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Underway:
• Office and Industrial Take-up and Demand

Relevant content elsewhere in the West of England evidence base:
▪ Economic Connectivity report: Severn Bridge tolls, Travel to work times, Digital connectivity

Report library:
• Digital Study
Summary of Findings

Background

The West of England is developing a Joint Spatial Plan (JSP) and Joint Local Transport Plan (JLTP). These provide high-level framework for development of housing, employment and infrastructure in the four West of England councils. Over 90% of people in the West of England both live and work in the area, and people commonly travel between authority areas to get to and from their place of employment. This puts strain on infrastructure in the region and creates high demand for housing that is close to employment land. The plans show a joint approach to housing and transport issues to support economic growth in the West of England, for example by identifying Strategic Development Locations for housing and employment land. The Local Industrial Strategy will sit alongside these plans, and as a result does not re-examine the evidence they develop. Our evidence base currently addresses a number of additional aspects of infrastructure.
Summary of Findings

Key assets

Analysis for Bristol shows that the city is well integrated with other economic centres and has high levels of agglomeration with neighbouring areas and towns on the route to London. Infrastructure assets such as a major port and airport within the region provide the West of England with strong connectivity for both people and goods. The airport is heavily used and expanding. A central use of the airport is for outbound leisure, though flights to the top five destinations are c.25% business passengers. Flights to five major international hubs allow for long-distance transfers. Cargo shipped through the port includes cars, animal feed, fuel, and containers.

Both the port, and the region as a whole, benefit from strong connection to motorways and rail. The recent removal of tolls on the Severn Bridges are likely to lead to significant rises in traffic, though estimates vary widely. This presents a risk of increased congestion, but surveys of businesses suggest that the removal of the tolls may benefit them through greater access to customers and labour.
Summary of Findings

Digital Connectivity

Digital infrastructure is rapidly evolving, but there are a number of challenges. Internet use in the region is above average, but there are large gaps in ultra- and super-fast broadband provision and adoption, particularly in rural areas. Bristol has strong 4G connection but other authority areas are further behind.
Case Study: Bristol Airport

Introduction

Bristol Airport is the 9th biggest airport in the UK by passenger numbers, with the airport processing 8.2m passengers 2017. This makes it the largest English airport outside of London, Manchester and Birmingham. The Airport caters for the wider South West and South Wales, as well as the West of England area itself. Aside from a one year dip in passenger numbers during the economic downturn in 2008/9, Bristol airport has shown steady growth in the number of passengers since 2000.

Planning permission is already in place to allow the airport to handle to up to 10 million passengers per annum (mppa); and a planning application has been submitted to increase capacity to 12mppa by 2026. This represents a practical first step towards the airport’s long-term vision to handle up to 20mppa by the mid-2040s.
Case Study: Bristol Airport

Connectivity

Bristol Airport has flights to 125 destinations including 5 major international hubs (Amsterdam, Dublin, Frankfurt, Munich and Paris) which are particularly important for businesses, as they allow easy onward connections to a wide range of destinations worldwide. The bulk of passengers using Bristol Airport are holidaymakers; however, the number of business passengers has increased over recent years.

By volume the most used routes by business passengers flying out of Bristol Airport are:

<table>
<thead>
<tr>
<th>Route</th>
<th>Edinburgh (EDI)</th>
<th>Glasgow (GLA)</th>
<th>Amsterdam (AMS)</th>
<th>Dublin (DUB)</th>
<th>Paris Charles de Gaulle (CDG)</th>
<th>Belfast International (BFS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last 12 months Passenger numbers</td>
<td>392,000</td>
<td>305,300</td>
<td>423,200</td>
<td>419,100</td>
<td>150,500</td>
<td>253,100</td>
</tr>
<tr>
<td>Estimated business percent</td>
<td>23%</td>
<td>23%</td>
<td>25%</td>
<td>23%</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Business passengers</td>
<td>90,160</td>
<td>70,219</td>
<td>105,800</td>
<td>96,393</td>
<td>45,150</td>
<td>63,275</td>
</tr>
<tr>
<td>Total for these routes</td>
<td>470,997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bristol Airport

