



# Coast to Capital LEP Local Transport Board

Sustainability Schemes: Independent  
Business Case Assessment

## Greater Redhill Sustainable Transport Package

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

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

*March 2015*

**PARSONS  
BRINCKERHOFF**

## SCHEME SUMMARY

Scheme Name	Greater Redhill Sustainable Transport Package	Date	05/03/2015
-------------	---	------	------------

### Scheme

#### Scheme Description

This scheme is a package of walking, cycling and bus improvements providing better connectivity between towns and settlements within the Redhill/Reigate to Horley/Gatwick areas, and interlinking with the Horley Master Plan infrastructure improvements.

The existing cycle network in this area is considered poor quality (where it exists) with sections of busy road to negotiate therefore making this alternative mode a limit to access employment sites, causing a high reliance on private car use. Although bus frequency is considered to be good along the A23/A2044/A217, congestion results in poor journey time reliability and increased journey times, making this a less attractive alternative to the car.

The resulting effects are high congestion levels and poor journey time reliability. Surrey County Council considers that improving sustainable transport facilities will help mitigate the situation, encourage modal shift, reducing the reliance on the private car and therefore reduce the cost of congestion. The scheme looks to build on the improvements from the Council's TravelSmart programme, currently being introduced in Redhill/Reigate, and the Redhill Balanced Network within the town centre of Redhill.

The proposals described below for walking, cycling, buses and rail stations dovetail with the Horley developments in the NW and NE sectors and other improvements within the Horley urban area known as the Horley Master Plan.

#### **Cycling and walking improvements:**

The scheme focuses on extending the cycling and walking network to the south and west of Redhill to connect and improve on the existing skeletal infrastructure in Reigate, Woodhatch, along the A23 corridor through Earlswood, East Surrey Hospital/Whitebushes, Salfords, through the NW and NE sector developments and into Horley/Gatwick, upgrading substandard network, or introducing new infrastructure. In addition extending the network east to Redhill Aerodrome to provide a holistic sustainable transport network within the wider Redhill area.

*Note: In response to a question from the C2C LEP regarding the term "skeletal infrastructure", the County Council replied to say "this reference means that there are some sections in place but these currently do not join up to make an attractive network".*

The cycling improvements will include resurfacing works, widening certain sections and providing new cycle routes, including segregated cycle paths. The walking improvements along these routes will include: signalised crossings, tactile paving, dropped kerbs, safe crossing points, signing and quality surfaced areas.

#### **Bus network improvements:**

The focus of the bus improvement measures is to achieve a significant improvement in the quality, reliability and the attractiveness of the bus services. Specific measures may include:

- Traffic signal priority for buses
- Other bus priority measures
- Traffic management
- High quality passenger facilities including accessibility improvements
- Real time and other passenger information and strong marketing
- Smart card ticketing
- Together with safe pedestrian routes to the bus stops
- Junction improvements
- Investment in lower emission high quality buses

#### **Connectivity with rail:**

The area benefits from five railway stations on the Brighton to London (Victoria/London Bridge) railway line, namely Gatwick Airport, Horley, Salfords, Earlswood and Redhill. This project will improve walking, cycling and bus accessibility to these railways and connectivity to local businesses and retail.

**Junction Improvements:**

The improvement corridors include some key junctions where cycle, pedestrian and/or bus priority measures will be required to facilitate the new links. This would need to include off carriageway and/or segregated sections, and include;

- A23 Honeycrook Lane
- A23 Salbrook Road / Lodge Lane
- A23 Three Arch Road / Maple Road
- A217 Woodhatch Road
- A23 / A2044 Junction

**Scheme Alternatives**

None considered in the business case.

**Scheme Objectives**

The Greater Redhill Sustainable Transport Package aims to deliver sustainable and public transport measures to improve accessibility, encourage its use and improve safety with goals to:

- Encourage modal shift (to walking, cycling, bus and rail)
- Reduce congestion
- Improve journey time reliability
- Reduced journey times
- Reduced vehicle operating costs
- Increase accessibility to economic centres and railway stations
- Reduce road casualties
- Increase bus reliability and patronage to major employment sites, town centres, hospitals and Gatwick Airport

**FINANCIAL SUMMARY**

Main Expenditure Items (£m)	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
Phase 1 scheme	1.125	1.950	1.825			4.9
<b>TOTAL SCHEME COST</b>	<b>1.125</b>	<b>1.950</b>	<b>1.825</b>			<b>4.9</b>

**Scheme Funding**

Funding Source	Funding Amount
LEP (Sustainability Schemes)	<b>£3.675m (75%)</b>
Horley Master Plan developer contributions	<b>£1.225m (25%)</b>
<b>TOTAL</b>	<b>£4.90m</b>

In response to a question from the C2C LEP, the County Council replied to say "It is confirmed that the grant funding could start in 2016/17, with the local contribution funded works commencing in 2015/16".

