

Davies Commission Evidence Session – 10 July

Transport for London Evidence

The value of a hub in securing the connectivity that the UK needs

TfL commissioned new analysis by consultants York Aviation to assess the future level of connectivity that would be achieved under different airport operating models. It seeks to go beyond the relatively broad assessments made previously to articulate actual example route networks. Such analysis is by nature speculative but it provides a strong basis for debate and further analysis.

The work examined three scenarios:

- **Maximum Use of Existing Capacity** (Maximum Use) – no additional runways are built at any of the five London airports;
- **Development of a Four Runway Hub** – a new airport is built to replace Heathrow with four runways or Heathrow is expanded to four runways. (further runway capacity is not developed at any of the other airport)
- **2 x 2 x 2 Runways** – additional runways are added at Gatwick and at Stansted but no additional runway is built at Heathrow.

Davies Commission Evidence Session – 10 July

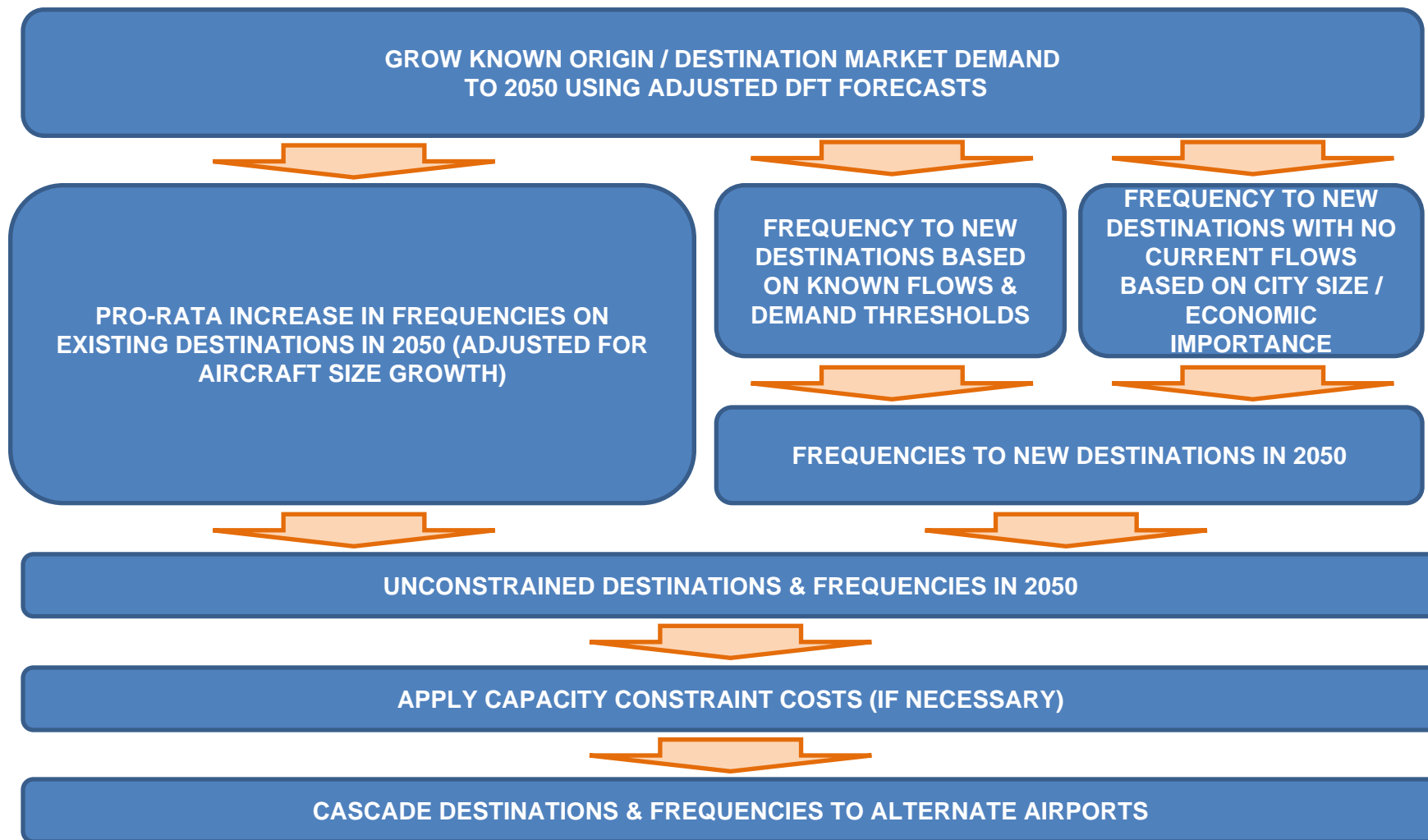
Transport for London Evidence

The analysis uses a systematic approach. It makes best use of existing evidence and data, while recognising the changing landscape of the world economy.

It is supported by a number of underlying principles:

- Grounded in existing passenger flows (existing CAA data)
- Quantum of future demand within the parameters of DfT 2013 forecasts
- Constraining LHR growth will mean a loss of hub function and a greater reliance on point to point demand
- High value services will displace low value services (value is not revenue but value to airlines as a whole)
- A cascade dynamic will operate in London
- Sheer economic size of destination cities will not be a guarantee of a new service – airlines will seek to serve cities efficiently, focusing on lead cities in geographic clusters, particularly for long haul destinations

The broad methodological approach was as follows:



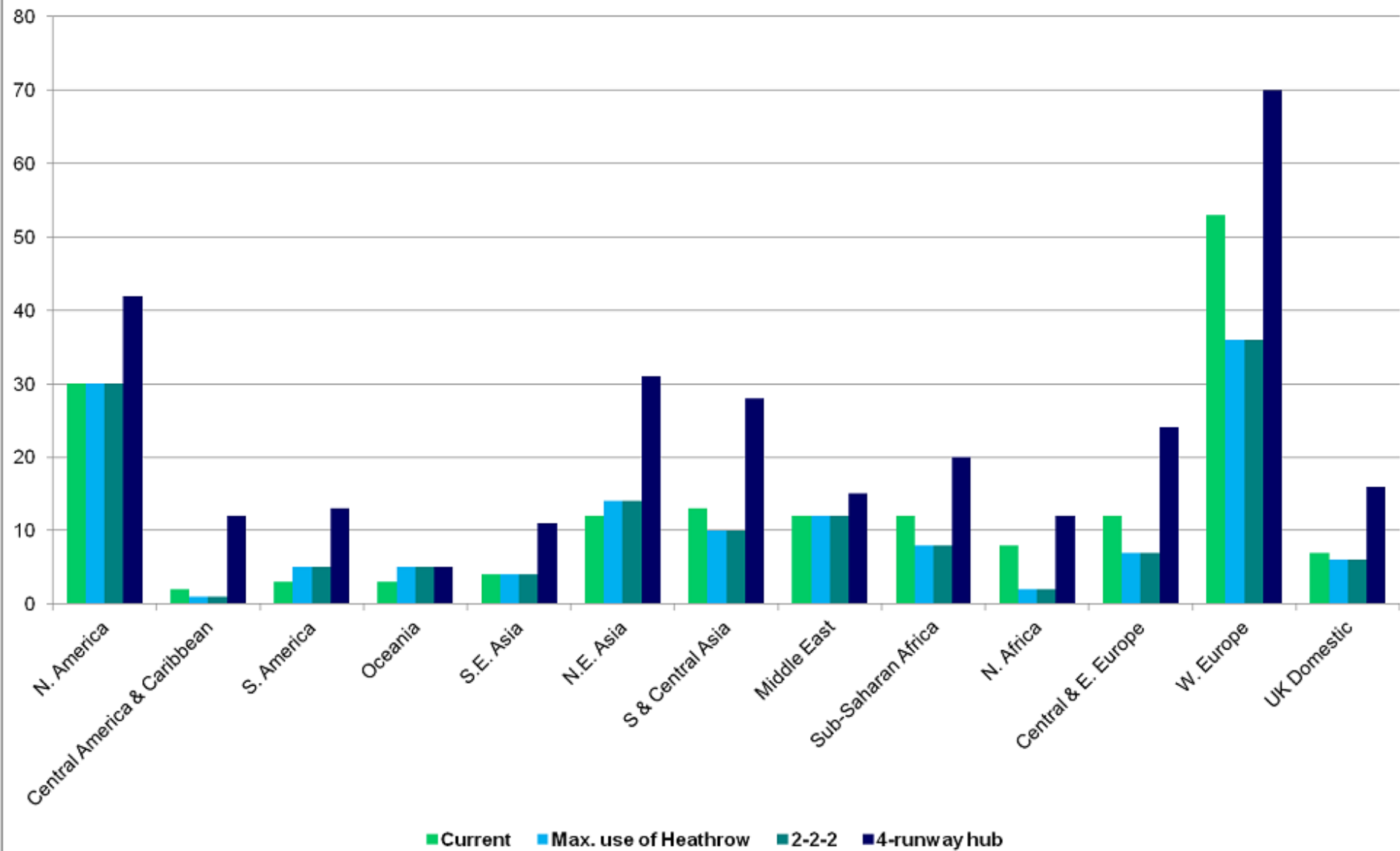
Davies Commission Evidence Session – 10 July
 Transport for London Evidence

