

M25 South West Quadrant Strategic Study

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Moving Britain Ahead

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1) Study Aim

- 1. The strategic aim of the study is to identify and evaluate options for improving the performance of the transport network across all modes in and around in the South West Quadrant of the M25, boosting economic growth and prosperity and improving journeys.
- 2. The South West quadrant of the M25 between junctions 10 (A3) and 16 (M40) is the busiest road in the country. The route is important for traffic locally; and for traffic moving from the south and south east to the west and north of the country. There is extensive congestion on, and around, this stretch of road which regularly extends well beyond the weekday morning and evening traffic peaks, and an absence of visible alternatives.
- 3. The study will consider a range of different modal options to ensure that the best possible solution is adopted for addressing the problem. It will identify options and develop conclusions on the strategic, economic, safety, environmental and operational benefits and impacts for each of the feasible options, and make recommendations on a preferred option or options.
- 4. The requirement for the study was set out in the first Road Investment Strategy (RIS):
 - "It is time for a far reaching study that can consider all the options for transport in this area, taking account of any relevant findings from the Airports Commission. This will need to consider how to make best use of different transport modes and the local network. It will also need to consider whether it is possible to strengthen or provide alternative routes for traffic to relieve pressure on the M25 itself. The end result needs to be a lasting solution, which can keep people moving for a generation to come."
 - "with the objective of informing priorities for the 2nd RIS period (2020/2021 2025/26)".
- 5. This area of the M25 SW Quadrant has been the subject of other detailed studies in recent times, so the current and potential forecast issues and challenges are well understood and documented. For example:

- London orbital multi modal study, 2003¹
- National Networks Study: M25 South West Quadrant, September 2010. A report prepared for the DfT by Atkins [unpublished].
- London Orbital and M23 to Gatwick Route Strategy Evidence Report, April 2014, Highways Agency.²
- Airports Commission Final Report, July 2015, Airports Commission.³

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¹http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCoQFjAAahUKEwjuv6DJro3 HAhVJPBQKHeWxA08&url=http%3A%2F%2Fabstracts.aetransport.org%2Fpaper%2Fdownload%2Fid%2F1591&ei=45q_Va7 CF8n4UOXjjvgE&usg=AFQjCNGrn8oeLGrXZvzmFYH8-

²https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364210/London_Orbital_and_M23_to_Gatwick.p

 $[\]frac{df}{^3} \\ \underline{https://www.gov.uk/government/collections/airports-commission-final-report-and-supporting-documents}$

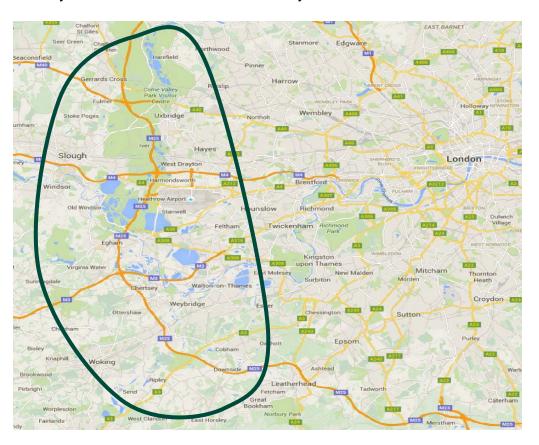
2) Objectives of the study

- 6. The objectives of the M25 South West Quadrant Strategic Study are to:
 - assess and form a preliminary strategic case for improving the transport network in the region based on the strategic and economic benefits;
 - define the transport objectives that this ongoing study should seek to identify options for;
 - identify a long-list of options which could meet the transport objectives, and undertake a high level assessment of the potential VfM, benefits and impacts of the different options using the Early Assessment Sifting Tool (EAST);
 - short-list the better options to be carried forward;
 - Prepare a Strategic Outline Business Case for the short-listed options for consideration in the development of future RIS.
- 7. The transport objectives of the study are to:
 - Support the Government's and regional aspirations for economic growth
 - Improve the flow of through traffic travelling around the M25 Junctions 10-16 and local roads in the study area
 - Impact on traffic demand and journey time reliability on the M25 Junctions 10-16 and local roads in the study area
 - Improve road safety for all, including road users; non-motorised users; road workers; local residents
 - Reduce adverse environmental impacts and eliminate where possible, In particular it will:
 - Address existing Air Quality Management Areas (AQMAs) and ensure no further air quality exceedances are created as a result of selected option
 - Address existing noise priority areas and ensure no further noise priority areas as a result of selected option
- 8. The study will consider a range of different modal options to ensure that the local road network and public transport play their part in long term transport solutions to the issues affecting the busiest part of the strategic road network (SRN) in the country. It will take into account the impact of future development pressures on the network, ensuring that the transport network can support both national and local aspirations for the area. The study will need to consider whether any major online enhancements to the SRN are part of the solution or additional capacity away from the M25 is needed.