<b>VALUE FOR MONEY STATEMENT</b>		
	<b>Assessment</b>	<b>Detail</b>
<b>BCR</b>	<p>The scheme promoter has not produced a BCR for the scheme but in their application notes that “Sustainable transport packaged projects of this nature within the county and nationally have been evaluated and continue to provide a BCR of above 2, including the Local Sustainable Transport Fund project within Surrey (Travel SMART), focused on three towns, including Redhill/Reigate”.</p> <p>However, as optimism bias has not been explicitly included in the scheme cost estimates, the BCR may be reduced.</p>	<p>Impacts monetised in the bid are as follows:</p> <ul style="list-style-type: none"> <li>• Bus operator benefit, due to increase in patronage, calculated to be £3.524m over 60 year appraisal period</li> <li>• Savings from accident reduction estimated to be £713,730 per year</li> <li>• Health benefits from the increase in cycling amount to £0.657m over a 30 year appraisal period</li> <li>• Commercial saving due to reduced absenteeism from increased cycling is £0.041m over a 30 year appraisal period</li> </ul>
<b>Non-Monetised Impacts</b>	<p>Summary of how Outline Business Case shows promoter’s scheme objectives will be achieved and what their non-monetised impacts consist of:</p> <ul style="list-style-type: none"> <li>• <b>Encourage modal shift (to walking, cycling, bus and rail)</b> - improvements to the walking, cycling and bus network are likely to encourage mode shift away from car</li> <li>• <b>Reduce congestion</b> – due to mode shift</li> <li>• <b>Improve journey time reliability</b> - for buses and cyclists from junction improvements; - for cyclists and pedestrians from crossing improvements</li> <li>• <b>Reduced journey times</b> - for cyclists through provision of commuter standard facilities; - for bus users through bus priority and RTPI on buses and at stops; - for rail users through better passenger information, including mobile phone apps</li> <li>• <b>Reduced vehicle operating costs</b> - from reduced congestion</li> <li>• <b>Increase accessibility to economic centres and railway stations</b> - through bus, cycling and walking improvements that connect to these destinations</li> <li>• <b>Reduce road casualties</b> – due to crossing, junction &amp; cycle route improvements</li> <li>• <b>Increase bus reliability and patronage to major employment sites, town centres, hospitals and Gatwick Airport</b> – due to improved service quality reliability and reduce journey times</li> </ul> <p><b>Impacts of achieving above objectives include:</b></p> <ul style="list-style-type: none"> <li>- in addition to mode shift, can also expect new sustainable trips to be generated</li> <li>- improved sustainable transport infrastructure on the A23 &amp; A2044 will increase access for the local workforce</li> </ul>	<p>No AST has been provided</p>

	<p>and may provide businesses with a larger pool of employees</p> <ul style="list-style-type: none"> <li>- reduced congestion may encourage a better range and quality of business premises along the A23 Corridor</li> <li>- reduce congestion may improve competitiveness of Gatwick airport</li> <li>- better access to education may improve local skills</li> <li>- improvements in the sustainable transport network (and resulting congestion reduction) may improve ability to deliver housing targets and future business development</li> <li>- improved accessibility may assist in encouraging new business and protecting existing business</li> <li>- provide more affordable travel choices for those in deprived areas</li> </ul>	
<p><b>Key Risks, Sensitivities and Uncertainties</b></p>	<p>Whilst not all of the impacts have been quantified and monetised, the positive impacts of the combined Greater Redhill package of measures are considered to be significant.</p>	<ul style="list-style-type: none"> <li>- Design work for the scheme has not yet been undertaken and as such there are inherent uncertainties regarding the cost and feasibility of the specific measures identified in the funding submission.</li> <li>- It has not been confirmed whether the £4.9M includes contingency/optimism bias.</li> <li>- It has not been confirmed which, if any, elements of the schemes the County Council would expect to consult on with the public and other stakeholders.</li> <li>- The extent of the identified walking, cycle and bus network is significant. Referring to bus corridors, the submission stated that “The proposed corridor works are modular packages, and if feasible, the work would be prioritised taking into account value for money and affordability”. Therefore, until the works are scoped further, there are uncertainties regarding the extent of the network can be improved using the LTB grant. The same situation applies for walking and cycling improvements.</li> <li>- The s106 agreement for the £1.225m contributions has been signed off and will be used to undertake sustainable transport improvements in advance of works funded through the LTB grant, therefore the risks associated with this are very low.</li> </ul>
<p><b>Value for Money Category</b></p>		<p><b>High Value for Money</b></p>

## REVIEW METHODOLOGY

### Independent Business Case Assessor Approach

The Review has been undertaken by Glenn Higgs of Parsons Brinckerhoff (the reviewer).

