

A428 / Western Corridor brief

Background

The Transport Strategy that has been developed to support the current Local Plan review outlines major investment in public transport as a pre-requisite to support employment and housing growth at key development sites, particularly on the western (along the alignment of the A428) and northern (along the alignment of the A10) corridors. The aim is to deliver high quality passenger transport provision complemented with cycling and pedestrian routes along key corridors linking key growth sites to key destinations in a comprehensive way. Although there isn't a prescriptive specific solution for each corridor, an equivalent standard of public transport provision in terms of reliability, frequency and speed to the successful Busway scheme serving the A14 and Northstowe development should be sought.

The County Council would like to understand in more detail the options to deliver a corridor-based public transport scheme between Cambridge and St Neots, focussed principally on connecting major new development sites located around Cambourne with major employment centres such as Cambridge City Centre, Addenbrooke's, and the Cambridge Science Park. Understanding the benefits of this scheme will assist in the option assessment and selection.

This commission will deliver an assessment of the options for delivering a bus based high quality public transport scheme for the western corridor, and develop an outline business case for the preferred option. This work may be used and relied on at a future Local Plan Examination, or as part of a Public Inquiry or consents process for any future scheme.

The principal objectives of this brief is to inform and test the options for the development of a high quality public transport scheme as outlined in the transport strategy. A mixture of disciplines will be required including transport planning, transport modelling, engineering, planning, and economic assessment.

The specific deliverables are listed below but principally are the completion of a robust Option Report identifying potential solutions to deliver a public transport scheme serving the western corridor, and the development of an Outline Business Case that establishes the context, justification, and case for the scheme.

Negotiations with central government over a potential City Deal for Cambridge are underway and could offer a route to fund the accelerated delivery of any scheme. This funding would be to unlock economic growth and development in the region so work should be compliant with WebTag Option Selection (Stage 1) but it will also be important to understand the contribution of any scheme to the economy. It is expected however that even if this funding becomes available, contributions will be required from developments along the route in terms of land and funding to both the capital cost and operating cost of a scheme.

Background documents / Client input

Transport Strategy

Responses to the Transport Strategy Consultation from Developers

City Deal information

Initial Options report

Objectives for corridor from Transport Strategy

Plans

Submissions to the draft Local Plan from promoters proposing development in the A428 corridor

Deliverables

1 Outline Business Case

- All deliverables should be WebTAG compliant to fully satisfy Stage 1 (Option Development), but should also consider that as well as the transport case for the scheme, the economic case and benefits of any scheme need to be defined given the potential funding stream from City Deal.
- An Outline Business Case will be developed by the consultant that establishes the context and need for the scheme, and sets out clearly the reasons why the investment is required.
- The options that have been considered, including a 'do nothing', and a 'do-minimum' option, should be assessed and presented in a standard format.
- A BCR for each option fully assessed should be determined.
- Patronage and PT demand for each option should be assessed and described, with a full analysis of movement / mode split in the corridor by all modes
- Demographics in the corridor should be analysed and presented as part of the supporting evidence
- Development sites should be identified and described with available information and the relationship to them of any proposed scheme should be identified
- Key employment sites should be identified and compared to unemployment rates in the corridor to identify potential demand for journeys key origins and destinations
- Funding requirements should be identified and possible sources of funding identified
- Consideration and evaluation of the apportionment of anticipated developer contributions in the corridor should be made, with a detailed description of the methodology used to arrive at the conclusion; this should be robust and evidence-based as the approach may be subsequently endorsed in planning / policy guidance, with County Council officers anticipating using this methodology in negotiations with developers. The approach will therefore need to be compliant with Community Infrastructure Regulation 122 on planning obligations
- Commentary on proposed bus operations and capacity should be provided
- Quantified benefits should be demonstrated comparing among other things predicted journey times against the do nothing and do minimum scenarios, for both current and future years

2 Options Report

Consideration of all options to deliver the objectives for the corridor should be undertaken, including both the use of the existing highway alignment and off-line interventions. This could include traffic reduction or removal to reallocate road space, highway capacity improvements, guided busway, bus lanes, a park and ride site (or sites) to intercept traffic, a combination of these, or another alternative. Options should be summarised and shortlisted to rule out options or routes that are clearly unacceptable in terms of cost, deliverability, or environmental impact. An example of some of the current thinking is attached. Key issues and risks associated with each option should be identified and the alignments and schemes suggested compiled into a shortlist that can be discussed with the client before further assessment.

More detailed assessment of the shortlist must be undertaken and compared against a 'do nothing', and a 'do minimum' option.

