

## 15. Socio-Economics

### 15.1 Introduction

- 15.1.1 This chapter of the Environmental Statement (ES) assesses the likely significant effects of the Proposed Development with respect to Socio-Economic effects. This relates to the interaction between economic and social factors and is one of several chapters which examine effects on "population". As such the chapter should be read in conjunction with **Chapter 2: Description of the Proposed Development** and with reference to relevant parts of other chapters, particularly, **Chapter 6: Traffic and Transport**, **Chapter 7: Noise and Vibration** and **Chapter 16: Human Health**. In these chapters effects on common receptors (i.e. people) have been considered and in instances there are overlaps or relationships between the assessments of effects.
- 15.1.2 Effects assessed within this chapter are: direct, indirect and induced and "catalytic" economic effects (on jobs and Gross Value Added (GVA)) arising from both Bristol Airport users and employees. Effects on the labour market are also examined, as are demographic impacts; impacts on housing and impacts on other local services.

### 15.2 Limitations of this assessment

- 15.2.1 This assessment is based on publicly available statistics and economic research on the economic effects of Bristol Airport, discussed in **Section 15.4**. No new primary research has been undertaken for the assessment.

### 15.3 Relevant legislation, planning policy and technical guidance

#### Legislative context

- 15.3.1 The following legislation is relevant to the assessment of the effects on socio-economic receptors:
- *The Town and Country Planning (Environmental Impact Assessment (EIA)) Regulations 2017*<sup>1</sup> (EIA Regulations) require "an assessment of the direct and indirect significant effects of the development on [...] population [...]". This is typically interpreted as requiring an assessment of socio-economic effects (i.e. how the interaction of social and economic factors arising from the Proposed Development affect people<sup>2</sup>).

#### Planning policy context

- 15.3.2 There are a number of policies and guidance documents at the national and local level that are relevant to Socio-economics. In addition to policy referenced in **Chapter 5: Legislative and Policy Overview**, policy directly applicable to this chapter is listed in **Table 15.1**. This focusses on planning and subnational economic development policy, Government aviation policy is also referred to.

<sup>1</sup> Ministry of Housing, Communities & Local Government (2017). The Town and Country Planning (Environmental Impact Assessment) Regulations 2017, [online]. Available at: <http://www.legislation.gov.uk/uksi/2017/571/contents/made> [Checked 23/03/18].

<sup>2</sup> Oxford Dictionaries (2018). *Definition of socio-economic in English*, [online]. Available at: <https://en.oxforddictionaries.com/definition/socio-economic> [Checked 28/03/18].

Table 15.1 Relevant policies and their implications for Socio-Economics

Policy reference	Implications
<b>National Planning Policy Framework (NPPF) 2018<sup>3</sup></b>	
Paragraph 8	Provides high level guidelines for planning for sustainable development, specifically in relation to Socio-Economics, identifying the importance of <i>"ensuring that sufficient land of the right type is available in the right places at the right time to support growth, innovation and improved productivity..."</i>
Paragraph 11	Presumption in favour of sustainable development including: <i>"plans should positively seek opportunities to meet the development needs to their area..."</i>
Paragraph 80	<i>"Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development."</i>
Paragraph 81	<i>"Planning policies should: (a) set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth, having regard to Local Industrial Strategies and other local policies for economic development and regeneration."</i>
Paragraph 104	<i>"Planning policies should... (e) 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."</i>
<b>West of England Local Enterprise Partnership Strategic Economic Plan 2015-2030<sup>4</sup></b>	
Page 10-11	This sets out the sub-regional aspirations for economic development.  The vision is that by 2030 the West of England will have <i>"one of Europe's fastest growing and most prosperous sub regions"...</i> <i>"A buoyant economy competing internationally and "Easier local, national and international travel, thanks to transport solutions that link communities to employment opportunities and local services, control and reduce congestion and improve strategic connections by road, rail and through Bristol Airport and Bristol Port."</i>
Page 22-23	The plan aims to <i>"successfully capture the impact major developments at the airport (and port) can have at meeting the investment and jobs targets"</i> .
Page 40-41	The plan notes the importance of the M4 in connecting four enterprise zones, the port and Bristol Airport.
Page 76-77	Bristol Airport is noted as a <i>"lever of growth"</i> .
<b>West of England Economic Needs assessment (2015)<sup>5</sup></b>	
Paragraph 4.3	The assessment sets out to provide a robust assessment of and evidence base for the future economic development needs across the West of England area. 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 that should be addressed if this potential is to be fully realised.
<b>North Somerset Council (NSC) Core Strategy January 2017<sup>6</sup></b>	
CS20 – Delivering a prosperous economy	The Core Strategy seeks to <i>"provide at least 10,000 additional employment opportunities 2006-2026"</i> .
CS23 – Bristol Airport	<i>"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"</i> .

<sup>3</sup> Ministry of Housing, Communities and Local Government (2018). National Planning Policy Framework, [online]. Available at: <https://www.gov.uk/government/collections/revised-national-planning-policy-framework> [Checked 06/08/18].

<sup>4</sup> West of England Local Enterprise Partnership (no date). West of England Strategic Economic Plan 2015-2030, [online]. Available at: <http://westofenglandlep.co.uk/about-us/strategicplan> [Checked 19/03/18].

<sup>5</sup> West of England Economic Needs assessment (EDNA) (November 2015). West of England Partnership.

<sup>6</sup> North Somerset Council (2017). Core Strategy, [online]. Available at: <https://www.n-somerset.gov.uk/wp-content/uploads/2015/11/Core-Strategy-adopted-version.pdf> [Checked 16/04/18].

Policy reference	Implications
<b>NSC Sites and Policies Plan Part 1 Development Management Policies 2016<sup>7</sup></b>	
DM50 – Bristol Airport	The policy aims to “ensure that, if further development of the Airport is required, proposals demonstrate the satisfactory resolution of environmental issues, including the impact of growth on surrounding communities and surface access infrastructure.” N.B. this is the same as the policy on Bristol Airport (CS23) in the NSC Core Strategy.
<b>North Somerset Economic Plan 2017-2036<sup>8</sup></b>	<p>The plan outlines the continuing mission for NSC and its partners to “champion North Somerset and provide the strategic leadership necessary for transformational economic change”. Most notably, the plan has five core strategic objectives which will be delivered via four investment themes.</p> <p>These themes highlight the important role of Bristol Airport in the economy of North Somerset. For example, Theme 1: Facilities and Infrastructure “highlights the need to work with partners to maximise the role of the airport and port as strategic employment locations”.</p>
<b>West of England Joint Spatial Plan – Publication Document November 2017<sup>9</sup></b>	The purpose of the plan is to provide a framework to assist the delivery of new homes, land for employment purposes and supporting infrastructure that will be required over the next 20 years.
<b>Local Plan 2036 Issues and Options Document<sup>10</sup></b>	
7. Bristol Airport	<p>Reviews the existing policy, which encourages the use of the existing developed area north of the runway. Four potential options are identified for a new policy for Bristol Airport, which are:</p> <ul style="list-style-type: none"> <li>● Option 1: Retain the existing policy;</li> <li>● Option 2: Remove airport area from the Green Belt;</li> <li>● Option 3: Remove airport area from the Green Belt and safeguard land for future expansion; and</li> <li>● Option 4: Remove airport area from the Green Belt and allocate land for expansion now and in the future.</li> </ul>
<b>Aviation Policy Framework (2013)<sup>11</sup></b>	Published by the Coalition Government in 2013. Sets out the overall objectives and policy framework for Aviation in the United Kingdom (UK). The documents recognises the economic benefits of aviation throughout the framework, alongside a recognition of the capacity challenge at UK airports. The framework notes these benefits need to be balanced against the long-term challenge of climate change, and of aircraft noise and advocates a collaborative approach to new development with various stakeholders including local communities.
<b>National Industrial Strategy<sup>12</sup></b>	
Page 128	This strategy sets out a long-term plan to boost the productivity and earning of people throughout the UK. It provides support for the development of Bristol Airport in that it supports access to international markets and drives productivity in the area. The strategy also clearly recognises the need for geographical balance. Bristol Airport, as the primary international gateway for the South West of England, again would support this aspiration.

<sup>7</sup> North Somerset Council (2016). Sites and Policies Plan Part 1 Development Management Policies [online]. Available at: <https://www.n-somerset.gov.uk/wp-content/uploads/2016/03/CC25-Sites-and-Policies-Plan-Part-1-Development-Management-Policies.pdf> [Checked 14/08/18].

<sup>8</sup> North Somerset Council (2017). North Somerset's Economic Plan 2017-2036, [online]. Available at: <http://innorthsomerset.co.uk/about-us/economic-plan/27456%20NSEP%20Final%20doc.pdf> [Checked 30/07/18].

<sup>9</sup> Joint Planning West of England (2017). West of England Joint Spatial Plan, [online]. Available at: <https://www.jointplanningwofe.org.uk/consult/ti/JSPPublication/consultationHome> [Checked 24/05/18].

<sup>10</sup> North Somerset Council (2018). Local Plan 2036 Issues and Options Document, [online]. Available at: <http://www.n-somerset.gov.uk/my-services/planning-building-control/planningpolicy/local-plan/new-local-plan-2036/about-the-new-local-plan-for-2036/> [Checked 26/11/18].

<sup>11</sup> HM Government (2013), Aviation Policy Framework, [online]. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/153776/aviation-policy-framework.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/153776/aviation-policy-framework.pdf) [Checked 07/11/18].

<sup>12</sup> HM Government (2017). Industrial Strategy: building a Britain fit for the future, [online]. Available at: <https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future> [Checked 27/11/18].

Policy reference	Implications
<b><i>Beyond the Horizon – the future of UK aviation next steps toward an aviation strategy (2018)</i></b> <sup>13</sup>	
Paragraph 5.2	In April 2018 the Government published 'Beyond the Horizon: The Future of UK Aviation - Next Steps Towards an Aviation Strategy'. This consultation document recognises the role that regional airports can play in enhancing the UK's connectivity and also invites views from the industry about how APD (Air Passenger Duty) could be reformed to support regional airports as well as other policy objectives, such as those relating to the environment, growth, competition and connectivity.  The Government has stated its intention to hold a further consultation on the future policy detail in 2018, leading to the publication of the new Aviation Strategy in 2019.
Paragraph 5.34	
<b><i>Bristol International Strategy (2018)</i></b> <sup>14</sup>	
Page 4	This strategy published by Bristol City Council establishes a vision for Bristol as an international city, which includes delivering " <i>a powerful, resilient, progressive economy that creates the entrepreneurial opportunities and decent jobs that will enable us to reduce inequality</i> ". 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 central to achieving this outcome.
<b><i>North Somerset Housing Strategy 2016-21</i></b> <sup>15</sup>	
Page 6	Sets out three strategic aims until 2021, which includes increasing the supply of homes and of new affordable housing.

## Technical guidance

- 15.3.3 This chapter is one of several that assesses the effects of the Proposed Development on population. In terms of the legal scope for Socio-economic issues, case law established before the recent update of the EIA Regulations, states that socio-economic effects include the direct economic consequence of the effects on the environment. Based on the revised wording of the EIA Regulations, implemented since that judgement, this is now interpreted as including indirect economic effects<sup>16</sup>.
- 15.3.4 Effects assessed within this chapter are: direct, indirect and induced, and "catalytic" economic effects (on jobs and Gross Value Added – GVA) arising from both airport users and airport employees, as well as knock on effects in the economy. Effects on the labour market are also examined, as are demographic impacts, impacts on housing and on other local services.
- 15.3.5 Beyond this the chapter refers to effects on local residents and road users from increased traffic movements (**Chapter 6: Traffic and Transport**) and from noise (**Chapter 7: Noise and Vibration**), by cross referring to the relevant assessments in these chapters. The detailed analyses are contained in those chapters and is not replicated here.
- 15.3.6 Whilst there is no directly relevant guidance on the assessment of Socio-Economic effects in EIA, there are more general best practice and guidance documents for which this assessment follows, these are listed in **Table 15.2**.

<sup>13</sup> HM Government (2018) Beyond the Horizon – the future of UK aviation next steps toward an aviation strategy <https://www.gov.uk/government/consultations/a-new-aviation-strategy-for-the-uk-call-for-evidence>

<sup>14</sup> Bristol Global City: working with the world for local and global benefit (2018) <https://www.bristol.gov.uk/documents/20182/2053023/Bristol+International+Strategy/da9a5464-4f28-5591-715c-27d401ab4992>

<sup>15</sup> North Somerset Council (2016). North Somerset Housing Strategy 2016-21, [online]. Available at: <https://www.n-somerset.gov.uk/wp-content/uploads/2015/11/26409-Housing-Strategy-FINAL.pdf> [Checked 17/07/18].

<sup>16</sup> CJEU decision in Case C-420/11 Leth v. Republik Österreich, [online]. Available at <http://curia.europa.eu/juris/liste.jsf?num=C-420/11&language=EN> [Checked 12/08/18].

Table 15.2 Technical guidance relevant to Socio-Economics

Guidance	Relevance
<b>Green Book<sup>17</sup></b>	Published by HM Treasury, it provides a broad framework for how policies, programmes and projects in the UK should be appraised and evaluated to inform decision making. It sets out guidelines for how the economic and social effects of policy should be conducted. It contains advice on the scoping of costs and benefits to be included in assessment, the time period for assessment and the use of discount rates. It contains various supplementary guidance on assessment of environmental effects, of health, crime and air quality, for example.
<b>Additionality Guide<sup>18</sup></b>	It provides more specific guidance on how to assess impact of a policy intervention (or a private sector investment) on the local, regional and national economy. Additionality is the 'extent to which something happens as a result of an intervention that would have not occurred in the absence of intervention'.

15.3.7 Other guidance includes the importance of socio-economic assessment in improving EIA practice by the Institute of Environmental Management and Assessment (IEMA)<sup>19</sup>.

## 15.4 Data gathering methodology

15.4.1 The EIA baseline has been undertaken with reference to **Chapter 2: Description of the Proposed Development** and the following sources of public Socio-Economic data<sup>20</sup>:

- Nomis (Official labour market statistics)<sup>21</sup>;
- Office for National Statistics (ONS)<sup>22</sup>; and
- Civil Aviation Authority (CAA) Passenger Survey Data (and other CAA statistics) and data from the international Passenger Survey (via Visit Britain).

15.4.2 This data has been supplemented with data in an Economic Impact Assessment, prepared in 2018, and will be submitted as part of this application<sup>23</sup>. This in turn was an update of a 2017 study<sup>24</sup>. This earlier 2017 study has been referred to for certain specific data, but the impact information all derives from the 2018 study. Both reports follow the same analytical framework and approach to economic modelling.

<sup>17</sup> HM Treasury (2018). *Central Government Guidance on Appraisal and Evaluation*, [online]. Available at:

<https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [Checked 28/03/18].

<sup>18</sup> English Partnerships (2014). *Additionality Guide, English Partnerships, a Standard Approach to Assessing the Additional Impact of Projects*, Fourth Edition.

<sup>19</sup> IEMA (2013). EIA Quality Mark Article: The importance of Socio-Economic Assessment in Improving EIA Practice, [online]. Available at:

[https://www.iema.net/assets/uploads/EIA%20Articles/bidwells\\_article\\_the\\_importance\\_of\\_socio-economic\\_assessment\\_in\\_improving\\_eia\\_practice.pdf](https://www.iema.net/assets/uploads/EIA%20Articles/bidwells_article_the_importance_of_socio-economic_assessment_in_improving_eia_practice.pdf) [Checked 28/03/18].

<sup>20</sup> Note that both ONS and Nomis contain a range of specific socio-economic datasets. These datasets are referenced throughout the chapter.

<sup>21</sup> Office for National Statistics (2018). Nomis: official labour market statistics, [online]. Available at <https://www.nomisweb.co.uk/> [Checked 28/03/18].

<sup>22</sup> Office for National Statistics (2018). Welcome to the Office for National Statistics, [online]. Available at <https://www.ons.gov.uk/> [Checked 28/03/18].

<sup>23</sup> York Aviation (2018). Development of Bristol Airport to accommodate 12 million passengers per annum: Economic Impact Assessment, Draft Report November 2018.

<sup>24</sup> York Aviation (2017). Part 1 (Strategic) Economic Impact Assessment of Bristol Airport, an economic impact assessment on the operations of Bristol Airport.

## Study area

- 15.4.3 Several different types of Socio-Economic effect are likely to arise from the Proposed Development. These will affect different groups of people and these effects will be felt at different spatial levels.
- 15.4.4 The groups affected include local residents, local and regional employers and employees, as well as visitors using Bristol Airport. A summary of effects and the geographical scale at which effects are assessed are included in **Table 15.3**.

Table 15.3 Socio-economic groups and effects

Groups of people affected	Nature of likely significant affect	Spatial scale at which effects assessed
<b>Employees, employers and airport users</b>	<b>Economic</b> - new job opportunities (for residents, for current employees and for current employers) and income from business creation and expansion. Accessibility to more destinations (markets or leisure) and tourism served by Bristol Airport.	<b>Local</b> – North Somerset (including – but not limited to – those in the immediate vicinity of Bristol Airport), and West of England.  <b>Regional</b> - including all of South West England and South Wales.

