OUR APPROACH TO DEVELOPING A SURFACE ACCESS STRATEGY

JANUARY 2018
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1 Introduction

1.1 Why surface access matters

1.1.1 Surface access to Heathrow matters because a successful strategy means passengers, colleagues and other people can get to and from the airport with a choice of safe, reliable, comfortable, value for money, efficient and sustainable options. That will be better for passengers, build up our workforce, better for air quality and local quality of life and improve Heathrow’s economics and value for the UK.

1.1.2 Today, around 250,000 passengers and colleagues use the airport each day. With expansion, this is expected to grow to around 340,000 by 2030. The challenge for the future is to serve more people, from more of the UK, in a sustainable way. A clear and deliverable surface access strategy is necessary to ensure that the needs of all the people who travel to the airport in the future can be met in the most efficient and sustainable way.

1.3 Heathrow is already well connected to the strategic road network. There is direct access to the M25 and M4 with the M1, M3 and M40 close by. Important local access is provided by the A4 and A30. This excellent location in relation to the motorway network means that coach and freight operators use Heathrow as a hub for their activities. There is a good choice of public transport options with express rail services into London as well as the Piccadilly line and Heathrow Connect. Full Elizabeth line services will begin to serve the airport from December 2019, with an initial service to Paddington starting in May 2018. A wide range of bus and coach services serve Heathrow today and connect the airport to many parts of the UK as well as the local area.

1.4 This document sets out our proposed approach to the development of a Surface Access Strategy (SAS) for an expanded Heathrow Airport. It identifies a package of possible measures that work together to meet the requirements of the National Policy Statement (NPS) whilst delivering commitments made by Heathrow Airport Ltd (HAL) that seek to improve surface access for airport users and local communities and support the development of more sustainable forms of transport. Further engagement will take place during 2018 as the Surface Access Strategy develops into a set of specific proposals that will form part of the Development Consent Order (DCO) application for Heathrow Expansion.

1.5 Surface access is an important part of a passenger’s overall experience. Research shows there is a strong link between a passenger’s surface access experience and their overall satisfaction with Heathrow. Passengers value reliable, convenient, direct and frequent services. Offering a range of choices to passengers makes it easier to meet the different needs of different types of passengers.

1.6 The convenience of travel to and from the airport is an important factor in the passengers’ decisions on which airport to use. With population growth, congestion is expected to increase and therefore minimising the impacts of congestion on the passenger journey is essential for a successful airport.

1.7 Our current surface access provision is highly rated by our passengers. This is measured through our own Quality of Service Monitor (QSM) survey. These surveys indicate that 93% of passengers rated Heathrow surface access as either ‘very good’ or ‘excellent’ in 2016. The independent airport service quality (ASQ) programme shows that satisfaction has improved over time with Heathrow achieving its highest ever quality score for the last quarter of 2016. We want to make passengers’ experience even better as we expand the airport.

1.8 Heathrow 2.0 is our airport wide sustainability strategy and it sets out a framework for the future. Heathrow’s plan is to expand to meet passenger demand in a way that creates a positive impact on our community, environment and economy. This will be achieved by making Heathrow a great place to work and live, creating a thriving sustainable economy and a world worth travelling.

1.9 Surface access has a key role to play in meeting our aspirations set out in all four areas. It has an important role in tackling local air quality and targets for reducing carbon emissions. Surface access also has a key role in connecting all of the UK to growth and ensuring a sustainable economy. Our operation relies on getting colleagues to work on time to serve passengers and allow the airport to function. Affordable and convenient choices for colleagues are critical to the ongoing success of the airport. Poor air quality is an issue affecting London and many parts of the UK. We recognise that we need to play our part in improving local air quality and ensuring that proposals for expansion support HAL’s wider air quality strategy. The key contributor to local air quality issues around Heathrow is road traffic. Our plans for expansion seek to tackle this by reducing the reliance on the use of cars to access the airport by improving public transport as well as supporting ways to reduce the emissions of vehicles that will still access the airport.

1.10 More widely, we want to play our part in addressing climate change and carbon emissions by making surface access by sustainable transport more convenient and attractive for all users.

1.11 Surface access matters to the economy

1.11.1 Congestion and delays on the transport network are bad for the economy. Road traffic congestion is estimated to cost the UK economy about £31 billion in 2016 through lost time and unreliable journeys. Reliable surface access journeys are critical to ensuring goods and people arrive on time.

1.11.2 Heathrow is a strategic national asset and key transport hub that is vital to the UK economy. Heathrow is Britain’s biggest port by value for global markets outside the EU and Switzerland, handling over 30% of these UK exports. Fast and reliable journeys to Heathrow matters to passengers and business who need to get their products and services to market.

1.11.3 Through a robust and innovative surface access strategy, we can deliver additional capacity and put the UK’s hub airport at the heart of the transport network, ensuring all of the UK benefits. This will help support London in its continuing role as a leading world city, as well as the Government’s aspirations to support growth across the whole of the UK through its industrial strategy.

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We would like to know your views on our proposed approach to the development of a Surface Access Strategy for an expanded Heathrow Airport. We are seeking views on any aspects of our proposals but there are prompts throughout the document on areas which may be helpful to provide views on:

- Please tell us what you think about the priorities and initiatives we propose to use to develop our surface access strategy.
- Please tell us what you think about the options to use road-user charging to reduce emissions and to manage vehicular access to the airport.

Your comments will help us develop our detailed Surface Access Strategy for an expanded Heathrow Airport during 2018.

1.2 Purpose and structure of this document

1.2.1 The purpose of this document is to explain the proposed surface access priorities and initiatives that would enable Heathrow to expand in accordance with the requirements of the draft NPS. The document explains how the proposed priorities and initiatives would manage the surface access effects of increased passengers, colleagues and cargo that could arise because of the Heathrow Expansion Project (the project). It forms part of a suite of materials produced as part of our Stage 1 pre-application consultation and should be read in conjunction with the other documentation produced in support of the consultation.

1.2.2 This remainder of this document is structured as follows:
- Section 2 – describes Heathrow’s existing surface access arrangements;
- Section 3 – outlines the policy context for expansion;
- Section 4 – details our priorities and targets for surface access for an expanded Heathrow;
- Sections 5-13 – outline a range of possible schemes and initiatives to enhance surface access at an expanded Heathrow;
- Section 14 – considers the possible packaging of strategy options and potential impacts; and
- Section 15 – articulates our proposed approach to delivery and development of the surface access strategy.

1.3 Have your say

We would like to know your views on our proposed approach to the development of a Surface Access Strategy for an expanded Heathrow Airport. We are seeking views on any aspects of our proposals but there are prompts throughout the document on areas which may be helpful to provide views on. In particular:

- Please tell us what you think about the priorities and initiatives we propose to use to develop our surface access strategy.
- Please tell us what you think about the options to use road-user charging to reduce emissions and to manage vehicular access to the airport.

Your comments will help us develop our detailed Surface Access Strategy for an expanded Heathrow Airport during 2018.

2 Surface access at Heathrow today

2.1 Overall travel to and from Heathrow

2.1.1 There are currently around 221,000 surface access journeys made by a quarter of a million people travelling to and from Heathrow each day. Around 60% of these are passengers and 40% are colleagues who work at Heathrow.

<table>
<thead>
<tr>
<th>Users</th>
<th>Number of people at Heathrow on an average day</th>
<th>Number of person trips generated to/from the airport on an average day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passengers starting or ending their plane journey at Heathrow</td>
<td>133,000</td>
<td>133,000</td>
</tr>
<tr>
<td>Passengers transferring between two planes at Heathrow</td>
<td>75,000</td>
<td>n/a2</td>
</tr>
<tr>
<td>People working at Heathrow</td>
<td>44,000</td>
<td>88,000</td>
</tr>
<tr>
<td>Total</td>
<td>252,000</td>
<td>221,000</td>
</tr>
</tbody>
</table>

Table 2.1: People and journeys to/from Heathrow (estimate for an average day in 2016)11

2.2 Passenger travel

Passenger travel choices today

The CAA and Heathrow survey passengers annually to determine how they travel to and from the airport. Around 39% of passengers currently use public transport to access the airport (Figure 2.1)12. We want more passengers to use public transport and have both short-term and long-term plans to increase this.

Figure 2.1: How passengers arrive today

7 Ground transportation is all forms of transport that are not planes
8 Transferring passengers do not need surface access, they are just transferring from one plane to another.
9 Over 76,000 people work at Heathrow but on an average day it is estimated that around 44,000 colleagues are on site. Source: Heathrow Employment Survey 2013.
10 Approximately two trips per person, one trip to work and one trip home.
11 Source: CAA 2016. May not sum due to rounding.
12 Source: CAA 2016. May not sum due to rounding.
2.2.1 Demand and method of travel varies depending on where people are travelling to and from. Of those passengers travelling to or from the airport, around half come from London and the East. Due to better public transport options from London and the East, almost half of these people use public transport compared to 30% or less from the other directions.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxi</td>
<td>16 M</td>
</tr>
<tr>
<td>Private car</td>
<td>12 M</td>
</tr>
<tr>
<td>Rail</td>
<td>4 M</td>
</tr>
<tr>
<td>Local bus &amp; coach</td>
<td>5 M</td>
</tr>
</tbody>
</table>

61%
39%

How Heathrow passengers arrive today

<table>
<thead>
<tr>
<th>Mode</th>
<th>Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxi</td>
<td>16 M</td>
</tr>
<tr>
<td>Private car</td>
<td>12 M</td>
</tr>
<tr>
<td>Rail</td>
<td>4 M</td>
</tr>
<tr>
<td>Local bus &amp; coach</td>
<td>5 M</td>
</tr>
</tbody>
</table>

2.2.2 It is helpful to look back to understand how passengers travel to Heathrow and how this has changed over time. Figure 2.4 shows changes in demand and mode of travel over time. Public transport mode share has risen steadily from 33% to 39% between 1991 and 2016. The introduction of new services like the Heathrow Express have had the biggest impact but changes like the introduction of Oyster have made public transport easier to use.

2.2.3 The proportion of passengers travelling to/from Heathrow by private car or hire car has fallen from 42% in 1991 to 28% in 2016, in spite of surface access passenger demand rising from 30 million in 1991 to 49 million in 2016. Alongside this, there has been an increase in the proportion of passengers travelling to the airport by taxi.

