



Strategic Transport Leadership Board

15 July 2022

Agenda Item 4

Oxford to Cambridge Arc Connectivity Study - Roads

Recommendation:

It is recommended that the Board:

a) Supports the work carried out on the Oxford to Cambridge Arc Roads Connectivity study to date, including identification of the priority areas

1. Purpose of report

1.1. To update members on the Oxford to Cambridge Arc roads connectivity study and its identification and ranking of priority areas, which are to be taken forward to next stage of the study.

2. Key points to note

- 2.1. National Highway's Oxford to Cambridge Arc road study, of which EEH and DfT are co-sponsors, is nearing completion.
- 2.2. Following assessment based on an agreed methodology and engagement, priority areas for further development have been identified in the study. These are in annex 1 below.
- 2.3. Once agreed by Ministers and supported by the EEH Board, the priority areas will be taken forward to concept development stage.
- 2.4. Areas which have not been selected as a priority, but which are considered priorities by their local authorities, may arise as other data or new issues and local plans transpire, or through other work carried out by EEH such as the connectivity studies.

3. Context

- 3.1. Following the cancellation of the Oxford to Cambridge expressway, DfT made available funding to undertake an Oxford to Cambridge Arc roads study to identify where investment in key parts of the region's road network is required to support committed local plan growth in the area and alleviate existing issues and constraints on the network.
- 3.2. The project, commissioned by National Highways, is being delivered by consultants Arup. As co-sponsors, DfT and England's Economic Heartland have been part of the steering group supporting the study.
- 3.3. Members and officers across the EEH region were briefed by the roads study project team in January 2022.
- 3.4. This study sits alongside wider complementary strategic studies being undertaken, including route strategies, East West Rail and EEH's connectivity studies, which specifically focus on the wider transport and connectivity needs of several specific corridors.

3.5. It should be noted this study does not include the whole of the EEH region as it excludes Hertfordshire and Swindon. EEH will continue to work with Hertfordshire and Swindon to ensure roads in their areas are equally considered and prioritised, either through the EEH connectivity studies, route strategies or other opportunities.

4. Study Methodology

- 4.1. The policy context and strategic objectives of both DfT and England’s Economic Heartland were used at the beginning of the study to define a series of ‘levels of service’ for roads in the study area. By defining desired levels of service, the study has been able to assess and understand the drivers, performance and impact of the SRN and MRN links in the area.
- 4.2. The network assessment criteria were split into three pillars, specifically: network driver, network performance and network impact. The categorisation of the network measures under each of these pillars is shown below in figure one.
- 4.3. These pillars were used to assess the network to identify where there are issues or areas of focus that should be looked at in more detail.

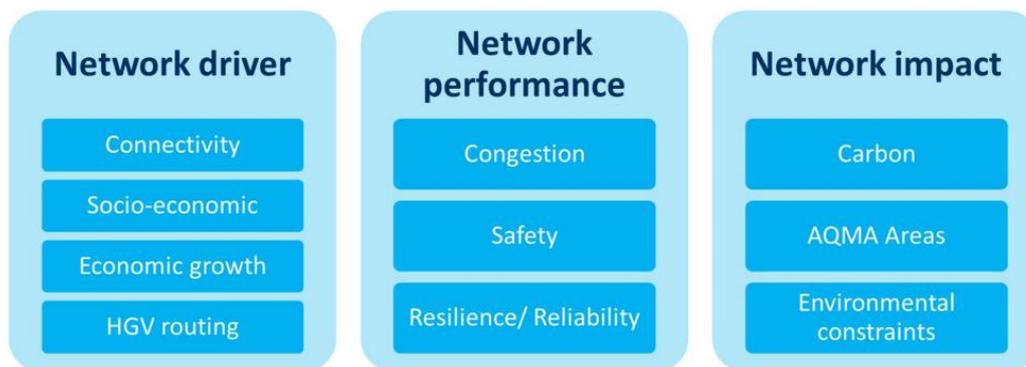


Figure 1 Pillars for Network Assessment

4.4. The assessment and analysis undertaken was based on five forecasting scenarios as outlined in Table 1 below. ‘High growth’ is growth that is included in local plans. The identified priority areas of focus were identified through assessing the network against the pillars for assessment in the different scenarios.

Scenario	Description
Core (TAG defined)	Planned growth and infrastructure schemes classified as ‘Near certain’ or ‘More than likely’ in the uncertainty log
Core plus known schemes	Schemes which are being worked on but are not certain (i.e not fully funded)
High Growth (TAG defined)	TAG defined high growth including ‘Reasonably foreseeable’ development
Population Redistribution	Running cost of EVs remains low resulting in longer distance trips and therefore a redistribution of trip ends
Behavioural Change	New developments deliver ambitious low car trip rates resulting in a reduction of short distance car trips

Table 1 Forecasting Scenarios

4.5. The analysis included factors such as whether high HGV flows are on inappropriate roads, whether planned growth will require the need for a road scheme, whether poor levels of connectivity could be resolved with a road scheme, or whether a road scheme could positively influence areas with lower deprivation.

- 4.6. Key junctions, corridors or town centres which repeatedly classified as level of service E or F across multiple network measures were identified and this formed the list of priority areas. These were compared with areas identified as priorities for stakeholders – captured via a number of means including: MP and leader engagement, the regional transport strategy and other evidence.
- 4.7. Summary tables were produced for each priority area showing the level of service score across each network for each scenario assessed against the baseline scenario to highlight whether the areas should remain a priority, or whether other factors may resolve existing network issues. An example of one is included as Table 2 below.
- 4.8. This process resulted in the identification of priority areas spread across the arc.
- 4.9. There has been local engagement with most of the local authority partners by EEH officers and in some instances members of the study project team to inform and provide individual feedback on the identified priority areas in their local authority area to ensure that they align with local priorities.
- 4.10. National Highways’ approach to engagement with EEH as sub-national transport body has been positive and should serve as a model for future studies.

Table 2 Example of Level of service summary table

	AM Congestion	PM Congestion	Safety	Freight	CO2	Reliability	Connectivity	Socio-economic
Base	D	F	F	C	D	N/A	E	E
Core	+	=		B	B		F	
Core + known schemes	=	=		B	B		F	
High Growth	+	=		B	B		F	
Population Redistribution	=	=		B	A		F	
Behavioural Change	=	=		B	B		F	

5. Priority areas

- 5.1. The process has resulted in the identification of priority areas spread across the region.
- 5.2. The priority areas are now being reassessed with a view to the potential for each location to be taken forward to the next stage of the study to develop concepts for each of the priority areas identified. Those not being taken forward will be identified and narrative to the reasoning behind this decision provided.
- 5.3. The final list of priority areas is based solely on the data available to the study at this time. The whole MRN and SRN network within the study area has been assessed using the same criteria so that the assessment is fair and consistent.
- 5.4. In advance of the Strategic Transport Leadership Board, EEH officers held bilateral discussions with Board members, supported by their officers and National Highways and local authority officers. The meetings were a key opportunity for EEH to discuss emerging findings and outputs from the project with individual partners which will be fed back to the project team.



6. Next steps

- 6.1. The project is now moving into its next phase: developing concepts for solutions to identified priority areas. EEH Business Unit has organised meetings with Local Authority Officers and the project team to ensure that any concepts align with local priorities and ensure that we are working collaboratively to identify solutions, which is a key part of the project.
- 6.2. Areas which have not been selected as a priority may arise as other data or new issues and local plans transpire. This analysis presents our current understanding and any future studies may expand or amend this list and it may be for individual local authorities to take local priorities forward with appropriate transport modelling evidence and solutions.

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