PRELIMINARY TRANSPORT INFORMATION REPORT

VOLUME 2 OF 6
PROJECT DESCRIPTION

JUNE 2019
Heathrow is consulting on proposals for an expanded airport.

The Airport Expansion Consultation is our statutory consultation and we will be seeking your view on four key areas:

- Heathrow’s preferred masterplan for expansion: our proposals for the future layout of the airport including the runway and other airport infrastructure such as terminals and road access. The masterplan will also reveal the airport’s growth in phases – from runway opening in around 2026, to the end masterplan in approximately 2050;

- Plans to operate the future airport: how the future three runway airport will be operated, including important elements such as night flights, as well as how potential additional flights before the new runway opens could be operated on our existing two runways;

- Assessment of impacts of the airport’s growth: our preliminary assessment of the likely impacts of expansion on the environment and local communities;

- Plans to manage the impacts of expansion: we will set out the airport’s plans for mitigating the effects of expansion, including property compensation, our Noise Insulation Policy, a Community Fund, and measures to mitigate against air pollution, carbon, and other environmental effects.

We are grateful for feedback provided at previous consultations, and have considered these responses in developing our proposals. We now ask for your views on our preferred proposals, so that we can further improve our project before we apply for development consent next year. You can provide feedback:

- online using the feedback form on our website aec.heathrowconsultation.com
- complete a feedback form, available at events or on request calling 0800 307 7996
- email us at feedback@heathrowconsultation.com
- write to us at Freepost LHR AIRPORT EXPANSION CONSULTATION

We have set out our proposals in a number of documents covering different topics and different levels of detail. All of these are available on our website, at Document Inspection Locations and at consultation events.
# AIRPORT EXPANSION CONSULTATION DOCUMENT

Overview and summary of the below documents:

<table>
<thead>
<tr>
<th>Document</th>
<th>Preferences and transport information</th>
<th>Proposals for Mitigation and Compensation</th>
<th>Consultation One Consultation Feedback Report</th>
<th>Heathrow Expansion and your area – Bedford and Mayfield Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Proposals</td>
<td>Early Growth</td>
<td>Draft Code of Construction Practice</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Surface Access Proposals</td>
<td>Preliminary Transport Information Report</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Equality Impact Assessment: Initial Findings</td>
<td>Noise Insulation Policy</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Economic Development Framework</td>
<td>How do we obtain approval to expand Heathrow?</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Environmentally Managed Growth</td>
<td>Healthrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Property Policies Information Paper</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Property &amp; Land Acquisition and Compensation Policies - Interim Professional Fees</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Property &amp; Land Acquisition and Compensation Policies - Interim Harship Scheme</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Property &amp; Land Acquisition and Compensation Policies - Interim Harship Scheme Panel Guidance</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Property &amp; Land Acquisition and Compensation Policies - Interim Agricultural Land and Property</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Property &amp; Land Acquisition and Compensation Policies - Interim Residential Property</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updated Scheme Development Report</td>
<td>Property &amp; Land Acquisition and Compensation Policies - Interim Commercial Property</td>
<td>Heathrow Expansion and your area – Cranford, Hurnton and North Feltham</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FEEDBACK FORM**

Have your say on the consultation by using the Airport Expansion Consultation Feedback Form or on our website: ecc.heathrowconsultation.com.
# CONTENTS

## PTIR VOLUME 2

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overview of the PTIR</td>
<td>6</td>
</tr>
<tr>
<td>1.1 What is the PTIR?</td>
<td>7</td>
</tr>
<tr>
<td>1.2 Geographic scope of the PTIR</td>
<td>8</td>
</tr>
<tr>
<td>1.3 Structure of the PTIR</td>
<td>9</td>
</tr>
<tr>
<td>1.4 The proposed Project</td>
<td>10</td>
</tr>
<tr>
<td>2. The Proposed Project</td>
<td>11</td>
</tr>
<tr>
<td>2.1 Chapter overview</td>
<td>11</td>
</tr>
<tr>
<td>2.2 The proposed Project</td>
<td>11</td>
</tr>
<tr>
<td>2.3 Project dependencies</td>
<td>12</td>
</tr>
<tr>
<td>2.4 The Preferred Masterplan</td>
<td>12</td>
</tr>
<tr>
<td>2.5 Airport Operating Protocol</td>
<td>14</td>
</tr>
<tr>
<td>Aircraft and passenger capacity</td>
<td>14</td>
</tr>
<tr>
<td>Night flight restrictions</td>
<td>15</td>
</tr>
<tr>
<td>2.6 Built development</td>
<td>16</td>
</tr>
<tr>
<td>Runways</td>
<td>16</td>
</tr>
<tr>
<td>Taxiways and aprons</td>
<td>16</td>
</tr>
<tr>
<td>Terminals</td>
<td>16</td>
</tr>
<tr>
<td>Airport Supporting Development</td>
<td>18</td>
</tr>
<tr>
<td>Airport Related Development</td>
<td>20</td>
</tr>
<tr>
<td>Displaced facilities</td>
<td>21</td>
</tr>
<tr>
<td>2.7 Parking</td>
<td>25</td>
</tr>
<tr>
<td>Car parking</td>
<td>25</td>
</tr>
<tr>
<td>Coach parking</td>
<td>28</td>
</tr>
<tr>
<td>Lorry parking</td>
<td>28</td>
</tr>
<tr>
<td>2.8 Associated Surface Access Infrastructure</td>
<td>28</td>
</tr>
<tr>
<td>M25 Realignment</td>
<td>29</td>
</tr>
<tr>
<td>M25 Junctions 14 and 14A</td>
<td>31</td>
</tr>
<tr>
<td>M4 Junction 4 and M4 Spur</td>
<td>32</td>
</tr>
<tr>
<td>A4 Replacement</td>
<td>33</td>
</tr>
<tr>
<td>A3044 Replacement</td>
<td>34</td>
</tr>
<tr>
<td>Stanwell Moor Junction</td>
<td>35</td>
</tr>
<tr>
<td>Emirates Junction</td>
<td>36</td>
</tr>
<tr>
<td>Southern Road Tunnel</td>
<td>37</td>
</tr>
<tr>
<td>Southern Perimeter Road</td>
<td>39</td>
</tr>
<tr>
<td>Cargo Area Access Road</td>
<td>40</td>
</tr>
<tr>
<td>Western Perimeter Road</td>
<td>41</td>
</tr>
<tr>
<td>3. Surface Access Proposals</td>
<td>42</td>
</tr>
<tr>
<td>3.1 Chapter overview</td>
<td>42</td>
</tr>
<tr>
<td>3.2 What is surface access?</td>
<td>42</td>
</tr>
</tbody>
</table>
3.3 The requirement for a Surface Access Strategy 42
3.4 The structure of the Surface Access Proposals document 43
3.5 How the surface access proposals have been developed and tested 44
   How the views of others have informed its development 44
   Testing the Surface Access Proposals 45
   Ensuring the Surface Access Strategy is effective 46
3.6 Heathrow’s Surface Access Proposals 48
   Non modelled benefits 51
3.7 Heathrow’s approach to delivery and monitoring of the SAP 53
   Delivering the Surface Access Strategy 53
   Monitoring the performance of the Surface Access Strategy 53
   The Environmentally Managed Growth Framework 54

4. Proposed Construction Management Arrangements 55
4.1 Chapter overview 55
4.2 Construction site arrangements 55
   Construction Support Sites (CSS) 55
   Construction Hubs 55
   Internal construction roads 55
   Working Hours 56
4.3 Construction Freight and Workforce Plan 56
   Management of construction freight traffic 57
   Management of construction workforce travel 57
PTIR VOLUME 2

The Preliminary Transport Information Report (PTIR) provides preliminary information about future changes to the use and operation of the surface transport networks associated with the proposed expansion of Heathrow Airport (“the proposed Project”).

This document, which forms Volume 2 of the PTIR, describes the proposed Project, the accompanying surface access proposals and the preliminary construction travel management arrangements.

It is structured as follows:

1. **Chapter 1** provides an introduction to and overview of the purpose and structure of the PTIR and briefly describes the proposed Project.

2. **Chapter 2** provides an overview of the proposed Project in its ‘end state’ (756,000 ATMs, 142 mppa). The year at which the ‘end state’ is realised will depend on the airport growth trajectories and phasing of the project but is currently forecast to be reached before or by 2050.

3. **Chapter 3** provides an overview of the Surface Access Proposals (SAP) which form part of the proposed Project.

4. **Chapter 4** provides a description of the preliminary construction travel management arrangements.
1. **OVERVIEW OF THE PTIR**

1.1 **What is the PTIR?**

1.1.1 The PTIR has been prepared for Heathrow's Airport Expansion Consultation, which takes place in summer 2019. The consultation is a statutory requirement of the proposed Development Consent Order (DCO) application for the proposed Project. It is currently envisaged that Heathrow will submit its DCO application during 2020.

1.1.2 The purpose of the PTIR is to provide preliminary information about:

1. Surface access infrastructure: a description of the transport networks at and around Heathrow and of committed, planned and proposed changes (including by third parties) to these networks in the future with and without the proposed Project.

2. Surface access interventions: details of existing measures and initiatives designed to influence travel behaviour and details of committed, planning and proposed changes to these interventions in the future with and without the proposed Project.

3. Airport travel demand: details of existing travel demand on all relevant modes of transport associated with the movement of air passengers, colleagues and freight to and from the airport and forecasts of how this is expected to change in the future with and without the proposed Project.

4. Transport network use and operation: details about existing conditions on all relevant transport networks and how these conditions are predicted to change in the future with and without the proposed Project.

