If these passengers had been included in the analysis Figure 4-6 would show leisure passengers slightly outnumbering business passengers in most demand cases.

# IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

Source: Department for Transport UK aviation forecast



**Figure 4-7: Domestic passengers 2000 to 2050 (mppa) by journey purpose (unconstrained)**

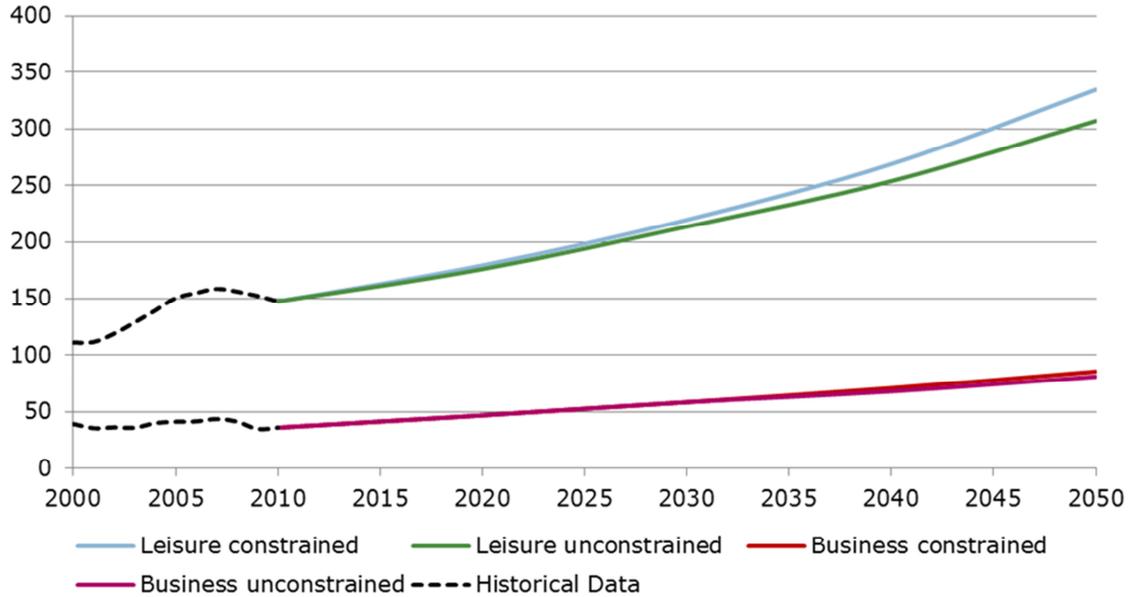
## 4.5. Comparative analysis of airport capacity in London

This subsection contains a comparison of the relevant results from the unconstrained and constrained forecasts with respect to development in leisure travel. As mentioned, the unconstrained forecast represents underlying estimates of demand in the absence of airport capacity constraints, while the constrained forecast take into account the effect of the limitations to runway and terminal capacity at UK airports.

A comparison of the forecasted number of passengers in the constrained and unconstrained case reveals that the difference between the two central cases in total number of passengers in the UK is limited (see Figure 4-8). Regarding leisure passengers the unconstrained scenario only brings 27 mppa extra passengers to the UK in 2050 as compared to the constrained scenario.

## IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

Source: Department for Transport UK aviation forecast



**Figure 4-8 Comparison of constrained and unconstrained forecast by journey purpose (central case) [mppa]**

These forecasts enable us to analyse the potential impact of increasing airport capacity in London. The point of origin is the total allocation of passengers inbound and outbound of London and selected airports in the UK, which are shown in Table 4-1 and Table 4-2.

A comparison of the number of passengers traveling to and from airports in London reveals that in 2050 in the unconstrained case, 293.9 mppa will be traveling to and from airports in London (Table 4-2). This number is much higher than the constrained case in which only 199.7 mppa will be travelling to and from London in 2050 (Table 4-1). Indicating that in a scenario with increased airport capacity the number of passengers travelling to and from airports in London may increase to 94.2 mppa in 2050.

