Development of Bristol Airport to Accommodate 12 mppa

Draft - Workplace Travel Plan 2018

On behalf of **Bristol Airport Limited**

Bristol Airport
Amazing journeys start here

Project Ref: 43321 | Rev: Final | Date: December 2018

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Contents

0 Executive Summary 1
0.1 Introduction & Background 1
0.2 Employee Travel Behaviour 1
0.3 Staff Travel Plan Targets 1
0.4 Measures 1
0.5 Bristol Airport Travel Plan Timeline 2
1 Introduction 3
1.1 Overview 3
1.2 Bristol Airport Travel Plan Background 4
1.3 Workplace Travel Plan 4
1.4 Progress to Date 4
2 Overarching Objectives 6
3 Existing Surface Access Options 7
3.1 Location 7
3.2 Access on Foot 7
3.3 Access by Bicycle 7
3.4 Access by Public Transport 7
3.5 Access by Car 11
3.6 Access by Taxi & Private Hire 12
3.7 Parking 12
4 Employee Travel Behaviour & Trends 13
4.1 Introduction 13
4.2 Current Employee Survey - Participants 13
4.3 Employee Mode Share 15
4.4 Barrier Analysis 18
5 Employee Catchment Analysis 21
6 Travel Planning Measures 24
6.1 Proposed Travel Plan Measures 24
6.2 Management Measures 24
6.3 Measures to Encourage Car Sharing 25
6.4 Measures to Encourage Public Transport Use 26
6.5 Measures to Manage Taxi Accessibility 31
6.6 Measures to Encourage Cycling 31
6.7 Measures to Encourage Walking 31
6.8 Measures to Reduce the Need to Travel (or Outside Peak Hours) 32
6.9 Measures to Encourage Electric Vehicle Usage 32
6.10 Information Provision 33
7 Workplace Travel Plan Targets 35
7.1 Proposed Targets 35

8 Monitoring and Review 37

Figures

Figure 1.1: Transport Document Hierarchy
Figure 3.1: Site Location and Highway Network
Figure 3.2: Footways and Bus Stops
Figure 3.3: Cycle Facilities
Figure 3.4 All Bus Routes
Figure 3.5: A1 Bus Route
Figure 3.6: A2 Bus Route
Figure 3.7: A3 and A5 Bus Route
Figure 3.8: A4 Bus Route
Figure 4.1: 2017 Employee Mode Share
Figure 4.2: Encouraging Car Sharing
Figure 5.1: Bristol Airport Employment Catchment Area – North Somerset
Figure 5.2: Employee Postcodes in Relation to Bus Stops

Tables

Table 1.1: Change in Employee Mode Share 2004 to 2017 based on Employee Surveys 5
Table 3.1: Bus Services to Bristol Airport 8
Table 3.2: Bristol Airport Coach Services 10
Table 3.3: National Rail Stations 10
Table 3.4: National Rail Destinations from Bristol Temple Meads 11
Table 4.1: Summary of all Employers and Employees at Airport (correct at February 2018) 13
Table 4.2: 2017 Travel Questionnaire Responses by Organisation 14
Table 4.3: Mode Share Progression 17
Table 4.4: Encouraging Change to Travel Behaviour 19
Table 5.1: Bristol Airport Employment Catchment Area (using 2017 Employee Survey Data as a Proxy) 21
Table 7.1: Workplace Travel Plan Targets 35
Table A.1.0: Project Management Plan 2

Appendices

Appendix A Project Management Plan
Appendix B Mode Split Targets Calculation

0 Executive Summary

0.1 Introduction & Background

0.1.1 Bristol Airport first launched its Workplace Travel Plan (TP) in 2006. Since then, the number of employees working at the Airport has increased and progress has been made towards targets to reduce reliance on the car for journeys to work, in particular for people travelling alone by car. Considering the significant increase in employee numbers since the launch of the first Workplace TP and the wide variety of employers now based at the Airport, improving the levels of sustainable travel among employees has become increasingly important. Whilst the measures and targets set out in this document are predominantly focussed on employees, the measures will also be relevant to visitors.

0.1.2 Bristol Airport is currently part way through the next major phase of development, enhancing and developing facilities to meet the future needs of passengers. The new extension to the departure lounge was opened in July 2015 and work has been completed on improving the Security and Arrivals areas. Over £160m has been invested in new facilities since 2010.

0.1.3 The overall proportion of staff travelling to work by single occupancy vehicle (SOV) has reduced since the baseline staff survey was undertaken, from 93% in 2004 to 84% in 2017 and uptake of other more sustainable transport options has increased significantly.

0.1.4 It is recognised that a TP isn't a static document but needs to be dynamic and to constantly evolve. This will ensure the airport continually works towards targets, whilst at the same time embracing and addressing changes at the airport and surrounding areas, changes in the way people travel and changes in technology.

0.1.5 This Workplace TP forms an update to the previous Bristol Airport Travel Plans that have been issued over the travel plan period since 2006. It has additionally been produced to support the planning application for 12 mppa and will be agreed through the S106 negotiations. It will be finalised though consultation with North Somerset Council (NSC), (the highway authority) and the Airport Transport Forum (ATF) before being issued as a final version in 2019.

0.1.6 This Workplace TP sets out the objectives, targets and measures to be implemented in order to achieve these objectives.

0.2 Employee Travel Behaviour

0.2.1 The most recent employee travel survey was undertaken in 2017 and the results of that survey form the baseline modal split for this TP. Annual surveys will be undertaken moving forward to inform the Travel Plan Co-ordinator (TPC) of the impact of the TP measures in relation to achieving the interim and final targets set out in this report. Annual monitoring also provides the opportunity to identify and address any areas of improvement in a timely manner.

0.3 Staff Travel Plan Targets

0.3.1 Whilst indicative targets are set for all modes, the SOV target of 75% by 2026, equating to 2939 staff members, is fixed. The remainder will be made up of a range of different sustainable modes, with their exact modal split being variable as long as the sustainable modes combined reach 25%.

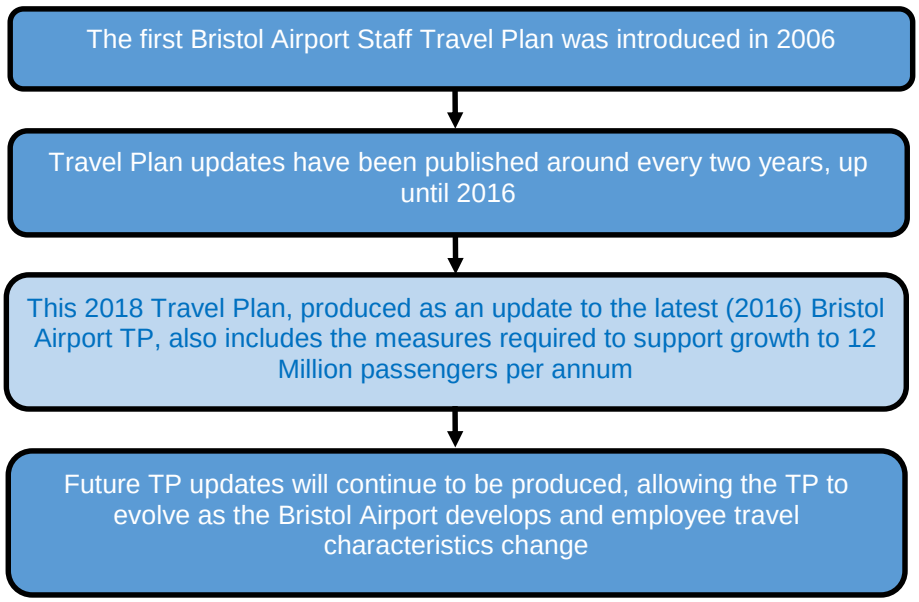
0.4 Measures

0.4.1 In order to achieve the employee modal shift targets outlined in this TP, a package of measures is being implemented on site and the surveys have informed the nature of those measures. These

focus on what is working and also areas where different approaches are needed and are now proposed. Some of the key measures include the following:

- Appointment of dedicated Travel Plan Co-ordinator;
- Creation of user groups to inform, advise and manage the TP;
- Re-launch and active promotion of an on-site care share scheme with additional car-share only spaces;
- Increase of bus services to and from Bristol Airport and promotion of these routes and services;
- Further promotion of discounted staff fares available on certain public transport services;
- Measures to encourage walking and cycling and their promotion;
- Further provision of cycle parking and storage facilities;
- Circulation of regular information updates regarding sustainable transport changes and opportunities;
- Purchase of zero emission pool vehicles; and
- Provision of Electric Car Charging Points.

0.5 Bristol Airport Travel Plan Timeline



1 Introduction

1.1 Overview

1.1.1 This Workplace Travel Plan (TP) supports a planning application for the development by Bristol Airport Limited (BAL) to North Somerset Council (NSC). The planning application seeks permission to expand Bristol Airport beyond the permitted passenger cap of 10 million passengers per annum (mppa) to 12mppa.

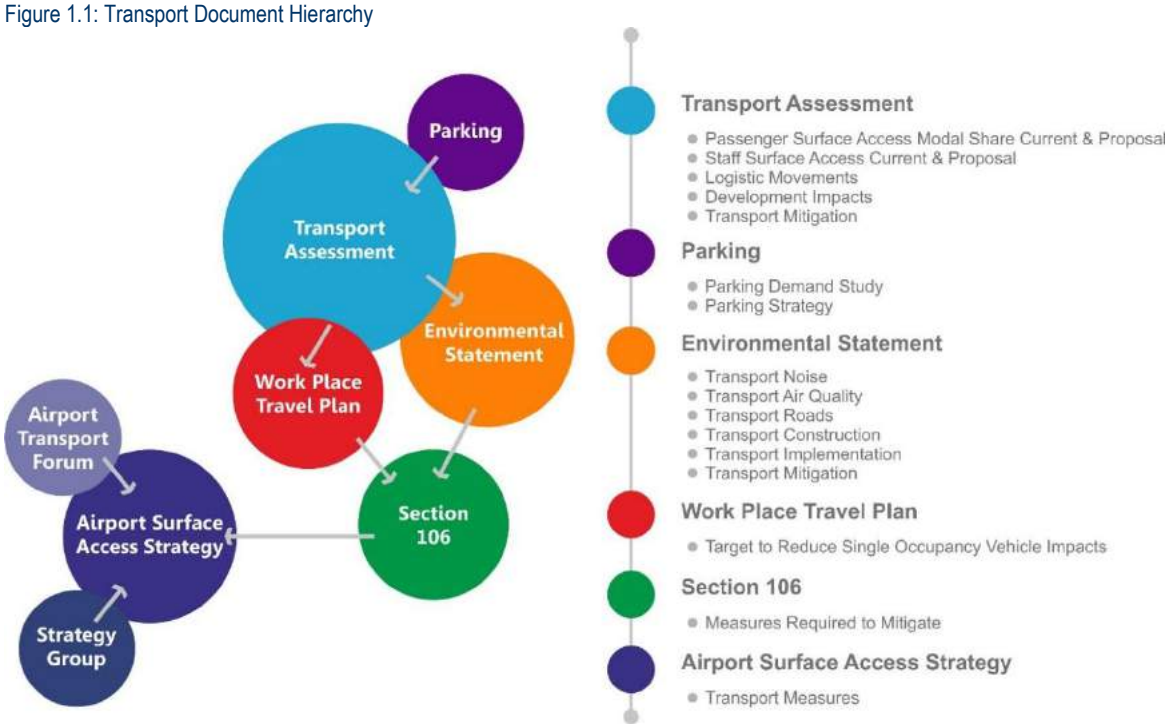
1.1.2 Bristol Airport is located on the A38, approximately 11km south-west of Bristol City Centre and within the local authority administrative area of NSC. Operated by BAL, it is the principal airport and main international gateway for the South West of England and South Wales.

1.1.3 Bristol Airport is the ninth largest airport in the UK, and in 2017, handled over 8.2 million passengers (mppa). Leading low cost, charter and full-service airlines currently fly from Bristol Airport to over 120 destinations across 34 countries.

1.1.4 BAL was granted outline planning permission (Ref 09/P/1020/OT2) by NSC on the 16th February 2011 for the expansion of Bristol Airport to handle 10mppa. Between 2010 and 2017, investment totalling over £160 million has been made to upgrade of facilities and infrastructure at Bristol Airport. During this time, passenger numbers have grown by over 40% from 5.8 mppa to 8.2 mppa. BAL forecast that passenger demand will reach 10 mppa by 2021.

1.1.5 This TP should be read in conjunction with the suite of planning application documents submitted as part of the application, including: Transport Assessment (TA), Parking Demand Study, Parking Strategy and Environmental Impact Assessment (EIA). BAL also commits to produce a new and ambitious Airport Surface Access Strategy (ASAS) secured through a Section 106 agreement. **Figure 1.1** illustrates how the transport documents link together.

Figure 1.1: Transport Document Hierarchy



1.2 Bristol Airport Travel Plan Background

1.2.1 Bristol Airport has had an active Workplace TP since 2006. The TP was completely reviewed and updated in conjunction with the development proposals for the 2011 Planning Permission. This latest Workplace TP includes updated proposals for more sustainable access to Bristol Airport for staff, taking into account the latest available travel and staff information, and informs the planning obligations relating to staff travel in the Section 106 Agreement, whilst also ensuring the TP is meeting further expansion needs up to 12 million passengers per annum to correspond with current planning application proposals.

1.2.2 Bristol Airport has an ASAS which was last updated in November 2012.The strategy aims to decrease the proportion of journeys to Bristol Airport by single occupancy vehicle (SOV) and increase the proportion by sustainable modes of transport, for both air passengers and employees at Bristol Airport. The ASAS is in the process of being updated with a revised version due to be published in early 2019 in conjunction with the planning application process. The ASAS will include a comprehensive package of measures that will be agreed through the planning application, and will be prepared in consultation with the Airport Transport Forum (ATF).

1.2.3 The content of this TP will be approved through the planning application process in liaison with NSC in order to achieve a fully agreed document to take forward.

1.3 Workplace Travel Plan

1.3.1 In accordance with NSC's Travel Plan Guidance, a Workplace TP is required for Bristol Airport. A Workplace Travel Plan is a long-term strategy for managing the demand for travel generated by an organisation's employees and visitors. The TP aims to develop an appropriate package of measures to enable and promote sustainable travel, with an emphasis on reducing reliance on SOV car journeys. Through reducing SOV use, the environmental, social and economic impact of travel to work can be reduced, with corresponding benefits for the community and environment as well as the organisation and employees and proportion.

1.3.2 The benefits associated with Travel Plans are well known. As well as the environmental benefits, such as reduced local air pollution and carbon emissions, there are physical health benefits from increased cycling and walking (even if that is part of a public transport trip), mental health benefits associated with active travel and social interaction, economic benefits to both employers and employees and social benefits for everyone.

1.3.3 Travel Plans form an important part of national and local transport policy and are seen as a way of managing and limiting traffic growth and congestion as well as assisting in achieving greater social inclusion.

1.3.4 BAL is also seeking to encourage passengers to travel to Bristol Airport by sustainable modes and this is a key part of the ASAS. However, some of these measures within the TP are also linked to encouraging passengers as well as employees to use sustainable modes.

1.4 Progress to Date

1.4.1 **Table 1.1** shows that the TP has been successful in reducing single car occupancy since the original baseline surveys in 2004. However, in the last two survey years there has been an increase in proportion and overall SOV numbers.

