



Thames Valley Berkshire Local Enterprise Partnership

Independent Assessment Summary Report: Thames Valley Park Park and Ride

Business Case Independent Assessment

Report No. RT-A087383-19 Rev3

Executive Park Avalon Way Anstey Leicester

LE7 7GR

WYG

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Appendices

Appendix A – Business Case Checklist

1 Executive Summary

1.1 This technical note provides an independent review of the Thames Valley Park Park and Ride Business Case submission to the Thames Valley Berkshire Local Enterprise Partnership. This scheme was formerly known as the East Reading Park and Ride.

SCHEME SUMMARY

- 1.2 The proposed location of the TVP Park and Ride site is a triangular, wedge shaped section of land, approximately 1.35ha, south of the River Thames and west of the Thames Valley Business Park. The Park and Ride scheme comprises:
 - 277 parking spaces (including 6 disabled spaces);
 - Two Park and Ride bus stops for 12m long single decker buses;
 - Space for motorcycle and cycle parking; and
 - Bus shelter facilities.
- 1.3 The facility would be served by the existing TVP shuttle bus service which operates between the business park and Reading town centre. Currently this service operates empty towards central Reading in the morning and towards TVP in the evening. The proposals would therefore utilise the shuttle service's spare capacity.

REVIEW FINDINGS

- 1.4 The Business Case Submission is well set out, detailed and comprehensive. The scheme appears to offer high value for money.
- 1.5 Two scenarios have been presented:
 - The Core scenario;
 - A Low-demand scenario (20% reduction to demand).
- 1.6 The Core Scenario has a High Value for Money with a BCR of 3.23. The Low-demand scenario has a High Value for Money with a BCR of 2.44.

1.7 DfT and TVB LEP guidance recommends that only schemes with a High or Very High Value for Money (VfM) be taken forward for funding.

It is now possible to **fully recommend the business case for the Thames Valley Park Park and Ride.** The case for the scheme is positive, with the scheme offering **High Value for Money** with a BCR of 3.23.

2 Submitted Information

November 2016 submission

- 2.1 The Business Case was submitted in November 2016, and an independent assessment was carried out based upon the following reports and appendices submitted by Wokingham Borough Council and their consultant team (WSP/Parsons Brinkerhoff):
 - 231015 TVP Park & Ride Appraisal Specification Report_V1.docx
 - Transport Assessment 060616 Signed GS TB SR.pdf
 - Appraisal-Summary-Table_and_Environmental_Worksheets_excl_AQ_v1.xlsx
 - TAG_workbook_air_quality_valuation_dec15 50% Pay.xlsx
 - TAG_workbook_air_quality_valuation_dec15 80% Pay.xlsx
 - Thames Valley Park Park and Ride Full Business Case 061016.pdf
 - Appraisal-Summary-Table.pdf
 - Appendices.zip

March 2017 submission

- 2.2 The Business Case was updated in March 2017, and further independent assessment was carried out based upon the following reports and appendices submitted by Wokingham Borough Council and their consultant team (WSP/Parsons Brinkerhoff):
 - Thames Valley Park Park and Ride Full Business Case 250117.pdf
 - TVP P&R Business Case Response to WYG Comments.pdf
 - Appendices 250117.zip including:
 - 2699-SK-006-D-RJM.pdf (scheme layout);
 - Logit Model.pdf:
 - TVP P&R MEC 60yr Calcs and NTEM Factors.pdf;
 - Distributional worksheets;
 - D-ENV-1 Environmental and TAG AQ.pdf;

- D-ENV-2_Landscape_MSBC_Appraisal.pdf;
- D-SOC-1 150727 Journey Quality.pdf;
- D-SOC-2 150810 Security.pdf;
- D-SOC-3 150727 Severance.pdf;
- Appraisal-Summary-Table.pdf;
- 161005 TVP PR QRA Risk v2.pdf.

July 2017 submission

- 2.3 The Business Case was further updated in July 2017, and further independent assessment was carried out based upon the following reports and appendices submitted by Wokingham Borough Council and their consultant team (WSP/Parsons Brinkerhoff):
 - Thames Valley Park Park and Ride Full Business Case 060717.pdf;
 - Appraisal-Summary-Table 250517.pdf;
 - NTEM Factors 250517.pdf;
 - Parking Availability Reading Town Centre 250517.pdf;
 - Parking Availability Reading Town Centre 250517.xlsx;
 - TVP P&R AMCB.xlsx;
 - TVP P&R Business Case Response to WYG Comments received 3 March 2017 (update 25 May 2017).pdf;
 - TVP P&R MEC 60yr Calcs_300617.pdf;
 - TVP P&R MEC 60yr Calcs_300617 20pc Low Demand.pdf;
 - TVP P&R PA Table.xlsx;
 - TVP PR Logit Model 300617.pdf;
 - Thames Valley Park Park and Ride Option Appraisal 300617.pdf;
 - 28791-5513 ERMRT Demand Modelling Report v0 7.pdf.

