

## **5. Economic Impact Assessment**



Development of Bristol Airport to Accommodate  
12 Million Passengers Per Annum: Economic  
Impact Assessment

Response to Further Comments Received



Bristol Airport Limited

May 2019



## 1. Responses to Further Comments

- 1.1. The purpose of this paper is to respond to the further comments by North Somerset Council's (NSC) advisors, Jacobs, in relation to the Economic Impact Assessment<sup>1</sup> undertaken and submitted in support of Bristol Airport Limited (BAL's) planning application for the development of Bristol Airport to accommodate 12 million passengers per annum (mppa) (Application No. 18/P/5118/OUT). These comments were received on 7<sup>th</sup> May 2019.
- 1.2. Below, we have set out each of the comments received and York Aviation's response.

**Chapter 4 – Current Economic Impact: Table 4.1 reports induced demand. Can YA clarify how this has been distinguished as our understanding is that it requires type II multipliers which are not published in the ONS input-output tables for the UK.**

- 1.3. Jacobs is correct in stating that the ONS input-output tables for the UK do not include published Type II multipliers. However, the necessary information to calculate these multipliers, i.e. the compensation of employees, is provided. Therefore, as part of the calculation of the regional and sub-regional multipliers, York Aviation has extended the multiplier analysis to include this additional 'sector', thereby estimating Type II multipliers.

**Wider Impacts: 2.12 YA acknowledge in their response that the approaches to considering wider impacts of air transport are relatively immature and the level of precision associated with these estimates is not at the same level as economic footprint effects. As such the productivity estimates in Table 4.2 will have a higher degree of uncertainty than the economic footprint effects estimated in Table 4.1. Are YA able to estimate confidence levels around these numbers?**

- 1.4. Given the nature of the analysis, we do not believe it would be appropriate to formally state a confidence level and we are not aware of a sensible approach to estimating such. We would, however, reinforce our previous position that we believe these estimates provide a sensible assessment of the order of magnitude of these effects.

**2.13: Again YA acknowledges the difficulty in estimating new jobs associated with increased productivity resulting from business travel, in Table 4.2. The approach of dividing the productivity-related GVA (indirect and induced) by average GVA per job for the study area can be argued to lead to an overestimate in the number of FTEs as one would expect these jobs to be more productive than the average.**

- 1.5. In our view this is not correct. The true productivity effect created via the airport's influence on business productivity is likely to be felt within the directly affected sectors. Those in the supply chain or supported by induced effects are more likely to be reflective of the broader economy as a whole, hence, our use of the average GVA per job for the study area.

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<sup>1</sup> York Aviation (2018) Development of Bristol Airport to Accommodate 12 Million Passengers Per Annum: Economic Impact Assessment: Final Report - November 2018.

**Tourism Impacts: 2.14 – 2.21.** YA have provided a detailed response to the question around the apparent asymmetry regarding in-bound vs out-bound passenger expenditure if Bristol Airport did not exist. In general we find the response reasonably convincing. The approach of not taking into account any loss of expenditure from out-bound tourism has been adopted elsewhere, so essentially the argument of precedence has been applied. The evidence to support the argument is not particularly strong, however, and we believe the numbers presented in Table 4.4 probably represent the upper end of a range, with some offset applying due to loss of outbound expenditure.

- 1.6. We note Jacobs's comment that our response is 'reasonably convincing' in relation to the asymmetry of inbound and outbound expenditure. However, we are unclear as to why they consider the results in Table 4.4 to be the upper end of a range. The results in Table 4.4 reflect the impact of inbound tourism only and we believe that they are a robust and reasonable estimate of this effect. We also note that Jacobs has noted that there will be some offset from outbound expenditure. This is consistent with our statement in the Economic Impact Report, albeit we state explicitly that this offset will be small for the reasons previously discussed.