1.4.2 In the 2015 survey there were a total of 302 responses collected. Modal splits were ascertained from the survey, but given the low response rate compared to previous and the latest surveys, the modal splits were revised based on bus ticket sales numbers, in an attempt to better reflect reality during the 2015 survey reporting.

1.4.3 The 2017 survey gained a considerably larger response rate as a result of a concerted effort by BAL to engage employees in the survey, with 828 completed questionnaires received. This also

demonstrates how employees are increasingly taking an interest in travel to the site and actively engaging in the process. The higher participation rate is also likely to provide a more realistic representation of the travel habits of employees of Bristol Airport than the 2015 results. The differing methods of determining modal splits and the significant improvement in participation rates in 2017 may explain some of the differences between the two surveys. This is discussed in more detail in **Section 5**.

1.4.4 Whilst the SOV rates have increased in 2017 compared to recent years, the improved response rate has provided a better set of data against which to determine which sustainable travel measures are more, or less, likely to be successful, based on the individuals' responses and their home locations. This enables the measures to be better tailored to suit the needs of employees in the future.

Table 1.1: Change in Employee Mode Share 2004 to 2017 based on Employee Surveys

Mode of Transport	Mode Share							
	2004	2007	2009	2012	2014	2015	2015* Adjusted	2017**
Car, as driver alone (SOV)	93.0%	86.4%	86.6%	80.5%	82.0%	63.2%	74.6%	84%
Car sharing	3.9%	4.2%	5.2%	6%	9%	4.6%	4.6%	3%
Bus	2.5%	5.5%	6.0%	10%	4%	27.7%*	16.3%	9%
Motorcycle	0.6%	2.8%	1.4%	2.5%	2%	1.3%	1.3%	2%
Bicycle		0.7%	0.4%	1%	2%	1.0%	1.0%	0.4%
Walk		0.4%	0.3%		0%	0.7%	0.7%	0.5%
Other		0.0%	0.1%		2%	1.5%	1.5%	1%

** With 302 responses from 2835 employees, the 2015 survey only had a response rate of 10.6%. It is also acknowledged that the larger an organisation is the more difficult it is to achieve a high response rate. A lot depends on how employees are reached – for example if surveys were handed out where staff buy their bus tickets this can likely favour responses from these employees over others.*

Therefore, other means to determine the modal shares were considered to help verify the 2015 survey figures. The total number of jobs was around 2835. Allowing for typical working patterns the total number of return commutes was around 433,755 per annum. Over the year in 2015 some 62,000 return Flyer tickets were sold to staff. Therefore, over the year 14.3% of trips would have been by the Flyer. 2% of trips were by other bus travel so therefore is assumed that bus travel overall was around 16.3%. As non-car modes were very low, the table was amended to assume the difference (27.7 - 16.3 = 11.4) would mainly be in increased SOV journeys. This data was set out in the previous Travel Plan and is included here to provided further context to the yearly results shown in the table above.

The 2017 survey achieved 828 responses. Bristol Airport now employs 3918 employees, so the response represents a percentage response rate of approximately 24%. As such, the 2017 employee survey is more representative than previous years. The modal share analysis is therefore based purely on the employee survey and no adjustment has been made based on bus ticket sales.

2 Overarching Objectives

2.1.1 The key objective of this TP is to reduce the reliance of Bristol Airport employees on travel to and from work by SOV car and encourage the use of more sustainable forms of transport. This will be achieved through the following:

- Minimising the impact of Bristol Airport's existing and potential future travel demands, particularly traffic impact associated with Bristol Airport;
- Introducing and facilitating measures to enable and encourage employees, visitors and customers to travel by sustainable modes of transport;
- Facilitating access to appropriate travel information for employees;
- Increasing employee and passenger awareness of and access to sustainable modes of travel;
- Reducing unnecessary or unsustainable use of the car for the journeys to and from the site;
- Encouraging the use of low emission vehicles through the provision of Electric Vehicle charging infrastructure;
- Providing on-going management co-ordination process which will monitor and review changes towards achieving modal shift; and
- Improving access to the airport so that Bristol Airport can recruit and retain employees that help make the airport a success.

2.1.2 Any and all other Travel Plans that are required for Bristol Airport site (e.g. for hotels) will adhere to these overarching objectives.

3 Existing Surface Access Options

3.1 Location

3.1.1 Bristol Airport is located approximately 11 kilometres to the south-west of the centre of the main conurbation of Bristol, within the administrative area of North Somerset Council. It is located 9 km to the east of the M5, which is the main arterial highway route that connects the south west of England to the rest of the country. The site location is shown in **Figure 3.1**.

3.2 Access on Foot

3.2.1 The topographical nature and relatively rural location of the site mean that walking trips to and from Bristol Airport are more likely to occur from the nearby hamlets of Downside, Lulsgate Bottom, Potters Hill and the village of Felton.

3.2.2 A footway is provided on one or both sides of the A38 from Bristol City Centre to the airport although the distance of the journey from Bristol makes walking trips unlikely. The footpath along the A38 does not extend south of the airport for any significant distance, making walking from Wrington and other villages to the south of the site unattractive.

3.2.3 At Lulsgate Bottom, the most likely destination/origin for walking trips, a pedestrian crossing is currently provided over the A38 to the south of the A38/Downside Road junction providing access to footways either side of the A38 and to bus stops.

3.2.4 Footway provision on roads in the vicinity of Bristol Airport are shown in **Figure 3.2**.

3.3 Access by Bicycle

3.3.1 Opportunities for cycling to and from Bristol Airport are limited due to the local topography, the busy nature of the A38 and the distance of the airport from major conurbations.

3.3.2 The most likely source of bicycle trips to and from Bristol Airport is trips from the hamlets of Downside, Lulsgate Bottom and Potters Hill and nearby villages such as Felton, Winford, Wrington and Backwell. Anecdotal evidence suggests employees at Bristol Airport from further afield, including Nailsea, Portishead, Blagdon and Bristol, are also known to cycle to work on an occasional or regular basis.

3.3.3 Bristol Airport currently provides bicycle racks and a secure cycle store at the Administration building for employees and visitors, and also at the silver zone employee transport hub, for employees, visitors and customers.

3.3.4 **Figure 3.3** shows the cycle network in the area around Bristol Airport. Bicycle infrastructure including cycle lanes and crossing points is provided at the Downside Road/A38 junction near the entrance to the Airport.

3.4 Access by Public Transport

Facilities for Bus Users at Bristol Airport

3.4.1 Bus stops are provided for services stopping at Bristol Airport directly outside the main terminal building. Buses set down at the departures end of the terminal building and pick up at the arrivals end. An internal employee bus connects those based at the administration building with the Employee Transport Hub and the main Terminal, meaning employees therefore have direct access to the main Terminal bus stops.

3.4.2 A live departures board providing up to date bus departure information is located adjacent to the bus stops at the Terminal.

3.4.3 Tickets and timetable information for the 'Flyer' bus service which operates between Bristol Airport and Bristol is available from a manned kiosk located next to the bus stop. Tickets are available to be pre-booked online, from the driver or within the terminal.

3.4.4 A real-time information screen showing train departures from Bristol Temple Meads is located on the terminal forecourt to inform users of onward travel information. This information is shown for departures in at least 30 minute's time, in order to allow for connecting bus journeys to Bristol Temple Meads.

Bus Services to Bristol Airport

3.4.5 Bristol Airport is well served by a broad, diverse range of frequent and direct bus routes to Bristol, Bath and Weston-Super-Mare as well as other local towns and villages. In addition, employees benefit from receiving a significant discount for using the A1, A2, A3, A4 and A5 services. Further details of this are included in the **Section 6 – Travel Planning Measures**

Table 3.1: Bus Services to Bristol Airport

Service	Route	Frequency	
		Mon-Sat (daytime)	Evening & Sunday
A1	Bristol Airport – Bristol	10 mins	15-20 mins, 60 mins night
A2	Bristol Airport – Bedminster – Bristol	30 mins	30 mins
A3	Weston-super-Mare – Worle – Congresbury – Bristol Airport	60 mins	60 mins
A4	Bath – Saltford – Keynsham – Brislington – Hengrove – Bristol Airport	30 mins	30 mins
A5	Winford – Felton – Bristol Airport – Wrington then either Congresbury – Yatton or Churchill – Winscombe	10 journeys Mon-Fri	No service
U2	Clifton – Lulsgate – Upper Langford	60 mins Mon-Fri (term time only)	No service
135	Chew Stoke – Chew Magna – Winford – Lulsgate – Wrington – Congresbury – Weston-super-Mare	1 journey Fri	No service
672	Blagdon – Wrington – Lulsgate – Bedminster – Bristol	1-2 journeys	No service

3.4.6 A summary of these routes in relation to Bristol Airport and the surrounding area is shown in **Figure 3.4**.

3.4.7 The main bus stops are located directly outside of the terminal building, accessed by a bus lane from North Side Road. The bus lane is manually controlled by security and access is controlled by rising bollards. The lane is clearly marked with signage and red surfacing. Less frequent rural routes do not enter the airport itself but instead serve stops at Lulsgate Bottom on the A38, which is a short walk from the Airport.

3.4.8 Service A1, is branded as the 'Airport Flyer', and it is the principal bus route to Bristol Airport. The Airport Flyer operates 24 hours a day, seven days per week, with frequencies up to every 10 minutes (6 buses per hour) from Bristol City Centre.

3.4.9 The A1 provides the main link with the National Rail network at Bristol Temple Meads railway station, for onward connections to London, the South West, South Wales, the South Coast and the Midlands.

3.4.10 The route is a limited-stop service operated with brand-new vehicles equipped with leather seats, tables, additional luggage space, USB sockets and free Wi-Fi.

3.4.11 The Flyer has been a considerable success, with the recent enhancement to the frequency and vehicle specification helping to deliver in excess of 700,000 passenger journeys in 2017. The new double deck buses utilised on the route have significantly boosted capacity on the service to up to 828 seats per hour. The A1 route is shown in **Figure 3.5**.

3.4.12 The City of Bristol is the largest catchment area for employees at Bristol Airport and particularly by those travelling by public transport. With this in mind, the Airport has increased the frequency of the main bus services to/from the City Centre to 8 buses per hour by introduction of service A2 in October 2018. This service is delivered in partnership with First and has further increased capacity by 144 seats per hour.

3.4.13 The A1 service and has recently been re-routed via Ashton Vale, utilising the MetroBus infrastructure to improve punctuality and reliability between Bristol City Centre and the Airport. In addition, the A2 has recently been introduced to retain the link between the Airport and South Bristol.

3.4.14 Service A2 operates as a local bus service calling at all stops, ensuring maximum connectivity for employees and passengers living in south Bristol. In order to maximise opportunity for all employees, services operate between 03:00 and 00:00 7 days per week. The A2 route is shown in **Figure 3.6**.

3.4.15 Service A3 provides the key link between the Airport and Weston-super-Mare, operating every 60 minutes from early morning (0300 hours) until late at night (2300 hours) seven days per week. The route is also branded as 'Airport Flyer' and uses single deck buses. The A3 route is shown in **Figure 3.7**.

3.4.16 Service A4, branded as 'Air Decker' connects Bath and Keynsham to Bristol Airport. The Air Decker service operates every 30 minutes (2 buses per hour) during the daytime with hourly services in the early mornings and late evenings, seven days per week. The A4 route is shown in **Figure 3.8**.

3.4.17 Service A5 is a new route which operates in part replacement of former local bus routes. The service provides 10 journeys per day on Mondays to Fridays between Winford, Felton, Bristol Airport, Wrington and Langford, with alternate journeys either serving Congresbury and Yatton or Sandford and Winscombe. The A5 route is shown in **Figure 3.7**.

3.4.18 Service U2 is a new service which commenced in September 2018 which provides a weekday link between the University of Bristol's main campus in Clifton, Bristol Airport and the veterinary campus at Upper Langford. The route of the U2 service is included in **Figure 3.4**.

Coach Services to Bristol Airport

3.4.19 In common with the bus services, Bristol Airport has a good level of sub-regional coach services which complement the local bus network to provide for longer distance travel. **Table 3.2** sets out the coach services currently operating to Bristol Airport.

Table 3.2: Bristol Airport Coach Services

Service	Route	Frequency	
		Mon-Sat (daytime)	Evening & Sunday
216	Cardiff – Newport – Bristol Airport	120 mins	120 mins
404	London – Heathrow Airport – Chippenham – Bath – Bristol Airport – Exeter – Newton Abbot – Torbay – Totnes – Plymouth – Truro – Falmouth – Penzance	No service	1 journey per eve
Falcon	Bristol – Bristol Airport – Bridgwater – Taunton – Cullompton – Exeter – Plymouth	60 mins	120 mins eve, 60 mins Sun

3.4.20 Stagecoach South West launched their 'Falcon' coach service in February 2016. It provides a 24 hour, seven days a week service from Plymouth, Exeter and Taunton to Bristol Airport and Bristol City Centre. The Falcon operates up to every hour in the daytime and every two hours overnight. Coaches are high specification, branded vehicles with free Wi-Fi, USB charging points, power sockets and air conditioning.

3.4.21 The 'Falcon' service also operates as a local bus service, serving all stops, between Brent Knoll and the outskirts of Bristol.

3.4.22 National Express commenced operation of coach services to Newport and Cardiff in March 2015, following the withdrawal of First's 'Greyhound' service. These operate broadly every two hours, seven days per week with services also operating overnight.

3.4.23 National Express also operate one overnight journey on service 404 between London and Penzance which serves Bristol Airport in the early hours of the morning.

Rail Services

3.4.24 Although there are no direct rail services to Bristol Airport, there are several stations that are near, and accessible by bus services. The National Rail stations that provide access to Bristol Airport via bus services are set out in **Table 3.3**.

Table 3.3: National Rail Stations

Station	Distance (km)	Bus Route	Journey Time (off peak)	Bus Frequency (off peak)
Nailsea & Backwell	4.5	None	n/a	n/a
Yatton	8.0	A5	43 mins	Hourly
Parson Street	8.9	A2	14 mins	Half hourly
Bedminster	10.0	A2	21 mins	Half hourly
Bristol Temple Meads	11.4	A1	29 mins	Every 10 minutes
Worle	14.2	A3	28 mins	Hourly
Weston Milton	16.6	A3	35 mins	Hourly
Weston-super-Mare	18.8	A3	44 mins	Hourly
Bath Spa	24.6	A4	70 mins	Half Hourly

3.4.25 Nailsea & Backwell is the closest National Rail station to Bristol Airport but there is currently no direct public transport link available. The station is served by the relatively infrequent service A5 and Worle lies on the route of service A3. All three of these stations have two trains per hour on the Bristol to Weston-super-Mare route, with one train per hour to Taunton and Cardiff; at peak times, some trains operate to/from London Paddington.

3.4.26 Bedminster and Parson Street are both served by service A2 but are local railway stations with a limited hourly rail service between Bristol and Weston-super-Mare. This also applies to Weston Milton on the service A3 route. As such it is not considered that these stations offer significant potential for rail/bus interchange.

3.4.27 Bristol Temple Meads is the principal rail interchange to/from Bristol Airport, located on the Airport Flyer bus service A1. Services operate from Bristol directly to a variety of national destinations as shown in **Table 3.4**.