The DfT forecast of passenger allocation to airports in the UK is not divided by purpose of travel. Hence, it is not possible to breakdown the numbers by purpose of travel. However, assuming that the percentage of non-business travel remains unchanged at about 76 per cent, the forecasts implies that the number of non-business travellers will increase with about 49 mppa in the constrained scenario and 122 mppa in the unconstrained scenario. Which means that as a result of increased airport capacity; non-business travel to and from London has the potential to increase to 73 mppa in 2050.

## IMPACT ON TOURISM AND OTHER NON-BUSINESS TRAVEL, INBOUND AND OUTBOUND

**Table 4-1 Terminal passenger forecasts, central demand case, 2011-2050 (constrained)**

Airport	2011	2020	2030	2040	2050
<b>Heathrow</b>	69.4	75.5	81.8	86.9	92.9
<b>Gatwick</b>	33.6	37.3	40.6	42.6	44.2
<b>Stansted</b>	18.0	25.4	35.7	36.0	35.4
<b>Luton</b>	9.5	13.8	18.5	18.6	17.7
<b>London City</b>	3.0	4.9	6.2	6.4	7.1
<b>Southend</b>	0.0	1.5	2.5	2.3	2.3
<b>London</b>	133.6	158.4	185.3	192.9	199.7
<b>Manchester</b>	18.8	22.1	28.1	39.0	55.2
<b>Birmingham</b>	8.6	11.8	16.7	28.2	38.3
<b>Bristol</b>	5.8	6.8	9.7	12.3	12.3
<b>East Midlands</b>	4.2	3.6	4.4	9.0	14.1
<b>Southampton</b>	1.8	2.3	4.0	7.0	6.7
<b>Rest of UK</b>	44.9	50.2	64.3	83.3	121.2
<b>National</b>	217.6	255.2	312.6	371.7	447.5

Source: Department for Transport UK aviation forecast

Nationally, the difference between the constrained and unconstrained scenarios is less distinctive. In the unconstrained scenario a total of 482.2 mppa will travel to and from UK in 2050, while 447.5 mppa will travel to and from UK in the constrained scenario in 2050. This is due to an underlying assumption behind the model that passengers will perfectly allocate themselves in the system of UK airports, and thus travel to and from other airports in the UK when London airports are congested. Thus, unused capacity in airports outside of London will be used to a higher degree in the constrained case as compared to the unconstrained case. It is assumed that airports, which are presently not operating at full capacity, will receive an increasing number of passengers in years to come.

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**Table 4-2 Terminal passenger forecasts, central demand case, 2011-2050  
(unconstrained)**

Airport	2011	2020	2030	2040	2050
<b>Heathrow</b>	69.4	86.6	109.4	134.8	170.1
<b>Gatwick</b>	33.6	38.3	39.8	45.3	51.9
<b>Stansted</b>	18.0	23.4	26.3	32.2	37.9
<b>Luton</b>	9.5	9.2	13.9	18.3	20.8
<b>London City</b>	3.0	3.9	6.2	8.4	10.6
<b>Southend</b>	0.0	1.0	2.2	2.3	2.5
<b>London</b>	133.6	162.3	197.9	241.2	293.9
<b>Manchester</b>	18.8	24.5	30.3	37.0	45.7
<b>Birmingham</b>	8.6	11.4	13.9	17.2	22.7
<b>Bristol</b>	5.8	6.5	9.2	11.5	13.0
<b>East Midlands</b>	4.2	3.3	4.2	5.2	7.1
<b>Southampton</b>	1.8	1.9	2.3	2.9	3.3
<b>Rest of UK</b>	44.9	48.7	61.7	75.7	96.6
<b>National</b>	217.6	258.7	319.6	390.7	482.2

Source: Department for Transport UK aviation forecast

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