### **Chapter 5 – Economic Impact of Increasing Capacity to 12 MPPA: 3.3. Can YA share the derived demand elasticities?**

- 1.7. The derived employment elasticities to passenger growth for each broad sector at the airport are shown below:

- Airfield services: 0.4;
- Airlines: 0.6;
- Airport operation and administration: 0.8;
- General aviation: 0.0 (note – not related to commercial passenger demand);
- Handling agents, airline support and catering: 0.5;
- Hotel: 0.5;
- Onward travel: 0.9;
- Terminal building concessionaires: 0.8;
- Terminal building support services: 0.8.

**Additionality:** YA have discussed in some detail their view on additionality, or 'factor displacement'. They make the valid point that additionality considerations are primarily an issue for schemes requiring public sector investment, whereas Bristol Airport expansion is to be privately funded. Precedence is used to add weight to the approach (the recent Stansted Airport Planning Application to increase passenger throughput excluded Green Book recommended guidance). Nevertheless YA have helpfully provided a table of the economic impact of Bristol Airport expansion that is factored down in line with Homes and Community Agency recommendations. These should be read in conjunction with Table 5.3 in the original report.

- 1.8. We note Jacobs's acceptance of the central point of our position around additionality and its relevance or otherwise to private sector investments. We would therefore emphasise that the factor displacement adjusted estimates provided in our response to comments are primarily for information. They should not be seen as our view on the economic impact of the proposed development.

**Foreign Direct Investment: YA have provided additional evidence and analogues to support the case for Bristol Airport expansion driving FDI. However it is noted that this does not include any quantification of the estimated impact – it would be helpful if this could be made.**

- 1.9. While we are aware of some methodologies for estimating the impact of foreign direct investment (FDI), we do not believe it would be appropriate to use these in this case. Our approach to considering the impacts associated with business travel takes a holistic view of the effect by seeking to estimate the impact on productivity in the economy as a whole. This would potentially include effects from increased FDI, along with effects from additional trade, competition and similar. In consequence, making a separate estimate of the impact of FDI would be likely to result in double counting to at least some degree.

**Chapter 6 – Socio-Economic Cost Benefit Analysis: In this chapter the main area that we flagged up was the large magnitude of the monetised benefit from air fare savings. YA acknowledge that this is a difficult area, with a limited evidence base. The socio economic benefits of the scheme substantially outweigh the costs, though given the uncertainties and potential for over-statement around air fare savings, we believe the NPV is likely to be significantly lower than shown in Figure 6.1 of the EIA.**

- 1.10. We continue to accept Jacobs's point in relation to the air fare savings set out and acknowledge the difficulties around this area. However, we would also point out that our estimates are based on available evidence and that no evidence to the contrary has been put forward. We also continue to emphasise that, whatever the position on air fares, socio-economic benefits substantially outweigh costs.

**Chapter 7 – Regeneration and Social Impacts: It is noted that the EIA does not contain detailed work to ascertain whether the requisite skill sets in Weston Super Mare and South Bristol (areas of relative deprivation) will be sufficient to fill the newly created roles associated with the airport expansion. As such there is some uncertainty around whether the skills sets in these areas will match the requirements of the new jobs.**

**YA have set out a number of examples to illustrate the active steps BAL has taken to develop and retain talent.**

- 1.11. As Jacobs note, BAL is already proactive in developing skills and labour supply to support its growth in the areas around the airport. This will continue into the future. The airport has also delivered significant expansion in recent years and has been successful in accessing the labour it requires. In the light of this and the likely available labour supply, this is unlikely to be a significant risk. As highlighted in our earlier response, through commitments contained in the proposed Section 106 Agreement Heads of Terms (see Appendix D of the Planning Statement), such as the preparation and implementation of a Skills and Employment Plan (where this is appropriate) and surface access improvements, BAL is seeking to maximise the opportunities associated with the growth of the airport for local communities including within Weston-super-Mare and South Bristol.

