York Aviation

BRISTOL AIRPORT LIMITED

DEVELOPMENT OF BRISTOL AIRPORT TO ACCOMMODATE 12 MILLION PASSENGERS PER ANNUM: ECONOMIC IMPACT ASSESSMENT

FINAL REPORT

November 2018

York Aviation	Originated by: James Brass / Richard Kaberry Dated: 30 November 2018 Reviewed by: Marshall McFadyen Dated: 30 November 2018

BRISTOL AIRPORT LIMITED

DEVELOPMENT OF BRISTOL AIRPORT TO ACCOMMODATE 12 MILLION PASSENGERS PER ANNUM: ECONOMIC IMPACT ASSESSMENT

Contents

0 EXECUTIVE SUMMARY

Introduction and Background

0.1 In March 2018, Bristol Airport Limited (BAL) commissioned York Aviation to undertake an economic impact assessment of the airport's proposals to increase its permitted annual passenger cap from 10 million passengers per annum (mppa) to 12 mppa. This report provides supporting evidence for Chapter 15: Socio-Economics within the Environmental Statement.

0.2 The study presents a range of both quantitative and qualitative evidence to assess the impact of future expansion. It considers the impact on economic activity through an assessment of the effect on Gross Value Added (GVA) and employment but also considers the broader economic welfare effects through a socio-economic cost benefit analysis. It examines the ongoing effects of growth at the airport through the increase in passenger numbers and also the transitory effects that will come through the construction of the necessary infrastructure at the airport to support 12 mppa.

0.3 Bristol Airport is located on the A38, around 7 miles South West of Bristol city centre. The airport is served by the Bristol Airport Flyer bus service, which links the airport to Bristol Temple Meads Railway station and Bristol Bus Station, both in the city centre. The service runs at up to 10 minute intervals through the day. The airport is located within the Green Belt in a rural location.

0.4 Bristol Airport is an important regional airport, primarily serving the South West region and South Wales. It handled around 8.2 million passengers in 2017, its highest level of passenger throughput to date. Whilst the majority of passengers are travelling for leisure, the airport has built a strong base of business passengers, which now number over a million per annum. It is also a gateway for a significant number of overseas visitors to come to the region.

0.5 The airport has shown strong growth since the 2008 recession, now serving over two million more passengers per annum since the financial crisis. The airlines serving Bristol provide a good mix of low-cost services to both domestic cities and foreign city and leisure destinations, in addition to a small number of services to major European hub airports by network carriers, which provide onward connections to destinations across the globe.

0.6 The economic strategy and planning policy relating to the airport is supportive of airport growth and in particular development of Bristol Airport to expand to 12 mppa is clearly supported by the Government's *Making Best Use of Existing Capacity* policy paper.

Current Baseline Impact of the Airport

0.7 Our analysis establishes that Bristol Airport is a significant economic driver within North Somerset, the West of England and the South West region and South Wales. The operation of the airport itself supports significant GVA and employment and it also supports significant benefits in the wider economy by facilitating travel for business passengers and for inbound visitors. Business travel enables local businesses to trade more effectively overseas, giving them access to larger markets and driving productivity, and gives confidence to overseas companies looking to invest in the areas around the airport that they will be able to manage their operations effectively and that these local operations will have access to the markets that they need. Inbound visitors bring additional consumer expenditure to the economy, which increases market size for businesses in the region, driving GVA and employment.

0.8 Within North Somerset in 2018, we estimate that the airport's economic footprint supported around 2,025 full time equivalent (FTE) jobs and around £260 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 2,525 FTEs and £355 million of GVA.

0.9 Within the West of England in 2018, we estimate that the airport's economic footprint supported around 4,900 FTEs and around £430 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 7,950 FTEs and £810 million of GVA.

0.10 Within the South West region and South Wales in 2018, we estimate that the airport supported around 8,200 FTEs and around £610 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 18,875 FTEs and £1.7 billion of GVA.

GVA and Employment Impact of Expansion to 12 mppa

0.11 Our analysis suggests that the expansion of Bristol Airport from 10 mppa to 12 mppa would bring substantial economic benefits to North Somerset, the West of England and the South West region and South Wales.

0.12 These benefits would start during the construction phase of the project and then continue into the future as the benefits from the operation of the expanded airport are felt when it grows beyond the current 10 mppa planning consent.

0.13 The airport is expected to reach its passenger capacity of 10 mppa in 2021 based on the airport's passenger forecasts. If planning permission is granted to increase capacity to 12 mppa, this passenger throughput is expected to be reached in around 2026. This additional growth is forecast to bring significant additional economic benefits:

- North Somerset – the economic footprint of the airport will be around £70 million larger in GVA terms and support around 525 additional jobs (450 FTEs) in 2026. When wider benefits are also included this increases to £90 million larger in GVA terms and support around 650 additional jobs (550 FTEs);

- West of England - the economic footprint of the airport will be around £110 million larger in GVA terms and support around 1,200 additional jobs (1,050 FTEs) in 2026. When wider benefits are also included this increases to £210 million larger in GVA terms and support around 2,050 additional jobs (1,725 FTEs);

- South West & South Wales - the economic footprint of the airport will be around £140 million larger in GVA terms and support around 2,125 additional jobs (1,750 FTEs) in 2026. When wider benefits are also included this increases to £390 million larger in GVA terms and support around 5,150 additional jobs (4,125 FTEs).

0.14 We have also considered the potential negative impacts of outbound travel from Bristol Airport in terms of the extent to which it removes expenditure from the local economy. This effect is highly complex and, primarily due to the extent of substitutability of UK airports for outbound travel, we have concluded that it is unlikely to be significant. The substantial role of airports such as Heathrow, Gatwick and Birmingham in the South West market supports this conclusion. Even in the short haul international market, Bristol Airport's largest segment, it does not have a 50% share of the passenger market in the South West.

0.15 The construction of the necessary infrastructure to enable the airport to handle 12 mppa will also result in positive economic impacts during the period of construction. Over the period to 2026, construction of the infrastructure to enable 12 mppa at Bristol Airport will support:

- £39 million in additional GVA (discounted) and 390 job years of employment (345 FTE years) in North Somerset;

- £52 million in additional GVA (discounted) and 995 job years (885 FTE years) of employment in the West of England (includes North Somerset);

- £71 million in additional GVA (discounted) and 1,665 job years (1,450 FTE years) of employment in the South West and South Wales (includes West of England).

0.16 It should also, of course, be recognised that major construction projects do generate adverse impacts. In socio-economic terms, they can result in pressure on housing and local services where significant in-migration of labour is required. However, given the relatively small scale of the construction project and the phased nature of the development, we do not believe that the project will result in significant in migration, resulting in adverse impacts on the housing market or local services.

Socio-Economic Impacts of Expansion to 12 mppa

0.17 We have also undertaken a socio-economic cost benefit analysis that indicates that supporting Bristol Airport's growth to 12 mppa would provide significant socio-economic benefits and that these benefits would substantially outweigh the construction costs associated with the infrastructure development required to handle 12 mppa.

0.18 The largest single benefit comes from air fare savings, reflecting the fact that Bristol Airport provides access to a wide variety of routes offered by low cost airlines and that alternatives are often relatively more expensive. Passengers also significantly benefit in terms of surface access time savings, highlighting the importance of Bristol Airport in serving the demand centres in the West of England and across the South West.

0.19 Overall, the NPV associated with raising the airport's capacity from 10 mppa to 12 mppa is around £1.6 billion over the next 60 years.

Regeneration and Social Impacts

0.20 Our analysis show that there are significant areas of deprivation in Weston-Super-Mare, which are amongst the 10% most deprived areas in the UK, and in Bristol, particularly in South Bristol. All these areas would clearly benefit significantly from the development of more employment opportunities at Bristol Airport, particularly as both are already significant providers of labour for the airport, demonstrating that the airport is accessible and attractive as a source of employment.

0.21 The airport already works closely with a range of partners across the West of England to highlight the employment opportunities that the airport offers, including regular recruitment events and extensive work with local schools and colleges. The airport also subsidises employee travel to and from the airport on a number of public transport options and facilitates a car share scheme for employees. BAL is also currently actively exploring options to introduce a number of new apprenticeships in engineering, passenger carrying vehicles and IT.

0.22 Bristol Airport's influence on the availability of local services and the health of local businesses is multifaceted and in general should be viewed as positive and growth at the airport beyond 10 mppa would increase this positive effect. Increased activity at the airport will provide more opportunities for local businesses through the supply chain and increased consumer expenditure in the area as passengers either stay in the area or use facilities and services. The airport is holding its first Meet the Buyer event in January 2019, which is an example of ways that the airport can actively increase the amount of local businesses benefitting from the airport's supply chain. There are potentially some adverse impacts in the labour market, from additional congestion and crowding out, but we would expect these to be significant.

1 INTRODUCTION AND BACKGROUND

Overview

1.1 In March 2018, Bristol Airport Limited (BAL) commissioned York Aviation to undertake an economic impact assessment of the airport's proposals to increase its permitted annual passenger cap from 10 million passengers per annum (mppa) to 12 mppa. This report provides supporting evidence for Chapter 15: Socio-Economics within the Environmental Statement.

1.2 Initially, the study sets out to assess the role that the airport plays in supporting economic prosperity in its sphere of influence in the South West region and South Wales[1], considering both the economic activity it generates through its operations and the role that it plays in supporting other sectors of the economy by enabling the movement of people. It also seeks to set the role of the airport in context, examining the economic conditions and strategic direction of the area around it and considering how the airport currently contributes as a strategic asset and how its activities will support future aspirations. It then moves on to specifically consider the impact of the airport being able to expand beyond its current 10 mppa passenger limit.

1.3 The study presents a range of both quantitative and qualitative evidence to assess the impact of future expansion. It considers the impact on economic activity through an assessment of the effect on Gross Value Added (GVA) and employment but also considers the broader economic welfare effects through a socio-economic cost benefit analysis. It examines the ongoing effects of growth at the airport through the increase in passenger numbers and also the transitory effects that will come through the construction of the necessary infrastructure at the airport to support 12 mppa. The analysis uses an industry standard, best practice approach to considering these effects.

Background

1.4 BAL was granted outline planning permission by North Somerset Council on 16 February 2011 for the expansion of Bristol Airport to handle 10 mppa. Between 2010 and 2017, investment totalling over £160 million has been made in a significant upgrade of facilities and infrastructure at Bristol Airport and passenger numbers have grown by over 40%, from 5.8 mppa to 8.2 mppa. Our analysis below suggests that the airport is on track to deliver or exceed on the economic benefits that this expansion was expected to deliver. BAL currently forecasts that passenger demand will reach 10 mppa by 2021, beyond which passenger traffic is projected to rise further to 15 mppa by the mid-2030s and 20 mppa by the mid-2040s.

[1] The report provides results for a series of study areas within this overall geography.

1.5 To meet future passenger demand, BAL is currently preparing a new Master Plan. The Master Plan will set out a strategy for phased growth to meet the forecast level of passenger demand by the mid-2040s. The issues Bristol Airport currently faces and BAL's broad approach to addressing these through the masterplanning process were set out in an initial discussion document, 'Your Airport, your views', which was subject to public consultation between November 2017 and January 2018. A further public consultation on the emerging Master Plan was undertaken between May and July 2018 and it is currently anticipated that a Draft Master Plan will be published for consultation in winter 2018/19.

1.6 As part of the approach set out in the emerging Master Plan to meeting future passenger demand beyond 2021, BAL is seeking planning consent for an initial phase of growth beyond the current cap of 10 mppa to 12 mppa. This will allow for growth in passenger numbers up to at least the mid-2020s. To accommodate the additional 2 mppa, existing infrastructure will be improved, new infrastructure delivered and current operations amended. This will include the following key components:

- west and south extensions to the terminal and a canopy over the forecourt of the main terminal building;
- erection of new east walkway and pier with acoustic fence;
- construction of a new service yard;
- erection of a multi-storey car park;
- enhancements to the internal road system including a gyratory road with internal surface car parking;
- enhancements to airside infrastructure including construction of a new eastern taxiway link and taxiway widening (and fillets) to the southern edge of Taxiway GOLF;
- extension to the Silver Zone car park;
- improvements to the A38 between the main airport access roundabout and West Lane; and
- operational changes including an annualised cap of 4,000 night flights between the hours of 23:30 and 06:00, the use of Stands 38 and 39 to align with Stands 34-37 and year-round use of existing Silver Zone car park extension (Phase 1) with associated permanent (fixed) lighting and CCTV.

This Report

1.7 This report builds on the knowledge base built up through York Aviation's previous economic impact assessment of Bristol Airport, which was published in early 2017[2]. It is, however, a new standalone analysis. It follows the same broad analytical framework and approach to economic impact modelling but extends and updates the previous analysis with new base information in a range of key areas. The framework for our analysis is also the same as that used in the socio-economic impact assessment that supported BAL's successful planning application for the current 10 mppa passenger cap. This framework is a well-recognised, industry standard approach. Given the passage of time, it does, however, use a number of more up to date modelling techniques, notably enabling quantitative estimates of wider economic impacts to be made.

1.8 The study has involved:

- a detailed review of the airport's market position and profile using data from sources such as the CAA Passenger Survey, CAA Statistics and Official Airline Guide (OAG) data on airport and airline schedules. These sources are standard industry sources and provide a detailed and robust insight into Bristol Airport's market position and the profile of its passengers;
- an analysis of the economic and policy context in which the airport is currently operating based on a review of documents and published data;
- engagement with a range of stakeholders to discuss the airport's role in the economy and its future potential. A list of stakeholders consulted during the course of the study is included in **Appendix A**;
- the development of economic models designed to articulate the impacts of the airport now and in the future.

1.9 It has considered the economic impact of the growth of the airport in relation to three study areas, each of which is a sub-set of the next:

- North Somerset – the local authority district in which the airport is located and the relevant planning authority;
- the West of England – a sub-region that includes North Somerset, the City of Bristol, Bath & North East Somerset and South Gloucestershire. This area makes up the core of the airport's passenger catchment area, accounting for around 36% of total passengers, and is the functional economic area in which the airport is located;

[2] Part 1 (Strategic) Economic Impact Assessment of Bristol Airport – York Aviation for Bristol Airport Limited (2017).

- South West Region and South Wales – this is the broader region that the airport serves, accounting for around 93% of passenger traffic.

1.10 We have organised this report into the following sections:

- **Section 2** provides a profile of Bristol Airport;
- **Section 3** outlines the economic and policy context in which the airport is operating;
- **Section 4** sets out the current economic impact of Bristol Airport to provide a current baseline position for the analysis;
- **Section 5** considers the GVA and employment effects of raising the airport's capacity to 12 mppa;
- **Section 6** uses a socio-economic cost benefit analysis to consider how the airport's growth will impact on broader economic welfare;
- **Section 7** provides a qualitative assessment of the effects of the airport's growth on a number of regeneration and social issues;
- **Section 8** sets out our conclusions.

2 PROFILE OF BRISTOL AIRPORT

2.1 Bristol Airport is the ninth largest airport in the UK. Operated by BAL, it is the principal airport and main international gateway for the South West of England and South Wales providing a range of services, mainly domestic and short haul.

2.2 This section sets out a profile of the airport and its passengers and provides the aviation market context for the economic impact assessment of BAL's proposals for growth beyond 10 mppa and up to 12 mppa.

2.3 Ultimately, the role the airport plays in the economy is reflected in its passenger profile. Broadly, an airport's economic impact is driven by:

- volume of demand – the role an airport plays as a direct provider of jobs and prosperity is, to a large extent, driven by its size in terms of passenger volumes;
- the nature of demand – the extent of business use is a key indicator as to the role that an airport plays in supporting business related benefits in the wider economy, such as gains from trade or increased inward investment; similarly, the level of inbound travel is a determinant of the ability of an airport to support tourism impacts.

2.4 In turn, the volume and nature of demand at an airport are a reflection of its catchment area, the services it offers, and the availability or otherwise of alternatives. Bristol Airport's position in relation to these key issues is set out below.

Location, Catchment and Competition

2.5 Bristol Airport is located on the A38, approximately 11km south-west of Bristol city centre and within the local authority administrative area of North Somerset Council. The airport is served by the Bristol Airport Flyer, which links the airport to Bristol Temple Meads railway station and Bristol Bus Station, both in the city centre. The service runs up to every 10 minutes through the day. Bristol Airport also runs a Weston Flyer bus service which provides an express service to Weston-super-Mare, operating on an hourly basis.

2.6 Bristol Airport is a regional airport, serving a regional catchment, including urban and rural areas, across the South West . For instance, the airport is:

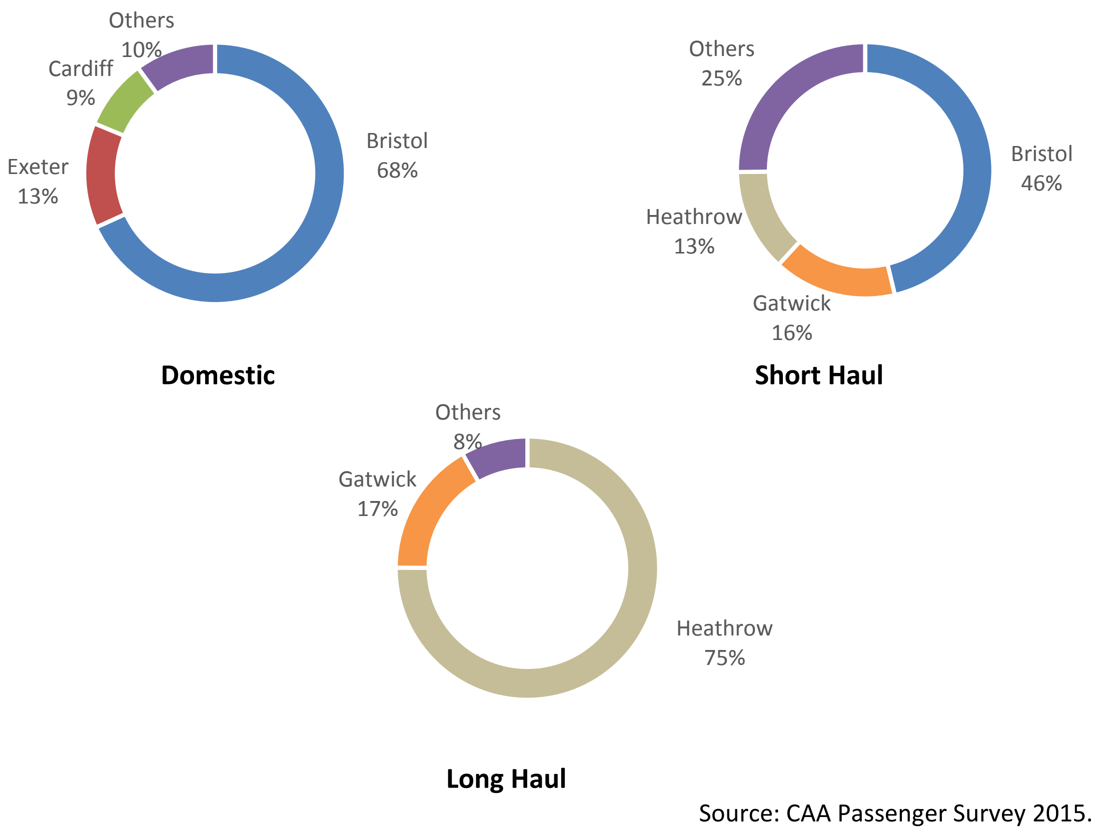
- 15 miles from Weston-super-Mare to the west or around 30 minutes' drive. Weston-super-Mare is also served by the Weston Flyer once an hour. The journey takes around 45 minutes;
- 19 miles from Bath to the east or around 40 minutes' drive or an hour (up to an hour and a quarter during busy times of the day) by public transport.

2.7 Improving surface access to the airport is an important catalyst to support economic growth in the region, including airport, housing and employment growth south of Bristol. Bristol Airport is joint funding a study (BSWEL Study) to identify the necessary multi-modal strategic transport improvements in the area to support sub-regional growth, including the planned increases in housing and employment, as well as future airport growth.