Passenger transport choices over time

In locations where a viable public transport alternative exists, there is generally a much higher level of public transport use. In central London, this can be over 60% of passengers.

<table>
<thead>
<tr>
<th>Location</th>
<th>Approximate public transport journey time</th>
<th>Approximate car journey time</th>
<th>Public transport mode share for passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower Hamlets</td>
<td>57</td>
<td>68</td>
<td>63%</td>
</tr>
<tr>
<td>Westminster</td>
<td>48</td>
<td>45</td>
<td>56%</td>
</tr>
<tr>
<td>Hammersmith</td>
<td>40</td>
<td>25</td>
<td>49%</td>
</tr>
<tr>
<td>Guildford</td>
<td>103</td>
<td>44</td>
<td>9%</td>
</tr>
<tr>
<td>Camden</td>
<td>46</td>
<td>49</td>
<td>69%</td>
</tr>
<tr>
<td>Reading</td>
<td>70</td>
<td>49</td>
<td>29%</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>62</td>
<td>42</td>
<td>40%</td>
</tr>
<tr>
<td>Bristol</td>
<td>162</td>
<td>118</td>
<td>50%</td>
</tr>
</tbody>
</table>

CASE STUDY – Where there is good public transport provision, passengers want to use it

In locations where a viable public transport alternative exists, there is generally a much higher level of public transport use. In central London, this can be over 60% of passengers.
2.3 Colleague travel

**Definition: Colleague**

A colleague is defined as a person working within the Airport boundary or travelling to the Airport for employment within the aviation industry whether they are directly employed by Heathrow Airport Limited or not.

### Colleague travel choices today

#### 2.3.1

Heathrow is the largest single employment site in the UK. The airport is home to over 400 companies, employing over 76,000 people making it a major employer in the local area. Many have unusual working hours, travelling outside the hours when regular public transport normally operates. Just over half of colleagues travel to work by car with the remainder travelling by public transport or other modes.

![Figure 2.5: Main mode of travel to work at Heathrow (2013)](image)

#### Table 2.2: Colleague car demand and mode share by selected locations

<table>
<thead>
<tr>
<th>District</th>
<th>Colleagues living in district</th>
<th>Direct public transport services per hour</th>
<th>Direct public transport journey time (mins)</th>
<th>Percentage of colleagues who drive to work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hounslow</td>
<td>10,400</td>
<td>27</td>
<td>16</td>
<td>35%</td>
</tr>
<tr>
<td>Hillingdon</td>
<td>9,200</td>
<td>11</td>
<td>19</td>
<td>40%</td>
</tr>
<tr>
<td>Ealing</td>
<td>6,600</td>
<td>13</td>
<td>44</td>
<td>42%</td>
</tr>
<tr>
<td>Slough</td>
<td>3,800</td>
<td>8</td>
<td>54</td>
<td>55%</td>
</tr>
<tr>
<td>Spelthorne</td>
<td>3,200</td>
<td>3</td>
<td>36</td>
<td>70%</td>
</tr>
<tr>
<td>Windsor &amp; Maidenhead</td>
<td>1,900</td>
<td>3</td>
<td>63</td>
<td>71%</td>
</tr>
<tr>
<td>Richmond upon Thames</td>
<td>1,600</td>
<td>11</td>
<td>64</td>
<td>71%</td>
</tr>
</tbody>
</table>

Source: Heathrow Employment Survey 2013 (IPSOS MORI/Heathrow)

Data on colleague locations and mode of transport is from Heathrow Employment Survey 2013 (IPSOS MORI/Heathrow). Journey times and services per hour are approximates based on Google Maps. The journey time is an estimate of shortest journey time.

#### Figure 2.6: Colleague travel to work trend 1975-2013

20 Data on colleague locations and mode of transport is from Heathrow Employment Survey 2013 (IPSOS MORI/Heathrow). Journey times and services per hour are approximates based on Google Maps. The journey time is an estimate of shortest journey time.

21 Heathrow Employment Surveys 1975 to 2013

22 Heathrow Employment Surveys 1975 to 2013
2.4 Freight and logistics

**Definition: Freight and logistics**

Freight or cargo is goods travelling through Heathrow for onward shipment. It can comprise many things such as high value pharmaceuticals such as medicines or short life food stuffs such as smoked salmon.

The vast majority of cargo travels in the belly hold of passenger aircraft with only a handful of dedicated freighter flights operating each week.

Logistics are goods that need to be transported to the airport for use on the airport such as food and drinks for the onsite catering materials to service aircraft such as parts and equipment.

**Freight transport at Heathrow today**

2.4.1 The airport is a major employment site and a key port for the import and export of goods. Maintaining this economic activity requires regular freight and logistics deliveries. Today, the vast majority of airport-related goods are transported by road, with some use of rail freight particularly in construction and for aircraft fuel.

The type of freight and logistic services required at Heathrow are outlined below. Together we estimate they generate around 13,000 daily vehicle movements:

- Handling air cargo and mail: 9000 vehicles per day (69%)
- Servicing the airport: 1500 vehicles per day (12%)
- Servicing the aircraft: 2500 vehicles per day (19%)

2.4.2 Identifying freight vehicles related solely to the airport can be challenging. This is due to the wider freight and logistics activities that surround Heathrow but are not necessarily directly related to the airport. Many freight and logistics companies are attracted to the area because of the excellent access to the strategic road network and central London along with the availability of affordable light industrial land at locations such as Poyle, and the Park Royal Industrial estate.

2.4.3 Freight movements can cause problems for local people including vehicles using inappropriate routes, parking in residential areas and associated anti-social behaviour and nuisance such as rubbish. This is in part due to a lack of strategic land use planning and also a lack of facilities in the area for HGV drivers.

We continue to work with the local communities and the freight industry to tackle some of the short-term issues. Longer-term solutions to improve facilities and more integrated transport and land use planning will be needed to tackle some of the existing issues.

2.5 Accessing Heathrow by rail

2.5.1 Fast and frequent rail services connect Heathrow to London (Figure 2.7). These include the Heathrow Express, the Heathrow Connect and the London Underground Piccadilly line.

2.5.2 The Heathrow Express rail service is important to passengers, offering a non-stop, 15-minute service to central London, four times an hour. It is designed to meet the needs of airport passengers and is industry-leading in terms of passenger experience and performance. The Heathrow Express is complemented by Heathrow Connect, a stopping service operating every 30 minutes that serves colleague and passenger catchments in West London.

Figure 2.7: Direct rail routes to Heathrow

Source: Heathrow

© Heathrow Airport Limited 2018
2.5.3 The Piccadilly line offers a lower cost public transport alternative for both passengers and airport colleagues. Trains depart from the airport every five minutes towards Central London and beyond to North London. Trains run through the night on Friday and Saturday on the Piccadilly line, providing 24-hour weekend services.

2.5.4 The combination of these rail services mean that at peak times 18 trains per hour leave from Heathrow to central London (Table 2.3). While frequencies to London are higher than most other airports we want to provide more rail services to a wider variety of destinations in the future.

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of services per peak hour</th>
<th>Total capacity per hour (sitting)</th>
<th>Total capacity per hour (sitting and standing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heathrow Express</td>
<td>4</td>
<td>1,800</td>
<td>1,800</td>
</tr>
<tr>
<td>Heathrow Connect</td>
<td>2</td>
<td>700</td>
<td>1,200</td>
</tr>
<tr>
<td>Piccadilly line</td>
<td>12</td>
<td>3,300</td>
<td>8,200</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>5,800</td>
<td>11,200</td>
</tr>
</tbody>
</table>

Table 2.3: Estimated rail capacity provision today (per direction)

2.6 Accessing Heathrow by road

2.6.1 Heathrow has excellent connections to the strategic road network which is operated by Highways England. The airport has direct access to the M25 and M4 and is close to the M1, M3 and M40 motorways which provide easy access to the UK. Important local road access is provided by the A4 and A30 routes which are operated by Transport for London (TfL). Heathrow owns and manages the roads within the airport boundary, which includes a full perimeter road providing access around the airport (Figure 2.9).
Traffic levels around Heathrow

2.6.2 Many of the roads around Heathrow are congested. These roads carry both airport and non-airport related traffic. In most cases the proportion of Heathrow related traffic is small. On the airport’s main approach roads highlighted in Figure 2.10 below, only about two-thirds of the traffic is related to Heathrow.

2.6.3 The total number of vehicles travelling to or from Heathrow is estimated at 143,000 vehicles per day, which includes cars, taxis, buses, coaches and lorries.

<table>
<thead>
<tr>
<th>Vehicle type</th>
<th>Heathrow related vehicles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars</td>
<td>81,000</td>
<td>56%</td>
</tr>
<tr>
<td>Taxis</td>
<td>44,000</td>
<td>31%</td>
</tr>
<tr>
<td>Buses</td>
<td>4,000</td>
<td>3%</td>
</tr>
<tr>
<td>Coaches</td>
<td>1,000</td>
<td>1%</td>
</tr>
<tr>
<td>Commercial goods vehicles</td>
<td>13,000</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>143,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2.4: Heathrow related traffic (preliminary estimate for an average day in 2016) (rounded)

2.6.4 Local bus services play an important role at Heathrow by providing a dense network of local transport links (Figure 2.11). This connectivity often allows access to and from areas not served by rail or London Underground. There are 31 bus routes that currently serve Heathrow at a combined frequency of around 80 buses per hour. This includes 13 routes that provide early morning or 24-hour services, allowing employees who work shift hours access to public transport options.

Figure 2.10: Approximate percentage of traffic on the road that is related to Heathrow airport

Figure 2.11: Core Heathrow related bus routes today

28 Car includes all private vehicles and hire cars, but not taxis.
29 Source: Heathrow and CAA. Note: These figures exclude empty returns.
30 Source: Heathrow. Note: Illustrative only.
2.6.5 Heathrow’s Free Travel Zone promotes the use of bus travel in and around the airport, helping to encourage the use of this sustainable mode of transport. TfL and a number of other operators manage bus routes around Heathrow, and these are planned in co-ordination with Heathrow.

2.6.6 Frequent coach services also connect Heathrow with the rest of the UK 24-hours a day. The airport already operates as an important hub for National Express linking over 75 major towns and cities with Heathrow. The coach network is used by more than just airport passengers; around 25% of those using the Central Bus Station at Heathrow are coach passengers changing between services not related to the airport.