- 9. The study will explore the technical feasibility, benefits, costs, deliverability and impacts of transport improvements. It will identify options that can feasibly be constructed, on what timescale, and assess the strategic, economic, safety, environmental and operational performance of these options. It will take account of schemes committed in the 1st RIS period to 2020; it can propose solutions that could be delivered in the 2nd RIS period to 2025; it can propose a package of solutions e.g. to the local road network/junctions leading to and from the M25 to help address current issues and relieve pressure; and, in the longer term, it will propose the longer term, far reaching solutions that will help to achieve the strategic aim to 2040.
- 10. The study will take into account the capacity improvements to the SRN, public transport and local road network that are already committed and being planned by the relevant delivery organisations i.e. Highways England, Network Rail, local authorities, Transport for London. It will also need to consider the Government's response to the Airports Commission's recommendations on new airport capacity. The study will also need to consider other key housing and economic growth proposals in the area.
- 11. As set out in the Transport Investment and Economic Performance Report and the Department for Transport's response on Understanding and Valuing the Impacts of Transport Investments, the study will need to reach an understanding on how options impact on the local and regional economy. This includes understanding how options:
 - Affect local labour markets, wages, employment and skill formation;
 - What the impact would be on firms from bringing them closer together, such as reduced costs of supply, greater co-operation benefits and economies of scale;
 - Whether there would be any land use changes and what that means for the economic performance of the region;
 - Whether increased investment would probably be brought into the region and what form that would take;
 - To what degree impacts are truly additional and which areas/groups gain and lose. Related to this it will be important to understand whether options have a negative impact on other areas eg reducing investment and growth in those areas.

3) Geographical Area for the Study

- 12. The geographical area for the study is the M25 Junctions 10-16 and connecting roads (motorway and trunk road spurs), and the wider area affected by traffic on these roads. The precise extent of this wider area will be determined by the Study Project, but should extend at least 10-15 miles from the existing road and should look to reflect the different demands placed on this section of the M25 from local and national traffic. The study should consider the benefits and economic impacts where it is sensible to do so, including outside of the study area.
- 13. The study should consider transport options across this wider area that could ease pressure on the M25 SW Quadrant and may suggest far reaching solutions where they would meet the aims of the study.



4) Notes on scope

- 14. The study is primarily aimed at exploring the case for improvements to the road network in the study area, but other multi modal modes should also be considered and included as options where they are likely to meet study objectives (covering strategic and local authority road networks, local bus; coach and rail services).
- 15. The study should consider transport options across this wider area that could ease pressure on the M25 SW Quadrant and may suggest far reaching solutions where they would meet the aims of the study. Improvements are not limited to enhancements of the existing strategic road network. Improvements to local roads, the consideration of building new roads and enhancements to other modes are not excluded from the scope of this study.

5) Study Outputs and Timings

Study Stages

16. The study will be completed in four stages which are set out below. The study will be reviewed at the end of stages two and three to confirm the value of proceeding and review the scope of the subsequent phases of work.

Task 1: Review existing materials and prepare a preliminary strategic case for transport improvements.

Objective:

Review previous studies, investigate and set out the exact nature of the problems experienced within the M25 quadrant and set out the strategic case for transport improvements in an initial report. Review previous study work, other relevant data, and current investment plans to understand current and anticipated future performance and constraints of the transport infrastructure (taking account of committed future improvements), and prepare a preliminary strategic case for considering further investment to the transport network in and around the M25.

Task specific requirements and instructions:

This review should consider the approach set out in Steps 1 to 3 of DfT's 2014 publication Transport Analysis Guidance: The Transport Appraisal Process

Further guidance on preparation of a Strategic Case can be found at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/85930/ dft-transport-business-case.pdf

Summarise the evidence and information obtained to reach a preliminary view on the strategic and macro-economic benefits for improving the M25 South West Quadrant. This will involve referencing wider economic evidence including how current problems impact on the regional economy, labour markets and business environment in the region and its sub-regions, community and social factors, and the impacts of the seaports and airports on transport and trade.

Existing transport and traffic models will be identified and existing knowledge reviewed. Any gaps in the modelling information should be identified. It is assumed that no additional traffic modelling will be required within the scope of this study but the Consultant will advise if additional modelling is required to achieve study

outcomes and, if this is the case, what the implications on the timetable for and cost of the study will be.