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Development of Bristol Airport to Accommodate 12 Million Passengers Per Annum:  
Further Submissions in Relation to Inbound Tourism and Foreign Direct Investment



Bristol Airport Limited

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## 1. Bristol Airport's Inbound Tourism Activities

- 1.1. Bristol Airport Limited (BAL) works with a wide range of partners to support the development of inbound tourism into the region, including into North Somerset.
- 1.2. BAL works with destination management organisations (DMOs) to create critical mass for tourism marketing within the area served by Bristol Airport, enabling the West of England to compete with better resourced regions and nations elsewhere in the UK. By providing private sector funding, it helps DMOs secure grants from the national tourist board to maximise the effectiveness of their marketing activity; example campaigns include online and outdoor advertising to promote the West of England in the French cities of Bordeaux and Toulouse, and a forthcoming campaign to promote the region in the Netherlands.
- 1.3. BAL has a dedicated budget to support its activities around inbound tourism. This year it has committed funding to:
  - a Regional Gateway partnership with VisitBritain, promoting Bristol Airport as a gateway to the region for international visitors;
  - a 'joint venture' with Destination Bristol and Visit Bath to promote twin city breaks (note that Destination Bristol represents several North Somerset attractions and North Somerset Council is represented on its Board);
  - the Great West Way project, for which Bristol Airport is the official airport ambassador. This new touring route is aimed at attracting overseas visitors out of London.
- 1.4. BAL also supports high profile events in the region through sponsorship (Bristol Pride, the St Pauls Carnival, the Somerset County Show) and through the provision of facilities and services (Weston Air Day, Glastonbury Festival).
- 1.5. BAL is a member or supporter of a range of bodies and campaigns that support inbound tourism development:
  - Destination Bristol – BAL is a long standing Board Member;
  - Visit Somerset – BAL is a member;
  - UK Inbound – BAL is a member;
  - North Somerset Partnership – BAL is a long standing Board Member;
  - North Somerset Growth Board – BAL is a member;
  - Weston Town Council business working group – BAL is a member;
  - West of England MIPIM delegation – BAL provided funding support and also attended the event;
  - Bristol Is magazine and investor campaign – BAL is a sponsor.

## 2. Bristol Airport and Foreign Direct Investment

2.1. Bristol Airport is the largest gateway for air passengers travelling for business to / from the South West of England<sup>1</sup>. The strong positive link between air travel and foreign direct investment (FDI) is well established, well evidenced, logical and well accepted. However, it remains challenging to link individual airport development projects to particular successes in relation to FDI or indeed general growth in FDI stocks. This stems from two primary issues:

- inward investment decisions are rarely based on a single factor and are multifaceted. Companies will consider a host of issues, such as access to markets, skills availability, land availability, financing and incentives, and liveability. Air service connectivity via a convenient airport is an important background factor in a number of these and a central factor in the ability to effectively manage an investment. It is not, however, generally, why a company chooses to be in a particular location; it is a necessary but not a sufficient condition for investors in most cases. This means that identifying the role of airports is difficult because the link is not direct and is unlikely to be cited even by individual investors as the principal reason they locate somewhere. This issue can limit the value of business surveys or focus groups in seeking to assess the value of an airport in terms of FDI;
- data on FDI successes and stocks at a regional or sub-regional is scarce and patchy. This makes examining the impact of individual airports within an area via revealed preference techniques very challenging.

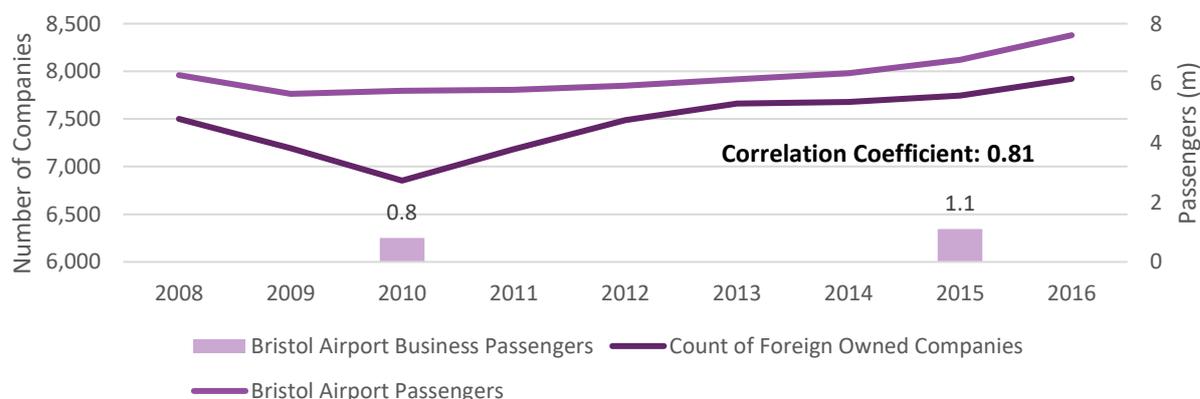
2.2. In this brief note, we have focussed on presenting additional evidence in relation to Bristol Airport's ability to support FDI growth in North Somerset and the broader region around the airport via:

- an examination of the link between the airport's past growth and the available data on FDI activity in the South West;
- presentation of key results from other studies considering the link between airports and FDI. It should be noted that some of this evidence has already been presented to North Somerset Council in response to previous queries regarding the airport's potential impact on FDI.

### FDI Performance in the South West of England

2.3. Figure 2.1 below shows the number of foreign owned companies in the South West between 2008 and 2016 set against passenger numbers at Bristol Airport over the same period.

**Figure 2.1: Foreign Owned Companies in the South West and Passenger Numbers at Bristol Airport**

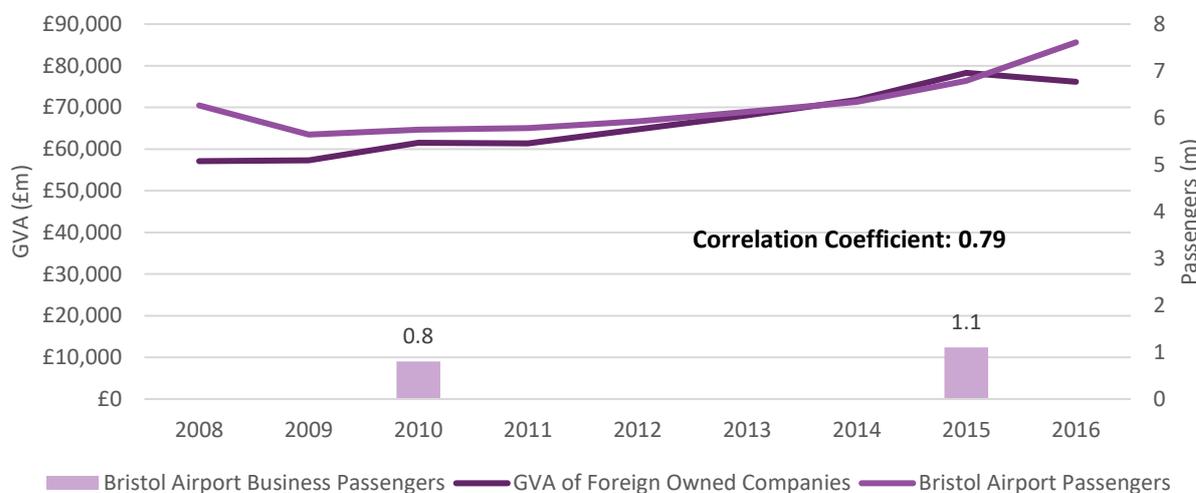


Source: ONS and CAA.

<sup>1</sup> CAA Passenger Survey 2015.

- 2.4. Figure 2.2 presents a similar analysis. It shows the GVA supported by foreign owned companies in the South West over time compared to passenger numbers at the airport.

**Figure 2.2: GVA of Foreign Owned Companies in the South West and Passenger Numbers at Bristol Airport**



Source: ONS and CAA.

- 2.5. Both charts clearly show a strong correlation between FDI performance in the South West (as illustrated by foreign company ownership) and passenger growth at the airport. It should be recognised that this does not prove causality. However, given the logical link between the two, it does provide an interesting piece of evidence on the link between the airport's growth and this element of the region's international economy, particularly given the growing number of business passengers.
- 2.6. Overall, this suggests that the further growth of Bristol Airport would be linked to growth in FDI.