Parking, drop off and pick up

2.6.7 Heathrow Airport Ltd controls around 39,000 on-airport car parking spaces, with approximately 23,500 spaces for passengers and 15,500 for colleagues. There are a further 12,500 spaces that are under the control of other tenants around the airport including British Airways.

2.6.8 Parking numbers are monitored on an annual basis which is a requirement of the Terminal 5 planning permission. This specifies a maximum of 42,000 Heathrow-controlled parking spaces at the airport. For passengers being dropped off at the airport there are free set-down lanes outside the terminals. There is no free pick up area adjacent to the terminals, most passengers being collected from a flight use the paid short stay car park or one of the longer stay car parks for free (if less than 2 hours).

2.7 Current sustainable transport initiatives

Definition: Airport Transport Forum

An Airport Transport Forum (ATF) is a DfT specified engagement group that brings together a major airport and local stakeholders.

Heathrow’s ATF is called the Heathrow Area Transport Forum (HATF) and is a partnership between various organisations in the private and public sectors seeking to improving accessibility and increase public transport use to, from and in the area around Heathrow.

2.7.1 The Heathrow Area Transport Forum (a forum of key stakeholders with an interest in surface access around Heathrow) has developed and delivered initiatives to encourage more sustainable patterns of travel. The forum sets the targets for our sustainable transport plan and helps to develop and deliver initiatives to achieve those targets. The current plan runs from 2014 to 2019 and seeks to increase public transport mode share of passengers to 45% and reduce colleague car use by a further 5%.

2.7.2 Working with the Forum, we have implemented innovative solutions that have helped increase public transport mode share and reduce the number of employees driving to work. These include the world’s largest single site car share scheme, the Heathrow Cycle Hub and the UK’s only airport free travel zone for public transport. Our award-winning Heathrow commuter initiatives support airport workers from over 400 companies across the airport with discounted travel products and travel advice.

2.7.3 Our current activities are paid for by our sustainable transport levy that is created using a surcharge placed on public and colleague car parks. This fund provides around £4million per year towards projects that help reduce emissions and reduce car use. More recently we have opened access to funding for local authorities to help deliver their local sustainable transport priorities. This has resulted in both Surrey County Council and the London Borough of Hounslow making successful bids to bring forward local projects that would not otherwise be funded.
3 Policy context

3.1 Airports National Policy Statement (October 2017)

The revised draft Airports National Policy Statement (ANPS) sets out the strategic framework for ensuring compliance with the specific requirements of the ANPS, including the National Networks Planning Strategy. The ANPS is consultative and aims to identify the key transport issues relating to a proposed development and set out the process for assessing the transport impacts. The draft ANPS is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport impacts of the scheme.

3.1.1 As a requirement of the Planning Act 2008, the Government is required to produce, consult upon and publish a National Policy Statement for Airports. Following the three-year Airports Commission process, Government published a draft Airports National Policy Statement (ANPS) in February 2017 for consultation. A second draft was then published in October 2017 for further consultation following the incorporation of an updated National Air Quality Strategy and updated passenger demand forecasts. Government intends to lay the final ANPS before Parliament in the first half of 2018.

3.1.2 Heathrow’s application for development consent will need to demonstrate how Heathrow will comply with the policy requirements set out in the ANPS. The application will be examined by the Planning Inspectorate before the Secretary of State takes the decision on whether expansion can proceed. Our plans for expansion will also affect the M25 motorway and the rail network. Where our proposals in relation to surface access qualify as NSIPs in their own right, the Secretary of State will consider those aspects by reference to both the ANPS and the National Networks NPS which contains policies in respect of major road and rail schemes.

3.1.3 The revised draft ANPS contains specific requirements in relation to surface access. It requires Heathrow to prepare a surface access strategy which must:

- reflect the needs of the Project over its development, implementation and operational phases;
- reference the role of surface transport in relation to air quality and carbon; and
- contain specific targets for maximising the proportion of journeys made to the airport by public transport, cycling or walking and actions, policies and defined performance indicators for delivering against those targets.

3.1.4 In particular, the revised draft ANPS states that any application for development consent and accompanying surface access strategy must include details of how Heathrow will increase the proportion of journeys made to the airport by public transport, cycling and walking to at least 50% by 2030 and at least 55% by 2040 for passengers. Heathrow must also demonstrate how it will achieve a 25% reduction of all colleague car trips by 2030, and a reduction of 50% by 2040 from a 2013 baseline level.

3.1.5 The draft ANPS also specifies the assessments that Heathrow must carry out to demonstrate that Heathrow can minimise and mitigate the effect of expansion on existing surface access arrangements. There will be a range of impacts on local and national transport networks during both the construction and operational phases. The construction phase will be assessed as part of the overall Transport Assessment and also as part of the Environmental Impact Assessment. The construction approach is discussed in more detail in our Emerging Plans consultation document.

3.1.6 The draft ANPS requires Heathrow to consult with Highways England, Network Rail and relevant highway and transport authorities, and transport operators, to understand the target completion dates of any third party or external schemes and investment plans. We will assess the effects of the airport expansion as influenced by such schemes and plans. Such consultation will allow us to understand the implications of the timings for our surface access proposals and enable us to demonstrate that third parties have been consulted and that we are content with the deliverability of any new transport schemes that we propose.

3.2 Wider policy

3.2.1 In addition to the specific surface access requirements of the draft ANPS, there are a number of national, regional and local policies which are relevant to Heathrow expansion and surface access. Below we outline some of the key policy areas that the expansion of the airport will support.

Industrial Strategy: Building a Britain fit for the future

3.2.2 The Government published its White Paper for an Industrial Strategy building a Britain fit for the future (November 2017) to promote economic growth across the UK. This strategy sets out several pillars to develop the UK’s economy, including: upgrading infrastructure; delivering clean (low-carbon) growth; cultivating world-leading sectors; and driving growth across the whole country and specifically refers to the expansion of Heathrow as the Government’s preferred scheme for increasing runway capacity.

3.2.3 To support the delivery of the Industrial Strategy, the Government set out its Transport Investment Strategy, in July 2017 stating that any investment can and should:

- Create a more reliable, less congested and better-connected transport network that works for users;
- Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities;
- Enhance global competitiveness by making the UK a more attractive place to trade and invest;
- Support creation of new housing.

3.2.4 In developing the surface access strategy for Heathrow, we will seek to identify proposals which help meet these wider Government policy objectives.

Air quality strategy

3.2.5 DEFRA’s Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007) provides the framework for ensuring compliance with the air quality limit values based on a combination of international, national and local measures to reduce emissions and improve air quality.

3.2.6 Its more recent UK plan for tackling roadside nitrogen dioxide concentrations (2017) details how the Government plans to reduce nitrogen dioxide (NO2) concentrations in those areas where air pollution is above the limit value in the shortest time possible.

33 Defra (2017) UK plan for tackling roadside nitrogen dioxide concentrations. Detailed plan July 2017
3.2.7 These documents are key drivers behind the requirements for air quality improvements through surface access outlined in the ANPS, which sets specific requirements to reference the role of surface transport in relation to air quality and carbon and to achieve mode share targets to mitigate air quality impacts.

3.2.8 Heathrow has a role in helping Government to meet its air quality objectives, working closely with the Mayor of London and local authorities. As part of our surface access strategy, we will support air quality objectives by seeking to increase the use of public transport, improving the efficient operation of vehicles using the airport and supporting the transition to low emission vehicles.

Draft Mayor’s Transport Strategy and the London Plan

3.2.9 The Mayor of London published a draft Transport Strategy in June 2017 with three core themes:
- Healthy streets and healthy people;
- A good public transport experience;
- New homes and jobs.

3.2.10 The draft strategy sets out the Mayor’s position on Heathrow which is to oppose expansion unless it can be demonstrated that no new noise or air quality harm will result and that surface access impacts can be accommodated. Policy 20 of the draft strategy requires Heathrow expansion to demonstrate how surface access networks will be changed to accommodate additional demand alongside background growth and refers to specific proposals which TfL believes will be required to accommodate surface access demand.

3.2.11 We are working with Transport for London to test the impact of expansion on London’s transport networks to ensure there is sufficient capacity to accommodate Heathrow-generated growth. Furthermore, through the development of the master plan for an expanded Heathrow, there is an opportunity to support the delivery of the Mayor’s wider objectives for transport in London.

3.2.12 The current and draft London Plans identify Heathrow as an Opportunity Area for growth. The development of the surface access strategy for Heathrow could help unlock this growth by providing new transport connections and capacity that not only benefits Heathrow users but also the wider area. In order to ensure the benefits of expansion are fully integrated with the plans of the surrounding area, the Heathrow Strategic Planning Group has been created to help co-ordinate the development plans for the surrounding area. The final Mayor’s Transport Strategy is expected to be published in early 2018.

Regional transport priorities

3.2.13 The Thames Valley Berkshire Local Enterprise Partnership (LEP) emphasises the importance of connectivity in its Strategic Economic Plan. Access to Heathrow is key to attracting inward investment to the region. Expansion at Heathrow and better rail connectivity to the west of the airport are considered priorities for the region.

3.2.14 The M3 LEP has also outlined the importance of Heathrow to the success of its region. Its strategic economic plan sets out the importance of improved surface access to Heathrow; in particular, a new rail connection from the south.

3.2.15 An economic assessment commissioned by the Western Wedge partners (Thames Valley Berkshire LEP, Enterprise M3 LEP, Buckinghamshire LEP, Oxfordshire LEP and West London Business) highlighted that the expansion of Heathrow would bring a boost to jobs and economic growth to the South-East economy.

3.2.16 Local transport policy

3.2.17 The National Planning Policy Framework (NPPF) sets out the Government’s overarching planning policy that local authorities must comply with in taking decisions and setting local planning policies. Of relevance to surface access to airports, the NPPF states that neighbouring authorities and transport providers should work together to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including strategies for the growth of airports.

3.2.18 Heathrow contributes to the economic success of many local authorities. Growth at Heathrow will generate new jobs across the UK and in particular within the five boroughs adjoining the airport.

3.2.19 Each council produces its own local plan policy documents which set out specific priorities and proposals for their area. Whilst specific policies may vary, they share several key themes and are required to reflect the NPPF. At a local level, transport policy focuses on improving public transport accessibility, walking and cycling as well as managing traffic congestion and associated emissions.