Table 3.4: National Rail Destinations from Bristol Temple Meads

Operator	Route	Frequency	
		Mon-Sat (daytime)	Evening & Sunday
Great Western Railway	Swindon, Reading, London Paddington	2 per hour	1-2 per hour
	Newport, Cardiff Central	2 per hour	1 per hour
	Salisbury, Southampton Central, Portsmouth & Southsea	1 per hour	1 per hour
	Weston-super-Mare	2 per hour	1 per hour
	Clifton Down, Avonmouth (some services continue to Severn Beach)	2 per hour	1 per hour
	Frome, Dorchester West, Weymouth	1 per 2 hours	4 journeys
	Worcester Shrub Hill, Great Malvern	1 per 2 hours	5-6 journeys
	Havant, Chichester, Brighton	1-2 journeys	3 journeys
Cross Country	Cheltenham Spa, Birmingham New Street	2 per hour	2 per hour
	Stoke-on-Trent, Manchester Piccadilly	1 per hour	1 per hour
	Derby, Sheffield, Leeds, York, Newcastle, Edinburgh (some services continue to Glasgow)	1 per hour	1 per hour
Great Western Railway	Exeter St Davids, Plymouth (some services continue to Cornwall)	1-2 per hour	1-2 per hour
South Western	Andover, Basingstoke, London Waterloo	3 journeys	1 journey

3.4.28 Weston-Super-Mare railway station is served directly by bus route A3, and offers some connections to the south with direct trains to Taunton and Exeter St David's.

3.4.29 Worle station is located on eastern edge of Weston-Super-Mare, serving the suburban area of the town approximately 5km from the town centre. Future proposals could improve connectivity between this station and Bristol Airport, including the potential development of a 'Parkway' type solution for the station, taking account of its location on the mainline between Bristol, Exeter and Plymouth.

3.4.30 Bath Spa bus station is located adjacent to the railway station and is connected to the Airport by frequent service A4, although the journey time is considerable (50-70 minutes) compared with access to other stations.

3.5 Access by Car

3.5.1 Primary vehicle access to the Bristol Airport site is provided by two roundabouts with the A38. The northern roundabout provides access to the northern parts of the airport including the main terminal building, passenger pick up and drop off areas, hotel and operational facilities, and both short and long stay parking areas. This is also the main access for public transport services.

3.5.2 The southern roundabout primarily provides access to Silver Zone long-stay car parking, employee and visitor car parking, aircraft maintenance areas, the Bristol and Wessex Aeroplane Club, Bristol Flying Centre and Western Power Distribution Helicopter Unit. In addition, BAL are currently constructing a new Fire station and new administration building which are predicted to open in early 2019 and will also access from the southern roundabout.

3.5.3 The primary road access to the Airport is via the A38 which is a strategic route between Bristol City Centre and Taunton, connecting to the M5 at Junction 22 and enabling connections to Somerset, Devon and Cornwall, to Weston-super-Mare via the A368 and A37 and also provides connections to many of North Somerset villages. The A38 is single carriageway with a variable speed limit.

3.5.4 Downside Road, located to the north of the site boundary, connects to the A370 near Brockley. The A370 connects to Weston-super-Mare from M5 Junction 21 as well as local villages and towns.

3.6 Access by Taxi & Private Hire

3.6.1 The Airport taxi service is operated under a concession arrangement with Arrow Cars, who were awarded an exclusive five-year contract in April 2015. This allows Arrow Cars sole rights to provision of private hire services taking bookings at the Airport, but does not exclude other operators who are able to set down or pick up pre-booked passengers from elsewhere; this is directed towards the drop-off and short stay car parks on site.

3.6.2 Arrow Cars are permitted to drop off and pick up passengers at the entrance to the terminal, unlike other taxi passengers who must alight elsewhere.

3.6.3 The concession is operated per a strict set of service standards laid down by the Airport, the objective of which is to ensure that private hire vehicles are readily available to passengers 24 hours a day. The agreement covers a range of issues including availability of taxis, quality of vehicles, maximum waiting time, driver standards and, where possible, avoidance of the B3130 through Barrow Gurney.

3.6.4 Arrow Cars' booking office is in the terminal building and they are the only taxi operation that can access the terminal forecourt. Bookings can be made in advance by telephone, online or from the booking office. They are open 24 hours a day throughout the year.

3.6.5 The Bristol Airport Surface Access Strategy does not promote an increase in modal share by taxi passengers. It does, however, seek to promote increased efficiency in the airport licensed vehicle operation by combining outward and inward journeys and use of licensed vehicle sharing. In the future, development of schemes such as Mobility as a Service (MaaS) could change the way people access the Airport by small vehicles, including taxis and taxi-bus style services.

3.7 Parking

3.7.1 Employee car parking is now located at the Silver Zone and totals 1,000 spaces. An inter-site employee bus operates from a new 'Employee Transport Hub' to the admin building and Terminal. There are currently 24 car share specific spaces located next to the Employee Transport Hub. Further details are provided in **Chapter 6**.

4 Employee Travel Behaviour & Trends

4.1 Introduction

4.1.1 Employee travel surveys have been undertaken in 2004, 2007, 2009, 2012, 2014, 2015 and most recently in 2017. The information gathered from these surveys, particularly the more recent ones, has been used to assist the development of the strategy and the package of measures to be implemented in the Travel Plan for employees. The following section will analyse the results of the most recent survey in greater detail, and compare it with previous surveys, commenting on outcomes, trends and potential improvements that these results indicate may result in modal shift.

4.2 Current Employee Survey - Participants

4.2.1 The 2017 survey provided data to monitor progress towards Travel Plan targets as well as providing feedback from employees. Additional information has been made available by BAL (February 2018), which provides information regarding the characteristics of all employers based at the Airport (not just those taking part in the 2017 survey). As of February 2018, there were 54 businesses on the Bristol Airport site which currently employs a total of 3,918 people during the summer peak, of which 2,976 are full-time jobs and 942 are part-time.

4.2.2 Around 160 of those employees are working for the airport taxi operator Arrow Cars and the Flyer bus service. They are therefore not permanently based at the Airport and do not have an alternative option in terms travel mode.

4.2.3 Based on data received, a variety of employers are based at the airport, the largest proportion of which are employed by EasyJet (16%). Only 8% of all employees who work at the airport are employed directly by Bristol Airport Ltd itself. **Table 4.1** sets out the employers and the number of employees based at the Airport for all companies employing more than 30 full time employees.

Table 4.1: Summary of all Employers and Employees at Airport (correct at February 2018)

Name of Organisation	Number of Full Time Employees Based at the Airport	Number of Part Time Employees Based at the Airport	Percentage of Total (FT and PT) Airport Based Employees
EasyJet	553	69	16%
ICTS	301	16	8.1%
Bristol Airport	275	22	7.6%
Swissport	247	253	12.8%
Thomson Airlines	129	11	3.6%
Ryanair	120	0	3.1%
Arrow Cars	119	0	3%
BMI Regional	117	8	3.2%
SSP	116	144	6.6%
Gate Gourmet	60	0	1.5%
Sasse	58	7	1.7%
Mego	58	142	5.1%
Border Force	57	8	1.7%
WDF	52	28	2%
Bristol Flying Centre	45	5	1.3%
OCS	45	25	1.8%

Name of Organisation	Number of Full Time Employees Based at the Airport	Number of Part Time Employees Based at the Airport	Percentage of Total (FT and PT) Airport Based Employees
NATS	43	0	1.1%
Avon and Somerset Police	42	0	1.1%
Flight Care Multiservices	41	0	1%
First Group	41	0	1%
SSE	34	6	1%
Bath Bus Company	30	7	0.9%
Hire Car Valet	30	0	0.8%
OTHER (less than 30 full time Employees)	361	174	14%
TOTAL	**2,976**	**942**	**100%**

4.2.4 The data set out above has been compared to the data extracted from the 2017 employee travel survey, which generated 828 responses from a broad range of employers across the Airport Site. The employment data is shown in **Table 4.2**.

Table 4.2: 2017 Travel Questionnaire Responses by Organisation

Name of Organisation	Number of Respondents from Each Organisation	Percentage of Responses from Total in Organisation	Percentage of Total Responses
EasyJet	205	33%	24.8%
Bristol Airport	154	52%	18.6%
Other (ICTS / Security)	104	33%	12.6%
Thomson Airways	81	58%	9.8%
Retail Outlets	40	27%	4.8%
OCS	36	51%	4.3%
BMI	30	24%	3.6%
Sasse	29	45%	3.5%
Border Force	22	34%	2.7%
SSP	22	8%	2.7%
Thomas Cook	18	23%	2.2%
Swissport	16	3%	1.9%
NATS	15	35%	1.8%
Menzies	10	53%	1.2%
Bristol & Wessex Flying Club	7	54%	0.8%
ONS	7	54%	0.8%
Alpha LSG	6	67%	0.7%
Gate Gourmet	6	10%	0.7%
Bristol Flying Centre	4	8%	0.5%
Airline Services	3	9%	0.4%
Police	3	7%	0.4%
Bagport	2	33%	0.2%

Name of Organisation	Number of Respondents from Each Organisation	Percentage of Responses from Total in Organisation	Percentage of Total Responses
SR Technics	2	8%	0.2%
Mego	2	1%	0.2%
First Group	1	2%	0.1%
Ryanair	1	1%	0.1%
Security (Mitie)	2	-	0.2%
TOTAL	828	-	100%

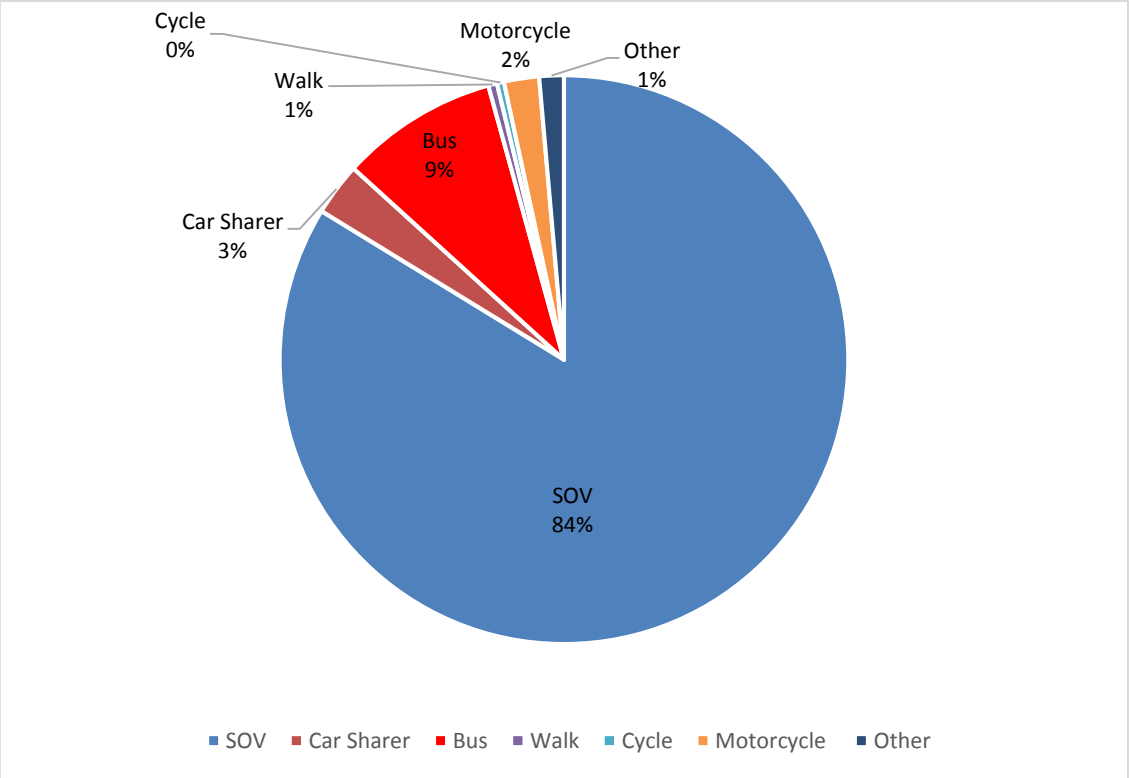
4.2.5 The results shown in **Table 4.2** indicate that the largest percentage of responses were collected from those employed by EasyJet, who are the largest employer at Bristol Airport. The largest proportion of responses of any organisation was received from Thomson with 58% of their employees taking part in the survey.

4.2.6 By comparing the fourth columns in **Tables 4.1** and **4.2**, the data shows that the Travel Plan survey results are broadly representative of the wider distribution of Airport based employees across different employers and organisations. The exception is Bristol Airport Ltd who are slightly over-represented and Swissport, who were under represented.

4.3 Employee Mode Share

4.3.1 When determining if targets are being met, the most important element of the survey is the response to the typical mode that employees use to travel to work, although this does miss information on people who occasionally travel differently or who sometimes work at home, and as such provides a robust picture of all travel to Bristol Airport for a typical day. However, some employees may use the bus or car share once a week, but drive to work the majority of the time, but only the driving is captured in the staff survey. Additional questions will be included in future surveys to better understand the detailed travel characteristics of employees based at the Airport and take these factors into account. **Figure 4.1** shows the typical modal share for employees derived from the employee questionnaires.

Figure 4.1: 2017 Employee Mode Share



4.3.2 Some preliminary conclusions can be drawn:

- The majority of employees are travelling to and from their place of employment via SOV;
- Cycling accounts for less than 1% of journeys which was expected due to the factors outlined in Section 4.3, albeit that it could be improved upon slightly given that 2% of survey respondents live within 5km of the site;
- Walking and working from home are not currently considered practicable options for many of the respondents, which is to be expected given the local topography, the location of the Airport relative to settlements and the nature/type of the work undertaken;
- Note that the topography of routes into site, lack of lighting, and shift work patterns, as well as distance from site are all likely to impact on levels of active travel modes used; and
- Public transport and car sharing should be the main focus of promoting alternative travel movements to the SOV for trips to and from site.

4.3.3 **Table 4.3** shows the employee modal share change over the twelve-year period 2004-2017.

Table 4.3: Mode Share Progression

Mode of Transport	Mode Share							
	2004	2007	2009	2012	2014	2015	2015 amended	2017
Car, as driver alone (SOV)	93.0%	86.4%	86.6%	80.5%	82.0%	63.2%*	74.6%	84%
Car sharing	3.9%	4.2%	5.2%	6%	9%	4.6%	4.6%	3%
Bus	2.5%	5.5%	6.0%	10%	4%	27.7%*	16.3%	9%
Motorcycle	0.6%	2.8%	1.4%	2.5%	2%	1.3%	1.3%	2%
Bicycle		0.7%	0.4%	1%	2%	1.0%	1.0%	0.4%
Walk		0.4%			0%	0.7%	0.7%	0.5%
Other		0.0%			2%	1.5%	1.5%	1%

4.3.4 This shows a significant increase in the proportion of employees using public transport, whilst showing a more fluctuating picture relating to the proportion of employees travelling to work via SOV. However, there are a number of factors that should be taken into account when considering these figures;

- The number of survey responses received after the 2017 survey is more than three times that received during the 2015 surveys, so is likely to show different travel patterns and is likely to be more representative of airport employee travel as a whole;
- The survey results are in line with those received between 2004-2014, suggesting that the 2015 results were anomalous when compared to the wider trend; and
- The large increase in employees based at the airport over this period will have an effect on the implementation of the Travel Plan and it takes time for new employees to be able to identify and adopt the alternative travel options available.

