

# FULL INDEPENDENT BUSINESS CASE ASSESSMENT SUMMARY REPORT

Epsom Plan E Highway Improvements Scheme

> Prepared for Coast to Capital LEP Arun House, Hurst Road, Horsham, RH12 2DN

> Prepared by Parsons Brinckerhoff Westbrook Mills Godalming Surrey GU7 2AZ

Report Title	:	INDEPENDENT BUSINESS CASE ASSESSMENT Epsom Plan E Highway Improvements Scheme
PIMS Number	:	N/A
Report Status	:	[Final Report]
Job No	:	[3513941A-PTG]
Date	:	6 March 2015

# DOCUMENT HISTORY AND STATUS

Document control						
Prepared	by	Glenn Higgs			Checked by (technical)	Theo Genis
Approved	l by	Theo Genis			<b>Checked by</b> (quality assurance)	Theo Genis
Revision details						
Version	Dat	e	Pages affected	Comments		
1.0	1.0 6 March 2015		All	Original draft		

# AUTHORISATION SHEET

Client:	Coast to Capital LEP
Project:	Independent Business Case Assessment – Epsom Plan E Highway Improvements
Address:	
	PREPARED BY
Name:	Glenn Higgs, Parsons Brinckerhoff
Position:	Associate, Transportation
Date:	March 2015
	AGREED BY
Name:	Theo Genis, Parsons Brinckerhoff
Position:	Regional Associate, Transportation
Date:	March 2015
	AUTHORISED FOR ISSUE
Name:	Theo Genis, Parsons Brinckerhoff
Position:	Regional Associate, Transportation
Date:	March 2015
	DISTRIBUTION
	ACCEPTED BY
Name:	lain Reeve, Coast to Capital LEP
Position:	Consultant to Coast to Capital LEP
Date:	March 2015
	ACCEPTED BY
Name:	
Position:	
Date:	



# CONTENTS

		Page
1	Executive Summary	2
1.2	Summary of Proposed Scheme	2
1.3	Summary of Business Case Review Findings	2
2	Methodology	3
2.1	Overview of Review Methodology	3
2.2	Documentation Reviewed	3
3	Overview of Proposed Scheme	4
4	Review Findings – Strategic, Financial and Management Cases	5
4.1	Strategic Case - Scheme Objectives	5
4.2	Strategic Case - Assessment of Alternatives	5
4.3	Strategic Case – Review of Policy Fit	5
4.4	Strategic Case – Environmental Impact	6
4.5	Financial Case – Project Costs and Funding	6
4.6	Management Case – Consultation and Stakeholder Engagement	6
4.7	Management Case – Delivery Risks	6
5	Review of Economic Case	7
5.1	Economic Case – Assessment of Monetised Scheme Benefits	7
5.2	Economic Case – Assessment of Non-Monetised Scheme Benefits	7
5.3	Key Risks, Sensitivities and Uncertainties	9
5.4	Assessment of Scheme Scoring	9
6	Review against Business Case Guidance (DfT)	10
7	Conclusions and Recommendations	10

# 1 EXECUTIVE SUMMARY

- 1.1.1 This technical note provides an independent review of the **Epsom Plan E Highway Improvements** Scheme Business Case (Epsom Plan E) submission to the Coast to Capital Local Enterprise Partnership by Surrey County Council (the Scheme Promoter).
- 1.1.2 The review has been carried out by Glenn Higgs ("The Reviewer") of Parsons Brinckerhoff Ltd (PB) on behalf of Coast to Capital LEP.
- 1.1.3 The Coast to Capital LEP was allocated a portion of the Local Growth Fund (LGF) in 2014 for the development and delivery of transport infrastructure schemes. Surrey County Council (SCC) submitted a full business case for the Epsom Plan E Highway Improvements scheme to the LEP in a bid for scheme funding of £2.7m out of a total scheme cost of £3.375m.

#### 1.2 Summary of Proposed Scheme

1.2.1 The Epsom Plan E Highway Improvements scheme seeks to manage congestion on the A24 in Epsom town centre. Congestion causes network delay and unreliable journey times, affecting the appeal of the town centre as a location for existing businesses and any potentially new businesses wishing to relocate in Epsom.