3.2.20 Key themes, common among local authorities and a focus for Heathrow surface access strategy include:
- Supporting economic growth and housing;
- Air quality management;
- Public transport;
- Improving connectivity;
- Modal shift;
- Congestion;
- Freight management; and
- Active travel.
4 Our surface access priorities

4.1 Our priorities

4.1.1 Recognising the specific policy requirements of the ANPS and wider policy context that our surface access proposals support, we have developed a set of priorities to guide the development of the surface access strategy. These seek to ensure that the impacts of expansion on the transport network and local communities are adequately mitigated whilst delivering wider benefits to the local area and the UK as a whole. Our proposed surface access priorities are:

- Facilitate more efficient and responsible use of the road network
- Mitigate the impacts of expansion by:
  - Making public transport the preferred choice for more passengers
  - Offering sustainable and affordable alternatives for colleagues
  - Facilitating more efficient and reliable use of the road network
- Deliver wider benefits to the national economy and local communities by:
  - Connecting all of the UK to growth through better surface access
  - Ensure local communities benefit from our surface access strategy

4.1.2 Mitigate the impacts of expansion by:

- Facilitating more efficient and responsible use of the road network

4.1.3 Deliver wider benefits to the national economy and local communities by:

- Connecting all of the UK to growth through better surface access
- Ensure local communities benefit from our surface access strategy

4.1.4 Table 4.1 and Table 4.2 outline what we think the outcomes and targets should be for our surface access strategy. Table 5 contains the targets set out by Government in the revised draft ANPS (2017). Table 4.2 contains a set of additional targets which we will seek to achieve by working with others to deliver wider benefits.

### Table 4.1: Surface access targets required by the Airports National Policy Statement

<table>
<thead>
<tr>
<th>Priority</th>
<th>Outcome</th>
<th>Targets</th>
</tr>
</thead>
</table>
| Make public transport the preferred choice for more passengers | Increase the proportion of passengers using public transport | At least 50% of surface access passengers arriving or departing from Heathrow by public transport in 2030
| | Improve passenger experience on public transport modes | At least 55% of surface access passengers arriving or departing from Heathrow by public transport in 2040 |
| Offer sustainable and affordable alternatives for colleagues | Reduce the number of car trips generated by colleagues | 25% reduction of all colleague car trips by 2030 compared with 2013 levels
| | Provide better and more sustainable commuting options (public transport, cycling and walking) | 50% reduction of all colleague car trips by 2040 compared with 2013 levels |

### Table 4.2: Surface access targets to support wider benefits

<table>
<thead>
<tr>
<th>Priority</th>
<th>Outcome</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitate more efficient and responsible use of the road network</td>
<td>Minimise congestion and support local air quality initiatives</td>
<td>Expand the airport without increasing the overall volume of Heathrow traffic when compared with 2017 traffic levels</td>
</tr>
<tr>
<td>Connect all of the UK to growth through better surface access</td>
<td>Put Heathrow at the heart of the transport network</td>
<td>Connect the largest 100 towns and cities in the UK to Heathrow by 2030 by public transport or air.</td>
</tr>
<tr>
<td></td>
<td>Support economic development by ensuring there is capacity and new connections to deliver growth</td>
<td>Enable new connections with sufficient capacity on road and rail networks around Heathrow to support wider development.</td>
</tr>
<tr>
<td>Ensure local communities benefit from expansion</td>
<td>Connect all of the surrounding communities to Heathrow by sustainable transport.</td>
<td>Ensure demand from expansion can be accommodated on the road and rail networks</td>
</tr>
</tbody>
</table>

4.2 Monitoring of targets

4.2.1 Reflecting the requirements set out in the revised draft ANPS and our own commitments towards delivering a sustainable expansion, our surface access strategy will contain specific and measurable targets that can be monitored over time. Heathrow is currently in the process of fully defining its targets and monitoring process. In order to provide independence there will be a mechanism whereby the Heathrow Area Transport Forum can oversee implementation of the strategy and monitor progress. We will also monitor the proposed timeframes for delivery of the targets set out in Tables 4.1 and 4.2 to ensure that the right measures are in place sufficiently early as passenger numbers grow.

4.2.2 When defining targets over a long period of time, it is important to recognise that the nature of transport will change. Technology such as autonomous vehicles will become more common and will enable different models of public transport. This could include on demand services which will start to reduce the clear distinction between public and private transport. As such we would expect the definition of public transport to change over time to include these sustainable forms of transport that will be shared by different users, most likely using low or zero emission vehicles.

4.2.3 As part of the our approach to surface access we have committed to seek to expand the airport without additional Heathrow related traffic compared to today. ‘Heathrow related traffic’ is defined as movements by motorised vehicles into and out of the airport and using the public highway whether carrying air passengers or colleagues or for the purposes of airport related freight and servicing. This includes all cars, taxis, vans, goods vehicles, buses and coaches. Airport related freight and servicing traffic relates to those trips whose origin or destination is within the Heathrow campus or a related warehouse supporting Heathrow airport.

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36 The Heathrow Area Transport Forum (HATF) is a partnership between various organisations in the private and public sectors seeking to improving accessibility and increase public transport use by, from and in the area around Heathrow.
5 Our eight key initiatives

5.1.1 We have identified eight key initiatives that will drive the development of our surface access strategy and deliver our five surface access priorities.

5.1.2 These initiatives are grouped into two areas:
   1. initiatives that improve the physical infrastructure and the level of service provided to passengers, colleagues and local residents; and
   2. initiatives that make public transport easier to use and change travel behaviour more widely.

The proposed initiatives deliberately overlap and together form the beginning of a surface access strategy for the airport.

5.1.3 Through this consultation we would like to know your views about our five surface access priorities and the proposals and initiatives identified in the following sections to achieve these priorities. Comments are invited on any aspect of our proposals, but we have included some specific questions in the following sections which you may wish to consider when responding.

5.1.4 Your comments will help us develop our detailed Surface Access Strategy for an expanded Heathrow Airport during 2018.

6 Putting Heathrow at the heart of the rail network

6.0.1 Rail is the most commonly used means of public transport access for passengers travelling to and from Heathrow. Over a quarter of all passenger journeys to and from the airport are undertaken on the Heathrow Express, Heathrow Connect and Piccadilly line. This section outlines a number of committed improvements to the rail network followed by a number other schemes and initiatives to further expand the network.

6.1 Committed changes to the rail network

6.1.1 Heathrow has always been committed to expanding the rail network to serve Heathrow Airport and works closely with the UK Government, Network Rail, Transport for London and rail operators to ensure its own plans for rail are fully integrated with those of the rest of the UK and London. A number of rail schemes are already being delivered or will be delivered in the next few years.

The Elizabeth line

6.1.2 The Elizabeth line (Crossrail) will replace Heathrow Connect services in 2018 with increased frequencies to Paddington. When the full service commences in December 2019, the Elizabeth line will provide a direct rail connection from Heathrow to the West End, the City of London and Canary Wharf for the first time (Figure 6.1) with six services per hour serving the airport in each direction. The Elizabeth line will reduce journey times and expand catchment for the airport, as well as providing new direct connections to parts of London where there is significant airport demand. It will offer a more reliable, quicker and cost effective option for many passengers.

6.1.3 By creating the new interchange opportunities, such as a link with HS2 at Old Oak Common and Thameslink at Farrington, the Elizabeth line will significantly extend the number of people within easy reach of Heathrow both within the South East and to all regions of the United Kingdom.
HS2 and Old Oak Common

6.1.4 HS2 will provide a high-speed rail connection between London and Birmingham (Phase 1) by 2026; to Crewe (Phase 2a) by 2027 and beyond to Manchester and Leeds by 2033. Although Heathrow is not directly served by HS2 there will be an opportunity for passengers to interchange at the new station at Old Oak Common (OOC) via the Elizabeth line which will give significantly reduced rail journey times between Heathrow, Birmingham and the major cities of the North of England and Scotland. We are working with HS2 Ltd, Old Oak and Park Royal Development Corporation, TfL and Network Rail to ensure the design of the station at Old Oak Common meets the needs of airport passengers.

The Piccadilly line upgrade

TfL plans to upgrade the Piccadilly line with work commencing in 2023\(^\text{39}\). The existing trains will be replaced with new trains with more capacity and a modern fit-out. The signalling system will be upgraded to allow a higher frequency of trains and faster journey times. The upgraded Piccadilly line will provide 50% more capacity with up to 18 trains per hour in each direction serving Heathrow.

6.2 Further potential rail improvements

6.2.1 In addition to the introduction of the Elizabeth line and Piccadilly line upgrades, we want to make further improvements to rail access, in particular expanding rail access to Heathrow beyond London. This includes making the most of existing and future rail infrastructure and exploring a range of new connectivity options.

A1 Optimising the Elizabeth line

6.2.2 In order to maximise rail usage within key catchments across London, there are opportunities to provide a more frequent service, extend operational hours into the early mornings/late evenings, promote the link to HS2 and provide supporting measures to encourage maximum usage.

6.2.3 Increased frequency - Heathrow is currently working with TfL to increase from six to eight trains per hour in the future. This is partly dependent on future Terminal 4 and 5 infrastructure improvements.

6.2.4 Increased operational hours – The current Elizabeth line planned operating timetable will run between 05:10 and 23:25. Heathrow would like to see extended operating hours on the Elizabeth line to accommodate the shift working and early starts required by some Heathrow colleagues. Extended operating hours on the Elizabeth line will give more colleagues the opportunity to commute to work via public transport.

A2 Support delivery of a new Western Rail Link to Heathrow

6.2.5 Network Rail is promoting a new rail connection between Heathrow Terminal 5 and the Great Western Main Line close to Langley station. A new 7km section of railway would be constructed in a tunnel and would allow direct rail services from Heathrow to places such as Reading (in 26 minutes) and Slough (in 7 minutes). This new Western Rail Link would provide direct rail links to key passenger and colleague catchments in the Thames Valley, reducing traffic on the M4.

6.2.6 The proposed rail link is currently being developed by Network Rail and a statutory public consultation is expected to be held in 2018 in advance of their DCO application\(^\text{40}\) for Western Rail Link. This would be separate from Heathrow’s DCO application for the expansion of the airport. If granted consent, the new rail link could become operational by 2025. The project is funded for the development to the DCO application stage – with additional funding required for construction as part of Network Rail’s Control Period 6 (2019-2024) to deliver the project.