4.3.5 However, despite this, **Table 4.3** does show that a significant reduction in SOV car has been achieved since 2004, in conjunction with the substantial increase in the number of employees based at the airport over this period. The 2014 survey identified an increase in SOV car but this may have been impacted by the time of year that the survey was carried out and the proportionally low number of respondents from organisations other than BAL. Car sharing has fluctuated over the years and this is an area for improvement going forward.

4.3.6 Bus use has continued to increase steadily over the years in line with the improvements in public transport access to Bristol Airport, and is expected to continue to be the most popular alternative method of travel, after SOV, given the proposed improvements to services, together with the reduced fares available for Airport employees. The continued improvements to the existing bus services, and the potential for new services to offer additional opportunities for employees to commute via public transport means that it is anticipated this mode share will continue to increase.

4.3.7 Cycling has remained relatively consistent over the period. This can be attributed to the strenuous nature of the route to the Airport in relation to Bristol and limited number of local settlements within cycling distance. However, it is anticipated that improvements to the cycling infrastructure in the vicinity, together with improvements to on-site facilities such as showers, storage and cycle parking, will continue to encourage cycling as a mode of travel for some employees.

4.3.8 The 2017 results also show that good progress is being made to ensure the survey is being promoted and in particular ensuring that non-Bristol Airport employees have access to the employee survey. It is important to maximise response rates of the survey to obtain the most representative response possible.

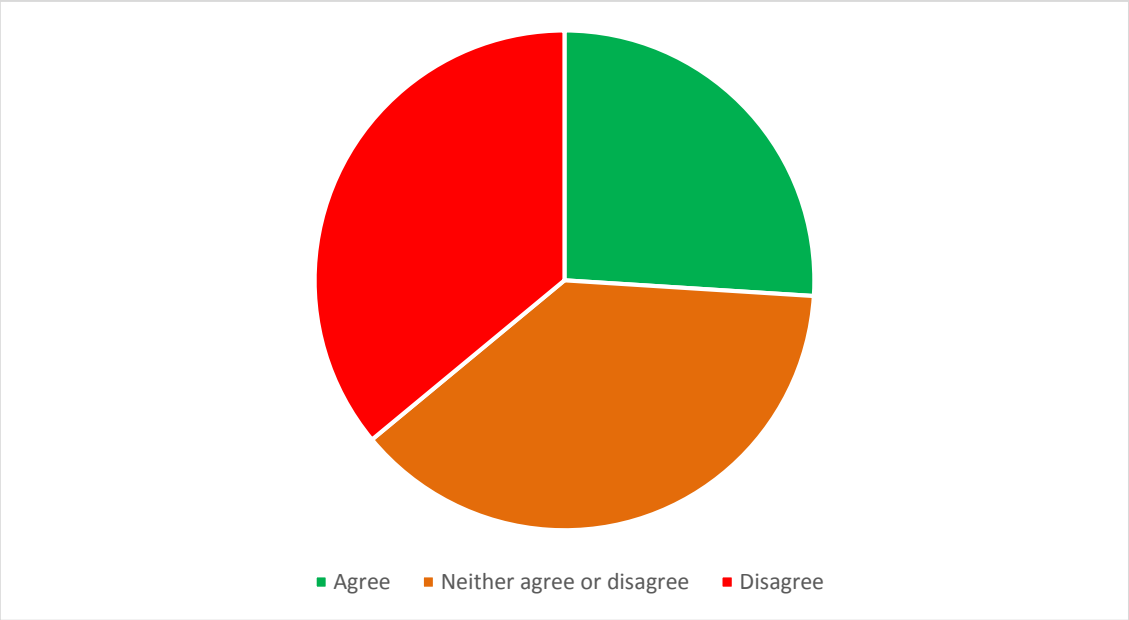
4.4 Barrier Analysis

4.4.1 The following section provides the responses and analysis from the additional questions answered by respondents in the questionnaire, and the implications these may have on employee travel patterns.

Access to Car Share

4.4.2 The survey included a question asking what would encourage employees to travel more sustainably, including access to Bristol Airport's car sharing provider, Liftshare. As it is expected to form a key part of the TP strategy, these results have been isolated from the other responses so they can be analysed separately. The results are summarised in **Figure 4.2**.

Figure 4.2: Encouraging Car Sharing



4.4.3 The results in **Figure 4.2** indicate that 26% of people think Liftshare would encourage them to car share, yet only 3% of people currently car share. This may be because those people are not aware of the current scheme. The introduction of the upgraded private scheme which was launched in October 2018, together with the associated promotion, should help to increase the car share modal split.

4.4.4 For those respondents that do not agree that access to this facility would encourage car sharing, this could be interpreted in a number of ways. For example, it is possible that respondents have not been provided with enough information of the benefits of car sharing and how this can be undertaken via the Liftshare service.

4.4.5 There may also be a lack of awareness of the other incentives already in place for car sharers such as dedicated car parking spaces offered to car sharers located adjacent to the Employee Transport Hub, a guaranteed lift home if the car share partner has to leave in an emergency, and the many other benefits associated with car sharing.

4.4.6 Awareness raising and promotion across the Airport site, through better promotion of the Airport Travel Information Leaflet, through notice boards, newsletters/ e-newsletters, and potentially

through Personalised Travel Planning, as well as through the launch of the new Travel Plan and Liftshare scheme in 2018 will ensure that all employees are fully aware of the car-sharing services available.

4.4.7 Another reason that respondents may not be attracted to car sharing could be due to shift work, which may be viewed as making car-sharing an unviable option. Better awareness that car-sharing partners do not have to be every day, and that Liftshare allows users to see who is traveling a similar route at the same time/day is available (it does not have to be a regular commitment to the same person/people) may help to address this.

Encouraging Changes to Travel Behaviour

4.4.8 The survey asked respondents to advise what factors may encourage them to travel by more sustainable modes of transport. This highlights areas where Travel Plan measures can be revised, amended or otherwise improved to address areas of concern for employees. **Table 4.4** sets out the responses to measures to encourage changes to travel behaviour.

Table 4.4: Encouraging Change to Travel Behaviour

Which of The Following Would Encourage You to Change Your Mode of Travel	Agree	Neither agree nor disagree	Disagree
Frequent public transport services	58%	16%	26%
Reliable Public Transport	56%	18%	26%
Affordable Public Transport	55%	18%	27%
Convenient Public Transport	54%	17%	28%
New Public Transport Links	53%	22%	24%
Safe Public Transport	49%	25%	27%
Better Information about Public Transport	47%	29%	27%
Improved Facilities (Waiting area, kiosks etc.)	47%	29%	24%

4.4.9 This highlights that, of the options provided regarding public transport improvements, respondents would most value more frequent, reliable and affordable services. This suggests that many respondents are either unaware of the existing timetables for bus services to the Airport (which run hourly through the night, and every ten minutes during the day) or wish to see the frequency improved during the night and potentially better match shift working hours.

4.4.10 This is reflected in some of the written comments provided alongside the survey answers. With regards to subsidised fares, the results again suggest that respondents are either unaware of the existing subsidy for employees on the A1, A2, A3 and A5 services (£1 fare for employees at the Bristol Airport site) and A4 service (£3 fare for employees at the Bristol Airport site) or would like to see other public transport services (other connecting bus or train services) subsidised.

4.4.11 A similarly popular option was the addition of new and convenient public transport links. Although the A1 Flyer service provides a highly frequent and affordable connection to Bristol City Centre, the majority of employees who responded to the survey live outside of the City Centre, making the A1 Flyer service less attractive due to the requirement to use more than one mode of transport / additional public transport leg as part of their journey. Details of where the Flyer services stop on the A38 in South Bristol, in addition to the town centre stop locations may help to encourage those who live to the south of the City Centre within reasonable walking or cycling distance of the Bus route.

4.4.12 Improved ticket/timetable information at work and improved buses received similar selection levels in the survey. Real-time passenger information is now provided on the terminal forecourt, along

with details of arrival/departures of rail services at Bristol Temple Meads for those undertaking onward journeys.

4.4.13 Again, better information dissemination of the available bus services, timetables and incentives available will help to address the needs of the employees and encourage higher uptake of public transport as a mode of transport.

4.4.14 Respondents who disagreed that improvements in public transport provision would encourage them to use public transport more, may be down to the available services not being direct for the users, or too far from where they live to the nearest bus stop. Journey time by bus is also a concern for some respondents. It is especially important in these cases to ensure that employees are constantly updated and that information provision is good, including journey times as well as routes and frequencies.

4.4.15 Whether the provision of electric vehicle charging points would encourage change in travel behaviour was also asked within the survey. Although currently comparatively low, Electric Vehicle Ownership is expected to rise dramatically over the course of the next decade, with the government committed to the 'Road to Zero' clean road strategy by 2030, where 50% of all new vehicles on the UKs roads will be electric powered. Although new charging points have been installed in public car parks and one is available adjacent to the admin building, these are limited in number and predominantly used for operational vehicles rather than being available for employees. The relatively high response rate of 18% suggests that additional Electric Charging facilities available to employees may encourage more employees to travel using an electric vehicle in the future.

4.4.16 There is a specific measure set out in the **Chapter 6** that commits to increasing electric charging points for employee use.

Working Hours

4.4.17 The 2017 questionnaire results suggest that approximately 60% of employees work variable shift patterns. Bristol Airport is operational 24 hours a day, 365 days a year. Whilst some employees work to a regular reoccurring shift pattern, most airlines operating at Bristol Airport operate their flights over an 18-hour day commencing with departures from 06:00 onwards. The start and finish times in many areas of the business are therefore related to the flight schedule. Airline employees will work shift patterns set out in their crew roster, with start and finish times varying from day to day. As an additional complexity, they are unlikely to work with the same people from one day to the next. The hours worked by security employees, terminal building concessionaires, handling agents and flight catering will also be related to the flight schedule and hours can vary from day to day. Early shifts will commence between 03:00 and 05:00 and late shifts will finish around midnight.

5 Employee Catchment Analysis

5.1.1 Employees were asked in the 2017 survey to provide a home postcode so that groupings, travel distances, access to facilities and likely travel routes could be investigated.

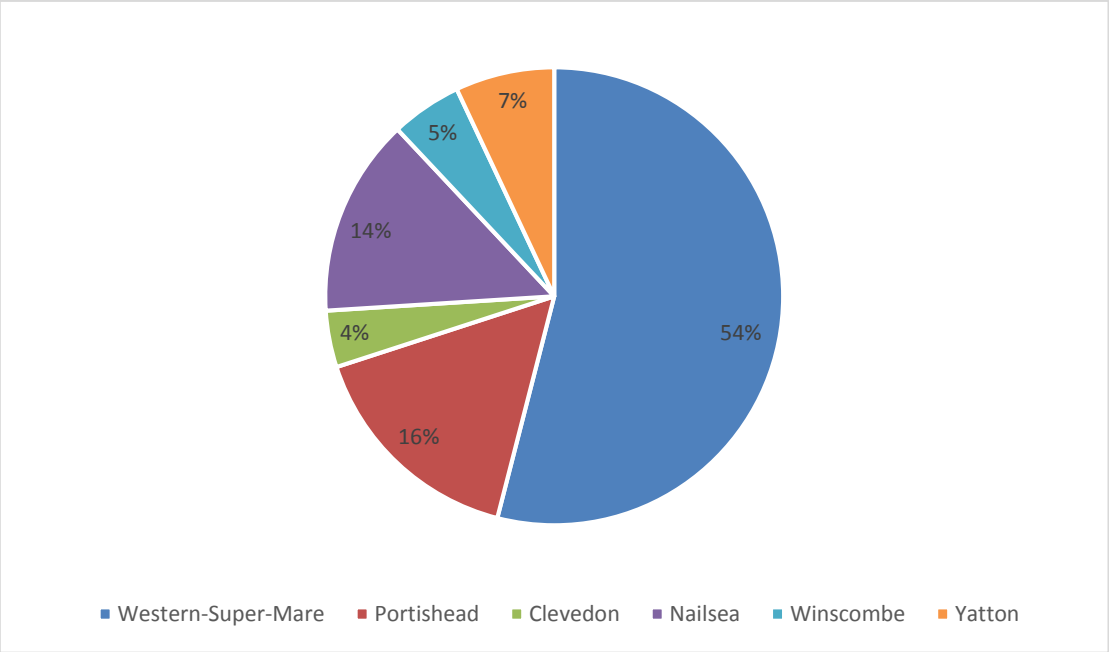
5.1.2 As would be expected, a significant number of employees live in Bristol and North Somerset (55%) based on the postcode data provided in the 2017 survey. A large proportion of those commute from South Bristol and Weston-super-Mare but smaller catchments such as Nailsea and Yatton were also identified. Given that the survey appears representative of the full workforce, (see **Table 4.1** and **Table 4.2**), it is anticipated that future investment to develop the surface accessibility of the airport for employees will be focussed in these areas, thereby improving the access opportunities for majority of Airport Employees. **Table 5.1** summarises the distribution of employee's home addresses from the 2017 survey data.

Table 5.1: Bristol Airport Employment Catchment Area (using 2017 Employee Survey Data as a Proxy)

Area	Percentage of Employees
North Somerset	31%
City of Bristol	24%
South Gloucestershire	10%
Bath & North East Somerset	7%
Sedgemoor District	7%
Mendip District	4%
Wiltshire	2%
South Somerset District	1%
Cardiff	1%
Newport	1%
Stroud District	1%
Taunton Deane	1%
Monmouthshire	1%
Vale of Glamorgan	1%
Caerphilly	1%
Swindon	1%
Others	6%

5.1.3 The North Somerset towns and villages account for the largest proportion of employees at 31% of the total. This proportion is broken down further to provide more details of employees located in close proximity to the Airport. **Figure 5.1** summarises this distribution.

Figure 5.1: Bristol Airport Employment Catchment Area – North Somerset



5.1.4 Weston-super-Mare accounts for the greatest urban concentration of employees within North Somerset at 54%. This equates to approximately 15% of the total respondents which suggest that there could be an opportunity for these employees to commute via the A3 Weston Flyer bus service that connects the airport with the town between 03:00 and 23:00. Furthermore, this concentration of employees provides a good opportunity for car sharing.

5.1.5 **Figure 5.2** illustrates the location of employees whose home address is within 400m of a bus stop on the route of one of the Airport services. This identifies a significant number of employees who could potentially travel to work using the various bus services that connect the Airport with the local area. Furthermore, the employee home locations shown in **Figure 5.2** only includes those who responded to the survey. It is anticipated that a similar proportion of the employees who didn't respond to the survey may also live in locations within the 400m distance from a bus stop. This provides an opportunity to encourage bus use as a means of commuting to work amongst all employees. Details of measures proposed to encourage further bus use are set out in the following section.

5.1.6 24% of respondents have home addresses within the City of Bristol. This means that there is the possibility that many of them could be within easy access of the A1, A2 or U2 bus services, either via Temple Meads or the stops in Clifton and south Bristol. A total of 132 respondents lived within 400m of a bus stop, which is illustrated in **Figure 5.2.** It is likely that additional employees who did not respond to the survey may also live in close proximity to bus stops and could potentially travel by bus for work purposes. It is anticipated that the re-launch of the TP will help to publicise this and further encourage employees to use the bus services available.

5.1.7 Appropriate measures to encourage cycling as a means of travelling to work are set out in the following Travel Planning Measures section.

5.1.8 A small proportion of staff live between 2 and 5 kilometres from the airport. This is the distance generally considered as the maximum cycling catchment area.