Deliverables:

- Initial report, based on the relevant sections of a Strategic Case, to determine
 whether or not an investment is needed in the transport system within the study
 area. It should demonstrate the case for change that is, a clear rationale for
 making investment; and strategic fit, how an investment will further the aims and
 objectives of the Department for Transport. It will include supporting annexes and
 datasets as required. In addition the consultants will:
 - Commence preparation of an Options Assessment Report (PCF Product), covering Steps 1 to 3.
 - A Product Checklist (PCF Product) will be produced to track the progress being made on each PCF Product.

Task 2: Define key objectives and sifting criteria for a transport intervention that will solve the problems identified and identify a long-list of options which could meet the transport objectives

Objectives:

- Define the key objectives and sifting criteria for identifying a long-list and shortlisting.
- Identify a long-list of options which could meet the transport objectives.

Task specific requirements and instructions:

This review should consider the approach set out in Steps 4a to 5 of DfT's 2014 publication Transport Analysis Guidance: The Transport Appraisal Process.

The identification of a long-list of possible transport improvements should build upon work done in previous studies and identify also any additional options worthy of further consideration. It is assumed that between eight and ten options will be identified at this stage although the Consultant will advise Highways England if it believes that a greater or lesser number of options should be long-listed.

Road improvements are not limited to enhancements of the existing strategic road network. Improvements to local roads, the consideration of building new roads or enhancements to other transport modes are not excluded from the scope of this study.

Deliverables:

 Add to the Options Assessment Report (PCF Product), started in Task 1 covering Steps 4a to 5. • An Appraisal Specification Report (ASR) (PCF Product) will be provided which will state how the further appraisal work will be undertaken.

Task 3a: initial sifting of options

Objectives:

- A high level assessment of the different options against sifting criteria to discard those least able to fit with local, regional, national strategies, or would be highly unlikely to pass key viability and acceptability criteria.
- Based on the assessment above, identify a short-list of potential options to be carried forward to Task 3b for further development and assessment.

Task specific requirements and instructions:

This review should consider the approach set out in Step 6 and 9 of DfT's 2014 publication Transport Analysis Guidance: The Transport Appraisal Process, including use of the Early Assessment Sifting Tool (EAST).

Consideration of air quality effects of the options is required and will need to go beyond the approach outlined in EAST, but should make use of available information and no modelling is expected. Air quality as a constraint to the deliverability or delivery timescale of the options should also be identified.

The approximate time for option delivery, must give regard to any option that will be a Nationally-Significant Infrastructure Project (NSIP) and will therefore be delivered under Planning Act 2008 powers.

Deliverables:

- Add to the Options Assessment Report (PCF Product), started in Task 1 covering Step 6.
- Update the Appraisal Specification Report (ASR) (PCF Product) produced in Task 2 state how the further appraisal work will be undertaken.

Task 3b: Assess the affordability, value for money and deliverability of shortlist potential options

Objective:

 To carry out an appraisal of the short-list of options from stage 3a and produce a Strategic Outline Business Case.

Task specific requirements and instructions:

Further guidance on preparation of a Strategic Outline Business Case can be found at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/85930/dft-transport-business-case.pdf

Appraise transport benefits including wider economic benefits using the overall approach set out in WebTAG. It is expected that the consultant will, as part of this analysis, look not just at economic impacts from static agglomeration but also the potential for dynamic agglomeration from land use change.

The consultant will also be expected to demonstrate familiarity with the Transport Investment and Economic Performance Report1 and the Department for Transport's response together with Understanding and Valuing the Impacts of Transport Investments 2 in addition to the assessment methods required by Highways England's Project Controls Framework (PCF) system. In detail it is expected that the analysis will include:

- an assessment of the impacts, benefits and costs of each transport improvement option, considering its strategic and economic case together with its effects on traffic and congestion, road safety, and the environment;
- consideration of the impact of each option on local and regional labour markets, wages, employment levels, and skills; on the cost of supply and on the benefits of greater collaboration and economies of scale;
- consideration of the impact of each option on current and future land use and what this means to the local and regional economy as well as to the environment and communities:
- consideration of the consequences of the scheme in terms of increased investment in the region and the most likely form which this would take;
- an assessment of the degree to which impacts and benefits are truly additional and whether options will have a negative impact on other areas in terms of reduced employment, investment and growth;
- calculation of the estimated cost of each option and the approximate time for its delivery, giving regard to any option that will be a Nationally-Significant Infrastructure Project (NSIP) and will therefore be delivered under Planning Act 2008 powers; and
- identifying the risks and opportunities associated with each option, including those relating to the development process, construction, commissioning, operation, use, maintenance, security and safety.

