



Thames Valley Berkshire Local Enterprise Partnership

**Independent Assessment Summary Report:
A3095 Bracknell Rev3**

Business Case Independent Assessment

Report No. RT-A087383-22

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Contents

1	Executive Summary	1
2	Submitted Information.....	2
3	Option Assessment Report - Review	4
4	Appraisal Specification Report - Review	5
5	Full Business Case Review	6
6	Conclusion	9
	Appendix A – Business Case Checklist.....	10

Appendices

Appendix A – Business Case Checklist

1 Executive Summary

- 1.1 This technical note provides an independent review of the A3095 Bracknell scheme Business Case submission to the Thames Valley Berkshire Local Enterprise Partnership.

SCHEME SUMMARY

- 1.2 The proposed scheme focusses upon the section of the A3095 from the Hanworth Roundabout through to the Golden Retriever Junction and includes the:

- Introduction of additional signalisation on Hanworth Roundabout;
- Replacement of Golden Retriever Roundabout with a fully signalised junction; and
- Modification of the highway between the Hanworth Roundabout and the Golden Retriever junction to introduce an additional southbound lane.

REVIEW FINDINGS

- 1.3 The Full Business Case (FBC) from WSP incorporates work presented in a technical note, including reworking of the transport modelling.
- 1.4 The scheme as presented has a **High Value for Money** with a **BCR of 2.78**.
- 1.5 Key requirements have been addressed in the updated business case.
- 1.6 It is possible to **fully recommend** the Business Case for the A3095 Corridor Improvements scheme.

2 Submitted Information

2.1 The first Business Case independent assessment was carried out based upon the following reports and appendices submitted by Bracknell Forest Council and their consultant team (Systra):

- A3095 Appraisal Specification Report (with Appendix).pdf;
- A3095 Option Appraisal Report 20170522.docx;
- east Golden Retriever.xls;
- east Hanworth Roundabout.xls;
- A3095_Full_Business_Case_Submission.pdf;
- Appendix A - A3095 tag-worksheet-appraisal-summary-table.pdf;
- Bracknell Multi Modal Model MDVR 2013.pdf.

2.2 This updated Business Case independent assessment has been carried out based upon the following reports and appendices submitted by Bracknell Forest Council and their consultant team (Systra):

- A3095 Option Appraisal Report (20170703).pdf;
- Appendix A1 - EAST Hanworth Roundabout.xls;
- Appendix A2 - EAST Golden Retriever.xls;
- A3095_Business_Case (FINAL_v2).pdf;
- Appendix A Scheme Drawings.pdf;
- Appendix B - Linsig Models.pdf;
- Appendix C - tag-worksheet-appraisal-summary-table.pdf.

2.3 Following a reported issue with the modelling, Bracknell Forest Council and their consultant team (WSP) issued the following document:

- Technical_Note_A3095_Corridor_Improvements_230218.pdf.



2.4 In July 2018, Bracknell Forest Council and their consultant team (WSP) have issued the following document, which forms the basis of this review:

- [A3095 Corridor Improvements_Business Case_060718_signed.pdf](#).

3 Option Assessment Report - Review

- 3.1 The Dft's Early Assessment and Sifting Tool (EAST) has been used to assess various options for the Hanworth and Golder Retriever junctions.
- 3.2 The Options Assessment Report (OAR) contains text descriptions of these various options.
- 3.3 The final option chosen has been identified in the OAR and the reasons for its selection given.
- 3.4 The updated OAR is considered acceptable.

4 Appraisal Specification Report - Review

- 4.1 The Appraisal Specification Report (ASR) was reviewed in May 2017. The review identified some items for consideration and explained that these should be addressed before submission of the full business case.
- 4.2 The WYG review of the ASR is given in the May 2017 note [ref: WYG_A3095_Bracknell-ASR_Review_(2017-05-26)].

5 Full Business Case Review

5.1 The objectives of the A3095 scheme are to:

- Reduce north-south journey times;
- Improve journey time reliability for all road users;
- Improve accessibility to Bracknell Town Centre and employment areas;
- Improve connectivity to the strategic road network; and
- Improve road safety and reduce the risk of accidents.

5.2 The scheme has been assessed on pure transport grounds.

General

5.3 The Financial, Commercial and Management Cases are now included in the business case.

5.4 Options assessment is an integral part of the Transport Business Case. The options that have been considered for the scheme are set out in Chapter 3 of the Business Case. These options have been presented in an Options Assessment Report (OAR). An update to the OAR, has brought it into line with WebTAG guidance.

5.5 Measures of success have been defined.

5.6 The scheme layouts have been presented in an appendix of the business case.

Modelling

5.7 The modelling methodology uses the Bracknell Multi-Modal Transport Model (BMMTM), which has been updated to a 2013 base year.

5.8 Paragraph 5.6.5 of the updated business case implies no variable-demand modelling (VDM) has been used. However, a previous WSP technical note, along with paragraph 5.7.13, makes it clear that the full BMMTM has been used for the DM and DS scenarios separately before

cordoning, which is the right approach. It should be noted that VDM is expected on schemes in excess of £5m cost.

- 5.9 The cordon chosen by WSP is larger than that chosen previously by Systra. It appears reasonable.
- 5.10 Traffic flow and speed plots are given in Appendix E and F, demonstrating the traffic impacts of the scheme.
- 5.11 The high and low growth scenarios have been run by WSP with the correct factor of 9.0%.
- 5.12 Details of the Linsigs for the two junctions have been presented. The scheme has been modelled in Linsig and the outputs have been presented. The worst turning movement at the Golden Retriever signalised junction is the A3095 (S) Ahead Right in the AM at 97.3% Degree of Saturation, whilst the worst turning movement at the Hanworth signalised roundabout is Great Hollands Rd Ahead Left in the AM at 97% Degree of Saturation.
- 5.13 These numbers mean that the scheme will be operating close to capacity by 2026, with little scope to increase capacity using signal timing changes alone.