6.2.7 There will be benefits to the airport from the scheme and we are currently working closely with the DfT and Network Rail on the planning and design of the scheme as well as how the project can be funded and delivered.

39 The Piccadilly line upgrade is committed in TfL’s 2016 Business Plan and 2017/18 Budget with a phased implementation of the new trains. Signalling upgrades are expected to be completed by 2026.

40 https://www.networkrail.co.uk/our-railway-upgrade-plan/key-projects/heathrow-rail-link/

41 Source: Heathrow. Note: Alignment shown on map is illustrative only
6.2.8 There are currently a number of different proposals that could connect the existing South Western railway network to Heathrow via a new Southern Rail Link. These proposals form part of a wider network improvement being considered by Network Rail. There is currently no railway connection between Heathrow and the south so this link would fill a key gap in the rail network.

6.2.9 Any plans for new rail services would need to fit into the existing timetable, a new direct service could be introduced to London Waterloo and destinations in Surrey and Hampshire from Heathrow (Figure 6.3). This would benefit passengers who currently do not have direct rail connections to Heathrow, such as those from Hampshire, Surrey and south west London. Many of these passengers currently drive or take a taxi/private hire vehicle in order to avoid a difficult journey on public transport with luggage.

6.2.10 A service to London Waterloo, providing a new connection to Central London for Heathrow, would add resilience and additional capacity for passengers and colleagues in London. This is likely to require changes to existing service patterns and this would need to be developed in partnership with the train operators, the Department for Transport, Network Rail, Transport for London, passenger groups and local authorities along the route.

6.2.11 A feasibility study undertaken by Network Rail showed that there is a strong business case for the proposals and that there are credible infrastructure solutions that should be explored further. Heathrow’s analysis to date indicates that our proposed surface access strategy is not reliant on a Southern Rail Link to deliver the mode share targets in the revised draft ANPS and commitment to no increase in Heathrow-related traffic.

6.2.12 The scheme also offers potential for wider benefits by offering the opportunity to travel through Heathrow. This would create new connections into London as well as Old Oak Common. This could help to relieve Waterloo, which is currently the busiest London terminus as well as the wider London rail network by giving an alternative route to HS2 services via Old Oak Common.

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A4 Making the most of Hatton Cross

6.2.13 Hatton Cross station, on the Piccadilly line, provides a valuable gateway and interchange hub for airport colleagues as it is close to many employment sites at the airport and connects with many bus routes to the rest of the airport campus through the Heathrow Free Travel Zone. There is an opportunity to expand the role of Hatton Cross as a southern gateway to Heathrow, through the introduction of more services, better interchange and enhanced passenger facilities. Heathrow will work with TfL to investigate ways in which the role of the station as a gateway to Heathrow can be enhanced.

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42 Source: Heathrow. Note: Alignment shown on map is illustrative only.
7 Creating a public transport focused airport

7.1.1 Heathrow has grown incrementally over time which means that some linkages between different terminals and employment areas and public transport, could be better integrated. This would have the benefit of making public transport easier and more accessible to use. The expansion of Heathrow will enable the airport to be developed in a more integrated way that makes access to public transport a priority.

7.1.2 Heathrow’s expansion will lead to a significant improvement in surface access facilities at the airport, this could potentially include upgraded coach and rail stations. Overall changes to the airport as part of expansion are outlined in Our Emerging Plans published as part of this consultation. The section below outlines the key physical changes to the airport under consideration from a surface access perspective.

B1 Upgrading rail, bus and coach facilities at the airport

7.1.3 The current central bus station will be upgraded into a new public transport interchange over the life of the expansion programme. This will have more capacity for buses and be better integrated with Terminal 2 and with easier access to London Underground and Rail stations.

7.1.4 As part of the development of the western campus, the Terminal 5 rail station will be upgraded to allow access to any new terminal facilities, allowing for additional trains, higher passenger flows and a better passenger experience.

B2 Integrating employment and public transport

7.1.5 We want to develop a scheme that will support an increase in the use of public transport by passengers and colleagues. In developing our plans for an expanded Heathrow, there is a significant opportunity to locate places of work close to rail and bus stations that would make it easier for colleagues to travel by public transport.

7.1.6 The significant redevelopment of the airport during expansion provides an opportunity to relocate employment sites closer to public transport hubs. Making public transport more convenient by reducing overall travel times and the need to interchange between services will encourage public transport usage. We will encourage and prioritise further development on or near public transport across the airport campus.

CASE STUDY: Where there is better public transport, more colleagues use it

Evidence from our colleague travel to work survey shows that colleagues who work in areas of the campus with greater public transport accessibility are more likely to use public transport to get to work. While not everyone can take public transport to work, the more we can align employment centres and public transport the more mode shift we can create.
8 Providing a resilient and reliable road network

8.1 The expansion of Heathrow will involve some changes to the road network. We will seek to ensure that our proposals for modifying the road network help relieve current points of congestion and provide connectivity for local people. Modifying the road network in a way that helps improve traffic flow and provide more reliable journey times will benefit those using coach and local bus services to reach Heathrow, increasing the attractiveness of these modes. As a major freight hub, the reliability of the highway network to the cargo facilities is essential to logistics companies and freight forwarding operations.

8.1.2 Highways England is planning a number of road improvements, regardless of the expansion of Heathrow, which are outlined in the Road Investment Strategy (RIS 1) which covers England’s motorways and strategic roads during the 2015 to 2020 period. RIS 1 schemes that will improve the quality or capacity in the Heathrow area are shown below.

8.1.3 RIS 2, which covers planned road investment post 2020, is currently in the development phase. The M25 south west quadrant study has given strategic direction for the development of potential projects in RIS 2 and Highways England is currently working to develop a programme of improvements.

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Description</th>
<th>Status</th>
<th>Timescales</th>
</tr>
</thead>
<tbody>
<tr>
<td>M25 junction 10 to A3 Wisley Interchange</td>
<td>Improvements to junction 10 of the M25</td>
<td>Committed change</td>
<td>2019/2020 start</td>
</tr>
<tr>
<td>M25 junction 10 to junction 16 smart motorway</td>
<td>We are improving the M25 between junction 10 and junction 16</td>
<td>Committed change</td>
<td>2020 start</td>
</tr>
<tr>
<td>M4 junctions 3-12: smart motorway</td>
<td>Making the M4 a ‘smart motorway’ between junction 3 and 12</td>
<td>Under construction</td>
<td>2017 start</td>
</tr>
<tr>
<td>       </td>
<td>     </td>
<td>   </td>
<td> </td>
</tr>
</tbody>
</table>

Table 8.1: Road Investment Strategy (RIS1) schemes near Heathrow (2015 to 2020)

8.1.4 The proposed alignment of the third runway crosses the M25. The road is critical for both airport and non-airport users alike and will need to serve users’ needs during construction and future operations. We are working closely with Highways England, which operates the M25, to develop and deliver the best solution, that reflects the following strategic principles:

- Maintain operation of the M25 and minimise impacts on the travelling public;
- Retain the existing M25/M4 junction;
- Maintain performance from an operational and safety perspective; and
- Ensure resilient, safe and sufficient access to the new western campus.

8.1.5 Details of the specific options for the M25 on which we are consulting are covered within the Our Emerging Plans published as part of this consultation.

8.1.6 The proposed new runway location will result in the loss of the Western Perimeter Road and parts of the Northern Perimeter Road. It will also result in severance of the A4 (Bath Rd) and A3044 (Stanwell Moor Rd). These changes will require close working with a number of interested highway authorities: Slough Borough Council (A4), TfL (A4, A30 and A312), London Borough of Hillingdon (A3044), as well as Highways England as an interested party operating nearby and parallel roads.

8.1.7 We are investigating options for the re-provision of the A4 and A3044 and how they can provide capacity, connectivity and resilience while balancing the issues of community severance, adverse environmental impacts and engineering complexity. Details of the specific options for re-provision on which we are consulting are provided within Our Emerging Plans published as part of this consultation.

8.1.8 Heathrow is considering constructing a Southern Access Tunnel linking the Central Terminal Area to the Southern Perimeter Road via a new underground road beneath the airport. The potential benefits of a Southern Access Tunnel could include:

- A reduction of road based journey times and vehicle mileage by providing a road across the campus, helping to contribute to a reduction in emissions. For example, the journey length by road from CTA to Terminal 4 would be cut from approximately five miles today to little under one mile with the Southern Access Tunnel;
9 Strengthening the coach hub at Heathrow

9.0.1 Heathrow is already the largest coach hub in the country. As part of plans for an expanded Heathrow we want to work with coach operators to grow the coach network further. We know that when coach services provide fast and convenient connections, passengers are more likely to use these services and switch from using their cars.

9.0.2 The success of existing coach services has shown that there are many opportunities for coaches to provide an alternative to private cars and taxis. Coaches could be particularly useful in filling gaps where rail services do not exist or where a long-term rail solution is being investigated.

9.0.3 In addition to improving the coach station, as discussed in Section B1 we want to work with new and existing coach operators to improve the extent and frequency of coach operations at the airport. Improving local bus services is also critical and is discussed separately under Section 10.

D1 Strengthening existing routes

9.1.1 Where an increase in frequency of services can be supported by growth in demand, we will work with operators to expand existing services. As demand grows, it may be possible to split existing multi-stop services into different routes. This will help to provide more direct routes which are more convenient and have faster journey times.

9.1.2 Areas of focus for improving routes and splitting services include:
- M11 corridor (Stansted/Ipswich and Cambridge/Norwich);
- M1 corridor (East Midlands, Sheffield/Leeds, Northampton);
- M40 corridor (Birmingham/Wolverhampton);
- West Country (Exeter/Torquay);
- M4 Corridor (Bristol/South Wales, Chippenham/Bath);
- South Coast (Bournemouth/Poole, Portsmouth/Southampton).

D2 New routes and operators

9.1.3 We will work with the coach industry to encourage new and innovative routes and operators to improve services for passengers and increase the travel options on offer. Areas for growth include the South coast, with urban areas like Worthing and Eastbourne, the M40 corridor including High Wycombe as well as North West London. Other growing cities in the North would also benefit from direct coach services.

9.1.4 This is part of an on-going effort from Heathrow to attract more coach services. This year we have worked with operators to add daily direct services between Heathrow and the following locations Tyneside, Teesside, Hartlepool, Sunderland, Doncaster, Darlington, York, Manchester and Torquay.