#### 1.3 Summary of Business Case Review Findings

- 1.3.1 The Business Case is set out in terms of:
  - Introduction and need for the project.
  - What can the investment deliver
  - Scheme Aims
  - Scheme Proposals (Annex 1)
  - Options Considered
  - Letters of support (Annex 2)
  - Scored Benefits of Scheme (against C2C template)
- 1.3.1 The review of the business case has been set out in terms of the strategic, financial, management and economic cases.
- 1.3.2 The transport economic benefits, if realised, are consistent with the aims of the scheme and consistent with normal expectations of measures of the kinds proposed.
- 1.3.3 The business case is described overall as 'proportionate' for the current stage in the programme.
- 1.3.4 The LEP may wish to consider requiring update reporting for this and other projects in a similar position.
- 1.3.5 The reviewer recommends decreasing the scoring for environmental benefit. *The net* result of these changes to scores is to reduce the total score to 21 out of 25.
- 1.3.6 **A 20% local contribution is intended to be made by Surrey County Council.**



#### Recommendation:

- 1.3.7 The conclusion of this review is that the Surrey Epsom Plan E Highway Improvements business case submitted to the LEP is robust and fit for purpose.
- 1.3.8 The reviewer considers that the scheme will provide significant benefits and has a relatively low risk and as such recommends that the requested LTB funding of £2.7m is provided for the Epsom Plan E Highway Improvements scheme.

# 2 METHODOLOGY

#### 2.1 Overview of Review Methodology

- 2.1.1 The review was undertaken as follows:
  - The business case was provided to the PB Project Manager (Theo Genis) via email from Iain Reeve on 19 February 2015.
  - The review was undertaken, and queries and clarifications were put to the lead officer from SCC (Lyndon Mendes / Steve Howard) via telecom in w/c 23/2/2015.
  - The reviewer finalised this Assessment Report following the receipt of these responses and the further information provided.
- 2.1.2 The review was undertaken against the guidance of the Department for Transport in the documents "Transport Analysis Guidance (TAG) The Transport Appraisal Process", January 2014 and "The Transport Business Cases", January 2013.

#### 2.2 Documentation Reviewed

- 2.2.1 Business Case Document:
  - Epsom Plan E Highway Improvements Scheme (Submission to Coast to Capital LEP), February 2015 by Surrey County Council (lead officer Lyndon Mendes)



# 3 OVERVIEW OF PROPOSED SCHEME

3.1.1 The Plan E highway improvements include:

#### • Traffic Management Measures

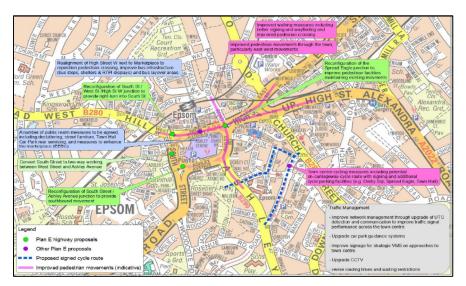
- Reconfiguration of South Street to two-way working to provide an alternative route;
- Reconfigure junction with South Street / West Street / High Street (West) to provide right turn into South Street;
- Reconfigure junction with South Street / Ashley Avenue junction to provide southbound movement towards Dorking Road and full pedestrian crossing facilities;
- Reconfigure 'Spread Eagle' junctions to signalised the right turn movement from High Street to Ashley Road;
- Review of Urban Traffic Control (UTC) system to improve traffic signal coordination and operational efficiencies;
- Enhance existing Closed Circuit Television (CCTV), to improve personal safety, reduce crime and provide network management resilience to report any incidents;
- Upgrade existing Variable Message Signs (VMS) and Car Park Guidance Information (CPGI) systems to provide information to drivers, to reduce cross town movement.

#### • Sustainable Transport Measures

- Town centre walking measures, including better signing, widened footways at 'Spread Eagle' junction;
- Town centre cycling measures including additional parking facilities at key destinations, including Derby Square and the Parade;
- Public transport infrastructure improvements, including bus layover areas, improved bus shelters with Real Time Passenger Information (RTPI) systems to provide better information to bus passengers and remove current conflict between bus passengers and pedestrians passing-by.

