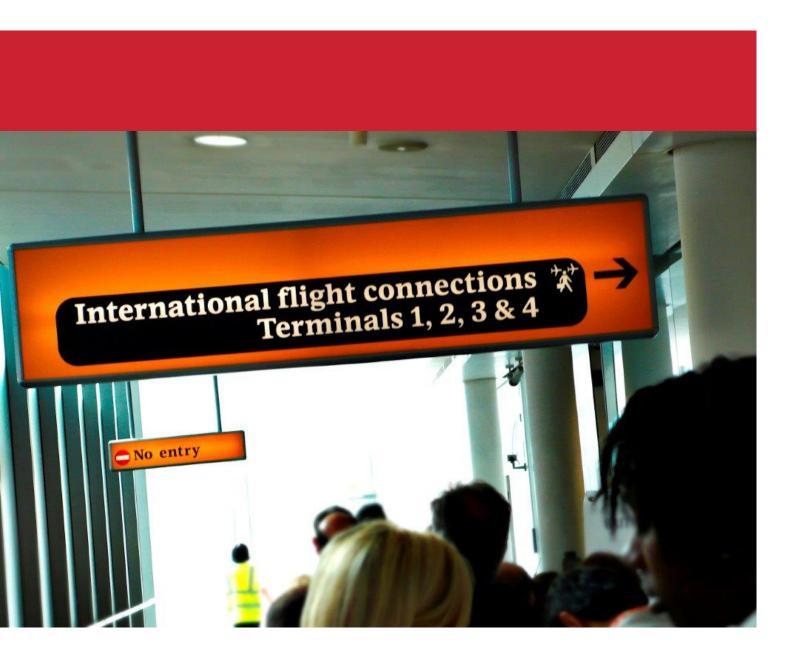
**Transport Committee** 

# LONDONASSEMBLY

## **Airport capacity in London**

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# **Transport Committee Members for 2012/13**

Caroline Pidgeon - Chair	Liberal Democrat
Valerie Shawcross - Deputy Chair	Labour
Jennette Arnold	Labour
Victoria Borwick	Conservative
Tom Copley	Labour
Andrew Dismore	Labour
Roger Evans	Conservative
Darren Johnson	Green
Joanne McCartney	Labour
Steve O'Connell	Conservative
Murad Qureshi	Labour
Richard Tracey	Conservative

### Terms of reference for the investigation

On 13 November 2012 the Transport Committee agreed to carry out an investigation into airport capacity with the following terms of reference:

- Examine the arguments for and against changing existing airport capacity in London including analysing current capacity and current and future estimates of demand for air travel;
- Explore the different options for addressing airport capacity in the short, medium and long-term including the scope for more rational use of existing airport capacity; and
- Set out findings in a written submission to the Government's independent airports commission, chaired by Sir Howard Davies, by May 2013.

## Contents

Chair's forew	ord	4
Executive Sur	nmary	5
Introduction		8
1. The debate	e about increasing airport capacity	10
2. Existing air	port capacity should be used more effectively	19
3. There shou	Ild be no expansion of Heathrow airport	27
Conclusion		34
Appendix 1	Issues for the Airports Commission to address	36
Appendix 2	Stages in the investigation	37
Appendix 3	Orders and translations	38

## **Chair's foreword**

Airports are a major part of London's infrastructure. The five main airports serving the capital handle around 130 million passengers each year. Most of these passengers use Heathrow – the UK's only hub airport.

Many Londoners want to fly but any changes to our airports – be it installing a new runway or building a whole new airport to the east of London – could have



significant implications. On the one hand, more airport capacity provides for more flights but, on the other, aviation causes adverse environmental and social effects such as noise and air pollution.

Later this year the Airports Commission will produce its interim report on the UK's future aviation requirements and this report seeks to inform its findings. We have explored the cases for and against increasing airport capacity and the different options to address this issue.

This report highlights that key to the economic arguments about increasing airport capacity is local demand. Drawing on specially commissioned research, we show that each airport in London, including Heathrow, serves a geographically distinct local market and it is this market which is a major influence on airlines' provision of flights to different destinations. In effect, local demand rather than limited airport capacity may be the cause of fewer flights to some emerging economies.

Our report also shows the potential to use existing airport capacity differently even at Heathrow to some extent. There is spare capacity at airports particularly Stansted and Luton. However, making use of this depends on airlines and passengers changing their behaviour. While many people prefer to use Heathrow, they might be prepared to switch to other airports if these had better surface transport links.

In addition to making better use of existing airport capacity, we oppose the building of any more runways at Heathrow. Too many Londoners already suffer from noise and air pollution from this airport. We call on the Airports Commission to rule out any expansion of Heathrow.

We would like to thank everyone who has contributed to our work.

### Caroline Pidgeon AM, Chair of the Transport Committee

### **Executive Summary**

In examining the issue of airport capacity in the capital, the London Assembly's Transport Committee has focused on three areas: the debate about increasing airport capacity; the use of existing airport capacity; and different options for addressing the issue of airport capacity. The Committee identifies issues in relation to each area for the Airports Commission to address in its interim report.

### 1. The debate about airport capacity

The Mayor and others argue for more airport capacity on economic grounds but it is not clear that runway constraints at Heathrow have resulted in fewer long-haul flights to emerging economies to date. London remains the best connected European city across the 23 fastest growing economies. In 2011, Heathrow had more weekly frequencies (4,641) with two runways than other European hub airports such as Frankfurt (4,570) with four runways, Paris Charles de Gaulle airport (4,508) with four runways and Amsterdam Schiphol (3,983) with five runways.

At the centre of the economic debate about changing airport capacity should be local demand. Each airport in London, including Heathrow, serves a geographically distinct local market and it is this market which is a major influence on where airlines fly to. In 2010, 127 million people used London's airports and 85 million of these passengers had surface origins or destinations in the South East or east of England. Of these 85 million passengers, around 47 million (over half) had origins or destinations in London boroughs.

There are disputes about the extent to which Heathrow is operating as a hub airport. It is not clear how many of Heathrow's passengers are transferring with estimates ranging from 22 to 36 per cent. In 2010, most of Heathrow's passengers – 70 per cent – were leisure not business travellers and most of its passengers make short-haul not long-haul trips. In July 2012, 75 per cent of flights at Heathrow were short-haul to Western Europe and UK destinations. Between 2005 and 2012, the number of destinations Heathrow served in Western Europe fell by eight and in the UK by two – but only to be replaced by more destinations in the USA rather than by destinations in emerging economies.

It is not clear that more airport capacity can be provided without creating adverse environmental effects. The targets put forward by the Committee on Climate Change suggest air passenger numbers could grow by 60 per cent by 2050 but this requires significant carbon reductions in other areas. Adverse environmental effects from aviation could incur significant financial costs.

It is also not certain that demand for air travel will rise significantly. The Government's most recent estimates of future demand were reduced downwards due to the economic outlook. The latest estimate scaled back demand in the central case from 345 million passengers to 320 million passengers in 2030. This has implications for the scale and timing of any new airport capacity. On the lowest demand forecast, airports may not be full until 2040 rather than 2030.

In its interim report, the Airports Commission should demonstrate how it has taken into account local demand for air travel. It should also address the conflict between providing for any more airport capacity and the desire to reduce the environmental impact of aviation and the extent to which estimates for growing demand for air travel are realistic.

### 2. Existing airport capacity should be used more effectively

There is scope to use existing airports including Heathrow differently to meet demand.

- Heathrow is running at near full runway capacity but has some unused terminal capacity. Some suggest it could serve 20 million more passengers per year if bigger aircraft were used.
- In summer 2012, 12 per cent of Gatwick's available runway slots were not used. Gatwick Airport Ltd is seeking to increase aircraft movements from 53 to 58 per peak hour to increase its utilisation.
- In summer 2012, 47 per cent of Stansted's available runway slots were not used.
- In summer 2012, 51 per cent of Luton's available runway slots were not used.
- Other airports including London City, Farnborough and Biggin Hill also have a role to play in meeting demand for air travel. Beyond London, airports such as Birmingham have spare capacity.

