

Euston Area Plan: Transport Study Addendum (2025)

Euston Area Plan- Transport Study Overview

- **Overview**

This document should be read in conjunction with the main Transport Study, which was initially drafted in 2022, and subsequently updated in 2025, following government announcements in relation to Euston.

- **Context**

As stated in the main document, since the Transport Study was originally drafted in 2022, the previous government's Network North announcements and the subsequent HS2 pause in 2023, mean that at present, the final station configuration and upper development limit remains uncertain. For this reason, the previous Upper EAP development scenario, which was modelled in 2021, has been adopted as a suitable worst-case scenario (in terms of the transport impacts), for discussion throughout the study. This document sets out in a bit more detail the rationale behind that and why such an approach is considered appropriate, given our current understanding in relation to the site.

- **Background**

TfL, alongside its strategic partner the London Borough of Camden, produced a new Transport Study for the Euston area in 2022, to support proposed updates to Camden's Euston Area Plan (EAP). This was considered necessary as since the original EAP was adopted in 2015, there had been some significant changes to our understanding of the future transport context of the area, most notably with HS2 gaining Royal Assent in 2017. In addition, Lendlease had been appointed as the Master Development Partner for the site in 2018 and had been working on the development of a masterplan for the campus, and Network Rail were developing a business case to redevelop the existing conventional station.

The Mayor's Transport Strategy was also introduced in 2018 and sets a pan-London target for 80% of all journeys to be made by sustainable modes (walking, cycling or public transport) by 2041. This target increases to 95% for trips within central London and 99% for trips between central and inner/ outer London¹. Camden also introduced a Transport Strategy in 2019, which set a local Camden target of 93%. According to Camden's latest mode share data from 2024, 87% of resident trips are now made by sustainable modes.²

Together, these changes meant the development context we were considering was considerably different to what had previously been assessed, and there was a need to better understand the potential impacts of these changes on the local transport network, to ensure that trips to/ from the station could continue to be supported in a sustainable manner.

¹ Mayor of London, 2018. [Mayor's Transport Strategy](#) (Figure 57)

² London Borough of Camden, 2025. [Camden Transport Strategy Annual Update 2025](#)

- **Transport Study Purpose**

The reason for undertaking a Transport Study is to provide an evidence base to identify what transport improvements (in terms of both services and infrastructure) may be needed to support an identified growth scenario within a specific area.

The Euston Area Plan sets out the transport vision and associated transport policies for the area, based on the findings of the Transport Study. This document highlights the challenges facing the area based on both quantitative (modelling) and qualitative analysis, using this information to inform what infrastructure needs to be delivered within the short, medium, and long term to enable growth to come forward sustainably, as well as to support existing communities in the area.

In the case of Euston, the Transport Study focuses on the end-state scenario, whilst acknowledging that Euston will undergo a significant period of disruption, and different measures may need to be implemented on an interim basis during the construction period to ensure the area can continue to meet the needs of people travelling to and through the area as well as of local residents.

The Transport Study evidence base was developed using TfL's suite of strategic models. MoTiON (Model of Travel in London) is a multi-modal strategic modelling suite for London. It uses a wide range of transport, land-use, economic, environmental, and demographic data inputs to forecast travel in London in different futures. MoTiON itself is used to generate demand figures, which are then input into our assignment models to assess network effects. The highway model (LoHAM) represents routing and congestion of motorised highway trips, including splits for different vehicle types, whilst the public transport model (Railplan), models the likely route and service choice of public transport users to inform outcomes such as route choice, crowding, distance travelled, and time taken. Following the initial strategic modelling, further pedestrian modelling was conducted in 2023 using the Station Design Services Contracts' scheme design model, which showed which locations would see high pressures from pedestrian footfall.

- **Development scenarios considered**

Euston is identified as an Opportunity Area within the current London Plan. This notes that the area has the capacity to support up to 3,800 new homes and 15,000 new jobs by 2041. TfL originally undertook a Transport Study to support the 2015 version of the Euston Area Plan, which at the time considered the impact of an increase of between 2,800- 3,700 new homes and between 7,700-14,000 new jobs on the transport network.

