Method Statement

Project:	A51 Tarvin Outline Business Case	**Date:**	12/06/17
Title:	Methodology to Outline Business Case Development		

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Introduction

Cheshire West and Chester Council (CWaC) have commissioned Mott MacDonald to develop an Outline Business Case (OBC) for highway capacity improvements on the A51 between Chester and Tarvin. The scope of the project has been divided into 5 key stages of activity:

- An initial OBC scoping exercise with the Cheshire and Warrington Local Enterprise Partnership (LEP) to determine the exact scope of appraisal required to produce a proportionate case for funding;
- Outline identification and design of option packages to improve capacity and flow along the A51 corridor from the A51/A54 roundabout in Tarvin, westward to the junction with the A55;
- Sifting of options and potential packages based on criteria agreed with CWaC, which will include cost and alignment with policy and scheme objectives;
- Traffic modelling of shortlisted options to assess localised performance at junctions and the impact on movement within the corridor as a whole; and a
- WebTAG compliant economic appraisal and an assessment of wider economic benefits for the preferred package of options.

Coupled with desk top research to identify current problems and opportunities and establish the strategic case for intervention, these 5 key stages of optioneering activity will inform the Outline Business Case by identifying, through a robust and transparent process, the preferred and most viable option.

Consideration of Business Case Requirements

Developed by the Department for Transport (DfT), the business case process has been developed to ensure that transport investment decisions are based on the same high-level process and information requirements to facilitate objective comparisons of proposals for investment within and between projects and modes.

OBCs and MSBCs (Major Scheme Business Cases) are designed in line with Treasury's advice on evidence-based decision making set out in the Green Book and use its best practice five case model approach. This approach shows whether schemes:

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

- Are supported by a robust case for change that fits with wider public policy objectives – the 'strategic case';
- Demonstrate value for money – the Economic Case;
- Are commercially viable – the Financial Case;
- Are financially affordable – the Commercial Case; and
- Are achievable – the Management Case.

The key tasks and our approach to addressing them to develop the OBC for the A51 Tarvin scheme are set out below in accordance with this 5-case model and incorporate the stages of activity surrounding the optioneering process, which form an integral part of OBC development.

Key Tasks

Strategic Case Tasks	Approach and method
Project description and update	Establish if there have been any changes to the scope, context, purpose and definition of the scheme since the development of the Strategic Outline Case (SOC) and re- state the scheme description accordingly.
Update Design Drawings	The designs presented in the SOC will be assessed and taken into consideration when developing options for the A51 corridor from and including the junctions of the A55 and the A54. The process for the design update is as follows: • Confirmation of scheme proposals; • Site assessments; • Obtain statutory undertakers details; • Obtain/ assess land ownership/ highway boundary details; • Initial option review/development (15-20 options); • Option assessment of shortlisted options (3-4 options); • Final changes to drawings; and • Cost estimates of schemes presented in the application.
Confirm strategic alignment with policy and strategy	A review of local, sub regional and national policy to evidence scheme 'fit' with strategy
Make the case for intervention	A more detailed review of the evidence base generated for the SOC looking at both transport and wider socio demographic issues. A separate stand-alone business report will be issued to support the LCR SIF produced OBC application form, evidencing the issues and opportunities in the area and making the case for intervention. On the basis of revised drawings, traffic modelling will be undertaken to show any changes to the impact of the scheme since the SOC was submitted.

Strategic Case Tasks	Approach and method
	Review market failures identified for the SOC and assess the viability of alternative funding streams to establish if there is any change in the level of public sector funding required.
Document stakeholder involvement	Identification of the main stakeholders and beneficiaries using stakeholder mapping. Development of an outline Stakeholder Consultation Plan and delivery, together with CWAC officers, consultation workshops that provide stakeholders the opportunity to comment on shortlisted scheme options
Identify strategic risks constraints and dependencies	Identification of strategic risks to the project such as technical, environmental, political, legal, and risks relating to construction and suggest mitigation measures. Completion of an environmental constraints mapping study with supporting reports. The maps will reflect all risk based constraints using a 'heat map' and high-risk map. Identification of internal and external constraints that may present a material risk to delivery, covering issues such as land ownership, planning, statutory processes, and approvals. Review of interdependencies with other transport, development and regeneration schemes, as well a review of any wider political or stakeholder influences.