D3 Expanding the role of the Heathrow Coach Hub Further

9.1.5 The strategy for coaches in London is changing. Transport for London (TfL) has confirmed that the current coach station at Victoria will need to be replaced. In response to this, TfL is currently looking at a more dispersed model of coach stations across London, with the possibility of new coach stations being developed in parts of Outer London.

9.1.6 By encouraging more coach usage and interchange at Heathrow, it would be possible to deliver more coach routes to a broader range of destinations whilst operating at higher frequencies. This would benefit airport passengers at Heathrow through the introducing of additional coach services. We will work with TfL to understand what role the coach station at Heathrow could play in delivering this strategy.
Investing in local transport solutions

10.1.1 Heathrow plays an important role as a local transport hub. As a focus for local bus services it is a key interchange and provides access to the London Underground and local rail services. As rail and coach access improves at Heathrow, this role will only increase. There is an opportunity to ensure that local communities benefit from this improved access by making sure there are local services that connect communities to the airport stations. We will also seek to deliver solutions that work towards achieving local transport priorities that align with our own strategy, encouraging more sustainable travel in the local area by all users.

E1 Enhance existing bus services

10.1.2 Heathrow is already a key part of the local bus network. As the airport grows, demand for bus services will grow, creating opportunities to enhance existing services. This could include increasing frequencies, expanding hours of operation and introducing express services to meet demand from colleagues and passengers residing in the boroughs surrounding Heathrow. Providing fast and reliable links could encourage colleagues to travel to work by bus instead of by car.

10.1.3 The introduction of the Elizabeth line provides an opportunity to restructure the bus network so that it better complements and feeds rail links for longer journeys. With changes to the local road network as a result of expansion, there is also an opportunity to review and change the local bus services. Current services along the Bath Road could be diverted along the new route of the A4 and some services diverted around the airport to enable them to serve both Terminal 5 and the Central Bus Station.

E2 Work with local bus operators to establish new bus routes

10.1.4 New routes can have a dramatic effect on shifting people to public transport. Exploring new bus routes could enhance north-south connectivity through Hillingdon, where currently over 9,000 (12%) of airport colleagues live. A particular focus will be routes to and from areas to the west and south, where there are pockets of demand as yet unmet.

10.1.5 In areas with an existing bus service, shuttle buses or express services could fill gaps in the early morning and late at night and provide fast and reliable journeys to Heathrow, encouraging passengers and colleagues to shift to using the bus instead of the car.

10.1.6 We will also work with stakeholders and operators to investigate the potential for demand-responsive minibus services, for example between Staines and Heathrow. Operators are currently trialling the technology that will underpin these services (for example, Citymapper’s recent smartbus trial in Central London). Operators have expressed a desire to undertake data analysis to assess the feasibility of providing such services.

10.1.7 Looking further into the future, there is potential for demand-responsive services to be operated by autonomous electric vehicles. In the first instance, it is likely that such services would provide on-campus shuttle services before operating on the public highway.

E3 Bus priority measures

10.1.8 Working in partnership with local authorities and TfL, local bus priority measures could be introduced to improve bus services at Heathrow. This would help to deliver faster and more reliable journeys for bus users and operators. This would be possible within the airport, on new roads where they are being provided and on some existing routes. It would include defining new bus priority corridors at Heathrow, bus lanes, priority measures at junctions and small changes to routes so that buses would avoid traffic hotspots.

10.1.9 This reflects TfL and the Mayor’s approach, as set out in the draft Mayor’s Transport Strategy, which seeks to improve bus journey times and reliability by:

- Making greater provision for bus priority lanes, junctions and signals to prioritise buses over other vehicular traffic,
- Delivering new bus priority corridors and protecting existing bus priority (in London), and
- Improving bus priority on key radial routes (from London), targeting those routes with high patronage to the benefit of bus users.

10.1.10 Heathrow will work with TfL and local authorities to identify new and improved bus priority measures that could be considered to improve the reliability and experience of bus users to-from Heathrow. We are specifically considering the following bus priority measures for Heathrow:

- Implementing an internal campus road network that enables easy access to terminals for buses
- Introducing bus-only corridors to Heathrow – exact locations to be determined; and
- Providing off-campus bus priority measures (re-allocate road space for buses (working with TfL/highway authorities) and coaches (working with Highways England)) to improve journey times and reliability.

10.1.11 Approximately one third of colleagues (around 10 m trips per year) and around one million passengers per year use local buses to travel to and from Heathrow. The development of bus priority corridors into the airport, on corridors where there are larger concentrations of colleagues and passengers, could help achieve a bigger shift towards bus. Figure 10.1 shows the Heathrow employee density and the TfL bus routes to/from Heathrow.

Figure 10.1: Heathrow colleague density and existing bus routes
E4 Upgrading walking and cycling infrastructure

10.1.12 There is significant potential to increase the number of colleagues who cycle to work; currently fewer than 1% do so. Almost 20,000 airport colleagues currently live within a 5km distance of the airport boundary – a comfortable cycling distance for many people.

10.1.13 We will continue to provide cycle parking and showers at all key locations and workplaces around the airport, as well as develop the road network on-airport to ensure safe and convenient active transport routes are provided.

10.1.14 We are also considering expanding the Heathrow Cycle Hub scheme which already has over 2,300 members and offers discounted cycles and equipment, free labour on maintenance and training to all airport employees. New cycle hub facilities could provide a single point of entry to and from Heathrow and a holistic service to users, including shower and changing facilities.

10.1.15 We will ensure that fast and frequent connections are available from the cycle hubs to relevant employment locations around the airport. It would be possible to build similar hubs at key entrances to the south and east of the airport, making cycling more convenient for many more of our colleagues.

10.1.16 Heathrow Airport Ltd is also currently re-purposing an existing tunnel to provide direct bicycle access to the Central Terminal Area from the north boundary of the airport. Proposals being developed for a new Southern Access Tunnel could include dedicated facilities for cyclists.

11 Making public transport easier to use

11.1.1 In order to make public transport more attractive we need to make it more convenient and easier to use for passengers and colleagues.

11.1.2 We will seek to advocate for and introduce measures that make public transport an easier choice for passengers and colleagues. This can be achieved through more convenient ticketing, promotion and the development of tools to improve the journey experience, as well as more convenient hours of operation. Options are outlined in proposals F1-F4.

F1 Building on the success of the Free Travel Zone

11.1.3 Heathrow has a strong track record of providing financial support for local travel. We support a range of early morning services for shift workers and fund the Free Travel Zone (FTZ) which provides free travel by public transport around the Heathrow campus area for all users, not just for passengers and colleagues. The FTZ currently covers Heathrow Express, the Piccadilly Line, London Bus services and other local bus services within the FTZ area.

F2 Promoting affordable fares

11.1.4 We are keen to build on the success of the FTZ to facilitate greater public transport connectivity across the Heathrow campus and link services into the wider network.

11.1.5 We want to work with local transport operators to make travel to and from the airport on public transport as affordable as possible. This could be through offers and promotions on our own services or negotiated discounts with other operators. We have already led a number of innovative pricing offers on Heathrow Express such as advanced fares for as little as £5.50, children travelling for free and our recent £15 summer price promotions.
12.1.1 With Heathrow’s expansion there will be more passengers, colleagues and freight at Heathrow. We want to manage and mitigate the impact of this on the road network by promoting more efficient vehicle operations and encouraging behaviour change with colleagues and passengers. Our objective is to expand the airport without growing the overall number of vehicles accessing the airport. This will be achieved through a combination of greater public transport use and more efficient and responsible use of the road network.

Opportunity for change: Too many empty journeys

Many taxis and private vehicles dropping off passengers have an “empty” return journey, where a vehicle is driving to or from the airport without a passenger inside. These empty returns result in approximately 40,000 additional vehicle movements each day at the airport. This is over a quarter of current airport-related traffic. Our efforts to encourage more efficient use of taxis and private hire could potentially reduce the Heathrow related trips that are made without a passenger.

G1 Efficient use of taxis

12.1.2 Today, 32% of passengers travel to Heathrow by taxis and private hire vehicles (PHV). This is the highest share across all modes of transport.5 It is, however, estimated that only a limited proportion of these taxi/PHV trips carry passengers in both directions.

12.1.3 Increasing the proportion of taxi and private hire vehicles that carry passengers in both directions, will reduce the number of vehicle trips that the airport will generate. Added to this, increasing the average occupancy of taxi and private hire vehicles will also help reduce the overall number of vehicles accessing Heathrow. For example, taxis and private hire vehicles currently carry on average, 1.6 passengers per journey to/from the airport.

12.1.4 We are considering a range of measures to make taxi operations more efficient, backfilling return journeys and delivering higher vehicle occupancy. These measures could include:

- priority taxi queueing for full arrivals – taxis arriving with a passenger are given a preferential lane for re-ranking which would reduce the amount of time spent waiting for their next fare;
- a taxi sharing scheme – many taxi passengers are heading to central London and other high density urban locations, priority lanes within the forecourt for these customers that are willing to share a taxi could decrease vehicle traffic, reduce the waiting times and costs for passengers.

12.1.5 As an illustration, the example below demonstrates the potential impact of taxi backfilling 20% of all empty taxi and private hire vehicles trips combined with measures to increase average occupancy (taxi/ passenger marshalling and the application of taxi booking/group booking technologies) from 1.6 to 2.2 passengers per trip.

12.1.6 The implementation of a package of measures to improve the efficiency of taxi operations is conservatively estimated to reduce the number of taxi trips in 2040 to levels only marginally greater than the 2013 baseline.

<table>
<thead>
<tr>
<th>Vehicle type</th>
<th>No. trips (per day)</th>
<th>2013 Baseline</th>
<th>2040 ‘Do nothing’</th>
<th>2040 With efficiency measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black cab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Hire Vehicle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12.1: Taxi backfilling and occupancy illustrative example (rounded to nearest thousand)


49 Source: CAA 2016

F3 Encourage airlines and operators to offer seamless and easy ticketing

Use of public transport is becoming easier through increased use of smarter ticketing technology. TfL has led the way in enabling passengers to use contactless and mobile payment systems on London’s public transport network.

We will seek to build on this success through encouraging the development of tools and promotions to provide public transport tickets as part of the airline booking process, building on the examples which already exist at Heathrow, the most recent of which is the proposed introduction of Oyster and contactless payment on the Heathrow Express.