The review was undertaken in the following stages:

- Following submission of the original business case, the scheme promoter was posed four initial questions by C2C.
- Questions were sent by the Reviewer to Surrey County Council's scheme promoter Lyndon Mendes and Steve Howard on 20/02/2015.
- The Reviewer was subsequently informed by the scheme promoter that the questions needed to be answered by Paul Fishwick at Surrey County Council.
- The Reviewer had a teleconference with Paul Fishwick on 03/03/2015.
- The Reviewer finalised this report on 05/03/2015.

The documentation reviewed consist of the following:

- C2C Redhill STP - Bid 15.12.14.pdf
- Addendum Greater Redhill STP - January 2015.pdf

## ASSESSMENT OF SCHEME BENEFITS

### Review of Claimed Benefits

The questions submitted to the county council by the reviewer are described below:

#### Scheme cost & phasing:

- Does the Council have an approximate breakdown of the cost split per walking, cycling and bus improvements (or per sub-area/module)?
  - *The scheme promoter confirmed that the funding will be split approximately 50/50 between walking/cycling improvements and bus network improvements.*
- How has the spend profile over 3 years been determined?
  - *The s106 contributions will be used to fund the improvements in the south of the area in 2015/16 with the LTB grant funding being used to extend these improvements northwards in the subsequent two years.*

#### Bus improvements:

- RTPI measures – do the costs allow for improvements across the entire network shown in Annex B?
- What RTPI technology, if anything, exist on buses and stops at present?
- Will funding provisions be made using Council/other funding regarding the operation of the RTPI system?
- The submission refers to the fact that the corridor works are modular packages and will be prioritised according to value for money and affordability – what has been assumed in terms of how much of the Quality Bus Corridor in Annex B network can be completed within the funding?
  - *The majority of buses have the Automatic Vehicle Location technology that is required to feed into future RTPI to be provided through this scheme. Increased ongoing revenue costs for maintaining the RTPI will be met by the bus operators.*
  - *Further scoping work will need to be undertaken in order to determine the extent of the bus corridors for which improvements can be made using the LTB grant funding.*

#### Relationship with the masterplan improvements:

- What is the planned phasing of the masterplan and the related transport improvements that would be delivered using developer contributions? What is the status of the agreement regarding the contributions?
- Can confirmation be given on whether the walking, cycling and bus corridors improvements shown in Annexes A and B can be delivered without masterplan contributions? If so, would the masterplan contributions potentially enhance the measure on these routes and/or improve links from the new development into the routes?
  - *As stated earlier, the masterplan related s106 contributions have been secured and the 2015/16 works to be undertaken under this package will be funding solely using these contributions (rather than grant funding).*

#### Supporting information/evidence:

- What are the current levels of congestion with the proposed bus improvement corridors and how does this impact on bus journey time and reliability. What are the likely bus journey time and reliability benefits from the proposed bus

priority improvements?

- Does the projected bus patronage increase cover the entire network shown in Annex B and what is the current patronage? Does the projected increase take into account the masterplan development and/or other development?
- Is the cost saving associated with accident reduction along the A23 specifically related to cyclists and pedestrians or for all accidents?
- Does the council have readily available information regarding the population within the respective catchments of the proposed walking, cycling and bus improvements?"
  - *Using their strategic transport model, the Council has identified the key junctions for which mitigation measures are required to improve journey time reliability for buses. The expected bus journey time and reliability benefits have not been quantified as part of this funding submission.*
  - *For simplicity, the forecasted 15% reduction in accidents has been applied to all users as opposed to accidents only involving pedestrians and/or cyclists.*
  - *The monetised estimates for increased bus patronage, accident reduction, health benefits and reduced absenteeism do not take into account the increased trips that are likely to occur as a result of the masterplan development. As such, they are likely to underestimate the benefits.*

## DELIVERABILITY

### Key Risks to Delivery

- Potential objections from any public consultation of the scheme elements
- Potential issues from future Road Safety Audits of footway, cycle and highway design measures
- Scheme costs exceeding the funding allocation
- Given that the scheme components need to be scoped in further detail there is a level of uncertainty regarding the extent of the network that can be improved using the grant funding. Given that the corridors are extensive in length, this may mean that if costs have been underestimated then whole corridor/s may need to be excluded from the improvement programme
- Potential uncertainty regarding the extent of the network that can be improved using the s106 funds that form the local contribution