Deliverables:

A strategic Outline Business case which should include for the short-listed options:

- An appraisal of the economic costs and benefits of each option and the assumptions used in to arrive at the estimates made in the Options Assessment Report.
- An Appraisal Specification Report (ASR) (PCF Product) which will state how the further appraisal work will be undertaken.
- An Order of Magnitude Estimate (PCF Product) is required to identify the costs incurred for each of the options.
- An Appraisal Summary Table (PCF Product) is required to summarise the costs and benefits associated with each of the options identified.

- An Investment Submission (PCF Product) will be produced to submit the evidence for a PCF Stage 0 Gateway Review.
- An Environmental Assessment Report will be produced which will identify the high level environmental risks and impacts as a result of each of the identified options.
- A Value Management Workshop Report (PCF Product) will be produced which will summarise the opinions expressed by each appraisal discipline.

Considering other Government decisions

17. As set out in earlier, the study will need to consider the Government's response to the Airport Commission's recommendations on new airport capacity.

6) Governance of the Study

18. Proposed governance arrangements for the M25 South West Quadrant strategic Study are summarised in Figure 2.

Sponsor – Department for Transport

35. The sponsor will chair the Programme Board and Project Board, with appropriate delegated authority for making decisions on behalf of the study to enable decisions to be made by the **Programme Board** and **Project Board**. These representatives will also be responsible for ensuring that the outputs at each stage meet Sponsor / Client requirements.

Senior Responsible Owner

19. The Senior Responsible Owner (SRO) for the study will be Paul Hersey, Senior Policy Lead at the Department for Transport.

37. The SRO will:

- Chair the Project Board
- Deal with issues as they arise requiring their advice, decision-making and communication with senior stakeholders;
- Ensure that stakeholders agree on the definition of outputs to be delivered, and the definition of their delivery
- Provide high-level scrutiny of risk, taking responsibility for risk and issue mitigation and management if required

Study Programme Board

- 38. Overall direction for this and the other five Strategic Studies will be provided by a Programme Board. The role of the Programme Board will be to:
 - Provide strategic direction for the programme of studies and monitor key milestones
 - Monitor/validate progress against plan and review significant risks and issues
 - Decide on the frequency and level of detail to be reported to Ministers;
 - Provide advice to project managers regarding issues that arise as part of the individual studies; and
 - Review and approve the study outputs.

The Programme Board will be led by the Sponsor, supported by the study SRO.

- 39. The other members of the Programme Board will include:
 - RIS Futures Deputy Director
 - RIS Client Deputy Director
 - Highways England Strategy and Planning
 - Economic Roads Advisor
 - Strategic Communications
 - Study SRO's
 - TfN representative (for consideration of the three northern studies only)

The study Sponsor, Director of DfT Strategic Roads, will agree the content of recommendations to Ministers arising from this study.

Study Project Board

- 40. The day to day control of the study will be undertaken by a project board. The project board will be chaired by the SRO, supported by the Project Manager. Membership of the Board will also include:
 - Highways England
 - DfT local engagement representative
 - Network Rail
 - The contractor for delivery of the study.
- 41. The Project Board's role will be to:
 - Ensure agreement to the scope of the study, and the aims, timings and outputs of the study, and agree any amendments to the study's activities as it progresses
 - Provide day to day oversight of the study
 - Take decisions as necessary throughout the life of the study and decide which decisions should be escalated to the Programme Board, and approve draft outputs to be considered by the Programme Board.
 - Monitor progress against the plan and review significant risks and issues
- 42. As the study progresses there may be a need to establish specific technical or working groups to take forward defined activities. Decisions on the establishment and membership of such groups would be for the project board to consider.

Stakeholder Reference Group

- 43. Given the broad range of stakeholder interests in the study a 'reference group' will be established. The group will meet regularly as the study progresses.
- 44. The main role of the reference group will be to ensure stakeholders' views are captured and considered during the study process, particularly at key points in the study's work and at times of the development of key outputs.

- 45. The establishment of the reference group will allow stakeholder organisations to be aware and feed into the work of the study and allow representation from other organisations.
- 46. The membership of the reference group will be confirmed at the end of stage 1 of the study, and is likely to include LEPs, local authorities (including planning authorities), environmental NGOs, other transport operators and infrastructure providers, and business interest groups. The membership of this group will be kept under review as the study progresses to ensure that it continues to capture stakeholder views throughout the study process.

Figure 2