5.1.9 The population within walking distance is likely to be less than 2%, suggesting opportunities for significant modal shares for walking are therefore unlikely to be achievable. However, there are a much larger proportion (approximately 10%) who live within 8km of the Airport. Although this is unlikely to appeal to all employees, there are potentially a number of more confident cyclists who would consider cycling this distance for commuting purposes. This distance could be covered by a

regular cyclist in approximately 25-30 minutes which is considered a reasonable time for commuting purposes, albeit the topography and location of employee's residence will mean this varies.

5.1.10 Elsewhere the postcode data indicates a widespread employment catchment area with a small number of employees with journeys of up to an hour or more.

6 Travel Planning Measures

6.1 Proposed Travel Plan Measures

6.1.1 The assessments associated with the 12mppa application include future projections for the numbers of employees based at Bristol Airport. The level of employee car parking will not increase beyond the 1,000 parking spaces located at the Employee Transport Hub. As a result, employees will have to change mode as there will be no alternatives when the demand of car parking spaces exceeds supply. This will mean that sustainable travel via modes other than SOV will become more important over time and therefore the success of the TP in meeting its targets is vital.

6.1.2 It is envisaged that as the attraction of parking reduces due to the reduction in availability, the TP will help to focus the increased demand in sustainable travel options and encourage additional mode shift where possible.

6.1.3 This chapter sets out the proposed measures to be implemented as part of this TP. Measures to encourage travel by car sharing, public transport, walking and cycling in preference to driving a car alone are included, aiming to ensure that the TP targets are met.

6.2 Management Measures

Travel Plan Co-ordinator

6.2.1 BAL will ensure there is a new dedicated Travel Plan Co-ordinator (TPC) who will be responsible for the management and implementation of the Workplace TP. This will allow the TPC to fully engage with employees across the airport site and be visible and proactive in raising awareness of the alternative travel choices available and encouraging employees to travel in a more sustainable manner.

6.2.2 The TPC will ensure that the TP and the ASAS are well aligned. The TPC will engage with the Airport Transport Forum and will also meet regularly with senior management at Bristol Airport and other employers, stakeholders (such as public transport providers) and with local transport authorities. The TPC will provide assistance to all employees, including those who do not work for BAL and will be available to provide travel advice and encouragement to all airport employees whenever required. The TPCs name and contact details (including where they are based, email and telephone details) will be included in travel information materials.

6.2.3 As part of their role, the TPC will also be in frequent communication with the Liftshare management team and part of this role will be to disseminate information on to Airport based employees. Further information on the role that Liftshare will play within the TP is included in **Section 6.3**.

Employee Forum

6.2.4 A new ‘Employee forum’ was launched in 2018 in order to consolidate various existing forums and improve focus. The Employee Forum provides employees an opportunity to discuss a variety of working practices via breakout or sub groups for each subject matter. It is anticipated that the TPC will attend this forum, with the aim of assessing progress and adjusting / developing the measures to help achieve the targets.

Bristol Airport Transport Forum

6.2.5 The ATF meets on a six-month basis and is a well-established group which comprises representatives from Bristol Airport, local highway authorities, public transport providers, the local community and the Airport Consultative Committee. Its role includes overseeing the implementation of the ASAS and the Workplace TP. The ATF will continue to be used as a forum

for discussion on the TP in conjunction with the Employee Forum. The TPC will attend the meetings and will be able to report on the progress of the TP and to discuss the adjustment/ development of measures as appropriate.

Surface Access Steering Group

6.2.6 The Public Transport Steering Group (PTSG) was formed in order to manage the investment agreed as part of the 10 mppa Section 106 agreement. The group will be renamed as Surface Access Steering Group (SASG) in order to better reflect all modes of sustainable travel and will continue this role for the 12mppa S106 Agreement. Its primary function will be to oversee the implementation of the Section 106 commitments relating to surface access, including the TP.

6.3 Measures to Encourage Car Sharing

6.3.1 Car sharing is a way to reduce the number of car journeys made to and from Bristol Airport. It could appeal to those who live in areas not served by public transport as well as more widely reducing travel costs. Bristol Airport has already introduced an attractive and easy-to-use airport-wide Car Sharing Scheme comprising a secure matching database, a guaranteed ride home facility and dedicated priority car parking for sharers. This service is currently provided by Liftshare, who specialise in providing an easy to use platform for car sharing amongst employees.

6.3.2 The number of car share spaces at the visitor car park is currently 24 and whilst it is acknowledged that this is lower than the TP targets, the number of spaces is anticipated to increase over time as the TP period progresses and the Liftshare initiative gains traction. The number of car share spaces will be increased in line with the employee increases. In addition, the capped number of 1,000 spaces at the Employee Transport Hub will encourage employees to car share more frequently, as the total number of employees increases and pressure on the availability of parking spaces grows.

6.3.3 Following the recent re-launch, the new Liftshare scheme will be internal only with the scheme available for each individual employer, therefore providing a more focussed service than was previously available. It will benefit from much greater publicity and promotion provided by the Liftshare team, whose employees have promoted the scheme directly to Bristol Airport employees. The scheme has accompanying apps, branded marketing materials and will aim to be much more visible than it has to date.

6.3.4 The following summarises details of the Bristol Airport employee car share scheme:

- The database enables employees from across the Airport site to find a sharing partners. The car share system is available to all airport employees including those who do not work directly for Bristol Airport Limited;
- The guaranteed ride home facility is offered as a “safety net” for those rare times when unforeseen circumstances result in the lift home not being possible;
- Liftshare will provide training for the TPC to assist in devising the appropriate strategy for successful employee engagement and ultimately behaviour change for employees at Bristol Airport;
- Training on using the Liftshare website will then be offered by the TPC to ensure all employees are informed of its existence and are aware of all its functions (including the lift-match service);
- All employees will be encouraged to publicise their working rota each week to ensure potential lift matches are found;
- The car share spaces will be placed as close as possible to the staff building and shuttle bus stops at the employee transport hub to provide further encouragement for car sharing; and

- Annual car share promotions will be held at busy times (e.g. during the summer peak periods).

6.3.5 Car sharing information, including links to the Liftshare website and the benefits available to car sharers is made available through the Employee Airport Travel Leaflet. This leaflet and its contents will be promoted further through public travel information noticeboards, Airport website and at the various Forums, User Groups and Steering Groups detailed above. The Bristol Airport car share scheme is supported by the provision of priority car sharing spaces on site.

6.4 Measures to Encourage Public Transport Use

6.4.1 The A1 Flyer service now runs a continuous service, 24 hours a day, with up to eight services an hour at peak. The vehicle fleet has been replaced with new high quality, low floor buses, equipped with Wi-Fi, USB ports and real-time passenger information.

6.4.2 Usage of the Flyer is monitored on a monthly basis and timetable adjustments are made in conjunction with the Airport Transport Forum. Additional bus services that currently provide access to the Airport include the A2 service (Bristol City Centre via Bedminster), A3 service (Weston Flyer, to Weston-super-Mare), A4 (Airdecker, to Bath), A5 (Congresbury and rural North Somerset), U2 (University), 135 (Chew Magna and Congresbury) and 672 (Blagdon and Bedminster).

6.4.3 In addition to the bus services set out above, a number of sub regional coach services provide access to the airport. This includes the Stagecoach run 'Falcon', which operates a 24 hour, seven days a week service from Plymouth, Exeter and Taunton to Bristol Airport and Bristol City Centre. The Falcon operates up to every hour in the daytime and every two hours overnight.

6.4.4 National Express also provides a service between Cardiff City Centre and the Bristol Airport. These operate broadly every two hours, seven days per week with services also operating overnight.

6.4.5 Further publicity of these services and fares (including significant subsidy), their routes and timetables will be circulated to employees to encourage travel by public transport wherever possible. Journey times as well as frequency will also be added to the information provided. 'Cycle and ride' will also be publicised to try and encourage employees who live slightly too far from a bus stop to cycle to the bus stop and pick up the bus, where appropriate.

6.4.6 The airport currently has plans in 2021 for the construction of the second phase of the existing multi-storey car park and the construction of the second multi-storey car park (with associated public transport interchange). Once constructed, the consented public transport interchange, which will be situated on top of the new multi-storey car park, will improve the quality of the passenger waiting environment. The public transport interchange will also be connected to the terminal building by a covered walkway to further improve the experience of passengers travelling via public transport.

Potential Bus Service Improvements

6.4.7 At present, the main bus services between Bristol and Weston-super-Mare operate on the A370 corridor. These are as follows:

- ***X1:*** Weston-super-Mare to Bristol via Worle, Congresbury, Backwell and Long Ashton (up to 2 buses per hour);
- ***X2:*** Weston-super-Mare to Bristol via Worle, Congresbury, Claverham and Backwell (up to 2 buses per hour); and
- ***X8:*** Nailsea to Bristol via Backwell (up to 2 buses per hour).

6.4.8 Airport Flyer service A3 provides an additional bus per hour between Weston-super-Mare, Worle and Congresbury.

6.4.9 Journey times between Bristol and Weston-super-Mare are 66 minutes on the X2 and 68 minutes on the X1. This compares unfavourably with the 54-minute journey time achieved by the X1 in 2012, which did not serve Long Ashton or Claverham.

6.4.10 North Somerset Council wish to see the MetroBus network extended to Weston-super-Mare. Subject to further discussions with First, who operate all the existing services on a purely commercial basis, it is considered that a potential opportunity exists to restructure the existing offer on the corridor to provide express limited-stop services between Bristol and Weston-super-Mare. This would be complemented by additional services to Bristol Airport, all utilising MetroBus infrastructure between the City Centre and Long Ashton Park & Ride.

6.4.11 Key bus stops on the corridor would be upgraded to receive the guided buses, together with improved facilities for passengers. It is potentially envisaged that between five and ten pairs of bus stops would be served by the new limited-stop express bus services.

6.4.12 Given that the express services would utilise fewer stops than the former X1 service, in the off-peak period end-to-end journey times could potentially be achieved in less than 54 minutes.

6.4.13 Separately, the *West of England Joint Transport Study*, dated October 2017, recommends extension of MetroBus services from Bristol to Nailsea and Clevedon which would potentially result in infrastructure improvements on the periphery of Bristol and could assist with development of a scheme designed to extend MetroBus towards Weston-super-Mare.

6.4.14 Bristol Airport are actively engaging with First on bus service opportunities and are exploring the potential options for integrating services to the Airport with existing arrangements on the A370 corridor. This may assist with the local authority aspirations of delivering MetroBus services into North Somerset whilst enhancing the attractiveness of the service for both employees and passengers.

6.4.15 Service A3 is currently the direct public transport link between Weston-super-Mare and Bristol Airport, currently operating hourly between 03:00 and 00:00 seven days per week. The service is operated by Airport Flyer branded single deck buses with an hourly seating capacity of 72.

6.4.16 This service was introduced in May 2017 and in the eight months of operation to the end of the year carried over 11,000 passengers to and from the Airport. Patronage growth has been encouraging throughout 2018 and it is expected that by 10 mppa there will be sufficient generated travel demand from the Weston-super-Mare area for a higher frequency service to be deliverable.

6.4.17 A service with a frequency of two buses per hour would deliver significant benefits to surface access at the Airport as well as enhancing connectivity between Weston-super-Mare and Congresbury. It would also assist in increasing the attractiveness of the route and increasing bus modal share for Airport journeys within North Somerset.

Service Quality Upgrades

6.4.18 Most bus and coach services to the Airport are operated with new, high specification vehicles. BAL will keep under review, via the Steering Group, the need for future enhancements which may tie in to interchange or information improvements being proposed (for example, audio-visual equipment on buses).

Potential New Routes and Services

6.4.19 As part of the 12mppa development proposals, new routes and services will be investigated to ensure that public transport accessibility is improved wherever viable in the local areas around the Airport.

6.4.20 Bristol Airport currently operate a Public Transport Fund which is utilised to support enhanced local bus services in the area. As part of the 12 mppa application it is proposed to extend this further for the purpose of ongoing development of public transport serving Bristol Airport, which would be managed by the Surface Access Steering Group and would be available for improvements such as:

- Trials of new bus routes, including demand-responsive services;
- Frequency enhancements;
- Service quality upgrades;
- Bus priority measures;
- Passenger interchange improvements;
- Improved passenger information;
- Improved ticketing; and
- Technology innovations and improvements.

6.4.21 There is potential for delivering increased modal share for public transport from these measures by utilising and enhancing resources already engaged on local bus services to provide new direct connections to the Airport. As the Airport grows, close attention will be paid to the need for additional capacity on the public transport network. The Steering Group will consider each route on a case-by-case basis and utilise the latest data to identify whether an increase in frequency or capacity is necessary and/or desirable.

6.4.22 Enhancements, potentially to hours of operation, may be considered on some routes not operating directly to the Airport where there is anticipated demand for connections to the Flyer service (for example, earlier starts on urban bus routes in Bristol to enable early morning travel).

6.4.23 Potential new routes could be delivered by combining existing services or investigating existing and future travel demands to provide a new service.

6.4.24 Some consideration has been given to development of a demand responsive transport (DRT) scheme which would provide more flexible solutions either at off-peak or outside conventional hours or in areas of lower, more dispersed demand. Two potential markets for a DRT-type solution have been identified which are:

- Provision of demand responsive services for employees outside of conventional bus service operating hours; and
- Operation of feeder services to the Airport from the rural hinterland which is currently poorly served by local bus routes.

6.4.25 The provision of services outside conventional hours is often difficult and expensive for commercial bus operators, but is important in an Airport context because of the requirements of employees (and passengers) who are required to travel early in the morning and late in the evening. As a result, one potential solution to this issue would be to develop a scheme where employees can pre-book transport to and from the Airport from locations where alternative services are not available.

6.4.26 It may be possible to work with an existing operator of ‘app-based’ demand responsive travel solutions such as RATP Dev who until recently were the providers of the ‘Slide’ commuter minibus service in Bristol. Before the operation was recently withdrawn, this service offered local pick-ups

and drop-offs within specified zones in south Bristol and the North Fringe and operated between 06:45-09:45 and 15:30-17:30 on Mondays to Fridays only.

6.4.27 Bath & North East Somerset Council (BaNES) have recently published a study into transport patterns in the Chew Valley – a large and deeply rural area to the east of Bristol Airport. The '*Chew Valley Transport Strategy'*, dated October 2017, identified the area as being served by a significant number of irregular bus services. Bristol Airport provided funding to BaNES for the Chew Valley Transport Strategy and transport schemes within it from previous S106 agreements, in relation to the 10mppa planning application. This may be a future opportunity for joint working on a demand-responsive transport scheme, with the addition of future S106 funding if appropriate.

6.4.28 NSC have a long-term aspiration to integrate Weston-super-Mare with the Metrobus network. Options will be developed to explore how a link could operate between Bristol and Weston-super-Mare via the Airport on the A38.

Promotion of Coach Services

6.4.29 Bristol Airport is currently served by two regular coach routes:

- Stagecoach Falcon: an hourly service from Plymouth, Exeter, Taunton and Bridgwater to Bristol Airport and Bristol City Centre; and
- National Express 216: a 2-hourly service from Cardiff and Newport.

6.4.30 The Airport has worked with coach operators to enhance the regional network of destinations available by public transport. The 10 mppa permission included a commitment to work towards developing such a network and this has been achieved ahead of schedule through the provision of these frequent and attractive coach routes which operate 24 hours a day, 7 days per week.