Although there is spare capacity at many airports, its use depends on the airlines which in turn follow local demand. Many people prefer to use Heathrow and may be reluctant to use other airports. Improving surface transport access is crucial to encouraging them to use other airports.

### EMBARGOED UNTIL 00:01 WEDNESDAY 1st May 2013

Stansted Airport Ltd has suggested it could attract 1.5 million more passengers each year if rail journey times to central London were reduced from 45 to 30 minutes.

In its interim report, the Airports Commission should show how existing airport capacity in London can be used more effectively. It should set out measures that should be taken to encourage passengers and thus airlines to change their usual behaviour including enhancements to surface transport access at all airports.

### 3. There should be no expansion of Heathrow

The public will not support any more runways at Heathrow due to the noise and air pollution it causes. An estimated 700,000 Londoners already suffer from noise pollution as a result of Heathrow. This would worsen if any more runways were built at this airport.

Beyond no expansion of Heathrow, we have different views on the options for addressing the issue of airport capacity. Some have suggested that expansion of Gatwick or Stansted might be more viable than building a new hub airport. Gatwick Airport Ltd estimates a new runway at Gatwick would cost in the region of £3-5 billion which would be privately funded. This option could provide some further airport capacity whilst maintaining a network of airports around London.

There may be many issues to address if a new hub airport was to be built in the Thames Estuary.

- It could mean the closure of Heathrow with major economic effects. Around 136,600 people are dependent on Heathrow for employment.
- National Air Traffic Services suggests it could mean more aircraft flying at low levels over central London.
- It could cost as much as £80 billion which would have to be funded by the public purse initially.
- There may be various technical and environmental obstacles given the Thames Estuary is home to thousands of migratory birds and the sunken SS Richard Montgomery ship.

If the Airports Commission finds that there is a need to increase airport capacity, it should rule out the expansion of Heathrow airport. It should also make clear in its interim report its criteria for shortlisting any other options, which should cover: cost and funding; how the option would meet local demand for air travel; the effects on Heathrow; airspace implications; and the potential environmental impacts.

## Introduction

The long debate about increasing airport capacity in the UK entered a new phase this year. The independent Airports Commission led by Sir Howard Davies started work and by December 2013 will produce its interim report. The report will set out the Airports Commission's findings on the UK's future aviation capacity and connectivity needs, short and medium-term options for improving the use of existing airport capacity, and a list of credible long-term options for addressing this issue.

The debate about increasing airport capacity centres on Heathrow. London is served by five main airports (Heathrow, Gatwick, Stansted, Luton and London City) with six commercial runways. Heathrow is the only functioning hub airport and has two runways. A hub airport provides for flights to be organised in waves of arrivals and departures to provide for passengers to make a wide range of connections. People use Heathrow either to fly directly to a destination (point to point travel) or to make a connection to another flight that will take them to their destination (transfer travel). Heathrow is operating at near full runway capacity.

For some, runway constraints at Heathrow are affecting the UK's economic competitiveness. They argue that the constraints limit flights to emerging markets and that a new runway or runways should be built at Heathrow or a new hub airport with four runways built elsewhere. For others, runway constraints at Heathrow are not limiting flights to emerging markets and the economic value of a hub airport is overstated. They argue that more airport capacity may be needed for more point-topoint flights, potentially by adding runways at Gatwick and/or Stansted. For yet others, there is no need to increase airport capacity. Existing airport capacity should be used differently because more air travel will generate adverse environmental effects with high economic costs.

The Transport Committee has explored the arguments for and against increasing airport capacity. It has also investigated the different options for addressing the issue of airport capacity. Our work has involved hearing from a range of relevant organisations and experts at two public meetings in early 2013, receiving written submissions, visiting the national air traffic control centre at Swanwick, and commissioning external technical analysis on airport capacity. In this report, we set out our findings on airport capacity to inform the Airports Commission's interim report. The findings draw on the information received during our investigation particularly the technical analysis which we are publishing alongside this report. The analysis provides detailed information on: current patterns of usage and demand at London's airports; the pattern of air services at each airport; how airport capacity is measured and used at London's airports; and the options for developing airport capacity.

In summary, we have reached three main findings. The remainder of this report covers each finding in turn.

- The debate about increasing airport capacity is complex but a key issue is local demand for air travel which is central to how airlines use any airport capacity;
- 2. Existing airport capacity should be used more effectively to meet demand for air travel; and
- 3. There should be no expansion of Heathrow.

# 1. The debate about increasing airport capacity

### Overview

We have heard different views on whether there is any need for new airport capacity and if there is a need whether this should be hub or point-to-point airport capacity. The various views reflect disputes over the economic rationale for increasing airport capacity particularly hub capacity. We have found a key economic consideration is local demand for air travel which is central to how airlines use airport capacity. There are also disputes over the potential environmental impact of increasing airport capacity and uncertainties over future demand for air travel.

### The economic rationale for increasing airport capacity in London

The Mayor argues for more airport capacity because aviation connectivity is vital for economic prosperity.<sup>1</sup> He suggests runway constraints at Heathrow are already resulting in a loss of trade worth £1 billion per year to rival European hub airports such as Charles de Gaulle in Paris, Schiphol in Amsterdam and Frankfurt.<sup>2</sup> In support of this economic argument, Heathrow Airport Ltd told us of polls of companies in emerging economies which stressed their preference for locating in European cities with more direct flights to them. It also cited the example of China Southern airline which had proposed a route from Heathrow to Guangzhou – the fourth largest city in China – in 2005 but then decided to operate this route from Paris instead because there was no capacity at Heathrow.<sup>3</sup>

### The connectivity of London to emerging markets

We have heard, though, that London is already the best connected European city with the most flights to key business destinations. More passengers fly into and out of London than any other city in the world.

<sup>&</sup>lt;sup>1</sup> Mayor's written submission, p3

<sup>&</sup>lt;sup>2</sup> Mayor's written submission, p3

<sup>&</sup>lt;sup>3</sup> Transcript of Transport Committee meeting on 13 February 2013, p12. NB A service to Guangzhou is now operating at Heathrow

Our technical analysis shows in detail that London also remains the best connected European city across the 23 fastest growing economies. In 2011, Heathrow had more weekly services (4,641) with two runways than Frankfurt (4,570) with four runways, Charles de Gaulle (4,508) with four runways and Schiphol (3,983) with five runways.<sup>4</sup>

Some people told us that businesses do not necessarily locate to London because of its connectivity. Often businesses are attracted to London because it is a destination in its own right. Many leading global financial firms are located in the city. London offers a good transport system, access to highly skilled staff and a high quality of life. London First told us there is little hard evidence showing that businesses are not locating to London because they cannot fly to emerging markets.<sup>5</sup>

Factors other than airport capacity may limit flights to emerging markets. We heard, for example, that there may be fewer flights from Heathrow to some cities in China because of visa rules or restrictions in bilateral air service agreements.<sup>6</sup> We also heard that the provision of flights to emerging markets is primarily based on demand. The Civil Aviation Authority told us that airlines in the UK are not currently operating services to some cities because there is insufficient demand for these flights rather than because there is too little capacity at Heathrow.<sup>7</sup>

# The importance of local demand on the provision of flights to emerging markets

Our technical analysis shows that key to understanding where airlines fly to is local demand for air travel. Contrary to popular belief, the analysis shows that each airport in London, including Heathrow, serves a geographically distinct local market, as well as central London to a greater or lesser extent. It is this local market which determines airlines' provision of flights to different destinations in the first instance. The local market is not the same for each airport and this is reflected in the different pattern of services operated at each airport.