2.8 The airport's main catchment area is North Somerset, the West of England (which includes North Somerset, City of Bristol, Bath & North East Somerset, and South Gloucestershire), as well as the wider South West Region and South Wales.

2.9 Bristol Airport operates in a competitive market, with a number of other airports drawing passengers from the South West, including nearby Cardiff Airport, but also Heathrow and Gatwick. According to the latest CAA Passenger Survey available[3], in 2015 the airport's market penetration across the South West was relatively strong in domestic and short haul markets (68% and 46% respectively, see **Figure 2.2**). Currently, there are no scheduled long haul services at the airport but a number of long-haul charter destinations are served.

Figure 2.2: Market Penetration in the South West by Airport



Source: CAA Passenger Survey 2015.

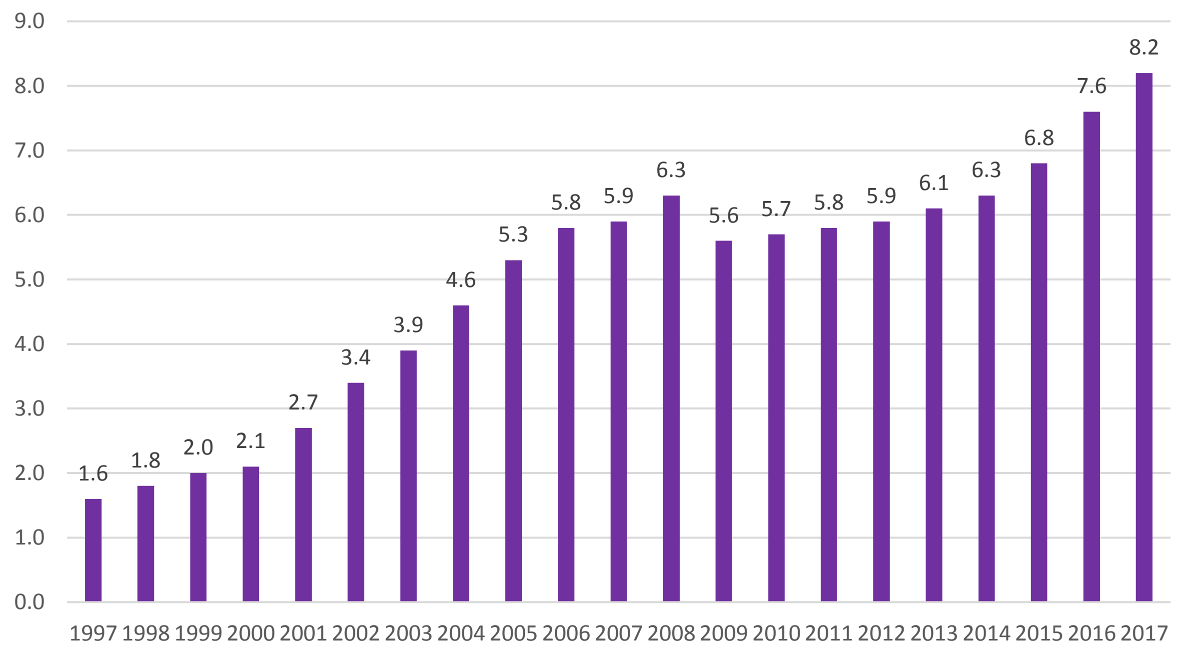
[3] The CAA Passenger Survey is undertaken a Bristol Airport on a rotational basis, with survey work undertaken undertaken around every four to five years.

Passenger Demand and Growth

2.10 In 2017, Bristol Airport handled around 8.2 million passengers (see **Figure 2.3**), making it the ninth largest airport in the UK, and the third largest in England outside London (**Figure 2.4**). The airport has grown strongly in recent years.

2.11 Passenger numbers have grown by more than four fold over the last 20 years, with only a brief reduction during the recession. The airport achieved record passenger demand levels in 2015, 2016 and 2017.

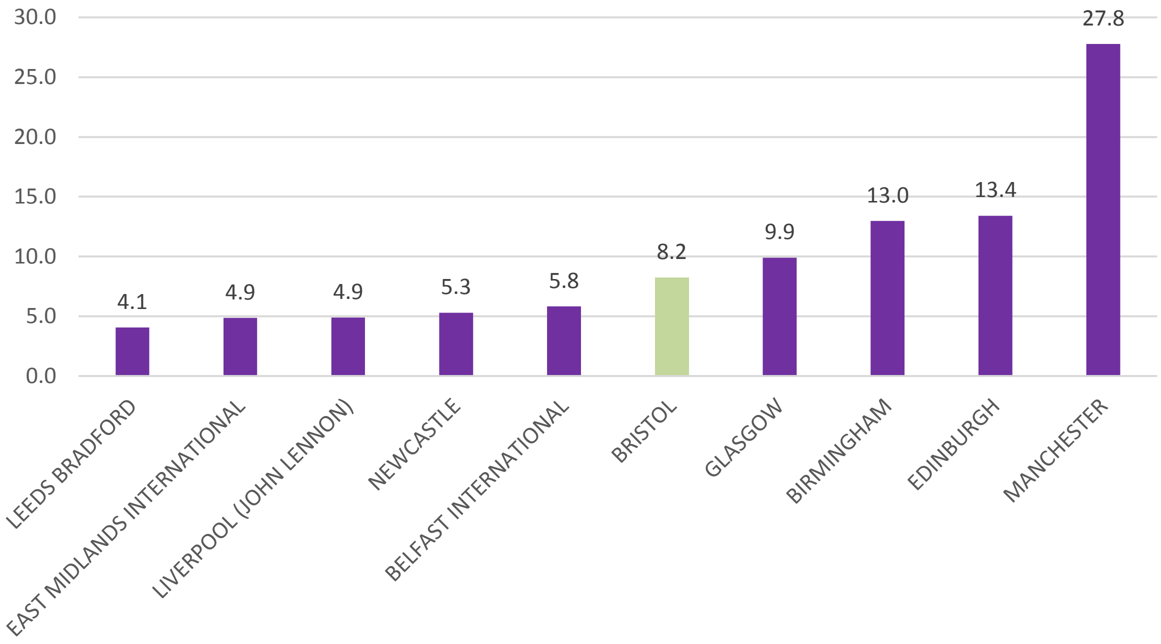
Figure 2.3: Annual Passenger Traffic at Bristol Airport



Source: CAA Statistics.

2.12 The airport does not currently handle freight, although it has handled small quantities in the past. Given its location, infrastructure and the business models of its main airline customers it is felt to be unlikely that any significant freight volumes will be handled in the short to medium term.

Figure 2.4: Top 10 UK Regional Airports by Passengers in 2017 (millions)



Source: CAA Statistics.

Nature of Demand

2.13 In common with all UK airports, Bristol Airport serves UK originating and overseas originating passengers and those travelling for both business and leisure, all of whom contribute to the economic impact of the airport. However, business passengers and foreign passengers are particularly important in driving wider economic benefits.

2.14 As can be seen from **Table 2.1**, around 17% of passengers were travelling on business in 2015[4], with the largest numbers travelling to international short haul destinations. Around 16% of passengers passing through the airport were foreign residents visiting the UK.

2.15 Leisure passengers make up the great majority of travellers at the airport (84%), with UK passengers the greater part of this (71% of total passengers). Whilst these passengers do not generate significant wider economic impact, they do support jobs and economic activity at the airport and, crucially, also support the viability of services that are used by business travellers and those visiting the UK. Without UK leisure passengers in many cases airlines would not have sufficient demand to offer the services that they do.

[4] Latest available data from CAA Passenger Survey.

2.16 It should be noted that the airport also handles business aviation and general aviation movements. The former in particular can bring significant economic benefits through the role they play in providing connectivity to high net worth individuals and to high value added companies. However, we have not sought to quantify these impacts in this report.

Table 2.1: Types of Passengers at Bristol Airport in 2015

		Scheduled Domestic	*Scheduled International*	*Scheduled Total*	*Charter International*	*Total*
UK	Business	7.4%	5.5%	12.9%	0.0%	12.9%
	Leisure	11.2%	48.7%	60.0%	10.8%	70.8%
	Sub-Total	*18.6%*	*54.2%*	*72.8%*	*10.8%*	*83.7%*
Foreign	Business	0.1%	3.5%	3.6%	0.0%	3.6%
	Leisure	0.4%	12.1%	12.5%	0.3%	12.7%
	Sub-Total	*0.5%*	*15.5%*	*16.1%*	*0.3%*	*16.3%*
Total		*19.2%*	*69.7%*	*88.9%*	*11.1%*	*100%*

Source: CAA Passenger Survey 2015.

2.17 **Table 2.2** shows the composition of business passengers at Bristol Airport in 2015. A significant proportion (around 45%) were UK based business passengers travelling to domestic destinations. Some 571,000 business passengers were travelling on international flights, of which 221,000 were foreign residents. This demonstrates how Bristol Airport's international connectivity is serving the business community within the airport's sphere of influence and facilitating inward travel from abroad.

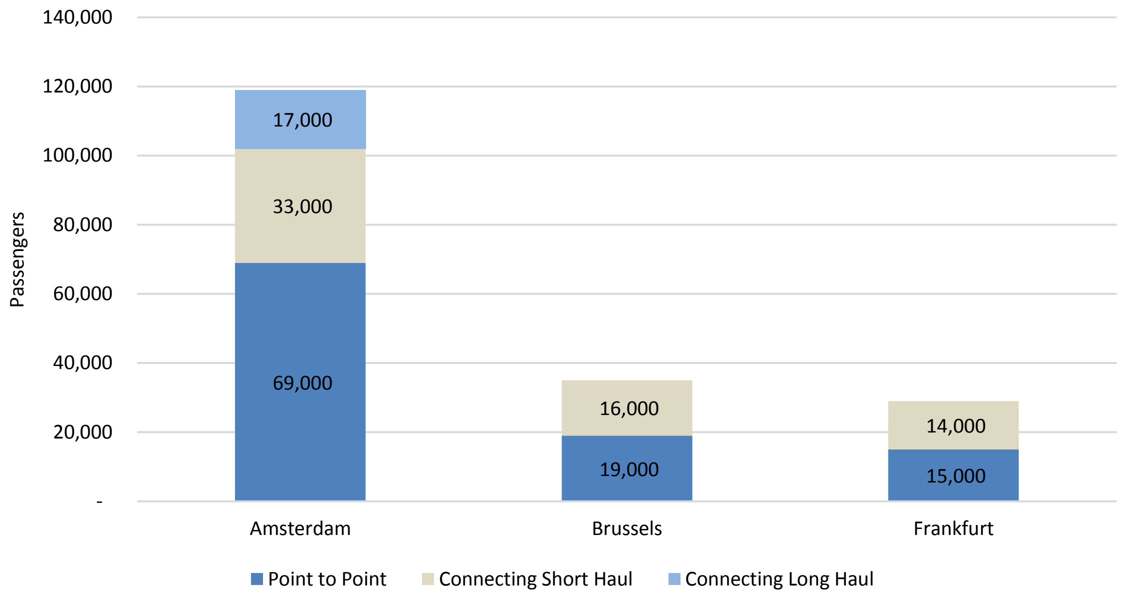
Table 2.2: Bristol Airport Business Passengers Profile 2015

	Domestic	*% of Total*	*International*	*% of Total*	*Total Business Passengers*	*% of Total*
UK Business	474,000	45%	351,000	33%	825,000	78%
Foreign Business	8,000	1%	221,000	21%	229,000	22%
Total	482,000	46%	572,000	54%	1,054,000	100%

Source: CAA Passenger Survey 2015.

2.18 Bristol Airport also offers connections to European hubs such as Amsterdam, Brussels and Frankfurt, which provide business passengers with onward connections to a wide range of global destinations, further improving the ease of doing business overseas and vice versa. **Figure 2.5** shows the proportion of business passengers from Bristol Airport using European hubs for onward flight connections. Across the three hub airports shown, around 40% of business passengers make an onward connection to their final destination, the majority of which are short haul connections. Amsterdam is used predominantly for onward long haul connections, with very few travelling onwards long haul from Brussels or Frankfurt.

Figure 2.5: Use of European Hub Airports by Business Passengers from Bristol Airport in 2015



Source: CAA Passenger Survey 2015.

2.19 Around half the business passengers using Bristol Airport begin their journey from the West of England, of which the majority come from the City of Bristol. The Near South West (which includes Wiltshire, parts of Somerset, Dorset, and Devon) accounts for around a third of business passengers using the airport (See **Table 2.3**). Cornwall & South Wales account for almost 20%, despite the existence of Exeter and Cardiff Airports, which underlines the importance of the greater frequency and breadth of connectivity Bristol Airport provides.

Table 2.3: Business Passengers at Bristol Airport by Surface Origin (2015)

Regions	*Passengers ('000s)*	*%*
West of England	478	45%
Near South West	304	29%
Cornwall	37	4%
South Wales	163	15%
Other	73	7%
Total	*1,054*	*100%*

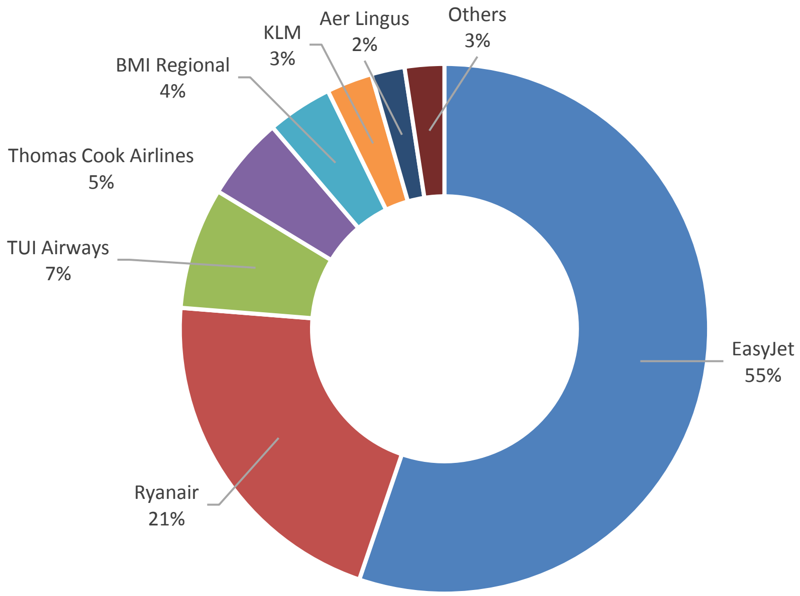
CAA Passenger Survey 2015.

Seat Capacity and Route Network

2.20 The connectivity that Bristol Airport offers is ultimately central to its economic impact. The range of destinations the airport serves and the levels of frequency it offers are key competitive factors, which ultimately drive its ability to provide jobs at the airport and support other sectors of the economy in accessing international markets.

2.21 The composition of seat capacity at Bristol has changed over the past 10 years, with strong growth coming from low cost carriers and charter airlines. Ryanair has more than tripled its seat capacity since 2008 and the two main charter airlines (Thomas Cook and TUI Airways) have doubled their seat capacity, albeit from a relatively low base. EasyJet and Ryanair now account for 76% of total seat capacity (see **Figure 2.6**), with Thomas Cook and TUI Airways accounting for a further 21%. The remaining seat capacity is provided by network airlines such as KLM, Brussels Airlines and Aer Lingus, regional airlines, such as BMI Regional, and a few other low cost carriers.

Figure 2.6: Seat Capacity Share by Airline in 2018



Source: OAG.

2.22 **Table 2.4** highlights the top 10 destinations served from Bristol Airport in 2017. Dublin and Amsterdam are the largest international routes, with KLM providing onward connectivity from its Amsterdam hub and Aer Lingus from its Dublin hub. Otherwise the key high volume routes are domestic connections to Scotland and Northern Ireland and major leisure destinations.

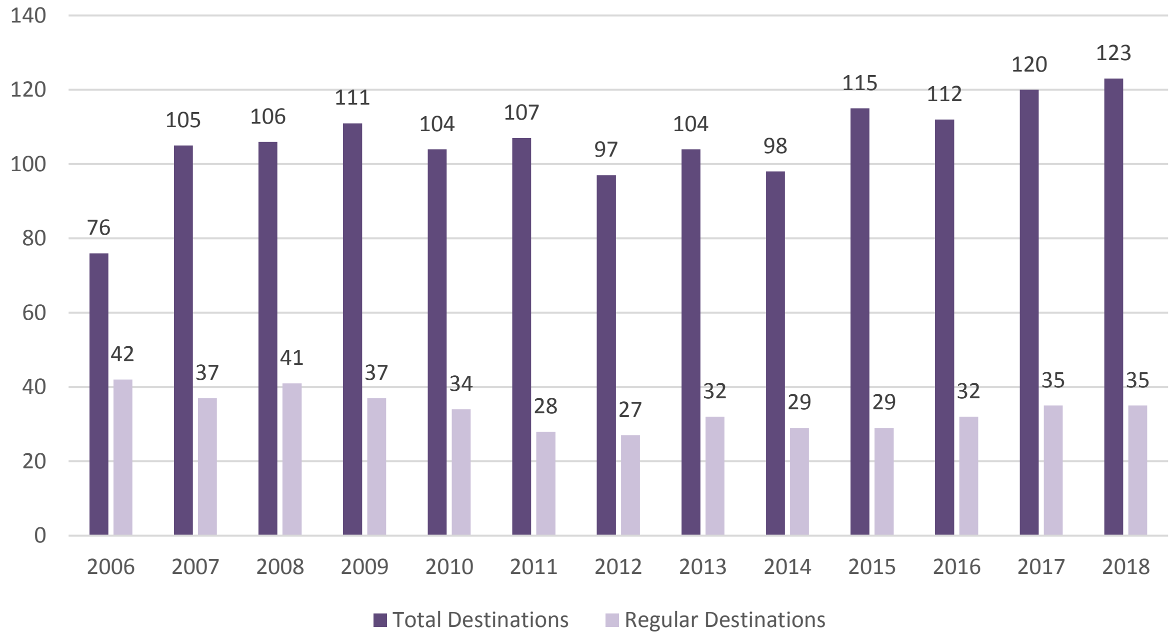
Table 2.4: Top 10 Destinations by Passengers in 2017

Destinations	*Passengers*	*Average Weekly Flights*	*Airlines*
Dublin	429,794	39	Ryanair & Aer Lingus
Amsterdam	410,341	39	KLM & easyJet
Edinburgh	393,853	25	easyJet
Malaga	347,703	21	British Airways, easyJet, Ryanair & Tui Airways
Palma De Mallorca	341,400	21	British Airways, easyJet, Ryanair, Tui Airways & Thomas Cook
Alicante	331,043	19	easyJet, Ryanair, Tui Airways
Glasgow	307,010	21	easyJet
Faro	304,906	18	easyJet, Ryanair, Tui Airways
Belfast International	261,249	17	easyJet
Geneva	232,800	14	easyJet & Thomas Cook

Source: CAA Statistics & OAG.

2.23 Over the past decade, Bristol Airport has grown to serve 115 routes in 2015 (see **Figure 2.7**). However, the number of destinations served with more than 5 flights per week has dropped by 10 to 32.

Figure 2.7: Bristol Airport Destinations Served



Source: OAG.

Conclusion

2.24 Bristol Airport is an important regional airport, primarily serving the South West Region and South Wales, and handling around 8.2 million passengers in 2017, its highest level of throughput to date. Whilst the majority of passengers are travelling for leisure, the airport has built a strong base of business passengers, which now account for over a million passengers per annum. It is also a gateway for a significant number of overseas visitors to come to the region.

2.25 The airport has grown steadily since the recession, with demand primarily being served by low cost carriers. The airport also provides frequent connectivity to key European destinations and to hub airports that offer onward connections to global destinations.