### Environmental Impact

- Reduced carbon emission and improved air quality through mode shift away from the private car
- Impact on noise pollution considered to be neutral
- Visual improvements to the environment

## SCORING EVALUATION

Criteria (refer to Appendix A)	Application Score	Recommended Score*
<b>Expected economic benefits [transport and scheme related]:</b> <ul style="list-style-type: none"> <li>- Value for money, including BCR (if known) or similar measure.</li> <li>- Expected impact on journey times, reliability and resilience</li> <li>- Encouraging sustainable travel</li> <li>- Expected impact on road safety casualties</li> <li>- Valuing public realm</li> <li>- Other transport benefits</li> </ul>	<b>5</b>	<b>4</b>
<b>Expected economic benefits [economic growth]:</b> <ul style="list-style-type: none"> <li>- Retention of existing jobs or creation of new jobs</li> <li>- Unlocking or improving access to new dwellings</li> <li>- Encouragement of new businesses, or 5protection of existing businesses.</li> <li>- Other economic benefits</li> </ul>	<b>5</b>	<b>4</b>

<b>Social Distributional Impact:</b> <ul style="list-style-type: none"> <li>- Expected regeneration &amp; deprivation impact</li> <li>- Expected impact on severance, physical activity, accessibility</li> </ul>	<b>5</b>	<b>4</b>
<b>Environmental impact:</b> <ul style="list-style-type: none"> <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>	<b>4</b>	<b>3</b>
<b>Contribution to the Strategic Economic Plan</b> <ul style="list-style-type: none"> <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>	<b>5</b>	<b>4</b>
<b>Local Indicators:</b> Local indicators and circumstances that help to explain the need for the scheme.	<b>Not scored</b>	<b>Not scored</b>

*\*Score recommended by independent business case assessor based on evidence provided in business case and in response to queries during the review process.*

### Commentary on Scoring

**The total score in the application is 24 out of 25. The scores suggested by the reviewer would total score 19.**

- The Transport and Scheme related Economic Benefits may have been underestimated as there is no quantification of journey time and journey reliability benefits.
- The Economic Growth related Economic Benefits may also have been underestimated as there is no indication of how the mode shift and potential new trips may translate into increased GVA and new jobs/businesses.
- The Social Distribution benefits are clearer for severance, physical activity, and accessibility but less demonstrable for regeneration & deprivation.
- Without identifying the extent of reduced car trips from the mode shift the resulting air quality and carbon reduction impacts are less tangible than they otherwise could be.

## RECOMMENDATION

### Independent Business Case Assessor Recommendations

The reviewer considers that the business case is robust and fit for purpose for a scheme of less than £5m, and that the scheme will provide significant benefits and with relatively low risks. As such, the reviewer recommends that the requested LTB funding of £3.675m is approved for the Greater Redhill Sustainable Transport Package dependent upon the ranking of schemes.

## Scoring criteria

Scores	Expected Economic benefits (transport and scheme related)	Expected Economic benefits (economic growth)	Socio-distributional Impact	Environmental Impact	Strategic Economic Plan
<b>Score: 5</b> <b>[Green]</b>	Expected BCR of 2+ (if known)  Significant beneficial impact on transport indicators.	Support for delivery of new jobs, housing & employment floor space in area clearly expected.	Significant positive benefits expected, such as supporting regeneration, improving accessibility, reducing severance and/or promoting physical activity.	Likely to lead to a reduction in carbon emissions and have limited impact on the natural environment and/or air quality and noise standards.	Clear linkage to one or more SEP policies and priorities
<b>Score:3</b> <b>[Amber]</b>	Expected BCR of 1.5 to 2 (if known)  Some, but limited beneficial impact on transport indicators.	Expected to support retention of existing jobs & help deliver some housing.	Some socio-distributional and well-being impacts expected.	Limited or neutral impact on carbon emissions, natural environment and/or air quality shown.	Some linkage to SEP policies and priorities.
<b>Score 1:</b> <b>[Red]</b>	Expected BCR of under 1.5 (if known)  Very limited or negative impact on transport indicators.	Very limited linkage with delivery of employment and/or housing expected.	Very limited or negative impact on distributional and well-being impacts expected.	Likely to have a negative impact on carbon emissions, local air quality and/or the natural environment.	Weak link to the SEP.