

MEETING OF THE BERKSHIRE LOCAL TRANSPORT BODY (BLTB) – THURSDAY 15 JULY 2020

CONTACT OFFICER: JOSIE WRAGG, CHIEF EXECUTIVE, SLOUGH BOROUGH COUNCIL, LEAD OFFICER TO THE BLTB

ITEM 10 – FINANCIAL APPROVAL FOR 2.44 READING BUSES: COMPLETING THE CONNECTION

Purpose of Report

1. To consider giving financial approval to scheme 2.44: Reading Buses Completing the Connection.
2. The ‘Completing the Connection’ project is designed for two core purposes:
 - 2.1. provide a complete travel picture to existing and prospective public transport customers by enabling bus operators across Berkshire to securely store, manage and make available live bus time predictions to customers via the real time information (RTI) system; and
 - 2.2. be scalable, by allowing, for example, the subsequent addition of new or upgraded screens at transport interchanges, bus stops and on-board buses
3. In summary this includes:
 - A new software platform and applications to underpin the RTI system using open data principles to calculate and disseminate to customers live departure information for multiple transport operators;
 - Installation of audio-visual information screens and speakers on 51 local buses, to inform and help all passengers and specifically assist customers with aural or visual impairments;
 - Installation of three large-format bus departure screens at two key railway stations, showing live departure information derived from the RTI system for multiple operators’ bus and coach services; and
 - Development of an online travel shop, allowing customers to purchase and receive tickets either on their mobile or in smartcard format.
4. The scheme was given programme entry status in [March 2020](#).

Recommendation

5. You are recommended to give Reading Buses Completing the Connection project full financial approval in the sum of £1,541,243 Local Growth Funds in 2020/21. This is on the terms of the funding agreement set out at paragraph 11 step 5 below, subject to meeting the following conditions:
 - 5.1. Agreement to provision of ongoing operating costs in relation to the investment to demonstrate compliance with state aid requirements. *Details will be agreed with input from a solicitor with state aid expertise and added to the grant letter.*

Other Implications

Financial

6. A call for bids process was undertaken in January 2020 and a list of prioritised projects were agreed at the BLTB meeting March 2020. Scheme 2.44 Reading Buses Completing the Connection was a named scheme.
7. This report recommends that Reading Buses be authorised to draw down the capital sum £1,541,243 from the Local Transport Body funding for this scheme.
8. The funding agreement set out at paragraph 11 step 5 sets out the roles and responsibilities, reporting and auditing arrangements, timing and triggers for payments, contributions from other funders, consequences of delay, consequences of failure, claw back, and evaluation requirements at one and five years on.

Risk Management

9. The risk management arrangements already put in place by the Local Transport Body are as follows:
 - The [Assurance Framework](#)¹ has been drafted following DfT guidance and has been approved by the DfT for use in allocating capital funds for transport schemes
 - Hatch Regeneris have been appointed as Independent Assessors and have provided a full written report (see [Appendix 2](#)) on the full business cases for the scheme
 - The funding agreement set out at paragraph 11, step 5 makes clear that the financial risk associated with implementation of the scheme rests with the scheme promoter.

Human Rights Act and Other Legal Implications

10. Slough Borough Council will provide legal support for the BLTB should any questions arise.

Supporting Information

11. The scheme will be carried out by Reading Buses.
12. A solicitor with state aid expertise has reviewed the case and indicated that on the provision of the costs provided by Reading Buses being robust, the scheme should be compliant under either Article 56 of the General Block Exemption Regulation or by treating Reading Buses as providing a service of general economic interest. This report is available at Appendix 4. Hatch Regeneris has stated that the financial case appears robust in general but not specifically in relation to state aid compliance. Reading Buses have also provided a response in relation to the state aid review by the solicitors which can be found at appendix 5.
13. The full details of the scheme are available from the [Reading Buses website](#).