3 ECONOMIC & POLICY CONTEXT

Introduction

3.1 In this section, the existing economic and policy context in which Bristol Airport operates it outlined. The section is structured as follows:

- policy context – this considers UK government aviation policy and a range of economic strategy and planning policy documents;
- the regional economic context;

Policy Context

Government Aviation Policy

Aviation Policy Framework

3.2 The Aviation Policy Framework[5] (APF) was published in March 2013 and fully replaces the 2003 Air Transport White Paper[6] as Government policy on aviation. The framework outlines objectives and principles to guide plans and decisions on airport developments, bringing together many related and discreet policies, some of which are 'in train' – for example, the work being carried out to deliver the Airport NPS. By defining the Government's objectives and policies on the impacts of aviation, the APF sets out the framework within which decisions on aviation ought to be made to deliver a balanced approach to securing the benefits of aviation and to support economic growth.

3.3 For many years, the Government has sought to open up access to the airports outside the South East to improve opportunities for connectivity and to help reduce demand on South East airports. It recognises that '*airports in Northern Ireland, Scotland, Wales and English airports outside of London play an important role in UK connectivity*'. There is general support for the growth of regional airports, with the APF highlighting that '*new or more frequent international connections attract business activity, boosting the economy of the region and providing new opportunities and better access to new markets for existing businesses*'.

3.4 It is identified, that beyond their regional importance, airports outside of the South East of England also have an important role in helping to accommodate wider forecast growth in demand for aviation in the UK and that the availability of direct air services locally from these airports can reduce the need for air passengers and freight to travel long distances to reach larger UK airports. In this context, the APF recognises the vital role Bristol Airport plays in the economic success of the South West region.

[5] Aviation Policy Framework - Department for Transport (2013).
[6] The Future of Air Transport - Department for Transport (2003).

3.5 The APF states that the '*Government wants to see the best use of existing airport capacity'* and that in the short-term, a key priority for Government is to continue to work with the aviation industry and other stakeholders to make better use of existing runways at all UK airports to improve performance, resilience and the passenger experience.

3.6 The Government is in the process of replacing the APF with a more comprehensive 'Aviation Strategy.' The final Aviation Strategy is expected in 2019. However, it should be noted that the documents produced to date have made clear that the '*making best use'* policy is confirmed.

Beyond the Horizon: the Future of UK Aviation[7]

3.7 The Government announced that the Department for Transport (DfT) is currently progressing work to develop a new strategy for UK aviation[8] that will set out the long-term direction for aviation policy to 2050 and beyond. It is anticipated that the strategy will be published by the end of 2019 and that it will sit alongside the Airports NPS. Together, they will constitute the Government's new aviation policy and framework.

3.8 A call for evidence was published in July 2017 which invited views on the proposed aims, objectives, policy priorities and timetable for the strategy. The call for evidence affirms the Government's support for the growth of airports outside the South East of England. It also states that the Government's declared preferred option for one new runway in the South East (by 2030) *"will not open for at least 10 years and it is vital that the UK continues to grow its domestic and international connectivity in this period, which will require the more intensive use of existing airport capacity."*

3.9 In considering the approach to be taken for the expansion of regional airports, the Government states that they "are aware that a number of airports have plans to invest further, allowing them to accommodate passenger growth over the next decade using their existing runways, which may need to be accompanied by applications to increase existing caps. The government agrees with the Airport Commission's recommendation that there is a requirement for more intensive use of existing airport capacity and is minded to be supportive of all airports who wish to make best use of their existing runways".

3.10 The Government undertook consultation in autumn 2017 and has now considered the responses received; it has set out how it will address these in the next stages of the strategy's development. The Government's commitment to the growth of regional airports was recently reaffirmed in the Secretary of State for Transport's June 2018 statement concerning the proposed expansion of Heathrow[9]; recognising that a new operational runway at Heathrow is still a number of years away, and consistent with the Airports Commission's recommendations, he states that "the government is supportive of airports beyond Heathrow making best use of their existing runways".

[7] Beyond the Horizon: The Future of UK Aviation - Department for Transport (2017).
[8] Written Statement to Parliament on Airport Capacity and Airspace Policy – 2nd February 2017
[9] Secretary of State for Transport (2018). Statement by the Secretary of State for Transport about the proposed expansion of Heathrow airport.

3.11 The overarching aim of the strategy is to achieve a safe, secure and sustainable aviation sector that '*meets the needs of consumers and of a global, outward-looking Britain'*. This aim is underpinned by the following objectives:

- help the aviation industry work for its customers;
- ensure a safe and secure way to travel;
- build a global and connected Britain;
- encourage competitive markets;
- support growth while tackling environmental impacts; and
- develop innovation, technology and skills.

Airports National Policy Statement

3.12 The Airports National Policy Statement[10] (NPS) was published in June 2018. This followed approval from the House, after which it was designated as a national policy statement under the provisions of Section 5 (1) of the *Planning Act 2008*[11] subject to any legal challenge.

3.13 The NPS provides the primary basis for decision making on development consent order (DCO) applications for nationally significant aviation-related development and, specifically, a Northwest Runway at Heathrow Airport. Whilst the Proposed Development is not of a scale considered to be nationally significant and does not relate to additional capacity in the South East of England, it is important to consider the proposals in the context of this national policy on aviation.

3.14 Specifically, in paragraph 1.39, the Government confirms that it is supportive of airports beyond Heathrow making best use of their existing runways albeit that they recognise that the development of airports can have positive and negative impacts, including on noise levels. Consistent with paragraph 1.29 of ''Beyond the Horizon: The Future of Aviation in the UK – Making best use of existing runways', the Government states that any proposals should be judged on their individual merits by the relevant planning authority, taking careful account of all relevant considerations, particularly economic and environmental impacts.

[10] Airports national policy statement: new runway capacity and infrastructure at airports in the south-east of England - Department for Transport (2018).
[11] The Planning Act 2008.

3.15 As indicated in paragraph 1.39, paragraph 1.42 states that airports wishing to make more intensive use of existing runways will still need to submit an application for planning permission or development consent to the relevant authority, which should be judged on the application's individual merits. However, in light of the Airports Commission's findings on the need for more intensive use of existing infrastructure as described at paragraph 1.6 of the Airports NPS[10], the Government accepts that it may well be possible for existing airports to demonstrate sufficient need for their proposals, additional to (or different from) the need which is met by the provision of a north-west runway at Heathrow. The justification of the need for the Proposed Development is discussed in the Planning Statement and **Chapter 3: Scheme need and alternatives**. The Government's policy on this issue will continue to be considered in the context of developing a new Aviation Strategy.

Airports Commission Discussion Paper 06: Utilisation of the UK's Existing Airport Capacity

3.16 The Airports Commission during its investigation looked at the potential to redistribute demand away from airports in London and the south-east. The study[12] recognised that regional airports and those serving London and the south-east, other than Gatwick and Heathrow, play a crucial national role. This is especially so at a time when the major London airports are already operating very close to capacity.

Beyond the Horizon: The Future of UK Aviation - Making Best Use of Existing Runways[13]

3.17 In June 2018, the DfT published a further policy paper considering the role of the UK's airports other than Heathrow. This paper clearly sets out policy support for airports other Heathrow to maximise the use of their available runway capacity:

"As a result of the consultation and further analysis to ensure future carbon emissions can be managed, government believes there is a case for airports making best of their existing runways across the whole of the UK"[14]

National Industrial Strategy

3.18 In November 2017, the UK Government published its Industrial Strategy. This strategy sets out:

"a long term plan to boost the productivity and earning power of people throughout the UK.

It sets out how we are building a Britain fit for the future – how we will help businesses create better, higher-paying jobs in every part of the UK with investment in the skills, industries and infrastructure of the future."[15]

---

[12] Discussion Paper 06: utilisation of the UK's existing airport capacity - Airports Commission (2014).
[13] Beyond the Horizon: The Future of UK Aviation - Making Best Use of Existing Runways – Department for Transport (2018).
[14] Beyond the Horizon: The Future of UK Aviation - Making Best Use of Existing Runways – Department for Transport (2018). Page 8.
[15] https://www.gov.uk/government/topical-events/the-uks-industrial-strategy.

3.19 It establishes five foundations for the transformation for the UK economy in the future:

- ideas – making the UK the world's most innovative economy;
- people – developing education and training that enables people to fulfil good jobs and develop greater earning power;
- infrastructure – to facilitate and encourage a major upgrade to the UK's infrastructure, including its transport infrastructure;
- business environment – to implement measures to make the UK the best place to start and grow a business;
- places – ensuring that local strengths are built upon to create prosperity and growth to develop prosperous communities across the UK.

3.20 With specific regard to infrastructure, the Industrial Strategy states:

"Infrastructure is the essential underpinning of our lives and work, and having modern and accessible infrastructure throughout the country is essential to our future growth and prosperity."

and that:

"We must make sure our infrastructure choices not only provide the basics for the economy, they must actively support our long-term productivity, providing greater certainty and clear strategic direction. Our investment decisions need to be more geographically balanced and include more local voices. We can improve how we link up people and markets to attract investment, and we must be more forward-looking in respect of significant global economic trends."[16]

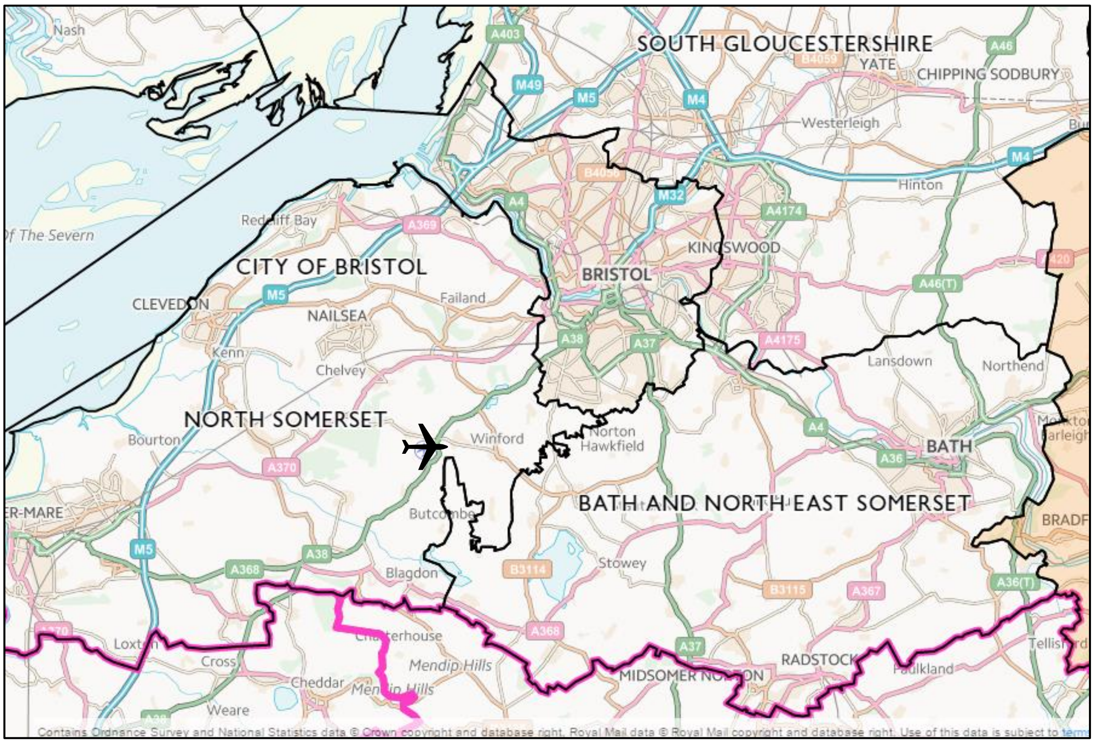
3.21 This clearly provides support for the development of Bristol Airport, given its potential to support access to international markets and drive productivity in the economy. The strategy also clearly recognises the need for geographical balance. Bristol Airport, as the primary international gateway for the South West of England, again supports this aspiration.

Regional Economic Policy

3.22 Bristol Airport is located within the unitary authority of North Somerset, close to the border with Bath & North East Somerset (**Figure 3.1**). The airport serves the West of England, which comprises the two local authorities already mentioned, as well as the City of Bristol and South Gloucestershire. However, Bristol Airport's catchment extends beyond the West of England and into the wider South West region as well as South Wales, with a population of around 7.5 million people living within a two-hour drive time of the airport.

[16] Industrial Strategy Building a Britain fit for the future – HM Government (2017). Page 128.

Figure 3.1: Bristol Airport's location within the West of England



3.23 In considering the economic policy context for the airport, we focus principally on the joint economic policy of the four local authorities of the West of England (Bristol City Council, Bath & North East Somerset Council, North Somerset Council, and South Gloucestershire Council), as reflected by the West of England Local Enterprise Partnership. This area represents the functional economic area within which the airport is located, as set out for instance in the West of England Economic Development Needs Assessment[17]. We recognise that the airport's influence extends beyond this area but believe that the primary influences and context relate to the West of England.

West of England Economic Development Needs Assessment (2015)

3.24 Atkins was commissioned in 2015 by the four Unitary Authorities in the West of England (Bristol City Council, South Gloucestershire, North Somerset and Bath and North East Somerset) to undertake an Economic Development Needs Assessment. This study set out to provide a robust assessment of, and evidence base for, the future economic development needs across the West of England area.

[17] West of England Economic Development Needs Assessment 2015 – Atkins for North Somerset Council, City of Bristol Council, Bath & North East Somerset Council and South Gloucestershire Council.

3.25 The study notes that the West of England is a relatively vibrant economic area, with good potential for future economic growth. However, it also notes that there are some spatial and socio-economic issues that should be addressed if this potential is to be fully realised. One of the issues identified relates to the relatively deprived area to the south of Bristol city centre and close to Bristol Airport and the study notes that in addressing this issue:

"…there is potential to stimulate demand through investment in key infrastructure and planning policy support for additional employment land provision."[18]

3.26 The growth and further development of Bristol Airport and its further contribution to economic growth and employment would be consistent with this assessment.

The West of England Local Enterprise Partnership Strategic Economic Plan 2015 – 2030

3.27 The West of England Local Enterprise Partnership Strategic Economic Plan[19] (SEP) contains a vision for economic growth which is managed sustainably to ensure all those within the sub-region benefit and that the environment is protected and enhanced.

3.28 Access to global mass markets by means of the region's good connectivity and the contribution made to this by the airport is seen as a key strength, and successfully capturing the impact that major developments at the airport and port can have at meeting the investment and jobs targets, is seen as an opportunity.

3.29 The SEP**Error! Bookmark not defined.** identifies the future aspirations to expand Bristol Airport and the potential for that growth to play a major role in the economic prosperity of the region. The document also includes a vision for easier local, national and international travel with improved strategic connections by 2030, supported by Bristol Airport.

3.30 The West of England is a major centre for a range of key sectors where the economy is felt to have an international comparative advantage. These sectors have been identified within the SEP as the key sectors that will drive forward the economy in the period through to 2036:

- advanced engineering & aerospace;
- creative & digital media;
- low carbon;
- high tech industries;
- professional services.

[18] West of England Economic Development Needs Assessment 2015, Executive Summary, paragraph 4.3.
[19] West of England Strategic Economic Plan 2015-2030 – West of England LEP.

3.31 Bristol Airport will clearly be key to providing international connectivity to these key growth sectors moving forward.

North Somerset's Economic Plan 2017-2036

3.32 The Economic Plan[20] recognises the important role of Bristol Airport to the economy and connectivity of North Somerset. It highlights that the airport provides an opportunity to support the retention and expansion of the area's most cutting edge and innovative companies as a driver of productivity growth, as well as to attract inward investment. The Plan states that a key challenge is to ensure that the airport is developed to provide the necessary space for growing businesses.

3.33 In this context, the Economic Plan includes a number of actions related to Bristol Airport, including to:

- work with partners to maximise the role of the airport as a strategic employment location;
- work with BAL to develop a campaign to encourage exporters/importers to use the airport's facilities;
- attract high value inward investment, capitalising on identified niche clusters, supply chains and strategic transport connectivity; and
- build on the role of Bristol Airport as a gateway to the North Somerset region, developing targeted support packages for international investors.

The West of England Combined Authority Business Plan 2018/19

3.34 The West of England Combined Authority (WECA) is made up of three of the local authorities in the region: Bath & North East Somerset, Bristol and South Gloucestershire. Working in partnership with the LEP, North Somerset Council, and other partners, its aim is to deliver economic growth for the region and address some key challenges, such as productivity and skills, housing and transport.

3.35 The WECA Business Plan 2018/19 identifies 'Infrastructure fit for the future' as a key objective and aims to improve national and international connections, with more passengers travelling to and from Bristol Airport by public transport[21].

[20] North Somerset's Economic Plan 2017-2036 - North Somerset Council (2017).
[21] WECA Business Plan 2018/19, page 7.

Bristol International Strategy

3.36 In 2018, Bristol City Council published its international strategy: *Bristol: Global City Working with the world for local and global benefit*. This document establishes a vision for Bristol as an international city, which includes:

"Bristol will live up to and build on its heritage as a truly global city. Through our international connectivity and trade and investment links we will deliver a powerful, resilient, progressive economy that creates the entrepreneurial opportunities and decent jobs that will enable us to reduce inequality"[22]

3.37 The strategy identifies four strategic outcomes, including securing a stronger Bristol economy and its position as an international gateway to the UK. Bristol Airport is clearly central to achieving this outcome and the importance of the airport's route network is identified within the document:

"Today, through Bristol Airport, there are connections to most major international cities as well as Easyjet's biggest base outside London with flights to nearly 100 destinations" [23]

Planning Policy Context

3.38 This section provides an overview of the principal planning policy context for Bristol Airport at the national, sub-regional and local level.

National Planning Policy Framework

3.39 On 24 July 2018, the Ministry of Housing, Communities and Local Government (MHCLG) published a revised National Planning Policy Framework[24] (NPPF) which sets out the Government's planning policies for England and is a material consideration in determining planning applications. The revised Framework replaces the previous NPPF published in March 2012.

3.40 At the heart of the revised NPPF[24] is a presumption in favour of sustainable development through plan-making and decision-taking. Paragraph 11 sets out that this is taken to mean:

"approving development proposals that accord with an up-to-date development plan without delay; or

where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

[22] Bristol International Strategy – Bristol City Council (2018). Page 4.
[23] Bristol International Strategy – Bristol City Council (2018). Page 10.
[24] National Planning Policy Framework - Ministry of Housing, Communities & Local Government (2018).

i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

3.41 Section 9 (Paragraph 104) of the revised NPPF[24] ('Promoting Sustainable Transport') refers to large scale transport facilities and states that planning policies should:

"…provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements…".

3.42 Furthermore, Paragraph 104 presents a strengthened policy position in respect of aviation and states that planning policies should:

"recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training and emergency service needs, and the Government's General Aviation Strategy".

<u>West of England Joint Spatial Plan</u>

3.43 The unitary authorities of Bath and North-East Somerset, Bristol, North Somerset and South Gloucestershire are currently preparing the West of England Joint Spatial Plan (JSP). The JSP will, once adopted, form part of the Development Plan, providing the strategic overarching development framework for the West of England to 2036 and guiding the review and future preparation of local plans in the sub-region.

3.44 The November 2017 JSP Publication Document[25] identifies Bristol Airport as a key strategic infrastructure employment location (Policy 4). It recognises the employment growth potential of Bristol Airport and in this regard, the supporting text to Policy 4 states: "*Growth at Bristol Airport has the potential to create a range of new employment opportunities".*

3.45 Consultation on the Publication Document closed in January 2018 and responses will be considered by the appointed inspector as part of the forthcoming Examination in Public and prior to adoption of the JSP.

[25] West of England Partnership (2017). West of England Joint Spatial Plan Publication Document - West of England Partnership (2017).

West of England Joint Local Transport Plan 3 2011-2026

3.46 The Joint Local Transport Plan[26] (JLTP) covers a fifteen-year period between 2011 and 2026 and sets out the transport strategy for the sub-region. The plan aims to deliver an affordable, low carbon, accessible, integrated, efficient and reliable transport network to achieve a more competitive economy and better connected, more active and healthy communities.

3.47 The JLTP recognises the significant positive impact that Bristol Airport has on the region's economy as one of the fastest growing regional airports in the UK and aims to support its growth. In this context, the JLTP seeks to achieve improved access to Bristol Airport by public transport and through the delivery of the South Bristol Link (completed in January 2017).