Amsterdam, Paris Charles de Gaulle and Dublin are international hubs allowing for easy onward connections.
# Case Study: Bristol Airport

## Top 10 Routes (2015)

<table>
<thead>
<tr>
<th>Destinations</th>
<th>Passengers</th>
<th>Average Weekly Flights</th>
<th>Airlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dublin</td>
<td>429,794</td>
<td>39</td>
<td>Ryanair &amp; Aer Lingus</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>410,341</td>
<td>39</td>
<td>KLM, easyJet</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>393,853</td>
<td>25</td>
<td>easyJet</td>
</tr>
<tr>
<td>Malaga</td>
<td>347,703</td>
<td>21</td>
<td>easyJet, Ryanair, Tui Airways</td>
</tr>
<tr>
<td>Palma</td>
<td>341,400</td>
<td>21</td>
<td>easyJet, Ryanair, Tui Airways, Thomas Cook</td>
</tr>
<tr>
<td>Alicante</td>
<td>331,043</td>
<td>19</td>
<td>easyJet, Ryanair, Tui Airways</td>
</tr>
<tr>
<td>Glasgow</td>
<td>307,010</td>
<td>21</td>
<td>easyJet</td>
</tr>
<tr>
<td>Faro</td>
<td>304,906</td>
<td>18</td>
<td>easyJet, Ryanair, Tui Airways</td>
</tr>
<tr>
<td>Belfast Int.</td>
<td>261,249</td>
<td>17</td>
<td>easyJet</td>
</tr>
<tr>
<td>Geneva</td>
<td>232,800</td>
<td>14</td>
<td>easyJet</td>
</tr>
</tbody>
</table>

Source: CAA Statistics 2017 & OAG
Case Study: Bristol Airport

Infrastructure

Despite significant growth in passenger numbers over the last 9 years, the airport acknowledges that poor surface access is a potential constraint on future growth, and could prevent economic benefits from being maximized in the long-term. There are a number of studies currently underway looking into various options for improved surface access including road and rail links.

The airport is served by a dedicated express bus service from Bristol and Weston; with services running every 10 minutes from Bristol; and every hour from 4am to 10pm from Weston. Frequent commercial bus and coach services also run from Bath, Cardiff, Exeter, Newport, Plymouth and Taunton.

The South West experiences the largest surface leakage of passengers from any one region to another in the UK, with some 7 million passengers a year choosing to fly out of one of the London Airports; 3.9 million of which are for short haul flights. This not only adds to road congestion but also hinders sustainable travel to and from airports. Whilst there are many factors which influence people’s decisions on where to fly from including choice of destinations, times of flights etc., the Airport argues that poor surface access to Bristol Airport is a major factor in the number of passengers in the South West region that are lost to London airports.

The airport does not have a significant freight handling capability, but improved surface access could, in the future, potentially lead to an increase in logistics activity including jobs.
## Case Study: Bristol Airport

<table>
<thead>
<tr>
<th>Airport</th>
<th>Passengers per annum (m)</th>
<th>Rail link / Tram</th>
<th>Motorway Connectivity / Proximity</th>
<th>Dual Carriageway (minimum)</th>
<th>Bus Connection</th>
<th>Public Transport use (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow</td>
<td>76</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>41%</td>
</tr>
<tr>
<td>Gatwick</td>
<td>43</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>41%</td>
</tr>
<tr>
<td>Manchester</td>
<td>26</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>16%</td>
</tr>
<tr>
<td>Stansted</td>
<td>24</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>50%</td>
</tr>
<tr>
<td>Luton</td>
<td>15</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>29%</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>12</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>30%</td>
</tr>
<tr>
<td>Birmingham</td>
<td>12</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>23%</td>
</tr>
<tr>
<td>Glasgow</td>
<td>9</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>14%</td>
</tr>
<tr>
<td>Bristol</td>
<td>8</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>13%</td>
</tr>
<tr>
<td>Newcastle</td>
<td>5</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>12%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>5</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>7%</td>
</tr>
<tr>
<td>Liverpool</td>
<td>5</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>20%</td>
</tr>
<tr>
<td>London City</td>
<td>5</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>46%</td>
</tr>
</tbody>
</table>

Source: Bristol Airport
Case Study: Bristol Airport

Bristol Airport’s market share of passengers of total air journeys (short and long haul) by county

Source: Bristol Airport analysis of CAA Passenger Survey 2015
Case Study: Bristol Airport

People and Skills
Bristol Airport directly employs c.350 people with approximately a further 4,000 people employed on site through 48 partner organisations (airlines, baggage handlers, retail, restaurants, cleaners etc). A detailed study (York Aviation 2017) has indicated that capacity growth of the airport would bring significant numbers of direct, indirect and induced jobs across North Somerset, the West of England and wider region.