A summary of the key points is given below:

Task	Timescale
Detailed designs agreed	August 2020

¹ <http://www.thamesvalleyberkshire.co.uk/berkshire-strategic-transport-forum>

Roll-out ticket shop for mobile & smart ticketing to live environment	November 2020
Rollout RTI system upgrades to live system and sign-off	January 2021
Close out of project	March 2021

Activity	Funder	Cost (approx)
Major scheme funding	Berkshire Local Transport Body	£1,541,243
Other Funding	Reading Buses	£1,045,000
Total		£2,586,243

14. The table below sets out the details of this scheme's compliance with steps 1-5 of paragraph 14 of [Assurance Framework](#)².

Assurance Framework Check list	2.44 Reading Buses Completing the Connection project			
	<p>The Reading Buses 'Completing the Connection' project is designed for two core purposes: 1. To provide a complete travel picture to existing and prospective public transport customers by enabling bus operators across Berkshire to securely store, manage and make available live bus time predictions to customers via the real time information (RTI) system; and; 2. to be scalable, by allowing, for example, the subsequent addition of new or upgraded screens at transport interchanges, bus stops and on-board buses.</p> <p>This scheme was submitted in the January 2020 call for bids and was given 24.5 points and ranked first out of six schemes submitted. See Appendix 1.</p>			
	Factor	Raw score	Weighting	Weighted score
	SEP	3	1.5	4.5
	Deliverability	3	2.0	6.0
	Economic Impact	2	4.0	8.0
	TVB area coverage	2	1.0	2.0
	Natural Capital	3	1.0	3.0

² <http://www.thamesvalleyberkshire.co.uk/berkshire-strategic-transport-forum>

Assurance Framework Check list	2.44 Reading Buses Completing the Connection project			
	Social Value	2	0.5	1.0
	Total			24.5
<p>Step 2: Programme Entry: evolution of the scheme from outline proposal to full business case, external view on the business case, and independent assessment (See paragraphs 15 and 16)</p>	<p>Programme Entry status was given to Reading Buses Completing the Connection by the BLTB on 12 March 2020 (minute 33 refers).</p> <p>The Reading Buses website holds the latest details of the full business case, including the VfM statement certified by the senior responsible officer.</p> <p>Any comments or observations on the scheme received by either TVB LEP or Reading Buses have been fully considered during the development of the scheme.</p> <p>The reports of the Independent Assessor are attached at Appendix 2. The Independent Assessor was asked to report as follows:</p> <ul style="list-style-type: none"> • Completeness – has the promoter prepared a complete Full Business Case submission, when judged against the prevailing advice from the DfT • Accuracy – has the promoter performed the relevant calculations and assessments accurately and without error • Relevance – has the Full Business Case considered all relevant matters, including use of appropriate forecasting models and planning assumptions, and has it included any irrelevant considerations such unduly-optimistic assumptions or out of date modelling data • Value for Money – does the scheme promoter’s Value for Money assessment comply with the prevailing DfT guidance • Evaluation arrangements – has the scheme promoter made provision for appropriate post-implementation evaluation of the scheme. • Remedies – where the independent assessment reveals a gap between the FBC supplied and the standard anticipated by the DfT guidance, then the advice for the LTB should include recommendations for remedial actions required – e.g., collection of further data, sensitivity tests on particular assumptions etc. <p>In addition, a solicitor was appointed to review compliance with state aid. Their advice is provided at appendix 4, along with a response from Reading Buses at appendix 5.</p>			