3.48 A West of England Joint Transport Study (JTS)[27] has been prepared by the four West of England authorities. The JTS is intended to provide a clear direction for the long-term development of the transport system in the sub-region to 2036 and beyond and will form the basis for the next JLTP and transport investment programme.

3.49 The JTS sets out that there is a strong case to significantly improve surface connectivity to Bristol Airport, both by public transport and road, and identifies two major investment proposals. The first is for a new mass transit route between Bristol Airport and Bristol, to form part of a mass transit network for the urban area. The second proposal is for major improvements to the A38 between Bristol and Weston-super-Mare including a new M5 Junction 21A at Weston-super-Mare, a new highway link connecting from the M5 to the A38 at Langford and improvements on the A38 between Langford and Bristol Airport. The JTS highlights that this investment in local transport schemes will significantly improve connectivity and capacity to south Bristol and will unlock capacity for growth and new development in the area as part of the emerging Spatial Strategy.

North Somerset Core Strategy

3.50 The North Somerset Core Strategy[28] was adopted in January 2017 and sets out the long-term vision, objectives and strategic planning policies for North Somerset up to 2026. The Core Strategy contains a suite of spatial visions that are intended to provide a clear, strategic planning context underpinned by a set of priority objectives. With specific regard to Bristol Airport, the overarching vision for North Somerset (Vision 1) sets out that:

"The future planning of…Bristol Airport will be guided by the need to balance the advantages of economic growth with the need to control the impacts on those who live nearby and on the natural environment."

3.51 Priority Objective 3, meanwhile, supports and promotes major employers in North Somerset including Bristol Airport to ensure continued employment security and economic prosperity.

[26] West of England Joint Local Transport Plan 3 2011 – 2026 - West of England Partnership (2011).
[27] West of England Joint Transport Study: Final Report - West of England Partnership (2017).
[28] North Somerset Core Strategy - North Somerset Council (2017).

3.52 Policy CS23 is the principal Core Strategy policy relating to development proposals at Bristol Airport and aims to support the delivery of Priority Objective 3. It states:

"Proposals for the development of Bristol Airport will be required to demonstrate the satisfactory resolution of environmental issues, including the impact of growth on surrounding communities and surface access infrastructure."

3.53 There are also a number of policies in relation to *Delivering a Prosperous Economy* that are relevant in relation to the growth of Bristol Airport.

3.54 Policy CS20 focusses on *"Supporting a Successful Economy"*. It identifies a policy to:

"The Core Strategy seeks to provide at least 10,100 additional employment opportunities 2006 - 2026, including around 114 hectares of land for B1, B2 and B8 uses (business, general industrial and storage and distribution), and to address the existing imbalance at Weston-super-Mare."

3.55 The airport as a one of the largest employers in the area clearly has a role to play in achieving these job aspirations.

3.56 Policy CS22 highlights a tourism strategy for North Somerset. It notes both the potential for the area given its location and natural assets and the role that Bristol Airport plays in providing accessibility:

"The geographical location of North Somerset makes it an attractive tourist destination. Its combination of coastal setting, beautiful countryside, accessibility via the M5 and Bristol Airport, and close proximity to Bristol, the City of Bath (a world heritage site), Cheddar Gorge, Wells and the rest of Somerset make it a versatile location which could appeal to a wide tourist market."

<u>Sites and Policies Plan Part 2: Site Allocations Plan</u>

3.57 The Site Allocations Plan[29] was adopted by NSC in April 2018. The Plan identifies the detailed allocations required to deliver the North Somerset Core Strategy[28] covering, for example, residential and employment uses, as well as designations to safeguard or protect particular areas such as Local Green Space or Strategic Gaps. It should be noted that the Site Allocations Plan does not include a specific allocation in respect of Bristol Airport or in respect of the area of the Proposed Development.

[29] Sites and Policies Plan Part 2: Site Allocations Plan - North Somerset Council (2018).

Emerging North Somerset Local Plan 2036

3.58 NSC has commenced work on a new Local Plan[30]. The new Local Plan will review and roll-forward policies and allocations in existing development plan documents and plan for the housing, jobs and infrastructure set out in the JSP to 2036. Initial consultation to generate ideas and discussion with regard to strategic developments proposed in Banwell, Churchill, Nailsea and Backwell took place in November 2017[31].

3.59 NSC have recently published a paper for consultation entitled, Local Plan 2036 Issues and Options Document[32]. It states the importance of Bristol Airport as a major employment location and for national and international connectivity, and sets out that the Bristol Airport policy needs to be reviewed in light of the growth ambitions for the airport.

3.60 The document identifies that an improved transport system will be key to unlocking the growth of Bristol Airport as an international and regional gateway which is closely linked with the economic growth of the region. Four potential options are put forward for a new policy for Bristol Airport and include: retaining the existing policy and Green Belt inset or removing the airport area (2011 permission plus additional land sought for expansion to 12mppa) from the Green Belt, with two options to either allocate or safeguard additional Green Belt land for future expansion. The document sets out the advantages and disadvantages of each option and requests feedback on the proposed alternatives by 10 December 2018.

North Somerset Employment Land Review 2018

3.61 In June 2018, North Somerset Council published its employment land review. This detailed analysis is intended to form an evidence base to support planning and decision making for the North Somerset Local Plan and its land allocations, as well as for planning applications, strategic investment and economic development initiatives. The review notes the potential for an expanded Bristol Airport to be part of an economic step change in North Somerset and drive the requirement for additional employment land.[33]

Bristol Airport Master Plan

3.62 British International Airport (now Bristol Airport or BAL) published its first Master Plan in 2006. The Master Plan covered the period up to 2030 and in 2011, BAL subsequently obtained planning permission from North Somerset Council for the major expansion of Bristol Airport to accommodate 10 mppa.

[30] About the new Local Plan for 2036 - North Somerset Council (2018).
[31] About the new Local Plan for 2036 - North Somerset Council (2018).
[32] Local Plan 2036 Issues and Options Document - North Somerset Council (2018).
[33] North Somerset Employment Land Review (2018). Page 9.

3.63 The 2013 Aviation Policy Framework recommends that airport master plans are updated every five years to "provide a clear statement of intent on the part of an airport operator to enable future development of the airport to be given due consideration in local planning processes". In this context, BAL is currently preparing a new Master Plan for Bristol Airport, with the early stages having been subject to very extensive public consultation.

3.64 The new Master Plan will provide a strategy for the long-term growth of Bristol Airport to meet the forecast level of passenger demand by the mid-2040s, which is expected to be circa 20 mppa. BAL's broad approach to long-term growth was set out in an initial discussion document, 'Your Airport, your views'[34], which was subject to public consultation between November 2017 and January 2018.

3.65 The second stage of non-statutory consultation on the emerging Master Plan commenced in May 2018 and closed in July 2018. Following best practice this included, and sought views upon, BAL's proposals for development at Bristol Airport to accommodate 12 mppa, as a first phase of planned growth in passenger capacity. BAL is committed to an open and transparent consultation process, allowing key stakeholders and the community an opportunity to comment and shape BAL's long term plans.

Economic Context

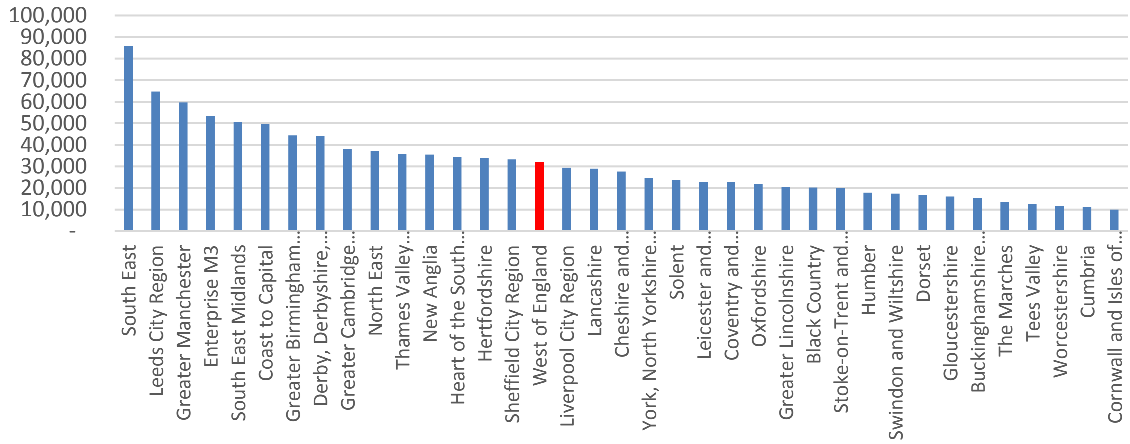
3.66 The West of England LEP produced an Economic Assessment in August 2015 which contains some key data to which we refer below. Where possible, we have updated some of the key metrics to the most recently available data. While we recognise that Bristol Airport's passenger catchment extends wider than this, the economic status of the West of England is most representative of the functional economic area in which it operates.

3.67 The West of England had a population of 1.14 million in 2017. In the year to March 2018, 78.1% of the population was in employment, compared with 75% in Great Britain as a whole, and 3.8% were unemployed, compared with 4.3% in Great Britain as a whole. The area supported 663,000 jobs in 2016 with a job density of 0.91, compared with 0.84 for Great Britain as a whole. In 2017, 47.8% of the working age population had qualifications at NVQ4 level or above, compared with 38.6% for Great Britain[35]. This suggests that the airport is operating in a strong and relatively prosperous local economy. This is reflected in average salaries in the West of England (£23,191), which are higher than the average for Great Britain regions outside London (£22,955).[36]

[34] Your Airport: Your Views, Towards 2050 - Bristol Airport (no date).
[35] Source: NOMIS.
[36] Source: Annual Survey of Hours and Earnings (2017).

3.68 The West of England's economic output in 2015 (latest figures available) in terms of Gross Value Added (GVA) was £31.8 billion (see **Figure 3.1** below), slightly higher than the £29.1 billion average for all LEP areas (excluding London, which is significantly higher than all others). Some care does, however, need to be taken in the interpretation of this data given the different sizes of LEP areas. The West of England's growth in GVA of 16.4% (nominal) from 2011 to 2015 has been slightly higher than the 14.8% average of all LEPs (excluding London).

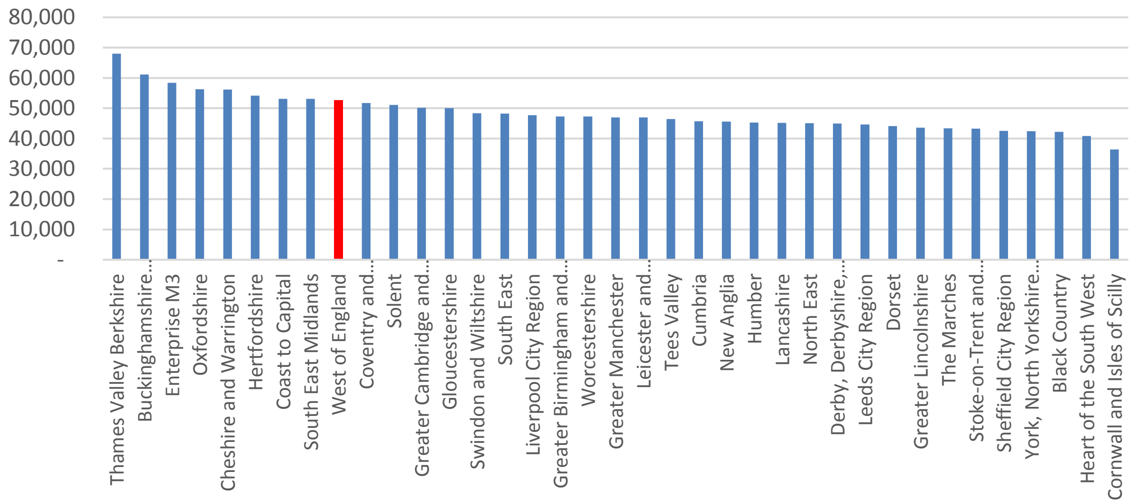
Figure 3.1: GVA by UK LEP Region in 2015 (£million, excluding London)



Source: ONS.

3.69 In terms of productivity, GVA per filled job in the West of England in 2016 was £52,530[37], which is higher than the UK average (excluding London) of £48,373. Over the last 5 years of available data (i.e. 2012 to 2016) GVA per filled job grew by 8%, which is slightly less than the UK average (excluding London) of 9.2%.

Figure 3.2: GVA per filled job by UK LEP Region in 2016 (£million, excluding London)



[37] Source: ONS.

Source: ONS.

3.70 **Table 3.1** shows a series of economic statistics for the local authority districts that make up the West of England and also the wider parts of Bristol Airport's catchment area. This demonstrates that there are clear differences in both sizes of economy and wealth across both the West of England and the South West and South Wales.

Table 3.1: Economic Statistics for the West of England and the Rest of the South West & South Wales

	GVA in 2015 (£ million)	GVA per Head in 2015	Employment in 2016
Bristol, City of	£13,862	£30,850	265,000
Bath and North East Somerset	£4,575	£24,746	87,000
North Somerset	£4,674	£22,263	86,000
South Gloucestershire	£8,674	£31,581	149,000
West of England	*£31,785*	*£28,410*	*587,000*
Other South West	£94,222	£21,648	1,911,250
South West	*£126,007*	*£23,031*	*2,498,250*
South Wales	£34,688	£18,366	791,000
South West and South Wales	*£160,695*	*£21,834*	*3,289,250*

Source: ONS and NOMIS.

3.71 The City of Bristol is the largest single economy in the area and the second wealthiest in terms of GVA per head. South Gloucestershire is the wealthiest economy and the second largest in the West of England. North Somerset, where the airport is located, has the lowest GVA per head in the West of England and its economy is relatively small compared to Bristol and South Gloucestershire. It is, however, still above average in terms of GVA per head compared to the rest of the South West and South Wales. Further growth at the airport will help to address this gap between North Somerset and the rest of the West of England.

3.72 **Figure 3.3** shows a graphical representation derived from the Index of Multiple Deprivation (IMD) produced for the Ministry of Housing, Communities & Local Government. It examines an area's performance in relation to 37 different indicators of deprivation in a single combined measure. These indicators are grouped into a series of 'domains' that consider different aspects of deprivation:

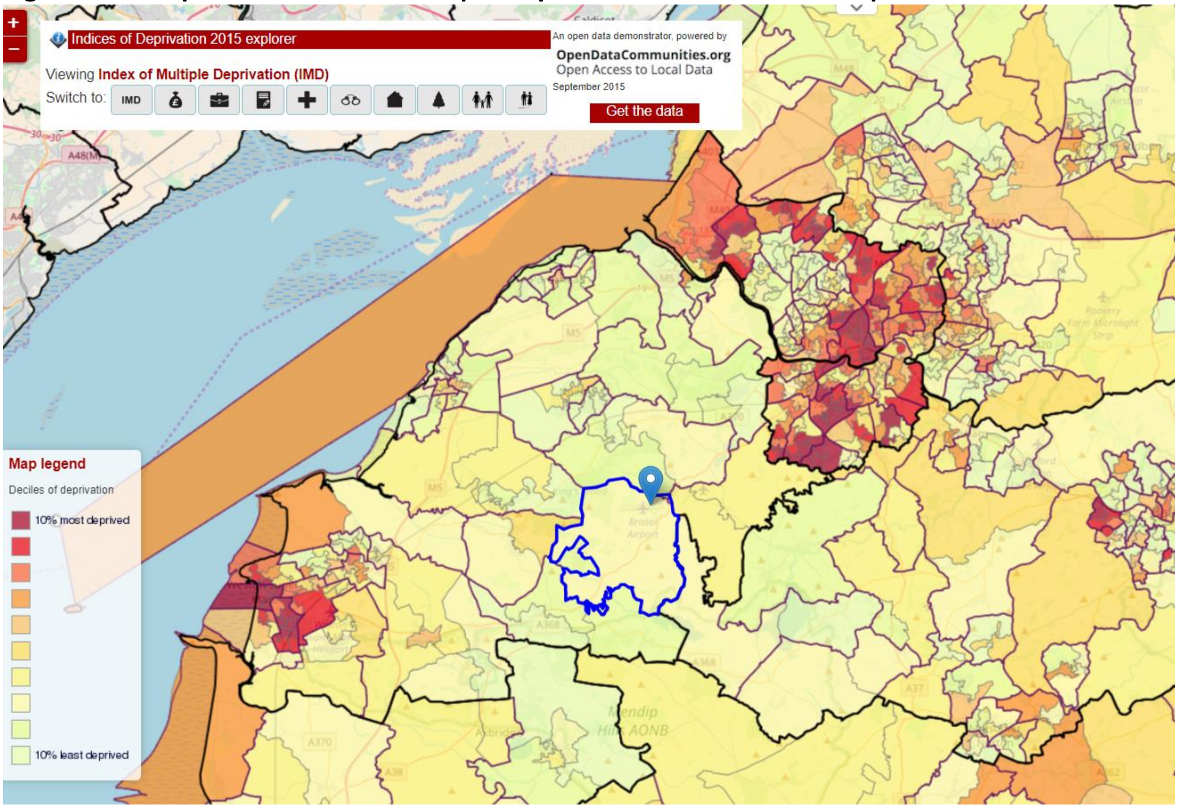
- income;
- employment;
- education and skills;
- health deprivation and disability;
- crime;

- barriers to housing and services;
- physical environment.

3.73 The IMD is a relative measure comparing the most deprived to the least deprived areas in England.

3.74 This graphic shows that, in the main, the local authorities in the West of England are relatively affluent, although there are clearly areas around Weston-super-Mare and the City of Bristol that suffer from relatively high levels of deprivation. The airport is well placed to support the regeneration of these areas by providing employment opportunities at a wide range of skill levels as it grows in the future. Clearly, the more the airport grows in terms of passenger throughput, the more opportunities it will offer.

Figure 3.3: Graphic of Indices of Multiple Deprivation around Bristol Airport

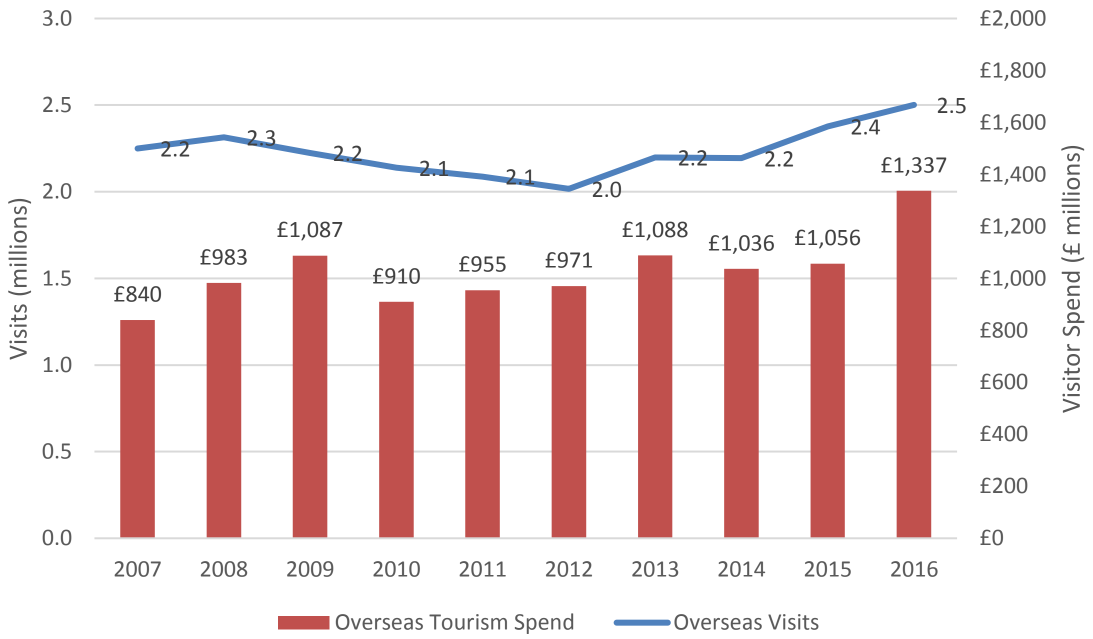


Source: Office for National Statistics.