The map below demonstrates the importance of local demand for London airports. While many passengers originated in Westminster, demand was also strong from the commuter belt around London. In 2010, 127 million passengers used London's airports. Most were leisure passengers from

<sup>&</sup>lt;sup>4</sup> York Aviation technical report for Transport Committee, p36

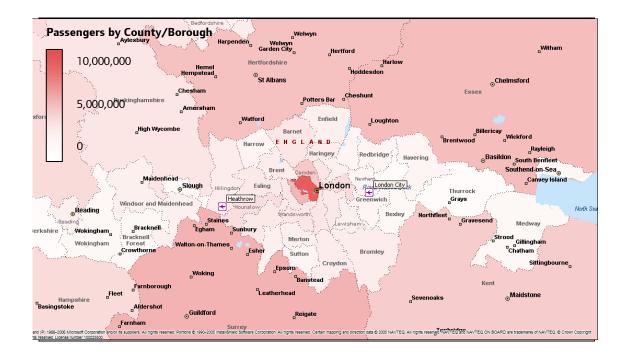
<sup>&</sup>lt;sup>5</sup> Transcript of Transport Committee meeting on 15 January 2013, p6

<sup>&</sup>lt;sup>6</sup> HACAN written submission

<sup>&</sup>lt;sup>7</sup> Transcript of Transport Committee meeting on 13 February 2013, p12

### EMBARGOED UNTIL 00:01 WEDNESDAY 1<sup>st</sup> May 2013

the area around London and the majority – 78 per cent – flew direct rather than transferred between flights. Of these 127 million passengers, 85 million had surface origins or destinations in the South East or east of England. Of these 85 million, nearly 47 million (over half) had origins or destinations in the London boroughs.<sup>8</sup>

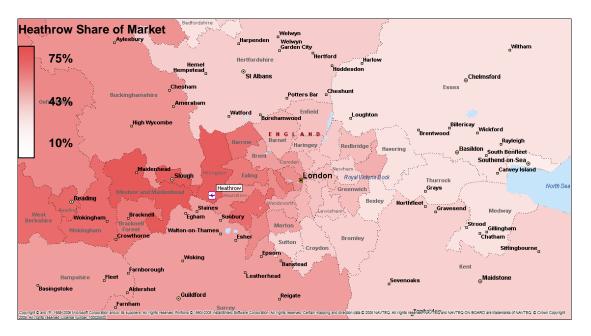


### Map 1: Overall surface origins of London airport passengers 2010<sup>9</sup>

The further map shows the importance of local demand for Heathrow. A high proportion of Heathrow's passengers originate from areas to the west of London. The detailed technical analysis which has been published with this report contains further maps of the origins of passengers including for other London airports. All airports in the capital are highly reliant on local demand.

<sup>&</sup>lt;sup>8</sup> York Aviation technical report for Transport Committee, p4

<sup>&</sup>lt;sup>9</sup> York Aviation technical report for Transport Committee, p4



Map 2: Heathrow airport market share in catchment area 2010<sup>10</sup>



The concept of a hub airport has dominated the debate on increasing airport capacity but we have received evidence questioning the extent to which Heathrow is operating as a hub airport. A hub airport provides for airlines to transfer passengers between flights to get them to their final destinations.

There are disputes over the proportion of Heathrow's passengers who are transferring. The Mayor's Aviation Adviser, Daniel Moylan, has stressed the importance of transfer traffic at Heathrow and suggested as much as 35 per cent of passengers at Heathrow are transferring.<sup>11</sup> Gatwick Airport Ltd, drawing on other data, suggested the proportion of transfer traffic at Heathrow was far lower. Our technical analysis covers this dispute in detail. It shows the proportion of transfer passengers at Heathrow could range from 22 to 36 per cent depending on the data used and how this is interpreted.<sup>12</sup> This could be an issue for the Airports Commission to investigate further.

While some passengers transfer at Heathrow, many of these passengers are travelling for leisure rather than business reasons and often

<sup>&</sup>lt;sup>10</sup> York Aviation technical report for Transport Committee, p17

<sup>&</sup>lt;sup>11</sup> Letter from the Mayor's Aviation Adviser, 5 March 2013

<sup>&</sup>lt;sup>12</sup> York Aviation technical report for Transport Committee, p14

connecting from short-haul and domestic services onto long-haul services. Overall, in 2010, 70 per cent of passengers at Heathrow were leisure travellers and 30 per cent were business travellers. In July 2012, there were 4,666 flights from Heathrow of which 2,777 flights were short-haul to Western Europe (66 per cent) and 466 were to UK destinations (10 per cent).<sup>13</sup>

The proportion of flights from Heathrow to short haul and domestic destinations has declined over time but this has not resulted in an increase in flights to emerging markets. Between 2005 and 2012, the number of destinations Heathrow served in Western Europe fell by eight and the number of destinations served in the UK fell by two. In the same period the number of destinations served in the USA rose by 10, the number of destinations served in Asia rose by one and there was no change in the number of destinations served in Latin America.<sup>14</sup> This raises the issue of whether or not more capacity at Heathrow would result in more flights to emerging economies or more flights to traditional markets such as Europe and the US.

The scope for passengers to transfer at Heathrow does make the difference to some flights operating at all but to varying degrees. Moreover our technical analysis shows the reliance on the hub varies between airlines. The hub is more important to British Airways (BA) than to other airlines with 77 per cent of all transfers at Heathrow involving BA and its Oneworld alliance partners.<sup>15</sup> For some, the current situation at Heathrow raises the possibility that it is not a hub airport at all. Simon Calder, Travel Editor of *The Independent*, told us it could just be the case that London is "an extremely big city with a large international airport that happens to have a fair amount of transfer traffic."<sup>16</sup>

In effect, long haul services are heavily concentrated at Heathrow because of both its local catchment area and because the airline BA is able to use its network strength to augment point to point passengers with transfer passengers. Connecting passengers can make the difference to some flights operating at all but this will vary throughout the year because of the nature of local demand.<sup>17</sup>

### The importance of hub airport capacity in the future

<sup>&</sup>lt;sup>13</sup> York Aviation technical report for Transport Committee, p27

<sup>&</sup>lt;sup>14</sup> York Aviation technical report for Transport Committee, p26

<sup>&</sup>lt;sup>15</sup> York Aviation technical report for Transport Committee, p39

<sup>&</sup>lt;sup>16</sup> Transcript of Transport Committee meeting on 15 January 2013, p14

<sup>&</sup>lt;sup>17</sup> York Aviation technical report for Transport Committee, p25

The competitive advantage of a hub airport in London may reduce in the future. We have heard that Heathrow is not only in competition with European hub airports but with new hub airports in the Middle East and Turkey. Some people suggest these new hub airports are better placed geographically to serve emerging markets in Asia and Latin America. By contrast, London may be best placed geographically to serve business flights to North America.<sup>18</sup>

We also heard that new types of aircraft will provide for more non-stop flights to long-haul destinations. Gatwick Airport Ltd told us about new aircraft such as the Airbus 350 with far longer ranges making them 'hubbusters'.<sup>19</sup> Additionally, airlines including BA would prefer to fly point to point wherever possible because this is more profitable. EasyJet told us it is focused on the provision of direct flights because these are more convenient for passengers. It also suggested point-to-point travel lessened the environmental impacts of flying because people only had to make one flight rather than two to reach their destination.<sup>20</sup> By contrast, other people stressed the importance of hub airport capacity in future as a means of aggregating demand so passengers had a wider choice of destinations.

### The environmental concerns about increasing airport capacity in London

The Mayor argues that the development of a new hub airport with four runways is compatible with national climate change targets. The targets put forward by the Committee on Climate Change suggest air passenger numbers could grow by 60 per cent by 2050 on 2005 levels. Others have also argued that an increase in airport capacity is permissible within the national climate change targets. London First suggests it would be possible to build two new runways. It argued that the carbon impact of expanding air travel is uncertain given that many current carbon emissions are due to aeroplanes circling above London.<sup>21</sup> National Air Traffic Services (NATS) also suggested that providing more runway capacity could result in less circling which would result in lower carbon emissions from aviation.<sup>22</sup>

### CO<sup>2</sup> emissions from aviation

<sup>&</sup>lt;sup>18</sup> Transcript of Transport Committee meeting on 15 January 2013, p43

<sup>&</sup>lt;sup>19</sup> Transcript of Transport Committee meeting on 13 February 2013, p7

<sup>&</sup>lt;sup>20</sup> Transcript of Transport Committee meeting on 13 February 2013, p11

<sup>&</sup>lt;sup>21</sup> Transcript of Transport Committee meeting on 15 January 2013, p32

<sup>&</sup>lt;sup>22</sup> Transcript of Transport Committee meeting on 15 January 2013, p33

Some have told us any increase in aviation would have adverse environmental effects. The Aviation Environment Federation (AEF) queried if the national climate change targets provide for a growth in air travel, arguing that the targets are based on many assumptions which might not be realised eg zero carbon growth in other sectors such as surface transport. The AEF also suggested that only a tiny fraction of carbon emissions from flights today are due to aeroplanes circling and argued increased hub airport capacity would mean more long-haul flights resulting in rises in carbon emissions.<sup>23</sup>

To provide for any growth in aviation without adverse environmental effects, the Airports Commission may be required to make a "leap of faith" regarding the decarbonisation of the UK economy by 2050. Current calculations of CO<sup>2</sup> limits could also require a 1.5 per cent projected annual improvement to the efficiency of aircraft all the way up to 2050 and no further expansion after the 60 per cent increase has been reached. The rapid expansion of aviation projected by the Mayor and government between now and 2030 would require the Government to provide evidence to the Airports Commission of how it plans to mitigate this expansion with dramatic carbon reductions in other areas.