Assurance Framework Check list	2.44 Reading Buses Completing the Connection project
Step 3: Conditional Approval	<p>The Independent Assessor has recommended that Full Financial Approval is appropriate. However on the guidance of the state aid solicitor, the following condition is proposed:</p> <p>Agreement to provision of ongoing operating costs in relation to the investment to demonstrate compliance with state aid requirements. <i>Details will be agreed with input from solicitor with state aid expertise and added to the grant letter.</i></p>
Step 4: Recommendation of Financial Approval <ul style="list-style-type: none"> • High Value for Money • Support of the Independent assessor 	<p>The Independent Assessor has identified that the Benefit Cost Ratio (BCR) of the component scheme enhancements are both within the High Value category:</p> <p>Over the 5-year appraisal period the scheme is forecast to generate a 2.82 to 1 benefit to cost ratio. If this is extended over a 10-year period, it rises to 4.14 to 1.</p> <p>DfT has set thresholds of 2.00 (High VfM) and 4.00 (Very High VfM) and schemes with BCRs above these thresholds can be described as having High or Very High Value for Money.</p>
Step 5: Formal Agreement <ul style="list-style-type: none"> • roles • responsibilities • implementation • reporting • auditing • timing and triggers for payments, • contributions from other funders, • consequences of delay, • consequences of failure, • consequences of change to the design or specification of the scheme • claw back, 	<p>The capital grant letter will include the following conditions. <i>In addition, specific reference will be made to the condition outlined above regarding ongoing compliance with state aid, which will be added after further discussion with the appointed solicitor.</i></p> <ul style="list-style-type: none"> • <u>Roles</u>: TVB LEP is a part funder of the scheme. Reading Buses is the scheme promoter and is the relevant highway and planning authority. • <u>Responsibilities</u>: TVB LEP is responsible for allocating the capital finance in accordance with its Assurance Framework. Reading Buses is responsible for all aspects of the design, risk management, insurance, procurement, construction and implementation of the scheme, including its responsibilities as highway and planning authority, any other statutory duties, and any financial or other liabilities arising from the scheme. • <u>Implementation</u>: In addition to any reporting requirements within Reading Buses, the scheme promoter will use the proforma supplied by TVB LEP to make reports on progress of the implementation of the capital scheme to each meeting of the BLTB until the build is complete. In particular, Reading Buses will report on any change in the size, scope or specification of the scheme; and on any substantial savings against the scheme budget whether achieved by such changes to the size, scope or specification of the scheme, or through

Assurance Framework Check list	2.44 Reading Buses Completing the Connection project
<ul style="list-style-type: none"> • evaluation one and five years on • other conditions of Local Growth Funds 	<p>procurement, or through the efficient implementation of the scheme.</p> <ul style="list-style-type: none"> • <u>Reporting</u>: The scheme promoter must provide accurate, timely, verified and quality assured quarterly monitoring and forecast data, which relate to defined output and outcome indicators agreed between TVB LEP and government as a condition of the Growth Deal. This scheme will not be required to participate in an evaluation as set out in the Growth Deal Monitoring and Evaluation Plan. • <u>Auditing</u>: Reading Buses will keep financial records such that the expenditure on the scheme is readily identifiable, and if and when BEIS, DfT or other government department or the accountable body for TVB LEP requests access to financial or other records for the purposes of an audit of the accounts, Reading Buses will co-operate fully. • <u>Timing and Triggers for payments</u>: See the Claim Proforma – available on request. • <u>Contributions from Other Funders</u>: Reading Buses will contribute £1.045m in regard to project over its five-year life period. In the event that the scheme experiences or it is anticipated that the scheme will experience a shortfall in these contributions, Reading Buses will be required to notify TVB LEP of these developments. The provisions of clauses 8, Consequences of Delay; 9, Consequences of Change to the Design or Specification of the Scheme; or 10, Consequences of Failure will then be applied. • <u>Consequences of Delay</u>: In the event that the scheme experiences minor delays to its overall Business Case programme (no more than 10 weeks), Reading Buses will report these delays and the reasons for them, and the proposed remedial action to the next available meeting of the BLTB. In the event that the scheme experiences major delays to its overall Business Case programme (11 weeks or longer) Reading Buses will be required to seek permission from TVB LEP to reschedule any payments that are due or may be delayed in falling due because of the delay to the overall Business Case programme. • <u>Consequences of Change to the Design or Specification of the Scheme</u>: In the event that Reading Buses wishes to change the design or specification of the scheme such the scheme delivered will vary in any material aspect from the description given in the overall business case, Reading Buses will be required to seek prior written consent