3.75 One of the key strengths of the South West economy is tourism. The region offers a wide range of products and attractions including access to three national parks, some of Europe's best beaches, world class visitor attractions, historic cities and some of Britain's finest cuisine and food products.

3.76 **Figure 3.3** shows the number of international visitors to the South West over the last 10 years and also the value of tourism expenditure associated with those visits.

Figure 3.3: Volume and Value of International Tourism in the South West

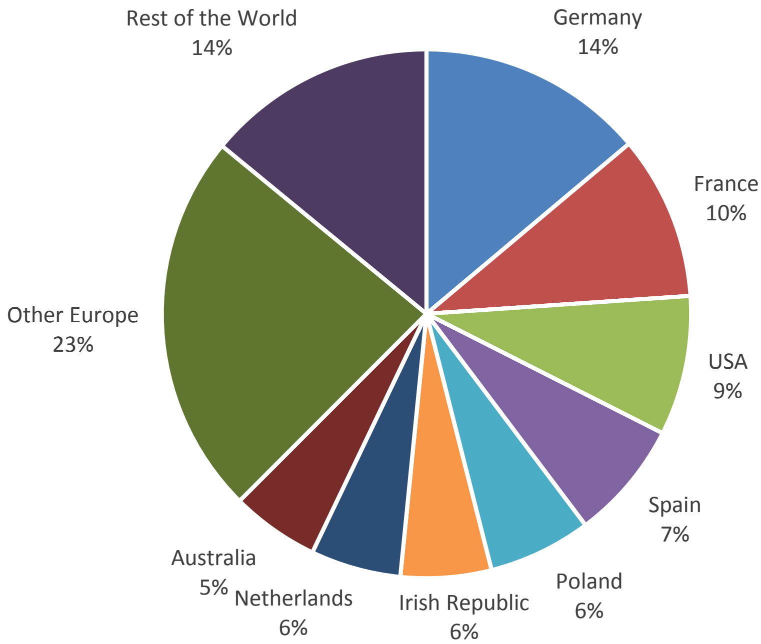


Source: VisitBritain.

3.77 Both visitor numbers and visitor spend have grown markedly in recent years. Around 2.5 million international visitors came to the South West in 2016 and spent around £1.3 billion. Visitors spend on average around £530 on each visit and stay around 8 nights.

3.78 **Figure 3.4** shows the main overseas markets for the South West. The largest markets by volume are Germany, France and the USA. Overall, Europe is the main market for inbound tourists. This pattern fits well with the airport's existing route network but also its aspirations in terms of long haul development.

Figure 3.4: Key Overseas Tourism Markets for the South West



Source: VisitBritain.

Conclusion

3.79 The economic strategy and planning policy relating to the airport is clearly supportive of airport growth and in particular development of Bristol Airport to expand to 12 mppa is clearly supported by the Government's *Making Best Use of Existing Capacity* policy paper.

3.80 The economic benefits that flow from aviation are widely recognised as making a significant contribution to the national, regional and local economy. Although the West of England is a relatively strong performer in economic terms overall, the airport's ability to support further jobs growth, as well as greater business productivity and inbound tourism, will make an important contribution to the region's continuing economic growth. Importantly, further development at the airport will also help to address the areas of deprivation that do exist in the area and will ultimately support regeneration.

4 CURRENT ECONOMIC IMPACT

Introduction

4.1 In this section, we set out our assessment of the current economic impact of Bristol Airport. Initially, we explain the analytical approach that we have taken and the key assumptions and data sources that we have used in our economic modelling work.

Economic Impact Analytical Framework

4.2 The economic impact of Bristol Airport has been analysed using a commonly used and widely accepted economic impact framework that is considered best practice in assessing the economic impact of airports. This analytical framework is consistent with that used for the socio-economic impacts assessment of BAL's planning application for expansion of Bristol Airport to 10 mppa.

4.3 This approach breaks down the way that the airport interacts with the economy into a series of effects. A range of economic impact techniques are then used to provide a quantitative assessment of the GVA and employment supported through each effect. This quantitative assessment has been supplemented by qualitative analysis around the wider impacts of the airport, particularly in areas where the airport's influence is likely to be less direct.

4.4 **Figure 4.1** sets out the economic impact framework used and explains the relationship between the different elements. The different effects can be defined as follows:

- 'economic footprint' effects reflect the role the airport plays in supporting GVA and employment purely through its operation as an economic activity. There are three sub-effects within this classification:
  - direct – employment and GVA supported by activities wholly or largely related to the operation of the airport or air services (passenger or cargo) and located at the airport or in the immediate vicinity. Essentially, this is the airport related economic activity that occurs at the site. It includes companies such as the airport company itself, airlines, handling agents, aircraft maintenance and engineering, terminal retailing and cleaning or car hire firms;
  - indirect – employment and GVA supported in the supply chain to the direct activities. The companies that generate the direct impacts need to buy goods and services from others to produce their output, who in turn have their own supply chains. These purchases in turn support jobs and GVA in a wide range of sectors, such as utilities and energy, advertising, manufacturing, professional services or construction. This effect is commonly measured using a multiplier;

  - induced – employment and GVA supported in the economy by the expenditure of wages and salaries earned in relation to the direct and indirect activities. People working in the companies in the direct and indirect effects spend money in their local economies. This expenditure injection also supports GVA and jobs. Any sector involved with consumer spending such as general retailing, food and beverages, leisure activities, utilities, banking and finance costs and insurance may benefit from this increase in expenditure. This effect is, again, commonly measured using a multiplier;

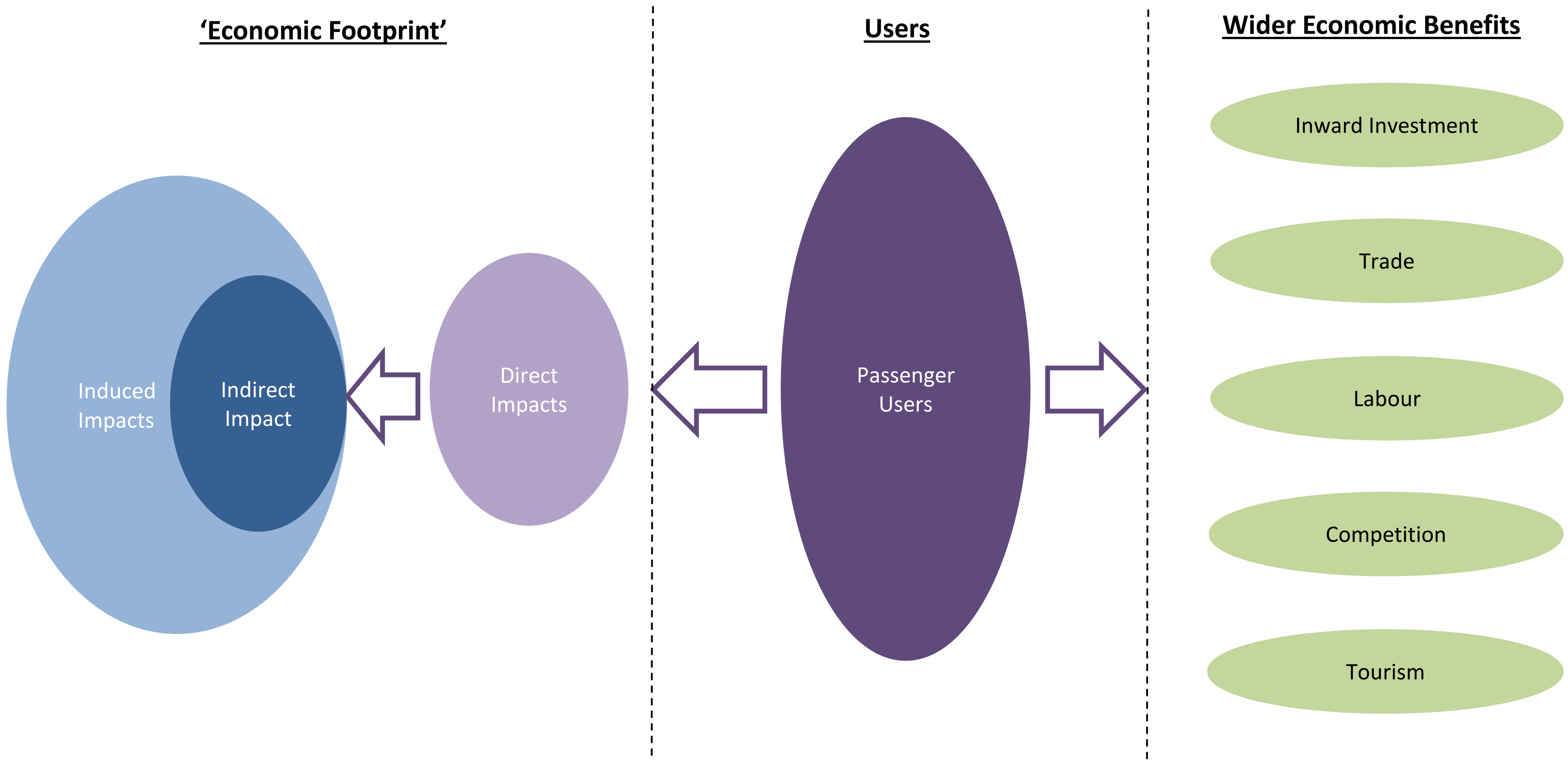
- Wider, or catalytic impacts reflect the benefits that accrue to the region around the airport through the provision of connectivity to businesses and to inbound travellers:

  - business productivity – employment and GVA supported by the role that the airport plays in enabling business travel and the movement of air freight, which in turn supports increased trade, increased inward investment, greater competition and better access to supply chains and knowledge sources. This is ultimately reflected in higher productivity in the surrounding economy. The sectors involved in these impacts are hard to identify but effects would tend to be concentrated in those with a strong international focus, either in terms of trade or investment. Some intelligence can be gained from examining CAA Passenger Survey data on business passengers and we consider this information in relation to Bristol Airport further below;

  - inbound tourism – employment and GVA supported by the airport's role in helping to bring new and additional visitors to the region. Expenditure by these visitors boosts economic activity and supports jobs and prosperity. The initial injection is in to the sectors that make up the tourism industry, notably hospitality and catering, leisure activities and transport. However, indirect and induced effects stemming from this injection will spread the impact across the economy.

4.5 The methodologies used to estimate the airport's economic footprint are well established and accepted. For example, this approach has been used in recent economic impact assessments of the Manchester Airport Group airports, London City Airport, Birmingham Airport, Newcastle Airport, Luton Airport and Edinburgh Airport. The quantification of the wider impacts of airports is a more recent development and a number of innovative approaches have been developed. Many of the airport economic assessments have included a quantitative assessment of wider impacts. Given that quantification of these benefits is an area where best practice is still evolving, the estimates of these particular effects should be considered from a broader perspective than those associated with the economic footprint of the airport. This should not be taken as suggesting that the wider impacts associated with airport growth are open to question. Their existence and the evidence base to support their existence and potential scale has been established for some time. It is simply that the techniques available for estimating them are not yet subject to the same level of precision.

Figure 4.1: Economic Impact Framework and Relationships



4.6 In terms of the geographical area of economic impact under consideration, as described in Section 1, we have considered the following study areas:

- North Somerset – the local authority district in which the airport is located and the relevant planning authority;
- the West of England – a sub-region that includes North Somerset, the City of Bristol, Bath & North East Somerset and South Gloucestershire. This area makes up the core of the airport's passenger catchment area, accounting for around 36% of total passengers, and is the functional economic area in which the airport is located;
- South West Region and South Wales – this is the broader region that the airport serves, accounting for around 93% of passenger traffic.

Assessing Bristol Airport's Current Economic Footprint

4.7 Airports are the geographic centres for the air transport industry. They are where the service is ultimately delivered to its end users, passengers or freight customers. However, airports are now about much more than simply loading passengers or freight on to an aeroplane. They are centres for the delivery of a wide range of ancillary goods and services that either directly support the delivery of air services or facilitate the broader demand for goods and services from passengers passing through the airport. As such, they are often major centres for employment and economic activity within the regions they serve and are diverse economies in their own right, offering employment opportunities in a wide range of sectors and at different skill levels.

4.8 The number of direct on-site employees at Bristol Airport in 2018 has been taken from survey work undertaken by BAL. It identified that around 3,960 people work on-site at the airport, which equates to around 3,480 full time equivalents (FTEs). The geographic distribution of employees in terms of residence has been taken from the Bristol Airport Staff Travel Plan 2017. The corresponding GVA impacts have been calculated using published information from on-site companies reports and accounts, factored to reflect presence at Bristol Airport where necessary.

4.9 The indirect and induced impacts of the airport have been calculated using a series of so-called multipliers. These multipliers are developed using a range of economic data on the nature of spending in supply chains and by consumers in the economy and the extent to which this expenditure is captured within the geographic area that is being considered. Developing multipliers is a complex exercise and a range of approaches can be used. In this case, we have used a technique based on the UK input-output tables. Input-output tables track spending relationships within the national economy and are based on extensive survey work undertaken by the Office for National Statistics. These tables provide information on the indirect and induced multipliers at a UK level. The latest version of these tables was published in early 2018 and examines data for 2014.

4.10 However, to be used at more local levels, adjustments need to be made to the coefficients within them to reflect the different sectoral make up of local and regional economies and the fact that such smaller economies are more reliant on other areas (within the UK or internationally) to provide the goods and services that they require. We have used a well-recognised and tested approach developed by A.T. Flegg of the University of the West of England and most recently set out in "*Estimating regional input coefficients and multipliers: The use of the FLQ is not a gamble*" (2013).

4.11 This approach uses specialised location quotients, which assess the level of relative concentration of an economic sector, to adjust the matrix of coefficients in the UK Input-output tables to reflect the different economic structure at a sub-regional level. The resulting adjusted input-output tables are then further adjusted to reflect the greater need for external trading relationships within areas at a sub-national level and in smaller economies. This approach is commonly used in undertaking economic impact assessments and has been adopted in relation to recent economic impact assessments of airports including Manchester, Stansted, East Midlands, Birmingham, Newcastle and Luton. The approach offers substantial advantages over a 'bottom up' methodology (as used in the economic impact assessment undertaken in support of expansion proposals to 10 mppa) in that does not require the collection of detailed data from companies on-site at the airport, which can be challenging given time pressures on respondents, and in reality, relevant data is not actually available and estimates often have to be made.

4.12 **Table 4.1** sets out our estimates of the direct, indirect and induced impacts of Bristol Airport in 2018 in the four study areas.

Table 4.1: Direct, Indirect & Induced Impacts of Bristol Airport in 2018

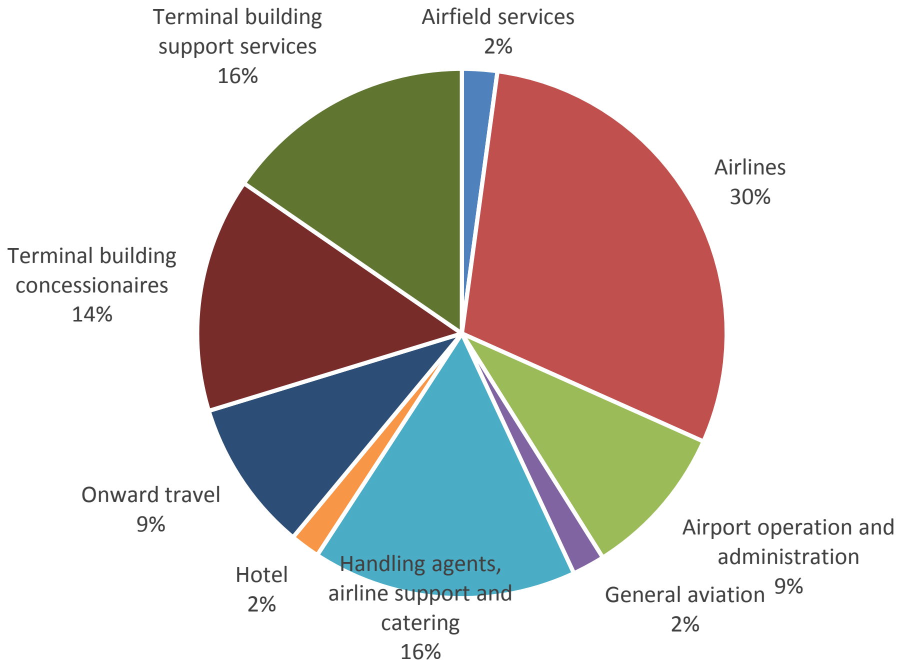
	North Somerset			*West of England*			*South West & South Wales*		
	GVA (£m)	*Jobs*	*FTEs*	*GVA (£m)*	*Jobs*	*FTEs*	*GVA (£m)*	*Jobs*[1]	*FTEs*
Direct	£200	1,300	1,150	£260	2,900	2,550	£300	3,900	3,425
Indirect & Induced	£60	1,100	875	£170	2,900	2,350	£310	6,050	4,775
Total Economic Footprint	***£260***	***2,400***	***2,025***	***£430***	***5,800***	***4,900***	***£610***	***9,950***	***8,200***

[1] The number of direct jobs supported in the South West Region and South Wales does not equal the total number of jobs on-site as a small number of employees live outside this area.

Source: York Aviation.

4.13 **Figure 4.2** sets out the structure of onsite employment at Bristol Airport in 2018. This structure is fairly typical of that at most UK airports. Airlines make up the largest part of employment (around 30% of FTEs). Both handling agents and terminal support services are also significant, accounting for around 16% of FTEs each. Terminal concessions also make up around 14% of on-site employment.

Figure 4.2: The Structure of Onsite Employment at Bristol Airport in 2015

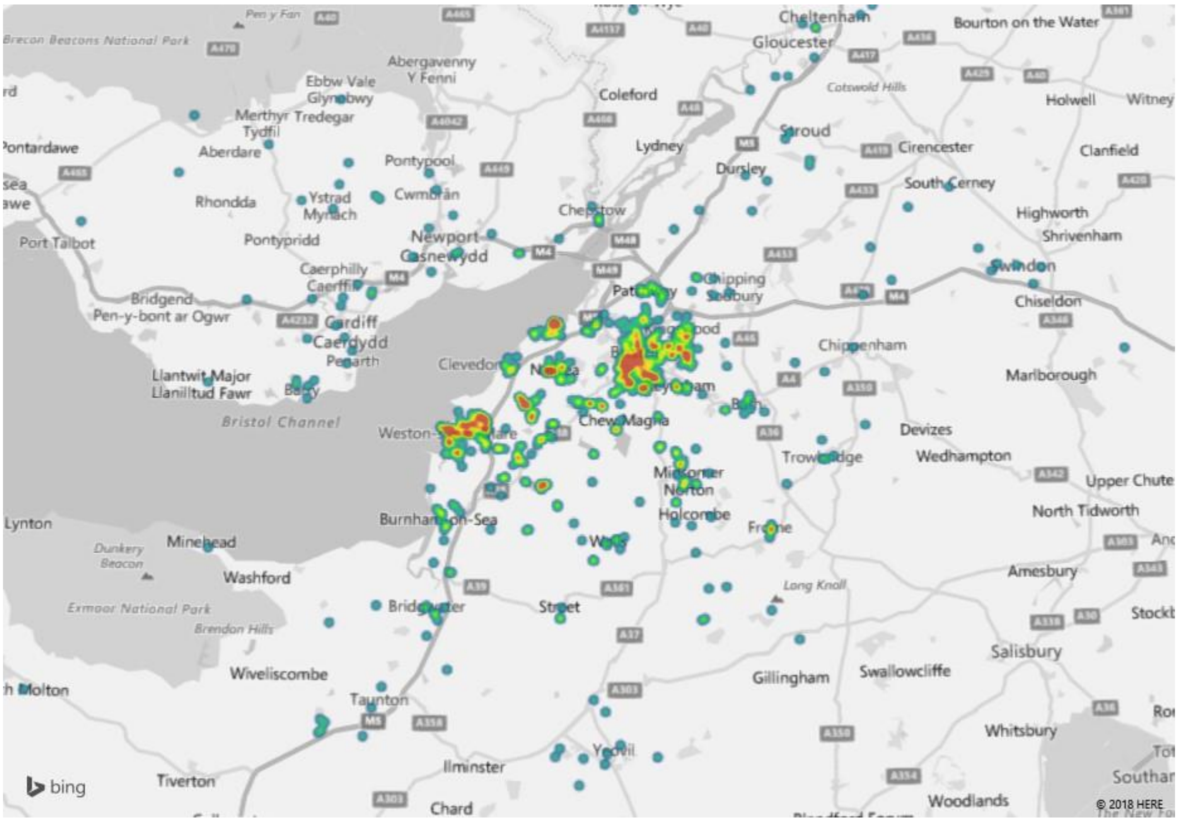


Source: Bristol Airport and York Aviation Analysis.