Adverse environmental effects from aviation could incur significant financial costs. For example, the New Economics Foundation has suggested that installing a third runway at Heathrow might not generate £5 billion for the UK economy but instead cost £5 billion, taking into account different demand forecasts and including modest costs for environmental impacts.<sup>24</sup> Indeed in this debate, many organisations including London Councils have suggested there is a need for far more evidence and detail on how the potentially opposite aims of increasing aviation and reducing aviation emissions can be delivered.<sup>25</sup> The complexity surrounding meeting climate change targets suggests that the Airports Commission will need to take account of the latest research on climate change.<sup>26</sup>

The Assembly's Health & Environment Committee (formerly the Environment Committee) has undertaken considerable work on the environmental impact of aviation. In its response to the Government's consultation on the draft aviation policy framework, the Committee

<sup>&</sup>lt;sup>23</sup> Transcript of Transport Committee meeting on 15 January 2013, p34 and 35

<sup>&</sup>lt;sup>24</sup> AEF written submission

<sup>&</sup>lt;sup>25</sup> London Councils written submission

<sup>&</sup>lt;sup>26</sup> This would need to be research that represents the established consensus of the scientific community and would include the next Intergovernmental Panel on Climate Change (IPCC) report in 2014

highlighted that meeting the national climate change targets will be a considerable challenge requiring a significant curb in the forecast demand for air travel. The Committee also stressed the need for ongoing action on local environmental issues such as noise and air quality at Heathrow and London City airports. It called for the establishment of an independent body to monitor noise and administer airport mitigation and compensation schemes in the capital.<sup>27</sup> The Committee has recently responded to the Government's consultation on night flight restrictions at Heathrow, Gatwick and Stansted restating its long-standing opposition to night flights to minimise the impact of aviation on Londoners.<sup>28</sup>

### Uncertainties about future demand for air travel

The Mayor argues that there is rising demand for air travel which means London's airports will be full by 2030. He told us the Department for Transport's aviation demand forecasts were "conservative" and offered five alternative forecasts from leading industry players (Boeing, Airbus, ICAO, FAA and Eurocontrol). These forecasts put annual growth in air travel in the region of 2.5 to 5.7 per cent per year compared to the Department for Transport's 2011 forecast of 2.5 per cent per year.<sup>29</sup>

Others dispute the extent to which demand for air travel will rise significantly. The AEF has highlighted that the Department for Transport's forecasts have been revised downwards every time they are reissued.<sup>30</sup> The AEF also suggest that the great majority of the growth in demand is for leisure rather than business air travel.<sup>31</sup> HACAN has raised doubts about the future demand forecasts. It highlights that factors such as oil prices, the impact of a growing population, future levels of taxation for the aviation industry, the potential for modal shift to rail and the future use of video-conferencing by business all lead to uncertainties over future demand for air travel.<sup>32</sup>

The Department for Transport's most recent aviation demand forecasts were lowered due to the poorer economic outlook. In the central case, the projected unconstrained demand reduced from 345 million passengers to 320 million passengers in 2030 and from 520 to 480 million passengers in 2050.<sup>33</sup> As our technical analysis shows, these lower

<sup>&</sup>lt;sup>27</sup> Health & Environment Committee response, 31 October 2012

<sup>&</sup>lt;sup>28</sup> Health & Environment Committee response, 12 April 2013

<sup>&</sup>lt;sup>29</sup> Mayor's written submission, p4-5

<sup>&</sup>lt;sup>30</sup> Transcript of Transport Committee meeting on 15 January 2013, p3

<sup>&</sup>lt;sup>31</sup>AEF written response

<sup>&</sup>lt;sup>32</sup> HACAN written response

<sup>&</sup>lt;sup>33</sup> York Aviation technical report for Transport Committee, p75

demand forecasts have some implications for the scale and timing of any new airport capacity.<sup>34</sup> The recent forecasts show that London's airports might be full by 2030 or by 2040 if future demand is in line with the lower case forecast.

The case for increasing airport capacity particularly hub capacity is not clear-cut. The economic importance of providing more airport capacity is disputed and a key economic consideration is local demand for air travel. Each airport in London including Heathrow serves a geographically distinct local market and it is this market which has a major influence on airlines' provision of flights to different destinations. Thus it can be local demand rather than a lack of airport capacity that constrains flights to emerging markets. It may also be the case that some Londoners have a preference for using different airports over others. The potential for providing for more air travel without incurring adverse environmental effects remains to be proven. The extent to which demand for air travel is set to rise and whether London's airports will be full by 2030 is also uncertain.

### **Issues for the Airports Commission**

- 1. In its interim report on future aviation needs, the Airports Commission should set out how it has taken into account the importance of local demand in determining how airlines use airport capacity.
- 2. The Airports Commission should also address in its interim report:
  - the conflict between providing for any more airport capacity and the desire to reduce the environmental impact of aviation; and
  - whether the projections of future demand for air travel are realistic and if so how accelerated reductions in CO2 to meet the Government's existing environmental commitments could be achieved.

<sup>&</sup>lt;sup>34</sup> York Aviation technical report for Transport Committee, p74

# 2. Existing airport capacity should be used more effectively

### Overview

Overall the current usage of London's airports is mixed. Whilst there is little spare capacity across the London airports as a whole in the morning peak, there is spare capacity in the early evening peak period. Moreover whilst Heathrow achieves around 99 per cent utilisation of its runways and Gatwick achieves 80 per cent utilisation, other airports are not so fully utilised. There is considerable spare capacity at Stansted and Luton airports. Key to making better use of the spare capacity could be improving surface transport access at airports.

Our technical analysis details the current usage of London airports and the scope for different usage. It also shows the complexity of measuring airport capacity. There is no simple measure of airport capacity.

### Measuring airport capacity

Airport capacity comprises individual capacities relating to runway, apron, passenger terminal and surface access, and any environmental limits on the number of aircraft movements. It is determined on an hourly basis with variances by season and day. Crucially, airport capacity is not independent of the nature of passengers and airlines using an airport so achievable capacity may vary over time as these change. Airports with a mix of business and leisure traffic and long and short haul routes will tend to have a more even profile of demand and attain a higher level of utilisation than other airports.<sup>35</sup>

Our technical analysis shows London's airports are mainly used for passenger flights. Pure freight flights comprise a low proportion of all aircraft movements especially at Heathrow and Gatwick. Most freight is carried in the bellyholds of passenger aircraft at these airports. The table

<sup>&</sup>lt;sup>35</sup> York Aviation technical report for Transport Committee, p50

Table: Aircraft Movements by Category at the London Airports.							
	Commercial	Freight	Other	Total	%	% Other	
	Passenger				Freight		
Gatwick	244,313	258	6,496	251,067	0.1%	2.6%	
Heathrow	473,839	2,456	4,611	480,906	0.5%	1.0%	
London City	61,064	0	7,728	68,792	0.0%	11.2%	
Luton	70,421	1,717	25,436	97,574	1.8%	26.1%	
Stansted	127,140	9,759	11,418	148,317	6.6%	7.7%	
Source: CAA Statistics							

below provides details of aircraft movement by category at each airport.<sup>36</sup>

### **Capacity at each London airport**

### a) Capacity at Heathrow

Heathrow is running at near full runway capacity but has some unused terminal capacity. Our technical analysis shows that in summer 2012 there were no regular spare slots which would allow an airline to operate a new daily scheduled service from Heathrow without acquiring slots from another airline.<sup>37</sup> However, there is some scope to increase the number of passengers using Heathrow through the use of larger aircraft. We have received some suggestions that Heathrow could add a further 20 million passengers per year (mppa) by increasing the numbers of passengers per plane using bigger aircraft such as A380s.<sup>38</sup> It has also been suggested that Heathrow could change its existing usage by freeing up some slots that are currently allocated for domestic or short-haul flights in order to serve more long-haul destinations.

