

# A40 Study

# LOCAL PLAN SUPPORTING STUDY

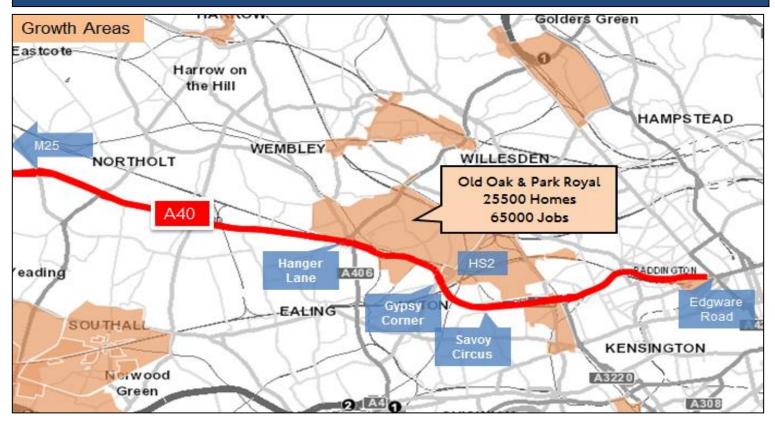
2017



### 1. A40 Study

Document Title	A40 Study
Lead Author	AECOM
Purpose of the Study	<ul> <li>The A40 has been identified by TfL as a key strategic corridor for freight and also the management of traffic into central London. This study has identified the key challenges associated with the A40, including: high traffic flows and congestion; pedestrian and cycle severance; poor air quality and urban realm; and significant development growth coming forward. Taking the challenges into consideration, the study investigated potential long term investment options with the aims to deliver three key outcomes that TfL have identified:</li> <li>1) maintaining the A40's core movement function;</li> <li>2) delivering connectivity enhancements to support existing and future development areas;</li> <li>3) improving the environment, air quality, safety and asset quality along the A40.</li> </ul>
Key outputs	<ul> <li>An assessment of the different options for improving the A40 issues focusing on: benefits, costs, risks, constraints and deliverability issues and timescales</li> <li>Recommendations to TfL on the optimal option</li> </ul>
Key recommendations	<ul> <li>The study provides an overview of the long term investment options for the A40 corridor and draws some key conclusions and next steps:</li> <li>Important to maintain A40 as key 'arterial' corridor into London with improvement required at key junctions including Hanger Lane as a priority. This could involve a tunnel or a major new junctions scheme.</li> <li>Focus on junction solutions east of Hanger lane to support bus and cycle access across the A40</li> <li>Continue to deliver schemes such as lane width improvements at Hanger Lane which improve journey time reliability (including for buses).</li> <li>Promote Smart Road management on the A40 to improve traffic management and journey time reliability from 2020</li> <li>Work with HS2 on short-term traffic mitigation schemes at A40 junctions</li> <li>Develop a strategic business case for Hanger Lane</li> <li>Identify longer term solutions for Savoy Circus and Gypsy Corner in line with the Healthy Streets indicators.</li> </ul>
Relations to other studies	Interfaces with Park Royal Transport Strategy and Old Oak Strategic Transport Study.
Relevant Local Plan Policies and Chapters	<ul> <li>Transport Chapter</li> <li>Place policy P4 (Park Royal West) and P7 (North Acton and Acton Wells)</li> </ul>

## **A40 Corridor Study - Summary**



City in the West: Potential for 210,000 homes and 300,000 jobs. Old Oak & Park Royal is UK's largest development project underpinned by HS2 station in 2026.

#### (1) A40 Corridor – Case for Change

#### Growth Opportunity

Significant development is proposed in the West London sub-region. The A40 is a critical TLRN corridor running through the middle of this west London growth area.

#### Transport Challenges

The A40 is one of London's major strategic road corridors serving central London. It is critically important for freight and also the management of traffic into central London. A number of key junctions on the A40, namely Hanger Lane, Gypsy Corner and Savoy Circus - located in close proximity to the south of Old Oak & Park Royal - are congested during peak periods and are key for providing access to Park Royal, London's largest industrial area. The A40 also causes severance, with very few at-grade pedestrian or cycle crossings and therefore acts as a barrier to those travelling on foot or by bicycle.