1.1.3 The PTIR is a precursor to the Transport Assessment (TA) which will accompany the DCO application. However, the information presented in the PTIR is preliminary and it should not be considered a ‘draft’ TA.

1.1.4 The PTIR should be read in conjunction with the following documents which also provide information on the surface transport aspects of the proposed Project:

1. The Surface Access Proposals (‘the SAP’), which sets out Heathrow’s proposals for its Surface Access Strategy that will form part of the DCO application for the proposed Project.

2. The Transport Network Users Chapter of the Preliminary Environmental Information Report (‘the PEIR TNU Chapter’), which is a precursor to the Transport Network Users Chapter of the Environmental Statement that will form part of the DCO application for the proposed Project.
3. The Preliminary Outline Construction Traffic Management Plan (‘the POCTMP’), which describes the range of measures that would be used to encourage sustainable freight and manage the impacts of construction traffic.

4. The Preliminary Outline Construction Workforce Travel Plan (‘the POCWTP’), which focuses specifically on how construction workers would be likely to travel to and from the construction site and identifies measures that encourage alternatives to the use of private car, especially single occupancy journeys.

1.2 Geographic scope of the PTIR

1.2.1 Heathrow Airport attracts travellers and colleagues from across the UK. The majority of this demand originates in London and the South East of England. The PTIR therefore concentrates on demand in these areas. The geographic scope of the PTIR is illustrated in Graphic 1.1.
1.2.2 The information presented in Volumes 3 to 6 of the PTIR focuses on travel demand on the strategic road and rail networks and in the local authorities within approximately 16km (10 miles) of the airport, which are where changes associated with the proposed Project are most likely to occur. The local authorities have been grouped into four local quadrants representing areas to the north-east, south-east, north-west and south-west of the airport.

1.2.3 **Volume 3 of the PTIR (Airport Travel Demand)** also includes information about air passenger, colleague and airport freight travel demand from the rest of London and four wider quadrants covering the remainder of the South East of England and part of the East of England.

1.2.4 The remainder of the air passenger, colleague and airport freight travel demand is dispersed across the rest of the UK.

**1.3 Structure of the PTIR**

1.3.1 The PTIR as a whole is formed of six volumes as set out below:

1. **Volume 1** provides an introduction to the PTIR and to the proposed Project, including a description of relevant Policy, information on the existing airport site, a description of the area over which information is provided within the PTIR and an overview of the modelling suite and key assumptions.

2. **Volume 2** (this volume) describes the proposed Project, the accompanying surface access proposals (as set out in the SAP) and the preliminary construction travel management arrangements contained in the POCTMP and POCTWP.

3. **Volume 3** describes the different types of airport travel demand and provides information on existing and future travel demand with and without the proposed Project.

4. **Volume 4** provides information on the existing and future active travel networks (primarily walking and cycling), and how the operation of these may change as a result of the proposed Project.

5. **Volume 5** provides information on the existing and future public transport, including bus, coach, public rail and London Underground networks and how the operation of these may change as a result of the proposed Project.

6. **Volume 6** provides information on the existing and future highway network, including private cars, taxis and freight as well as airport car parks and terminal forecourts, and how the operation of these may change as a result of the proposed Project.
1.4 The proposed Project

1.4.1 The proposed Project comprises the delivery of a new (third) runway to the north-west of the airport, together with associated on and off-site development, car parking and transport infrastructure, landscaping, mitigation and compensation works. The implementation of the new runway will also require a section of the M25 motorway to the west of the airport to be realigned and placed in a tunnel and sections of the A4 and A3044 to be diverted. The airport’s two existing runways will be retained.

1.4.2 The proposed Project also includes measures and interventions which Heathrow proposes to implement to influence the way that people and goods travel to and from the airport, as outlined in the SAP.

1.4.3 The proposed Project also includes the measures and initiatives that are proposed to manage construction travel associated with the expansion of the airport, which are set out in the POCWTP and POCTMP.

1.4.4 All of these elements are considered in combination when reporting on changes to travel demand and network operation associated with the proposed Project in the PTIR.
2. **The Proposed Project**

2.1 **Chapter overview**

2.1.1 This chapter describes the airport operating parameters and physical components of the proposed Project of most relevance to the PTIR, including proposals for built development, parking and highway infrastructure.

2.2 **The proposed Project**

2.2.1 The proposed Project comprises:

1. Changes to Operating Protocol including aircraft and passenger capacity and night flight restrictions.

2. Built development including:
   a. The construction and operation of a new (third) runway and associated taxiways, terminals and aprons.
   b. Airport supporting development such as cargo facilities, maintenance, repair and overhaul and industrial units.
   c. Airport related development including hotels and warehousing.
   d. Displaced facilities.

3. Changes to car, coach and HGV parking.

4. Infrastructure associated development, specifically road/highways diversions including the realignment of a section of the M25 motorway to the west of the airport and placing it in a tunnel.

2.2.2 It also comprises the ‘toolbox’ of potential measures and interventions which Heathrow proposes to implement to influence the way that people and goods travel to and from the airport, as outlined in the Surface Access Proposals (‘the SAP’) document. Further details about the SAP are provided in Chapter 3.

2.2.3 In addition, it includes the measures and initiatives that are proposed to manage construction activity associated with the expansion of the airport, which are set out in the Preliminary Outline Construction Traffic Management Plan (‘the POCTMP’) and the Preliminary Outline Construction Workforce Travel Plan (‘the POCTWP’). Further details about these documents are provided in Chapter 4.
2.3 Project dependencies

2.3.1 Network Rail is promoting a Western Rail Link (or Heathrow Rail Link) project independently from Heathrow’s proposals for a third runway. Proposals for a Western Rail Link would be the subject of a separate DCO application, however, the timescales for submission of the application and delivery of the project are currently uncertain.

2.3.2 Heathrow’s plans for expansion have been designed to be compatible with, although independent of a future Western Rail Link. Whilst it is anticipated that the Western Rail Link project will have progressed sufficiently by the time Heathrow submits its DCO, as a precaution it has been assumed that it may not be in place.

2.3.3 A decision has yet to be made on whether proposals for a Southern Rail Link are to proceed. Proposals for a Southern Rail Link would be the subject of a separate DCO application. Similar to the approach taken in relation to the proposed Western Rail Link, Heathrow’s plans for expansion have been designed to be compatible with, although independent of, a potential future Southern Rail Scheme.

2.3.4 Proposals for the Western Rail Link and for the Southern Rail Link therefore do not form part of the proposed Project.

2.4 The Preferred Masterplan

2.4.1 A series of illustrative Preferred Masterplan drawings have been prepared showing potential layouts for different phases of the expansion of Heathrow. These drawings show one interpretation of the proposed Project. The illustrative Preferred Masterplan for the ‘end state’ (Phase 4) is shown in Graphic 2.1.

2.4.2 As discussed in Volume 1 of the PTIR (Introduction), there are a number of locations on the Preferred Masterplan where different options are still under consideration or elements of the masterplan have been further refined since the preliminary surface access modelling was undertaken. The potential implications of these changes are discussed in Volume 3 of the PTIR (Airport Travel Demand) and the relevant modal volumes (Volumes 4-6 of the PTIR).
Graphic 2.1  Illustrative Preferred Masterplan for ‘End State’ (Phase 4)
2.5 **Airport Operating Protocol**

2.5.1 The proposed Project would increase Heathrow’s flight and air passenger capacity and would fundamentally change the way that the airport operates. The elements of the proposed Project that determine how Heathrow would operate are called the ‘Operating Protocol’.

2.5.2 The proposed changes to Operating Protocol that are considered relevant to the PTIR are described below.

**Aircraft and passenger capacity**

2.5.3 In its ‘end state’, the proposed Project would enable the airport to increase its operating capacity from 480,000 Air Traffic Movements (ATMs) per annum (a cap imposed by planning conditions on the Terminal 5 permission) to approximately 756,000 ATMs per year and from 78 million passengers per annum to approximately 142 million passengers per annum. Cargo throughput is forecast to increase from around 1.5 million tonnes per year to around 2.9 million tonnes per year.

2.5.4 The growth in ATMs and air passenger demand would be phased between 2022, following the grant of DCO consent, and the ‘end state’, which is currently forecast to be reached before or by 2050.

2.5.5 It is envisaged that the third runway would open in late 2026, with the first full year of operation taking place in 2027. The exact growth trajectory is still to be determined and it would be dependent on a number of factors including the ambition of airlines to operate new routes, and, potentially, environmental constraints.

2.5.6 Prior to the opening of the third runway, an early increase in the number of Air Traffic Movements (ATMs) is proposed. This would involve raising the current flight movements cap by 25,000 ATMs per year, enabling the two existing runways to accommodate around 505,000 ATMs per annum.

2.5.7 Graphic 2.2 illustrates the anticipated growth in ATMs between today (2018) and the ‘end state’, while Graphic 2.3 shows passenger throughput over the same period.
Night flight restrictions

2.5.8 Heathrow is currently restricted to 5,800 take-offs and landings a year during the night (23:00-07:00). Heathrow operates a voluntary ban that prevents flights scheduled between 04:30 and 06:00 from landing before 04:30. There is also a night quota limit, which caps the amount of noise the airport can make at night.
2.5.9 The remaining flights that operate after 23:00 are primarily unscheduled late running departures. These do not occur every night and are generally depart before 01:00.

2.6 **Built development**

*Runways*

2.6.1 Heathrow airport currently has two runways, known as the northern and southern runways. The northern runway is approximately 3.9km long and the southern runway is approximately 3.7km long. The two runways are separated by approximately 1.4km, with a range of land uses including taxiways, passenger terminals, aprons and aircraft stands in between. The runways are oriented east-westwards and can support take-offs and landings in either a westerly or easterly direction.