Assurance Framework Check list	2.44 Reading Buses Completing the Connection project
	<p>from TVB LEP. Failing this permission, no further monies will be paid to Reading Buses after the change becomes apparent to TVB LEP. In addition, consideration will be given to recovering any monies paid to Reading Buses in respect of this scheme.</p> <ul style="list-style-type: none"> • <u>Consequences of Failure</u>: As soon as it becomes apparent to Reading Buses that it will not be possible to deliver the scheme within the current LGF programme, i.e. by the end of 2020/21, written notice shall be given to the accountable body for TVB LEP. No further monies will be paid to Reading Buses after this point. In addition, consideration will be given to recovering any monies paid to Reading Buses in respect of this scheme. • <u>Claw back</u>: If the overall scheme achieves savings against budget, these savings will be shared by TVB LEP and the other funders noted above in proportion to the amounts set out in the Financial Profile. The accountable body for TVB LEP reserves the right to claw back any amounts of grant that have been spent on purposes other than the scheme as approved and any repayments due as a consequence of changes to the design or specification of the scheme or scheme failure. • <u>Evaluation One and Five Years On</u>: Reading Buses will produce scheme evaluations One and Five years after practical completion that comply with DfT guidance. • <u>Other Conditions of Local Growth Funds</u>: Reading Buses will acknowledge the financial contribution made to this scheme through Local Growth Funds and follow the 'Growth Deal Identity Guidelines' – see link here: http://www.thamesvalleyberkshire.co.uk/getfile/Public%20Documents/Strategic%20Economic%20Plan/Logos%20for%20branding/GROWTH%20DEAL%20IDENTITY%20GUIDELINES%20280219.pdf?inline-view=true <p>It will also give due regard to the Equality Act 2010 - Public Sector and with the Public Services (Social Value Act) 2012, particularly through the employment of apprentices across the scheme supply chain.</p>

Conclusion

15. It is the conclusion of the Independent Assessor that there is a strong overarching case for the scheme, with good strategic alignment, high overall value for money from investment, and robust proposals for delivery.

Background Papers

16. The LTB and SEP scoring exercise papers are available on request.

Appendix 1 - Local Growth Deal list of prioritised schemes agreed March 2020

Weighting	1.5	2	4	1	1	0.5				
Factor	SEP	Deliv- erable	Econo mic Impact	TVB area	Natural Capital	Social Value	Total Weigh ted score	Rank	Contribution Sought	Cumulative spend
LGF Eligible Projects										
Reading Buses: Completing the Connection	4.5	6	8	2	3	1.0	24.5	1	1,541,243	1,541,243
Superfast Broadband - Extension	4.5	6	8	2	1	0.5	22	2	46,920	1,588,163
2.29 Wokingham: Winnersh Triangle Park and Ride - Extension	4.5	4	8	1	2	0.5	20.0	3	1,411,142	2,999,305
2.24 Newbury: Railway Station improvements - Extension	4.5	4	8	1	1	1.0	19.5	4	640,000	3,639,305
2.30 TVB Smart City Cluster Extension	4.5	6	4	2	2	0.5	19	5	283,620	3,922,925
Slough Langley High Street (phases 1, 2 & 3)	4.5	2	8	2	1	0.5	18.0	6	4,000,000	7,922,925

Appendix 2

Thames Valley Berkshire Local Enterprise Partnership

Independent Assessment Summary Report: Reading Buses 'Completing the Connection' Scheme

June 2020

www.hatchregeneris.co.uk

Contents Page

Executive Summary

Scheme Summary

Review Findings

1. Introduction
 - Submitted Information
 - Report Structure
 2. Appraisal Specification Report
 - Overview
 - Review
 3. Full Business Case
 - Overview
- Key Input Assumptions and Parameters
- Strategic Case
 - Economic Case
 - Financial Case
 - Commercial and Management Cases
- Summary and Conclusions

Executive Summary

- i. This technical note provides an independent assessment of the Reading RTI 'Completing the Connection' Scheme Business Case submission to the Thames Valley Berkshire Local Enterprise Partnership (TVB LEP).