3 Option Assessment Report - Review

- 3.1 The Options Assessment Report (OAR) has been submitted [ref: Thames Valley Park Park and Ride Option Appraisal 300617.pdf].
- 3.2 The report documents the other options considered, the sifting process and the reasons for choosing the proposed scheme.
- 3.3 The OAR is considered acceptable.

4 Appraisal Specification Report - Review

- 4.1 The Appraisal Specification Report (ASR) was reviewed in July 2016. The review identified a number of issues in the ASR 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 July 2016 note [ref: WYG_Thames_Valley_P&R-ASR_Review_(2016-07-13)].

5 Full Business Case Review

- 5.1 The review of the Full Business Case (FBC) is presented in this section.
- 5.2 Details of the scheme itself are good. It is easy to understand exactly what the scheme entails, including the site layout, the access/egress operations and the anticipated bus service provision.
- 5.3 The objectives of the scheme are stated as:
 - To support the forecast housing growth of 13,000 units by 2026 in Wokingham Borough;
 - To reduce congestion on the A4 corridor;
 - To encourage car drivers to access central Reading using public transport; and
 - To support other Park and Rides, including Winnersh Triangle Park & Ride.
- The scheme has been assessed on pure transport grounds. This is the most straightforward approach for a scheme of this type and size. In particular there are no wider economic impacts/GVA derived benefits assessed. This is reasonable since extra trips from new 'unlocked' development could cancel out the decongestion benefits derived for the scheme.
- The P&R site is co-located with the Eastern end of the proposed East Reading Mass Rapid Transit (MRT) PT link. The MRT link is part of a separate funding application to TVB LEP. It has been made clear that the P&R site is a standalone scheme and the P&R buses are proposed to use the A329/A4 corridor. The MRT scheme corridor is protected by the P&R scheme.

General

5.6 An Options Assessment Report (OAR) has been submitted. The OAR documents the other options considered, the sifting process and the reasons for choosing the proposed scheme.

Costs

- 5.7 Scheme costs are given as £3.6m in 2019 prices (£2.8m in 2010 prices) with £0.7m of developer funding. £2.9m is sought from the TVB LEP.
- 5.8 A breakdown of the costs has been provided in the Business Case.
- 5.9 The developer contributions will come from the Community Infrastructure Levy (CIL).
- 5.10 The full TEE, PA and AMCB economics tables from WebTAG have been submitted. Summaries of the PA and AMCB tables are also presented in the business case document.
- 5.11 The identification of risks has been well documented and a Quantified Risk Assessment (QRA) at the appropriate level of detail has been conducted. The QRA is sufficient that the optimism bias of 15% that has been applied is appropriate.
- 5.12 The business case states that P(50) post mitigation risk costs have been included.

Modelling

- 5.13 The modelling methodology does not include an assignment model (highway or public transport). Instead the focus of study is restricted to the A4 corridor. Permanent ATC sites on the corridor and a turning movement count at Kings Rd / London Rd junction are used to establish baseline traffic flows. The benefits mostly derive from a WebTAG Margin External Costs (MEC) spreadsheet calculation.
- 5.14 An NTEM growth factor has been applied to produce 'Do Minimum' in-scope demand for the P&R site.
- 5.15 A Logit model has been used to predict the number of car trips that would transfer to the P&R, informing the 'Do Something' scenario.
- 5.16 The Logit model has been updated for this revision of the business case. It is stated as being the same calibrated model that Reading Borough Council have used for the East Reading MRT scheme. The logit model appears reasonable and includes a PT mode constant of 10 minutes.

- 5.17 The Logit model has been calibrated on the existing Winnersh Triangle P&R site to the east of the proposed site, which serves the same corridor. The Logit choice model therefore appears applicable here.
- 5.18 The proposed Thames Valley Park P&R is forecast to be fully utilised by 2033.
- 5.19 The mode-choice model relies principally on journey times and parking costs to predict P&R usage at the site.

Economics

- 5.20 Future year growth on the A4 is based on NTEM forecasts. In the business case NTEM is used principally for calculating in-scope future demand for the P&R site.
- 5.21 NTEM 7.2 datasets have been used.
- 5.22 The appraisal period of 60 years is acceptable for an asset of this type. The scheme cost breakdown indicates that the majority of the costs are on assets where a 60 year appraisal is appropriate.
- 5.23 The benefits considered in the appraisal are:
 - Environmental;
 - Social and Distributional Impacts;
 - Accident Analysis with Cobalt;
 - Decongestion benefits using WebTAG Data Book Table A5.4.2;
 - Revenue benefits.
- It is noted here that if the decongestion benefits are significant then the Park and Ride will be less attractive. A second iteration of the demand model, with the updated journey times, would normally be a requirement. The MEC methodology does not supply journey times, so the requirement for a second iteration does not apply. However, it should be noted that, all other things being equal, the stated decongestion benefits could be over-estimated because of this, given that 10% of trips on the A4 are predicted to be removed.