F4 Aligning public transport connectivity with airport operating hours

Heathrow attracts passengers and colleagues around the clock and it is essential that our surface access strategy offers choice and viable public transport alternatives to suit each individual’s needs, irrespective of the time of day of travel.

Despite some 24-hour options, we want to encourage more public transport options outside peak hours. Achieving a public transport system which is more closely aligned with the needs of users will encourage more sustainable patterns of travel. This is especially the case for colleagues who travel to the airport regularly and whose travel choices can therefore be more easily influenced by the availability of convenient alternative modes.

To make public transport more attractive and easier to use we want to work with local transport operators, particularly within the rail industry, to understand opportunities to better align public transport operating hours with that of the airport itself. For example, the success of the all-night London Underground Night Tube services to Heathrow demonstrates that there is flexibility in maintenance schedules to be explored that could improve the rail industry’s operating hours and customer offering.

An example of this integrated ticketing is Singapore’s Rail-Fly ticket. This allows passengers to book one ticket through Singapore Airlines website that will provide travel from eleven locations in South West England and Wales to the airline’s 90 international destinations through an agreement with Heathrow Express and Great Western Railway. Coach-Fly tickets are also available from 25 National Express locations in South West England, Wales and the Midlands. Rail-Fly and Coach-Fly tickets allow passengers to more easily book door to door travel without having to book multiple tickets.
G2 Reducing emissions through vehicle charging

12.1.7 The measures outlined in this document would increase the range and quality of public transport options available for passengers and colleagues wishing to access Heathrow and encourage use of these options. They would significantly reduce the number of people who need to drive to the airport.

12.1.8 In the context of an expanded Heathrow, we need to ensure that, wherever possible, trips to and from the airport are made by public transport, cycling or walking. We are therefore considering the potential role of pricing and demand management to help to secure the outcomes that the government is seeking in the revised draft ANPS and to which we have ourselves committed.

12.1.9 The effectiveness of pricing and charges in influencing travel behaviour and reducing emissions is acknowledged across the world. In central London, the Congestion Charging scheme reduced inbound traffic by 14%16. The Ultra-Low Emission Zone is intended to increase the uptake of cleaner vehicles. We are exploring the potential for strategically-managed access charges, low emission zones, and parking charges at Heathrow to encourage the use of low emission vehicles, reduce unnecessary trips.

12.1.10 Achieving these outcomes would help to reduce Heathrow’s impacts on local roads and the environment. It would also enable us to deliver the benefits of expansion to the local and national economy without increasing Heathrow traffic and emissions.

12.1.11 Depending on the findings of this consultation, and if fuller analysis shows it to be necessary, we are considering a phased strategy for the implementation of charges broadly mirroring the approach set out by the Mayor of London in his draft Transport Strategy. We envisage that the focus in the early years would be on tackling existing issues around air quality, encouraging those who drive to the airport to do so in the cleanest possible vehicles.

12.1.12 Various activities could be subject to charges – some of which are already subject to charges today. The list below sets out some examples of the points at which we envisage charges could apply at Heathrow in future. Charges could be applied across one or more of these points in combination, with drivers paying charges reflective of the specific activities they have undertaken:

- **Emissions based surcharge** – Utilising existing charging structures at the airport (such as car parking, permits, facility charges) we would introduce a supplementary charge for the most polluting vehicles. This could mirror the Mayor of London’s proposals for an Ultra Low Emission Zone.

- **Drop off charge** – Similar to several airports around the world, Heathrow is considering applying a charge to vehicles that are dropping off passengers directly outside the terminal buildings. This charge could apply to all vehicles that drop off/pick up or be based on the vehicle emission standards.

- **Terminal low emission zone** – This would allow priority access to the terminal areas for low emission vehicles or those that operate in the most efficient way. This would encourage fleet operators and regular users to shift to low emissions vehicles.

- **Airport low emissions zone** – This would require all vehicles accessing the airport to be charged based on the emissions standard of the vehicle. This would target a wider range of users than the terminal low emission zone.

- **Airport access charge** – If there needed to be further shift towards public transport to reduce congestion, then a broader charge based on vehicle access could be applied to encourage passengers to shift onto public transport. This charge would apply regardless of the emission standard of the vehicle. This would be similar to the London congestion charge. However, this charge would be introduced in conjunction with major improvements to public transport connections to Heathrow, and strong support to find convenient alternative modes of transport for all Heathrow users.

12.1.13 An effective charging strategy would consider the sum of all charges paid by individual drivers across all the activities they undertake, and would seek to ensure that in aggregate they act to incentivise the appropriate behaviour.

12.1.14 The kind of behaviour that we might wish to incentivise would include car sharing, taking public transport, or driving cleaner vehicles – which lead to lower emissions and fewer car trips. The following list sets out some of the factors according to which charges could be imposed, or adjusted upwards or downwards:

- Emissions – charges could be higher for vehicles with higher emissions of environmental pollutants, and could be reduced or removed for cleaner vehicles.

- Vehicle occupancy level – charges might be reduced (or removed) for vehicles carrying several people, while those with only a driver could face higher charges.

- Time of travel – charges might differ by time of day – with those arriving outside the busiest time potentially paying less as they may contribute less to local congestion, while those travelling at the peak could pay more.

12.1.15 We recognise that for some people, driving is not a choice. If any charges are introduced, we would ensure that appropriate exemptions are made available to ensure that passengers who rely on their car (for instance because of reduced mobility or other disabilities) are not unfairly penalised.

12.1.16 As noted above, charges would only be introduced if they are necessary to meet specific requirements, and would be used in conjunction with our sustainable transport initiatives and investment in transport infrastructure to further support a shift away from private highway travel.

G3 Intelligent Mobility

12.1.17 The aim is to put the customer at the centre of transport decision making and to provide information so that they can make informed decisions. People already utilise apps for a range of transport related activities, such as cashless payment, journey option comparison (car, taxi, bus or rail) and navigation. Intelligent mobility can help to co-ordinate all these elements and provide a service to help people to plan, book and make their journeys. This could help passengers to book an entire journey from home to destination in an easy way that helps them use the fastest, cheapest or easiest form of transport.

Definition: Intelligent mobility

Intelligent Mobility refers to the use of new technologies and innovative data solutions to improve the efficiency and quality of movement of people and goods. It comprises a package of existing apps and information sources and seeks to develop this into a more coordinated offering for travellers.

- **Mobility Information Services** - to enable travellers to make informed travel choices in relation to their modes of transport, routes, time of travel, journey duration.

- **Smarter Working** – flexible working or ‘work hubs’, aimed at reducing commuting to and from the Heathrow campus.

- **Mobility Services** - providing a ‘one stop’ app for all the mobility needs of an individual covering all travel modes (including air) and all journey purposes.

- **Connected and Autonomous Vehicles (CAVs)** – proactively facilitating/managing the adoption of CAVs as they affect Heathrow.
12.1.18 Intelligent Mobility therefore relates to a package of information sources and new technologies, that use a common data platform, and which will provide a more coordinated basis for colleagues and passengers to make informed decisions regarding mobility and travel. This will contribute to more efficient use of vehicles travelling to and from Heathrow in the future. Our aim is to educate and empower passengers and colleagues by providing a framework to enable informed, sustainable and seamless door-to-door travel.

12.1.19 Currently there are many different car parks at the airport serving different purposes, covering approximately 100 hectares within the operational boundary of the airport. With expansion, it is proposed to keep the number of spaces at a similar level to today and to manage the parking that is available in a way that helps achieve the wider priorities for surface access and deliver benefits for passengers. This includes the following approach:

- Consolidation of parking for passengers – To move towards a more efficient operation of parking where clusters of car parks are grouped together with good access to the road network and direct links to airport terminals. This would help reduce the amount of traffic circulating around the airport and ensure car parks operate efficiently and are located where good road access can be secured. It will also help to improve service to passengers.
- Reduction and consolidation of colleague parking – In order to meet the overall target for a reduction in colleague car trips, the amount of parking available for colleagues will reduce with parking for colleagues managed in a more integrated way with incentives to encourage use of public transport and car sharing.
- Smart and clean parking – To maximise the use of new technology to ensure car parks operate in an efficient way, including better signage, different pricing structures and incentives for colleagues to switch to car sharing. This could also include a form of emissions based pricing for access to car parks with cleaner less polluting vehicles paying less and having better access to terminals.

12.1.20 Freight and logistics requirements will be greater with an expanded airport. Through expansion we are seeking to facilitate growth whilst minimising the number of journeys made on the road network. We have identified a number of measures to influence freight vehicles and delivery behaviour in order to minimise the impact of Heathrow-related freight vehicles on traffic and air quality. We will also continue to assess any innovative technology or approach that may help us achieve this goal.

12.1.21 As set out in our blueprint for sustainable freight, our strategy will seek to target three area for Heathrow to work with the freight industry to:

- Increase efficiency;
- Be a responsible operations;
- Drive forward sustainability

12.1.22 As part of the development of the master plan we will help major partners deliver a modernised, more efficient cargo village on airport. This will increase capacity to allow more cargo to be processed on airport, helping to reduce the need for moving goods to and from off airport warehousing, which represent around a third of cargo related trips.

12.1.23 Working with local authorities we will seek to make more efficient land use. The expansion of Heathrow provides an excellent opportunity to consolidate freight activity. This will allow vehicle operators to utilise their vehicles more efficiently, reducing the number of trips required to deliver the goods and services that support our customers, colleagues and neighbours.

12.1.24 We will work with industry to seek to increase load factors and ensure as many vehicles as possible are fully loaded as they arrive at and depart the airport. This will help reduce the number of Heathrow related trips by consolidating two trips made by half full vehicles into one single trip made by a full vehicle. We recently launched a Heathrow CargoCloud app to support and connect those with goods to ship and those with unutilised vehicle capacity. We will continue to work with the freight industry to explore new technology solutions to increase efficiency and to ensure that we design our facilities to allow for optimal vehicle operations.

A responsible operator

12.1.25 We are currently working with industry and local authorities to establish a code of conduct for operators using the airport. This will help to improve incidents of anti-social behaviour as well as inappropriate driving and parking by HGVs. Through a more integrated approach to enforcement, we will seek to ensure that all responsible authorities are working together to reduce these behaviours.