# • Public Realm Measures

 Public realm improvements including the marketplace, rationalising road, bus and pedestrian signage and other street furniture to provide uncluttered routes for pedestrians



# PARSONS BRINCKERHOFF

# 4 REVIEW FINDINGS – STRATEGIC, FINANCIAL AND MANAGEMENT CASES

# 4.1 Strategic Case - Scheme Objectives

- 4.1.1 The Epsom Plan E Highway Improvements scheme aims to deliver the vision of the town centre area action plan and promote economic growth by increasing accessibility to attract consumers and businesses; provide an attractive business environment; and to support the creation of jobs with goals to:
  - Improve the balance between vehicular and pedestrian movement to reduce the detrimental effect of traffic in the town centre;
  - Improve and create safe pedestrian routes and links around the town centre which are inclusive to all;
  - Ensure that Epsom remains a focus for employment uses and maintains and enhances its attractiveness as a location;
  - Create a high quality attractive, safe and uncluttered street scene; and
  - Improve the road network operational efficiency by addressing parking/ enforcement issues.

#### 4.2 Strategic Case - Assessment of Alternatives

- 4.2.1 As part of the Plan E Area Action Plan consultation in 2008/09 for the Local Plan, three options were considered to reconfigure the highway network through the town centre. These were:
  - 1. Make High Street West accessible to public transport and cyclists only, by diverting traffic via Station Approach.
  - 2. Return South Street to two-way traffic.
  - 3. Make Ashley Road and Ashley Avenue two-way. High Street (West) would be accessible to public transport and cyclists only.
- 4.2.2 Initial highway feasibility work discounted Options 1 and 3 on the basis that to accommodate existing levels of traffic flow, two lanes of traffic would be required in each direction, requiring substantial junction modifications and local widening and the need for the acquisition of or demolition of properties. These were considered major unfavourable aspects of the options.
- 4.2.3 Option 2 was taken forward and preliminary traffic modelling undertaken. Making South Street two-way shortens vehicle journeys and re-routes traffic away from High Street and Ashley Avenue and provides opportunities to improve other junctions, such as Spread Eagle and Quadrant junctions which currently act as barriers to pedestrian movements, dependent upon operational requirements.
- 4.2.4 More widely, Plan E includes a number of transport improvements which focus primarily on South Street, the Market Place/High Street (east) and Upper High Street, and the associated junctions of Quadrant junction and Spread Eagle junction, which link the key parts of the town centre.

# 4.3 Strategic Case – Review of Policy Fit

4.3.1 There is a good fit between the proposed scheme and the local policy and LEP Strategic Economic Plan (SEP).



#### 4.4 Strategic Case – Environmental Impact

- 4.4.1 Environmental impacts are assessed as follows:
  - Neutral impacts on carbon emissions, air quality and noise pollution.
  - However, the detailed modelling suggests a reduction in vehicle kilometres, journey time savings for most cross town movements and smoother traffic flow which is likely to reduce emissions and improve air quality.
  - Visual improvements to the environment expected due to public realm improvements.

# 4.5 Financial Case – Project Costs and Funding

4.5.1 The business case sets out a programme and corresponding phasing of expenditure as follows.

-	2015/16	£1.1m
-	2016/17	£1.735m
-	2017/18	£0.54m
-	Total	£3.375m

4.5.2 The sources of funding are as set out in the table below.

Funding Source	Funding Amount	
C2C Capital grant funding	£2.700m (80%)	
Epsom & Ewell Borough Council	£0.335m (10%)	
Surrey County Council	£0.252m (7.5%)	
S106 developer contributions	£0.088m (2.5%)	
TOTAL	£3.375m	

- 4.5.3 The scheme adheres to the requirement for 20% local contributions toward the total scheme cost. The scheme promoter has confirmed that the cost estimates includes for Construction Risk (at 15%) and Optimism Bias at 25%.
- 4.5.4 The programme indicates commencement of construction in September 2015 with sign off and handover of the measures taking place in March 2017. This is subject to approval procedures, procurement and design commencing immediately.