Scheme Summary

- ii. The full business case submission sets out the case for investment in a range of enhancements to customer information provision and ticketing enhancements. The 'Completing the Connection' project is stated to be designed for two core purposes:
 - provide a complete travel picture to existing and prospective public transport customers by enabling bus operators across Berkshire to securely store, manage and make available live bus time predictions to customers via the real time information (RTI) system; and
 - be scalable, by allowing, for example, the subsequent addition of new or upgraded screens at transport interchanges, bus stops and on-board buses
- iii. In summary this includes:
 - A new software platform and applications to underpin the RTI system using open data principles to calculate and disseminate to customers live departure information for multiple transport operators;
 - Installation of audio-visual information screens and speakers on 51 local buses, to inform and help all passengers and specifically assist customers with aural or visual impairments;
 - Installation of three large-format bus departure screens at two key railway stations, showing live departure information derived from the RTI system for multiple operators' bus and coach services; and
 - Development of an online travel shop, allowing customers to purchase and receive tickets either on their mobile or in smartcard format.

Review Findings

Conclusions

- iv. The overall scheme is considered to align well with strategic priorities and will encourage travel by sustainable modes by improving information provision and enhancing options for ticketing. The measures combine well as an integrated package of improvements. The outcomes of a separate external State Aid assessment is required to ensure compliance with these regulations.
- v. The overall economic case for the package of measure is forecast to deliver at least 'high' value for money, and potentially 'very high'. This is based upon the value to existing bus users from the enhanced provision. Whilst not captured within the assessment, the scheme should also encourage increased bus usage deriving higher benefits, including highway decongestion.

- vi. The financial case appears robust, with binding quotes for the supply and installation of the separate scheme measures. The financial risks for delivery will be the responsibility of the suppliers. The on-going operating costs are well understood and RBL are fully committed to covering these funding these costs for a minimum 5-year period but more likely, the full 10-year life-expectancy of the infrastructure measures.
- vii. The commercial and management cases are generally considered to be acceptable, although limited in detail in some areas. The risks to delivery appear relatively limited and are subject to mitigation measures.

Recommendations

- viii. There appears to be a strong overarching case for the scheme, with good strategic alignment, high overall value for money from investment, and robust proposals for delivery.
- ix. On this basis, we recommend the scheme for approval.

1. Introduction

- 1.1 This report provides an independent assessment of the Full Business Case (FBC) submitted by Reading Buses Limited (RBL) for a range of enhancements to customer information provision and ticketing enhancements.
- 1.2 The report considers the evidence presented and whether it represents a robust case for the investment of Thames Valley Berkshire Local Enterprise Partnership (TVB LEP) growth deal funds.
- 1.3 The independent assessment has applied criteria from TVB LEP assurance framework and the requirements for transport scheme business cases set out within the Department for Transport (DfT) transport Appraisal Guidance (TAG).

Submitted Information

- 1.4 The independent assessment process for the 'Completing the Connection' submission has been conducted on the following set of documentation submitted by RBL:
 - Appraisal Specification Report (ASR) (4th June 2020)
 - Full Business Case (FBC) Report (25th June 2020)
- 1.5 Whilst no formal Options Appraisal Report has been submitted, an options assessment has been presented as part of the ASR document.
- 1.6 In addition to these formal documents, Hatch Regeneris have engaged with RBL and their consultants, Jacobs, throughout March to June 2020 to discuss the requirements of the final business case submission and comment upon the acceptability of the proposed appraisal approach and input assumptions and parameters.