12.1.26 Better long term land use planning will help to reduce the need for freight vehicles to pass close to or through residential areas. We will work with local authorities to identify appropriate sites for freight and logistics uses that reduce impacts on local communities. This may allow existing logistics sites to become more appropriate.

Driving sustainability

12.1.27 We want to improve the environmental standard of Heathrow-related vehicles. This includes acting as a trial location for future technology. Through our sustainable freight group we will help to identify new opportunities to reduce trips and improve emissions. We strive to be a leading location for the trial of new and emerging technology to reduce emissions from freight vehicles. Accordingly, we have the Heathrow Clean Vehicles Partnership to facilitate such trials and promote best practice. We also have a Sustainable Freight Group which supports the roll out of freight accreditation schemes with emissions reduction targets, such as FORS (Freight Operator Recognition Scheme), and helps to identify new technology that needs a test location and would support a more sustainable freight operation at Heathrow. A good example of this is the trial of electric trucks by DNATA at the airport.

12.1.28 We are investigating options to ensure that new vehicle technology can be supported at the airport through appropriate electric vehicle charging or fuel infrastructure at the airport. This is already happening with the introduction of a hydrogen filling station at the airport and our investment of over £4million on electric vehicle charging infrastructure since 2014.

Heathrow's Retail Consolidation Centre already reduces the number of retailer supplier vehicles on the roads entering the airport by 42%. This policy has also driven behaviour change through the supply chain helping to consolidate loads before they arrive at the Consolidation Centre.
13 Building on the success of our Commuter Programme

13.1 Heathrow has a dedicated commuter team, which supports all 76,000+ people who work at the airport. This has led to a reduction in the number of colleagues commuting to work by car. In 1991, around 80% of colleagues travelled to work by car. With a range of initiatives, products and change campaigns – this reduced to just over 50% by 2013.

13.2 During expansion, additional construction colleagues will be at the airport. We will ensure they also can benefit from our Commuter Programme and access the airport in the most sustainable way possible.

Opportunity for change: Small behavioural change making a big difference
If all of those currently driving to work could be encouraged to travel differently one day a week it would reduce colleague car trips to Heathrow by 20%.

H1 Targeted personalised travel planning for colleagues

13.3 We intend to introduce personalised travel plans for each person who starts work at the airport to establish sustainable patterns of travel from the outset, rather than having to change established behaviour. We have already rolled out trials of personalised travel planning to colleagues and as a result this will focus on new starters and when people move home. Establishing sustainable trends from the outset is the most effective way of changing behaviour.

H2 Support discounted colleague public transport travel

13.4 Heathrow has already negotiated a wide range of discounted travel products for all colleagues working at the airport. These include monthly and annual passes that give unlimited travel for a range of bus and coach routes (ranging from £25 to £100 a month) or Heathrow Express (£180 a month).

13.5 We will seek to deliver an expanded discounted product range for any new bus, rail and coach services. We also want to be able to offer products for TfL services and will continue to engage with TfL to understand what is possible.

H3 Reduction and prioritisation of colleague parking

13.6 Heathrow Airport Ltd controls around 39,000 on-airport car parking spaces, with approximately 23,500 spaces for passengers and 15,500 for colleagues. There are a further 12,500 spaces that are under the control of other tenants around the airport including British Airways.

13.7 There are currently approximately 28,000 employee car parking spaces at Heathrow, including 15,500 controlled by the airport. As a result of (or to help achieve) our target of reducing the number of colleague car trips to Heathrow we anticipate that by 2030 the number of Heathrow controlled colleague car parking spaces will need to reduce.

13.8 This will be managed through a gradual transition to ensure the airport can continue to operate efficiently. Policies and procedures will be developed in partnership with airlines and other key Heathrow employers to promote sustainable travel modes and ensure a fair and reasonable process for allocating parking passes. An outline of the options is set out below:

- Adoption of a new parking allocation policy to ensure those that need car parking are able to access it and those with alternative options are encouraged to use them;
- Develop incentives for colleagues to give up car parking permits;
- Offer more flexible parking passes, featuring incentives for car sharing or less frequent usage. Rather than simply owning a pass, passes would be paid for based on usage in order to incentivise more sustainable travel behaviour;
- Reduce parking spaces and parking pass availability over time – as the airport grows, the number of passes on issue and spaces available to employees will be reduced to encourage a shift to public transport.

13.9 We will also work with local authorities to develop schemes to prevent colleagues parking on local residential roads, including support for the introduction of Controlled Parking Zones (CPZs) and their enforcement.

H4 Creating a culture of active travel

13.10 We want to promote active modes of travel such as walking and cycling to and around the airport campus. This is an important part of our wider strategy for mental and physical wellbeing and will support the Mayor of London in his ambitions to deliver healthy streets.

13.11 Key measures will include:

- Continuing to promote walking and cycling as part of our wider wellbeing initiatives;
- Events to build a culture of walking and cycling and promote airport and local community involvement;
- Providing safe and practical routes on key desire lines;
- Clear wayfinding;
- Providing better connections to and around the local community through our green space strategy.
14 Developing the options

14.1 The surface access options represent a broad range of schemes and initiatives which work together to achieve the surface access related targets and pledges set out for expansion of Heathrow.

14.1.1 The surface access options represent a broad range of schemes and initiatives which work together to achieve the surface access related targets and pledges set out for expansion of Heathrow.

14.1.2 Different packages of the schemes and initiatives outlined in Sections 6 to 13 can be developed to meet the passenger mode share targets, colleague car use reduction targets and Heathrow’s commitment to no more Heathrow related traffic with expansion. These packages are being assessed by Heathrow to determine which ones best meet the targets, whilst remaining affordable, financeable and delivering benefits to the UK economy and local communities.

14.1.3 Our analysis shows that the various targets and commitments for surface access can be met through a combination of measures including:

- Expansion of the rail network at Heathrow;
- Bus and coach improvements, including better service frequency and new routes;
- Better management of colleague car travel and parking to reduce single occupancy car trips;
- Measures to make taxi operations more efficient, such as taxi backfilling;
- Supporting measures to make public transport more accessible and attractive;
- Making freight trips more efficient;
- Investment in active travel like cycle lanes to improve first and last mile access to public transport;
- Some form of vehicle charging to manage Heathrow-related traffic levels and encourage people who have a choice to use public transport to access the airport.

14.1.4 On the basis of the analysis carried out to date we are confident that this broad range of measures provides an effective means of meeting the surface access targets and pledges. Further assessment and analysis is ongoing by Heathrow to determine exactly which combinations of measures are required by which date to deliver the best surface access for the expanded airport.

14.2 Initial assessment against surface access targets

14.2.1 Passenger public transport mode share

14.2.1.1 Figure 14.1 illustrates the increase in the passenger public transport mode share required to meet the target of 50% public transport mode share by 2030, and 55% by 2040. It shows that an 11 percentage point increase in public transport mode share is required by 2030. Some of this additional mode share will be achieved through schemes that are already planned such as the Piccadilly line upgrade and the introduction of Elizabeth line services.

14.2.2 The remaining increase in public transport mode share is expected to be secured through a range of other measures including a combination of rail and coach enhancements and proposals that secure more efficient and responsible use of the road network. Our strategy will not require all of the measures set out in sections 6-13 to enable the mode share targets to be met. Our strategy will be to ensure that the right measures are in place at the right times as passenger numbers grow.

14.2.3 If any of the individual measures are not delivered, then other measures can be scaled up to achieve the required targets.

14.2.4 Reduction in colleague car trips

14.2.4.1 Figure 14.2 illustrates the reduction in colleague car trips required to meet the target. It shows that a reduction of 12,000 car trips is required by 2030 (compared to 2013 levels) and a reduction of 24,000 car trips is required by 2040. This reduction can be achieved through a range of measures including improvements to walking, cycling and public transport provision, as well as integrating employment sites with public transport and further development of our successful Commuter Programme.
15 Delivering surface access improvements

15.1 Collaboration

15.1.1 The delivery of our strategy will require us to work with other agencies such as Transport for London, Highways England, Network Rail and Local Authorities. We have a strong history in working with partners to deliver surface access improvements that benefit both Heathrow and the surrounding area.

15.1.2 This offers a unique opportunity to plan the UK’s infrastructure needs in an integrated way and will help ensure the surface access plans for Heathrow are embedded in key strategic long-term planning processes and investment opportunities. For example:

- Highways England is currently delivering a programme of activity that was set out in its first Road Investment Strategy. There are a number of projects in the Heathrow area including M25 J10 improvements, M25 J10-16 and the M4 Smart Motorway between J3 and J12. Plans are currently being developed for the RIS2 (2021-2026) which will include outputs from the M25 Southwest quadrant study and other strategic studies.
- Network Rail is also preparing its plan for the next investment period (2019-24) known as Control Period 6 (CP6).
- The Mayor and Transport for London have set out their priorities for transport in London over the period to 2041.

15.1.3 There is an opportunity to develop a co-ordinated plan for Heathrow surface access that brings together the emerging plans for Heathrow with the programmes developed by Highways England, Network Rail, Transport for London, Local Authorities and others.

15.2 Delivery

15.2.1 This consultation document contains a range of schemes and initiatives, some of which are in the process of being delivered already and others where delivery will be secured through the DCO for expansion. A more detailed programme for delivery of surface access improvements will be developed taking account of comments from the public consultation exercise.

15.3 Funding

15.3.1 The schemes and initiatives within this consultation document will draw on funding from a variety of sources including funding from Heathrow. We are committed to paying our fair share of improvements but as recognised in the ANPS, the proposals that deliver wider benefits will also attract funding from government and other sources. Any funding contribution from Heathrow would be subject to full cost recovery through the regulatory framework.

15.4 Next steps

15.4.1 As a result of the comments received during our consultation we will develop the set of options into a draft Surface Access Strategy that will form part of our statutory consultation. We will continue to engage with interested parties to develop our detailed proposals. If you are interested in being part of that process then please indicate this in your consultation response.

15.4.2 We will also be developing a full Transport Assessment that will form an important part of our Environmental Impact Assessment and our DCO application. We will consult on the scope of this assessment with relevant and interested parties.
If you would like a large text or alternative format of this document, please contact us on 0800 307 7996 or send an email to us at: info@heathrowconsultation.com

There are lots of ways you can contact us and find out more

- **online** via our project website
  www.heathrowconsultation.com

- **call** our freephone number:
  0800 307 7996 (open Monday to Friday, 9am-6pm)

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