Since the London Plan was adopted and the original Transport Study was undertaken, the development aspirations for the area have changed. As such it was previously considered appropriate to test a new range of development capacities within the updated Transport Study.

Prior to the HS2 pause it was agreed between TfL, LB Camden and other stakeholders involved in the development of Euston to test two growth scenarios in the transport models, i) a low growth scenario based on the development figures assessed as part of the 2015 EAP (see above) and ii) a high growth scenario based on the aspirations of the Lendlease

masterplan at the time. This assumed the delivery of c.33,000 new jobs and c.3,000 new homes. This level of development was identified for strategic modelling purposes only and was never intended to be an indication of the scale of development which might be considered acceptable in planning terms.

This scale of development was considered to represent the maximum level of development which could be accommodated on the site, based on the emerging station design at the time, and as such demonstrate the 'worst-case' scenario in terms of impacts on the transport network.

Assumptions

At the time of developing the 2022 version of the Transport Study several assumptions were made in relation to the level of service on the transport network, to help inform the transport modelling. This included assumed frequencies on the bus and underground network, as well as in relation to future service patterns on HS2 and National Rail services.

Alongside this, several transport infrastructure improvements were also previously assumed to be committed, as set out in the HS2 Act. This included the delivery of the following, some of which are now under review following the previous government's Network North announcements (4th October 2023):

- A new LU station entrance and ticket hall at Euston station
- A new Euston Square LU station entrance and ticket hall located on Gordon Street
- New and upgraded pedestrian crossings on Euston Road and Hampstead Road
- A new linear bus station
- A new 60 bay taxi rank
- New and additional cycle parking
- New and additional cycle hire docking stations
- Travel demand measures
- Safeguarding of the Crossrail 2 ticket hall and associated infrastructure
- A passenger subway linking Euston Station and Euston Square Station under Euston Road

As referenced in the main document, all modelling needed to support the ongoing design development for these measures is being undertaken as part of the HS2 workstream and has not been replicated here. As such, it should be noted that no station modelling has being undertaken as part of the EAP.

For the EAP, it has been assumed that all new transport facilities being designed and/ or delivered by HS2 will be suitably sized and capable of accommodating all demand anticipated to be generated on site from both the rail uses and the proposed development. Any proposed changes to what is currently assumed will need to be modelled accordingly.

Any changes in the future to what is currently assumed in terms of the location of key pieces of transport infrastructure (e.g. bus station, LU station entrance) would also potentially need to be modelled. The current public transport model includes assumed walk distances, which influences the demand for different services from interchanging passengers, so any significant changes to where the infrastructure is proposed to be located has the potential to impact on demand. It is assumed this would either be done by HS2 as part of the ongoing design development process, or as part of a future planning application for the site depending on what is being proposed.

North- south and east- west walking and cycling routes, over and across the station are not included in the HS2 Act and following the Network North announcements, it is less likely that these will be deliverable. Given they are local in nature however, they are unlikely to have a significant impact on the strategic modelling results.

Issues for consideration

Since the 2022 Transport Study was concluded, there have been several significant changes affecting the previous assumptions around transport at Euston. Most notably, in line with direction from the previous government, work to construct the HS2 station at Euston was paused on 9th March 2023 due to inflationary pressures and the need to find a more affordable design solution. Since that time, work has been underway to consider what a 'minimum viable product' station design at Euston might look like and a new baseline design is currently awaiting sign-off by the DfT.

Other significant changes affecting Euston include the fact that it was confirmed that all HS2 trains would now terminate at Birmingham, with Phases 2a and 2b to Crewe and Manchester respectively, being cancelled. Finally, confirmation was only received in the 2024 budget that funding to extend the route from Old Oak Common into Euston would be made available.