2.6.2 The proposed third runway, also referred to as the ‘north-west’ runway, would be 3.5km in length, with an available landing distance of 2.95km. The distance between the proposed runway and the existing northern runway would be approximately 1.0km.

2.6.3 The proposed runway has been designed to accommodate aircraft with wingspans up to 80m in length (known as Code F aircraft) such as the Airbus A380.

2.6.4 As part of the proposed Project, works are also proposed to increase the length of the existing northern runway to approximately 4.1km.

*Taxiways and aprons*

2.6.5 As part of the proposed Project, new taxiways would serve the proposed runway and connect it with the existing airport.

2.6.6 In addition, a number of existing aprons around Terminal 2 (T2A) and Terminal 5 (T5A) would be reconfigured, with new aprons added to serve the proposed new terminal building in the Western Campus (T5X-W) and the new satellite buildings serving Terminal 2 (T2C) and Terminal 5 (T5X-N).

*Terminals*

2.6.7 Increased terminal capacity would be delivered through a combination of new terminal buildings (with associated infrastructure) and intensification of the use of existing terminals, satellites and associated infrastructure. The proposed changes are described in more detail in the following paragraphs.
**Eastern Campus**

2.6.8 In the Eastern Campus, which is commonly known as the Central Terminal Area or CTA, it is proposed that Terminal 1 (which is no longer in use) would be demolished to enable the development of new terminal facilities to the north of existing Terminal 2 (known as T2A).

2.6.9 A new satellite building, known as T2C, and a new bank of aircraft stands would also be built in the east of the existing satellite building (known as T2B).

2.6.10 Terminal 3 is proposed to be demolished in the later stages of the construction of the Project, and five new banks of live stands would be provided in its place. The new apron will be served from Terminal 2, with a new satellite building, known as T2D, being built to the west of the terminal.

2.6.11 In combination, these proposed changes would increase the capacity of the Eastern Campus to 52mppa.

2.6.12 The landside terminal zone in the Eastern Campus would include a public transport interchange, vehicle drop off/pick-up areas, multi-storey car parks, commercial developments and passenger facilities. Land would be safeguarded for Personal Rapid Transit (PRT) or Group Rapid Transit (GRT) infrastructure.

2.6.13 Road access to the landside terminal zone in the Eastern Campus would be via the existing northern road tunnels and the proposed new southern road tunnel (described in more detail below in the ‘Associated Surface Access Infrastructure’ section below).

**Terminal 4**

2.6.14 No changes are proposed to Terminal 4. The capacity of the existing terminal would be 12mppa.

**Western Campus**

2.6.15 In the Western Campus, the current Terminal 5 building (known as T5A) has two satellite buildings to its east.

2.6.16 It is proposed that a new terminal building, known as T5X-W, would be built to the west of the existing terminal building. This would be linked to T5A and would act as a ‘passenger processor’, containing the key passenger processing facilities such as check-in, security, immigration, baggage reclaim and a transfer facility.

2.6.17 In addition, a new satellite building, known as T5X-N, would be located adjacent to the third runway. The precise location of this new satellite terminal is not fixed, and would be delivered within a set parameter envelope, with its size determined by the required capacity.
In total, the new terminal building (T5X-W) and new satellite building (T5X-N) would increase the capacity of the Western Campus by 37.5mppa.

Linear extensions would also be made to the existing satellite buildings to the east of Terminal 5, which would increase their capacity to 7mppa.

In combination, these proposed changes would increase the capacity of the Western Campus to 77.5mppa.

The landside terminal zone in the Western Campus would include a public transport interchange, vehicle drop off/pick-up areas, multi-storey car parks, commercial developments and passenger facilities. Land would be safeguarded for Personal Rapid Transit (PRT) or Group Rapid Transit (GRT) infrastructure.

Road access to the landside terminal zone in the Western Campus would be from M25 Junction 14A to the west and from the Stanwell Moor Junction on the Southern Perimeter Road to the south.

**Campus Connectivity**

Initially, it is proposed to use Mass Rapid Transit (MRT) to connect the Parkways to the Eastern and Western campuses. These vehicles would provide a similar level of service to a tram-style system and would operate on the public roads.

There is also potential for the landside terminal zones in the Eastern and Western campuses to be connected with the parkways by Group Rapid Transit (GRT) and Personal Rapid Transit (PRT) systems.

Connections between the Eastern and Western campuses and Terminal 4 would continue to be provided by the on-airport rail links.

**Airport Supporting Development**

‘Airport Supporting Development’ (ASD) is a term which is used to describe a range of facilities that are core components of the proposed Project.

**Airport Facilities**

To support the proposed Project, it would be necessary to grow various airport facilities including:

1. Parking for ground service equipment (GSE).
2. Emergency facilities.
3. Aircraft turnaround support facilities/infrastructure.
4. Baggage facilities.
5. Vehicle control posts.
6. Aircraft fuelling facilities.
7. Airport operations building(s).
8. Winter resilience infrastructure.
9. VIP facilities.
10. Vehicle maintenance facilities.

The proposed Project includes additional facilities in a number of development zones across the airport campus.

The majority of these facilities are located airside and therefore do not generate landside traffic, therefore, no allowance has been made for the replacement office space for Waterside in the transport modelling that underpins the PTIR.

**Maintenance, Repair and Overhaul**

Heathrow has significant Maintenance, Repair and Overhaul (MRO) facilities for aircraft operating from the airport, and with expansion the scale of facilities required for this function would increase. The existing maintenance base would be reconfigured with additional hangars and other accommodation proposed. The existing Cathedral Hangar and Technical Block E (TBE) would be demolished to facilitate the redevelopment and rationalisation of this area.

The airport growth forecasts that feed into the transport modelling that underpins the PTIR take account of the growth and redistribution of jobs and the growth in freight traffic associated with these proposed uses.

**Cargo**

In 2017, Heathrow handled approximately 1.5 million tonnes of cargo. Existing cargo handling facilities are concentrated to the south of the airport and to the east of the airport. By 2035 with the proposed Project, the throughput of these facilities is expected to increase to around 2.9 million tonnes per annum.

To support this growth, up to 202,060 square metres of new cargo floorspace is proposed, including the reconfiguration and intensification of the existing ‘SEGRO Horseshoe’ and additional accommodation to the north, east and south of the existing IAG World Cargo Centre.

The airport growth forecasts that feed into the transport modelling that underpins the PTIR take account of the growth and redistribution of jobs and the growth in freight traffic associated with these proposed uses.
Industrial

2.6.35 Up to 151,500 square metres of industrial development is proposed as part of the proposed Project. The majority of facilities that fall under the ‘industrial facilities’ category are related to utilities, engineering, contractor’s compounds, in-flight catering and displaced industrial uses.

2.6.36 The airport growth forecasts that feed into the transport modelling that underpins the PTIR take account of the growth and redistribution of colleague travel demand and the growth in freight traffic associated with these proposed uses.

Airport Related Development

2.6.37 ‘Airport Related Development’ (ARD) is a term which is used to describe a range of development which is not critical to the operation of the airport but which facilitates the use of the airport by passengers and colleagues, such as hotels, offices, and warehousing.

2.6.38 The proposed Project includes provision for new hotel, office and warehousing floorspace as described below.

2.6.39 The air passenger, colleague and freight growth forecasts that feed into the transport modelling that underpins the PTIR take account of the growth and redistribution of airport travel demand associated with these proposed uses.

Hotels

2.6.40 The expansion of Heathrow airport would require re-provision of hotels which are displaced through the physical expansion of the airport and implementation of the new runway, and also to respond to increased demand for hotel rooms to support the increase in passenger and crew numbers. The proposed distribution of the hotel provision is summarised below:

1. Eastern Campus (CTA): approximately 65,500 square metres
2. Western Campus (T5): approximately 151,500 square metres
3. Northern Parkway: approximately 20,000 square metres
4. Southern Parkway: approximately 23,000 square metres
5. Hatton Cross: approximately 66,000 square metres
6. East of existing runways approximately 27,500 square metres
7. North of existing northern runway approximately 20,800 square metres
2.6.41 The combined total of hotel provision is proposed to be approximately 375,000 square metres.

**Offices**

2.6.42 Approximately 20,500 square metres of office activity is proposed in two locations:

1. Eastern Campus (CTA): approximately 8,000 square metres
2. Hatton Cross: approximately 12,500 square metres

**Warehousing**

2.6.43 In order to support the increase in cargo capacity that is proposed as a result of expansion, additional off-airport warehousing floorspace would be required. Specifically, additional freight forwarding facilities, which primarily handles import/export cargo associated with activity on airport, would be needed.

2.6.44 The proposed distribution of warehouse distribution is summarised below:

1. East of existing southern runway: approximately 11,600 square metres
2. Mayfields Farm: approximately 65,000 square metres
3. M25 and River Corridor: approximately 13,500 square metres
4. South of Colnbrook: approximately 59,000 square metres

2.6.45 The combined amount of warehouse space in these areas equates to around 151,500 square metres.

**Displaced facilities**

2.6.46 A number of existing facilities would be displaced by the proposed Project. The following paragraphs describe the principle existing uses that would be affected by the proposed Project and indicates whether it is proposed that they would be replaced as part of the proposed Project, replaced through the local planning process or whether it is expected that their re-provision would be addressed by the market.

**Immigration Removal Centres (IRCs)**

2.6.47 The Home Office’s Harmondsworth and Colnbrook IRCs are located on adjacent sites to the north of the Colnbrook Bypass (A4) and east of the Duke of Northumberland’s River. These facilities are located on land which would be used for the proposed new runway and taxiways and would therefore be displaced as part of the proposed Project.
2.6.48 Given the important function the IRCs play in relation to the airport and the requirements set out in the Airports NPS, a replacement site would be provided as part of the DCO application. It is proposed that this replacement facility would be located to the south of the maintenance area.