### Evidence from Other Studies

- 2.7. Below, we have set out some further secondary evidence on the link between airports, air service connectivity and FDI. As noted above, some of this evidence has been presented previously in our response to questions from North Somerset Council's advisers:
- Cushman & Wakefield European Cities Monitor (2011) – this was an annually recurring survey between 1990 and 2011 of 500 European corporate decision makers which provided significant evidence of the importance of international connectivity in influencing company location decisions. It is still one of the most commonly cited pieces of survey evidence in this area. The survey consistently identified factors such as transport links with other cities and the ease of access to markets, clients and customers amongst the most important factors in company location decisions. There were clear linkages to the availability of air service connectivity as the cities served by Europe's major hub airports commonly featured towards the top of the list in terms of the best places to locate in Europe. In 2011, the last year the survey was published, London was ranked first, followed by Paris, Frankfurt and Amsterdam in order;
  - Oxford Economics - The Economic Contribution of the Aviation Industry to the UK Economy (2006) – research by Oxford Economics sought to assess the contribution of the air transport industry to the UK economy. It was found that a quarter of companies surveyed as part of the research reported that access to air services was important in determining where they locate their operations in the UK. Further research, also by Oxford Economics in 2006, attempted to quantify the link between air connectivity and business investment. The results of the study suggested a 10% increase in connectivity is associated with a 3.5% increase in the level of fixed investment in the long run;

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- Bel & Fageda Getting There Fast: Globalisation, Intercontinental Flights and Location of Headquarters – Journal of Economic Geography (2008) – this research paper considered the influence of intercontinental flights on head office location. It was found that the supply of direct intercontinental flights is effectively a major determinant in the location choices of large firms’ headquarters. A 10% increase in the supply of such flights involved a 4% increase in the number of headquarters of large firms located in the corresponding urban area;
  - Similarly, a discussion paper by Strauss-Kahn, Vanessa and Xavier Vives, Why and where do headquarters move? (2008), identified that headquarters relocate to metropolitan areas with good airport facilities, low corporate taxes, low average wages, high levels of business services and an agglomeration of headquarters in the same sector of activity;
  - Price Waterhouse Coopers - Econometric Analysis to Develop Evidence on the Links Between Aviation and the Economy on behalf of the Airports Commission (2013) – this comprehensive study identified that a 1% increase in international seat capacity was associated with a 0.47% increase in FDI inflows and a 0.19% increase in FDI outflows;
  - Boeh & Beamish - Travel time and the liability of distance in foreign direct investment: Location choice and entry mode (2012) – this study demonstrated that travel time between different locations has a significant predictive power in firm governance and location decisions, as travel time could otherwise be employed for productive purposes. This suggests that improved air connectivity will result in a region becoming more attractive as an investment location;
  - Eurocontrol - The Economic Catalytic Effects of Air Transport in Europe (2005) - the study analysed the relationship between air transportation and business investment, and found that a 10% increase in air transportation usage will tend to increase business investment by 1.6% in the long run (the impact takes approximately five years to fully manifest);
  - IATA – Airline Network Benefits (2006) - a study commissioned by IATA surveyed 625 businesses in five countries (China, Chile, United States, Czech Republic and France). It found that in regards to access to effective air transport links, 63% of firms stated that it was vital or very important to investment decisions, while a further 24% said it was somewhat important. On average, 18% of firms reported that the lack of good air transport links had affected their past investment decisions, while 30% of Chinese firms reported that they had changed investment decisions because of constraints on air services;
  - Arndt, A., et al. - Economic catalytic impacts of air transport in Germany–The influence of connectivity by air on regional economic development - a survey of 100 foreign-owned businesses in Germany found that access to air connectivity was the third most important factor affecting location decisions (out of 30 factors considered in the survey), with 86% of businesses indicating that air connectivity was important or very important to location decisions. In furthermore, 57% of businesses indicated that they would have chosen another location had air connectivity been weaker.
- 2.8. Overall, this evidence strongly suggests that airport growth will support increased FDI. This in turn supports the conclusion that Bristol Airport’s growth from 10 million passengers per annum to 12 million passengers per annum will have a positive impact on FDI.

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