#### **A40 Corridor Current Challenges**

- High traffic flows and congestion
- Pedestrian / Cycle severance
- Poor air quality and urban realm
- Significant development growth

#### (2) Transport Outcomes to Support Growth

Based on the corridor challenges 3 critical transport outcomes for the A40 Corridor were identified as required to support and mitigate future growth:



- 1. Maintaining core movement function
- Provide reliable corridor journey times and managed traffic flows to support London's economy and growth



- Delivering connectivity enhancements to support existing and future residential and development areas
- Improve connectivity from and across the A40 to Old Oak Common, Park Royal and White City
- Provide access to high quality east-west cycle facilities



- 3. Improving the environment air quality, safety and asset quality along the A40
- Reduce impacts of noise pollution and improve air quality along the A4o Corridor.
- Reduce collisions, particularly among vulnerable road users
- High quality asset management

#### (3) A40 Future

Projects and programmes affecting the A<sub>4</sub>0 in the short and medium term include:

- Minor Roads Improvement Programme (RIP)
   Schemes 2016-2019 (e.g. Hanger Lane off slip improvements)
- STIP2- Westway Flyover Maintenance –
   2021+
- Smart Roads Measures e.g. ramp metering –
   2020+
- HS2 & Old Oak Common construction activity and construction traffic up to 2026

These committed schemes will bring some improvements in line with strategic objectives for the corridor in the short term. However, further long term investment in the corridor is required to address the key strategic aims set out the Mayors Transport Strategy. HS2 construction activity is likely to limit the window for additional major interventions to post 2026.

#### (4) A40 Corridor Study

In 2016 TfL completed an Outcome Definition project focused on the Inner Section of the A40 corridor to consider potential long term investment options. An overview of these options is provided below:

#### (a) A40 Tunnel(s)

A number of major tunnel options for the corridor were investigated as outlined below:

Option	Summary
1.	2 lane 2 way tunnel between Hanger Lane
	& Savoy Circus
2.	2 lane outbound only tunnel between
	Hanger Lane & Savoy Circus
3.	2 lane 2 way tunnel between Hanger Lane
	& Edgware Road
4.	2 lane 2 way tunnel between Savoy Circus &
	Edgware Road

Strategic assessment of these options highlighted:

- all are technically feasible with Options 1 and 4 providing the most benefits
- options are very high cost and involve major delivery risks and constraints
- options removed strategic traffic from the surface and provided journey time benefits for A40 users
- options provided an opportunity for improvements to be delivered for pedestrians, cyclists and bus movements at the surface

- the scale of local movement and access demands mean significant surface road and junction infrastructure were still required
- options unlocked development opportunities
- a risk of increasing flow into central London
- major consents & construction challenges/ impacts
- significant level of public funding would be needed to support any option, making delivery difficult



**Short tunnel option at Savoy Circus** 

#### (b) Flyunders / short tunnel

A package of more localised grade separated schemes was assessed incorporating flyunders at Gypsy Corner and Savoy Circus plus a short tunnel at Hanger Lane for the A4o/A4o6(N) interchange.

Strategic assessment of these options highlighted:

- Gypsy Corner and Savoy Circus: whilst these schemes reduced delays for users of A40 these benefits were negated by significantly increased delays for local road users trying to access the A40
- Hanger Lane: scheme offered most significant strategic benefits unlocking capacity at this critical intersection that would help support growth and improve the resilience of the network
- all options provide opportunities for some significant improvements to be delivered for pedestrians, cyclists and bus movements reducing severance
- options unlocked redevelopment opportunities
- significant construction challenges and impacts
- option costs again high cost between £100m and £300m

#### (c) At Grade Option

A package of potential at-grade junction enhancement schemes was also assessed. The schemes included introducing 2-way working at Hanger Lane and bus and cycle only links to Old Oak Common at Gyspy Corner and Savoy Circus. These options were designed to meet corridor objectives for reduced severance and an improved environment and are much more affordable at approximately £5m-£25m per location.



At grade option at Savoy Circus

Strategic assessment of the at-grade options highlighted:

- provided some benefits for pedestrians and cyclists, reducing severance, enhancing access to growth areas and improving the urban realm
- options unlocked limited development opportunities
- significantly impacts on corridor performance, increasing journey times and delays resulting in diversion of traffic off the A40
- less challenging to deliver
- delivery unlikely to be feasible without wider policy measures to reduce demand on the corridor and/or wider corridor management measures to control flow along this section of the A40

#### (5) Conclusions and Next Steps

- Key to maintain arterial function of the A<sub>4</sub>o and improve major junctions including Hanger Lane as priority. This could involve a tunnel or major new junctions scheme.
- Focus on at-grade solutions east of Hanger Lane to support bus and cycle access across the A40

- Continued Delivery of Minor RIP schemes e.g. slip lane improvements at Hanger Lane to improve journey time reliability, including for buses
- Promote SMART Road management on A40 corridor to improve corridor traffic management and journey time reliability from 2020
- Further work with HS2 on short term mitigation schemes at A40 junctions
- Hanger Lane develop a Strategic Business Case for further
- Identify longer term solutions for Savoy Circus & Gypsy Corner in line with Healthy streets agenda