Results – Destinations and Weekly Frequencies

<u>HUB airport</u>	Current	Maximum use	2-2-2	4-runway hub
	2013	2050	2050	2050
China	3	6	6	14
South America	3	5	5	13
USA	22	23	23	33
Domestic	7	6	6	16
Worldwide	171	140	140	299
<i>Total frequencies</i>	<i>4,714</i>	<i>4,850</i>	<i>4,850</i>	<i>9,226</i>

The 4-runway hub delivers substantially more connectivity at London’s main airport. More than twice the number of destinations are offered than in the other future scenarios.

Destinations served, by airport scenario

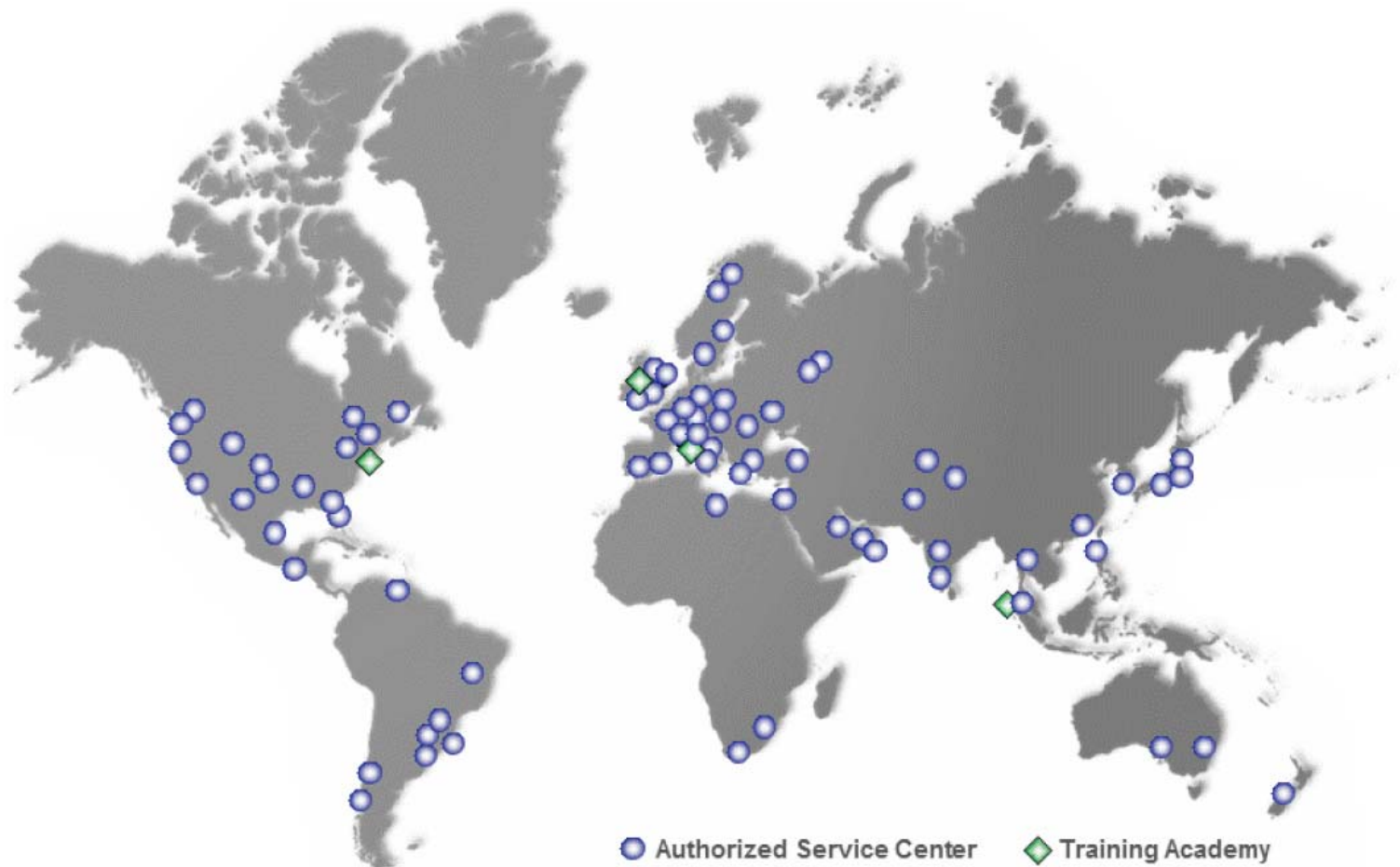


Davies Commission Evidence Session – 10 July
 Transport for London Evidence

Results – Destinations and Weekly Frequencies

<u>LONDON</u> <u>system</u>	Current 2013	Maximum use 2050	2-2-2 2050	4-runway hub 2050
China	3	6	6	14
South America	3	5	5	13
USA	26	26	26	36
Domestic	15	13	14	17
Worldwide	385	322	358	435
<i>Total frequencies</i>	<i>10,133</i>	<i>12,201</i>	<i>15,598</i>	<i>16,576</i>

Across the London airports, the connectivity value of a 4-runway hub airport is also clear. There are substantially more destinations served (21% more than the next best future option) and more weekly frequencies realised.



- **Medium sized aerospace company** with just over £1bn annual revenue and 3,200 employees at South West UK headquarters
- Operates JIT procurement and onward delivery around the world
- 12 joint ventures and collaborations across 4 continents
- Global support network offering assistance within 24 hours to 1400 customers in 105 countries



- **iPhone supply chain** encompasses 10 key global trade nodes across 7 countries (and does not include the UK)
- High tech components sourced from Europe, Asia and the USA
- Assembly in China and onward distribution through Hong Kong and Alaska
- All based on JIT deliveries

Even items you would have thought were uncomplicated...

- A Nissan car seat has 95 different parts arriving from 17 suppliers (in the UK, Belgium, China, Germany, Poland, Romania and Spain)
- Components may travel by air, sea, rail and truck depending on the weight/value and type of operation (e.g. just-in-time)
- The final assembled product is less likely to travel by air, but many components may arrive by air