Report Structure

- 1.7 This Independent Assessors Report responds to the formal submission of documentation, as well as the informal engagement process with RBL and Jacobs, to provide a review of information provided, assess its suitability and robustness against TVB LEPs assurance requirements, and provide recommendations in relation to the approval of LEP funding for the proposed scheme.
- 1.8 The report is structured as follows:
- Section 2: Appraisal Specification Report – presents a high-level review of the ASR, including commentary upon the options assessment process, and the acceptability of the proposed appraisal approach to be adopted
 - Section 3: Full Business Case Submission – presents an initial summary of scheme elements included in the business case submission, alongside the details presented within each of the five ‘cases’ (Strategic, Economic, Financial, Commercial, Management). It also sets out the recommendations to the LEP Local Transport Body relating to the suitability of the scheme for funding.

2. Appraisal Specification Report

Overview

- 2.1 The final Appraisal Specification Report (ASR) was submitted for assessment and reviewed by Hatch Regeneris in early June 2020, after previous iterations in April 2020. The final document provides:
- An overview of the project, including its aims, the project scope, and the wider policy context;
 - An overview of the objectives and intended outcomes;
 - A summary of the options assessment process and the identification of the preferred option; and
 - The proposed appraisal methodology in relation to the assessment of the economic value of the scheme.
- 2.2 A telecom was held with Jacobs to discuss the broad approach.

Review

- 2.3 The ASR sets out an overview of the context and the issues surrounding the need for the development of the scheme.
- 2.4 It provides a clear assessment of the aims and the objectives of the investment, in how it will directly enhance information provision to public transport users across Berkshire and enhance the experience, and ease of use, of existing service provision. In doing so, it will support wider aspirations of economic growth by maximising public transport capacity and encouraging mode shift from private car.

- 2.5 The option assessment process considers a range of diverse option for addressing the five identified scheme objectives. This includes:
- More frequent bus services
 - Increased bus lanes
 - Subsidised bus fares
 - Upgrades to real-time information (RTI) and smart ticketing
 - Improvement to walking & cycling routes
- 2.6 A structured approach has been applied to determine the relative merits of each option, applying a five-point scale to score each option against each objective. This provides a transparent assessment of how the preferred option has been identified.
- 2.7 The appraisal methodology set out within the ASR focuses primarily upon the approach to assessing monetised benefits within the Economic Case. It should be noted, however, that the telecom that accompanied the appraisal specification process discussed all required aspects of the 'five case' transport business case approach and the need to adopt Dft Transport Appraisal Guidance (TAG).
- 2.8 The approach to assessing and monetising the economic benefits is considered to be robust and is consistent with Dft TAG requirements. The assumptions and data source outlined are considered to be appropriate. The ASR proposes that benefits will be captured through Generalised Journey Time (GJT) savings experienced by the user, as per the guidance set out in TAG. These will include the value that passengers experience from:
- Real Time Information (RTI);
 - Audio announcements;
 - On-bus displays; and
 - Simplified ticketing.
- 2.9 The analysis will be reliant upon the assessment of underlying demand on different parts of the public transport network, including rail/bus interchange at Reading and Newbury Stations, patronage on 30 defined bus routes that will benefit from on-board information provision and demand for Online Ticketing facilities. Whilst specific sources for this information are not presented, it is understood that RBL will be able to provide, or source, the necessary data.
- 2.10 The proposal to conduct a COVID-19 sensitivity test is also considered a sensible suggestion.
- 2.11 The applicant was provided with the following specific comments:
- It was noted that an underlying assumption is to not apply any growth. Does this reflect forecast future patronage levels on buses or station interchange?
 - Given one of the objectives is to "Enable and encourage use of local buses instead of private vehicles" will the FBC demonstrate that this outcome is likely to occur i.e. demand for bus will increase as a result of the scheme? (this could utilise case study evidence, if available)
 - It would be useful to understand the 30 bus routes and the key centres served (a map would be ideal). This would be useful evidence in relation to Objective 1.