2.6.49 The replacement facility would provide equivalent amenities and capacity to the existing facilities.

2.6.50 These facilities generate very few vehicle movements, therefore no specific allowance has been made for the replacement IRCs in the transport modelling that underpins the PTIR, although overall growth associated with the proposed Project is taken into account.

**Lakeside Waste Management Facilities**

2.6.51 The Lakeside Waste Management Facilities are currently located in Lakeside Industrial Estate in Colnbrook. The Energy from Waste (EfW) facility is located to the south-west of the M25/M4 junction. Both facilities are in the path of the proposed new runway and taxiways and would therefore be displaced as part of the proposed Project.

2.6.52 Two scenarios are under consideration:

1. The facility is not re-provided in the proposed Project, but would come forward separately through a Town and Country Planning Application promoted by the operators. The proposed Project safeguards land for this eventuality.

2. The facility is not re-provided and the safeguarded site would be developed for Airport Supporting Development as part of the proposed Project.

2.6.53 Given the uncertainty about the future re-provision of these facilities, no allowance has been made for the replacement office space for Waterside in the transport modelling that underpins the PTIR.

**British Airways’ Waterside Office Complex**

2.6.54 The Waterside office complex is located north of the Colnbrook Bypass (A4) and east of Harmondsworth Moor. It is also in the path of the proposed new runway and taxiways and would therefore be displaced as part of the proposed Project.

2.6.55 The proposed Project does not include replacement office space for Waterside, but does allow for British Airways to bring forward its own proposals for a new office complex.

2.6.56 Given that replacement facilities would not form part of the proposed Project, no allowance has been made for the replacement office space for Waterside in the transport modelling that underpins the PTIR.
BT Data Centre and Maintenance Depot

The BT Data Centre and Maintenance Depot are located north of the Colnbrook Bypass (A4), east of the Duke of Northumberland’s River. Both facilities are in the path of the proposed new runway and taxiways and would therefore be displaced as part of the proposed Project.

These facilities are not essential to airport operations and, as such, no replacement facilities are included in the proposed Project.

Given that replacement facilities would not form part of the proposed Project, no allowance has been made for the replacement of these facilities in the transport modelling that underpins the PTIR.

Total Fuel Depot

The existing Total Fuel Depot site of approximately 1.5 hectares is located within Poyle Industrial Estate, to the west of the M25. It is also in the path of the proposed new runway and taxiways and would therefore be displaced as part of the proposed Project.

Given the importance of this facility to the operation of the airport, it is proposed to provide a replacement fuel depot facility as part of the DCO application.

The depot receives aviation jet fuel by train and distributes it to the airport via an underground pipeline. A new underground pipeline would therefore need to be constructed to connect the Rail Terminal to the Northern Fuel Receipt Facility (NFRF).

Given that the Total Fuel Depot is primarily served by rail, no allowance has been made for its relocation in the transport modelling that underpins the PTIR.

Rail Head

The rail line that serves the fuel depot would also likely be severed by the new runway, so a replacement rail head would need to be provided.

It is proposed that the replacement rail head would be located on the Colnbrook branch of the Great Western Main Line (GWML). The new rail head would be located immediately to the north-west of the new runway where it crosses the M25 into the Colne Valley, close to the existing rail logistics facilities.

The capacity of the rail head would be dictated by the number of train paths available to move trains from the rail head on to the GWML. Further work with Network Rail is required to establish capacity, but it is likely that the railhead would operate 24 hours a day to utilise available paths during the night when passenger rail services are much reduced.
Given that the rail head generates little traffic, no allowance has been made for its relocation in the transport modelling that underpins the PTIR.

**Aggregate Industries**

Aggregate Industries operates a rail- and road-served aggregates site, which is located to the south west of the M25/M4 junction. Its operational area covers around 10 acres and comprises a rail unloading system together with a rail-fed asphalt plant and ready-mix concrete plant. It is in the path of the proposed new runway and taxiways and would therefore need to be removed as part of the proposed Project.

Three scenarios are under consideration:

1. The facility is re-provided to the north-west of the new runway as part of the proposed Project.

2. Land is safeguarded for a facility to be re-provided to the north-west of the new runway, which would come forward separately through a Town and Country Planning Application promoted by the operators.

3. The facility is not re-provided and it is excluded from the DCO with up to 15,000 square metres for Heathrow’s Consolidation Centre provided instead.

Given the uncertainty about the future re-provision of these facilities, no allowance has been made for the replacement facilities in the transport modelling that underpins the PTIR.

**Community Facilities**

A number of community facilities would be displaced by the proposed Project. The current proposals in respect of these community facilities is described below:

**Harmondsworth Primary School**

The school will be demolished, with a preferred strategy to re-provide the school in close proximity in order to limit disruption to children, staff and families. Facilities could be delivered as permanent buildings during the 2022 school summer holiday. This is a preliminary position subject to further engagement and technical assessment.

**Heathrow Special Needs Centre**

The Heathrow Special Needs Centre is proposed to be demolished with a preferred strategy for re-provision south of Colnbrook. This is a preliminary position subject to further engagement and technical assessment.
Harmondsworth Community Hall (including Wonderland Nursery)

2.6.74 It is proposed that the existing Harmondsworth Community Hall building would be retained and repurposed as a community hub as part of the proposed Project.

Wonderland Day Nursery, Harmondsworth and Littleford Nursery, Longford

2.6.75 It is proposed that the nursery facilities at Wonderland Day Nursery and Littleford Nursery in Longford would not be re-provided as part of the proposed Project.

2.6.76 Given the uncertainty about the future re-provision of these facilities, no allowance has been made for their replacement in the transport modelling that underpins the PTIR.

2.7 Parking

2.7.1 As part of the proposed Project, changes are proposed to the quantum and location of parking on the airport. The following sections describe the proposed changes to car, coach and HGV parking.

2.7.2 These proposals are preliminary and are subject to further refinement following development of the masterplan, Surface Access Strategy and associated modelling.

Car parking

2.7.3 At this stage it is envisaged that the proposed Project would include allowance for up to 63,400 parking spaces on the airport, covering public, colleague and operational uses.

2.7.4 It is proposed that this parking would be indicatively distributed as follows:

1. Around 43,400 public parking spaces.
2. Around 2,100 airport hotel parking spaces.
3. Around 11,600 colleague parking spaces.
4. Around 4,500 spaces for car hire.
5. Around 1,350 authorised vehicle spaces.
6. Around 450 taxi feeder spaces.

2.7.5 In addition, it is assumed that around 3,600 of the existing off-site car parking spaces, which are outside Heathrow’s control, would remain in the future. In combination with the proposed on-airport car parking provision, this would give a total of around 67,000 airport-related car parking spaces.
This car parking on the airport would be distributed across the airport campus, with the principal parking areas being:

1. Eastern Campus (CTA): up to 3,600 spaces.
2. Terminal 4: up to 10,750 spaces.
3. Western Campus (T5): up to 4,300 spaces.
4. Northern Parkway: up to 24,000 spaces.
5. Southern Parkway: up to 22,000 spaces.

Further information is provided about each of these parking areas in the following paragraphs.

**Eastern Campus (CTA) Parking**

Much of the existing short-stay car parking in the landside terminal zone for the Eastern Campus would be retained. The total amount of car parking available would be reduced from around 5,200 spaces to around 3,600 spaces.

The existing business and long-stay parking serving Terminals 2 and 3 would be progressively relocated to the Northern Parkway as it is built out.

**Terminal 4 Parking (including Maintenance Base and Southside)**

The existing short-stay car parking adjacent to Terminal 4 would be retained.

The existing long-term and business parking serving Terminal 4, which is located to the south of the Southern Perimeter Road, would also be retained.

New multi-storey car parks are proposed to consolidate the colleague parking in the Maintenance Base and in areas to the south of the Southern Perimeter Road.

**Western Campus (T5) Parking**

The existing short-stay car parking in the landside terminal zone for the Western Campus would be retained. The total amount of car parking available would remain at around 4,300 spaces.

The existing business and long-stay parking serving Terminals 2 and 3 would be progressively relocated to the Southern Parkway as it is built out.
Northern Parkway

2.7.15 The proposed Northern Parkway would be located to the north of the airport, east of the M4 Spur and south of the M4. Access to the Parkway would be from M4 Junction 4 and also via a proposed new junction on the M4 Spur. The Northern Parkway would also be accessible via the proposed new A4 route, which would provide road access to and from the main airport campus.

2.7.16 It would include up to 24,000 spaces, which would comprise a mixture of public, valet and colleague parking. In addition, there would be a forecourt for air passenger drop off/pick-up (also referred to as ‘kiss and fly’).

2.7.17 The Northern Parkway would be connected to the Eastern Campus by a Mass Rapid Transit (MRT) system, which would travel on public roads via the M4 Spur and Emirates Junction.

2.7.18 There is also potential for the Northern Parkway to be connected to the Eastern Campus using either Personal Rapid Transit (PRT) or Group Rapid Transit (GRT) in the future. A route has therefore been reserved for a grade separated PRT or GRT system that crosses above the Emirates Junction before descending to run through the side bores of the northern road tunnel into the Eastern Campus landside terminal zone.

Southern Parkway

2.7.19 The proposed Southern Parkway would be located to the south-west of the airport, south of the Southern Perimeter Road and east of the Stanwell Moor Road (A3044). Access to the Parkway would be via a direct spur from a proposed new roundabout on the Southern Perimeter Road, to the east of Stanwell Moor Junction.