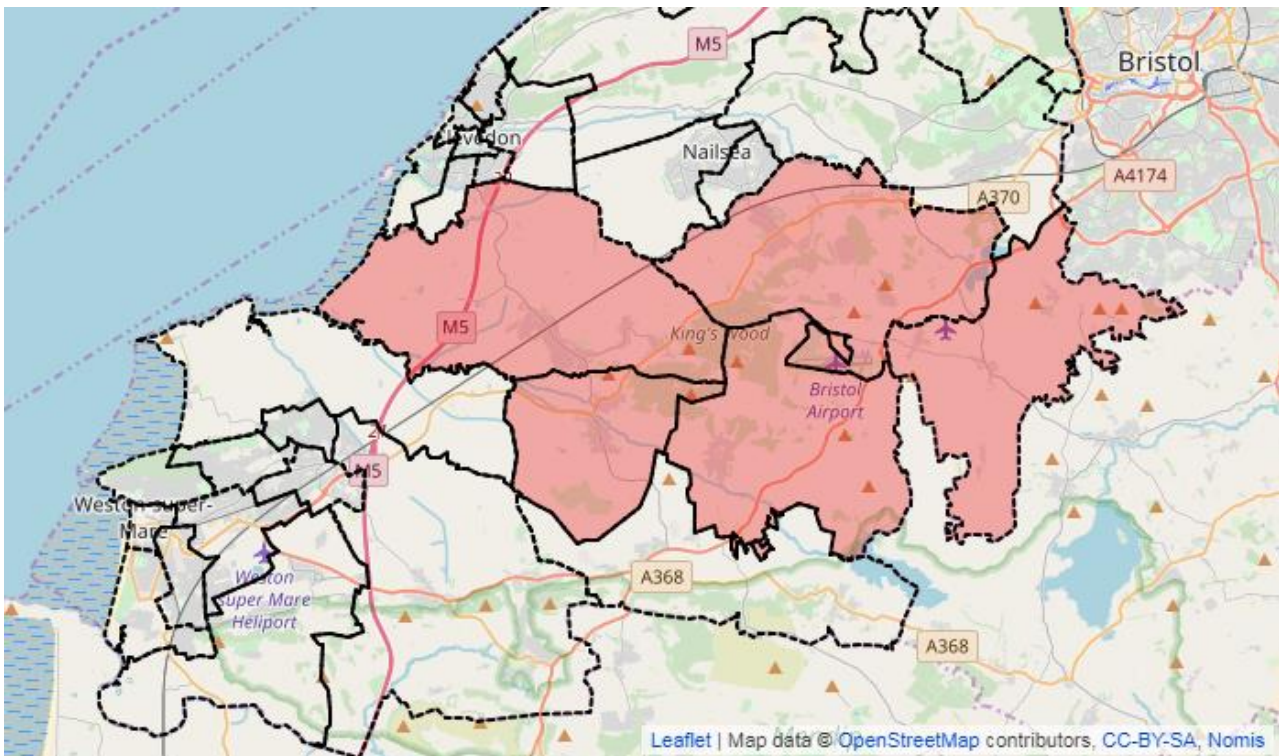
## The immediate vicinity of Bristol Airport

- 15.4.5 Bristol Airport is located in the parish of Wrington in North Somerset District. This is a largely rural area to the south of the City of Bristol, with several small hamlets and villages within a 10km radius. These include Lulsgate Bottom, Felton, Redhill and Downside in the immediate vicinity of Bristol Airport (less than 1km from the current boundary).
- 15.4.6 The 2011 “lower level super output area” (LLSOA), the smallest geographical scale at which socio-economic data is available<sup>25</sup>, is E01014854: North Somerset 013D. This is an area of some 2,650 hectares (ha) around Bristol Airport, with a resident population of a little under 1,400 people (2011)<sup>26</sup>.
- 15.4.7 A wider range of socio-economic data are available for “wards”, for which data tends to be statistically more reliable because of the larger size. Bristol Airport falls on the border of two wards, Wrington and Backwell. Adjacent to these to the west, is Yatton ward, which covers the area between the M5 and the coast, and Congresbury ward, covering the village of the same name. To the east is Winford ward. Together these areas comprise an area of approximately 13,000ha around Bristol Airport, with a total resident population of 24,500 people<sup>26</sup>.

<sup>25</sup> Socio-economic data available from both the ONS and Nomis relate to LLSOAs as well as Wards. Note this is slightly different to a Parish. Socio-economic data is generally not available for Parishes.

<sup>26</sup> Source Nomis (2011). Census KS101EW - Usual resident population (all persons), [online]. Available at: <https://www.nomisweb.co.uk/query/construct/submit.asp?forward=yes&menuopt=201&subcomp> [Checked 19/07/18].

Figure 15.1 2011 Ward Boundaries – Bristol Airport



Source: Nomis<sup>27</sup>

### Economic effects – Employees, employers and airport users

15.4.8 Bristol Airport is located close to the boundaries of several Local Authority Districts (LADs) (**Figure 15.2**). It creates economic impact (jobs, expenditure or income) via several different channels of effect and each manifest at different geographical levels. The economic effects from the Proposed

<sup>27</sup> CJEU decision in Case C-420/11 Leth v. Republik Österreich, [online]. Available at <http://curia.europa.eu/juris/liste.jsf?num=C-420/11&language=EN> [Checked 12/08/18].

<sup>27</sup> HM Treasury (2018). *Central Government Guidance on Appraisal and Evaluation*, [online]. Available at: <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government> [Checked 28/03/18].

<sup>27</sup> English Partnerships (2014). *Additionally Guide, English Partnerships, a Standard Approach to Assessing the Additional Impact of Projects*, Fourth Edition.

<sup>27</sup> IEMA (2013). EIA Quality Mark Article: The importance of Socio-Economic Assessment in Improving EIA Practice, [online]. Available at: [https://www.iema.net/assets/uploads/EIA%20Articles/bidwells\\_article\\_the\\_importance\\_of\\_socio-economic\\_assessment\\_in\\_improving\\_eia\\_practice.pdf](https://www.iema.net/assets/uploads/EIA%20Articles/bidwells_article_the_importance_of_socio-economic_assessment_in_improving_eia_practice.pdf) [Checked 28/03/18].

<sup>27</sup> Note that both ONS and Nomis contain a range of specific socio-economic datasets. These datasets are referenced throughout the chapter.

<sup>27</sup> Office for National Statistics (2018). Nomis: official labour market statistics, [online]. Available at <https://www.nomisweb.co.uk/> [Checked 28/03/18].

<sup>27</sup> Office for National Statistics (2018). Welcome to the Office for National Statistics, [online]. Available at <https://www.ons.gov.uk/> [Checked 28/03/18].

<sup>27</sup> York Aviation (2018). Development of Bristol Airport to accommodate 12 million passengers per annum: Economic Impact Assessment, Draft Report November 2018.

<sup>27</sup> York Aviation (2017). Part 1 (Strategic) Economic Impact Assessment of Bristol Airport, an economic impact assessment on the operations of Bristol Airport.

<sup>27</sup> Socio-economic data available from both the ONS and Nomis relate to LLSOAs as well as Wards. Note this is slightly different to a Parish. Socio-economic data is generally not available for Parishes.

<sup>27</sup> Source Nomis (2011). Census KS101EW - Usual resident population (all persons), [online]. Available at: <https://www.nomisweb.co.uk/query/construct/submit.asp?forward=yes&menuopt=201&subcomp> [Checked 19/07/18].

<sup>27</sup> Nomis (2018). Ward boundaries, [online]. Available at: <https://www.nomisweb.co.uk/query/construct/components/stdListComponent.asp?menuopt=12&subcomp=100> [Checked 14/08/18].

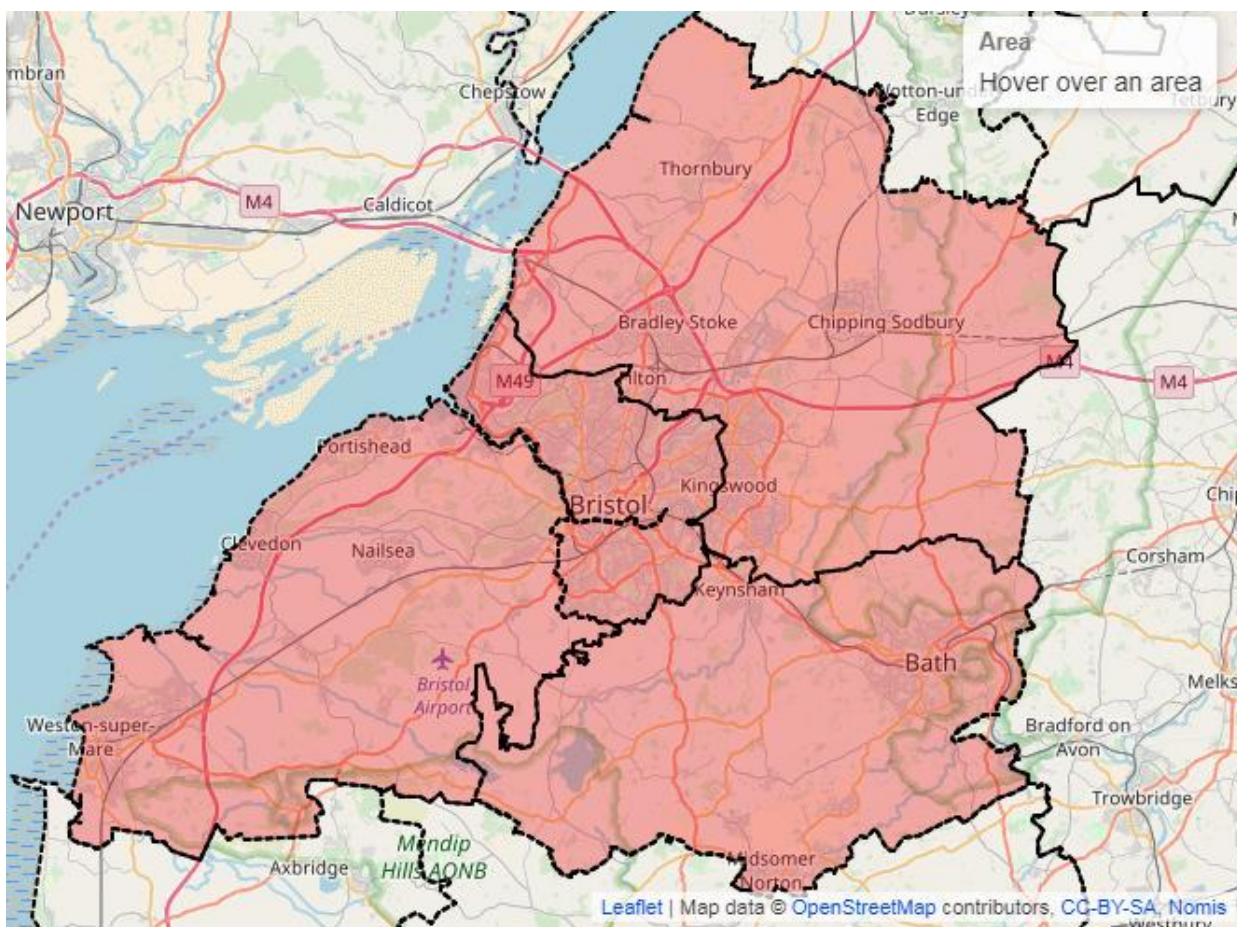
Development have been assessed in detail separately by York Aviation, based on a consistent and widely used economic framework<sup>23,24</sup>. The data on the employment and GVA economic impact in this chapter draws from the results of these two assessments.

15.4.9

These channels of effect are grouped into two overarching categories:

- First, “economic footprint” relates to the role Bristol Airport plays in supporting jobs and GVA as an economic entity. Within this, these effects are then grouped into direct effects, indirect and induced multiplier effects; and
- Second “wider” or “catalytic” effects, these relate to wider benefits accruing to the region as a result of improved connectivity to businesses and to inbound travellers. These wider benefits are then grouped into business productivity effects and tourism effects.

Figure 15.2 Local Authority Boundaries – Bristol Airport (North Somerset and West of England)



Source: Nomis<sup>28</sup>

15.4.10

Direct impacts relate to the economic activities and employment created or sustained by the operations of Bristol Airport. Jobs may be physically located within Bristol Airport’s boundary (pilots, air traffic control and terminal employees), and/or directly related to its operations (catering, logistics integrators, transportation, and many airline and passenger services). A 2017 Economic Impact Assessment<sup>24</sup> examined the place of residence of on-site employees. Of the 3,400 direct jobs at Bristol Airport, 39% of the employees lived in the LADs of North Somerset; 22% in Bristol (with around half of these in South Bristol); 10% in Bath; and North East Somerset and 10% in South

<sup>28</sup> Nomis (2018). Local Authority Boundaries [online]. Available at:

<https://www.nomisweb.co.uk/query/construct/components/stdListComponent.asp?menuopt=12&subcomp=100> [Checked 14/08/18].

Gloucestershire. Collectively, just over 80% of the on-site employees lived in these areas at that time.<sup>29</sup> This provides a good approximation of the likely spatial area from which new direct employees associated with the Proposed Development may be drawn, as well as an indication of where they may spend the majority of their earnings.

- 15.4.11 Indirect and induced impacts relate to the multiplier or knock-on effects of the above operations. They arise in two ways:
- First, supply linkages (indirect multipliers) arise from the business to business supply chain of Bristol Airport. It includes the spending, income and employment supported by every purchase made by Bristol Airport Limited (BAL); by airlines, retail and commercial occupants, or those providing services to Bristol Airport; and
  - Second, an income multiplier (induced multiplier) which arises from the consumer expenditure of those who derive incomes from Bristol Airport or from its supply chain.
- 15.4.12 These indirect and induced effects take place over a wider geographical area, reflecting the wider footprint of goods and services they relate to.
- 15.4.13 Catalytic and wider effects arise from multiple channels and relate to increased productivity and increased economic activity resulting from connectivity provided by Bristol Airport. These take place over a larger geographical area still.
- 15.4.14 The 2018 Economic Impact Assessment examined economic effects (jobs and GVA) within several geographical areas:
- North Somerset;
  - Within the “West of England” (comprising City of Bristol, North Somerset, South Gloucestershire and Bath and North East Somerset Districts); and
  - Wider effects were assessed across the South West England Region as well as South Wales.<sup>30</sup> This reflects the catchment from which the majority of passengers using Bristol Airport reside.<sup>31</sup> The analysis that follows uses the same geographies for the assessment of economic effects.

## Desk study

- 15.4.15 Baseline data for the assessment has been compiled from a number of sources in relation to population and economic structure, inclusive of the sources listed below:
- Publicly available data sources (including Census data, Nomis, Public Health England (PHE)) and CAA); and

<sup>29</sup> Note the 2018 study presented the same information, but graphically; a statistical breakdown was not available. The 2018 graphical distribution suggests the same pattern as noted above – with concentrations of Airport employees in North Somerset (Weston-super-Mare) and South Bristol.

<sup>30</sup> The South West and South Wales include the following Local Authority Areas (data in the remainder of this chapter is based on these areas): Bath and North East Somerset; Bournemouth; Bristol, City of; Cheltenham; Christchurch; Cornwall; Cotswold; East Devon; East Dorset; Exeter; Forest of Dean; Gloucester; Isles of Scilly; Mendip; Mid Devon; North Devon; North Dorset; North Somerset; Plymouth; Poole; Purbeck; Sedgemoor; South Gloucestershire; South Hams; South Somerset; Stroud; Swindon; Taunton Deane; Teignbridge; Tewkesbury; Torbay; Torridge; West Devon; West Dorset; West Somerset; Weymouth and Portland; Wiltshire; Abertawe – Swansea; Blaenau Gwent - Blaenau Gwent; Caerdydd – Cardiff; Caerffili – Caerphilly; Casnewydd – Newport; Castell-nedd Port Talbot - Neath Port Talbot; Merthyr Tudful - Merthyr Tydfil; Pen-y-bont ar Ogwr – Bridgend; Rhondda, Cynon, Taf - Rhondda, Cynon, Taff; Sir Fynwy – Monmouthshire; Tor-faen – Torfaen; and Bro Morgannwg - the Vale of Glamorgan.

<sup>31</sup> See Table 4.1b and 4.2b: CAA (2015). CAA Passenger Survey Report 2015, [online]. Available at: [https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard\\_Content/Data\\_and\\_analysis/Datasets/Passenger\\_survey/CAA%20Passenger%20survey%20report%202015.pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Passenger_survey/CAA%20Passenger%20survey%20report%202015.pdf) [Checked 27/11/18].

- The 2017 and 2018<sup>23</sup> York Aviation: Economic Impact Assessments.