Economic Case Tasks	Approach and method
Option development	A 'Long List' of initial options will be presented that notes the do minimum and approximately 15-20 do-something options covering the A51 corridor from the junction with the A54 to the junction with the A55. Drawings, existing turning and flow data from the SATURN model and alignment with objectives and policy will then be used to sift this initial 'Long List' using our bespoke in-house Investment Sifting and Evaluation Tool (INSET), to arrive at a shortlist of 3- 4 options. Appropriate and relevant criteria for options assessment will be developed so that the advantages and disadvantages of each option can be clearly demonstrated. The 3-4 shortlisted options will be modelled using ARCADY for roundabouts, PICADY for priority junctions and LINSIG for signalised junction options to assess their performance in relation to improving journey time reliability

Economic Case Tasks	Approach and method
	The shortlisted options will be costed, excluding inflation, but including risk and optimism bias at 15% and a Benefit Cost Ratio calculated for the preferred option to establish, in accordance with DfT guidance whether the option provides poor, low, medium, high or Value for Money (VfM). A separate Options Appraisal Report will be produced documenting the options development and appraisal process; it will outline the assumptions, assessment criteria and the sifting process. .
Estimate wider economic benefits	Assess the wider economic benefits associated with each of the shortlisted options to ascertain how they could support the growth within the Cheshire West and Chester economy by examining: Current travel to work patterns into Chester and it's the surrounds. Commercial development planned in and around the proposals, particularly the development in and around the city centre along the A51. Assessing the likely level of gross and net jobs and Gross Value Added (GVA) associated with any land use changes from commercial development and how the scheme could influence such development. Any other key wider economic benefits such as supporting key sectors such as tourism. The assessment will focus on the difference between the do-nothing scenario and preferred do something approach given differences between the do something options are likely to be negligible from a wider economic benefits perspective.
Estimate transport benefits	The transport economic benefits will be calculated in line with WebTAG for the preferred option with the Chester SATURN model will form the basis of the transport modelling. All demand estimates and the overall economic assessment will be undertaken in line with recognised government guidance, and the following elements will be calculated: • Transport economic benefits; • Wider impact of transport appraisal benefits; • Journey time reliability benefits; • Accident benefits; and • Initial and adjusted benefit-cost ratio (BCR).
Risk identification and analysis	The risk register will be prepared in accordance with the application noting strategic, funding, infrastructure and environmental risks specific to the preferred option. A quantified risk assessment will also be prepared using a Monte Carlo analysis.

Economic Case Tasks	Approach and method
Selection of the preferred option	Document the process for arriving at the preferred option and note reasons for discarding other options, taking into account the findings of the sifting, modelling and appraisal processes.

Commercial Case Tasks	Approach and method
Establish delivery structure	Working with CWAC officers and based on information provided about delivery routes, document the delivery options, potential delivery partners and their role in delivery.
Investigate and assess procurement approaches	With the assistance of CWAC officers document the procurement method that will be used to procure delivery or development activities.
Identify statutory and other consents	Review any change since the SOC submission that may impact any requirement for statutory and other consents.
Apportion risk	Identify risk owners and where possible the percentage of risk borne by both the public and private sectors.

Financial Case Tasks	Approach and method
Summarise project funding	Update the Financial Case presented in the SOC, on the basis of updated drawings and costs, including the QRA and optimism bias, which is reduced from 44% at SOC stage to 15% at OBC.
Detail capital and revenue costs	Capital and revenue expenditure will be shown on a per annum basis on the LCR SIF application form. A separate Cost Plan will be drafted to show the breakdown of specific delivery costs.
Establish the SIF Funding requirement	Using updated figures based on the outcomes of cost revisions complete the funding profile and investigate the possibility of other funding sources, either public or private that could contribute to the delivery of the scheme.

Management Case Tasks	Approach and method
Illustrate an overview of governance arrangements	Use organograms detail scheme governance including roles, responsibilities and decision-making hierarchy.
Establish delivery milestones	Develop an Implementation Plan to highlight delivery timescales, key project milestones, management of other partners and stakeholders involved in scheme delivery and anticipated wider impacts as the overall project is delivered.
Define a risk management approach	Identify a risk management approach and agree mitigation measures.

OBC Deliverables

The tasks noted above will result in a suite of documentation that will include the final and complete OBC application form with the following documents as appendices.

- Outline scheme drawings;
- Scheme cost estimates;
- Technical note to provide an audit trail of the economic appraisal;
- TEE tables;
- Impact on Public Accounts;
- AMCB tables
- Land Use and Economic Appraisal Report.
- Outline Monitoring and Evaluation Report
- Outline Benefits Realisation Plan
- Environmental Constraints Report
- Appraisal Specification Report