The airport is in the process of producing a set of strategic documents including a Sustainable Growth Strategy and Employment and Skills Plan. A number of apprenticeships are already offered and the airport is considering how to identify wider opportunities in future. Employment ranges from highly-skilled occupations such as air traffic control, to lower skilled roles in retail, cleaning and other services. Coupled with shift requirements related to 24/7 operations, it can be challenging to fill some roles where strong competition exists from city centre locations. Mitigating steps include subsidised public transport for staff.

Partnerships
Strategic Partnerships
Bristol Airport is active engaged in local partnership activity including the North Somerset Partnership Board and Growth Board, and formally West of England LEP Board. The Airport is also a member of Destination Bristol.

Local Partnerships
The Airport works closely with neighbouring communities recognising that the operations of the airport can affect the lives of local residents. To help alleviate this the airport has developed a number of local community projects; these include:

- **Concessionary parking and use of the Airport Flyer Express for those living in certain areas**

- **Bristol Airport Environmental Improvement Fund** concentrates on a number of core local parishes including the villages of Winford, Wrington, Backwell, Brockley, Cleeve and Barrow Gurney. Projects need to meet at least one of the criteria set by the Fund. The airport contributes over £100,000 to the Fund each year.
Case Study: Bristol Airport

Opportunities

• The Airport has demonstrated consistent passenger growth in recent years and has aspirations to grow further; this will present opportunities for associated employment growth and have wider regional economic impacts.

• New and emerging technologies will help to transform the operations of the airport, improving passenger experience as well as reducing the environmental impact of the Airport. In the long term, this could include aircraft with electric or hybrid engines and a greater role for renewable energy.

Barriers to Growth

• Poor surface access to the airport is considered to be the main potential constraint to the future growth of Bristol Airport; with the shape of future growth dependent on the access solution adopted. A study - Bristol South West Economic Link - is currently considering high level options for addressing the issue.

• Green Belt and environmental constraints currently limit the potential for expansion. These matters will be addressed through the airports emerging Master Plan and the development plan process.

• Potential market distortions bought about by an unequal Air Passenger Duty environment.
Case Study: The Bristol Port Company

Introduction

The Bristol Port Company is the UK’s largest private independently-owned port, made up of the Royal Portbury and Avonmouth Docks. The Port was formed in 1991 when entrepreneurs Terence Mordaunt and Sir David Ord purchased the Port of Bristol from Bristol City Council. Since then the port has been transformed into a modern, commercially viable port with:

- Throughput of 12m tonnes per year of cargo including 700,000 motor vehicles, 1.1m tonnes of animal feed, 27% of Heathrow’s aviation fuel and 3,000 TEUs a week.
- Revenue of £88m (FY 17/18)
- Over £500m of private investment across the freehold 2,600 acre estate
- Significant new businesses attracted to the port

Connectivity

Bristol Port is Britain’s most centrally located deep sea ports. As a westward facing port, around 67% of trade is undertaken with non-EU countries.

Bristol Port is well connected to domestic markets through road and rail, connecting to all points of the compass. Both the Royal Portbury and Avonmouth Docks are connected by rail, and have their own dedicated motorway junctions on the M5 - just seven miles from the M4 interchange and four miles from the Toll Free (as of December 17th 2018) Second Severn Crossing providing links to London, Birmingham, Manchester and South Wales.
Case Study: The Bristol Port Company
Case Study: The Bristol Port Company

Port Activities
Imports & Exports
67% of the trade going through Bristol Port is with non-EU countries. One of the most significant trades of the port is that of motor vehicles, with in excess of 700,000 vehicles per annum handled. However the variety of goods and products moving through the port is highly diverse, so a downturn in one area such as motor vehicles does not significantly impact operations.