We oppose the use of mixed mode as a means of increasing the usage of Heathrow. Mixed mode which involves both Heathrow's runways being operated for take-off and landing aeroplanes could result in more noise disturbance. HACAN suggests mixed mode would result in 200 additional flights a day for many of the 700,000 people who live under Heathrow's flight paths. These people would no longer receive the half-day break from noise when the use of either runway for take-off or landing is switched at 3pm.<sup>39</sup> The London Borough of Hounslow has also stressed

<sup>&</sup>lt;sup>36</sup> York Aviation technical report for Transport Committee, p12

<sup>&</sup>lt;sup>37</sup> York Aviation technical report for Transport Committee, p69 and 73

<sup>&</sup>lt;sup>38</sup> London Councils' written submission, p3 - Heathrow's terminal capacity is 90 million passengers per annum (mppa) but it had 70 mppa in 2011

<sup>&</sup>lt;sup>39</sup> HACAN's written submission

the problems with mixed mode suggesting a predictable period of respite is the single most effective noise mitigation measure available.<sup>40</sup>

### b) Capacity at Gatwick

There may be some scope to increase usage of Gatwick airport. Our technical analysis shows that, in summer 2012, there was excess demand for slots in peak periods but some spare capacity particularly at the beginning and end of the day. As with Heathrow, capacity at Gatwick is profiled as far as possible to match demand but overall in summer 2012 there were 717 spare runway slots each week (12 per cent of the total) concentrated in the evening period. There could also be opportunities to increase the utilisation of Gatwick in winter when aircraft movement rates are far lower. This would require Gatwick airport to attract airlines operating more year round business services.<sup>41</sup>

Gatwick Airport Ltd told us about steps it was taking to improve the use of its capacity. It is now operating at 53 aircraft movements per peak hour compared to 50 movements three years ago. Gatwick Airport Ltd was hoping to increase this further to 55 movements per peak hour in 2014 and beyond that to 58 movements per peak hour. It suggested that if similar levels of performance could be achieved at other airports such as Stansted, Luton and Southend, it could "put an awful lot of peak hour capacity into the system." <sup>42</sup>

### c) Capacity at Stansted

There is spare capacity at Stansted. Our technical analysis shows that, overall in summer 2012, around 47 per cent of its available runway slots were not used. Stansted is limited by planning controls to 264,000 air traffic movements (atms) per year and 35 mppa. However, its runway infrastructure could support around 40 mppa. In order to reach maximum utilisation, Stansted would need to attract more off-peak traffic both during the day and across the year.<sup>43</sup> Stansted Airport Ltd stressed to us the scope for greater utilisation. It told us it was only using around 50 per cent of its capacity but had the capability to support flights by the largest aircraft.<sup>44</sup>

<sup>&</sup>lt;sup>40</sup> London Borough of Hounslow's written submission

<sup>&</sup>lt;sup>41</sup> York Aviation technical report for Transport Committee, p70 and 78

<sup>&</sup>lt;sup>42</sup> Transcript of Transport Committee meeting on 13 February 2013, p6-7

<sup>&</sup>lt;sup>43</sup> York Aviation technical report for Transport Committee, p71, 78 and 79

<sup>&</sup>lt;sup>44</sup> Transcript of Transport Committee meeting on 13 February 2013, p6

### d) Capacity at Luton

There is spare capacity at Luton. Our technical analysis shows that overall in summer 2012, around 51 per cent of its available runway slots were not used. Luton currently operates close to full capacity at peak periods with limitations on terminal, apron and runway capacity. It has recently applied for planning permission to enhance its infrastructure to provide for 18 mppa. As with Stansted, the profile of traffic at Luton airport is peaky. Attaining better utilisation, therefore, requires a change to the profile of traffic using the airport which may be difficult. The short runway at Luton limits the prospect for introducing larger aircraft serving long-haul destinations.<sup>45</sup>

### e) Capacity at other airports

There is also scope to make better use of other airports in and around London. Our technical analysis shows that London City airport has spare capacity during the middle of the day. However, the strong business profile of the traffic at this airport may limit the potential to develop substantial off-peak operations and increase its utilisation.<sup>46</sup> Other airports near London also play a crucial role in meeting business demand. In 2011, Farnborough and Biggin Hill airports were major operators in business aviation handling 25,000 and 11,300 air traffic movements respectively. Biggin Hill has stressed to us the role it can play in future in providing private air travel for business.<sup>47</sup>

We have also heard other airports in the UK may have spare capacity. For example, Birmingham Airport Ltd told us that it has the spare capacity now, and will have the long haul connectivity from 2014, to help take the pressure off London's airports. Birmingham Airport Ltd wants to see the introduction of policies that improve surface access between London and Birmingham to encourage passengers to use airports differently.<sup>48</sup>

### Overcoming the barriers to different use of existing airport capacity

Although there is spare capacity at many airports, its use depends on the airlines. In turn, this depends on the nature and strength of the market which each airport serves. Many have commented to us that people often prefer to use Heathrow and are reluctant to use other airports. This

<sup>&</sup>lt;sup>45</sup> York Aviation technical report for Transport Committee, p72 and 79

<sup>&</sup>lt;sup>46</sup> York Aviation technical report for Transport Committee, p80

<sup>&</sup>lt;sup>47</sup> London Biggin Hill written submission

<sup>&</sup>lt;sup>48</sup> Birmingham airport written submission

may be due to various reasons including perceptions about the proximity of Heathrow to the centre of London and that it is easier to travel to and from Heathrow than from Gatwick, Stansted or Luton.

We have heard that government interventions to encourage different use of existing airports may be problematic. For example, imposing changes to Air Traffic Distribution Rules so airlines have to use different airports could breach competition rules. Similarly, we have heard concerns about the introduction of different rates of Air Passenger Duty (APD) at airports. Whilst some research has suggested that a 50 per cent rise in APD at Heathrow would be high enough to persuade passengers to switch to airports like Luton and Stansted,<sup>49</sup> we have also heard that this may be "too blunt an instrument" leading to unintended consequences. Some such as HACAN have therefore argued that rather than intervene deliberately in the aviation market, it should be left to market forces. They suggest current pressures on Heathrow would inevitably lead to price rises which would, in turn, lead to different usage of the airport. HACAN argued that this process could be assisted if expansion of Heathrow was ruled out.<sup>50</sup>

# Improve surface transport access to make better use of existing airport capacity

We have heard that improving surface transport access is crucial to improving the use of airports. Gatwick Airport Ltd told us that this was the key to unlocking the use of existing spare capacity. <sup>51</sup> London First made a similar point. It told us that there is a range of short-term, relatively low-cost rail enhancements that could be taken to improve Gatwick and Stansted's connectivity to London thereby attracting more people to use these airports.<sup>52</sup>

The table below shows the current ways in which people travel to London's airports. This demonstrates that many people travel by private car rather than use public transport. In 2010, 38 per cent of passengers at Heathrow used public transport, 31 per cent used private car and 26 per cent used taxis. There were similarly high proportions of passengers using private car at Gatwick (42 per cent), Luton (48 per cent) and Stansted (40 per cent).