15.4.16 No other external data has been used within this assessment.

## Survey work

15.4.17 No primary survey work has been undertaken in the preparation of this chapter since comprehensive data is available via online sources.

## 15.5 Overall baseline

### Current baseline

#### Bristol Airport

- 15.5.1 Bristol Airport handled some 8.2 million passengers in 2017 making it the 9<sup>th</sup> largest UK airport by passenger numbers (5<sup>th</sup> largest regional airport). Historic data shows that passenger numbers have been steadily increasing over the last decade or more.<sup>32</sup> BAL expects this trend to continue.
- 15.5.2 Bristol Airport offers flights to a wide range of locations in Europe and a small number to the rest of the world (e.g. North Africa, Mexico and the United States). Routes cater for summer and winter holidays (e.g. Majorca, Alicante, Catania, Turin, Innsbruck), visiting friends and family, alongside business and city breaks (e.g. Berlin, Dusseldorf, Hamburg, Vienna, Copenhagen, Rome, Seville, Bologna, Bordeaux and Toulouse).<sup>33</sup> Regular scheduled flights are also offered to several European hub airports (Amsterdam, Paris, Frankfurt, Madrid, Brussels and Munich).<sup>34</sup>
- 15.5.3 There were just over 5,000 air traffic movements (ATMs) in January 2017, which compares to approximately 7,000 in May and increased to some 7,500 in June and August of the same year. There were approximately 5,500 in March 2018 (latest data).<sup>35</sup>
- 15.5.4 **Figure 15.3** provides an overview of seasonal trends at Bristol Airport from 2013-2017 but illustrates a steadily growing number of aircraft movements annually. Only passenger aircraft operate at Bristol Airport; there are no freight aircraft and no freight is currently handled.<sup>35</sup>
- 15.5.5 The latest detailed passenger data relating to Bristol Airport was in the 2015 *Civil Aviation Passenger Survey Report*<sup>36</sup>. As of 2015, around 1% of passengers were connecting to further flights; 99% of passenger journeys terminated at Bristol. Of the latter 80% were international and 20% domestic. Some 16.5% of total passengers were business passengers. Most passengers are on scheduled, rather than chartered flights, and the 2015 data indicates a reasonably diverse age range of passengers. Example data includes 7% aged 2 to 10 years old; 9% aged 20 to 24; 16% aged between 25 to 34 and 20% aged 45 to 54.

<sup>32</sup> Civil Aviation Authority (2017). Size of Reporting Airports March 2016 – February 2017: *Comparison with previous year*, [online]. Available at:

[https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard\\_Content/Data\\_and\\_analysis/Datasets/Airport\\_stats/Airport\\_data\\_2017\\_01/T](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2017_01/Table_01_Size_of_UK_Airports.pdf)  
[able\\_01\\_Size\\_of\\_UK\\_Airports.pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2017_01/T) [Checked 28/03/2018].

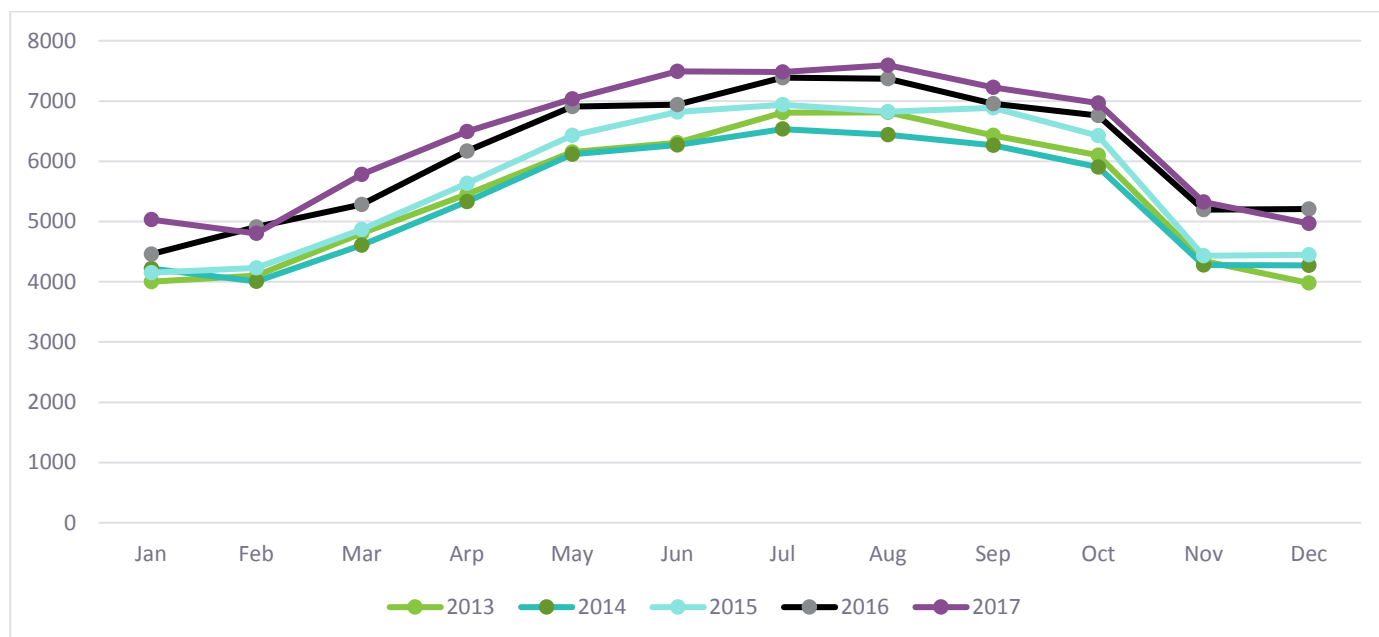
<sup>33</sup> Airbus (2018). Our Locations [online]. Available at: <http://company.airbus.com/careers/Our-locations/Filton.html> [Checked 07/11/18].

<sup>34</sup> Bristol Airport (2018). Where can I fly? [online]. Available at: <https://www.bristolairport.co.uk/where-can-i-fly> [Checked 17/07/18].

<sup>35</sup> Civil Aviation Authority (2017). Airport data: Size of UK Airports, [online]. Available at: [https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard\\_Content/Data\\_and\\_analysis/Datasets/Airport\\_stats/Airport\\_data\\_2018\\_03/T](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2018_03/T)  
[able\\_03\\_Aircraft\\_Movements\(1\).pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2018_03/T) [Checked 04/06/18].

<sup>36</sup> Civil Aviation Authority (2015). CAA Passenger Survey Report 2015, [online]. Available at: [https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard\\_Content/Data\\_and\\_analysis/Datasets/Passenger\\_survey/CAA%20Passenger%20survey%20report%202015.pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Passenger_survey/CAA%20Passenger%20survey%20report%202015.pdf) [Checked 30/07/18].

Figure 15.3 Number of aircraft movements at Bristol Airport from 2013-2017



Source: CAA<sup>32</sup>

- 15.5.6 The 2018 Economic Impact Assessment<sup>23</sup> evaluated the economic effects of Bristol Airport under several scenarios. First, the current (2018) impact was established. Subsequently, impacts in the year 2026 were forecast, based on 10 million passengers per annum (mppa) (future baseline) as well as 12 mppa. The net difference in economic impact between 10 and 12 mppa was also shown.
- 15.5.7 **Table 15.4** presents headline economic impacts for North Somerset alone in 2018. These are categorised by the types of effect (as described in **Section 15.4**); direct, indirect and induced and catalytic effects (also called wider effects), generated via increases in productivity, as well as from tourism. **Table 15.5** presents the same effects across the West of England, as well as the wider South West and South Wales region. The study notes that ultimately the role the airport plays in the economy is reflected by its demand profile, with economic impacts driven by the volume (passenger numbers) and nature of demand (extent of business travel and of inbound visitors)<sup>23</sup>.
- 15.5.8 Currently, the direct impact of Bristol Airport is estimated to contribute some £200 million per annum in North Somerset alone. This equates to 1,300 jobs (or 1,150 Full Time Equivalent (FTE) jobs).<sup>37</sup> In the District, a further £60 million GVA and 1,100 jobs are supported indirectly, arising from local employee spending and local business supply chains. A further £95 million is estimated to be supported via wider effects from enhanced productivity as well as tourism. Again, this is in North Somerset alone as of 2018.
- 15.5.9 Summing all of the channels of effect, the total economic impact of Bristol Airport at present is estimated at £355 million in GVA and some 3,075 jobs (2,525 FTEs) in North Somerset alone. This comprises approximately 4% of employment in North Somerset and 1% of total GVA (based on data provided in **Table 15.11** and **Table 15.17** respectively). Overall, whilst much larger effects are felt across the larger geography of West of England and beyond, Bristol Airport is an important contributor to the North Somerset economy and a major employer.

<sup>37</sup> Equivalent employees working full-time. In other words, one FTE is equivalent to one employee working full-time; 0.5 of an FTE works part time. The hours worked are typically 37.5 per week.

Table 15.4 Bristol Airport economic impact in North Somerset (2018, Baseline)

	GVA (£m)	Jobs	FTEs
<b>Direct</b>	£200	1,300	1,150
<b>Indirect &amp; Induced</b>	£60	1,100	875
<b>Total economic footprint</b>	£260	2,400	2,025
<b>Productivity</b>	£90	600	450
<b>Inbound tourism</b>	£5	75	50
<b>Wider Impacts (Total)</b>	£95	675	500
<b>Grand Total</b>	£355	3,075	2,525

Source: York Aviation (2018)<sup>23</sup>. Note that “total economic footprint” is the sum of direct, indirect and induced effects. Wider impacts is the sum of productivity and tourism effects. Grand total is the sum of both economic footprint and wider impacts.

- 15.5.10 Across the West of England (defined as North Somerset, Bristol, Bath and North East Somerset and South Gloucestershire) the total economic footprint is estimated at some £430 million, equating to 5,800 jobs (**Table 15.5**). Accounting for wider impacts, Bristol Airport supports GVA of £810 million and over 9,500 jobs from all channels of effect. This constitutes some 3% of the total size of the economic footprint of the West of England and around 2% of all jobs (based on data in **Table 15.11** and **Table 15.17**).
- 15.5.11 Across South West England and South Wales, the total direct, indirect or induced and catalytic employment effects arising from Bristol Airport is estimated at just under 23,500 jobs, equating to £1.65 billion GVA. This makes Bristol Airport a major contributor to the regional economy and a major employer, constituting 1% of total employment and GVA in South West England and Wales.

Table 15.5 Bristol Airport economic impact in the West of England and South West England and South Wales (2018, Baseline)

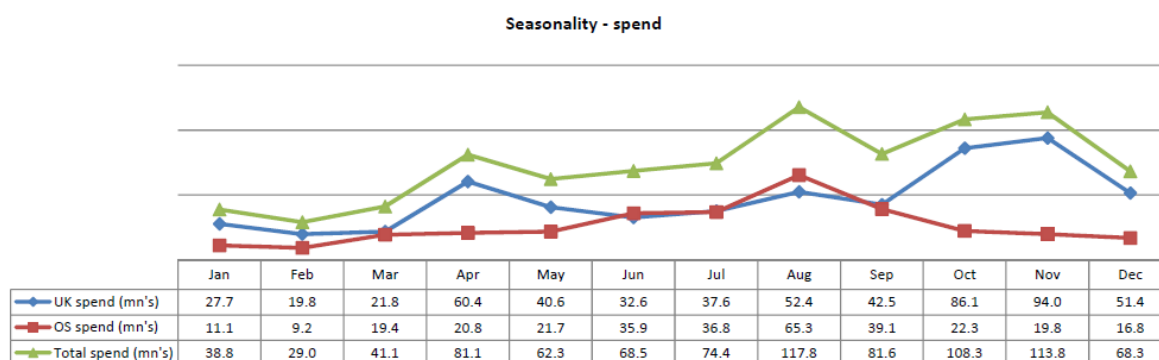
	West of England			South West & South Wales		
	GVA (£m)	Jobs	FTEs	GVA (£m)	Jobs	FTEs
<b>Direct</b>	£260	2,900	2,550	£300	3,900	3,425
<b>Indirect &amp; Induced</b>	£170	2,900	2,350	£310	6,050	4,775
<b>Total economic footprint</b>	£430	5,800	4,900	£610	9,950	8,200
<b>Productivity</b>	£290	2,250	1,850	£780	8,400	6,625
<b>Inbound tourism</b>	£90	1,475	1,200	£260	5,125	4,050
<b>Wider Impacts (Total)</b>	£380	3,725	3,050	£1,040	13,525	10,675
<b>Grand Total</b>	£810	9,525	7,950	£1,650	23,475	18,875

Source: York Aviation (2018)<sup>23</sup>. Note that “total economic footprint” is the sum of direct, indirect and induced. Wider impacts are the sum of productivity and tourism effects. Grand total is the sum of both economic footprint and wider impacts. Note these are not additive; South West England and South Wales includes effects in The West of England for example.

## Tourism profile

- 15.5.12 The UK is the eighth largest international tourism destination ranked by visitor numbers.<sup>38</sup> In total, there were 37.6 million visits by overseas residents to the UK in 2016, this was 4% more than in 2015. In 2010, 72% of international UK visitors arrived by air and accounted for 83% of inbound visitor spending. On average, these passengers spend more than those arriving by rail or ferry.<sup>39,40</sup>
- 15.5.13 Across the West of England, FTE jobs from tourism total 32,884.<sup>41</sup> Overall spend from tourism in this area peaks in August (**Figure 15.4**), driven by overseas visitors (overseas spend – or OS), while the UK spend increases around holidays and peaks in November. The wider South West of England is the third most popular region for tourists in the UK, with 10.7% of visitors.<sup>38</sup>

Figure 15.4 West of England estimated seasonality spend (2016)



Source: The South West Research Company Ltd<sup>41</sup>

- 15.5.14 Bristol Airport is a gateway to South West England (including Somerset, Devon, Cornwall, Gloucestershire and Wiltshire) and Wales. Attractions in the local area include, but are not limited to the following:
- The Brecon Beacons National Park, Cardiff, Swansea and the Pembrokeshire Coast;
  - The City of Bristol; (including Clifton Suspension Bridge and Avon Gorge; Bristol International Balloon Fiesta; Ashton Court and Bristol Harbour); the City of Bath (including the Roman baths); the City of Gloucester, including Gloucester Cathedral and Docks; Cheltenham; and Cardiff (including Cardiff Bay);
  - The Mendips, the Cotswolds, the Severn Estuary, the Wye Valley, the Quantocks, the Brecon Beacons, Exmoor, Dartmoor; and
  - Glastonbury; Cheddar Gorge; Weston-Super-Mare and Berkeley Castle.

## Population and demographics

- 15.5.15 The total resident population (**Table 15.6**) of the West of England area was 1.14 million (2017), of which just under 213,000 resided in North Somerset. Generally, the LADs have similar proportions

<sup>38</sup> Tourism Alliance (2017). UK Tourism Statistics 2017, [online]. Available at: [http://www.tourismalliance.com/downloads/TA\\_395\\_420.pdf](http://www.tourismalliance.com/downloads/TA_395_420.pdf) [Checked 09/07/18].

<sup>39</sup> Office for National Statistics (2016). Travel trends: 2016, [online]. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/leisureandtourism/articles/traveltrends/2016>. [Checked 17/07/18].

<sup>40</sup> Office for National Statistics (2016). UK Perspectives 2016: How we travel, [online]. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/leisureandtourism/articles/ukperspectives2016howwettravel/2016-05-26> [Checked 17/07/18].

<sup>41</sup> The South West Research Company Ltd (2018). The Economic Impact of North Somerset's Visitor Economy 2016, [online]. Available at: <http://www.n-somerset.gov.uk/wp-content/uploads/2018/05/economic-impact-report-2016.pdf> [Checked 09/07/18].

of population who are of working age (aged 16-64) as the regional and national proportions (with the average being 63% for the LADs). North Somerset has a slightly older age profile, with a larger proportion aged over 65. The converse is true for Bristol.

Table 15.6 Population profile (2017) by geography<sup>42</sup>

Study area		All People	Aged 0-15	Aged 16-64	Aged 65+
North Somerset	No.	212,800	38,600	123,800	50,400
	% of total population	-	18.1	58.2	23.7
Bristol	No.	459,300	85,400	314,100	59,800
	% of total population	-	18.6	68.4	13.0
Bath and North East Somerset	No.	188,700	31,500	121,500	35,700
	% of total population	-	16.7	64.4	18.9
South Gloucestershire	No.	279,000	52,100	174,900	52,000
	% of total population	-	18.7	62.7	18.6
South West	No.	5,559,300	977,500	3,370,800	1,211,000
	% of total population	-	17.6	60.6	21.8
England	No.	55,619,400	10,638,000	34,950,900	10,030,500
	% of total population	-	19.1	62.8	18.0
South Wales <sup>43</sup>	No.	1,912,300	349,200	1,206,700	356,400
	% of total population	-	18.2	63.1	18.6
Wales	No.	3,125,200	559,300	1,922,600	643,300
	% of total population	-	17.9	61.5	20.6

Source: Nomis<sup>44</sup> (2017 ONS Population Estimates)

15.5.16 The local and regional populations are forecast to increase (**Figure 15.5**). Over the forecast period, Bristol's population is expected to grow the fastest, followed by South Gloucestershire. This trend is consistent with analysis undertaken by Bristol City Council, who expect the Bristol population to increase by 95,100 people over a 25-year period (2016-2041).<sup>45</sup> This is mainly driven by an increase in births, rather than migration, which reduced in 2018.<sup>45</sup> Similarly, an 11% increase in population in

<sup>42</sup> Data is shown for the constituent Local Authority Districts (LADs) of the West of England, as well as the South West England Region and South Wales. Wales and England are included for comparative purposes only and are not utilised for further analysis.