The Royal Portbury Dock handles break-bulk of steel, aluminium, plywood, paper and pulp; and has over 1 million sq ft of high quality warehousing for storage as well as open storage areas. Both the Portbury and Avonmouth terminals have the facilities to handle container shipments from deep sea and short sea container operators. The Portbury container terminal receives shipments from MSC Feeders from Antwerp and Sines; meaning that the Port connects with more global shipping routes; and Maersk from Rotterdam. The Avonmouth Container terminal serves vessels calling from Northern Ireland and the Iberian Peninsula.

Bristol Cruise Terminal
Since 2013, Cruise ships have embarked from the Port to destinations such as the West Indies, Norway, Portugal and Spain, the Scottish Highlands and Islands, and Canary Islands. Travelling to 25 locations the Port embarks approximately 10,000 passengers per year.

The Port is also an attractive Port of Call for cruise lines keen to offer passengers the opportunity to come to a port they may not have visited before. There is a range of attractive excursions within 90 minutes of the port such including both Bristol and Bath; Wells; the Cotswolds; Stonehenge; and the Ryder Cup Golf course at Celtic Manor.

Relationship with Hinkley Point C & Significant National Infrastructure Projects
Hinkley Point C in Somerset is the first in a new generation of nuclear power stations in the UK. Avonmouth is acting as Hinkley Point’s Muster Port; with the major components required for the project coming into Bristol Port and stored there until needed. They are then transported via sea to Combwich Wharf and onwards to the site itself. The Bristol Port Company is also ideally situated to capitalise on future significant national infrastructure projects such as HS2 and Crossrail 2 etc.
Surrounding Hinterland

Avonmouth / Severnside Enterprise Area is a key employment location adjacent to the Bristol Port. The focus of employment activities in this area is primarily regional distribution and logistics centres; as well as a number of waste management sites. There is a total of 16 million sq ft of current and future warehousing space in the Avonmouth Hinterland area.
Case Study: The Bristol Port Company

Employment & Skills

As of September 2018 the Bristol Port Company directly employed 559 permanent staff. A significant proportion of the workforce is local with 94% living within the West of England area. Working hours on the port are dictated by the tides so having a local workforce that can easily get to work is critical for successful operations.

Working with Weston College, the Port offers a number of Level 3 and Level 5 apprenticeships and a Leadership Diploma utilising the apprenticeship levy. This has given the opportunity to improve workforce skills for both traditional apprentices and those looking for financial, commercial, leadership and contract negotiation skills.

The Port consider there to be pressing need for a local skills Academy/Hub in the area to support the Port and associated logistics businesses on site and in the immediate surrounds who are experiencing skills gaps. This would need to be subject to further feasibility work to consider the rationale for any public intervention.
Case Study: The Bristol Port Company

Wider Economic Impact

It is estimated that through its employment of 559 people the port contributes to an additional 430 full time equivalents (FTEs) and a subsequent £21.9m to the West of England economy.

**Estimated Employment Impacts**
- 559 direct employees
- 187 FTEs through direct suppliers
- 67 FTEs through indirect suppliers
- 176 FTEs through income effects
- 989 Total

**Estimated GVA Impacts**
- £31.2m direct
- £9.6m through direct suppliers
- £3.0m through indirect suppliers
- £9.3m through income effects
- £53.1m Total

The figures above relate to the economic impact generated through employment at the port only, it does not take account of the wider economic impact of the goods imported and exported through the Port. These figures have been generated using the West of England AMORE Economic Impact Tool which was last updated in 2016.

An economic impact study produced for the Bristol Port Company by Oxford Economics in 2014 estimated that, together with associated businesses on the Port Estate, it supports:
- 19,100 jobs around the UK
- An estimated £1.0bn GVA contribution to GDP in 2012
Case Study: The Bristol Port Company

➢ Export & Trade Opportunities - As one of the regions international gateways the Port offers huge growth opportunities to businesses in the West of England and the wider UK. By tapping into more of the West of England's business base, particularly SMEs, the Port can play a role in increasing the amount of international trade being undertaken and therefore help drive up productivity in individual businesses. Whilst the Port has strong links with the EU, the fact that it is Westward facing opens the region up to markets outside of the EU. The Bristol Port Company is working closely with Business West and the Department of International Trade to help support businesses and drive up trade and exporting in the region.