<sup>&</sup>lt;sup>49</sup> Department for Transport analysis as reported in The Observer, 29 December 2012

<sup>&</sup>lt;sup>50</sup> Transcript of Transport Committee meeting on 15 January 2013, p4

<sup>&</sup>lt;sup>51</sup> Transcript of Transport Committee meeting on 13 February 2013, p31

<sup>&</sup>lt;sup>52</sup> Transcript of Transport Committee meeting on 15 January 2013, p31

Table: Mode of Access to the London Airports							
	Heathrow	Gatwick	London City	Luton	Stansted		
Bus	3%	0%	1%	1%	1%		
Coach	9%	6%	0%	15%	21%		
Courtesy Bus	2%	3%	0%	0%	1%		
DLR	-	-	52%	-	-		
Hire Car	3%	2%	1%	3%	3%		
Private Car							
Parked	13%	23%	3%	22%	20%		
Private Car							
Dropped Off	18%	19%	10%	26%	20%		
Rail	10%	34%	-	17%	25%		
Тахі	26%	13%	34%	16%	9%		
Tube	16%	-	-	-	-		
Total	100%	100%	100%	100%	100%		
Source: CAA Survey Data 2010							

Existing plans to improve rail services at airports could be enhanced. Network Rail told us future developments will include enhanced Thameslink services for Gatwick and Luton airports, and changes to the West Anglia mainline for Stansted airport.<sup>53</sup> Gatwick Airport Ltd welcomed these schemes and stressed the importance of further changes. It wants the provision of new carriages, the maintenance of good rail timetables, and the extension of the Oyster card scheme to Gatwick. This would mean passengers travelling from London using Oyster did not have to get off trains at Croydon, swipe out and then buy a new ticket to get to Gatwick.<sup>54</sup>

Stansted Airport Ltd also called for the extension of Oyster card to its area. It suggested that the airport was well positioned for rail connections but suffered from long journey times to London and poor service reliability. Stansted Airport Ltd estimated that if the rail journey time to London was reduced from 45 to 30 minutes it could attract 1.5 million more passengers per year.<sup>55</sup> EasyJet told us airlines had a role to play in informing their customers about rail transport options. For example, airlines could let passengers know that Luton is only 21 minutes away from St Pancras and that it is possible to travel by rail from Gatwick all the way through London.<sup>56</sup>

<sup>&</sup>lt;sup>53</sup> Network Rail written submission

<sup>&</sup>lt;sup>54</sup> Transcript of Transport Committee meeting on 13 February 2013 p31

<sup>&</sup>lt;sup>55</sup> Transcript of Transport Committee meeting on 13 February 2013, p30

<sup>&</sup>lt;sup>56</sup> Transcript of Transport Committee meeting on 15 January 2013, p33

The Assembly's Health & Environment Committee has highlighted the need for transport improvements at London's airports especially Heathrow. Its report *Plane Speaking* (March 2012) made a number of recommendations to enhance public transport usage at Heathrow. These included that Heathrow Airport Ltd should: adopt a more ambitious target of 60 per cent of its passengers using public transport; enhance the planned Crossrail provision from four to ten trains per hour; establish a rail transport forum to develop integrated rail transport solutions; and establish a communications plan to increase awareness of bus and coach services amongst workers as well as passengers. <sup>57</sup>

Many have echoed these calls for enhanced public transport at Heathrow. This includes upgrading the Piccadilly line and building High Speed 2 (HS2). The London Chamber of Commerce & Industry suggested HS2 had potential to reduce the number of short-haul domestic and European flights from Heathrow.<sup>58</sup> In this regard, we heard that the Government's recent decision to postpone the possible HS2 spur to Heathrow is not helpful. Simon Calder described this as "utterly mad" given HS2's potential to reduce the number of short haul flights from Heathrow.<sup>59</sup>

There is scope to use all of London's airports including Heathrow differently. While Heathrow is running at near full runway capacity, it has spare terminal capacity. At Gatwick, there is particular scope to increase its utilisation in winter. At Stansted and Luton, the levels of spare capacity are far greater. However, key to maximising the usage of existing capacity is encouraging airlines to move their flights. In turn, this requires alterations in the current nature of demand for air travel.

Passengers have to be encouraged to switch from using Heathrow to using other airports. Key to this may be improving surface transport access particularly rail connections and promoting these connections to passengers. If people found it easier to travel to and from central London to Gatwick, Stansted and Luton, they may make greater use of these airports. Thus, the usual 'predict and provide' approach to determining airport capacity requirements could be replaced by an approach that focuses on shifting how existing airport capacity is used to meet the demands of the UK economy.

<sup>&</sup>lt;sup>57</sup> London Assembly Environment Committee report, *Plane Speaking*, March 2012, p48

<sup>&</sup>lt;sup>58</sup> LCCI written submission

<sup>&</sup>lt;sup>59</sup> Transcript of Transport Committee meeting on 15 January 2013, p30

### **Issue for the Airports Commission**

3. In its interim report, the Airports Commission should show how existing airport capacity in London should be used more effectively, including at Heathrow. The Commission should set out the measures that should be taken to encourage passengers and consequently airlines to make better use of existing airports where there is spare capacity. In particular the Commission should look to progress enhancements to surface transport access at Gatwick and Stansted airports by examining and reporting on the detail of scheme options and what would be required to make them happen.

## 3. There should be no expansion of Heathrow airport

### Overview

We cannot see that there is any case for the expansion of Heathrow, particularly given its ongoing adverse environmental impact on many Londoners. We have also received information about other options to address the issue of airport capacity. We have heard that building a new runway at one or more existing airports apart from Heathrow may be more viable than building a new airport in the Thames Estuary as well as receiving evidence that no expansion is needed at all and existing airports should be used more smartly.

### The noise and air quality implications of Heathrow airport

We do not believe that the public would support any more runways at Heathrow due to the noise and air pollution it causes. It has been suggested that around 700,000 Londoners suffer from noise pollution as a result of Heathrow which is 28 per cent of all the people in Europe who suffer from aircraft noise.<sup>60</sup> Many of these people also suffer from poor air quality - the area around Heathrow regularly breaches European Union (EU) limits for nitrogen dioxide.<sup>61</sup> Londoners need to see the Government and the aviation industry take effective action to address Heathrow's adverse effects. A strategy needs to be developed that results in a reduction in noise and air pollution from the airport.

Our position concurs with the majority of London Boroughs which oppose any expansion in runway capacity at Heathrow.<sup>62</sup> The London Borough of Hounslow has highlighted the adverse effects of Heathrow airport on its residents. In particular, it cites research which suggests the average of 16 night flights before 6am each day results in night noise that can lead to prolonged sleep deprivation with serious health implications e.g. increased risk of heart disease/stroke. The London Borough of Hounslow opposes any changes to night flights and has also called for new noise mitigation measures around Heathrow. These include: the adoption of EU

<sup>&</sup>lt;sup>60</sup> Assembly Environment Committee's *Plane Speaking* report, March 2012

<sup>&</sup>lt;sup>61</sup> 40 microgrammes per cubic metre expressed as an annual average

<sup>&</sup>lt;sup>62</sup> London Councils' written submission

standards for noise; maintaining annual aircraft movement limits; establishing a new contour cap that provides a real incentive for aircraft manufacturers, airlines and airports to improve their noise performance; and a revision of the fine system for departing aircraft.<sup>63</sup>

The Assembly's Health & Environment Committee has undertaken extensive work on the local environmental effects of Heathrow. In the past it has found that if the airport were expanded the negative environmental effects would be disproportionate to the estimated economic benefits. In its report *Plane Speaking* (March 2012) the Committee highlighted that poor air quality in London leads to over 4,000 premature deaths a year and made recommendations on how to improve the environment around Heathrow including through public transport.

#### The scope for expanding existing airports such as Gatwick and Stansted

We have heard that the most viable option for providing more airport capacity would be to build a new runway at one or more existing airports apart from Heathrow. Some such as London First suggest the "big plus" of expanding existing airports are: a) far lower costs than building a new airport; and b) that airport owners will meet these costs themselves.<sup>64</sup> Simon Calder suggested that a second runway could be put in place at Gatwick or Stansted relatively straightforwardly.<sup>65</sup> He commented that a split hub approach whereby Heathrow and Gatwick were linked by a high speed rail line (so called Heathwick) would not work because of the long travel time for passengers transferring between the airports. However, he suggested it was possible to operate a two hub city, like New York, in which Heathrow and Gatwick competed alongside each other.<sup>66</sup> Such a model would provide for the maintenance of a system of airports in London which generates competition but would require a commitment by the airlines to develop a second hub.