<sup>43</sup> South Wales data is comprised of the following authorities: Swansea; Blaenau Gwent; Cardiff; Caerphilly; Newport; Neath Port Talbot; Merthyr Tydfil; Bridgend; Rhondda, Cynon Taff; Monmouthshire; Torfaen; and the Vale of Glamorgan.

<sup>44</sup> Nomis (2017). Local Authority Profiles, [online]. Available at: <https://www.nomisweb.co.uk/> [Checked: 05/07/18].

<sup>45</sup> Bristol City Council (2018). The Population of Bristol June 2018, [online]. Available at: <https://www.bristol.gov.uk/documents/20182/33904/Population+of+Bristol+June+2018/53020277-05de-a153-2052-aa080338bb57> [Checked: 05/07/18].

Bath and North East Somerset was expected (2014- 2024)<sup>46</sup> and a 17% increase by 2037 in South Gloucestershire<sup>47</sup>.

Figure 15.5 Population increase in the LADs (numbers in thousands)



Source: ONS 2016 population projections<sup>48</sup>

15.5.17 Population pyramids for the West of England LADs (**Figure 15.6**) compare the numbers of men and women locally with the national pattern in 2016 and to the expected demographic make-up in 2020. Several patterns are evident:

- North Somerset has a noticeably lower share of its population of working age, from the ages of 15 to 39 in particular. From the age of 45 upwards, the share is greater, and this is expected to increase to 2020; and
- South Gloucestershire has a rather more typical demographic profile, but also indicates an ageing of the local population. In contrast, Bristol has a much younger population and a significantly larger working age population reflecting its economic role. Bath and North East Somerset has a pronounced share of 20-24-year olds, reflecting its two universities, but a lower working age population. Through to 2020 a slight ageing of the population is expected.<sup>49</sup>

<sup>46</sup> Bath and North East Somerset Council (2017). Population Key Facts, [online]. Available at: <http://www.bathnes.gov.uk/services/your-council-and-democracy/local-research-and-statistics/wiki/population> [Checked: 05/07/18].

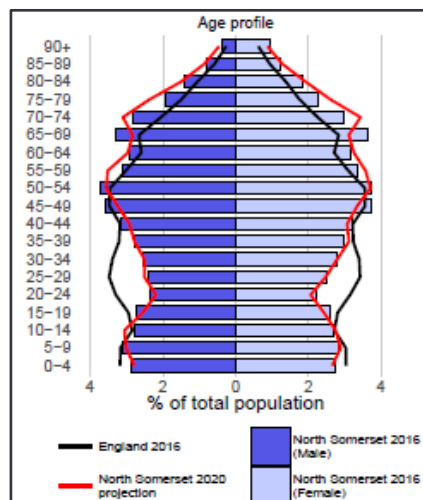
<sup>47</sup> South Gloucestershire Council (2018). Population and Place, [online]. Available at: <http://edocs.southglos.gov.uk/jsna/pages/population-and-place/> [Checked: 05/07/18].

<sup>48</sup> Office for National Statistics (2016). Population projections for local authorities, [online]. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2> [Checked 17/07/18].

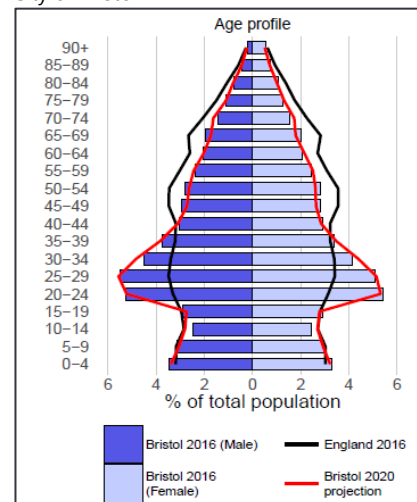
<sup>49</sup> Public Health England (2018). North Somerset Local Authority Health Profile 2018, [online]. Available at: <https://fingertips.phe.org.uk/profile/health-profiles/data#page/9/qid/1938132696/pat/6/par/E12000009/ati/102/are/E06000024>. [Checked 05/07/18].

Figure 15.6 2016 age profile and 2020 population projections (PHE)

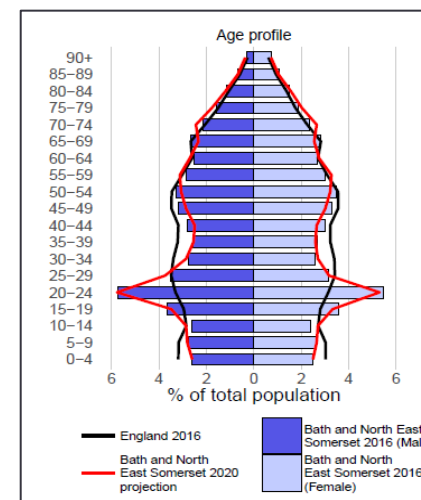
#### North Somerset



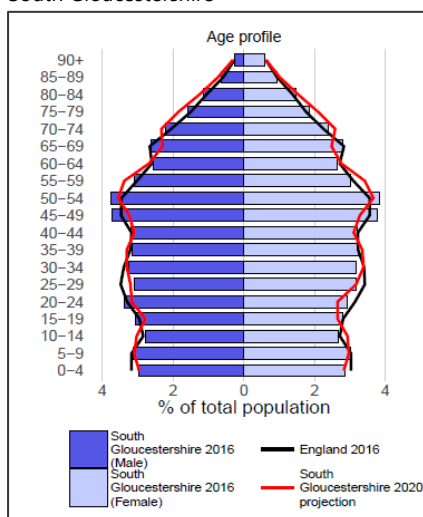
#### City of Bristol



#### Bath and North East Somerset



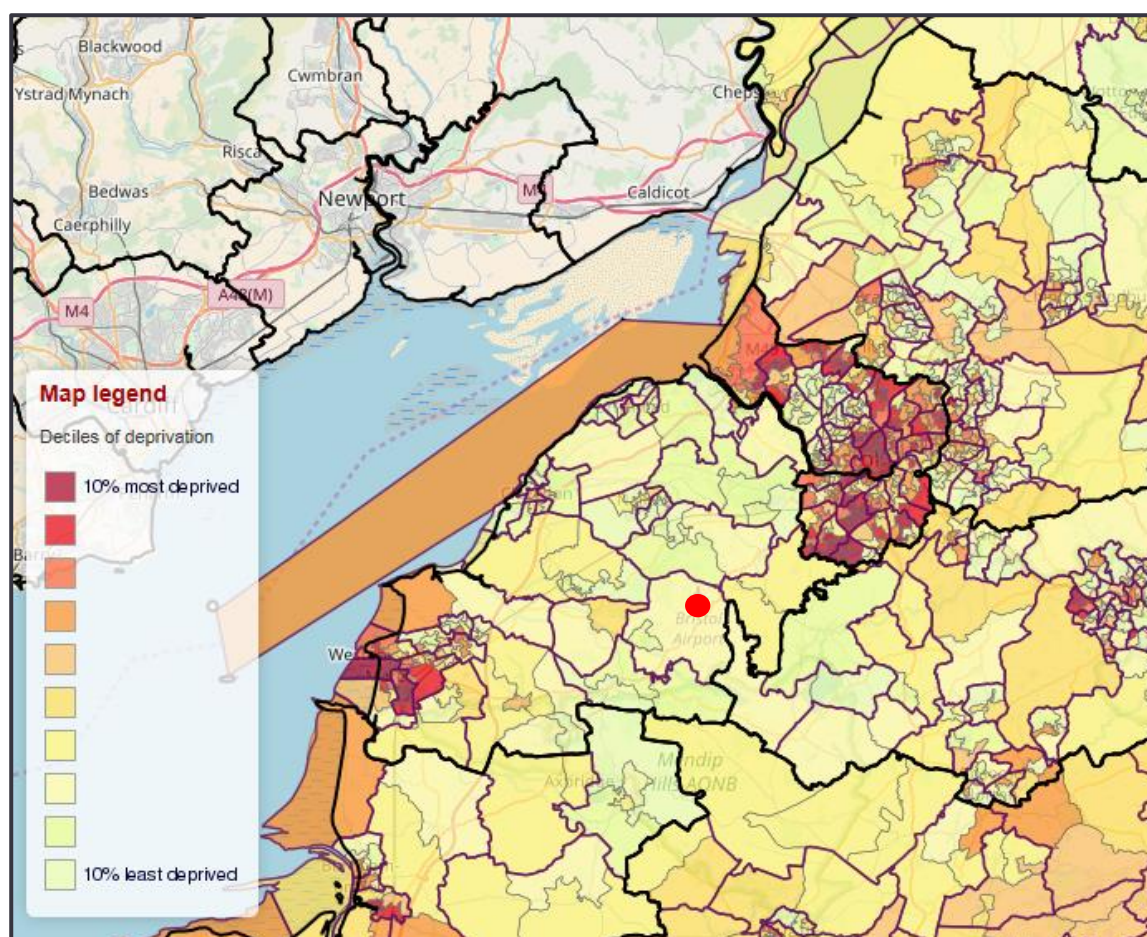
#### South Gloucestershire



## Socio-economic deprivation

- 15.5.18 The Index of Multiple Deprivation (IMD) is a composite measure used to reflect the relative position of small geographical areas across the UK comparing access to or provision of social and economic services. It is based on several domains or dimensions: income, employment, health deprivation and disability, education, skills and training deprivation, barriers to housing and services, crime and living environment deprivation. Lower scores indicate greater deprivation, the most deprived area is indicated by a rank of 1.
- 15.5.19 Bristol Airport is within the North Somerset 013D LLSOA which is ranked 23,619 out of 32,844 LLSOAs in England (i.e. it is amongst the 30% least deprived areas when compared nationally). Its approximate position is marked with a red dot in the figure below.
- 15.5.20 The areas surrounding Bristol Airport (**Figure 15.7**) are amongst the least deprived parts of England. Areas of noticeable deprivation are present around South and East Bristol, South and central parts of Weston-Super-Mare in North Somerset with small areas in Bridgwater to the South (within Sedgemoor District) as well as a small area to the east of Bath.

Figure 15.7 Index of Multiple Deprivation (2015) at neighbourhood (LSOA) scale



Source: Department for Communities and Local Government<sup>50</sup> The approximate location of the airport is marked with a red circle.

<sup>50</sup> Department for Communities and Local Government (2015). Indices of Deprivation Explorer, [online]. Available at: <http://dclgapps.communities.gov.uk/imd/idmap.html> [Checked 05/07/18].

## Education and skills

- 15.5.21 In comparison to regional and national averages, the West of England LADs have a higher average of people with National Vocational Qualification (NVQ) Level 4 and above and a lower average of people with no qualifications (refer to **Table 15.7**). Bristol has rather more unequal skill levels, with higher proportions of those with both no qualifications and higher-level ones.

**Table 15.7** Qualifications by geography (2017)

Qualification <sup>51</sup> Study area	No Qualifications	NVQ Level 1 and Above	NVQ Level 2 and Above	NVQ Level 3 and Above	NVQ Level 4 and Above
<b>North Somerset</b>	3.0%	93.1%	80.9%	61.8%	41.9%
<b>Bristol</b>	5.1%	90.3%	82.0%	70.3%	54.2%
<b>Bath and North East Somerset</b>	3.7%	92.2%	83.7%	69.5%	47.8%
<b>South Gloucestershire</b>	3.3%	92.9%	82.3%	62.8%	40.8%
<b>South West</b>	5.0%	90.1%	79.0%	60.3%	39.0%
<b>England</b>	7.6%	85.5%	74.6%	57.1%	38.3%
<b>South Wales</b>	9.6%	84.0%	71.5%	52.1%	33.7%
<b>Wales</b>	8.7%	85.3%	74.1%	54.6%	35.1%

Source: Nomis<sup>44</sup> (2017 Office for National Statistics (ONS) annual population survey)

## Health

- 15.5.22 On average, within the majority of LADs, general levels of health are similar to the regional and national averages (**Table 15.8**). Bath and North East Somerset and South Gloucestershire have slightly better general health.

**Table 15.8** Key health variables by geography (2011)

Study area	Very good health	Good health	Fair health	Bad health	Very bad health
<b>North Somerset</b>	46.3%	34.8%	13.7%	4.1%	1.2%
<b>Bristol</b>	48.9%	33.5%	12.2%	4.2%	1.3%
<b>Bath and North East Somerset</b>	50.5%	33.4%	11.8%	3.3%	0.9%
<b>South Gloucestershire</b>	49.1%	34.9%	11.8%	3.3%	0.9%
<b>South West</b>	46.9%	34.2%	13.1%	4.2%	1.2%
<b>England</b>	47.1%	34.2%	13.1%	4.2%	1.2%

<sup>51</sup> Level 1: 1-4 O Levels/CSE/GCSEs (any grades), Entry Level, Foundation Diploma, NVQ Level 1, Foundation GNVQ, Basic/Essential Skills; Level 2: 5+ O Level (Passes)/CSEs (Grade 1)/GCSEs (Grades A\*-C), School Certificate, 1 A Level/ 2-3 AS Levels/VCEs, Intermediate/Higher Diploma, Welsh Baccalaureate Intermediate Diploma, NVQ level 2, Intermediate GNVQ, City and Guilds Craft, BTEC First/General Diploma, RSA Diploma; Apprenticeship; Level 3: 2+ A Levels/VCEs, 4+ AS Levels, Higher School Certificate, Progression/Advanced Diploma, Welsh Baccalaureate Advanced Diploma, NVQ Level 3; Advanced GNVQ, City and Guilds Advanced Craft, ONC, OND, BTEC National, RSA Advanced Diploma; Level 4 and above: Degree (for example BA, BSc), Higher Degree (for example MA, PhD, PGCE), NVQ Level 4-5, HNC, HND, RSA Higher Diploma, BTEC Higher level, Foundation degree (NI), Professional qualifications (for example teaching, nursing, accountancy); Other qualifications: Vocational/Work-related Qualifications, Foreign Qualifications (not stated/level unknown).

<b>South Wales</b>	46.6%	30.6%	14.5%	6.3%	2.0%
<b>Wales</b>	46.6%	31.1%	14.6%	5.8%	1.8%

Source: 2011 Census<sup>52</sup>

15.5.23 Detailed health statistics, including life expectancy and other indicators of health, are presented in **Table 15.9**. Infant mortality and life expectancy are close to regional and national averages, although average life expectancy rates in Bristol are slightly lower than elsewhere. Excess weight is generally lower than regional and national averages, with the exception of South Gloucestershire. Smoking prevalence is generally lower, except in Bath and North East Somerset which is closer to the regional average.

15.5.24 Further details pertaining to health are provided in **Chapter 16: Human Health**.

Table 15.9 Health statistics (various years)

Variable	Infant mortality	Life expectancy at birth (females)	Life expectancy at birth (males)	Excess weight in adults	Smoking prevalence in adults
	(2014-2016)	(2014-2016)	(2014-2016)	(2015-2016)	(2017)
<b>Measure:</b>	Rate per 1000	Years	Years	Percent	Percent
<b>North Somerset</b>	3.2	83.6	79.9	55.1	11.1
<b>Bristol</b>	3.6	82.8	78.8	55.2	11.1
<b>Bath and North East Somerset</b>	3.0	84.5	80.7	53.7	13.4
<b>South Gloucestershire</b>	3.5	85.0	81.3	60.1	10.5
<b>South West</b>	3.4	83.8	80.2	60.3	13.7
<b>England</b>	3.9	83.1	79.5	61.3	14.9
<b>South Wales</b>	No data available				
<b>Wales</b>	No data available				

Source: PHE<sup>53</sup>

## Housing

15.5.25 In England, as of 2011, there were a total of some 23 million dwellings (including houses, bungalows, flats and maisonettes)<sup>54</sup> (**Table 15.10**). The corresponding figures for North Somerset are just under 91,700; for the West of England as a whole the total number of dwellings are just over 466,000 and the number of household space marginally over 468,000. The *North Somerset Housing Strategy 2016-21*<sup>15</sup> sets out three strategic aims until 2021, which include increasing the supply of homes and of new affordable housing.

<sup>52</sup> Census (2011). General Health, [online]. Available at: <https://www.nomisweb.co.uk/census/2011/QS302EW> [Checked 06/07/18].