➢ Supporting and Driving Innovation in Infrastructure Projects - there is a real opportunity for the Bristol Port Company to build on its location and existing expertise in dealing with project cargo. The strategic position of the Port and it motorway and rail connections mean that it is well placed to be the Muster Port for many nationally significant infrastructure projects in the UK.

➢ Skills for growth - ensuring that the port and the businesses in the surrounding hinterland have the skills they need to grow is fundamental. The skills agenda also plays a role in social inclusion, ensuring that the labour market can access the jobs on offer. The Port already utilises the apprenticeship levy by offering apprenticeship and leadership diploma courses however there is opportunity to offer this to an increased proportion of Port Staff. There is also a desire to undertake a feasibility study looking into a local skills academy/hub to aid the Port and associated logistics businesses in reducing the skills gap through the upskilling of staff in partnership with local education providers.

➢ Business Collaboration building an environment for investment - The smooth operation of the Port is built upon collaboration and communication with both strategic (inc. National Rail, Environment Agency, Highways England) and local partners (local businesses and residents). Attending and presenting at business and partnership events will reach a wider audience, build stronger relationships and help facilitate companies to do business in the region by stimulating an environment which supports this.
Infrastructure: House Prices


Analysed by: Economic Development Team, Bristol City Council.

There was a total of 19,384 sales in the West of England in 2017.
The number of sales by LSOA (2011) ranged from 3 to 189 with an average of 29.

Legend
- West of England UA boundaries
- WoE LSOA (2011) boundaries

Average House Price 2017

Mean
- Under £150,000
- £150,000 to £200,000
- £200,000 to £250,000
- £250,000 to £300,000
- £300,000 to £375,000
- £375,000 to £450,000
- £450,000 to £600,000
- £600,000 to £750,000
- Over £750,000

Sales volumes of 15 or less
- Less than 10
- 10 to 15 inclusive

Ordnance Survey survey 100003408.
Infrastructure: Affordability

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;NES</td>
<td>326,799</td>
<td>29,722</td>
<td>11.0</td>
<td>15,685</td>
<td>20.8</td>
</tr>
<tr>
<td>Bristol</td>
<td>267,949</td>
<td>27,980</td>
<td>9.6</td>
<td>16,605</td>
<td>16.1</td>
</tr>
<tr>
<td>NSomerset</td>
<td>249,744</td>
<td>30,514</td>
<td>8.2</td>
<td>15,626</td>
<td>16.0</td>
</tr>
<tr>
<td>S.Gloucestershire</td>
<td>264,805</td>
<td>30,236</td>
<td>8.8</td>
<td>17,500</td>
<td>15.1</td>
</tr>
<tr>
<td>West of England</td>
<td>272,632</td>
<td>29,299</td>
<td>9.3</td>
<td>16,557</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Source: WECA Workings, House Price Index & ASHE, ONS

- **Average house prices in the West of England** are 9.3 times average annual pay. This varies greatly across the region with average house price being 11 time annual resident earnings in B&NES; this extends to 20.8 times for the lowest 10% of earners.

- Since 2011 average house prices across the West of England have increased by 58%; with the largest increase in Bristol by 68%. 

<table>
<thead>
<tr>
<th></th>
<th>Average House Prices (Dec 2011)</th>
<th>Average House Prices (Dec 2017)</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;NES</td>
<td>223,481</td>
<td>329,126</td>
<td>47</td>
</tr>
<tr>
<td>Bristol</td>
<td>163,898</td>
<td>275,012</td>
<td>68</td>
</tr>
<tr>
<td>NSomerset</td>
<td>170,644</td>
<td>252,895</td>
<td>48</td>
</tr>
<tr>
<td>S.Gloucestershire</td>
<td>170,978</td>
<td>269,376</td>
<td>58</td>
</tr>
<tr>
<td>West of England</td>
<td>175,700</td>
<td>277,342</td>
<td>58</td>
</tr>
</tbody>
</table>

Source: WECA Workings, House Price Index & ASHE, ONS