Gatwick Airport Ltd told us of its proposal to add a new runway at Gatwick after 2019 with further capacity being added to Stansted at a later date. This would create a network of three two-runway airports around London. Gatwick told us this approach could provide for Heathrow to remain open as a hub with additional hub capacity provided in different ways. For example, in some countries, low-cost short-haul carriers are used to 'feed' larger long-haul airlines eg JetBlue in the

<sup>&</sup>lt;sup>63</sup> London Borough of Hounslow written submission

<sup>&</sup>lt;sup>64</sup> Transcript of Transport Committee meeting on 15 January 2013, p18

<sup>&</sup>lt;sup>65</sup> Transcript of Transport Committee meeting on 15 January 2013, p20

<sup>&</sup>lt;sup>66</sup> Transcript of Transport Committee meeting on 15 January 2013, p24

United States 'feeds' the larger long-haul American services and Flydubai in the Middle East 'feeds' Emirates' larger long-haul aircraft. Gatwick Airport Ltd estimated that its new runway would cost in the region of £3-5 billion including upgraded surface transport access which would be privately funded. Gatwick Airport Ltd also suggested that the potential local environmental impacts of expansion at its site and Stansted would be far less than at Heathrow because of the relatively rural locations.<sup>67</sup>

### The scope to build a new hub airport in the Thames Estuary

We have heard that there would be many issues to address if a new hub airport were to be built in the Thames Estuary. The Mayor has said a new hub airport is the best option because it better meets future aviation needs and could deliver wide regeneration benefits. His Aviation Adviser, Daniel Moylan, said that although there were challenges, there were no "show-stoppers" to building a new airport in the Thames Estuary. <sup>68</sup> More than seven different schemes have been promoted for this airport including options for an airport on land and in the water.

### The extent to which passengers would use a new hub airport

Our technical analysis makes clear that a crucial issue is the extent to which airlines and passengers would automatically relocate to a new hub airport given the existing pattern of demand. We have shown that passengers are more likely to travel to their closest airport so it is not obvious that they would switch to a new hub airport in the Thames Estuary if services were still operated from Heathrow and/or one of the other airports.

Experience from abroad would suggest that new airports are more likely to be successful when they replace existing airports. For example, new airports in Denver, Hong Kong and Munich were all built in place of existing airports. By contrast, in 1975, a new airport, Mirabel, was built to serve Montreal alongside its existing airport, Dorval, but it failed to attract sufficient demand. By 1997, international flights were switched back to Dorval and Mirabel is now used principally as a cargo airport. Our technical analysis suggests there are no examples of the successful development of major new airports operating alongside existing airports in recent years. <sup>69</sup>

<sup>&</sup>lt;sup>67</sup> Transcript of Transport Committee meeting on 13 February 2013, p37

<sup>&</sup>lt;sup>68</sup> Transcript of Transport Committee meeting on 13 February 2013, p41

<sup>&</sup>lt;sup>69</sup> York Aviation technical report for Transport Committee, p82

### The potential impact of a new hub airport on Heathrow

The impact of a new hub airport on Heathrow is a key concern. The Mayor has said that a new hub airport would not mean the closure of Heathrow but this has been questioned. Our technical analysis highlights that most industry commentators suggest a new hub option would only be viable if Heathrow closed. This could have significant implications for the economy of west London where 136,600 people are dependent on Heathrow for employment.<sup>70</sup> Many organisations have stressed to us the potential damage to west London's economy of the closure of Heathrow. In response, Daniel Moylan, told us that west London had a diverse range of economic strengths and Heathrow accounted for only around three per cent of jobs in west London. He also advised that if a new hub were built elsewhere and Heathrow downsized there would be a fifteen year planning period to put in place a transition plan to manage this change.<sup>71</sup>

### The airspace implications of a new hub airport

There may be significant airspace implications from any new airport in the Thames Estuary. NATS has told us that because aircraft take off into the wind and this usually blows in a westerly direction any new airport in east London with four runways in an east to west direction would result in more aeroplanes flying over central London. Moreover, to accommodate this extra traffic with the existing air traffic from other London airports, these aircraft would need to fly at a low level over central London. NATS has also identified that a new airport in the Thames Estuary would have European airspace implications given its proximity to the eastern border of UK airspace. The closeness of Amsterdam (Schiphol) and Brussels airports would mean that climb and descent profiles of aircraft would be affected which would require international negotiation for changes in the use of airspace.<sup>72</sup>

NATS has provided a series of maps that demonstrates the significant usage of airspace over London. The map below shows the trajectory of aircraft flying 25,000 ft and below from airports in and around London including to and from Amsterdam (AMS) and Brussels (BRU) on one day in August 2011. The colours represent the different airports as follows: blue for Heathrow (arrivals in light blue and departures in dark blue); red for Gatwick (arrivals in light red and departures in dark red); green for Stansted (arrivals in light green and departures in dark green); pink for

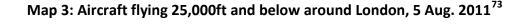
<sup>&</sup>lt;sup>70</sup> York Aviation technical report for Transport Committee, p24 and 82

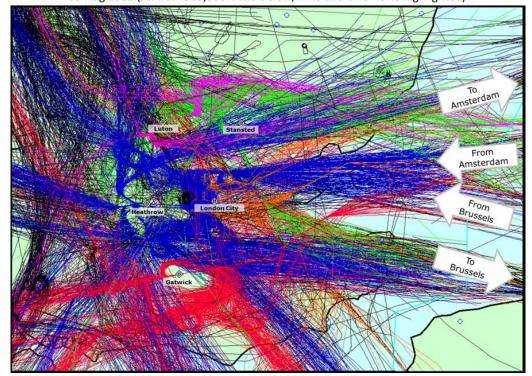
<sup>&</sup>lt;sup>71</sup> Letter from the Mayor's Aviation Adviser, 5 March 2013

<sup>&</sup>lt;sup>72</sup> NATS written submission and note of Transport Committee site visit, 21 February 2013

### EMBARGOED UNTIL 00:01 WEDNESDAY 1<sup>st</sup> May 2013

Luton (arrivals in magenta and departures in purple); orange for London City and black for other airports including military bases.





05 Aug 2011 (All traffic 25,000ft and below, AMS and BRU flows highlighted)

In response to concerns about airspace, Daniel Moylan told us he refuted the suggestion that an airport located on the eastern side of London would lead to a greater population being adversely affected by aircraft noise than at Heathrow. However, he gave no detailed evidence in support of this point. Daniel Moylan told us there remained a need to undertake detailed analysis to identify the exact environmental impacts of specific airport locations on local populations.<sup>74</sup>

# Other issues including the potential cost of a new hub airport and its environmental impact

A new hub airport in the Thames Estuary could cost £80 billion. Daniel Moylan suggested this cost would include £25 billion for surface transport

<sup>&</sup>lt;sup>73</sup> NATS written submission

<sup>&</sup>lt;sup>74</sup> Transcript of Transport Committee meeting on 13 February 2013, p43 and letter from the Mayor's Aviation Adviser, 5 March 2013

access and £20 billion for the closure of Heathrow. He said this would be funded by taxpayers initially and the airport then sold as "a going concern."<sup>75</sup> Our technical analysis shows that there would be a need for expenditure on high quality road and rail access to attract people to use any new airport, particularly from West London where many passengers currently travel to Heathrow. There may also be significant costs associated with the technical difficulties of building an airport in the Thames Estuary eg there may be a need to remove the sunken SS Richard Montgomery ship which is loaded with explosives.