<sup>53</sup> Public Health England (2018). Local Authority Health Profiles, [online]. Available at: <https://fingertips.phe.org.uk/profile/health-profiles>. [Checked 06/07/18].

<sup>54</sup> Office for National Statistics (2011). Housing, [online]. Available at: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKewiUtofb-qXcAhXBY8AKHfcLDboQFggoMAA&url=https%3A%2F%2Fwww.ons.gov.uk%2Fons%2Frel%2Fsocial-trends-rd%2Fsocial-trends%2Fsocial-trends-41%2Fhousing-chapter.pdf&usq=AOvVaw0EihZrvbqnOoRFm8T9IsrZ> [Checked 17/07/18].

15.5.26 In 2016, the average house price (all properties) in North Somerset was £229,458.<sup>55</sup> In Bristol, this was £277,406 in 2016.<sup>56</sup>

Table 15.10 Dwellings and household spaces (2011)

Study area	All dwellings	Household spaces
North Somerset	91,694	91,954
Bristol	188,438	189,885
Bath and North East Somerset	75,931	76,304
South Gloucestershire	109,984	110,024
South West	2,401,289	2,408,437
England	22,976,066	23,044,097
South Wales	822,285	823,427
Wales	1,383,814	1,385,521

A household space is the accommodation used or available for use by an individual household. Source: Nomis (2011 Census)<sup>57</sup>

## Labour market

15.5.27 As shown in **Table 15.11**, there were 86,000 jobs in North Somerset and 587,000 across the West of England in 2016, equating to 18% of total jobs across South West England and Wales and approximately 2% of England and Wales. Nearly half of all jobs in the city region are in Bristol itself (45%) with a further 25% in South Gloucestershire (most of these jobs, in turn, are located within the "North Fringe" of Bristol near to the M4 and M5 motorways). The remaining two districts are similarly sized with around 15% of jobs each.

15.5.28 Bristol and South Gloucestershire have the highest proportion of full-time employees, while Bath and North East Somerset and North Somerset have the highest proportion of part-time jobs.

Table 15.11 Employment (2016)

Study area		Total employee jobs	Full-time	Part-time	Employment
North Somerset	Number	83,000	52,000	31,000	86,000
	%	-	62.7	37.3	-
Bristol	Number	259,000	177,000	82,000	265,000
	%	-	68.3	31.7	-
Bath and North East Somerset	Number	84,000	52,000	32,000	87,000
	%	-	61.9	38.1	-

<sup>55</sup> Dixon Searle Partnership (2016). For: North Somerset Council Appendix III Market Values & Assumptions Research Update, [online]. Available at: <https://www.n-somerset.gov.uk/wp-content/uploads/2017/01/C7-CIL-viability-review-update-appendices-part-B.pdf> [Checked 31/07/18].

<sup>56</sup> Home (2018). House Prices Report for Bristol – January 2016 to December 2016, [online]. Available at: [https://www.home.co.uk/guides/house\\_prices\\_report.htm?location=bristol&startmonth=01&startyear=2016&endmonth=12&endyear=2016](https://www.home.co.uk/guides/house_prices_report.htm?location=bristol&startmonth=01&startyear=2016&endmonth=12&endyear=2016) [Checked 31/07/18].

<sup>57</sup> Nomis (2011). KS401EW – Dwellings, household spaces and accommodation type, [online]. Available at: <https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=618> [Checked 30/07/18].

<b>South Gloucestershire</b>	Number	146,000	101,000	45,000	149,000
	%	-	69.2	30.8	-
<b>South West</b>	Number	2,433,000	1,579,017	853,983	2,562,000
	%	-	64.9	35.1	-
<b>England</b>	Number	25,530,000	17,377,000	8,153,000	26,385,000
	%	-	68.1	31.9	-
<b>South Wales</b>	Number	773,000	516,000	257,000	791,000
	%	-	66.8	33.2	-
<b>Wales</b>	Number	1,255,000	813,000	442,000	1,332,000
	%	-	64.8	35.2	-

Source: Nomis<sup>44</sup> (2016 ONS Business Register and Employment Survey) Note employment is inclusive of self-employment and armed forces. These are not the same as FTEs.

15.5.29 The above patterns reflect the major employment sectors in each District, where diverse trends are evident. A breakdown of the employment by industry sector is in **Table 15.12**.

15.5.30 Health is the most significant employment sector, driven by Bristol, and Bath and North East Somerset. In these areas this reflects – in part – the presence of Bristol Royal Infirmary and Southmead hospitals (Bristol) and the Royal United and St. Martin's Hospitals (Bath). Employment in retail is lower than the South West England average, but similar to the national. The average across the South West is itself approaching double the England average. Accommodation services in Bath and North East Somerset and public administration jobs in South Gloucestershire are both above average, whilst manufacturing in Bristol and property jobs in North Somerset are both above average. Jobs at Bristol Airport will fall into several of these sectors.

Table 15.12 Employee jobs by industry (2016)

Proportion of employee jobs (% of total employee jobs, excluding farm-based agriculture):	North Somerset	Bristol	Bath and North East Somerset	South Gloucestershire	South West England	England	South Wales	Wales
Industry								
Mining, quarrying and utilities (B, D and E)	1.8	1.0	2.1	1.2	0.1	1.1	1.7	1.6
Manufacturing (C)	9.6	4.2	5.4	11.0	9.3	8.0	14.1	11.3
Construction (F)	5.4	4.2	4.8	6.2	0.4	4.5	5.6	5.4
Motor trades (Part G)	2.7	1.9	1.5	2.1	1.0	1.8	1.9	1.8
Wholesale (Part G)	2.7	4.6	2.7	2.7	5.3	4.1	3.0	2.9
Retail (Part G)	10.8	7.7	11.9	10.3	16.7	9.4	10.2	10.0
Transport and storage (inc postal) (H)	6.0	4.2	1.8	5.5	3.5	5.0	3.0	2.9

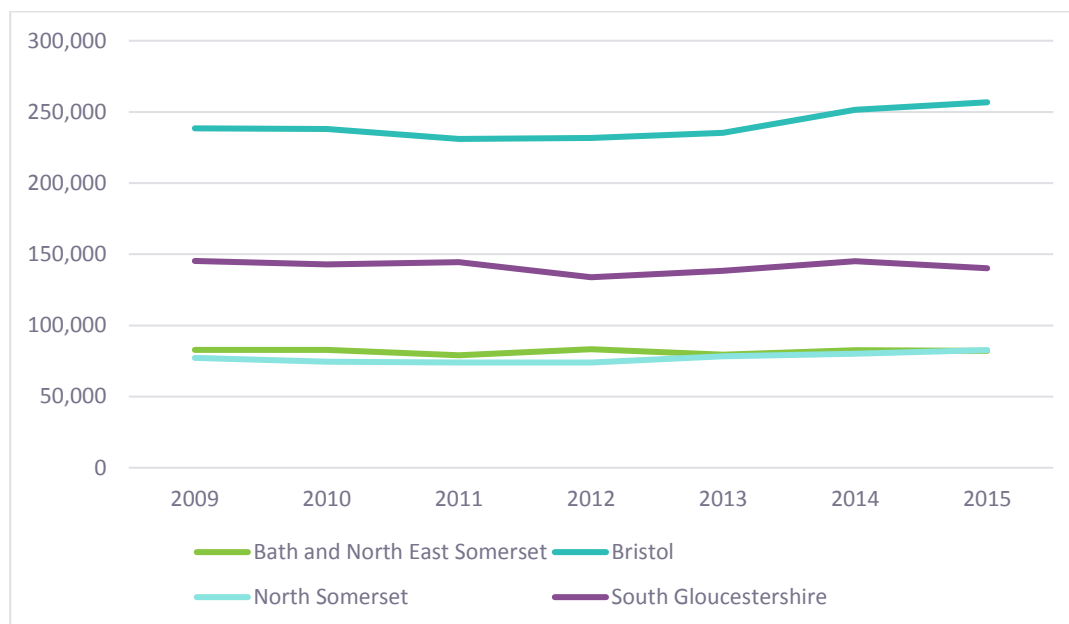
<b>Accommodation and food services (I)</b>	8.4	6.2	9.5	5.5	9.0	7.3	7.4	8.8
<b>Information and communication (J)</b>	3.0	5.0	4.8	5.5	3.3	4.4	2.4	2.3
<b>Financial and insurance (K)</b>	1.8	6.9	3.0	4.1	3.5	3.6	1.9	2.2
<b>Property (L)</b>	2.4	1.5	1.8	1.2	1.7	1.7	1.7	1.6
<b>Professional, scientific and technical (M)</b>	6.0	9.7	8.3	6.8	6.6	9.0	3.6	4.1
<b>Business administration and support services (N)</b>	8.4	9.7	4.8	8.2	7.1	9.2	6.3	6.5
<b>Public administration and defence (O)</b>	4.2	3.9	2.4	8.2	4.3	4.0	7.0	6.8
<b>Education (P)</b>	7.2	9.7	14.3	8.2	9.3	9.0	9.5	10.0
<b>Health (Q)</b>	14.5	15.8	17.9	8.2	14.7	12.8	16.6	15.9
<b>Arts, entertainment, recreation and other services (R, S, T and U)</b>	4.8	3.9	4.8	3.1	2.2	4.5	3.7	4.0

Source: Nomis<sup>44</sup> (2016 ONS Business Register and Employment Survey)

- 15.5.31 Trend data shows increasing employment from 2009 to 2015<sup>58</sup> as the economy recovered from the recession. This trend was mirrored in both Bristol and North Somerset, which experienced job growth over that period of nearly 8%. This was above the regional average and similar to the national rate of growth. However, there has been little or no growth in number of employees across the wider area over the same time period and a net loss of jobs in South Gloucestershire; the latter may reflect the sizable public administration share of employment which has experienced particular job losses arising from cuts in public expenditure over that time (**Figure 15.8** and **Table 15.13**).

<sup>58</sup> Nomis (2018). Business Register and Employment Survey (excluding units registered for PAYE only): open access, [online]. Available at: <https://www.nomisweb.co.uk/query/construct/submit.asp?menuopt=201&subcomp> [Checked 18/07/18].

Figure 15.8 Total number of employees from 2009 - 2015



Source: Nomis<sup>58</sup> (ONS Business Register and Employment Survey)

Table 15.13 Percentage increase and decrease of total employees (2009-2015)

Study area	% Change in total number of employees from 2009-2015
North Somerset	7.26
Bristol	7.63
Bath and North East Somerset	-0.89
South Gloucestershire	-3.51
South West	2.29
England	7.83
South Wales <sup>59</sup>	3.59
Wales	4.27

Source: Nomis<sup>58</sup> (ONS Business Register and Employment Survey)

15.5.32 The gross medium weekly earnings of full time employees are shown in **Table 15.14**. Male wages in Bristol and South Gloucestershire are above the national average and below it in North Somerset and Bath and North east Somerset. Average wages earned by women in South Gloucestershire appear low, both absolutely and relative to men.

Table 15.14 Median weekly gross full-time earnings (in £s) (2016)

Study area	Males	Females	Total
North Somerset	517.5	327.6	520.6
Bristol	556.2	377.8	536.6

<sup>59</sup> Comparison from 2010 – 2015 only.

<b>Bath and North East Somerset</b>	502.2	344.9	535.2
<b>South Gloucestershire</b>	554.5	293.6	575.1
<b>South West</b>	498.4	319.7	505.8
<b>England</b>	536.6	351.3	544.2
<b>Wales</b>	481.0	332.9	493.7

Source: Nomis<sup>44</sup> (2017 ONS annual survey of hours and earnings)

15.5.33 Generally, economic activity rates<sup>60</sup> (**Table 15.15**) are above the national average, with the exceptions of Bath and North East Somerset (which may partly reflect the age profile). Self-employment rates are generally higher than the national average, noticeably in North Somerset, alongside Bath and Bristol. Unemployment is generally lower than the national average, but slightly higher in Bristol.

**Table 15.15 Economic activity by geography (percentage, 2017)**

Study area	Economically active (total of the resident population aged 16-64)	In Employment (as a proportion of the individuals economically active)	Employees (as a proportion of the individuals in employment)	Self-Employed (as a proportion of the individuals in employment)	Unemployed (as a proportion of the individuals economically active)
<b>North Somerset</b>	83.1	80.6	67.7	12.6	3.0
<b>Bristol</b>	81.8	78.2	66.7	11.5	4.0
<b>Bath and North East Somerset</b>	78.4	76.7	64.8	11.7	3.2
<b>South Gloucestershire</b>	83.4	79.4	71.6	7.3	3.6
<b>South West</b>	81.4	78.6	66.0	12.3	3.3
<b>England</b>	78.6	75.1	63.9	10.9	4.5
<b>South Wales</b>	75.6	71.6	63.0	8.1	5.3
<b>Wales</b>	76.0	72.4	62.3	9.6	4.8

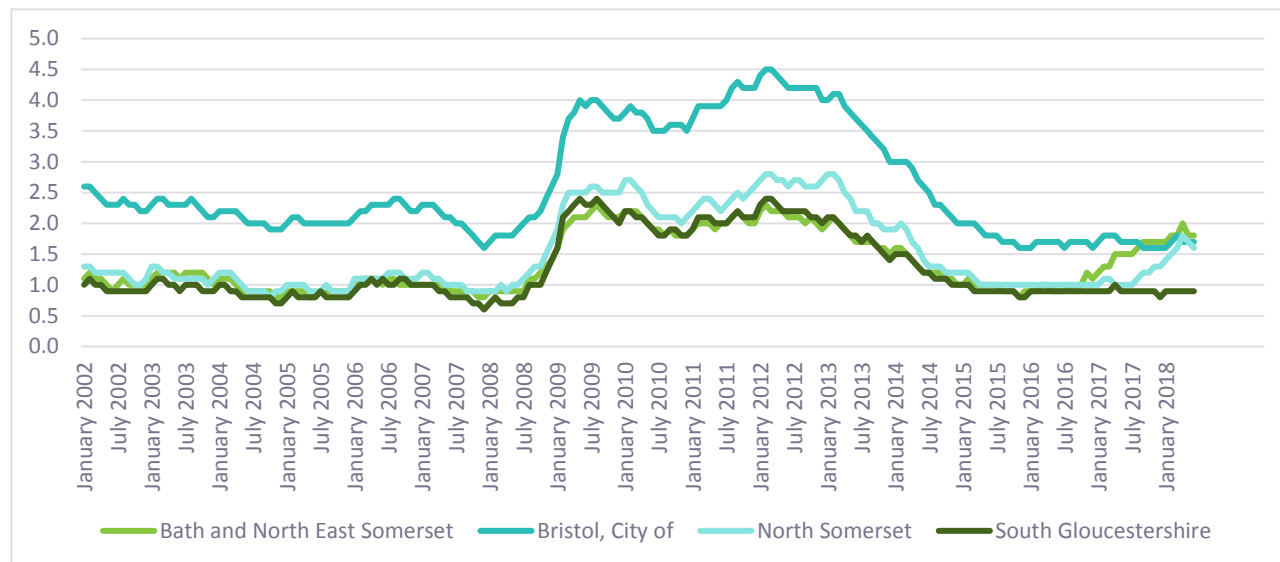
Source: Nomis<sup>44</sup> (2017 ONS annual population survey)

15.5.34 The claimant unemployment rate between 2002 to 2018 (i.e. those who are out of work and claiming Job Seekers Allowance – rather than those just out of work as shown **Table 15.15.**) is shown in **Figure 15.9**. Unemployment increased significantly from late 2008 across all districts – remaining at relatively high levels to mid-2013 (from 2% to 2.5% (except Bristol where levels were between 4% to 4.5%)) before falling in sustained numbers. Unemployment has remained broadly stable since then at between 1% and 2%, however, latest data shows rates in both North Somerset and Bath and North East Somerset have been increasing since 2017.

<sup>60</sup> Economic activity rates indicate the extent of local labour participation but are also indicative of a range of other factors, including skill levels, employment sectors, age and gender mix. It also provides an indication of employment demand and the ability of the local labour market to absorb growth in job opportunities locally.

15.5.35 In absolute numbers, the latest data (June 2018) claimant unemployment amounted to a total of 10,800 unemployed persons in the West of England (an unweighted average of 1.5%) and 1,995 (1.6%) in North Somerset itself<sup>61</sup>.

Figure 15.9 Claimant unemployment rate – West of England



Source: Nomis<sup>44</sup> (ONS Claimant count by sex and age)

15.5.36 A more detailed breakdown on those out of work and claiming benefits across the West of England is shown in **Table 15.16**. Those on incapacity benefit comprise the largest share, particularly in North Somerset and Bristol.