- The objective is to have congestion free PT serving the corridor including the new developments, to avoid an increase in congestion and journey times
- An assessment should be made of the cumulative effect of developments along the A428 corridor in a do nothing scenario. The study should establish what modal share is needed along the corridor to accommodate the planned new development, without making queues on Madingley Rise longer. Consequently, modal share targets for the new developments should be proposed.
- The Transport Strategy identifies that bus based investment is most appropriate for this corridor. A justification for the extent of the investment is required, based on the need to achieve the modal shares established above.
- Scheme characteristics should be identified and described
- Alignments on and offline should be clearly shown at a suitable scale, with standard sections, and more detailed drawings showing pinchpoints, highway interfaces, or other details.
- Park and ride site options should be identified and assessed along the corridor, considering both operational and engineering issues.
- Work should concentrate on the section of the corridor between Caxton Gibbet and Queen Street, but should also consider the longer term issues and options between Caxton Gibbet and St Neots.
- Journey times for public transport and car journeys should be assessed.
- A cost estimate should be identified for each option, including a breakdown of the different elements (land / civils / structures / etc).
- Key risks / constraints should be identified.
- Phasing a corridor scheme should be considered and assessed in the context of the development timescales, particularly examining if it is operationally feasible to introduce phased investment as the build up in journeys and potential patronage takes place over time. Phasing proposals should also consider the relationship with key development sites as it may be some key elements can be directly delivered by developments

- Congestion in the existing and future scenarios should be evaluated and compared with public transport interventions
- An assessment should be undertaken to evaluate whether any highway interventions required are required, either to improve capacity at pinchpoints on the network, or to add highway capacity that can be used in either the short, medium, or long term to meet the objectives for the corridor.
- Engineering feasibility drawings should be provided to demonstrate routes, standard designs, widths Consideration of construction requirements should also be made and possible land requirements identified.
- Commentary on Planning requirements and identification of the scope of any potential ES should be provided.
- Description of any consents required (DCO / TWA / other) should be included
- For each option an assessment of potential funding sources, including developers based on a robust approach to apportioning contributions, should be provided
- Recommendations
- All work must be suitable for use in either an EIP in support of the Transport Strategy or Local Plan, or any Inquiry required as part of future scheme development and implementation. Representation as Expert Witness may be required and should be assumed as included in the services provided as part of this scope.

3 Non-Technical Summary

A non-technical summary of the identified options, and the business case work must be provided in plain English and suitable for a non-technical audience including potentially any future public consultation on the scheme. The options, and any others that have been discounted, should be presented.

4 Technical Note – Modelling

A technical note on the modelling approach proposed for this study should be submitted as part of the response to the brief. This should clearly describe the methodology, models, data, and resources required to fulfil the brief. This will need to be agreed with the Client before the start of the commission.

5 Technical Note – Proposed methodology for next phase

Subject to the successful completion of this study and suitable funding coming forwards, it is anticipated that this study will lead to further work including full business case development and securing the appropriate consents for the scheme. The preferred approach and scope for this work should be set out, particularly with regard to any further modelling that will be required

6 Technical Note – Proposed funding packages and methodology for securing developer contributions.

A technical note setting out a robust methodology for securing developer contributions, should be developed. This should be developed to such a level that it can be used, if necessary, as evidence at EIPs and provide a basis for negotiating planning obligations with developers.

Response

- The Consultant should set out their understanding of the brief and describe their proposal to meet the requirements
- A method statement should be provided detailing how the work will be undertaken, including the methodology and approach.
- The approach to undertaking the modelling required should be clearly set out, identifying specific models, resources, and data that will be used.
- Details of the proposed project team should be provided, including CVs, rates, and evidence of previous similar work successfully undertaken, including a nominated project manager and technical lead.
- A detailed list of proposed deliverables must be provided in response to the brief, including any additional to those identified above that the Consultant considers necessary.
- Any additional Client inputs must be identified.
- A target cost and programme for completing the work, broken down by key deliverables and milestones and showing deliverables and key dates must be provided, including any proposed phasing of the output or break points in the programme, and clearly showing both the critical path and when each deliverable will be produced, including draft reports and technical notes.
- All reports, technical notes, and other output should be submitted to the Client in draft for review. Changes may be required as part of this review which should then be incorporated into a final report for publication.
- A statement detailing any conflict of interest, or potential conflict of interest in carrying out this work must be provided.
- Any areas of work that are planned to be sub-contracted must be detailed including how this will be undertaken.
- A risk register showing the key time and cost risks to the successful completion of this work must be provided.