There are also particular environmental issues to address in relation to a new hub airport in the Thames Estuary. The Environment Agency has stressed the need to consider various issues including the water needs of a new airport, air quality, the flood risk and biodiversity issues. There are European, national and local conservation sites within the estuary marshes and mudflats, which are home to thousands of migratory birds. <sup>76</sup>The British Airline Pilots Association (BALPA) told us pilots are concerned about the potential flight safety implications given the migratory birds. BALPA said bird strike is a serious problem and it would want to see significant mitigation before it could endorse the building of a new airport in the Thames Estuary.<sup>77</sup>

There is no case for the expansion of Heathrow airport given its adverse environmental impact on many Londoners. This airport causes significant noise and air pollution. Providing for more flights from Heathrow without tackling its environmental impact effectively will worsen these problems. Apart from expanding Heathrow, there are many other options for addressing the issue of airport capacity including building a new airport in the Thames Estuary. The majority of the Committee believe that building a new airport in the Thames Estuary is not a viable option.<sup>78</sup> We have different views on the other options which include no expansion of any London airports whilst making better use of existing capacity and expanding another existing airport such as Gatwick and/or Stansted which could bring economic benefits to south and east London and maintain a network of airports for London.

<sup>&</sup>lt;sup>75</sup> Transcript of Transport Committee meeting on 13 February 2013, p35

<sup>&</sup>lt;sup>76</sup> Environment Agency written submission

<sup>&</sup>lt;sup>77</sup> BALPA written submission

<sup>&</sup>lt;sup>78</sup> With the exception of the Conservative Members, who believe that an Estuary Airport may be the best option for a hub airport

### **Issue for the Airport Commission**

4. If the Airports Commission finds that there is a need to increase airport capacity, it should rule out the expansion of Heathrow airport as an option. It should also make clear in its interim report its criteria for shortlisting any other options which should cover: the potential cost and how this would be funded; how the option would meet demand for air travel given the importance of local demand to airlines' use of airport capacity; the potential effects on Heathrow and other airports; the airspace implications; and the potential environmental impacts.

## Conclusion

Airport capacity is a very difficult issue. For many decades it has engendered much heated debate. Many of the options currently being discussed have been suggested before. Many of the arguments either for or against adding new runways or building whole new airports are longstanding.

Nevertheless, the Airports Commission presents an opportunity to progress this debate. Our work has identified that in examining the economic arguments for more airport capacity the Commission will need to give due consideration to the role played by local demand for airports and how airlines follow this demand. The Commission will also need to have regard to the adverse environmental effects of aviation and uncertainties over future demand for air travel.

There is scope to use London airports including Heathrow differently to better meet demand. There is spare capacity particularly at Stansted and Luton. However, there are different views on the importance of hub airport capacity and the extent to which this spare capacity could meet demand.

Using spare airport capacity effectively will depend on the willingness and ability of airlines and passengers to shift their existing travel patterns. The Airports Commission will therefore need to set out how passengers and in turn airlines may be encouraged to switch from using Heathrow to using other airports. Regardless of views on the importance of hub airport capacity, it is clear that better surface transport access, particularly rail connections, at all airports is crucial in encouraging people to use existing airports differently. If the importance of a competitive hub is overstated, then an approach of using existing airports more smartly could be more cost effective than building new runways or airports.

There is no case for expanding Heathrow. This airport already affects the lives of many Londoners and more flights from Heathrow would worsen noise and air pollution. Beyond that, there are many different options for providing more airport capacity. It would appear that some options such as building a new runway at Gatwick and/or Stansted are more viable than building a new airport in the Thames Estuary. We have highlighted a number of potential issues with a new hub airport including the possible adverse impact on Heathrow, the airspace implications, the high cost and local environmental issues.

### EMBARGOED UNTIL 00:01 WEDNESDAY 1<sup>st</sup> May 2013

We now look forward to the publication of the Airports Commission's interim report. We want to see the report progress the airport capacity debate by showing how existing airport capacity can be used more effectively and by ruling out any expansion of Heathrow.

## Appendix 1 Issues for the Airports Commission to address

- 1. In its interim report on future aviation needs, the Airports Commission should set out how it has taken into account the importance of local demand in determining how airlines use airport capacity.
- 2. The Airports Commission should also address in its interim report:
  - the conflict between providing for any more airport capacity and the desire to reduce the environmental impact of aviation; and
  - whether the projections of future demand for air travel are realistic and if so how accelerated reductions in CO2 to meet the Government's existing environmental commitments could be achieved.
- 3. In its interim report, the Airports Commission should show how existing airport capacity in London should be used more effectively, including at Heathrow. The Commission should set out the measures that should be taken to encourage passengers and consequently airlines to make better use of existing airports where there is spare capacity. In particular the Commission should look to progress enhancements to surface transport access at Gatwick and Stansted airports by examining and reporting on the detail of scheme options and what would be required to make them happen.
- 4. If the Airports Commission finds that there is a need to increase airport capacity, it should rule out the expansion of Heathrow airport as an option. It should also make clear in its interim report its criteria for shortlisting any other options which should cover: the potential cost and how this would be funded; how the option would meet demand for air travel given the importance of local demand to airlines' use of airport capacity; the potential effects on Heathrow and other airports; the airspace implications; and the potential environmental impacts.

# Appendix 2 Stages in the investigation

The Committee held two public meetings for this investigation:

- On 15 January 2013 when it heard from: John Dickie, Director of Strategy & Policy, London First; John Stewart, Chair, Heathrow Association for the Control of Aircraft Noise (HACAN); Cait Hewitt, Deputy Director, Aviation Environment Federation (AEF); Simon Hocquard, Director of Operations Strategy & Deployment, National Air Traffic Services (NATS); Nathan Stower, Manager, Parliamentary & External Relations, Virgin Atlantic Airways; Peter Morris, Chief Economist, Ascend [aviation consultancy]; and Simon Calder, Travel Editor at *The Independent*; and
- 2. On 13 February 2013 when it heard from: Daniel Moylan, Mayor's Aviation Adviser; Richard de Cani, Director of Transport Strategy & Policy, TfL; Nigel Milton, Director of Policy, Heathrow Airport Ltd; Stewart Wingate, Chief Executive, Gatwick Airport Ltd; Nick Barton, Managing Director, Stansted Airport Ltd; Iain Osborne, Group Director of Regulatory Policy, Civil Aviation Authority; Hugh Aitken, Commercial Manager, easyJet; and Paul Harwood, Principal Network Planner, Network Rail.

The Committee also held a site visit to the National Air Traffic Services (NATS) centre at Swanwick on 21 February 2013.

The Committee commissioned external research from York Aviation to inform its work on airports capacity and received written views and information from a wide range of organisations and individuals.

The external research, written submissions and a note of the site visit have been published alongside this report on the GLA website. Transcripts of Transport Committee meetings are also available to view on the website.

# Appendix 3 Orders and translations

### How to order

For further information on this report or to order a copy, please contact Ross Jardine, Project Officer, on 020 7983 4206 or email: ross.jardine@london.gov.uk

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#### Vietnamese

Nếu ông (bà) muốn nội dung văn bản này được dịch sang tiếng Việt, xin vui lòng liên hệ với chúng tôi bằng điện thoại, thư hoặc thư điện tử theo địa chỉ ở trên.

#### Greek

Εάν επιθυμείτε περίληψη αυτού του κειμένου στην γλώσσα σας, παρακαλώ καλέστε τον αριθμό ή επικοινωνήστε μαζί μας στην ανωτέρω ταχυδρομική ή την ηλεκτρονική διεύθυνση.

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यदि आपको इस दस्तावेज का सारांश अपनी भाषा में चाहिए तो उपर दिये हुए नंबर पर फोन करें या उपर दिये गये डाक पते या ई मेल पते पर हम से संपर्क करें।

#### Bengali

আপনি যদি এই দলিলের একটা সারাংশ নিজের ভাষায় পেতে চান, তাহলে দয়া করে ফো করবেন অথবা উল্লেখিত ডাক ঠিকানায় বা ই-মেইল ঠিকানায় আমাদের সাথে যোগাযোগ করবেন।

#### Urdu

#### Arabic

الحصرول على ملخص لدذا المستند بلغتك، ضرجاء الانتصال ببرقم الدانتف أو الانتصال على العنوان الببريدي العادي أو عنوان الببريد الالكتروني أعل.

### Gujarati

જો તમારે આ દસ્તાવેજનો સાર તમારી ભાષામાં જોઈતો હોય તો ઉપર આપેલ નંભર પર ફોન કરો અથવા ઉપર આપેલ ૮પાલ અથવા ઈ-મેઈલ સરનામા પર અમારો સંપર્ક કરો.

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