This project pause has led to uncertainty with regards to the station design. In response to this, a 'Spatial Concepts' exercise has recently been undertaken, aimed at resolving strategic issues on the Euston Campus, however at the time of writing, there is no agreed layout in place. This means there is currently uncertainty over the following issues, some of which could impact on the outputs of a strategic modelling exercise, meaning it would be unreasonable to commit to further modelling at the current time:

- The design and layout of both the HS2 and NR stations
- Future train service patterns into both the HS2 and NR stations
- The size and location of the future bus station and taxi rank
- The size and layout of Euston London Underground station, as well the proposed link to a new Euston Square station entrance on Gordon Street
- The location of new and improved pedestrian and cycle links
- The location and quantum of development it is feasible to deliver on the site.

All these changes have led to questions over whether the existing transport modelling which was undertaken was still fit for purpose, and appropriate to inform further revisions to the EAP.

It is our professional judgement that the current modelling outputs still form the most appropriate basis on which to inform further transport updates to the EAP for the following reasons:

- We consider the modelling undertaken to date to represent the 'worst case' scenario in terms of the potential transport impacts, given the scale of development which has been considered and the volume of train passengers expected to use the station is higher than what is now currently being assumed (see below).

- Given the changes being considered following the Euston pause referenced above, it is understood that going forward:
 - There will be fewer HS2 trains accessing the station than was previously assumed to be the case as the number of platforms at the station are being reduced. The cancellation of Phases 2a and 2b will also have an impact. The requirement to safeguard land for a potential future expansion in platforms at the HS2 station has however recently been announced, and the additional demand likely to be generated by this will need to be considered.
 - It is no longer considered feasible to deliver Over Station Development, and as such the development quantum which can be delivered on site will likely be lower than was previously assumed.
- Given the current uncertainties around the design and layout of the future Euston Campus, at the present time it is considered that there isn't enough information available to undertake further modelling, even if this was considered appropriate. Too many assumptions would need to be made meaning that the results may be open to question. As such, the work undertaken to date provides the best evidence base available at the current time.
- During 2025, The Euston Partnership has led a Strategic Demand Forecast modelling exercise, which will refresh existing modelling about future intermodal travel patterns using TfL's latest MoTiON modelling suite update and updated assumptions about key transport components of Euston's regeneration. This will provide a better understanding of how the future station campus will respond to surrounding land uses and its interface with the public realm.

Conclusions and next steps

Given the above issues which have been highlighted, the conclusions from the 2022 Transport Study are considered to still be valid and the most appropriate analysis we have available to help inform the transport strategy for the area at the current time, while the plans for the station are still under review.

As stated in the Transport Study, the modelling undertaken to date has been strategic in nature and based on several assumptions which were valid at the time, but which may now be subject to change given the ongoing design development underway across the Euston campus.

A majority of the analysis undertaken when TfL and the London Borough of Camden first began updating the Transport Study before the pause of the Euston project in 2023 has been retained. In certain instances, where new relevant evidence has emerged, this has been added throughout the study in blue boxes. This approach has been taken to provide clarity where updates have been made to the document.

Next Steps

- Our current expectation is that while no further modelling is needed to support the EAP review at this time as the current modelling is considered to represent a worst-case scenario in terms of the transport impacts, additional detailed modelling will be

required to support the submission of a future planning application for the site. It is anticipated that such an application would not come forward until a time that a lot of the uncertainties highlighted above have been addressed and as such would be based on the most current assumptions.

- Any proposed improvements to the highway network, including those developed through the Euston Healthy Streets programme will also be subject to highway modelling prior to implementation in order to demonstrate acceptability.
- As stated above, it is assumed any changes to individual mitigation measures being proposed by HS2 will be suitably tested to demonstrate their acceptability through that workstream.
- Be mindful of any modelling updates undertaken by HS2 (e.g. long-term modelling refresh) and ensure the outputs are suitably accounted for in other modelling workstreams e.g. the planning application
- Consider the HS2 Platform safeguarding and what this might mean in terms of demand at the station.

END.