4.14 Whilst no specific analysis is available of occupational grouping by skill level, experience from other UK airports, such as Manchester, Stansted, East Midlands, Birmingham, Newcastle, Luton and Leeds Bradford suggests that the majority of direct jobs are likely to require either basic skills or supervisory skills at the equivalent of NVQ Levels 1 & 2, along with a range of managerial jobs at a higher level.

4.15 The distribution of direct economic effects is influenced by the pattern of residence of employees at the airport site. The Bristol Airport Workplace Travel Plan provides an insight of this distribution; the distribution of on-site employees based on this survey is represented in **Figure 4.3**.

Figure 4.3: Distribution of On-site Employees at Bristol Airport



Source: Bristol Airport Staff Travel Plan 2017

4.16 The direct employment impacts of Bristol Airport are spread across the South West and South Wales. There are particular concentrations in North Somerset and Bristol, with Weston-super-Mare and South Bristol featuring particularly.

Wider Impacts

Productivity

4.17 The role that the airport plays in supporting and facilitating prosperity in other sectors is at the very centre of its economic importance in a prosperous and developed country such as the UK. The stakeholders consulted as part of this work emphasised the role that the airport plays in supporting the international economy.

4.18 The connectivity provided by Bristol Airport enables the flow of trade, investment, people and knowledge that are central to globally successful regions:

- ✈ companies based in a region are able to easily access international markets, either to seek out new business opportunities or to build on and solidify existing relationships;

- it enables companies to seek out better or cheaper inputs to their supply chains;
- air services enable inward investors to effectively manage their activities within the region, thereby making new investments or expansion more attractive. Conversely, it also enables global businesses based in the region to manage their overseas interests, promoting efficiency and profitability;
- by being better connected, the businesses in the region are exposed to greater competition, to new ideas and a greater knowledge base, which drives productivity;
- in a labour market which is increasingly global, connectivity is an increasingly important quality of life factor. Air services enable individuals to visit friends and relatives overseas easily and make the region a more attractive place to live and work.

4.19 Our consultations and review of policy documents has identified that Bristol Airport is widely recognised by local stakeholders as an important driver of growth and a key regional asset. In particular, a number highlighted the growing international 'feel' of Bristol and emphasised the importance of the airport in supporting its international status.

> *"Bristol Airport is heavily used by people involved with the Hinkley Point C project. EDF Energy's Engineering Centre is based in France and so there are a large number trips and to and from this base either for meetings in Bristol or at the site. We also have potential suppliers coming to the site from all over the world, many of whom come through Bristol Airport. The airport plays an important role for us, enabling different parts of what is a large and highly complex project to meet and interact easily and efficiently. Further expansion of the airport and its route network can only increase the role it plays"*
> David Eccles, Head of Stakeholder Engagement, Hinkley Point C, EDF Energy

4.20 The West of England is already home to a number of large companies with international reach, including high-tech companies such as Oracle and Hewlett Packard, and aerospace companies such as Airbus, Rolls Royce, and GKN. The Hinkley Point nuclear power station development in Somerset, and the nuclear industry more broadly, is also widely seen as a critical component of future regional economic growth, which will have a strong international component given its ownership. Other major companies which are likely to require air connectivity would include GE Oil & Gas, OVO Energy, Hargreaves Lansdowne, Yeo Valley Group and Tata Technologies Europe. Stakeholders confirmed the role that the airport plays in securing inward investment. In most cases the airport is not why companies locate in the area but it is important in giving the confidence to do so.

4.21 During our consultations stakeholders cited particularly the roles of the Amsterdam and Dublin hub services in supporting global connectivity, with the use of Amsterdam by high tech firms for access to US markets coming out particularly strongly. The connections to Bordeaux and Hamburg were highlighted in terms of their importance for the aerospace sector in the region. The existing connections to Southern France, Germany and Spain were also cited as being important from the perspective of the financial services and legal sectors.

4.22 **Table 4.2** shows the GVA and employment impact on the three study areas in 2018 from productivity benefits associated with passenger business travel. These impacts have been calculated using a statistical relationship originally developed by Oxford Economics as part of research undertaken for Transport for London around the Airports Commission process[38]. This relationship correlates the level of business air travel and air freight from an area to total factor productivity in the economy. It identified an econometric relationship whereby a 10% increase in combined business air travel and air freight would result in a 0.5% increase in productivity in the economy.

> *"Bristol Airport is undoubtedly a very important driver for the West of England economy due to the connectivity it provides. It is a key tool in attracting overseas foreign businesses to operate and invest in the West of England as it allows efficient use of time for passengers and is vital for international tourism. It is also helps support the increasingly international market for talent in Bristol, which includes growing numbers of academics and people working in professional services. There is a direct link between our economic success and competitiveness and our connectivity to global markets."*
> James Durie, Chief Executive Bristol Chambers of Commerce & Initiative and Executive Director of Business West

4.23 York Aviation has developed a model of passenger behaviour that uses generalised cost modelling to estimate the level of business travel from each of the study areas that is solely reliant on Bristol Airport. In other words, these business passengers would not fly if Bristol Airport did not exist. It examines the patterns of travel for business passengers from CAA Passenger Survey and OAG data, identifying surface origins, potential alternate airport options, frequencies available, direct and indirect routings, and air fares. It ultimately assesses the generalised cost of travelling via Bristol Airport and the next best alternate to complete the same journey. A price elasticity based on the Department for Transport's aviation forecasts research[39] is then applied to the price differential to identify the number of passengers that would no longer fly if they are forced to use the alternate to Bristol. The results of this analysis can then be used to estimate the role that Bristol Airport plays in supporting productivity in a given study area using the Oxford Economics relationship described above.

4.24 This model has been developed over a number of years and has been used in a wide range of more recent economic impact assessments, including York Aviation's recent work on Birmingham Airport, Leeds Bradford Airport, the MAG airports, Newcastle Airport and in relation to London City Airport's City Airport Development Plan planning application.

[38] Impacts on the UK Economy through the Provision of International Connectivity – Oxford Economics for Transport for London (2013).
[39] UK Aviation Forecasts – Department for Transport (2017).

Table 4.2: Productivity Impacts from Bristol Airport's Business Passenger Travel on GVA and Employment in 2018

	North Somerset			*West of England*			*South West & South Wales*		
	GVA (£m)	*Jobs*	*FTEs*	*GVA (£m)*	*Jobs*	*FTEs*	*GVA (£m)*	*Jobs*	*FTEs*
Productivity Impacts	£90	600	450	£290	2,250	1,850	£780	8,400	6,625

Source: York Aviation.

4.25 In relation to estimating the impact on employment from business travel, the nature of the effect is complex. Business travel productivity effects are primarily an influence on the level of GVA within a study area. They reflect the fact that businesses can operate more effectively from within Bristol's catchment area with the airport in place. Equally, increased inward investment and trade and greater prosperity are ultimately likely to drive some increase in employment within a study area over the longer term. We have therefore assumed that the observed increase in GVA stemming from increased business travel is a mixture of direct, indirect and induced impacts and that the impacts in the supply chain and from expenditure of wages and salaries does result in new job creation.

4.26 We have also considered the sectors in the economy that are likely to be the main beneficiaries of the connectivity offered by Bristol Airport. In **Table 4.3** we have set out an analysis of business users of Bristol Airport based on the CAA Passenger Survey 2015. This provides an indication of the types of sectors that are likely to benefit from the productivity boost provided by the airport's connectivity.

4.27 Business use of air services at Bristol Airport is spread across a wide range of sectors. However, there is a notable concentration in advanced manufacturing, business and professional services and public services. This reflects some of the core strengths of the South West and South Wales region and particularly the international elements of the economy. It demonstrates how the airport is supporting key sectors of the economy and sectors that offer high added value.

Table 4.3: % of Business Passengers at Bristol Airport by Economic Sector

Sector	*Percent*
Advanced Manufacturing	12%
Business & Professional Services	12%
Public Services	10%
Energy & Utilities	7%
Leisure Services	7%
Other Manufacturing	7%
IT & Communications	6%
Transport Services	6%
Education	6%
Other	5%
Retail Sales	5%
Construction	4%
Life Sciences	4%
Wholesale Sales	3%
R&D	3%
Personal Services	2%
Creative Industries	2%
Agriculture	1%

1 The sectors presented here represent those provided as responses to questions from the CAA Passenger Survey. They are not defined by Standard Industrial Classification (SIC) or similar and there may be crossover between the sectors in some places as they reflect respondents' own opinions.

Source: York Aviation analysis of CAA Passenger Survey 2015.

Inbound Tourism

4.28 Stakeholders from regional tourism organisations consulted as part of this study generally feel that the visitor economy in the West of England is currently relatively healthy, aided by sterling being weak at the moment, which has led to an influx of foreign visitors. As highlighted in Section 3, the overseas visitor numbers recorded for the South West reflect this trend. The airport plays an important role in this by providing easy access to overseas markets, notably Germany, Spain, the Irish Republic, Italy and France. The expansion of the route network that has been seen over recent years was cited as a particularly strong driver of growth in the tourism sector. The development of the airport is very much seen as part of a package of measures around the tourism product in the West of England that will help it fulfil its potential.

> *"The expansion of European routes from Bristol in recent years has had a big impact on the tourism economy. Bristol as a tourism destination has not yet reached its potential and the airport can be an important part of seeing that it does"*
> *John Hirst, Chief Executive – Destination Bristol*

4.29 **Table 4.4** shows the GVA and employment impact on the study areas stemming from inbound tourism. These estimates have been calculated by examining the number of visitors to the relevant study areas that fly in via Bristol Airport. This is then combined with data from VisitBritain on the average spend per trip to provide an estimate of the consumer expenditure injection in to the economy. This is then worked through to an impact on GVA and employment based on information within the Annual Business Survey and Business Register and Employment Survey from the Office for National Statistics and indirect and induced effect multipliers calculated in the same way as for the airport's economic footprint.

Table 4.4: Inbound Tourism Impacts on GVA and Employment in 2018

	North Somerset			*West of England*			*South West & South Wales*		
	GVA (£m)	*Jobs*	*FTEs*	*GVA (£m)*	*Jobs*	*FTEs*	*GVA (£m)*	*Jobs*	*FTEs*
Inbound Tourism Impacts	£5	75	50	£90	1,475	1,200	£260	5,125	4,050

Source: York Aviation.

4.30 At this point it is also important to consider the potential impact of UK passengers travelling out from Bristol in terms of their effect on GVA and employment. Commonly, it is assumed that outbound passengers are a negative in terms of the economic impact of airports as these passengers spend money abroad (or in other parts of the UK) that might otherwise be spent within the study area. However, there are a number of issues that need to be considered further that suggest the actual situation is more complex:

- the differing extent of airport substitutability for inbound and outbound passengers – for visitors using Bristol Airport to come to the South West region, their choice is not primarily about which airport they use to access the region but about whether to visit the South West or one of many other options elsewhere. They will likely either come to the region via Bristol Airport, as the known gateway to the area, or not come at all. For UK outbound resident passengers, the choice is different. If they want to travel (and the extent of outbound demand from the UK and propensity to fly would suggest that this is the case) they will have to use an airport and if Bristol Airport were not to be available they would in most cases simply travel to the next nearest airport option. This behaviour is driven both by the lack of alternatives to air travel and by a greater knowledge of the available airport options. Ultimately, this means that UK resident passengers will in the great majority of cases still fly if Bristol Airport were not available to them and, as a consequence, the loss of consumer expenditure in the domestic economy from these outbound travellers would occur with or without Bristol Airport. Therefore, any adverse effect on outbound travel from Bristol Airport is likely to be limited. Ultimately, this effect is reflected in the fact that other airports, notably Heathrow and Gatwick, both continue to have significant market shares in Bristol Airport's catchment;

- outbound travel supports economic activity in the UK economy as well - outbound travel from the UK does in reality actually support significant GVA and employment in the domestic economy as travellers buy goods and services before they leave the country. Research undertaken by the Centre for Economics and Business Research on behalf ABTA identified that the outbound travel sector makes a contribution of around £28.3 billion to the UK economy and supports around 435,000 jobs[40]. Any impact on the study area economy from tourism expenditure overseas would need to be offset by the corresponding effect on the outbound travel sector in the UK;

- outbound expenditure would necessarily be retained within the region - it is far from clear whether the expenditure lost via people travelling overseas would actually be injected into the UK economy if they were not to travel. Discretionary expenditure, such as that involved in overseas leisure travel, is quite likely to be used for the purchase of high value consumer goods, which in a UK context, are very often imports and consequently the great majority of the economic value might still be lost overseas. Alternatively, discretionary expenditure such as that being considered here is ultimately optional. It may well not be spent at all but instead saved, which again would not support additional GVA or employment in the UK;

- outbound travel has positive economic benefits - the potential positive impacts of outbound travel on GVA would also need to be considered. Access to air travel for leisure activities is an increasingly important factor in attracting talented individuals to locate within an area. These individuals help drive productivity growth in the economy, thereby increasing GVA.

4.31 These issues suggest that in reality, the potential loss of GVA and employment resulting from outbound travel from Bristol Airport is in all likelihood relatively limited. Making estimates of this limited effect would be highly complex and there are elements which would require significant numbers of assumptions to be applied. We have not therefore sought to produce estimates of this effect here. Instead, we believe that the impacts from outbound tourism should instead be seen as small potential offsetting effect on the inbound tourism benefits. This is ultimately consistent with the Roger Tym's economic impact assessment for the 10 mppa application.[41] This research did make an estimate of the outbound effect but did not include this estimate within its assessment of the economic impacts.

Total Impact

4.32 **Table 4.5** shows the total impact of Bristol Airport within the study areas in 2018. This provides the current baseline, which is then used in the following section to project forward economic impacts as the airport grows beyond the permitted passenger cap from 10 mppa to 12 mppa.

[40] The economic value of outbound travel to the UK economy – a report for ABTA – The Travel Association by CEBR (June 2015).
[41] Bristol International Airport – Economic Impact Report – Roger Tym and Partners (2009).

4.33 Within North Somerset in 2018, we estimate that the airport's economic footprint supported around 2,025 full time equivalent (FTE) jobs and around £260 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 2,525 FTEs and £355 million of GVA.

4.34 Within the West of England in 2018 (which includes North Somerset), we estimate that the airport's economic footprint supported around 4,900 FTEs and around £430 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 7,950 FTEs and £810 million of GVA.

4.35 Within the South West region and South Wales (which includes the West of England) in 2018, we estimate that the airport supported around 8,200 FTEs and around £610 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 18,875 FTEs and £1.7 billion of GVA.

Table 4.5: Total Economic Impact of Bristol Airport in 2018 (£2018 prices)

		Direct	Indirect & Induced	Economic Footprint	Productivity	Tourism	Wider Impacts	**Grand Total**
North Somerset	GVA (£m)	£200	£60	*£260*	£90	£5	£95	**£355**
	Jobs	1,300	1,100	*2,400*	600	75	675	**3,075**
	FTEs	1,150	875	*2,025*	450	50	500	**2,525**
West of England	GVA (£m)	£260	£170	*£430*	£290	£90	£380	**£810**
	Jobs	2,900	2,900	*5,800*	2,250	1,475	3,725	**9,525**
	FTEs	2,550	2,350	*4,900*	1,850	1,200	3,050	**7,950**
South West & South Wales	GVA (£m)	£300	£310	*£610*	£780	£260	£1,040	**£1,650**
	Jobs	3,900	6,050	*9,950*	8,400	5,125	13,525	**23,475**
	FTEs	3,425	4,775	*8,200*	6,625	4,050	10,675	**18,875**

Source: York Aviation.

Conclusions

4.36 The analysis presented in this section establishes that Bristol Airport is a significant economic driver within North Somerset, the West of England and the South West region and South Wales. The operation of the airport itself supports significant GVA and employment and it also supports substantial benefits in the wider economy by facilitating travel for business passengers and for inbound visitors.

5 ECONOMIC IMPACT OF INCREASING CAPACITY TO 12 MPPA

Introduction

5.1 In this section, we consider the potential impact of Bristol Airport in the future under two scenarios. The first scenario is the future baseline position in which the airport grows to its consented capacity of 10 mppa but is then unable to grow further. The second scenario assumes that the airport is able to grow to 12 mppa, in line with BAL's proposals. The difference between the two scenarios represents the economic impact, in GVA and employment terms, of the increased capacity at 12 mppa.

5.2 Below, we have set out our approach to projecting the airport's economic impact of increasing capacity to 12mppa and some of the key assumptions that have driven our analysis.

Approach and Key Assumptions

5.3 Our estimates of the future impact of the airport are governed by a number of key assumptions, notably in relation to:

- ✈ future passenger growth at the airport – ultimately the GVA supported by the airport is a reflection of the economic activity generated, which is, in turn, reflected in the level of passenger traffic. Growth in demand indicators at the airport will be reflected in growth in the airport's impact on the economy. We have used the airport's future passenger and movement forecasts as set out in Chapter 3 of the Environmental Statement, along with estimates of the terminal floor areas to drive the GVA generated by different activities at the airport. We set out the passenger forecasts assumed in more detail below;

- labour productivity – productivity gains on-site at the airport will determine the extent to which future growth in the level of GVA supported translates through into new job opportunities. Using historic data on employment at the airport, we have examined how individual employment segments have reacted to growth at the airport and developed a series of elasticities[42] that reflect employment productivity growth for use moving forward. The implied onsite productivity growth is between 1.1% and 1.3% per annum, depending on the growth scenario. Given that Bristol Airport already displays high productivity levels, this is broadly in line with the assessment made within InterVISTAS research for ACI EUROPE on the economic impact of airports in Europe[43]. This research identified a forward productivity growth rate of around 1.7% per annum but starting from a considerably current lower productivity position. Similarly, growth in labour productivity in the wider economy will determine the extent to which increased GVA away from the airport site will increase employment opportunities;

- the nature of passenger demand growth – the extent to which future growth delivers more business travellers or more inbound travel will influence the extent to which the airport delivers wider benefits in the future. Again, we have based our assumptions in this area around the passenger forecasts produced by the airport. We have considered the structure of passenger demand within each market segment set out in the airport's passenger forecasts currently in terms of the purpose of travel (business or leisure) and the residence of passengers (UK or foreign). This structure has then been applied to the different passenger demand segments as they grow overtime. This enables the changing passenger mix in the forecasts over time to be reflected in terms of the overall passenger structure at the airport.

Passenger Forecast Scenarios

5.4 As described above, the future economic projections are based on future passenger forecasts developed by BAL and subsequently verified by Mott McDonald. These have been used to define two scenarios:

- Future Baseline Scenario – this sees the airport grow in line with the airport's forecasts through to 2021 when it reaches its current consented capacity of 10 mppa. At this point, the airport ceases to grow and remains at 10 mppa into the future[44];

[42] In economics, elasticities are used to measure how one variable changes as the result of a change in another. For instance, a price elasticity of demand measures the extent to which the demand for a product will change as a result of a change in price. Here we have estimated the extent to which employment in different activities will change as a result of a change in passenger numbers or movements or similar at Bristol Airport.