2.7.20 The Southern Parkway would include up to 22,000 spaces, comprising a mixture of public and colleague spaces.

2.7.21 The Southern Parkway would be connected to Western Campus by a Mass Rapid Transit (MRT) system, which would travel on the public roads via the Stanwell Moor Junction.

2.7.22 There is also potential for the Southern Parkway to be connected to the Western Campus using either PRT or GRT in the future. A route is reserved for a grade separated PRT or GRT system that crosses above the Southern Perimeter Road before diving underground to reach the Western Campus landside terminal zone.
2.7.23 Coach parking

The proposed Project would include surface level coach parking on the airport campus. This would provide parking for:

1. Airside coaches, which are used to transport air passengers between aircraft and terminal buildings.
2. Landside MRT vehicles, which would be used to provide connectivity between the parkways and terminals and to transport colleagues around the airport.
3. Landside coaches that are waiting to be called forward to the drop-off/pick-up areas in the landside terminal zones. This would replace the existing facility adjacent to the Emirates Junction, which would be removed as part of the proposed Project.

2.7.24 It is proposed that the landside coach park would be located to the east of the existing northern runway, reusing the space (known as Parking Express) which is currently used for long-term parking for Terminals 2 and 3, and which would be consolidated into the parkways.

2.7.25 Lorry parking

It is proposed that a lorry park would be provided to the north-west of the Southern Parkway. It would have direct access from the M25 and dedicated links to the Southern Perimeter Road.

2.7.26 The lorry park would be a secured parking facility for lorry drivers awaiting access to the cargo centre, which would potentially include additional services such as sanitary facilities, showers, food courts and a minor repair workshop.

2.8 Associated Surface Access Infrastructure

2.8.1 The proposed Project would require changes to supporting infrastructure including roads, rivers, flood storage areas, utilities and green infrastructure. The proposed changes to the highway network at and around the airport are relevant to the PTIR and are described below.

2.8.2 It is intended that bus priority measures and provision for active modes will be integrated into the surface access proposals. While land has been safeguarded for these purposes, the details of these schemes are still under consideration and are therefore not taken into account in the surface access modelling undertaken to date. Further details about these schemes will be provided in the DCO application.
M25 Realignment

2.8.3 In order to accommodate the new runway, which would run across the existing alignment, the M25 would need to be lowered and realigned between Junction 14 (J14) and Junction 15 (J15).

2.8.4 The new route would run up to a maximum of 150m to the west of its existing motorway over a length of 2km. The main carriageway would comprise four lanes in each direction and would be built off-line to minimise disruption to the existing M25 during construction.

2.8.5 There would also be new northbound and southbound ‘collector-distributor’ roads running parallel with the main carriageway, which would link J14 and J15 and also link to Junction 14A.

2.8.6 The vertical profile of the proposed new section of the M25 would be lowered below the existing carriageway to allow it to pass under the proposed new runway in tunnels.

2.8.7 The preferred layout for the proposed M25 realignment is shown in Graphic 2.4.
Graphic 2.4  Preferred layout for the proposed M25 Realignment
M25 Junctions 14 and 14A

2.8.8 With the proposed Project, access to and from the expanded airport would continue to be provided via M25 Junction 14 (J14) and Junction 14A (J14A).

2.8.9 M25 J14A would be modified to accommodate the proposed north and south collector-distributor roads that would run parallel with the M25 between M25 Junction 14 and Junction 15.

2.8.10 A new roundabout would be provided on the eastern side of the existing M25 J14A, which would provide access to the Western Campus landside terminal zone and also to M25 Junction 14 and Junction 15 via the proposed collector-distributor roads. It would be elevated above other highways and a proposed river corridor.

2.8.11 The M25 J14 roundabout would be enlarged to enable the connection of the new A3044 link to the north, however, no additional facility would be provided at J14 for the south to east traffic movement (M25 northbound to A3113).

2.8.12 The preferred layout for the M25 J14 and J14A is shown in Graphic 2.5.

Graphic 2.5 Preferred layout for the M25 J14 and J14A
2.8.13 Modifications are proposed to M4 Junction 4 (J4) and the M4 Spur as part of the proposed Project.

2.8.14 Access and connectivity currently offered by M4 J4 would be preserved, however, an additional arm is proposed to the south-east of the junction that would give access to the Northern Parkway.

2.8.15 As part of the works to the junction, it is proposed to realign the M4 westbound on and off-slips to better align with the circulating carriageway and thereby improve the capacity of the junction.

2.8.16 It is also proposed to widen the M4 westbound on-slip from two to three lanes and provide a new merge arrangement where the slip road joins the M4. A new or widened structure is assumed to be required where this slip road passes over A408 Holloway Lane.

2.8.17 On the junction itself, it is proposed to construct four standard-width lanes in both the eastern and western circulatory carriageways under the M4 mainline. The section to the north of Junction 4 is not proposed to change.

2.8.18 In addition, a new junction would be added to the M4 spur to provide access to the proposed Northern Parkway.

2.8.19 The preferred layout for M4 J4 is shown in Graphic 2.6.

Graphic 2.6 Preferred layout for the M4 J4
A4 Replacement

2.8.20 As part of the proposed Project, the existing A4 would be severed to the west of the Emirates junction.

2.8.21 A replacement A4 route is proposed to replace the existing link, which would be constructed off-line. The proposed route can be split into two parts.

2.8.22 The first part of the route would start at a new roundabout on the Colnbrook Bypass (A4) to the north of Colnbrook and connect to an enlarged roundabout at the intersection of Harmondsworth Lane (A3044) and Sipson Road (A408) to the north of Sipson. This section would be routed to the south of Saxon Lake and Saxon Way Industrial Estate. The parameters allow for a dual carriageway road with two lanes in each direction, but it is currently envisaged that this section of the route would be configured as a wide single carriageway.

2.8.23 Two new roundabouts would be provided part way along this section. The first would be provided to maintain access to the Saxon Way Industrial Estate, while the second would be provided to maintain access to West Drayton via Harmondsworth Road and to Harmondsworth via Holloway Lane.

2.8.24 The second part of the replacement A4 route would connect the enlarged A3044/A408 roundabout with an enlarged roundabout at the intersection of Sipson Road (A408) and Bath Road (A4), just to the east of Emirates Junction. The proposed link road would bypass Simpson to the north and east, crossing the M4 Spur just south of M4 J4. It is proposed that this section of the route would be a dual carriageway road with two lanes in each direction.

2.8.25 A number of new roundabouts would be provided on this section to maintain access to Sipson and Harmondsworth via Sipson Lane and to Sipson from the south via Sipson Road (A408).

2.8.26 The preferred layout for the replacement A4 route is shown in Graphic 2.7.
A3044 Replacement

2.8.27 As part of the proposed Project, the existing A3044 would be severed between the Colnbrook Bypass (A4) and the Stanwell Moor Junction.

2.8.28 A replacement A3044 route is proposed linking M25 Junction 14 to the Colnbrook Bypass (A4). The new route would be located to the west of and run parallel to the re-aligned M25. It is proposed that this section of the route would be a wide single carriageway road. An intermediate junction would be provided part way along the new link to maintain access to Poyle via Bath Road.

2.8.29 The preferred layout for the replacement A3044 route is shown in Graphic 2.8.
Stanwell Moor Junction

2.8.30 Stanwell Moor Junction is located to the south west of the airport at the intersection of Stanwell Moor Road (A3044), Airport Way (A3113) and the Southern Perimeter Road.

2.8.31 As part of the proposed Project, the current junction would be replaced by a new grade-separated (multi-level) roundabout. The east-west movements between Airport Way and the Southern Perimeter Road would be grade-separated to provide a continuous through route beneath the new roundabout.

2.8.32 New east-facing and west-facing slip roads would be provided to link the new junction to Airport Way and the Southern Perimeter Road, both of which would be realigned. The northern arm of the roundabout would provide access to the Western Campus landside terminal zone, while the southern arm would be reconnected to Stanwell Moor Road (A3044).

2.8.33 The preferred layout for the Stanwell Moor Junction is shown in Graphic 2.9.
Emirates Junction

2.8.34 As part of the proposed Project, the Emirates Junction would form part of a complex of three large roundabouts along with an enlarged Nene Road Roundabout to the east and the existing Newport Road Roundabout to the west.

2.8.35 The existing Emirates Junction would be reconfigured to reduce its footprint, rationalise the road layout. The revised junction would have four arms providing access to the following routes:

1. M4 Spur to the north.
2. The northern road tunnel to the Eastern Campus (CTA) to the south.
3. A link to the expanded Nene Road Roundabout to the east.
4. A link to the existing Newport Road Roundabout to the west.

2.8.36 The existing slip road from the Emirates Junction to Bath Road in the north-east corner of the junction would be closed.
2.8.37 The enlarged Nene Road Roundabout would provide access to Bath Road (A4) to the east and west, the replacement A4 link (currently the A408 Sipson Road) to the north and the Northern Perimeter Road to the south.

2.8.38 The link to the west of Emirates Junction would connect to the existing Newport Road Roundabout, which provides access to Bath Road to the north and the Northern Perimeter Road to the east and west as well as maintaining access to a number of existing airport facilities on Newbury Road.

2.8.39 The preferred layout for the Emirates Junction is shown in Graphic 2.10.

**Graphic 2.10 Preferred layout for the Emirates Junction Complex**

2.8.40 Road access to the Eastern Campus (CTA) is currently only possible via the Northern Road Tunnel.

2.8.41 As part of the proposed Project, a new twin-bore tunnel is proposed to provide access to the CTA from the Southern Perimeter Road. The tunnel would be 1.1km long, and the new route would have a total length of 1.7km.

2.8.42 This new link would require the rearrangement of the cargo area and the upgrading of parts of the Southern Perimeter Road.