6.4.31 The Airport will continue to work with coach operators to develop the existing routes and to encourage new provision where possible. The existing coach services are well aligned with the key areas of expected patronage growth in the South West and South Wales; therefore, further development of these services is seen as the most beneficial means of securing improved public transport modal share.

Discounted Employee Travel

6.4.32 Employees benefit from a heavily discounted bus fare when travelling on the A1, A2, A3 and A5 services (currently £1 nominal charge) on production of an airport pass. Letters of authority are issued to temporary employees to allow them the same benefit. A ten-journey ticket can be purchased by employees for added convenience, for shift-workers particularly. The Flyer employee concessionary fare is available to all employees, including those who do not work directly for Bristol Airport Limited. This reduced travel price will be better publicised to ensure all new employees are aware of the benefits.

6.4.33 In addition, the A4 service also offers a significant discount to employees. The current cost is £3 per journey, which is considerably lower than the £14 standard fare for the public. At present the A4 Airdecker only accepts cash which can deter some potential users. However, upgrades are expected in the near future to allow card and contactless payment methods. This will be publicised to employees to ensure that they are aware of the public transport travel opportunities available.

6.4.34 It is anticipated that further attractive fares to encourage a shift from SOV will be considered on other routes to ensure that all employees who could potentially choose to travel via public transport will have the financial incentive to do so. Furthermore, trial periods or introductory offers could be made to new employees to encourage public transport as a mode of travel from the outset.

Public Transport Travel Information

6.4.35 Bus information, including timetable/ ticket information and subsidies available to Airport Employees is made available through the Employee Airport Travel Leaflet. This leaflet will be updated to include news (such as the new fleet with Wi-Fi and real-time passenger information) This leaflet and its contents will be promoted further through public travel information noticeboards, Airport website and at the various Forums, User Groups and Steering Groups detailed above.

6.4.36 The public transport fund to be delivered through the Section 106 Agreement may be used in part to deliver information improvements such as installing RTPI capability at the Airport, facilitate the introduction of on-bus screen and audio-visual stop announcements on all bus routes, or the introduction of i-points (information screen and ticket sales) at stops which would speed boarding times and reduce queuing for the bus.

Ticketing Improvements

6.4.37 Employees accessing Bristol Airport via the National Rail network are able to purchase through tickets via online portals, at booking offices and on trains where applicable. However, such a facility is not available in reverse where employees or visitors are required to purchase a bus ticket at Bristol Airport to Bristol City Centre before an onward ticket to a National Rail destination; similarly, there is no facility at the Airport to collect pre-paid online tickets.

6.4.38 As part of the development of an integrated travel centre within the Airport, it is anticipated that tickets for the National Rail network will be available. Further discussions are being held with stakeholders to secure this enhancement for the benefit of passengers and staff.

6.4.39 In addition, the Airport will seek to secure the wider promotion of the dedicated bus services to the Airport across the National Rail network to raise awareness of the access possibilities from the Midlands, South Wales and South West by rail/bus interchange at Bristol Temple Meads and Weston-super-Mare.

Potential Technology Innovations and Improvements

6.4.40 Transport technology is constantly innovating and evolving over time; therefore, it is important that consideration is given to some of the emerging technologies which will shape the future of transport. These may include:

- Autonomous public transport vehicles; and
- Mobility as a Service (MaaS).

6.4.41 Public transport services are expected to be amongst the first mass applications of autonomy in the sector. Major developments are well placed to offer this as a potential transport solution given the ability to construct and maintain segregated routes around sites which can be used safely with minimal interruption from general traffic.

6.4.42 Small, electrically propelled shuttle services could provide quiet, emission-free transport in areas such as the airside locations and in public zones (e.g. car parks) within the apron of the Airport.

6.4.43 MaaS, brings all means of travel together. It combines options from different transport providers into a single mobile service, removing the hassle of planning and one-off payments.

6.4.44 The concept is being trialed in a number of locations, for example in Birmingham where the 'Whim' brand offers a number of package options at varying prices where for a fixed monthly fee (taken by Direct Debit) users have unlimited access to bus services, rail services, car hire, bike hire (when available) and taxi use from selected companies.

6.4.45 The service is based around a smartphone app; the user books transport or uses the app as a ticket for public transport services.

6.4.46 Bringing MaaS together successfully requires the support and co-operation of a number of partners such as the major bus operator(s), taxi services, car hire companies, bike hire schemes and rail operators. In Bristol, the EU Replicate project is seeking to support sustainable mobility and some of the key elements required for MaaS are being proposed, personalised mobility applications, car clubs and e-bikes.

6.4.47 The Airport will consider the potential opportunities for use of these emerging technologies, as and when appropriate and cost-effective market-driven solutions are available.

6.5 Measures to Manage Taxi Accessibility

6.5.1 At present, unless visitors to the airport specifically book a taxi from Arrow Cars, there are limited waiting areas for taxi drivers to utilise, aside from the Express Drop-off zone which incurs a cost of approximately £2 per 5 minutes spent within the area. As a result of this, taxis will often informally wait outside the airport site on verges and in laybys along the A38 to the north and south. This impacts on the local highway causing local amenity issues.

6.5.2 As part of the 10 mppa consent, a new transport interchange hub, with a dedicated drop-off zone, will be built above the multi-story car park to the north of the terminal. There will be a footbridge connecting the transport interchange directly into the terminal building.

6.5.3 This will allow easier access for both passengers and employees to access taxis from the terminal building and to reduce the impact of waiting vehicles on the local highway network, improving the environment for both visitors to the airport and the local road users.

6.5.4 In addition, Bristol Airport will seek to work in partnership with NSC to provide local parking control measures.

6.6 Measures to Encourage Cycling

6.6.1 Secure parking for bicycles and shower facilities are provided at the administration building. These facilities are available to all employees, including those who do not work for Bristol Airport Limited. Additional cycle parking is proposed to be provided as part of the S106 agreement and will be located at key locations around the Airport site, including at the main Terminal.

6.6.2 It is accepted that the geographic location of the Airport site means that cycling for the majority of employees is less appealing than other forms of transport and is not expected to form a large proportion of the future modal split of the Airport. However, there is the potential for some employees to cycle and so a number of measures will be implemented to encourage cycling where possible.

6.6.3 Third party/partner employers will be encouraged to provide additional shower facilities to complement those located in the Administration Building.

6.7 Measures to Encourage Walking

6.7.1 As set out in the Cycle Measures section above, the location of the Airport in relation to surrounding residential areas means that employees are less likely to walk to work. However, walking is often an important part of a combined journey, for example from the employees' home address to the bus stop or from the car park to the terminal building.

6.7.2 Some employees will be required to travel around the site for work purposes and walking should also be encouraged for these trips where possible. Incentives such as pedometers or umbrellas would be provided to further incentivise employees.

6.7.3 The provision of public transport information as outlined in the earlier section can help to identify the closest bus stop to an employee's home address. Further publicising of these routes could encourage employees to add a short walk into their daily commute which would not only reduce the SOV generation of the Airport but also the health and wellbeing of the employee.

6.8 Measures to Reduce the Need to Travel (or Outside Peak Hours)

6.8.1 There are some jobs undertaken by employees of the airport that can be completed at the employees own residence, removing the need altogether to travel to the airport site. The nature of many roles related to the aviation industry mean that this is not usually an option, but there are considered to be some roles, especially within the administration team that can be completed at home. Employers will highlight the opportunities for employees to work flexibly or from home when feasible. Initiatives considered to assist in cutting travel, especially by car include:

- The use of Tele/Video Conferencing to reduce business travel;
- When possible, working from home and more flexible working hours to facilitate car sharing and use of public transport for administrative employees;
- As part of the proposed relocation of the Administration building to the south of the runway, and associated changes in technology including the provision of laptops for employees, hot-desking practices etc. there will be a drive to embrace different working practices including more agile working;
- External visitor appointments will wherever possible be arranged so that travel within the peak highway hours is discouraged. Visitors will be informed of opportunities to travel to Bristol Airport by sustainable transport means; and
- Servicing and deliveries will, wherever possible, be conducted outside of peak highway hours to reduce the contribution to congestion on the local highway network. Items will be bought in bulk to reduce the total vehicle movements generated by the site and a local procurement policy will reduce the miles per delivery with corresponding environmental benefits.

6.9 Measures to Encourage Electric Vehicle Usage

6.9.1 Whilst trips made by employees using electric vehicles will not improve modal shift targets, the Travel Plan is also a mechanism to address environmental concerns by reducing local air pollution and carbon emissions. Therefore, measures to encourage Electric Vehicle usage are included to further improve the sustainability of Bristol Airport, even if they will not directly impact the modal shift targets set out in the subsequent chapter.

6.9.2 Two electric vehicle charging points have been installed in the public short stay car park and one electric vehicle charging point has been installed outside the Administration Building. The questionnaire results indicated that 18.4% of respondents would like to see more Electric Vehicle facilities provided. This could indicate that the provision of additional charging points would encourage more to travel using and electric vehicle, or consider the use of one in the future.

6.9.3 Additional charging points will be installed as part of the new administration office and through ongoing partnership work with North Somerset Council.

6.9.4 Vehicle charging points in the short stay car park, and future installations at the airport, will be listed on various electric vehicle websites and will be shown on a map provided for all employees. The location of the charging points will be placed preferentially within the car parks to encourage use over standard fuel vehicles. Additional charging points would be provided throughout the TP period in line with the anticipated rise in electric vehicle sales.

6.9.5 Bristol Airport IT department purchased an electric vehicle for onsite logistics in 2014. It is anticipated that as the airport expands any additional vehicles required for similar purposes would be electric powered.

6.9.6 There are further proposals for additional EV charging points as set out in the S106 package.

6.10 Information Provision

6.10.1 It is important that all employees, visitors and passengers are aware of the travel options that are available to them. The Employee Travel Questionnaire highlighted that many of the initiatives that would encourage employees to use a sustainable travel mode are already available and that lack of awareness may be a key factor in employees not using them.

6.10.2 The new TP will be launched in early 2019 and publicised to all employees based at the Airport. The survey suggests that 48% of employees have been working at the site for less than 3 years. Therefore, a significant number will have been employed after the last TP (2016) was launched and as such may be less aware of the measures and opportunities in place to provide alternatives to driving to work. The Re-launch will ensure all are up to date with the TP and will aim to increase engagement as much as possible. As part of the marketing strategy, every effort will be made to ensure that the information circulated is provided on a number of platforms, both digitally and physically to reach all employees in the manner best suited to their role. The wide variety of job types based at the airport mean that there is not one method of information dissemination that suits all employees. This will need to be approached carefully as the information needs to be updated regularly in order to be relevant to employees, and this needs to be applied to all platforms.

6.10.3 A comprehensive marketing strategy will be developed to allow travel information to be publicised to employees appropriately. A marketing budget will be made available to ensure that employees are maximising the use of existing and proposed measures to encourage more sustainable travel. As identified in the employee survey, lack of awareness in some areas could have explained the low take up of some travel opportunities among employees, and so publicising the measures available will be a key element of the strategy. The strategy will include the following:

- Key contacts within each building or organisation (whichever is appropriate) within the Airport site should be sought. The TPC can pass information directly to them and they can disseminate as required, be that via email, leaflets or noticeboards for example;
- The existing Employee Airport Travel Leaflet will be updated and promoted more heavily through displays in public areas. A digital copy will also be circulated with the TP Newsletter via the Bristol Airport intranet;
- Travel Information Notice Boards will be provided in some public employee areas (staff rooms, break out areas, kitchens, warehouse areas etc.) that will include details, news and benefits relating to car-sharing, public transport, cycling and the contact details of the TP Co-ordinator/where to go for additional information;
- All new Bristol Airport Limited employees will be given a tailored travel information pack on joining Bristol Airport. New employees have not formed travel habits and may particularly welcome information about the travel services and facilities available to them. The packs will include details of all the benefits available to employees to encourage sustainable travel choices from the outset. Furthermore, all employees of business partners at Bristol Airport will attend a 'Welcome to Bristol Airport' induction, and travel options will be added to the induction session;
- All employers based at the Airport will be encouraged to provide similar travel information to their employees, provided for them by the TPC. Third party employees will also be encouraged to circulate the Employee Airport Travel leaflet and to provide travel information boards in public employee areas;

- Business partner new management induction sessions take place at regular intervals at which the opportunity will be taken to highlight the Workplace TP measures;

- BAL employees have access to an employee travel intranet website with downloadable information. Bus timetables, travel maps and leaflets promoting the Car Sharing Scheme are available, as well as information on promotional or special events that tie up with local or national sustainable transport initiatives;

- The TPC will be available to help all employees with journey planning and answer any issues surrounding employee travel. The Co-ordinators' role and contact details will be more widely publicised to ensure all Airport employees know that they can contact the Co-ordinator for any travel-related advice and information; and

- Transport information is available to employees and the public through a comprehensive internet site (www.bristolairport.co.uk) and at customer service points in the airport. There will be a dedicated page within the Bristol Airport intranet that provides up to date travel information for employees, along with the Employee Airport Travel leaflet.

7 Workplace Travel Plan Targets

7.1 Proposed Targets

7.1.1 The Workplace TP seeks to encourage modal shift away from driving alone towards alternative means of travel, such as car sharing and use of public transport. The measures set out in the previous chapter will be implemented at the Airport aimed at meeting the targets set out in this section. These targets have been calculated based on the level of impact the measures could have on employee modal shift.

7.1.2 The 2026 Target Mode Shares have been calculated to tie proposed measures to modal shift. The current and target mode shares are shown in **Table 7.1** as percentages and total employee numbers. It should be noted that the baseline figures are based on the 2017 employee figures, and the 2026 target year includes a projected growth of 700 employees. This data has been sourced from information provided by Bristol Airport Ltd. Further details of how these targets have been calculated based on the proposed measures is set out in **Appendix B**.

7.1.3 Although the total employee numbers for the 2026 future year show an increase in SOV trips due to an overall employee increase, the proportion will have reduced to meet the target of 75%. This is reflected in the increased numbers and proportions using other modes of travel.

7.1.4 Whilst the 2026 modal share figures are the targets that the TP is progressing towards, the TPC will monitor the progress of the year on year results of the TP to assess whether it is likely to achieve the targets by 2026. Key performance indicators (KPI) will be used to provide a benchmark for comparison between the yearly survey results and the progress of the TP. If required, the measures can then be adjusted to seek to ensure the targets are met by 2026. Additionally, should the TP targets be achieved before 2026, new targets can be set to ensure the TP retains momentum and can further improve the sustainability of Bristol Airport.

7.1.5 The TP targets are set out in **Table 7.1**.

Table 7.1: Workplace Travel Plan Targets

Mode	2017 Existing Mode Share		2026 Target Mode Share	
	Modal Share %	Employee Numbers (February 2018)	Modal Share %	Future Employee Numbers (including the forecast growth)
Single occupancy car	**84%**	**3,291**	**75%**	**3,465**
Car sharing (Driver or Passenger)	3%	118	8%	350
Bus	9%	353	13%	622
Walk	0.5%	20	0.5%	23
Cycle	0.4%	16	0.4%	18
Motorbike	2%	78	2%	92
Other (Employee minibus, WFH)	1%	39	1%	46
Totals	100%	3,918	100%	4,618

7.1.6 The Workplace TP aims to achieve a reduction in the number of persons employed at Bristol Airport who drive to and from the Airport by SOV to no more than:

- 75% of the total number of persons employed at the Airport by 31 December 2026. This equates to **3,465** employees based on the forecast growth of total employees employed at Bristol Airport by 2026.