Table 15.16 Worklessness in people aged 16-64 (2016)

Study area		Job seekers	ESA and incapacity benefits	Lone parents	Disabled	Others on income related benefits
North Somerset	Number	750	7,550	950	990	190
	% of 16-64	0.6	6.1	0.8	0.8	0.2
Bristol	Number	3,650	20,050	3,560	2,450	480
	% of 16-64	1.2	6.4	1.1	0.8	0.2
Bath and North East Somerset	Number	290	4,210	590	920	90
	% of 16-64	0.2	3.5	0.5	0.8	0.1
South Gloucestershire	Number	1,030	6,590	1,140	1,440	160
	% of 16-64	0.6	3.8	0.7	0.8	0.1
South West	Number	25,550	184,680	27,120	29,010	5,210
	% of 16-64	0.8	5.5	0.8	0.9	0.2
England	Number	385,770	2,012,680	346,900	268,340	61,980
	% of 16-64	1.1	5.8	1.0	0.8	0.2
South Wales	Number	18,190	109,160	15,980	10,580	2,690

<sup>61</sup> Nomis (2018). Claimants as a proportion of residents ages 16-64, [online]. Available at: <https://www.nomisweb.co.uk/reports/lmp/lep/1925185566/report.aspx#tabwab> [Checked 09/08/18].

Wales	% of 16-64	1.5	9.4	1.3	0.9	0.2
	Number	26,650	162,350	23,030	14,180	4,200
	% of 16-64	1.4	8.4	1.2	0.7	0.2

ESA denotes Employment Support Allowance – financials support if one is ill and/or disabled and unable to work.

Source: Nomis<sup>44</sup> (2016 DWP benefit claimants)

## Economy

- 15.5.37 Based on national accounts, the total size of the South West England regional economy (in GVA terms) in 2016 was just under £130 billion (£129,891 million). This had increased by 4.2% from £124.6 billion in 2015. The comparable data for Wales was £59.8 billion (data for South Wales wasn't available for 2016). Across the West of England, total GVA amounted to £31.8 billion (2015), this comprises 26% of the South West England economy and 20% of the combined South West England and South Wales economy.
- 15.5.38 Within the city region, Bristol accounted for 44% of GVA; 27% from South Gloucestershire (**Table 15.17**). The North Somerset economy amounted to £4.7 billion, comprising 15% of the West of England and similar size to Bath and North East Somerset. Per head, GVA is 2% higher in South Gloucestershire, than in Bristol. Bath and North East Somerset 22% lower. North Somerset is closer to the regional average, some 30% below South Gloucestershire.

Table 15.17 GVA and GVA per head (2015 and 2016)

	GVA 2015 (£m)	GVA 2016 (£m)	GVA per head 2015	GVA per head 2016
North Somerset	£4,674	N/A	£22,263	N/A
Bristol	£13,862	N/A	£30,850	N/A
Bath and North East Somerset	£4,575	N/A	£24,746	N/A
South Gloucestershire	£8,674	N/A	£31,581	N/A
South West	£124,589	£129,891	£22,772	£23,548
England	£1,443,496	£1,495,559	£26,348	£27,060
Wales	£57,442	£59,774	£18,535	£19,200
South Wales	£34,688	N/A	£17,269 (Average)	N/A

Source: ONS Regional gross value added (income approach)<sup>62</sup>, ONS Regional GVA(I) by local authority in the UK<sup>63</sup>

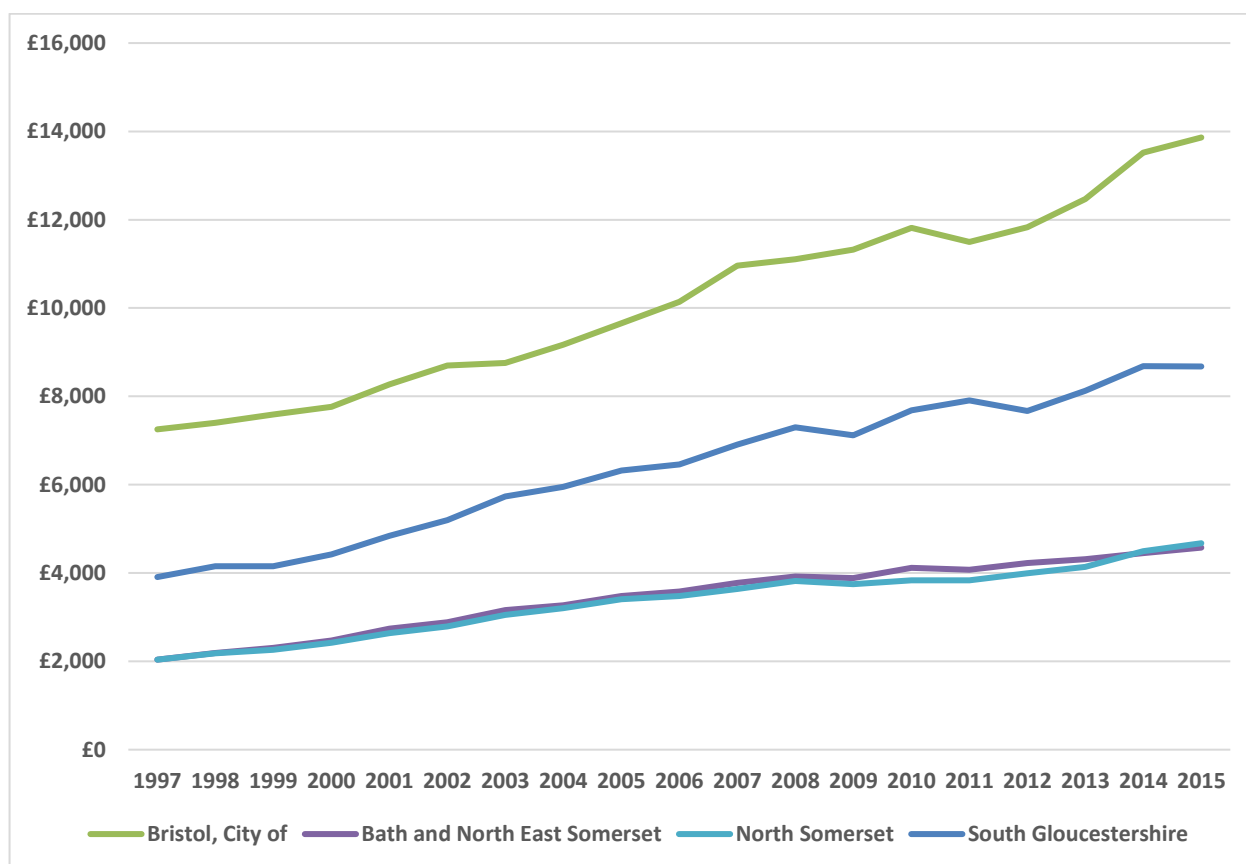
- 15.5.39 Over the last decade average annual GVA growth (**Figure 15.10**) has averaged 3.5% in North Somerset and 3.6% in the West of England as a whole. Within the West of England, Bristol and South Gloucestershire play important roles in driving GVA growth given the relative sizes of these

<sup>62</sup> Office for National Statistics (2017). Regional gross value added (income approach) 1997-2016 for South West, England and Wales, [online]. Available at: <https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedincomeapproach> [Checked 14/08/18].

<sup>63</sup> Office for National Statistics (2017). Regional GVA(I) by local authority in the UK (for Local Authority data including South Wales, 2015) [online]. Available at: <https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgvaibylcalauthorityintheuk> [Checked 14/08/18].

economies. This compares to lower average annual rates of growth across the South West England and Wales (2.6%) over the same period.

Figure 15.10 GVA in the West of England 1997-2015 (£million, income approach)



Source: ONS Regional GVA (I) by local authority in the UK<sup>63</sup>

- 15.5.40 Evidence indicates there is a relationship between greater international connectivity, and greater Foreign Direct Investment (FDI) and business location. The European Cities Monitor found that 51% of companies surveyed indicated that international transport links were an important factor in deciding where to invest, alongside access to markets, availability of staff and quality of telecommunications infrastructure<sup>64,65</sup>.
- 15.5.41 A similar relationship exists between airport connectivity and the ease, cost, flexibility and hence propensity of firms to trade internationally. Whilst Bristol Airport does not carry freight, the provision of international services (rather than the international trade in goods) are reflected in the business passenger numbers traveling through Bristol Airport<sup>66</sup> and these support the catalytic (or "wider") effects noted earlier, from increased productivity and economic activity resulting from greater connectivity.

<sup>64</sup> Cushman and Wakefield (2010). European Cities Monitor 2010 [online]. Available at: [http://81.47.175.201/ETMS/rankings/2010\\_ECM.pdf](http://81.47.175.201/ETMS/rankings/2010_ECM.pdf) [Checked 14/08/18].

<sup>65</sup> Airport Operators Association (AOA). 2013. *An Integrated Policy Framework for UK Aviation: Connecting the Economy for Jobs and Growth*, [online]. Available at <http://www.aoa.org.uk/wp-content/uploads/2013/11/aoa-an-integrated-framework-for-uk-aviation-report.pdf> [Checked 28/03/18].

<sup>66</sup> Civil Aviation Authority (2017). Airport data 2017, [online]. Available at: [https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard\\_Content/Data\\_and\\_analysis/Datasets/Airport\\_stats/Airport\\_data\\_2017\\_annual/Table\\_13\\_2\\_Freight.pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2017_annual/Table_13_2_Freight.pdf) [Checked 30/04/18].

## Business demographics

- 15.5.42 The South West of England has the highest five-year survival rate for businesses established in 2011 and still active in 2016, at 47.0%. This is higher than the survival rate for the UK which was 44.1%. The LAD with the highest number of start-up businesses in the local study are Bristol (with 2,920 business births in 2015-2016). The lowest number of start-up businesses was in West Somerset (110 business births in 2015-2016).<sup>67</sup> This pattern also exists for business closures, with the highest number of business closures in Bristol and lowest in West Somerset.

## Community resources

### Education facilities

- 15.5.43 The closest primary schools, within 5.5km of Bristol Airport, are in Backwell, Flax Bourton, West Leigh, and Wrington (all rated outstanding by Ofsted) with the exception of Winford which is rated good). In Bristol, the proportion of primary schools which are rated either good or outstanding is 92%<sup>68</sup>.
- 15.5.44 The nearest secondary schools to Bristol Airport are Backwell (rated outstanding by Ofsted), Nailsea (rated good by Ofsted) and Ravenswood (rated good by Ofsted), all within 6.5km<sup>78</sup>. In Bristol, the proportion of secondary schools which are rated either good or outstanding is 95%<sup>68</sup>.

### Healthcare facilities

- 15.5.45 The closest medical facility to Bristol Airport is the Backwell Medical Centre in Backwell, approximately 4km north-west of Bristol Airport. There are 15 other General Practitioner (GP) surgeries within a 10km radius of Bristol Airport, while the South Bristol National Health Service (NHS) Community Hospital is approximately 10km to the north-east of Bristol Airport. It is a relatively new hospital (opened in 2012) and allows more streamlined diagnosis and treatment for South Bristol. The North Somerset Community Hospital (Clevedon) is some 15km to the north-west. Weston General hospital is located further afield some 25km to the west.
- 15.5.46 The closest accident and emergency facility is Bristol Royal Infirmary, 12km to the north-east of Bristol Airport. This is a 24-hour facility that offers emergency services and has numerous other medical departments.
- 15.5.47 Further information on healthcare provision and facilities can be found in **Chapter 16: Human Health**.

### Recreation facilities

- 15.5.48 Nearby recreational facilities include the Felton and Redhill village halls, local pubs, a post office, the Tall Pines golf club and accommodation.
- 15.5.49 Further afield lie the larger villages of Wrington, Winford, Backwell, Congresbury, Barrow Gurney and Yatton, each with a wider range of local services. Blagdon Lake is circa 5km to the south and the wider area is attractive for walkers, cyclists and other users.

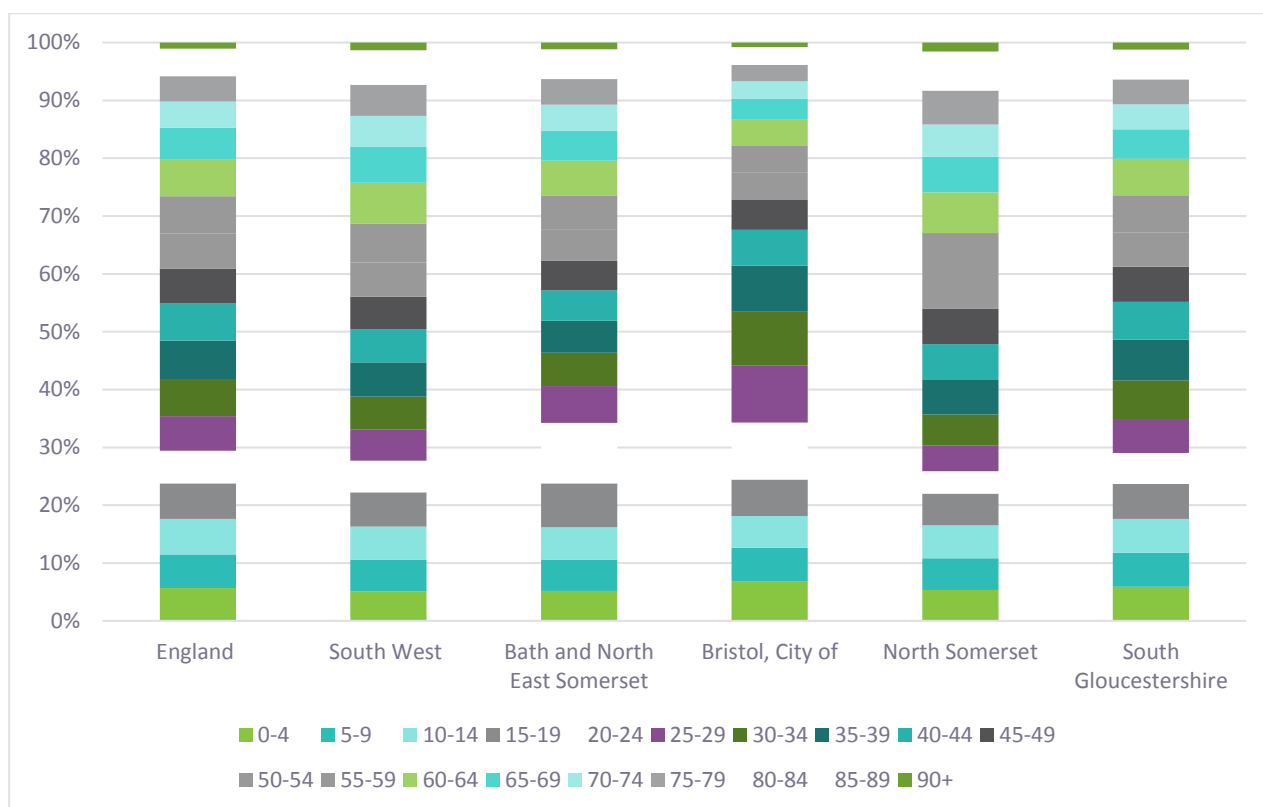
<sup>67</sup> Office for National Statistics (2017). Business demography, [online]. Available at: <https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/businessdemographyreferencetable> [Checked 17/07/18].

<sup>68</sup> Bristol Learning City (2016). Bristol Education Performance Report 2015-2016, [online]. Available at: <https://democracy.bristol.gov.uk/documents/s11147/Education%20Performance%20Report%202016.pdf> [Checked 10/07/18].

## Future baseline

- 15.5.50 The introduction of the Joint Spatial Plan<sup>9</sup>, (submission version) which 'sets out a prospectus for sustainable growth' refers to Bristol Airport as a "key strategic infrastructure employment location" that will ensure the continued economic growth of the West of England and supports employment growth at the Bristol Airport (if adopted). The forecast for flight movements and passenger numbers used in the EIA are based on estimates provided by Bristol Airport. These estimates assumed that the airports existing 10 mppa capacity limit would be exceeded in 2021 with numbers then building up to 12 mppa by 2026<sup>23</sup>.
- 15.5.51 Demographic and economic characteristics are dynamic. Population forecasts are presented in **Figure 15.5** with more detailed population pyramids in **Figure 15.6**. Forecasts are subject to uncertainty and error, but these indicate ongoing, relatively minor, demographic changes might be expected locally, consistent with an ageing population.
- 15.5.52 **Figure 15.11** presents a more detailed demographic breakdown by age group in the West of England based on the current (2016) ONS population forecasts for the year 2026 when the airport is expected to reach 12 mppa.

Figure 15.11 Forecasted demographic breakdown West of England 2026



Source: ONS: Population projections for local authorities<sup>69</sup>

- 15.5.53 The total population currently forecast for 2026 (**Table 15.18**), indicates a total resident population across the West of England of 1,229,800.

<sup>69</sup> Office for National Statistics (2018). Population projects for local authorities: Table 2, [online]. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2> [Checked 14/08/18].

Table 15.18 ONS Forecasted resident population 2026

Area	2026 forecast resident population (000's)
North Somerset	229.5
Bristol	498.1
Bath and North East Somerset	199.8
South Gloucestershire	302.4
South West	5,880.9
England	58,505.6

Source: ONS: Population projections for local authorities<sup>69</sup>; only data for Local authorities and higher administrative areas within England are available, hence South Wales is not included.