2.8.43 An elongated roundabout is proposed to replace the existing Beacon Road Roundabout to link the Southern Perimeter Road with the new tunnel. The enlarged roundabout would provide greater capacity to accommodate increased traffic flows associated with the tunnel.
2.8.44 The preferred layout for the Southern Road Tunnel is shown in Graphic 2.11, while the preferred layout for the Beacon Road Roundabout is shown in Graphic 2.12.

Graphic 2.11 Preferred layout for the Southern Road Tunnel
2.8.45 As part of the proposed Project, the Southern Perimeter Road would be upgraded from two to three lanes in each direction to provide additional capacity for the forecast increase in traffic using this corridor associated with the growth of the Western Campus, the consolidation of parking in to the Southern Parkway and the opening of the Southern Road Tunnel.

2.8.46 The western section of the Southern Perimeter Road as far as the junction with Seaford Road would also be realigned to the north to create additional space for the Southern Parkway.

2.8.47 In conjunction with the widening and realignment of the Southern Perimeter Road, new roundabouts are proposed at Seaford Road and Stirling Road to replace the existing signalised junctions. The Seaford Road roundabout would provide access to the Southern Parkway site and the retained Southern Fuel Receipt Facility (SFRF). The Stirling Road roundabout would provide access to the proposed cargo area access road.

2.8.48 The existing roundabout that provides access to the Western Campus landside terminal zone would be reconfigured to provide access to the Southern Parkway.
2.8.49 The preferred layout for the Southern Perimeter Road is shown in Graphic 2.13.

Graphic 2.13 Preferred layout for the Southern Perimeter Road

Cargo Area Access Road

2.8.50 To complement the proposed changes to the Southern Perimeter Road, a new access road is proposed in the cargo area. This new road would be a single carriageway link which would link two new at-grade roundabouts. At the western end it would link to Stirling Road while at the eastern end it would link to the enlarged Beacon Road Roundabout.

2.8.51 This access road would take all cargo-related traffic off the Southern Perimeter Road between these two junctions. All other existing junctions on the Southern Perimeter Road serving the cargo area would be stopped up and access would be re-provided from within the cargo area.

2.8.52 The preferred layout for the Cargo Area Access Road is shown in Graphic 2.14.
Western Perimeter Road

2.8.53 As part of the proposed Project, the existing Western Perimeter Road would be removed. It would not be replaced and the traffic that currently uses it would transfer to other routes, including the replacement A4 and A3044.
3. Surface Access Proposals

3.1 Chapter overview

3.1.1 This chapter provides a brief overview of Heathrow’s current proposals for the Surface Access Strategy that will form part of the DCO application. These proposals are set out in the SAP.

3.2 What is surface access?

3.2.1 Surface access refers to the ways in which passengers, visitors, colleagues and goods travel to and from Heathrow. This includes travelling to or from Heathrow by public transport, taxis, cars, lorries, walking and cycling. It does not include trips by aircraft (e.g. transfer passengers).

3.2.2 The surface access network connects people and freight to Heathrow, supporting its role as the UK’s only hub airport. Heathrow is also an integrated transport hub, bringing together road, rail and air transport. Fast and frequent rail services connect Heathrow to London, with an extensive bus and coach network providing connections locally and to the rest of the country. Heathrow has direct road access from the M25 and M4 and is within 10 miles of the M40 and M3.

3.3 The requirement for a Surface Access Strategy

3.3.1 In June 2018, the Secretary of State for Transport designated the Airports National Policy Statement (NPS). The Airports NPS will provide the primary basis for decision-making on the DCO application for an expanded airport. It sets out the tests that Heathrow is required to meet in order to deliver additional airport capacity and support economic growth, whilst mitigating the impacts of expansion on local communities and the environment.

3.3.2 The Airports NPS states that the Government’s objective for surface access in relation to an expanded Heathrow is “to ensure that access to the airport by road, rail and public transport is high quality, efficient and reliable for passengers, freight operators and airport workers who use transport on a daily basis. The Government also wishes to see the number of journeys made to airports by sustainable modes of transport maximised as much as possible. This should be delivered in a way that minimises congestion and environmental impacts, for example on air quality.”

---

1 Airports NPS paragraph 5.5
3.3.3 The Airports NPS requires Heathrow to prepare a Surface Access Strategy (SAS) and submit this with the DCO application. Heathrow’s proposals for the SAS are set out in the SAP, which has prepared for this consultation to obtain feedback on these proposals. That feedback can then be taken into account when preparing the SAS.

3.4 **The structure of the Surface Access Proposals document**

3.4.1 The Surface Access Proposals document sets out a number of policies and initiatives that Heathrow would implement as necessary to achieve the targets the Airports NPS. Through their implementation, Heathrow will increase the proportion of passengers travelling to the airport by public transport and reduce the number of car trips being made by colleagues. The SAP also sets out how Heathrow will strive to meet its pledge to deliver expansion without increasing landside airport-related traffic.

3.4.2 The SAP comprises three parts as show in Graphic 3.1 below.

**Graphic 3.1 Structure and content of the Surface Access Proposals**

<table>
<thead>
<tr>
<th>Surface Access Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1</strong>&lt;br&gt;Supporting Information</td>
</tr>
<tr>
<td>• How we developed our surface access proposals and how the consultations, engagement and relevant planning policies helped to shape the proposals.</td>
</tr>
<tr>
<td>• How we have tested our surface access proposals to demonstrate that we will deliver the change needed to meet the ANPS targets.</td>
</tr>
<tr>
<td><strong>Part 2</strong>&lt;br&gt;Surface Access Proposals</td>
</tr>
<tr>
<td>• The proposed structure and content of our surface access proposals, consisting of seven modal strategies.</td>
</tr>
<tr>
<td>• The proposed policies and initiatives for each strategy, that form our ‘toolbox’ approach to ensure our proposals will be flexible and responsive.</td>
</tr>
<tr>
<td><strong>Part 3</strong>&lt;br&gt;Delivery, Monitoring &amp; Enforcement</td>
</tr>
<tr>
<td>• Our approach to delivering the surface access proposals and how performance against the targets and objectives will be monitored, reported and enforced.</td>
</tr>
<tr>
<td>• Our proposals to prepare 5-year Delivery Plans</td>
</tr>
<tr>
<td>• The relationship between the SAS, the Framework for Environmentally Managed Growth and our No More Traffic pledge.</td>
</tr>
<tr>
<td><strong>Appendix</strong>&lt;br&gt;Indicative Surface Access Delivery Plan 2020 – 2025</td>
</tr>
<tr>
<td>• Our proposed approach for implementing the SAS in the near-term.</td>
</tr>
<tr>
<td>• The specific initiatives on which we are proposing to focus, and the roles, methods, and timescales of their delivery.</td>
</tr>
<tr>
<td>• Detailed descriptions of the proposed initiatives, set out in Annex.</td>
</tr>
</tbody>
</table>
3.4.3 The following sections summarise the proposals. This provides information of relevance to the PTIR, relating to the additional surface access demand and proposed changes to surface access infrastructure and working practices associated with expansion. This includes information on the potential impacts of these changes on all relevant modes of surface transport, taking account of future committed and planned development and infrastructure improvements.

3.5 How the surface access proposals have been developed and tested

3.5.1 The development of the SAP has followed the requirements of the Airports NPS and the three-stage approach set out in the Department for Transport’s WebTAG guidance.

3.5.2 Recognising the requirements of the Airports NPS and the wider policy context and Heathrow’s own commitments in this area, a set of priorities to guide the development was developed. These Airports NPS requirements underpinned the identification of a longlist of potential surface access interventions. These options were then sifted against the requirements to create a shortlist of options. Heathrow set out this shortlist as part of the Airport Expansion Consultation (January 2018) to gather feedback from a range of interested parties, supported by the ongoing programme of stakeholder engagement.

3.5.3 Following the January 2018 consultation, the options on the shortlist were developed further, with scenarios created to test combinations of different options, with the results used to inform the development of these proposals.

How the views of others have informed its development

3.5.4 Heathrow is committed to consulting with key stakeholders as well as the public throughout the Development Consent Order process. Heathrow’s first public Airport Expansion Consultation (Consultation One) took place between 17th January and 28th March 2018 and set out the emerging proposals for what the expanded airport could look like, how it might operate, and how Heathrow might best mitigate the potential impacts. This included a document which set out Heathrow’s approach to surface access. Full details of this consultation and the responses Heathrow received are included in the Consultation One Consultation Feedback Report.

3.5.5 In addition to the first Airport Expansion Consultation carried out in January 2018, Heathrow is undertaking ongoing engagement with other key stakeholders in support of the development of the surface access proposals.
3.5.6 There is an ongoing programme of engagement with surface access stakeholders, including the Heathrow Area Transport Forum (HATF), local authorities and the Heathrow Strategic Planning Group (HSPG), Highways England, Transport for London (TfL) and Network Rail.

3.5.7 The Airports NPS requires Heathrow to prepare the SAS in conjunction with HATF. The HATF was established in 1995 and is one of Heathrow’s longest-running stakeholder engagement groups. It is a forum that brings together local authorities, local businesses, transport operators, airlines and other interested parties to work with Heathrow to improve accessibility and surface access provision to, from and in the area around Heathrow. HATF comes together for quarterly meetings, as well as for surface access topic-specific workshops.

**Testing the Surface Access Proposals**

3.5.8 Following the shortlisting of different possible initiatives, a range of scenarios have been tested. These scenarios considered different packages of initiatives for different years in the future with the associated forecast growth in passenger numbers. This has been carried out using bespoke airport surface access mode choice models. The modelling approach is compliant with the DfT WebTAG procedures.