7.1.7 Whilst targets are indicated for all modes, monitoring will focus on SOV targets, which are fixed, with the other mode targets being variable to ensure that together they total 25% of modal split by 2026.

8 Monitoring and Review

8.1.1 Monitoring is crucial to the successful implementation of any TP. Monitoring will primarily be conducted by the Travel Plan Co-ordinator in conjunction with the ATF and the Employee Forum. The responsibilities of the TPC include providing the interface between all parties on the site, reporting to the local authority, and monitoring the progress being made towards site-wide transport objectives and the provision of sustainability measures.

8.1.2 The primary means of monitoring the TP will be through further employee surveys to be undertaken every year based on NSC guidance. The surveys will establish mode share of journeys to work, use of TP measures, attitudes towards transport and aspirations to enable Travel Plan development. This will enable the Workplace TP Co-ordinator to monitor the effectiveness and suitability of the Workplace TP measures. Concessionary ticket sales data (from the A1, A2 and A3 services), car park use, data from the car share scheme and surveys of motorbike and bicycle use will be used to provide regular intermediate monitoring of progress.

8.1.3 The headline findings from the surveys will be reported to employees in an easily digestible format such as a newsletter or email. A more detailed report will be produced with copies supplied to the Travel Plan Steering Group, Transport Operators and North Somerset Council. This will ensure that decision makers are informed about progress towards the TP targets.

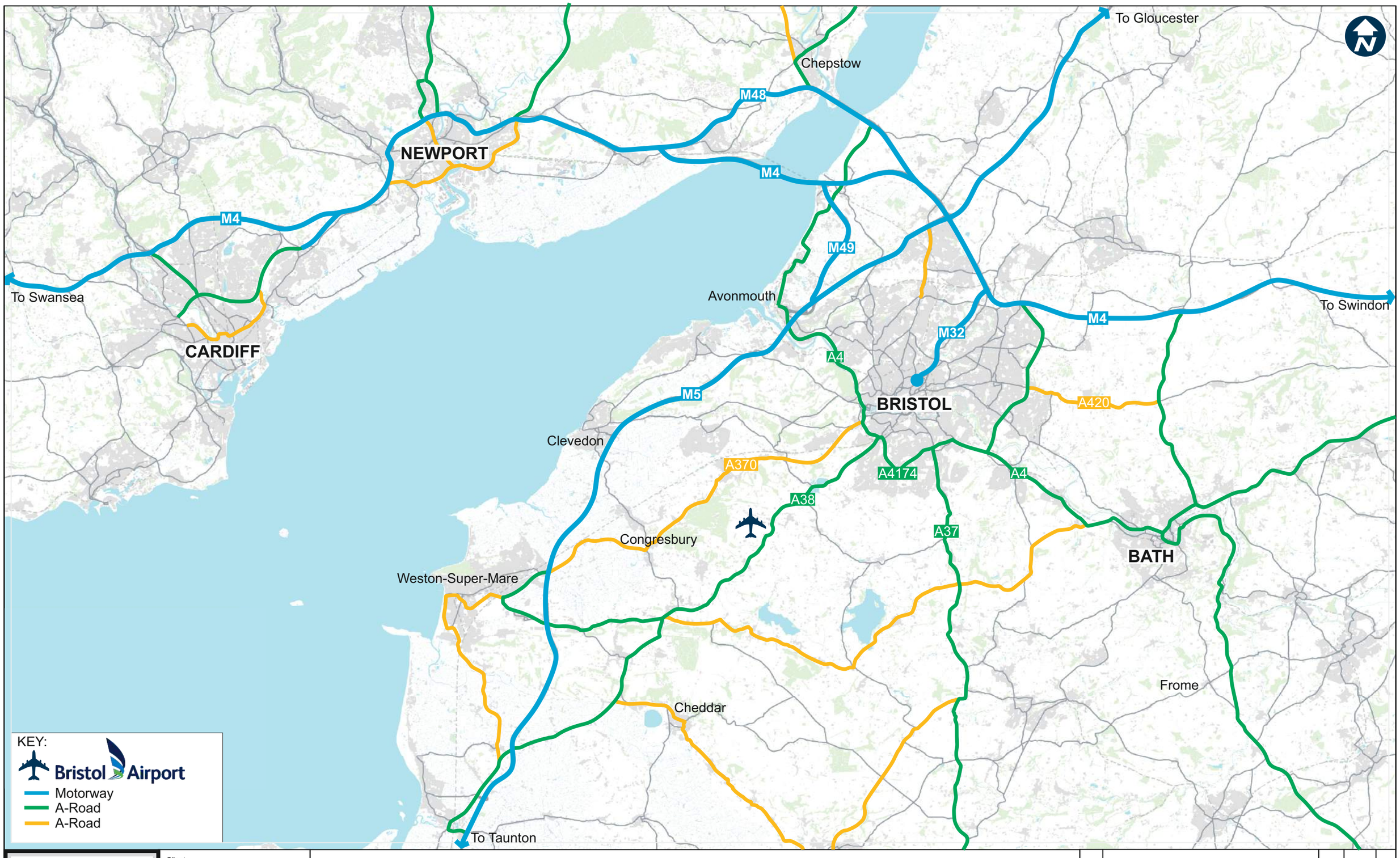
8.1.4 Future questionnaires will include additional questions focussing on the barriers to travel by different modes and measures that would encourage different modes. This would provide insight into the reasons behind the travel characteristics of employees, and could help to target measures more effectively in the future to help to ensure the TP meets its targets.

8.1.5 In addition, it is proposed to alter future surveys to ensure that they capture infrequent travel characteristics of employees. This will include questions to ask whether employees travel by more than one form of transport on different days/or times of the year. For example, some employees may choose to car share once a week as it is convenient, but it may not be their main form of transport and so previous surveys will not have captured this behaviour.

8.1.6 The Workplace Travel Plan measures will be reviewed by the TPC, the ATF and the Employee Forum in light of the performance results from the monitoring surveys and adjusted as necessary in line with the achievement of the targets.

8.1.7 The employee travel survey will be completed every year to continually inform the TPC and airport management of the updated travel characteristics of employees based at the Airport and make any required adjustments to measures in a timely manner. This will allow the targets to be monitored and provision to be tailored accordingly. The Workplace TP will be comprehensively reviewed and updated every two years.

Figures & Drawings



Client

BRISTOL AIRPORT LTD

AIRPORT LOCATION AND LOCAL HIGHWAY NETWORK

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	30/07/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 3-1

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J:\43321 Bristol Airport\Technical\Corel\Site Location Plan.cdr

KEY:

Bristol Airport

Bus Stop

Footway

Bedminster

Bishopsworth

Lulsgate Bottom

Winford

Redhill

Chew Magna

Chew Stoke

Client	BRISTOL AIRPORT LTD

FOOTWAYS AND BUS STOPS

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	30/07/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 3-2

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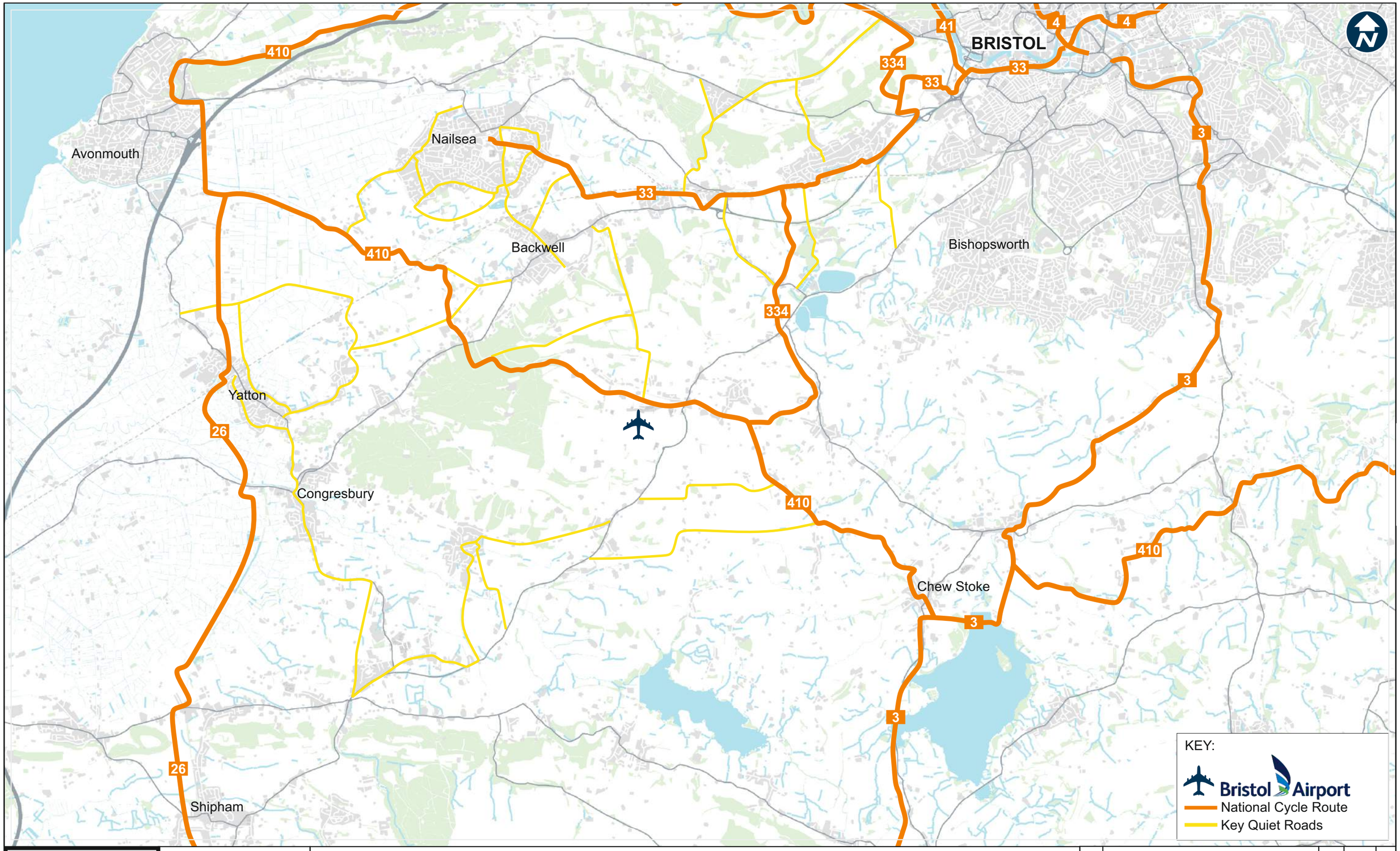

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CYCLE FACILITIES

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	30/07/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 3-3

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BRISTOL
Clifton
Bristol Temple Meads
Ashton Gate
South Bristol Link
Bedminster
Brislington
A38
Hengrove
Withywood
Keynsham
Saltford
Corston
BATH
Bath Spa
Backwell
A38
Yatton
Cleeve
Bristol Airport
A370
WESTON-SUPER-MARE
Weston-super-Mare
Wrington
A38
Langford
Winscombe

Key:

Bristol Airport

A1 Bus Route (Bus Station - Temple Meads - Airport)
A2 Bus Route (Broadmead - Bedminster - Airport)
A3 Bus Route (WSM - Cleeve - Airport)
A4 Bus Route (Bath - Airport Road - Airport)
A5 Bus Route (Winscombe - Langford - Airport)
U2 Bus Route (Langford - Airport - Clifton)
Bus Stops

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BRISTOL AIRPORT EXPANSION

BUS SERVICES TO BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	06/11/2018
Scale	A3 - N.T.S
Drawn by	JDS
Checked by	JH

FIGURE 3-4

-

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\\Pba.int\bri\Projects\43321 Bristol Airport\Technical\Corel\Figure 4.4 Bus Services to Bristol Airport.cdr

Bristol Temple Meads

Bristol Airport

KEY:

Bristol Airport

A1 Bristol Airport Flyer Route

Frequency:
First services at 04:50
Every twenty minutes (05:40–6:50)
Every ten minutes (06:50-19:30)
Every twenty minutes (19:30 – 00:50)
Hourly until 03:50
Journey time: 30 mins from terminus to airport.

Rail Station
Key Bus Stop
Bus Terminus

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A1 AIRPORT FLYER BUS ROUTE

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd
A	Route amended to reflect changes to service	AA	29.10.18	JH

Date	30/07/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 3-5

A

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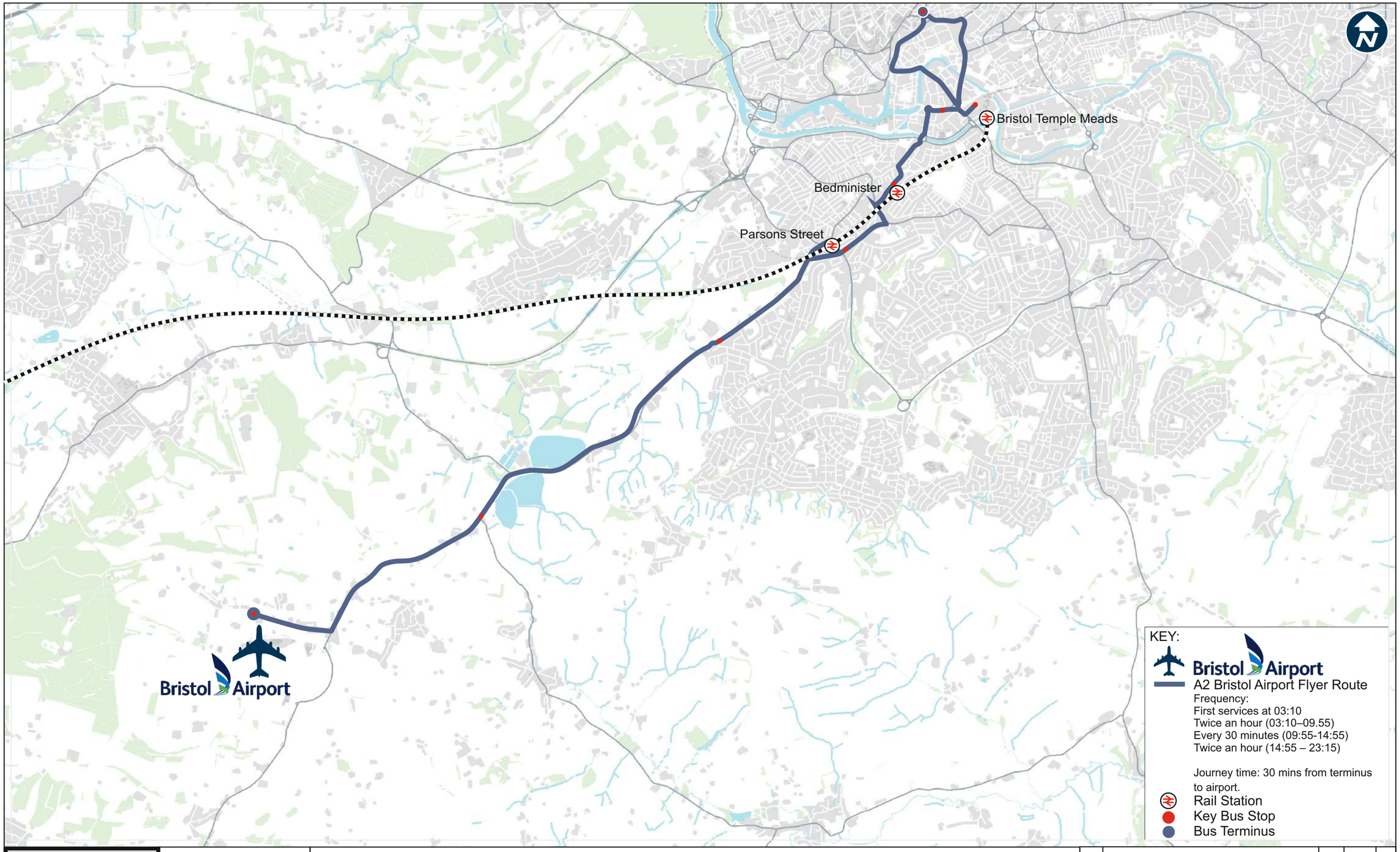
J:\43321 Bristol Airport\Technical\Corel\A1 Flyer Route.cdr