- It is noted that 10% Optimism Bias will be applied. This is fine in principle, as long as it is clear that the scheme is sufficiently well developed to reflect the level of detail that would be typically expected at FBC stage.

3. Full Business Case

Overview

- 3.1 The full business case submission sets out the case for investment for a range of enhancements to customer information provision and ticketing enhancements. The 'Completing the Connection' project is stated to be designed for two core purposes:
- provide a complete travel picture to existing and prospective public transport customers by enabling bus operators across Berkshire to securely store, manage and make available live bus time predictions to customers via the real time information (RTI) system; and
 - be scalable, by allowing, for example, the subsequent addition of new or upgraded screens at transport interchanges, bus stops and on-board buses
- 3.2 In summary the project includes:
- A new software platform and applications to underpin the RTI system using open data principles to calculate and disseminate to customers live departure information for multiple transport operators;
 - Installation of audio-visual information screens and speakers on 51 local buses, to inform and help all passengers and specifically assist customers with aural or visual impairments;
 - Installation of three large-format bus departure screens at two key railway stations, showing live departure information derived from the RTI system for multiple operators' bus and coach services; and
 - Development of an online travel shop, allowing customers to purchase and receive tickets either on their mobile or in smartcard format.
- 3.3 Bus passengers in all six districts of Reading, Wokingham, Bracknell Forest, Royal Borough of Windsor and Maidenhead, Slough and West Berkshire will benefit from this project.

Key Input Assumptions and Parameters

- 3.4 The overarching business case is considered particularly reliant upon the following key assumptions:
- All scheme elements will be completed and operational by April 2021
 - A 5-year appraisal period (with full funding commitment), with 10-year sensitivity test (the actual life expectancy of the infrastructure assets)
 - The number of passengers at both the railway stations and on the buses will remain constant during the appraisal period (i.e. no assumed growth)
 - 5% of passengers will use the Online Shop (with sensitivity tests for 2.5% and 7.5%)
 - Costs and benefits discounted to 2010 prices (3.5% discount rate)
 - 10% Optimism Bias from TAG (for intelligent transport systems at FBC stage)

Independent Assessor Comment

- 3.5 It is recognised that a 10-year appraisal period would normally be appropriate for a technological investment of this nature but, given that a formal revenue funding commitment is only in place for a 5-year period, it is agreed that it is only appropriate that the central case forecasts should consider this shorter duration. In reality, it is highly likely that benefits will accrue over a 10-year period and so this provides as useful sensitivity test.
- 3.6 The assumed zero growth rate in demand/patronage across the appraisal period is considered acceptable. Whilst it is likely that rail demand (and hence rail/bus interchange) is likely to increase over the period, it is more challenging to forecast standalone bus demand in the current climate. The sensitivity test undertaken to assess the impact of COVID-19 will provide a useful understanding of lower bus patronage levels.
- 3.7 It is understood that there is no specific case study evidence to benchmark the precise level of passengers who will use the Online Shop. The 5% assumptions is considered conservative, and it is considered good practice to have the sensitivity tests applying 2.5% and 7.5%.
- 3.8 The assumptions around discounting and optimism bias are all considered acceptable and consistent with DfT Transport Analysis Guidance.

Strategic Case

- 3.9 The Strategic Case provides details on the wider context, the rationale for the scheme, and makes the case for why public sector investment is required.
- 3.10 The introduction sets out the context of bus provision across Berkshire, along with research evidence around the impact of congestion on bus services and the need for measures, such as information provision and clear ticketing, to encourage public transport usage.
- 3.11 An overall description of the project and the specific aims (see Section 3.1 above) are presented, followed by a detailed assessment of the policy context for the scheme. This references national, regional and local transport policy, including the Bus Services Act, Bus Open Data Service, TVB LEP SEP and LIS, and the six Berkshire local authority Local Transport Plans.
- 3.12 The case for change is established, including the impact of no change resulting in a lack of customer confidence in outdated public transport information provision, the inability to improve customer confidence of bus travel, and the subsequent ability to attract more bus users. The current levels of information provision and ticketing systems are set out, with the short-comings identified.
- 3.13 The main issues facing existing and potential public transport customers are set out, including: incomplete information about bus service options; lack of live onward travel information at rail stations; and limited availability of audio-visual real time

'next stop' information on board local buses that hampers access to employment and other opportunities for visually or sensory-impaired customers.