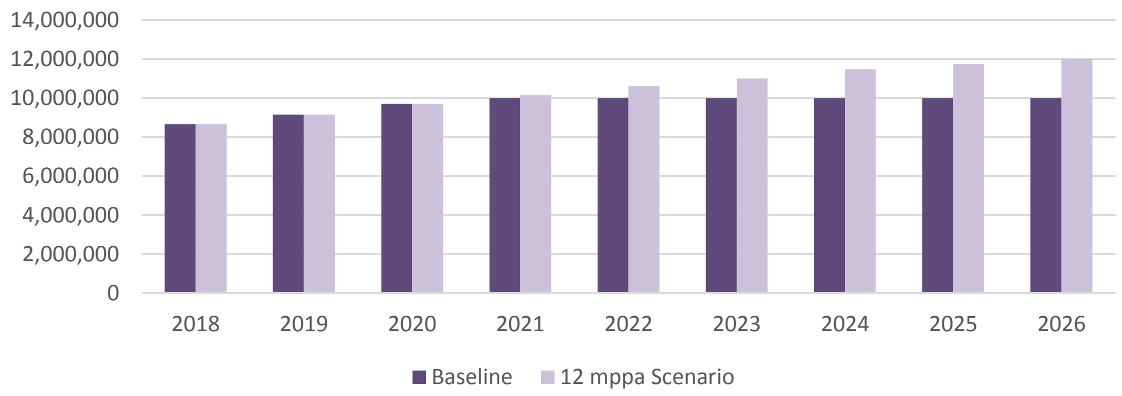
[43] Economic Impact of European Airports: A Critical Catalyst to Economic Growth – InterVISTAS for ACI EUROPE (2015).

[44] It should be noted that if the airport is artificially constrained at 10 mppa, there is some potential for stagnation and a decline in passenger numbers. This would reduce the economic impact supported in the Future Baseline Scenario and hence increase the impact of expansion to 12 mppa. This possibility has not, however, been considered in detail.

- 12 mppa Scenario – this sees the airport grow in line with the forecasts through to 2026 when it reaches 12 mppa. The airport is then capped at 12 mppa reflecting the new capacity to be consented under the current planning application.

5.5 These two scenarios are set out in **Figure 5.1** below. This demonstrates that until 2021 there is no difference in passenger growth at the airport and hence there is no difference in the economic impact delivered. Beyond 2021, there are an increasing number of potential passengers that are no longer able to use Bristol Airport as they cannot be accommodated with the current consented capacity of 10 mppa. This reduces the GVA and employment impacts that the airport can support in the economies that surround it.

Figure 5.1: Air Passenger Forecasts for Bristol Airport



Source: Bristol Airport Limited.

Estimates of Future Economic Impact

5.6 Our analysis has produced detailed estimates of the future impact of the airport under the Future Baseline and 12 mppa scenarios for the year 2026, when the airport is expected to reach 12 mppa.

5.7 The total number of people employed on site increases from around 3,950 jobs (3,500 FTEs) in 2018 to 4,400 jobs (3,875 FTEs) in the future baseline scenario or 5,215 jobs (4,575 FTEs) at 12 mppa.

5.8 The economic impacts of the two scenarios are set out in **Tables 5.1** and **5.2** respectively.

Table 5.1: The Economic Impact of Bristol Airport in 2026 – Future Baseline Scenario (10 mppa)

		Direct	Indirect & Induced	Economic Footprint	Productivity	Tourism	Wider Impacts	**Grand Total**
North Somerset	GVA (£m)	£240	£70	£310	£110	£5	£115	**£425**
	Jobs	1,450	1,200	2,650	650	100	750	**3,400**
	FTEs	1,275	950	2,225	525	75	600	**2,825**
West of England	GVA (£m)	£310	£200	£510	£360	£100	£460	**£970**
	Jobs	3,225	3,175	6,400	2,500	1,650	4,150	**10,550**
	FTEs	2,825	2,575	5,400	2,050	1,325	3,375	**8,775**
South West & South Wales	GVA (£m)	£360	£370	£730	£950	£320	£1,270	**£2,000**
	Jobs	4,350	6,600	10,950	9,325	5,700	15,025	**25,975**
	FTEs	3,825	5,225	9,050	7,375	4,500	11,875	**20,925**

Source: York Aviation.

Table 5.2: The Economic Impact of Bristol Airport in 2026 – 12 mppa Scenario

		Direct	Indirect & Induced	Economic Footprint	Productivity	Tourism	Wider Impacts	**Grand Total**
North Somerset	GVA (£m)	£290	£90	£380	£130	£5	£135	**£515**
	Jobs	1,725	1,450	3,175	775	100	875	**4,050**
	FTEs	1,525	1,150	2,675	625	75	700	**3,375**
West of England	GVA (£m)	£380	£240	£620	£430	£130	£560	**£1,180**
	Jobs	3,800	3,800	7,600	3,025	1,975	5,000	**12,600**
	FTEs	3,350	3,100	6,450	2,450	1,600	4,050	**10,500**
South West & South Wales	GVA (£m)	£430	£440	£870	£1,140	£380	£1,520	**£2,390**
	Jobs	5,150	7,925	13,075	11,200	6,850	18,050	**31,125**
	FTEs	4,525	6,275	10,800	8,850	5,400	14,250	**25,050**

Source: York Aviation.

The Economic Impact of Growth to 12 mppa

5.9 As we have described above, the economic impact of an additional 2 mppa is equal to the difference in GVA and employment impact between the 10mppa and 12mppa scenarios. These GVA and employment impacts are set out in **Table 5.3** below.

Table 5.3: The Economic Impact of Bristol Airport in 2026 – Impact of the 12 mppa Planning Consent

		Direct	Indirect & Induced	Economic Footprint	Productivity	Tourism	Wider Impacts	**Grand Total**
North Somerset	GVA (£m)	£50	£20	£70	£20	£0	£20	**£90**
	Jobs	275	250	525	125	0	125	**650**
	FTEs	250	200	450	100	0	100	**550**
West of England	GVA (£m)	£70	£40	£110	£70	£30	£100	**£210**
	Jobs	575	625	1,200	525	325	850	**2,050**
	FTEs	525	525	1,050	400	275	675	**1,725**
South West & South Wales	GVA (£m)	£70	£70	£140	£190	£60	£250	**£390**
	Jobs	800	1,325	2,125	1,875	1,150	3,025	**5,150**
	FTEs	700	1,050	1,750	1,475	900	2,375	**4,125**

Source: York Aviation.

5.10 This analysis demonstrates that enabling Bristol Airport to grow by a further 2 mppa by 2026 will have a significant beneficial impact on the economies around it. In total, in each of the study areas growth at the airport would support:

- North Somerset – the economic footprint of the airport will be around £70 million larger in GVA terms and support around 525 additional jobs (450 FTEs). When wider benefits are also included, this increases to a total of £90 million larger in GVA terms and supports around 650 additional jobs (550 FTEs);

- West of England - the economic footprint of the airport will be around £110 million larger in GVA terms and support around 1,200 additional jobs (1,050 FTEs). When wider benefits are also included, this increases to a total of £210 million larger in GVA terms and supports around 2,050 additional jobs (1,725 FTEs);

- South West & South Wales - the economic footprint of the airport will be around £140 million larger in GVA terms and support around 2,125 additional jobs (1,750 FTEs). When wider benefits are also included this increases to a total of around £390 million larger in GVA terms and supports around 5,150 additional jobs (4,125 FTEs).

5.11 It should of course be recognised that Bristol Airport will only deliver this level of additional benefits once its throughput reaches 12 mppa. Before that, the number of additional passengers handled above the current 10 mppa consent will be lower and hence the additional benefits will be lower. Therefore, in **Table 5.4** we have set out the estimated additional GVA impacts from the 12 mppa consent over the 10 year period from 2018 expressed as a present value, discounted at the HM Treasury's standard Green Book discount rate of 3.5%.

Table 5.4: Present Values of Additional GVA Benefits from the 12 mppa Planning Consent in the 10 year period after 2018

	Economic Footprint	*Wider Benefits*	*Total*
North Somerset	£247	£71	£318
West of England	£388	£353	£742
South West & South Wales	£494	£883	£1,377

Source: York Aviation.

5.12 This analysis demonstrates that the granting of planning consent for growth to 12 mppa would enable Bristol Airport to deliver:

- £318 million in additional GVA benefits in North Somerset over the next 10 years;
- £742 million in additional GVA benefits in the West of England over the next 10 years;
- £1.4 billion in additional GVA benefits in the South West & South Wales over the next 10 years.

Construction Impacts

5.13 In addition to the GVA and employment that will be supported by the operations of the airport as it grows in the future, additional GVA and employment will be supported by the construction of the airport infrastructure required to enable the airport to reach 12 mppa. This boost to the economy is, of course, transitory but it is nevertheless a benefit in each of the eight years during which construction is expected to take place.

5.14 We have estimated the GVA and employment impacts associated with the construction phase based on:

- construction costs by year provided by BAL;
- the ratio of GVA to output for the construction industry in the South West taken from the Annual Business Survey 2017 from the Office for National Statistics (ONS);
- the estimated GVA per job in the South West from the Annual Business Survey and the Business Register and Employment Survey, again from ONS;

- indirect and induced multipliers for the construction industry in each of our study areas based on the methodology described above for other multipliers;

- an assumption that the distribution of construction employment in terms of residence will be similar to that of the on-site companies at the airport. Given the relative scale and duration of the construction programme compared to other projects such as, for instance Hinkley Point or the third runway at Heathrow, it is unlikely that the development will result in significant labour being sourced outside of the region around the airport. We would envisage the relevant construction firms seeking to source contractors sub-regionally to enable efficient delivery. This would suggest that a labour residence distribution similar to that of the airport is reasonable.

5.15 In **Table 5.5** we set out our estimates of the GVA and employment associated with the construction phase for each of our study areas.

5.16 The GVA and employment supported in any given year varies considerably, reflecting the profile of construction expenditure through to the point at which the airport is forecast to be handling 12 mppa. The peak year is 2025 but there is also significant activity in 2020, 2024 and 2026. As with operational benefits, the broader the geographic area the more benefits that are captured.

5.17 Over the period to 2026, construction of the infrastructure to enable 12 mppa at Bristol Airport will support:

- £39 million in additional GVA (discounted) and 390 job years of employment (345 FTE years) in North Somerset;

- £52 million in additional GVA (discounted) and 995 job years (885 FTE years) of employment in the West of England;

- £71 million in additional GVA (discounted) and 1,665 job years (1,450 FTE years) of employment in the South West and South Wales.

Table 5.5: GVA and Employment Impacts Associated with Construction of the 12 mppa Infrastructure

		2019	2020	2021	2022	2023	2024	2025	2026	Discounted Total GVA[1] / Total Job Years
North Somerset										
GVA (£m)	Direct	£1	£4	£2	£0	£0	£5	£8	£3	£20
	Indirect & Induced	£1	£2	£1	£0	£0	£2	£3	£1	£8
	Total	*£2*	*£5*	*£3*	*£0*	*£1*	*£6*	*£11*	*£5*	*£28*
Jobs	Direct	5	20	10	0	0	20	35	15	105
	Indirect & Induced	10	30	15	5	5	35	60	25	185
	Total	*15*	*45*	*25*	*5*	*5*	*55*	*95*	*40*	*285*
FTEs	Direct	5	15	10	0	0	20	35	15	100
	Indirect & Induced	10	25	10	0	5	30	50	20	150
	Total	*15*	*40*	*20*	*5*	*5*	*50*	*85*	*35*	*255*
West of England										
GVA (£m)	Direct	£2	£5	£2	£0	£1	£6	£10	£4	£24
	Indirect & Induced	£1	£3	£2	£0	£0	£4	£6	£3	£16
	Total	*£3*	*£8*	*£4*	*£1*	*£1*	*£9*	*£16*	*£7*	*£40*
Jobs	Direct	25	75	40	5	10	85	150	65	455
	Indirect & Induced	20	55	30	5	5	65	110	45	335
	Total	*40*	*125*	*65*	*10*	*15*	*150*	*260*	*110*	*775*
FTEs	Direct	25	70	35	5	10	80	140	60	425
	Indirect & Induced	15	45	25	5	5	50	90	40	275
	Total	*35*	*115*	*60*	*10*	*15*	*135*	*235*	*100*	*705*
South West & South Wales										
GVA (£m)	Direct	£2	£5	£3	£0	£1	£6	£11	£5	£27
	Indirect & Induced	£2	£6	£3	£1	£1	£7	£12	£5	£30
	Total	*£4*	*£11*	*£6*	*£1*	*£1*	*£13*	*£23*	*£10*	*£57*
Jobs	Direct	35	100	50	10	10	120	205	85	615
	Indirect & Induced	40	115	60	10	15	140	240	100	720
	Total	*70*	*215*	*115*	*20*	*25*	*255*	*445*	*190*	*1,335*
FTEs	Direct	30	95	50	10	10	110	195	80	580
	Indirect & Induced	30	95	50	10	10	115	195	85	590
	Total	*60*	*190*	*100*	*15*	*20*	*225*	*390*	*165*	*1,165*

[1] GVA totals have been discounted using HM Treasury's standard discount rate of 3.5%.

Source: York Aviation.

5.18 It should also, of course, be recognised that major construction projects do generate adverse impacts. They can result in pressure on housing and local services where significant in-migration of labour is required. However, given the relatively small scale of the construction project and phased duration of activity, we do not believe that the project will result in significant in migration, resulting in adverse impacts on the housing market or local services.

Conclusions

5.19 Our analysis suggests that the expansion of Bristol Airport from 10 mppa to 12 mppa would bring substantial economic benefits to North Somerset, the West of England and the South West region and South Wales.

5.20 These benefits would start during the construction phase of the project and then continue into the future as the benefits from the operation of the expanded airport are felt when it grows beyond the current 10 mppa planning consent.

6 SOCIO-ECONOMIC COST BENEFIT ANALYSIS

Introduction

6.1 In this section we consider the potential impact of raising Bristol Airport's capacity from 10 mppa to 12 mppa from a different perspective. Above, we have examined how the different possible future growth scenarios for the airport might impact on its ability to support GVA and employment in our study area economies. This is essentially an analysis that purely focuses on the level of economic activity in the economy. It does not consider the broader effects on socio-economic welfare and places the emphasis on whether the expansion of the airport will result in a more efficient allocation of resources across the economy.

6.2 The mechanism for this analysis is a socio-economic cost benefit analysis that focuses on transport economic efficiency. It examines whether the key actors (passengers, producers, and the government) in the market will be better or worse off as a result of Bristol Airport being allowed to increase its passenger cap from 10 mppa to 12 mppa. This approach is the same in concept as the economic elements of the Department for Transport's WebTAG appraisal approach.

Components of the Cost Benefit Analysis

6.3 The cost benefit analysis analyses the changes in costs and benefits to the primary actors in the market that are directly affected by the proposed change expansion of Bristol Airport. This includes:

- passengers – allowing Bristol Airport to expand its passenger capacity by 2 mppa will mean that up to 2 million more passengers will be able to use the airport where, as things stand currently, this demand would either have to use another airport or choose not to make their intended journey. This will impact on:
  - surface access time – if Bristol Airport cannot grow, there will be passengers within its catchment who will have to travel to other more distant airports to travel. We have estimated this additional travel time based on the structure of the airport's existing catchment area and an assessment of the most likely alternative based on data within the CAA Passenger Survey 2015. Journey times have been estimated using Google Maps. This additional time is an economic cost, which can be monetized using the air passenger values of time identified by the Airports Commission[45];

[45] Economy: Transport Economic Efficiency Impacts – Airports Commission Final Report (July 2015).

– surface access costs – if passengers have to travel further then it is likely to cost them more to access the airport they travel to as an alternate to Bristol Airport. We have identified these additional costs based on DfT's WebTAG guidance on vehicle operating costs[46] and our assessment of current passenger distribution and most likely alternate airports as described above;

– flight time savings – if passengers cannot use Bristol Airport they may be unable to fly directly to their intended destination from the alternate airport and hence incur additional time by having to travel via a hub airport. We have based this analysis on the current schedules from the next best airport option using OAG schedules data;

– air fare savings – if passengers cannot use Bristol Airport they may be forced to use a more expensive air service to reach their destination from another airport. Given the significant role played by both Heathrow and Gatwick in Bristol's catchment and the primarily low cost airline offer available at Bristol Airport, this is a significant possibility, as can be seen in **Table 6.1**. Our assessment uses modelled fares for Bristol Airport and alternate airports based on CAA Passenger Survey 2015 to assess the likely differences in prices paid by passengers. It should, however, be recognised that predicting how fares in the broader market might change is very difficult. The air fare benefits should therefore be considered as an order of magnitude estimate;

Table 6.1: Average Air Fares at Bristol Airport and Key Competitors

	Domestic Routes	*Short Haul International Routes*
Birmingham Airport	£70.66	£65.10
Bristol Airport	£51.84	£70.91
Cardiff Airport	£61.89	£79.39
Gatwick Airport	£56.63	£77.64
Heathrow Airport	£80.89	£112.59

Source: CAA Passenger Survey 2015.

✈ airport company – as the airport grows it is able to realise greater economies of scale and its ability to generate profits that ultimately benefit society increases. We have estimated the impact of this effect based on an analysis of the airport's profitability over time from its published accounts;

✈ airlines – we have assumed that if airlines are not able to locate capacity at Bristol Airport they will simply locate capacity elsewhere and hence there is no impact on their costs or benefits. This is a simplified assumption as the next best option to Bristol Airport can reasonably be assumed to be less profitable for the airline. However, we are not able to sensibly estimate the size of this effect. This means that the benefits of expansion will be understated to some degree;

[46] Values of Time and Vehicle Operating Costs TAG Unit 3.5.6 - Department for Transport, Transport Analysis Guidance (TAG) (2014).

- government – if passengers choose not to fly because they cannot fly from Bristol Airport (i.e. they would not switch to another airport), there is a cost to Government in terms of lost Air Passenger Duty revenue. A significant majority of passengers that cannot use Bristol Airport if it were constrained to 10 mppa (around 72%) would travel via another airport. For the purposes of this analysis, we have assumed that all passengers in this group would be travelling to short haul destinations and travelling in economy class. Given the higher overall costs associated with long haul and premium class travel[47] in the first instance, it seems reasonable to suggest that passengers in these categories are more likely to continue to travel if Bristol Airport were not an option;

- construction costs – the costs of building the infrastructure required to enable the airport to handle 12 mppa are in this case the opportunity cost to society of choosing to develop Bristol Airport rather than invest in another option. Hence, these construction costs must be set against benefits that accrue from expansion. The construction costs have been provided to us by BAL;

- carbon costs – in line with our assumption that airlines will simply redeploy capacity elsewhere, we have not assumed any additional carbon costs from flights associated with the expansion. The carbon emissions associated with the majority of the two million additional passengers may not be incurred at Bristol Airport if it cannot expand but they will still be incurred elsewhere. Ultimately, airlines invest in aircraft capacity and this needs to be utilised somewhere.

6.4 The cost and benefit streams are assessed over a 60 year period, which is regularly used for the assessment of airport infrastructure, and discounted using the HM Treasury Green Book standard discount rate of 3.5%.

Socio-Economic Impacts

6.5 **Figure 6.1** sets out the results of this analysis. It shows the present value for each of the cost benefit analysis components described above and the Net Present Value.

[47] Premium class travel is defined as travel in premium economy, business or first classes or their equivalents.

Figure 6.1: Socio Economic Cost Benefit Analysis (£ million)

Source: York Aviation.

6.6 The socio-economic cost benefit analysis indicates that allowing Bristol Airport to grow to 12 mppa would provide significant socio-economic benefits and that these benefits would substantially outweigh the construction costs associated with the infrastructure development required to handle 12 mppa.

6.7 The largest single benefit comes from air fare savings, reflecting the fact that Bristol Airport provides access to a wide variety of routes offered by low cost airlines and that alternatives are often relatively more expensive. Passengers also significantly benefit in terms of surface access time savings, highlighting the importance of Bristol Airport in serving the demand centres in the West of England and across the South West.

6.8 Overall, the NPV associated with raising the airport's capacity from 10 mppa to 12 mppa is around £1.6 billion.

7 REGENERATION & SOCIAL IMPACTS

Introduction

7.1 In this section, we consider some of the broader issues around the growth of Bristol Airport beyond 10 mppa and up to 12 mppa. These are, in the main, extensions of impacts that have been discussed above for which it is helpful to consider the potential of the airport to offer benefits further and in a more qualitative fashion.