#### 4.6 Management Case – Consultation and Stakeholder Engagement

4.6.1 The business case contains evidence of support of other authorities and the Highways Agency.

#### 4.7 Management Case – Delivery Risks

- 4.7.1 Identified scheme delivery risks include:
  - Potential objections from public consultation of the scheme elements.
    - Potential issues from future Road Safety Audits of footway, cycle and highway design measures
  - Cost exceed funding (including additional costs associated with any utilities work required)

# PARSONS BRINCKERHOFF

# 5 REVIEW OF ECONOMIC CASE

# 5.1 Economic Case – Assessment of Monetised Scheme Benefits

- 5.1.1 Details for the Benefit-Cost Ratio (BCR) calculation include:
  - Total Present Value Benefits = £10.218m
    - Economic benefits undertaken using DfT TUBA software for 60year appraisal period, based on outputs from micro-simulation model (£9.105m)
    - Cost savings from accident reduction calculated using 'COBALT' software (£1.113m)
  - Total Present Value Costs = £2.858m
  - Net Present Value = £6.247m
  - BCR = 3.575
- 5.1.2 The BCR represents High Value for Money.

# 5.2 Economic Case – Assessment of Non-Monetised Scheme Benefits

#### <u>Overview</u>

- 5.2.1 Further benefits will be provided in terms of increased active travel through improved pedestrian and cycle routes, public realm and wayfinding/signage improvements. More active travel can result in economic health benefits and is also likely to result in increased retail spend by local residents and visitors. Public realm improvements may result in increased retail rateable value and residential property prices.
- 5.2.2 The Plan E highway improvements measures will also help to decrease the amount of vacant floorspace and assist in delivering the planned employment space and residential development.
- 5.2.3 Discussions between the Reviewer and the County Council focussed on how the proposals link in with the development areas and whether consideration was given to including more extensive and ambitious provision for cycle access to and within the town centre.
- 5.2.4 Much of the development is within the town centre, so the proposals will directly benefit those living and working in these sites. Other significant development areas are located just to the east of the town centre, however the scale, mix and phasing of development has not yet been determined. The Plan E highway improvements measures will provide increased capacity and higher quality facilities for additional demand from these developments and are likely to set a standard in terms of the quality of design that should be expected from highways improvements that may connect between the town centre and the developments.
- 5.2.5 The County Council considered introducing more extensive cycle route improvements within the town centre but were constrained, particularly in the west of the town (inc South Street) by the limited highway width. However, amongst other benefits, the reduced volume of traffic, smoother traffic flows and reduced queuing will improve the environment for cyclists.
- 5.2.6 As noted in the funding submission: The scheme is not considered scalable. Delivering the different elements of the scheme separately would impact on the overall benefits of the scheme. However, should the anticipated funding not be



available, it would be possible to deliver certain elements separately to deliver some localised benefits. The proposed change to South Street (two-way working) is linked with modifications at the Spread Eagle junction, is the 'keystone' measure, without this many of the additional measures which provide balanced benefits to all users of the town centre could not be implemented.

#### Details of Non-monetised Impacts

- 5.2.7 <u>A3: Encouraging sustainable travel</u>
  - Smoother traffic flow means can rationalise & reposition pedestrian crossings

- Introduction of two-way flow on South Street provides opportunity to improve the operational performance of buses

5.2.8 <u>A5: Valuing public realm</u>

- Improved wayfinding and signage helps promote night-time economy and promote 'key destinations'

- Highway improvements enable upgrading of materials, street furniture and decluttering in the marketplace to provide a focal point for shoppers and visitors

5.2.9 B1: Retention of existing jobs or creation of new jobs

- Improvements to sustainable transport have been shown to increase economic activity in town centres

- Epsom has approximately 11,000 sqm of vacant office floorspace as well as vacant retail and industrial space. Calculations suggest that should this floor-space be occupied, the GVA would total approximately £61 million

- The improvement scheme will help increase occupation rates of existing vacant floorspace in Epsom

- The improvements will assist in achieving full occupation of 6,000 sqm of new employment space (by 2026) which can be expected to generate a further 500 jobs.

- 5.2.10 <u>B2: Unlocking or improving access to new dwellings</u> The Town Centre has the capacity to deliver circa 600 new residential units within the Town Centre by 2026. Delivery of the housing sites will benefit from the package of transport improvements.
- 5.2.11 <u>B4: Other Economic benefits</u> The Plan E highway improvement measures will facilitate and support potential future development including the Upper High Street, Depot Road and Church Street Development Brief where improvements will be sought to improve pedestrian linkages, improve safety and connectivity, to encourage greater linked trips between the Upper High Street and Marketplace.
- 5.2.12 <u>C1: Expected regeneration & deprivation impact</u> It is considered that the scheme will have an overall 'slight beneficial impact' on regeneration & deprivation by providing the opportunity to retain existing businesses, up-scale employment sites (moving away from low-density and low value storage uses), provide intensification of town centre employment densities and increase commercial land values.
- 5.2.13 <u>C2: Expected impact on severance, physical activity, accessibility</u> It is considered that the scheme will have an overall 'slight beneficial impact' on severance, physical activity and accessibility. Whilst no quantitative assessment has been undertaken, using a conservative approach the Plan E Highway Improvements would help to



maintain or slightly improve the existing observed pedestrian and cyclist volumes within the town centre.