- 15.5.54 As previously noted, the 2018 Economic Impact Assessment evaluated the economic effects Bristol Airport under several scenarios. The current 2018 impacts are described in **Table 15.19** and **Table 15.20**. Economic impacts expected to arise in the year 2026 were also forecast under two scenarios:
- First, economic effects in 2026, assuming that the 10 mppa capacity limit was not increased. This assumes further growth at the airport over and above the current situation. This is the future baseline used for the assessment - the estimated impacts are set out below in **Table 15.19** and **Table 15.20**; and
  - Second, that effects in 2026 assuming the capacity limit was increased to 12 mppa and the airport accommodates this number. This allows the net additional impact of the further 2 mppa to be evaluated. These are set out in **Section 10.5**.
- 15.5.55 For the first scenario, **Table 15.19** presents headline economic impacts for North Somerset only in 2026, while **Table 15.20** presents the same effects across the larger West of England area as well as the wider South West England and South Wales region.
- 15.5.56 The direct and indirect impact of Bristol Airport is estimated to contribute some £425 million per year in North Somerset, as of 2026. This equates to 3,400 jobs; (or 2,825 FTE jobs) in North Somerset. Note this is based on the first scenario – and assumes that Bristol Airport continues to grow but does not exceed the 10 mppa capacity limit.

Table 15.19 Bristol Airport economic impact in North Somerset (2026 Forecast 10 mppa)

	GVA (£m)	Jobs	FTEs
Direct	£240	1,450	1,275
Indirect & Induced	£70	1,200	950
<b>Total economic footprint</b>	<b>£310</b>	<b>2,650</b>	<b>2,225</b>
Productivity	£110	650	525
Tourism	£5	100	75
<b>Wider Impacts (Total)</b>	<b>£115</b>	<b>750</b>	<b>600</b>
<b>Grand Total</b>	<b>£425</b>	<b>3,400</b>	<b>2,825</b>

Source: York Aviation<sup>23</sup>. Note that "total economic footprint" is the sum of direct, indirect and induced. Wider impacts is the sum of productivity and tourism effects. Grand total is the sum of both economic footprint and wider impacts.

- 15.5.57 Again, based on the first scenario, across the wider West of England, the total economic footprint by 2026 is expected to be close to £1 billion, equating to 10,550 jobs.
- 15.5.58 Across the South West England and South Wales, the total direct, indirect or induced and catalytic employment effects arising from Bristol Airport is estimated at just under 26,000 jobs by 2026, equating to £2 billion of GVA. Bristol Airport is expected to continue to play a major role in the region's economy and be a major direct and indirect supporter of employment.

Table 15.20 Bristol Airport economic impact in the West of England and South West and South Wales (2026 Forecast – 10 mppa)

	West of England			South West and South Wales		
	GVA (£m)	Jobs	FTEs	GVA (£m)	Jobs	FTEs
<b>Direct</b>	£310	3,225	2,825	£360	4,350	3,825
<b>Indirect &amp; Induced</b>	£200	3,175	2,575	£370	6,600	5,225
<b>Total economic footprint</b>	<b>£510</b>	<b>6,400</b>	<b>5,400</b>	<b>£730</b>	<b>10,950</b>	<b>9,050</b>
<b>Productivity</b>	£360	2,500	2,050	£950	9,325	7,375
<b>Tourism</b>	£100	1,650	1,325	£320	5,700	4,500
<b>Wider Impacts (Total)</b>	<b>£460</b>	<b>4,150</b>	<b>3,375</b>	<b>£1,270</b>	<b>15,025</b>	<b>11,875</b>
<b>Grand Total</b>	<b>£970</b>	<b>10,550</b>	<b>8,775</b>	<b>£2,000</b>	<b>25,975</b>	<b>20,925</b>

Source: York Aviation<sup>23</sup>. Note that "total economic footprint" is the sum of direct, indirect and induced. Wider impacts is the sum of productivity and tourism effects. Grand total is the sum of both economic footprint and wider impacts. Note these are not additive; South West England and South Wales includes effects in the West of England for example.

## 15.6 Consultation

- 15.6.1 North Somerset Council and statutory consultees have reviewed a Scoping Report (**Appendix 1A**) and were satisfied with the methodology and scope proposed, stating '*the scope and methodology of the assessment is acceptable*'.
- 15.6.2 More generally, BAL is currently preparing a new Master Plan. The issues Bristol Airport currently face and how the airport is seeking to address them through the master planning process, were set out in 'Your Airport, your views', on which public consultation was undertaken between November 2017 and January 2018. A further public consultation on the emerging Master Plan was undertaken between May and July 2018, including non-statutory consultation on the next phase, broadly in line with the Proposed Development. It is currently anticipated that a Draft Master Plan will be published for consultation in winter 2018/19.

## 15.7 Scope of the assessment

- 15.7.1 The expansion of Bristol Airport is expected to support the growth of the local, City and Regional economy at construction and operational stages, including from tourism. As noted earlier these will be direct, indirect and induced as well as catalytic impacts. Hence the economic effects of the Proposed Development have the potential to be significant and are considered in more detail in the remainder of this chapter.

- 15.7.2 However, local residents will be affected by increased road traffic movements and aircraft noise at construction as well as operational stages. Whilst these may cause effects on amenity including for local residents, they are not expected to translate to any significant adverse economic effects. The technical basis for these conclusions are set out in **Chapter 6: Traffic and Transport** and **Chapter 7: Noise and Vibration**, respectively.
- 15.7.3 A range of jobs at varying skills levels will be created as a result of the Proposed Development, a proportion of these are likely to be specialist in nature. The West of England labour market is large; unemployment rates are low but increasing in some areas. Additional employment requirements arising from the Proposed Development are likely to be met from within the West of England, given the size of the labour market, the current availability of employees as well as the skill and occupation profiles of those who currently work there (refer to **Table 15.12**). Any change to the resident population from people moving into the West of England to take up employment opportunities arising from the Proposed Development are not considered significant in terms of population growth over and above the baseline.
- 15.7.4 As there will be no significant increases in population associated with the Proposed Development, associated increases in demand on local services (such as schools and hospital places), will not be significant and are therefore not considered further within the assessment.
- 15.7.5 For the same reasons, effects on local community facilities (beyond potential effects on noise and traffic), such as sport and recreation, housing demand or supply, and cultural or religious facilities are not expected to be significant. There will be no change in the provision of these services arising from the Proposed Development and effects on local community facilities will therefore not be considered further within the assessment.

### Spatial scope

- 15.7.6 The study area and the spatial scope of Socio-Economic effects is outlined in **Section 15.4**. In summary, these differ according to the receptors:
- Employees and employers (new job opportunities and GVA) will be created, this will be assessed across North Somerset, the West of England and South West England and Wales. The same applies to effects on Bristol Airport users (both business and tourism).

### Temporal scope

- 15.7.7 The temporal scope of the assessment covers both construction and operational periods. As noted above, the forecast for passenger numbers used in the EIA has assumed that Bristol Airport's existing 10 mppa capacity limit is exceeded in 2021 with numbers then building up to 12 mppa by 2026.

### Potential receptors

- 15.7.8 The receptors of Socio-Economic effects are people. They include employees, employers and airport users from North Somerset (including but not limited to the area in the immediate vicinity of the airport), the West of England, and South West England and South Wales). The effects upon differing groups are outlined in paragraph 15.7.6 and **Section 15.4**.

### Likely significant effects

- 15.7.9 Areas of likely significant effects are outlined in **Section 15.7** and summarised in **Table 15.2**. The remainder of the chapter goes on to assess their significance.

## 15.8 Environmental measures embedded into the development proposals

- 15.8.1 Typically, this section would document how the design evolution of the proposed development has embedded measures which mitigate any adverse effect and accentuate positive effects on local people. This is covered in **Chapter 6: Traffic and Transport** and **Chapter 7: Noise and Vibration**, respectively as they relate to amenity of local people. There are no specific embedded measures into the Proposed Development itself which relate to the Socio-Economic effects considered here. Relevant activities such as training, access to employment activities, whilst not related to the Proposed Development design per se, do influence the Socio-Economic effects. Bristol Airport highlights employment opportunities via regular recruitment events and works with local schools and colleges. Further, Bristol Airport subsidises employee travel to and from the airport on public transport and facilitates an employee car share scheme. It will also be developing a Skills and Employment Strategy, which will examine further how the benefits of the Proposed Development can support regeneration in the local area.

## 15.9 Assessment methodology

- 15.9.1 The generic project-wide approach to the assessment methodology is set out in **Chapter 4: Approach to Preparing the Environmental Statement**, specifically in **Sections 4.5 to 4.7**. However, whilst this has informed the approach that has been used in this assessment, it is necessary to set out how this methodology has been applied, and adapted as appropriate, to address the specific needs of this Socio-Economic assessment.
- 15.9.2 There is no definitive guidance on significance criteria for Socio-Economic effects and accordingly the assessment draws on the overall approach noted above, existing good practice alongside professional judgement. As such, effects are assessed in relation to the magnitude of change as well as the sensitivity of the receptor.
- 15.9.3 Judging the magnitude of a Socio-Economic change, takes into account the scale of the change it represents and its severity. Various factors are considered here including the extent (number of groups and/or people, households or businesses affected), the nature and seriousness of the effect, its duration (i.e. whether it's time limited or permanent), the type of impact and the value of the resource being affected. As such, the magnitude of change in GVA and/or employment is compared to existing employment numbers and size of GVA within the study areas. Reference is made to historical changes in these data as far as data allows to evaluate this in context.
- 15.9.4 The sensitivity of receptors (local employees, employers and residents) relates to the ability to withstand change. This is assessed with reference to the type of impact and relevant population characteristics. For example, employment opportunities are assessed with reference to local employment demand and supply, skill levels, and the nature and extent of economic and employment change that has occurred within the particular study area historically.
- 15.9.5 The assessment of likely significant environmental effects as a result of the Proposed Development has considered both the construction phase and operational phase. The significance level attributed to each effect has been assessed based on the magnitude of change due to the Proposed Development and the sensitivity of the affected receptor. The following matrix has been used to define the significance of the effects identified.

Table 15.21 Significance evaluation matrix

		Magnitude of change				
		Very high	High	Medium	Low	Very low
Sensitivity/importance/value	Very high	Major (Significant)	Major (Significant)	Major (Significant)	Major (Significant)	Moderate (Probably significant)
	High	Major (Significant)	Major (Significant)	Major (Significant)	Moderate (Probably significant)	Minor (Not significant)
	Medium	Major (Significant)	Major (Significant)	Moderate (Probably significant)	Minor (Not significant)	Negligible (Not significant)
	Low	Major (Significant)	Moderate (Probably significant)	Minor (Not significant)	Negligible (Not significant)	Negligible (Not significant)
	Very Low	Moderate (Probably significant)	Minor (Not significant)	Negligible (Not significant)	Negligible (Not significant)	Negligible (Not significant)

Note: Significant effects are those identified as 'Major'. 'Moderate' effects would normally be deemed to be significant. However, there may be some exceptions, depending on the environmental topic and the application of professional judgment.

## 15.10 Assessment of employees, employers and airport users

### Baseline conditions

#### Current baseline

- 15.10.1 The current baseline economic effects of Bristol Airport as well as the wider baseline socio-economic conditions in North Somerset, the West of England and the South West England and South Wales are contained in **Section 15.5**.

#### Predicted future baseline

- 15.10.2 The predicted future economic effects of Bristol Airport in the year 2026 are in paragraphs 15.5.50 to 15.5.58. This impact assumes that Bristol Airport continues to grow, but that the current 10 mppa capacity limit is not increased. This is the predicted future baseline against which effects of an increase to 12 mppa are compared below. Effects discussed are total economic effects expected in 2026 as well as the additional effect between 10 mppa and 12 mppa in 2026.

### Predicted effects and their significance – construction effects

- 15.10.3 Employment and GVA will be generated as a result of the construction of the Proposed Development. These impacts have also been assessed as part of the 2018 economic impact study and are presented below (**Table 15.22**). The analysis presents effects, per year, over the duration of the construction period (2019–2026) and are temporary. GVA, jobs and FTEs jobs are analysed. The 2018 economic impact study disaggregates these data into direct, indirect and induced effects. Below only the totals are shown, per year, along with a discounted total for the entire period.

- 15.10.4 In North Somerset, the total economic impact fluctuates between £1 million and £11 million per annum over the course of the construction period. In terms of the magnitude of change, these GVA effects are equivalent to between 0.2% and <0.1% of the North Somerset economy (compared to the size of the economy in 2015). Although uncertain, the local economy can be expected to continue to grow between 2015 up to 2026. Part of this growth is expected to be driven by Bristol Airport itself, as noted in paragraph 15.10.5. By 2026 this percentage is likely to have decreased further. A similar conclusion applies to the number of construction jobs, estimated at between 5 and up to 95. The total number of job years<sup>70</sup> over the entire construction period is estimated at 285. The annual figures correspond to around 0.1% of the current employment numbers in the North Somerset District; the total job years c. 0.3%. In terms of labour supply, the maximum total new jobs in any one year equate to c. 5% of the claimant unemployed registered in the North Somerset District (1,995, as of June 2018). This is judged to be **very low**.
- 15.10.5 The sensitivity of the employees, employers and airport users ("receptors") in North Somerset overall is considered **medium**. This is based on a range of factors that includes employment levels, historic employment growth, the extent of unemployment and of socio-economic deprivation<sup>71</sup>. Overall, based on the magnitude of change and sensitivity of receptors the estimated economic boost to the local North Somerset economy from the construction of the Proposed Development is considered to be a positive effect but **negligible (not significant)**.
- 15.10.6 In the West of England, the economic effects are somewhat larger, with GVA effects fluctuating between £1 million and £16 million and jobs between 10 and 260 per year; with a total of 775 job years over the entire construction period. This corresponds to well below 0.1% of total GVA and employment across the region. This is judged to be **very low**. Based on the same factors above, the sensitivity of the receptors in the West of England is also considered **medium**.<sup>72</sup> Overall, based on the magnitude and sensitivity the estimated economic boost to the West of England economy from the construction of the Proposed Development is considered a **positive effect but negligible (not significant)**.
- 15.10.7 For South West England and South Wales, the economic effects are again larger, with GVA fluctuating between £1 million and £23 million and jobs between 25 and 455 per year; with a total of 1,335 job years over the entire construction period. This corresponds to well below 0.1% of total GVA and employment across the region. This is judged to be **very low**. The sensitivity of the receptors in the region is again considered **medium**.<sup>73</sup> Overall, based on the magnitude and sensitivity the estimated economic boost from the construction of the Proposed Development to the wider region is considered to be a positive effect but **negligible (not significant)**.

<sup>70</sup> Note construction employment effects are presented in job years in the 2018 York Aviation Economic Assessment. One job year equates to one job for one year. This convention is used because of the temporary nature of construction employment for specific schemes.

<sup>71</sup> The justification for this assessment is provided below in **Section 15.10.15**. To avoid repetition and given the scale of effects at the construction stage is much smaller than at operational, the explanation is not set out several times.

<sup>72</sup> The justification for this assessment is provided below in **Section 15.10.19**. To avoid repetition and given the scale of effects at the construction stage is much smaller than at operational, the explanation is not set out several times.

<sup>73</sup> The justification for this assessment is provided below in paragraph 15.10.22. To avoid repetition and given the scale of effects at the construction stage is much smaller than at operational, the explanation is not set out several times.

Table 15.22 Bristol Airport economic impact associated with construction of 12 mppa infrastructure (2019 – 2026)

	North Somerset			West of England			South West and South Wales Region		
	GVA (£m)	Jobs	FTEs	GVA (£m)	Jobs	FTEs	GVA (£m)	Jobs	FTEs
<b>2019</b>	£2	15	15	£3	40	35	£4	70	60
<b>2020</b>	£5	45	40	£8	125	115	£11	215	190
<b>2021</b>	£3	25	20	£4	65	60	£6	115	100
<b>2022</b>	£0	5	5	£1	10	10	£1	20	15
<b>2023</b>	£1	5	5	£1	15	15	£1	25	20
<b>2024</b>	£6	55	50	£9	150	135	£13	255	225
<b>2025</b>	£11	95	85	£16	260	235	£23	455	390
<b>2026</b>	£5	40	35	£7	110	100	£10	190	165
<b>Discounted GVA / total job years (2019-2026)</b>	£28	285	255	£40	775	705	£57	1,335	1,165

Source: York Aviation<sup>23</sup>

### Predicted effects and their significance – operational effects

- 15.10.8 The economic impacts discussed in the subsequent section are annual impacts estimated to occur from 2026. This is the assumed operational start year of the Proposed Development. This assumes an increase in capacity to 12 mppa from 10 mppa. Both *total* effects from the 12 mppa and *additional* effects from the 2 mppa increase are shown.
- 15.10.9 As before, **Table 15.23** presents data for North Somerset District. **Table 15.24** and **Table 15.25** presents data for the West of England areas as well as the wider South West England and South Wales region.