Impact on Deprived Areas

7.2 In Section 3 we set out an analysis of the areas around the airport in terms of their relative levels of deprivation using the Index of Multiple Deprivation produced by the Office for National Statistics. This established that in the main the areas surrounding the airport are relatively affluent and that deprivation is not a significant issue. However, the analysis did identify that there are pockets of significant deprivation in Weston-super-Mare and in the south of Bristol. **Figure 7.1** shows an assessment of the position of different lower super output areas (LSOAs)[48] in both areas taken from the Index of Multiple Deprivation 2015.

7.3 The darker the colour on each map the more deprived the area shown. The maps show that there are significant areas of deprivation in Weston-Super-Mare, which are amongst the 10% most deprived areas in the UK, and in Bristol, particularly in South Bristol. In Bristol the most deprived areas include Whitchurch Park, Hartcliffe, Filwood and Lawrence Hill. All these areas would clearly benefit significantly from the development of more employment opportunities at Bristol Airport, particularly as both are already significant providers of labour for the airport, demonstrating that the airport is accessible and attractive as a source of employment. Weston-super-Mare is estimated to account for around 13% of current on-site employment and South Bristol around 11%. Based on the expected increase in direct jobs at the airport and current residency patterns, we would anticipate the airport supporting:

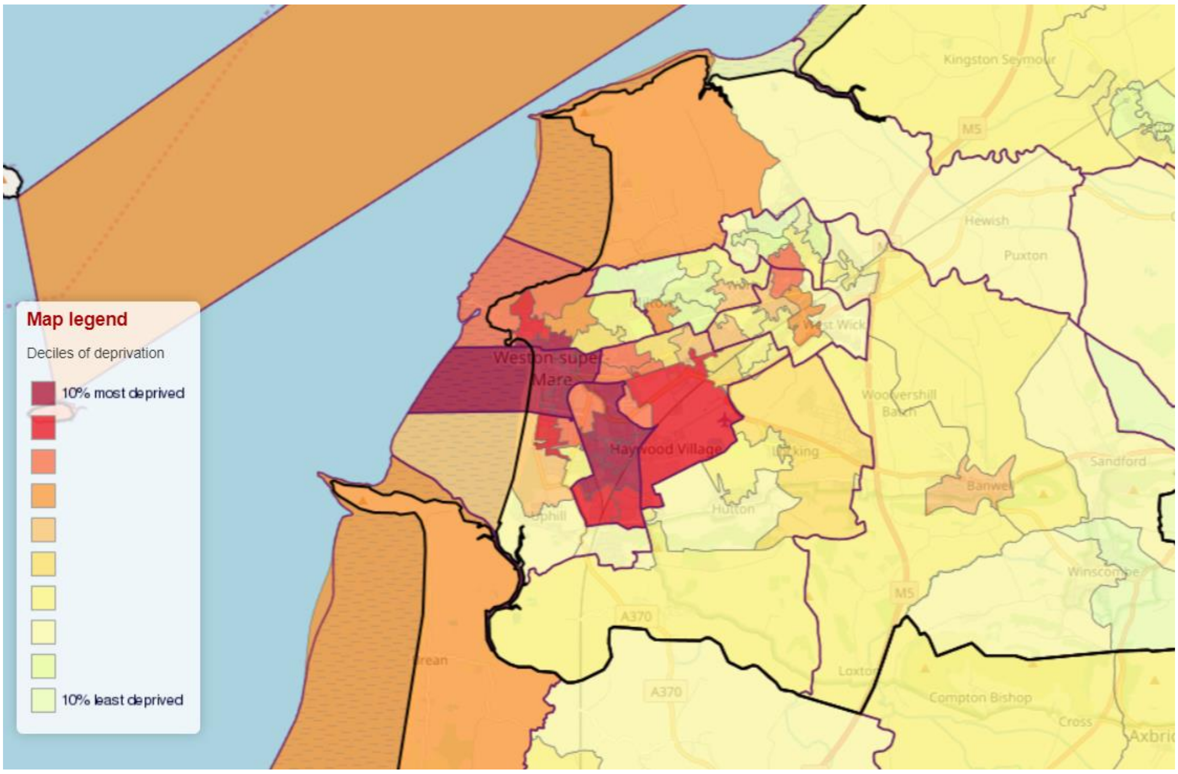
- 100 additional jobs in Weston-super-Mare;
- 90 additional jobs in South Bristol.

7.4 These numbers could be increased through targeted surface access improvements and through further active engagement with relevant stakeholders (see below). We would therefore consider these to be minimum likely impacts.

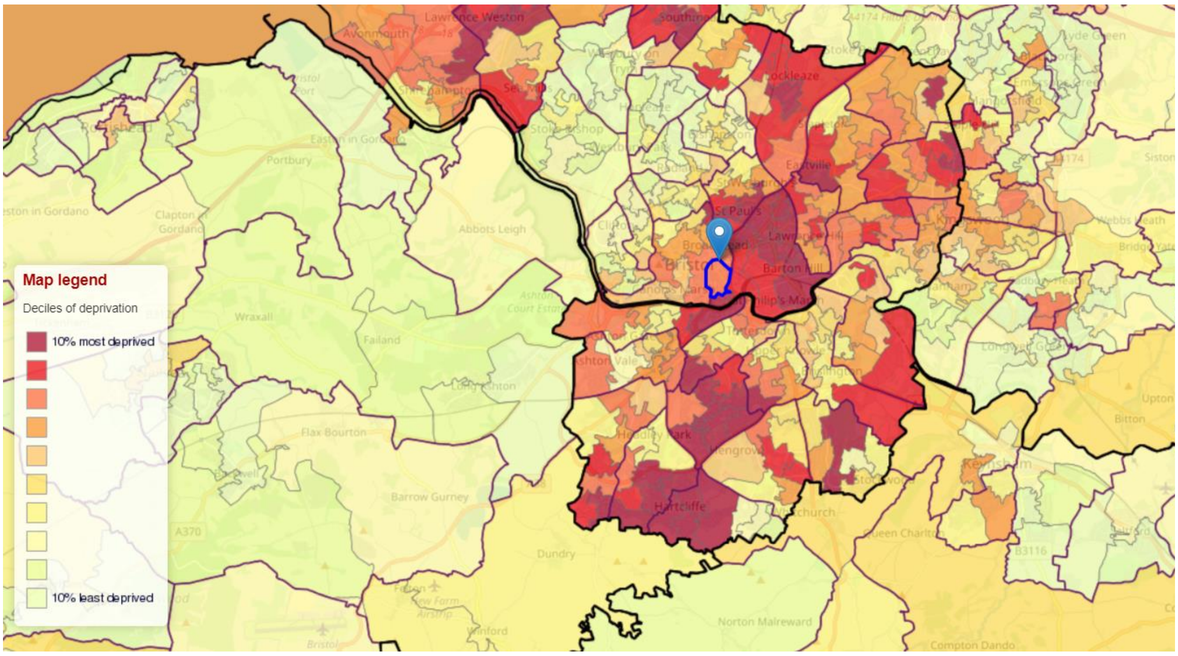
[48] Lower super output areas are small statistical areas defined by the Office for National Statistics. They typically have a population of around 1,500 people. They are intended to enable a better understanding of circumstance at a broad neighbourhood level.

Figure 7.1: Areas of Deprivation in Bristol & Weston-Super-Mare

Weston-Super-Mare



Bristol



Source: Index of Multiple Deprivation 2015.

7.5 The creation of jobs at the airport that could be accessed from these areas would be particularly helpful in addressing the causes of deprivation in these areas. Analysis of the different domains of deprivation that make up the Index of Multiple Deprivation (see Section 3), identifies that the income and employment domains are particularly strong drivers of the overall situation in these two localities.

7.6 The airport already works closely with a range of partners across the West of England to highlight the employment opportunities that the airport offers, including regular recruitment events and extensive work with local schools and colleges. The airport also subsidises employee travel to and from the airport on a number of public transport options and facilitates a car share scheme for employees. BAL is also currently actively exploring options to introduce a number of new apprenticeships in engineering, passenger carrying vehicles and IT. Measures such as these and continued close work with local stakeholders can help to ensure that the benefits from growth at the airport are felt in areas where a particular economic boost is required. Successful joint working could result in larger numbers of job opportunities being secured than those indicated above. It should also be noted that the airport will be developing a Skills & Employment Strategy, which will examine further how the benefits of expansion can support regeneration in the areas around it.

Impact on Local Services and Businesses

7.7 The airport is located in a largely rural area to the south of the City of Bristol with several small hamlets/villages within a 10km radius. These includes Lulsgate Bottom, Felton, Redhill and Downside in the immediate vicinity of Bristol Airport (less than 1km from the perimeter). Bristol Airport's influence on the availability of local services and the health of local businesses is multifaceted and in general should be viewed as positive and growth at the airport beyond 10 mppa would increase this positive effect.

7.8 This impact comes through a number of channels, most of which have already been considered quantitatively earlier in this report:

- indirect effects – to the extent that companies based on-site at the airport buy goods and services from local suppliers they will support both the level and range of services offered and the health of local businesses. These effects will obviously increase as the airport grows. The airport is running its first 'Meet the Buyer' event in January 2019. This will be an opportunity to assist more local companies in becoming part of the supply chain to companies operating at the airport and increasing these effects locally;
- induced impacts – when those employed at the airport or in its supply chain spend their wages they in turn inject expenditure into local economies, thereby again supporting the level and range of services offered and the health of local businesses. As we have seen, significant numbers of employees that work at the airport currently live within North Somerset, including in the villages around the airport, and will therefore impact on the localities around the airport. Again, with growth at the airport these effects will increase;

- inbound tourism – visitors coming to the area inject expenditure into local economies as they buy goods and services, again supporting local businesses. Expansion will bring more visitors to North Somerset, who will purchase goods and services in the area, ultimately making local businesses stronger and improving the range of services on offer to the local population as well;

- outbound passengers – additional expenditure by outbound passengers in local economies will also support the range and scale of services. However, in our view this effect is likely to be relatively limited. In most cases passengers will simply travel from their homes or workplaces to or from the airport without stopping locally and hence there will be no impact. However, some may choose to stay locally prior to a flight or may purchase goods in local shops and there is evidence to suggest that this effect is supporting the hotel sector in the area particularly. The Hampton by Hilton Hotel at the airport is experiencing a growth in bookings as the airport continues to grow. Two new hotels in the area have also received planning permission in recent months. This would suggest that this effect will continue to increase as the airport continues to grow beyond 10 mppa and up to 12 mppa.

7.9 While, in our view, the effect of the airport on local services and businesses is mainly positive, it should be recognised that there are potentially some adverse effects, albeit we believe these are likely to be limited:

- impacts in the labour market – the airport is a significant employment centre in a relatively rural location. The 'pull' from the airport may make it harder for other local businesses to recruit or potentially drive up wage rates. However, given that the airport draws labour from a relatively wide area, we do not believe that this effect is likely to be significant;

- increased road usage –growth at the airport will result in more passengers and employees seeking to access the airport site via the road network. This will have some impact on the efficiency of the transport networks around the airport, which will have a knock-on effect on the functioning of the economy. However, again, we would not consider this effect to be significant. It should also be noted that the proposals include measures to mitigate these impacts and improve surface access, such as the improvements to the A38 and investment in public transport;

- 'crowding out' effects – there is some potential for the growth of local services and amenities in the local area to be inhibited by the growth of competing providers located at the airport. However, given the scale of development proposed here, the physical constraints of Bristol Airport's site and the general focus at airports on commercial developments airside, it is unlikely that this effect would be a factor here.

Conclusions

7.10 The analysis above suggests that the growth of Bristol Airport from 10 mppa to 12 mppa has significant potential to support regeneration of key deprived areas in Weston-super-Mare and South Bristol. This effect can be enhanced through further partnership working to support access to the opportunities that come forward, both in terms of transport interventions to enable accessibility and through skills and employment programmes.

7.11 The potential impact on local services and businesses from further growth at the airport is largely positive as the airport injects supply chain and consumer expenditure into the surrounding economy. There are some potential adverse effects but we do consider these to be significant on balance.

8 CONCLUSIONS

8.1 Airports are an essential tool for modern, developed regions, facilitating the flow of trade, investment, knowledge and people. Bristol Airport is the primary airport playing this role in the South West region and South Wales.

8.2 In 2017, the airport handled a record 8.2 million passengers, of which around 1.3 million were estimated to be flying on business. It also brought around an estimated 700,000 overseas visitors to the UK. In the 12 months to June 2018, the airport handled around 8.4 million passengers.

8.3 The airport is one of the largest regional airports in the UK and has experienced significant growth in the last 20 years, with passenger numbers growing from 2.1 million in 2000 to 8.2 million in 2017. It offers flights to a wide range of domestic and international destinations, primarily through services offered by Europe’s two largest low fares airlines, easyJet and Ryanair. However, it also offers a number of full service connections, including to the global hub airport at Amsterdam.

Current Baseline

8.4 Its importance to the economy of the region is well recognised by stakeholders and is reflected in the core economic strategy and planning policy documents concerned with the areas around the airport.

8.5 The airport already has a significant impact on the economies that surround it. Currently, we estimate that:

- within North Somerset in 2018, we estimate that the airport’s economic footprint supported around 2,025 full time equivalent (FTE) jobs and around £260 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 2,525 FTEs and £355 million of GVA;

- within the West of England in 2018, we estimate that the airport’s economic footprint supported around 4,900 FTEs and around £430 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 7,950 FTEs and £810 million of GVA;

- within the South West region and South Wales in 2015, we estimate that the airport supported around 8,200 FTEs and around £610 million of GVA. When the additional wider impact from productivity and tourism is included, the overall impact rises to 18,875 FTEs and £1.7 billion of GVA;

The Impact of Growth to 12 mppa

8.6 The airport is expected to reach its passenger capacity of 10 mppa in 2021 based on the airport's passenger forecasts. If planning permission is granted to increase capacity to 12 mppa, this passenger throughput is expected to be reached in around 2026. This additional growth is forecast to bring significant additional economic benefits:

- North Somerset – the economic footprint of the airport will be around £70 million larger in GVA terms and support around 525 additional jobs (450 FTEs). When wider benefits are also included this increases to £90 million larger in GVA terms and support around 650 additional jobs (550 FTEs);

- West of England - the economic footprint of the airport will be around £110 million larger in GVA terms and support around 1,200 additional jobs (1,050 FTEs). When wider benefits are also included this increases to £210 million larger in GVA terms and support around 2,050 additional jobs (1,725 FTEs);

- South West & South Wales - the economic footprint of the airport will be around £140 million larger in GVA terms and support around 2,125 additional jobs (1,750 FTEs). When wider benefits are also included this increases to £390 million larger in GVA terms and support around 5,150 additional jobs (4,125 FTEs).

8.7 We have also considered the potential negative impacts of outbound travel from Bristol Airport in terms of the extent to which it removes expenditure from the local economy. This effect is highly complex and, primarily due to the extent of substitutability of UK airports for outbound travel, we have concluded that it is unlikely to be significant.

8.8 The construction of the necessary infrastructure to enable the airport to handle 12 mppa will also result in positive economic impacts during the period of construction. Over the period to 2026, construction of the infrastructure to enable 12 mppa at Bristol Airport will support:

- £39 million in additional GVA (discounted) and 390 job years of employment (345 FTE years) in North Somerset;

- £52 million in additional GVA (discounted) and 995 job years (885 FTE years) of employment in the West of England;

- £71 million in additional GVA (discounted) and 1,665 job years (1,450 FTE years) of employment in the South West and South Wales.

8.9 Again, it should be recognised that major construction projects do come with potential adverse effects. However, given the scale of the construction programme involved and the phased development, we do not consider it likely that adverse impacts are likely to be significant.

8.10 In addition to considering the GVA and employment impacts associated with the growth of the airport, we have also considered the potential impacts of its growth to 12 mppa in terms of a socio-economic cost benefit analysis. This identifies that granting a 2 mppa increase in the airport's passenger capacity will result in net economic efficiency benefits to the economy of around £1.6 billion over the next 60 years.

8.11 In terms of the impact of this additional growth at the airport on less tangible issues we have identified that the increase in capacity would allow it to make a greater contribution to regenerating deprived areas in South Bristol and Weston-super-Mare, and in supporting local services and businesses.

Recommendations for Securing Maximum Benefits Locally

8.12 As we have identified, expanding Bristol Airport to 12 mppa offers significant opportunities to the areas around the airport. However, as we have highlighted at a number of points, there are additional actions that can be taken to help maximise the amount of economic impact that is captured locally. Measures include:

- the expansion of the airport will result in significant numbers of new job opportunities on-site at the airport. It will be important for the airport to work with local stakeholders to ensure that these opportunities are accessible to local people to maximise the direct impact of the airport in the area and the regeneration opportunities it offers. This could involve further work with public transport providers to ensure that the airport site is easily reached from key areas at a reasonable price and that the timing of services reflects the working patterns at the airport. Similarly, working with local education providers to raise awareness of the airport as an employer and the breadth of opportunities on offer will be important. Further regular job fairs at the airport and the attendance of key companies at other job fairs would be a useful activity in this regard. The airport's existing work around the development of apprenticeships is also an important step. There may also be opportunities to support people working at the airport through the provision of ancillary services on-site, such as for instance child care that reflects the needs of airport employees. This activity should be planned and coordinated via a skills and employment strategy for the airport to further aid in locking in benefits for the surrounding area;

- companies at the airport can also seek to more actively engage with local suppliers of goods and services to try to capture more of the airport's supply chain locally. The inaugural Meet the Buyer event to be held in January 2019 is an important first step in this regard. This could be combined with targeted work with local business support and representative organisations to raise awareness of the opportunities that the airport offers for local businesses;

- tourism stakeholders have noted the need for the overall product for the West of England and the wider South West to move forward as one, including the airport. There is an opportunity to work closely with these organisations to highlight the area's attractions in overseas markets to help build inbound passenger flows to the airport. This will also ultimately help support existing route viability and secure new routes;

- there is a role for NSC in ensuring that there is adequate and appropriate provision for new businesses seeking to locate in the area at least in part because of the connectivity opportunities offered by the airport. The employment land review is an important starting point for this work but ongoing work with the airport to understand the nature of business users and their characteristics would be a helpful addition to the evidence base.

9 GLOSSARY OF TERMS

CAA – Civil Aviation Authority.

Catchment Area – the geographic area from which Bristol Airport draws its passenger traffic.

Economic Footprint – the economic impacts supported by the operation of Bristol Airport and air services from it. These are divided in to direct, indirect and induced impacts.

FDI – foreign direct investment.

Gross Value Added (GVA) - is the measure of the value of goods and services produced in an area, industry or sector of an economy.

Input Output Tables - the tables provide a complete picture of the flows of goods and services (products) in the economy for a given year. They detail the relationship between producers and consumers and the interdependencies of industries.

Location Quotient - is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region “unique” in comparison to the national average.

Long Haul – air travel to destinations over four hours flying time.

Low Cost Carrier - an airline that offers generally low fares in exchange for eliminating or providing as options many traditional passenger services. These airlines will generally focus on point to point services.

Network Airline – airlines that offer services using primarily a hub and spoke network.

OAG – Official Airline Guide. An industry database of schedules and capacity information for airports globally.

Regional Airport – an airport outside of the London system of airports.

Short Haul – air travel to destinations within around four hours flying time.

West of England – the area covered by the local authorities for City of Bristol, North Somerset, South Gloucestershire and Bath and North East Somerset, which together comprise the West of England Strategic Planning sub-region.

Workload Unit - is a combined measure of passengers and freight passing through an airport, where 100 kilos of freight is assumed to be equal to one passenger.

10 APPENDIX A: LIST OF ORGANISATIONS CONSULTED

- Bath Tourism Plus/Visit Bath
- Bristol City Council
- Bristol Port
- Business West
- CBI South West
- Destination Bristol
- Invest Bristol & Bath
- North Somerset Council
- Sedgemoor District Council
- Somerset County Council
- Plymouth City Council