3.5.9 The majority of analysis has been carried out using the London Airports Surface Access Model (LASAM)\(^2\) for passenger travel – an industry-standard model that has been successfully used by various other London airports. Colleague travel has been assessed using the Heathrow Employment Mode Choice Model (HEM-CM). Further information on the changes in transport demand forecast by these models is included in the PTIR.

3.5.10 For the purposes of the surface access proposals, two potential scenarios have been considered to demonstrate the impact of the initiatives and show how they meet the Airports NPS targets:

1. The ‘Assessment Case’ represents future year scenarios where only transport improvements that are committed or are considered reasonably capable of being delivered (i.e. are funded and have all necessary consents in place) are brought forward.

2. The ‘Expected Case’ represents future year scenarios where other proposed transport measures outside of Heathrow’s direct control are also brought forward as anticipated (primarily Western Rail and Southern Rail).

---

\(^2\) LASAM is an industry model and has been used by other airports.
On a precautionary basis, only the Assessment Case has been used in wider assessments that inform this consultation, whilst the Expected Case provides a sensitivity test. The PTIR is based solely on the Assessment Case, which shows that Heathrow can meet Airports NPS targets without relying on the implementation of third-party rail schemes.

The SAP must be flexible, with the ability to respond to different sets of circumstances in the future. Certain measures are included in both cases, but the reliance on those measures varies between cases – for example, both cases propose improvements to bus and coach services and infrastructure, but there is a greater reliance on bus and coach measures in the Assessment Case without third-party rail schemes. Full details on the initiatives included within each modelled scenario are explained in detail in Part 1 of the SAP.

The inclusion of certain measures in each modelled scenario does not necessarily indicate that these are the measures that Heathrow will implement in the period covered by the modelling. Instead, they demonstrate that the various measures in the surface access proposals are capable of achieving the Airports NPS targets in the circumstances assumed in the modelling. Different measures in the surface access proposals would be available to Heathrow and could be deployed as necessary to achieve the targets in different circumstances.

**Ensuring the Surface Access Strategy is effective**

In developing the transport models that underpin its surface access proposals, Heathrow has taken care to follow relevant guidance (including the DfT’s WebTAG) and to calibrate and validate the models to make sure that the forecasts they produce are as accurate as possible. However, a degree of uncertainty is inherent in all transport modelling, and this uncertainty increases as models are used to forecast further into the future.

The Airports NPS requires Heathrow to demonstrate that it can meet its surface access targets in 2030 and 2040. To ensure the Surface Access Strategy remains effective in the long term given the uncertainty when looking 20 years in the future, flexibility is therefore a key principle. For example, when surface access was being considered 20 years ago, the impact of ride hailing apps such as Uber on demand for taxis could not have been foreseen.

The proposals for surface access set out a ‘toolbox’ of potential measures that Heathrow can draw upon as and when required, in response to changing circumstances and the results of ongoing monitoring.

Some of these measures, particularly where they have significant infrastructure requirements associated with them, have to be implemented at a particular time or in accordance with a wider programme.
3.5.18 Some initiatives, such as Heathrow’s plans to reduce colleague parking provision, consolidate passenger car parking at parkways, and make improvements to Heathrow stations will be implemented in accordance with the wider construction programme of the masterplan.

3.5.19 Others, notably the Elizabeth line, HS2, improvements to the Piccadilly line and Western and Southern Rail will be brought forward by others. Whilst Heathrow will support these schemes, they are delivered by third parties and Heathrow has limited influence over their timescales.

3.5.20 Other measures are more flexible and can be introduced, increased or decreased in response to the ongoing monitoring proposed through the approach to Environmentally Managed Growth set out in Part 3 of the SAP document. This sets out clearly how and when Heathrow will monitor progress in achieving compliance with the Airports NPS targets, how Heathrow will deliver surface access interventions in response to this monitoring, and how Heathrow will be subject to external enforcement should it be in breach of the Airports NPS limits.

3.5.21 An example of how the toolbox of initiatives would be used to ensure the Airports NPS targets are met is shown in Graphic 3.2. In this example, Heathrow would need to draw on a number of measures to meet targets. However, if the Elizabeth line has a greater impact than the models are forecasting, Heathrow may not need to introduce all of these in order for the targets to be met.
3.5.22 The strategies and initiatives that Heathrow is proposing for surface access are described further in Part 2 of the SAP. These strategies set out Heathrow’s proposed approach to managing surface access. Further details regarding the delivery of these measures are set out in the indicative Delivery Plan appended to the SAP, which presents in detail the initiatives that Heathrow proposes to introduce in preparation for the third runway opening.

3.6 Heathrow’s Surface Access Proposals

3.6.1 The expansion of Heathrow is a unique opportunity to change the way that people and goods travel to, from and around the airport. Improving surface access brings a variety of benefits to passengers and colleagues, but also to local communities, in the improvement of air quality and congestion around the airport.

3.6.2 Mass transit provides the most sustainable transportation method for travel to and from Heathrow, reducing emissions and the impact on congestion on the road network. Today, use of sustainable transport has not reached its fullest potential by either colleagues or passengers.
3.6.3 **Part 2 of the SAP** sets out Heathrow’s modal proposals to ensure that Heathrow can deliver on its sustainability agenda and comply with Airports NPS targets. Each of the modal strategies describes their contribution to delivery of the SAP and how Heathrow intend to manage this mode in the future, through improved processes, infrastructure, engagement, promotion and/or management. These modal proposals guide the approach to surface access throughout the life of the expanded airport, to 2040 and beyond.

3.6.4 In addition to these modal proposals, policies and initiatives, Heathrow has also developed an indicative Delivery Plan for the period from 2020 to 2025, which is included as an appendix to the SAP. The Delivery Plan explains how Heathrow will implement the initial phase of surface access initiatives prior to the third runway opening in 2026.

3.6.5 Graphic 3.3 presents the approach to surface access.
Graphic 3.3  Heathrow’s approach to surface access

Airports National Policy Statement

Surface Access Proposals
- Public Transport
- Colleague Travel
- Car Parking
- Road User Charging
- Taxi and Private Hire
- Freight
- Intelligent Mobility

Indicative Surface Access Delivery Plan

An increase in public transport mode share
- Today: 40%
- 2030: 50%
- 2040: 55%

A reduction in colleague car trips
- Today: -25% from 2013 baseline
- 2030: -50%

No increase in Heathrow-related traffic

Transport mitigation
Minimise and mitigate the effect of expansion on existing surface access arrangements

Air quality
Ensure that construction and operation of expansion builds on our sustainability commitments, including complying with our legal air quality obligations
3.6.6 By using the flexibility of the toolbox approach, Heathrow has a number of key initiatives that analysis indicates will be required under any scenario, and a number of other initiatives that can be scaled up or down as needed to meet its commitments. This ensures that under any future scenario Heathrow can meet the requirements and minimise the impacts. Heathrow will monitor and report on their success through key performance indicators, as summarised in Part 3. The key initiatives are presented in Graphic 3.4.

3.6.7 Whilst specific initiatives sit within some individual proposals, it is recognised that many are applicable to multiple modes. For example, the car sharing initiative has implications for Colleague Travel, Road User Charging and Intelligent Mobility.

3.6.8 Each modal proposal concludes with a section setting out the next steps to be taken for developing the SAP in preparation for the DCO application.

**Non modelled benefits**

3.6.9 Heathrow has tested some initiatives through both passenger (LASAM) and colleague (HEM-CM) demand models. This is to help understand the impacts of proposals and demonstrate how initiatives can combine as a toolbox of measures to present both passengers and colleagues with a range of sustainable travel choices to meet their individual needs.

3.6.10 Due to the nature of transport demand models, only certain proposed measures and initiatives – those that affect journey time, frequency and costs – can be tested. For example, modelling of the impacts of Road User Charging, reduction in Heathrow Express fares and the impacts of new rail schemes such as the Elizabeth line is possible. However, it is not possible to assess the benefits and therefore mode share impacts of many measures that make public transport easier to use, such as Intelligent Mobility proposals to increase information provision, integrated ticketing, new luggage collection services and the impacts of the Colleague Travel Wallet. Heathrow’s research, including testing surface access proposals on the user insight community, provides a strong indication that these initiatives would improve both passenger and colleague experiences and confidence in public transport, and will result in an even greater take up of the sustainable travel options than modelled.

3.6.11 As such, how surface access proposals have modelled and tested through the Assessment Case should be seen as a conservative scenario where, in reality, new routes and improved existing services will be complemented by Heathrow’s world class public transport facilities and developments in real time information provision.
Graphic 3.4 The SAP and key initiatives

Surface Access Proposals
- Public Transport
- Colleague Travel
- Car Parking
- Road User Charging
- Taxi and Private Hire
- Freight

Intelligent Mobility

Key Initiatives

Delivered by Heathrow (Primary Initiatives)
- Heathrow Ultra Low Emission Zone
- Heathrow Vehicle Access Charge
- Taxi and private hire backfilling
- Relocation of employment sites
- Bus and coach priority
- Car sharing
- Needs-based parking for colleagues
- Making public transport more affordable
- Developing an active travel network
- Vehicle call forward facilities

Delivered by Heathrow (Supporting Initiatives)
- Integrated ticketing
- Enhanced mobility information services
- Virtual cargo consolidation
- Human Resources policies
- Heathrow Travel Wallet

Delivered by, or in partnership with, third parties
- New and improved coach routes
- Changes to rail frequencies
- New and improved bus routes
- 24-hour public transport access
- Supporting Western Rail Link to Heathrow
- Supporting Southern Rail Link to Heathrow
3.7 **Heathrow’s approach to delivery and monitoring of the SAP**

**Delivering the Surface Access Strategy**

3.7.1 Flexibility is a key principle of the surface access proposals. The initiatives should be thought of as a ‘toolbox’ of measures that Heathrow can draw upon as and when required, in response to how it is performing against the Airports NPS requirements and targets.