### Effects on employees, employers and airport users - North Somerset

- 15.10.10 By 2026, assuming the Proposed Development is constructed, the total direct annual economic effect of Bristol Airport is estimated to rise to £290 million GVA per year, this a direct increase of £50 million per annum to the economy of the North Somerset District. Total direct employment will equate to 1,725 jobs; (or 1,525 FTE jobs). Indirectly, again in the North Somerset District alone, a further £90 million GVA and almost double the direct jobs (1,450 jobs) will be supported indirectly, arising from local employee spending and local business supply chains. This constitutes an increase over the current 10 mppa impact of £20 million and 250 jobs. In addition, a total of £135 million is estimated to be supported via wider effects from enhanced productivity as well as tourism; this continues an increase of £20 million to the local economy alongside 125 new jobs.
- 15.10.11 Overall, taking all these channels of effect into account, Bristol Airport is estimated to contribute over half a billion (£515 million GVA per annum) and over 4,000 jobs to the economy of North Somerset District. This assumes capacity is increased, and the expected quantum of passengers are accommodated. This constitutes an increase of £90 million GVA per year and 650 additional jobs (550 FTEs), over the future baseline of 10 mppa.

- 15.10.12 In terms of the magnitude of change, the total GVA effect is equivalent to 11% of the North Somerset economy (as of 2015). The additional economic impact provided by the Proposed Development would be equivalent to 2% (again as of 2015). However, the local economy can be expected to continue to grow between 2015 up to 2026. Part of this growth is expected to be driven by Bristol Airport itself, as noted in paragraph 15.10.5.
- 15.10.13 The potential size of the economy in 2026 has been estimated (very approximately) to enable comparisons. Any economic forecasts are subject to error as economies respond to a range of internal and external factors. Bespoke local economic forecasts are commercially available but are typically not in the public domain. In the absence of this, past rates of annual growth from the 11-year period up to 2015 have been identified. Assuming these rates, on average, continue for the next 11 years (2016-2026), they provide an approximate idea of scale. For North Somerset District, this indicates an average GVA growth rate of 3.5% per year.<sup>6374</sup> If this were to continue, the local North Somerset District economy may have increased from some £4.6 billion in 2015 to some £6.8 billion in 2026.
- 15.10.14 Subsequently, the total GVA effects from Bristol Airport – in North Somerset District - would constitute approximately 8% of the 2026 economy; and the total additional economic boost provided by the Proposed Development would equate to an additional 1.3% of the North Somerset District's economy. Whilst this the percentage change is small, from a single facility this is a significant contribution. In terms of magnitude, for comparison between 2008 and 2009, during which the UK was in a significant recession, total GVA in North Somerset decreased by 1.9%. If the economy were to grow at a slower rate from 2015 to 2026, or to face another recession, then the contribution by 2026 may be greater still (but any economic slowdown would presumably also affect demand for air travel). Overall, this is judged a positive effect and the magnitude of change is considered to be **high**.
- 15.10.15 The sensitivity of the receptors in North Somerset District need to be considered in the context of the importance of local economic growth. Whilst subjective, the baseline compares North Somerset District's economic characteristics with those of several surrounding areas using standard data. Overall, both GVA and employment growth has been generally good in recent years, despite the recession, with relatively broad-based employment by sector. The population is slightly older than the surrounding area, but health is good and economic activity rates reasonably high. Parts of Weston-super-Mare are amongst the 10% most deprived areas in the Country. Very small pockets of relative deprivation are in the North Somerset District, in parts of Portishead and Clevedon, but generally much less compared to surrounding areas. But both average earnings and GVA per head in North Somerset District are low in comparison to other parts of the West of England and nationally. Claimant unemployment has been comparatively low, but in recent years has started to increase. In terms of labour supply, the number of additional jobs equate to around a third of the claimant unemployed registered in the North Somerset District (as of June 2018). On balance, the sensitivity of the receptors is considered to be **medium**.
- 15.10.16 Overall, based on the magnitude and sensitivity the estimated economic boost to the local North Somerset District economy, benefitting employees (from increased job opportunities) and employers (from opportunities for business growth), alongside an increase in the range of destinations is considered to be **positive and major (significant)**. This is contingent on the expected passenger demand materialising.

<sup>74</sup> Based on GVA growth from between 2004/2005 to 2014/2015 in North Somerset District. This ranged from 6.3% in 2004/2005, to -1.9% in 2008-2009. The average annual GVA growth over this eleven-year period was 3.5%. This assumed growth rate was then applied to the 2015 value of GVA in North Somerset for each of the eleven years between 2016 and 2026. This resulted in estimated GVA in 2026 of £6.845 billion.

Table 15.23 Bristol Airport economic impact in North Somerset (2026 – 12 mppa)

	Total estimated effects – 12mppa			Additional effect – increase from 10 to 12mppa		
	GVA (£m)	Jobs	FTEs	GVA (£m)	Jobs	FTEs
<b>Direct</b>	£290	1,725	1,525	£50	275	250
<b>Indirect &amp; Induced</b>	£90	1,450	1,150	£20	250	200
<b>Total economic footprint</b>	<b>£380</b>	<b>3,175</b>	<b>2,675</b>	<b>£70</b>	<b>525</b>	<b>450</b>
<b>Productivity</b>	£130	775	625	£20	125	100
<b>Tourism</b>	£5	100	75	£0	0	0
<b>Wider Impacts (Total)</b>	<b>£135</b>	<b>875</b>	<b>700</b>	<b>£20</b>	<b>125</b>	<b>100</b>
<b>Grand Total</b>	<b>£515</b>	<b>4,050</b>	<b>3,375</b>	<b>£90</b>	<b>650</b>	<b>550</b>

Source: York Aviation<sup>23</sup> Note that “total economic footprint” is the sum of direct, indirect and induced. Wider impacts is the sum of productivity and tourism effects. Grand total is the sum of both total economic footprint and wider impacts.

- 15.10.17 **Table 15.24** and **Table 15.25** provide the same data in the same format as above, but for two larger areas, the West of England and the South West of England and South Wales. Across the West of England, the total economic impact as of 2026 assuming the Proposed Development is constructed is estimated to reach just under £1.2 billion, GVA per annum. This would equate to 12,600 jobs at Bristol Airport. At the West of England level, this equates to an additional impact of £210 million GVA per annum and additional 2,050 jobs (1,725 FTEs). The size of the West of England economy as of 2015 was £31.785 billion. As above, in terms of the magnitude of change, the total economic effect in GVA terms is equivalent to 4% of the West of England Economy in 2015. The additional economic impact provided by the Proposed Development is equivalent to 0.7% (again as of 2015). But the West of England economy can be expected to continue to grow between 2016 up to 2026, and again, part of this is expected to be driven by Bristol Airport itself.
- 15.10.18 The estimated size of the economy in 2026 is based on historic average annual growth rates to enable comparison. This indicates an average GVA growth rate<sup>63</sup> of 3.6% per year<sup>75</sup>. If this were to continue, the West of England economy would have increased from some £31.8 billion in 2015 to nearly £47 billion in 2026. At this point the total economic effect across the West of England would constitute 3% of the West of England economy and the estimated increase between 10 mppa and 12 mppa would equate to an additional 0.4% of the West of England economy. Again, for comparison, the same dataset suggests economic slowdown across the whole West of England between 2008 and 2009, was -0.3% of GVA. Overall, the operational effects of the Proposed Development are a positive effect and the magnitude of change is considered to be **high**.
- 15.10.19 With respect to receptor sensitivity, in the West of England, the baseline compares economic characteristics using standard data. As the West of England is a larger area, the characteristics are diverse. But overall, employment growth has been mixed in recent years, strong growth in Bristol; net losses in South Gloucestershire. The age profile is mixed, with a younger profile in the cities of Bristol and Bath. There are significant pockets of deprivation across the West of England, with concentrations in South Bristol (where a large proportion of current Bristol Airport employees live) Weston-Super-Mare as well as East Bristol and parts of West Bath. Average earnings and GVA per head in the four Districts which comprise the West of England are mixed, with high rates in Bristol and South Gloucestershire, but lower elsewhere. In contrast claimant unemployment – whilst now

<sup>75</sup> Based on average GVA growth from between 2004/2005 to 2014/2015 in all of North Somerset District, City of Bristol, Bath and North East Somerset and South Gloucestershire. This ranged from 7.2% in 2013/2014 to -0.5% in 2010/2011. The average annual GVA growth over this eleven-year period was 3.6%. This assumed growth rate was then applied to the 2015 value of GVA in the West of England for each of the eleven years between 2016 and 2026. This resulted in estimated GVA in 2026 of £46.943 billion.

decreasing - has been persistently high in Bristol and has started to increase in both North Somerset and Bath and North East Somerset. In terms of labour supply, the new jobs equate to around 20% of the claimant unemployed registered in the West of England (as of June 2018). On balance, the sensitivity of the receptors is considered **medium**.

- 15.10.20 Overall, based on the magnitude and sensitivity the economic boost to the West of England benefitting employees (from increased job opportunities) and employers (from opportunities for business growth) alongside an increase in the range of destinations is considered to be **positive major (significant)**. This is contingent on the expected passenger demand materialising.
- 15.10.21 Across the wider South West England and South Wales region, the total direct, indirect or induced and catalytic employment effects arising from Bristol Airport in 2026 with 12 mppa is estimated at £2.39 billion GVA and some 31,125 jobs. This amounts to an increase of £390 million by that time to the regional economy, along with some 5,150 new jobs. Applying past rates of growth to estimate the possible size of the economy indicates GVA may amount to some £212.5 billion in 2026<sup>63</sup>. At this point the total economic effects would constitute 1% of the economy. The estimated increase between 10 mppa and 12 mppa would equate to an additional 0.2%. Again, for comparison the economic slowdown across the whole South West England and South Wales Region between 2008 and 2009, was 1.5% of GVA. Overall, this is a positive effect and the magnitude of change is considered to be **medium**<sup>76</sup>.
- 15.10.22 In terms of the sensitivity of the receptors, overall the same conclusion can be drawn for South West England and South Wales regions as for the West of England; the area is a diverse economy with areas of prosperity and of relative deprivation. In terms of labour supply, new employment opportunities equate to around 6% of the claimant unemployed registered in the area (as of June 2018). Overall this is considered **medium**.
- 15.10.23 Based on the magnitude and sensitivity the economic boost to the South West and Wales economy, benefitting employees (from increased job opportunities) and employers (from opportunities for business growth) and airport users is considered to be **positive moderate (probably significant)**. This is contingent on the expected passenger demand materialising.

Table 15.24 Bristol Airport economic impact in the West of England and South West England and South Wales (**total effects** in 2026 based on 12 mppa)

	West of England			South West and South Wales		
	GVA (£m)	Jobs	FTEs	GVA (£m)	Jobs	FTEs
<b>Direct</b>	£380	3,800	3,350	£430	5,150	4,525
<b>Indirect &amp; Induced</b>	£240	3,800	3,100	£440	7,925	6,275
<b>Total economic footprint</b>	<b>£620</b>	<b>7,600</b>	<b>6,450</b>	<b>£870</b>	<b>13,075</b>	<b>10,800</b>
<b>Productivity</b>	£430	3,025	2,450	£1,140	11,200	8,850
<b>Tourism</b>	£130	1,975	1,600	£380	6,850	5,400
<b>Wider Impacts (Total)</b>	<b>£560</b>	<b>5,000</b>	<b>4,050</b>	<b>£1,520</b>	<b>18,050</b>	<b>14,250</b>
<b>Grand Total</b>	<b>£1,180</b>	<b>12,600</b>	<b>10,500</b>	<b>£2,390</b>	<b>31,125</b>	<b>25,050</b>

<sup>76</sup> Note that the calculations are based on summing the GVA statistics for all constituent local authorities across the South West of England (£126,007) and South Wales. The South West England total shown in Table 15. is slightly lower (£125,589 m) as it is calculated in a slightly different way.

Source: York Aviation<sup>23</sup> Note that "total economic footprint" is the sum of direct, indirect and induced. Wider impacts is the sum of productivity and tourism effects. Grand total is the sum of both total economic footprint and wider impact. Note these are not additive; South West England and South Wales includes effects in West of England for example.

Table 15.25 Bristol Airport Economic Impact in the West of England and South West England and South Wales (**additional effects** in 2026 - increase from 10 mppa to 12 mppa)

	West of England			South West & South Wales		
	GVA (£m)	Jobs	FTEs	GVA (£m)	Jobs	FTEs
<b>Direct</b>	£70	575	525	£70	800	700
<b>Indirect &amp; Induced</b>	£40	625	525	£70	1,325	1,050
<b>Total economic footprint</b>	<b>£110</b>	<b>1,200</b>	<b>1,050</b>	<b>£140</b>	<b>2,125</b>	<b>1,750</b>
<b>Productivity</b>	£70	525	400	£190	1,875	1,475
<b>Tourism</b>	£30	325	275	£60	1,150	900
<b>Wider Impacts (Total)</b>	<b>£100</b>	<b>850</b>	<b>675</b>	<b>£250</b>	<b>3,025</b>	<b>2,375</b>
<b>Grand Total</b>	<b>£210</b>	<b>2,050</b>	<b>1,725</b>	<b>£390</b>	<b>5,150</b>	<b>4,125</b>

Source: York Aviation<sup>23</sup> Note that "total economic footprint" is the sum of direct, indirect and induced. Wider impacts is the sum of productivity and tourism effects. Grand total is the sum of both total economic footprint and wider impacts. Note these are not additive; South West England and South Wales includes effects in West of England for example.

15.10.24 A summary of the results of the assessment of Socio-Economic effects is in **Table 15.26**.

Table 15.26 Summary of significance of beneficial effects

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor <sup>1</sup>	Magnitude of change <sup>2</sup>	Significance <sup>3</sup>	Summary rationale
<b>Employees, employers and airport users in North Somerset District – Employment and GVA effects - Construction stage.</b>	Medium	Very low	Positive effect – negligible (not significant)	Additional GVA and direct and indirect employment opportunities are expected to be created over the duration of the construction period. Whilst a positive effect, in quantitative terms the numbers are small.
<b>Employees, employers and airport users in West of England - Employment and GVA effects - Construction stage.</b>	Medium	Very low	Positive effect – negligible (not significant)	
<b>Employees, employers and airport users in the South West and South Wales region – Employment and GVA effects - Construction stage.</b>	Medium	Very low	Positive effect – negligible (not significant)	
<b>Employees, employers and airport users in North Somerset District – Employment and GVA effects - Operational stage.</b>	Medium	High	Positive effect - - major (significant)	The Proposed Development is estimated to increase the size of the North Somerset economy, create a large number of direct, indirect and catalytic jobs in a range of skill levels and occupations. In quantitative terms this increase is judged to be significant to the North Somerset District.
<b>Employees, employers and airport users in West of England - Employment and GVA effects - Operational stage.</b>	Medium	High	Positive effect - - major (significant)	The West of England is an economic driver of the South West England region. The Proposed Development is estimated to increase the size of the economy, create a large number of direct, indirect and catalytic jobs in a range of skill levels and occupations accessible to part of the West of England in relative need. In quantitative terms this increase is judged to be significant at the West of England level.
<b>Employees, employers and airport users in the South West and South Wales region - Employment and GVA effects - Operational stage.</b>	Medium	Medium	Positive effect - moderate (probably significant)	The South West of England and South Wales are an economically diverse region. The Proposed Development is estimated to increase the size of the economy, create a large number of direct, indirect and catalytic jobs in a range of skill levels and occupations accessible to part of the region in relative need. In quantitative terms this increase is judged to be moderate at the regional level.

1. The sensitivity/importance/value of a receptor is defined using the criteria set out in **Section 15.9** above and is defined as very low, low, medium, high and very high.
2. The magnitude of change on a receptor resulting from activities relating to the development is defined using the criteria set out in **Section 15.9** above and is defined as very low, low, medium, high and very high.
3. The significance of the environmental effects is based on the combination of the sensitivity/importance/value of a receptor and the magnitude of change and is expressed as major (significant), moderate (probably significant) or minor/negligible (not significant), subject to the evaluation methodology outlined in **Section 15.9**.

## 15.11 Consideration of optional additional mitigation or compensation

- 15.11.1 The Socio-Economic impacts are judged to be positive, hence no additional mitigation measures are proposed.

## 15.12 Conclusions of significance evaluation

- 15.12.1 The economic boost associated with Bristol Airport's future expansion to both the North Somerset and West of England economy, benefitting employees (from increased job opportunities) and employers (from opportunities for business growth), is considered to be **positive but negligible and not significant** at construction stage. Once operational the effects in terms of employment and GVA benefits to North Somerset and to the West of England are considered to be **positive and major (significant)**. To the wider South West England and Wales economy the effects are considered to be **positive and moderate (probably significant)**.

## 15.13 Implementation of environmental measures

- 15.13.1 No further environmental measures are embedded within the Proposed Development.