Economics

- 5.14 Annualisation factors of 253 are used for the peak hour models in the WSP appraisal.
- 5.15 The accident appraisal uses COBALT, over the whole cordon. Links and junctions are stated to have been assessed separately. The scheme provides £1m in accident benefits over the 60 year appraisal
- 5.16 A basic noise assessment has been undertaken. This has concluded that for some links there is a negative impact and for some links there is a positive impact. The report recommends a more detailed noise assessment is undertaken due to an isolated residential property adjacent to a road link with a moderate negative impact. It would not be expected that any noise mitigation measures will alter the value for money of the scheme.
- 5.17 An air quality assessment using the DMRB spreadsheet method from Highways England has been undertaken. This gives a positive benefit of £0.5m.

- 5.18 A breakdown of the scheme costs is given in the financial case of the updated business case. Scheme base costs are £5.9m. With inflation and contingency this rises to £8.0m.
- 5.19 Optimism bias of 30% has been applied and no Quantified Risk Assessment (QRA) at the appropriate level of detail has been conducted. It would normally be expected at this stage that a QRA would be undertaken, but given the straightforward nature and size of the scheme this is acceptable. Normally optimism bias of 44% should be applied, but this method is acceptable since the contingency costs, stated as £1.2m, are included in the economic case costs and optimism bias at 30% is applied on top of this.
- 5.20 A total of £5.5m is sought from the LEP; the remaining £2.5m funding from Section 106 agreements. The present value cost (PVC) of the scheme is £4.9m.
- 5.21 The monetised benefits considered in the appraisal are:
- Economy benefits using TUBA;
 - Accident reduction benefits using COBALT;
 - Greenhouse gases using TUBA;
 - Air quality.
- The WSP reported core scenario has a **BCR of 2.78**. The air quality benefit has not been included in the final BCR. Whilst it should be included, it would have the effect of raising the BCR and would not affect the value for money statement.
- 5.22 The results and economics are presented for the high and low growth scenarios. The low growth scenario has a BCR of 2.22 and the high growth scenario has a BCR of 2.86. This indicates the scheme provides benefits over a range of future flow scenarios.

6 Conclusion

- 6.1 The Full Business Case (FBC) from WSP incorporates work presented in a technical note, including reworking of the transport modelling.
- 6.2 The scheme as presented has a **High Value for Money** with a **BCR of 2.78**.
- 6.3 DfT and TVB LEP guidance recommends that only schemes with a High or Very High Value for Money (VfM) be taken forward for funding.
- 6.4 Key requirements have been addressed in the updated business case.
- 6.5 In conclusion, it is possible to **fully recommend** the Business Case for the A3095 Corridor Improvements scheme.



Appendix A – Business Case Checklist

Project Number: A087383
 Scheme: Bracknell A3095
 Submitted by: Bracknell Forest Council

Strategic Case	Addressed within Business Case	Notes	Economic Case	Addressed within Business Case	Notes	Financial Case	Addressed within Business Case	Notes	Commercial Case	Addressed within Business Case	Notes	Management Case	Addressed within Business Case	Notes
Business Strategy	Y	The organisation responsible for the proposal is Bracknell Forest Council. The strategic aims and responsibilities described in Section 2.2 are those of the TVB LEP.	Introduction	Y	Detailed description of the approach taken. Reference is made to the LMVR, which has not been provided. Validation details for the study area have been included as per the comments provided on the ASR.	Introduction	Y	Does not include when costs will occur and which parties they will fall.	Introduction	Y		Introduction	Y	
Problem Identified	Y	Clear description of the problem and the evidence base.	Options appraised	Y		Costs	Y		Output based specification	Y	specification not provided	Evidence of similar projects	Y	Section included but no evidence provided.
Impact of not changing	Y	Clear description provided.	Assumptions	Y		Budgets / Funding Cover	Y		Procurement Strategy	Y		Programme / Project dependencies	Y	
Drivers for change	N	Not included but not compulsory.	Sensitivity and Risk Profile	Y	High and Low Growth scenarios included	Accounting Implications	Y		Sourcing Options	Y		Governance	Y	
Objectives	Y		Appraisal Summary Table	Y	Appendix A has been provided. Information about interpeak periods has been provided, as per the comments provided on the ASR. In para 3.5.17 reference to Section 0 is made, which needs to be updated. A detailed costs breakdown has been provided as per the comments on the ASR.				Payment Mechanisms	Y		Programme / Project Plan	Y	
Measures for success	N	Reference is made to Chapter 0 but it is not provided.	Value for Money Statement	Y	Again, references to Section 0 need to be updated.				Pricing Framework and charging mechanisms	Y		Assurances and approvals	Y	No milestones included.
Scope	Y	Clear description of the scope.							Risk allocation and transfer	Y		Communication & Stakeholders	Y	
Constraints	Y								Contract length	Y		Project Reporting	Y	
Inter-dependencies	Y								Human resource issues	N	Not included but not required	Implementation	N	Not included but not necessary.
Stakeholders	N	The main stakeholder groups and their contribution have not been identified. Potential conflicts have not been identified.							Contract management	Y		Key Issues	N	Not included
Options	Y											Contract Management	N	Not included
												Risk Management	Y	
												Benefits realisation	Y	
												Monitoring and evaluation	Y	The two sections have been combined.
												Contingency	N	Not included
												Options	N	Not included