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A2 AIRPORT FLYER BUS ROUTE

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	29/10/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 3-6

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J:\43321 Bristol Airport\Technical\Corel\A1 Flyer Route.cdr

Avonmouth
Nailsea
Backwell
Brockley
Yatton
Winford
Congresbury
Wrington
WESTON-SUPER-MARE
Worle
Lower Langford
Sandford
Winscombe

KEY:

Bristol Airport

Bus Route A3
Frequency:
1 per hour (04:10 – 00:10)
Journey time: 35 mins

Bus Route A5
Frequency:
1 per hour (08:43 – 16:13)
Last two services at 17:43, 18:43

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A3 AND A5 BUS ROUTES

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	30/07/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 3-7

REV

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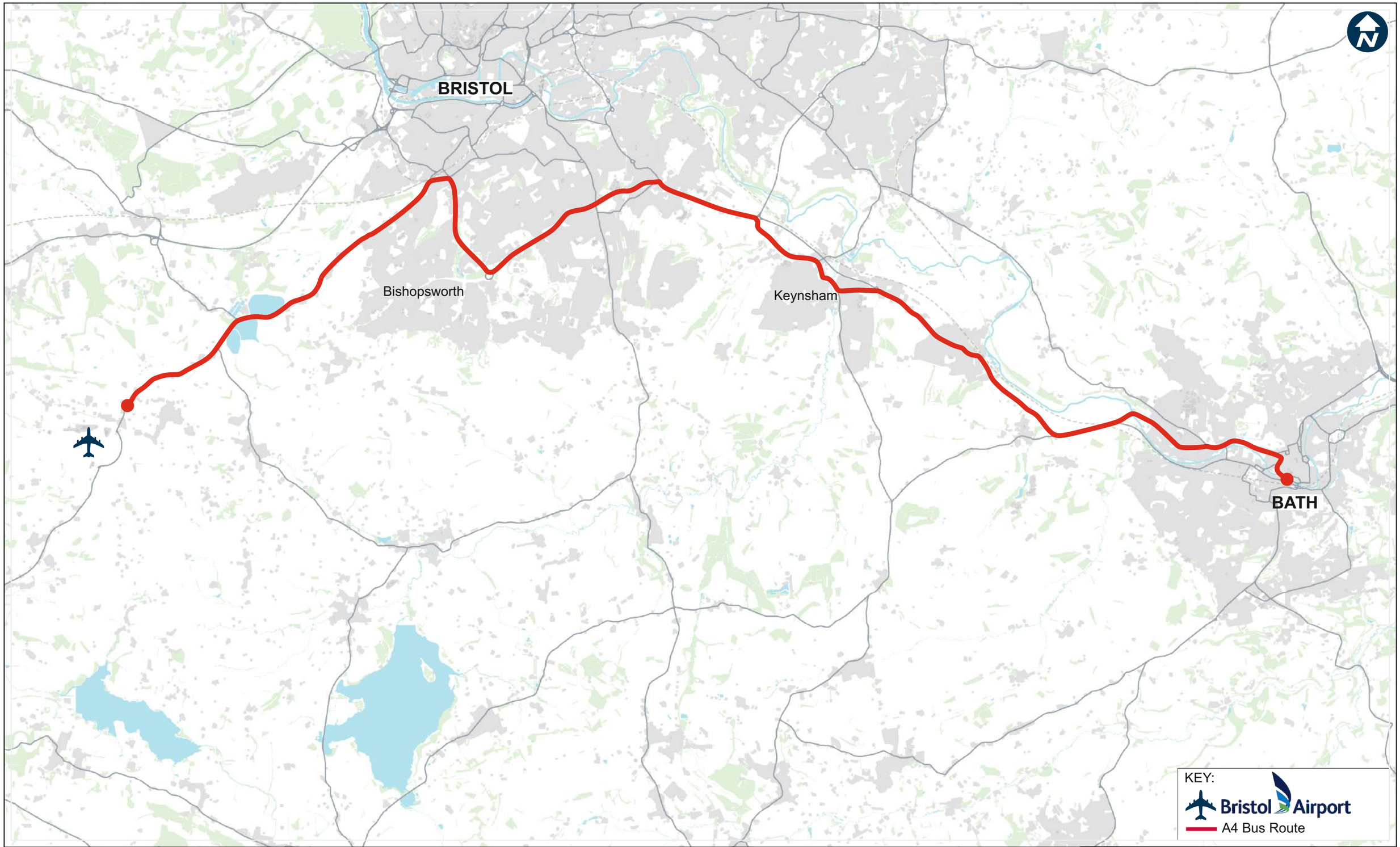

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A4 BUS ROUTE

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	30/07/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 3-8

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KEY:

Bristol Airport

- A1
- A2
- A3
- A4
- A5
- Bus Stops
- Employees within 400m of bus stop

BRISTOL

BATH

WESTON-SUPER-MARE

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POSTCODE/BUS STOPS

BRISTOL AIRPORT

Mark	Revision	Drawn	Date	Chkd

Date	08/08/2018
Scale	A3 NTS
Drawn by	AA
Checked by	JH

FIGURE 5-2

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Appendix A Project Management Plan

Project Management Plan

The British Standard Institute through its Publicly Available Specification for Travel Plan stipulates that “Travel Plans need a long-term management strategy to deliver sustainable transport SMART objectives (e.g. Specific, Measurable, Achievable, Realistic and Timely)”.

The project management plan shown in **Table A.1.0** summarises the proposed initiatives and measures that conform to the Bristol Airport Staff Travel Plan SMART targets and objectives.

Table A.1.0: Project Management Plan

Objectives	Targets	Measures/Actions	Time Frame	Applicable to
Information and Marketing				
Information Provision and TP Management	Ensure maximum engagement from all employees	Installation of a new full time Travel Plan Co-ordinator who will manage and update the TP as it evolves as a live document	September 2018 onwards	All employees
Provision of information travel packs.	All new employees to be provided with information travel packs.	Bristol Airport to produce and distribute to all employer’s sufficient information travel packs. Employers to distribute to new employees.	Ongoing during employee induction.	All employees
TP Launch	To publicise the TP to employees and promote sustainable travel	A series of public events and will be held and information shared to launch the revised TP, enhancing publicity and promoting the opportunities available for employees to travel sustainably. Opportunities will be explored to gauge whether representatives from sustainable travel organisations, such as Liftshare and Travel west could visit the Airport to engage with staff and publicise the opportunities and benefits of travelling sustainably.	Expected Early 2019	All Employees
Engagement with Airport forums and user groups	Regular Meetings between TPC and employee focus group and public	TPC will discuss the TP and in particular, the ongoing success of the measures to meet the targets. TPC	TPC will attend all relevant user group meetings. Expected to be monthly	TPC, Airport User Groups

Objectives	Targets	Measures/Actions	Time Frame	Applicable to
	transport steering group	will gather information from these groups which will help to focus the measures appropriately and ensure the TP is successful		
Dissemination of sustainable travel options.	All employees and passengers to be able to retrieve quality travel information on site and remotely via the internet/email correspondence with TPC	Bristol Airport to maintain and update travel information on the Intranet, Internet, employee notice board, staff Airport Travel Leaflet and customer information points. Bi-monthly e-newsletter will contain news and updates as well as links to the Staff Airport Travel Leaflet. Travel Plan Co-ordinator to gather reliable information from Transport operators, local authorities, etc.	All travel information access already existing. To be updated/maintained monthly.	All employees (except the Bristol Airport Limited intranet site which is available to Bristol Airport Limited employees only)
Health and environmental promotion of sustainable modes of transport.	Increase awareness amongst public and staff of the benefits of sustainable transport.	Providing relevant information in employee travel pack and passenger information access points. Secure managerial support and a high-profile campaign leader at Bristol Airport.	Bristol Airport CEO endorsed the Staff Travel Plan when first produced in 2006. Planning and Environment Director is taking a lead in the implementation of the Staff Travel Plan.	Promoted to all employees through various business forums.
Car Sharing and Drop Off				
To increase the number of employees' car sharing.	Aim towards meeting target of 8% by 2026.	Provision of a formal car sharing database provided by Liftshare. This will include the App allowing employees to easily communicate and arrange car sharing from within their own organisation.	Re-launch of TP will begin in early 2019	All employees
		Promotion and information of the car sharing scheme.	Managed by TPC and will be ongoing following Launch	All employees

Objectives	Targets	Measures/Actions	Time Frame	Applicable to
		Guaranteed and dedicated space for registered car sharers to be provided close to the Administration Building.	Some existing available, but additional spaces will be provided as the airport development continues	All employees
		Guaranteed ride home in case of unforeseen and exceptional circumstances.	Terms and conditions to be stipulated in the car sharing scheme by September 2018.	All employees
Public Transport				
To increase employees' public transport use.	Achieve 13% target mode share by 2026.	Employee provided with relevant and quality public transport information (maps, timetables, etc.).	Included in Travel Pack and available online – employees directed towards information sources	All employees
		Concessionary fares for staff using the A1, A2, A3, A4 and A5 bus services.	In place.	All employees
		DRT Service – Proposals for a demand response type service will be investigated to cover areas with reasonably high level of employees but few bus services to help employees with few alternative travel options access the airport sustainably. This trial service could provide regular links from places with few or no bus services to rapid bus network, for a single all-inclusive, affordable price	Post Launch	All employees, although will be focussed on those who have limited access to alternative forms of transport.
		Investigation into Slide-type service to provide a multi-employee pick up service for those who work in a similar area on similar shifts.	Post Launch	All employees, although will be focussed on those who have limited access to alternative forms of transport.
Parking Management				
Introduction of a staff parking	Maximum of 1000 spaces to be used	Preparation and implementation of a	Completed but ongoing	All employees

Objectives	Targets	Measures/Actions	Time Frame	Applicable to
management plan related to the achievements of the Staff Travel Plan.		Staff Car Parking Management Plan.		
		Investigation into parking restrictions based on staff only permitted to access the car park four days per week, or similar.	Managed by TPC, available post early 2019 launch	
Cycling				
To maintain or increase level of cycling to/from the airport.	0.4% or higher in 2026 to take into account the higher percentage of public transport use overall.	Cycling information provision (routes, facilities, etc.).	Post Launch, ongoing information provided by the TPC	All employees
		Improve/expand shower/changing facilities and access to them.	Existing shower/changing facilities located at Administration Building. When this building is relocated improved facilities will be provided. Additional facilities in line with Airport Expansion is required, individual organisations will be encouraged to provide facilities across the airport for their employees.	All employees
		Improved cycle parking facilities.	Will be provided as part of the relocation of Administration building, improvements expected elsewhere across the airport.	All employees
		Cycle to work scheme for employees and interest free loan offered to purchase bicycles and electric bicycles.	Available to Bristol Airport Ltd employees and some other organisations based at the airport. All will be encouraged to offer it in the future.	Bristol Airport Ltd employees only.
		Emergency cycling repair kit to be located at reception of the Administration building.	Completed. Additional facilities could be provided by individual organisations.	All employees

Objectives	Targets	Measures/Actions	Time Frame	Applicable to
		Dr Bike Cycle Maintenance	Managed by TPC, available post early 2019 launch.	All employees
		Pool Bikes will be made available for staff to trial cycling to work	Managed by TPC, available post early 2019 launch	All employees
Motorcycle				
To maintain or increase motorcycling levels to/from the airport.	2% or higher in 2026 to take into account the higher percentage of public transport use overall.	Provision of parking facilities.	Covered parking facilities made available at the relocated Administration Building and near the terminal building.	All employees
		Provision of lockers for clothes storage.	Ongoing	Responsibility of employers
Reduce the Need to Travel (or at Peak Time)				
To reduce the need to travel for business.		To encourage (when possible) the use of tele and videoconferencing.	Ongoing	Bristol Airport Limited
To reduce the need to commute.		Compressed week and/or work from home for admin/support/office staff.	Ongoing	Bristol Airport Limited
To reduce peak time traffic.		Flexible working hours, deliveries restriction times.	Ongoing	All businesses where appropriate
To reduce parking demand and improve health / wellbeing of employees		Aim to change working conditions to allow flexible working conditions / systems etc. as part of the new building. Change of ethos is required to encourage a change is working practises	Ongoing, will be encouraged further after the launch of the TP in early 2019	All employees where appropriate

Appendix B Mode Split Targets Calculation

Prepared by: RK
Reviewed by: DW

Bristol Airport Travel Plan - Modal Split Target Methodology

			Appointment of Site-Wide Travel Plan Co-ordinator	Distribution of Travel Information packs	TP Launch Event	Up-to-date travel information on intranet/notice board/leaflets/newsletter	Provision of formal car sharing database	Promotion and information of the car sharing scheme	Dedicated car share parking spaces close to Administration Building	Guaranteed ride home in case of unforseen circumstances for car sharer	Employees provided with public transport information such as maps and timetables	Concessionary fares for staff using A1 and A3 buss services	Provision of Demand Response Type service	Preparation and implementation of a Staff Car Parking Management Plan	Parking restrictions for staff car park	Cycling information provision	Improve/expand shower and changing facilities	Improved cycle parking facilities	Cycle to Work Scheme	Emergency cycling repair kit to be located at reception	E-bike loan 6-month scheme	Dr Bike Cycle Maintenance	Pool Bikes made available for staff to trial cycling to work	Encourage use of tele and video conferencing	Compressed week or work from home	Flexible working hours encouraged					
Mode which measure encourages			Multiple modes	Multiple modes	Multiple modes	Multiple modes	Car Share	Car Share	Car Share	Car Share	Bus	Bus	Bus	Multiple modes	Multiple modes	Cycle	Walk & Cycle	Cycle	Cycle	Cycle	Cycle	Cycle	Cycle	Cycle	Reduction in Need to Travel	Reduction in Need to Travel	Reduction in Need to Travel					
2026 Future Targets																																
Baseline modal split.		Average Daily Person Trips (24hrs)	Modal shift																												Revised person trips	Change in person trips	**Revised modal split**	
Car Single Occ	84%	3879																													3465	-414	**75%**	Car Single Occ
Car share	3%	139	0	6	0	0	56	50	39	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	350	212	**8%**	Car share
Public Transport	9%	416	0	6	6	6	0	0	0	0	22	56	33	0	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	622	206	**13%**	Public Transport
Walk	0.5%	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	**0.50%**	Walk
Cycle	0.4%	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	**0.40%**	Cycle
Motorbike	2%	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	0	**2.00%**	Motorbike
Other (staff minibus, WFH)	1.0%	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	**1.00%**	Other (staff minibus, WFH)
TOTAL	100%	4618																													4618		**100%**	

*Note - Percentages have been rounded