#### 5.3 Key Risks, Sensitivities and Uncertainties

- 5.3.1 The scheme is part of an Area Action Plan which has been developed over a number of years. As such, many of the risks associated with consultation, approvals and evidence have been significantly mitigated. However, the scheme is still subject to further public consultation.
- 5.3.2 Detailed design work for the scheme has not yet been undertaken and as such there are inherent uncertainties regarding the cost and feasibility (including potential additional costs from any utilities diversion works, for example).

#### 5.4 Assessment of Scheme Scoring

- 5.4.1 The total score in the application is 22 out of 25. The reviewer has given a total score of 21.
- 5.4.2 The Environmental impacts on carbon emissions, air quality and noise pollution are considered to be neutral therefore the Reviewer has recommended a score of 3.

# TABLE 1: Commentary on Scoring

Criteria	Application Score	Recommended Score <sup>1</sup>	
Expected economic benefits [ <i>transport and scheme related</i> ]:			
<ul> <li>Value for money, including BCR (if known) or similar measure.</li> </ul>			
<ul> <li>Expected impact on journey times, reliability and resilience</li> </ul>	5	5	
- Encouraging sustainable travel	5		
<ul> <li>Expected impact on road safety casualties</li> </ul>			
- Valuing public realm			
- Other transport benefits			
Expected economic benefits [economic growth]:			
- Retention of existing jobs or creation of new jobs			
- Unlocking or improving access to new dwellings			
<ul> <li>Encouragement of new businesses, or protection of existing businesses.</li> </ul>	4	4	
- Other economic benefits			
Social Distributional Impact:			
<ul> <li>Expected regeneration &amp; deprivation impact</li> </ul>	4	4	
<ul> <li>Expected impact on severance, physical activity, accessibility</li> </ul>	-		
Environmental impact:			
<ul> <li>Expected impact on carbon emissions</li> <li>Expected impact on air quality</li> <li>Expected impact on noise/natural and urban environment</li> </ul>	4	3	

<sup>&</sup>lt;sup>1</sup> Score recommended by independent business case assessor based on evidence provided in business case and in response to queries during the review process.



Contribution to the Strategic Economic Plan		
<ul> <li>How does the scheme contribute to the objectives and priorities of the SEP.</li> <li>The five transport objectives</li> <li>Contribution to other objectives</li> </ul>	5	4
Local Indicators:		
Local indicators and circumstances that help to explain the need for the scheme.	Not scored	Not scored

# 6 REVIEW AGAINST BUSINESS CASE GUIDANCE (DFT)

6.1.1 Whilst the majority of the DfT's requirements for transport business cases have been fulfilled by the Epsom Plan E Business Case, there are a number of categories that have not been comprehensively addressed.

#### 6.1.2 Strategic Case:

- Objectives
  - Establish specific, measurable, achievable, realistic and time-bound objectives that will solve the problem identified. Ensure that they align with the organisation's strategic aims.
- Measures for success
  - Set out what constitutes successful delivery of the objectives
- 6.1.3 Economic Case:
  - Risk profile and sensitivity
    - Action recommended as set out above to investigate the sensitivity of the assumed benefits, and risks to these benefits.
- 6.1.4 It is recommended that as part of further scheme development the missing detail of the business case is addressed as set out in this report.

# 7 CONCLUSIONS AND RECOMMENDATIONS

- 7.1.1 The conclusion of this review is that the Surrey Epsom Plan E Highway Improvements business case submitted to the LEP is robust and fit for purpose. The BCR calculation is robust and represents High value for money.
- 7.1.2 The reviewer considers that the scheme will provide significant benefits and has a relatively low risk and as such recommends that the requested LTB funding of £2.7m is provided for the Epsom Plan E Highway Improvements scheme.