3.7.2 Some of these measures, particularly where they have significant infrastructure requirements associated with them, need to be implemented at a particular time or in accordance with a wider programme. Others can be introduced more flexibly, or in response to ongoing monitoring at different scales of impact.

3.7.3 The coordination between these more flexible measures and those with wider constraints is an important aspect of the delivery of the surface access proposals. Heathrow is proposing a framework that sets out how and when it can deliver each measure, either independently or in coordination with stakeholders. This framework will help Heathrow to demonstrate that the approach is credible and realistic, and show that it can deliver the initiatives required to meet the requirements and targets of the Airports NPS.

3.7.4 To demonstrate the approach to delivery, an indicative Delivery Plan is included as an appendix to the SAP. This Delivery Plan sets out the approach to delivering the initiatives and policies that will be brought forward in the period from 2020 to 2025, should consent for expansion be granted. Heathrow will revise this Delivery Plan according to feedback from this consultation and submit an updated version as part of the DCO application.

**Monitoring the performance of the Surface Access Strategy**

3.7.5 Heathrow will monitor the performance of the surface access initiatives to ensure that it remains within the environmental limits as the airport grows. Monitoring data will be used to ensure that the initiatives, policies and proposals identified within in document are having the desired outcomes. This includes policies such as increasing cycle mode share for colleagues, the use of taxi backfilling for passenger travel, and the implementation of the virtual consolidation for freight. Specific data sources, monitoring methods and performance indicators will be developed further for the DCO application.

3.7.6 Monitoring in this way is required to make best use of the flexibility of the SAS, as it will allow Heathrow to proactively update the Delivery Plan, and overall business planning, in response to the performance of the SAS. This will ensure that we can realise the positive outcomes desired for passengers, colleagues, local...
communities and the environment, as well as meeting the targets of the Airports NPS.

**The Environmentally Managed Growth Framework**

3.7.7 The Environmentally Managed Growth framework (EMG) sets out Heathrow’s proposals to operate within defined environmental limits that reflect the requirements of the Airports NPS. The limits in the EMG relate to surface access, air quality, noise and carbon and the EMG document sets out the proposed limits for each topic. For surface access, these relate to the Airports NPS targets to increase passenger public transport mode share and reduce the number of colleague car trips being made.

3.7.8 The document describes the proposed monitoring and enforcement regime which will ensure the limits are adhered to, and guarantee transparency and clear reporting for local communities and other interested parties. Under these proposals Heathrow would produce an annual Monitoring Report which would include all relevant data and identify the relevant impacts of expansion. It would place those impacts in the context of the environmental limits and contain a ‘look forward’ discussing how Heathrow’s forecast growth relates to those limits, taking account of any existing or planned mitigation measures.

3.7.9 Heathrow is also proposing a clear and impartial mechanism to ensure compliance with the surface access limits set out in the EMG. Heathrow proposes to establish an Independent Scrutiny Panel (ISP) comprising specialist agencies who have a role in assessing and enforcing the environmental limits to Heathrow’s growth, so that Heathrow can be held to account in a comprehensive and coordinated way.

3.7.10 The EMG would place a legally binding obligation on Heathrow to take action in the event of anticipated or actual non-compliance with the limits, and the ISP would be given powers to take enforcement action in the event of ongoing breaches.

3.7.11 In addition to the formal reporting process associated with the Airports NPS targets established by the EMG, Heathrow will provide parallel annual reporting to HATF on its performance against its 'no more traffic' pledge. If monitoring indicates that Heathrow has not been able to keep traffic below today’s levels, it will identify any necessary action(s) and revise its Delivery Plans accordingly, in consultation with HATF.
4. **Proposed Construction Management Arrangements**

4.1 **Chapter overview**

4.1.1 This chapter provides a high-level overview of the arrangements that are proposed to be put in place to manage construction activities at Heathrow during the construction of the proposed Project.

4.1.2 The construction management arrangements, as currently envisaged, are set out in the Preliminary Outline Construction Traffic Management Plan (POCTMP) and the Preliminary Outline Construction Workforce Travel Plan (POCWTP).

4.2 **Construction site arrangements**

**Construction Support Sites (CSS)**

4.2.1 The expansion of Heathrow is expected to require temporary use of land, in addition to the land identified for permanent use associated with the proposed Project. This land would support and facilitate construction and logistics operations, including allocated areas for the storage of materials, batching plants, HGV parking, workforce parking, contractors' compounds and stockpiling areas.

4.2.2 Plans are being developed that aim to keep construction activities within those areas identified for permanent use in the proposed Project as much as is reasonably practical. However, where this is not possible plots of land would be identified to be temporarily used during construction. Further details are provided in the **POCTMP**.

**Construction Hubs**

4.2.3 In addition to the Construction Support Sites around the airport, it is proposed to utilise four remote ‘Construction Hubs’ elsewhere in the UK that aim to increase off-site activities (e.g. prototyping, pre-assembly and consolidation) and spread the economic benefit of the proposed Project.

**Internal construction roads**

4.2.4 During the site preparation works, a number of internal construction roads are proposed to be developed to facilitate the movement of vehicles carrying excavation and construction materials as well as buses around the construction site. These internal roads would vary in location, alignment and specification according to the construction needs and phasing.
4.2.5 There would be two main long-term strategic internal site roads to facilitate the movement of materials and people around the construction site: the east-south road (to the east of the M25) and a link over the M25.

4.2.6 These internal construction site roads would be constructed in accordance with the relevant standards required for HGV usage and estimated traffic volumes.

4.2.7 In addition, a number of internal construction roads dedicated to earthworks, known as haul-roads, are proposed to be constructed. These routes would be formed from sands, gravels or clay. HGVs, buses and other vehicles would not normally use haul-roads to avoid mixing general construction traffic with earthworks vehicles.

4.2.8 There would also be other construction roads required for the construction of the off-site roadworks outside the operational airport boundary, including the realignment of the M25, the diversion of the A4 and A3044 and other proposed changes to local roads. As a programme principle, these roads would be constructed on the line of the earthworks movements as much as possible, as this minimises haul distances and cost and retains earthworks movements within the construction boundary.

4.2.9 It is expected that the off-site roadworks would be completed, and the internal construction roads open for use by 2025.

**Working Hours**

4.2.10 Construction activities at work sites include the construction of roads, tunnels, terminals and other major infrastructure and earthworks over extended periods of time.

4.2.11 Working hours would vary by activity and across different sites depending on land uses and receptors (e.g. residential areas) surrounding work sites. Measures would be put in place in accordance with best practice to manage impacts. This may include varying working hours, quiet periods or additional mitigation measures. Further details are provided in the [POCWTP](#).

**4.3 Construction Freight and Workforce Plan**

4.3.1 The expansion of Heathrow would involve many concurrent construction activities that require a high volume of materials and a large construction workforce. Construction logistics solutions are, therefore, required to manage the flow of materials and workforce to optimise construction operations, maximise productivity and reduce adverse effects on airports operations, local communities and the environment. These would be achieved through:
1. Maximising the use of rail for importing materials to and from site.
2. Optimisation of road deliveries.
3. Reduction of workforce on site.
4. Make use of existing and new temporary infrastructure on, near to and off-site to increase off site activities and overall productivity.
5. Adopting innovative delivery strategies and work with the supply chain and stakeholders to create an integrated approach to logistics.

**Management of construction freight traffic**

4.3.2 Due to the significant size of the proposed Project, the expansion of Heathrow requires a bespoke approach to the management of construction freight. The following principles for managing construction freight are being considered:

1. Ensuring the safe, efficient and sustainable movement of construction materials by maximising the use of rail transport, particularly for bulk materials;
2. Managing the effects on the local community by controlling and reducing the quantity of road freight using public roads, particularly at peak times; and

4.3.3 Taking all reasonable steps to ensure the resilience of the local transport network in the event of an accident.

4.3.4 A number of specific measures have been identified to help manage construction freight traffic including:

1. The provision of a new rail head on the Colnbrook branch of the Great Western mainline.
2. The implementation of a Delivery Management System.
3. Use of construction support sites to create lorry park/holding areas to act as a buffer for parking and holding HGVs when required.
4. Minimising impact on the local road network by utilising existing high capacity routes (principally motorways) as far as possible and providing dedicated construction routes off the public highway.

**Management of construction workforce travel**

4.3.5 The following primary objectives have been set out with regards to management of the construction workforce:

1. Reduce the number of workers on site by increasing off site manufacturing and pre-fabrication through the Logistics Hubs initiative and improving on-site execution.
2. Achieve optimum staff productivity by providing high quality, site-wide workforce facilities and services.
3. Provide a healthy and safe working environment, whilst ensuring that people can move to where they are required in the right numbers and at the right time.
4. Avoid or mitigate potential impacts on the local community.

4.3.6 A number of specific measures have been identified to help manage construction workforce travel. These measures and include:

1. Promotion of sustainable travel.
2. Workforce parking strategy.
3. Provision of on-site accommodation.

4.3.7 Details of these proposals are provided in the POCWTP.
There are lots of ways you can contact us or find out more

- Find all the consultation information on our website: aec.heathrowconsultation.com
- Follow @LHRconsultation to stay up to date on event details
- Email any questions about the consultation to info@heathrowconsultation.com
- Call our freephone number 0800 307 7996 (open Monday to Friday, 9am-6pm)

If you would like a large text or alternative format of this document, please contact 0800 307 7996 or email info@heathrowconsultation.com