- 5.25 A Low Demand scenario has been presented representing a lower level of demand (20% reduction to demand). The low demand scenario still gives high value for money.
- The environmental assessments have been conducted in a proportionate manner, partly using the MEC methodology and partly from independent assessments. The scheme mostly has a neutral impact, with slight adverse impacts on Landscape, Historic Environment and Biodiversity.
- 5.27 Cobalt has been used to calculate accident savings of £1.6m over the appraisal period.
- 5.28 The Core scenario has been assessed based on 64% of car commuters currently paying for parking in Reading Town Centre.
- 5.29 It is clear from the modelling that the proportion who currently pay for parking in Reading town centre is critical to the numbers who will use the park and ride.
- 5.30 The 64% pay-for-parking value relies principally on two things:
 - The proportion paying for parking (7am to 10am) given in a 2007 survey;
 - A desktop study of parking spaces changes between 2007 and 2017.
- 5.31 The calculations for the above are given in Appendix B and appear reasonable.
- 5.32 The scheme is forecast to generate around £2m in revenue (2010 prices and discounting) above that required for operation, maintenance and renewal. This has been split evenly between the private and public sector.
- 5.33 The Core scenario has a High Value for Money with a BCR of 3.23.

6 Conclusion

- 6.1 The Business Case Submission is well set out, detailed and comprehensive. The scheme appears to offer high value for money.
- 6.2 Two scenarios have been presented:
 - The Core scenario;
 - A Low-demand scenario (20% reduction to demand).
- 6.3 The Core Scenario has a High Value for Money with a BCR of 3.23. The Low-demand scenario has a High Value for Money with a BCR of 2.44.
- 6.4 DfT and TVB LEP guidance recommends that only schemes with a High or Very High Value for Money (VfM) be taken forward for funding.
- In conclusion, it is now possible to **fully recommend the business case for the Thames**Valley Park Park and Ride. The case for the scheme is positive, with the scheme offering High Value for Money with a BCR of 3.23.

Appendix A – Business Case Checklist

Project Number:

A087383

Scheme: TVP Park and Ride

Submitted by:

Wokingham Borough Council

Business Strategy Y Introduction Y Introduction Y Introduction Y Options appraised Y Costs Y Output based specification Y Sensitivity and Risk Profile Cover Objectives Y Appraisal Summary Table Constraints Y Options Op	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
Impact of not changing Y Assumptions Y Budgets / Funding Cover Y Procurement Strategy Y Pro	Business Strategy	Υ		Introduction	Υ		Introduction	Υ		Introduction	Υ	
Drivers for change N Not included but not compulsory. Objectives Y Appraisal Summary Table Value for Money Statement Y Constraints Y Inter-dependencies Y Stakeholders Y Inter-dependencies Y Inter-	Problem Identified	Y		Options appraised	Y		Costs	Υ			Υ	
Objectives Y Appraisal Summary Table Y Pricing Framework and charging Y Measures for success Y Value for Money Statement Y Stakeholders Y Not included but not compulsory. Stakeholders Y Not included but not compulsory. Inter-dependencies Y Not included but not compulsory.	Impact of not changing	Υ		Assumptions	Y			Υ		Procurement Strategy	Υ	
Measures for success Y Value for Money Statement Y Value for Money Statement Y Pricing Framework and charging Y mechanisms Risk allocation and transfer Y Constraints Y Constraints Y Inter-dependencies Y Not included but not compulsory. Stakeholders Y Contract management M Contract man	Drivers for change	N			Υ			N		Sourcing Options	Y	
Measures for success Y Value for Money Statement Y and Charging Y mechanisms Scope Y Risk allocation and transfer Y Constraints Y Contract length Y Human resource issues N Not included but not compulsory. Stakeholders Y Contract management Y	Objectives	Υ			Υ					Payment Mechanisms	Υ	
Scope Y Constraints Y Inter-dependencies Y Stakeholders Y Contract length Y Human resource issues N Contract management Y Contract management Y	Measures for success	Y			Y					and charging	Y	
Inter-dependencies Y Stakeholders Y Contract management Y Not included but not compulsory.	Scope	Υ					-				Υ	
Stakeholders Y Contract management Y Contract management Y	Constraints	Υ								Contract length	Υ	
	Inter-dependencies	Υ									N	
Options Y	Stakeholders	Y								Contract management	Y	
	Options	Υ										

Addressed within

Business Case

Υ

Υ

Notes

Not included but not

compulsory.

Management Case

Introduction
Evidence of similar projects
Programme / Project dependencies
Governance
Programme / Project Plan
Assurances and approvals
Communication &

Stakeholders Project Reporting

Implementation

Key Issues

Contract Management
Risk Management
Benefits realisation
Monitoring and
evaluation
Contingency

Options