- 3.14 The internal drivers for change are presented in broad terms and the strategic fit is reiterated, including the geographic coverage of the scheme.
- 3.15 The scheme objectives and intended outcomes are reiterated (as presented within the ASR – see Section 2.4 above). A logic model is then presented that indicates the relationship between the five scheme objectives, the resources / inputs required, the outputs, and the direct and indirect outcomes. These key outcomes are as follows:
- Higher passenger satisfaction with bus travel in the region
 - More useful management information on bus service performance to help refine timetables to reflect real-life traffic conditions.
 - More use of buses by passengers who currently struggle with audio or visual impairments
 - Less use of cash transitions and more use of 'smart' ticketing to speed up bus boarding times
 - Modal shift from the private car to the bus.
- 3.16 RBL recognise that, due to variations in factors external to this project (e.g. traffic congestion, the economy, etc.), evaluating bus patronage as a measure for success is unlikely to be particularly accurate. The main measure that will be applied is, therefore, bus passenger satisfaction levels, through the annual Transport Focus surveys.
- 3.17 The four scheme elements are presented in detail, including where the measures will be delivered, in terms of locations and bus routes, as well suppliers of technology elements.
- 3.18 Reference to stakeholder engagement with GWR (around the information displays at stations) and other bus operators (about using the RTI system)is made, and support from local authorities for the scheme is identified. It is commented that passenger representation groups, such as Bus Users UK, do not normally comment on projects of this scale.
- 3.19 RBL indicates that, since the scheme represents an extension to existing provision, there are inter-dependencies; however, there are no technological constraints to implementation. The bus departure screens at the railways station require co-operation and agreement of GWR at Reading and Newbury Stations, and Network Rail at Reading Station, however, there are no planning requirements as they are defined as free-standing equipment.
- 3.20 The inter-relationship with project partners (Great Western Railways, Network Rail, R2P UK, Passenger Technology Group) are set out.
- 3.21 No other internal or external factors, nor any other projects, are considered to have inter-dependencies with the project.
- 3.22 The five options considered are re-presented (as set out within the ASR – see Section 2.5 above).

Independent Assessor Comment

- 3.23 The Strategic Case is considered to presents a comprehensive overview of the policy context, issues, and objectives for enhancements to public transport information and ticketing provision across Berkshire.
- 3.24 The policy context is well established, with a clear understanding of the priorities of national, regional and local bodies. The importance of encouraging travel by public transport is clearly stated, along with the role that 'live' travel information provision and clear ticking plays in giving people the confidence to travel via these modes. The evidence of strategic fit with TVB LEP priorities is demonstrated and the project will deliver benefits across the LEP area.
- 3.25 The impact of no change demonstrates not only the lost opportunity to encourage greater public transport travel, but also the potential negative impact that could occur if existing bus users lose confidence in existing travel information systems. It is clearly shown where current provision is limited and the principle issues that are identified reiterate the lost opportunities for encouraging travel for all users - in particular for visually or sensory-impaired customers.
- 3.26 The scheme objectives are considered to be focussed, with a clear set of outputs and outcomes presented for each objective within the subsequent logic chain.
- 3.27 The measure of success are considered pragmatic and it is agreed that using passenger demand as a measure for success would be challenging, albeit may still provide helpful contextual information. The Transport Focus surveys provide a clear annual mechanism to identify if the satisfaction levels with information provision and ticketing have improved.
- 3.28 The scope of the project is clearly defined with details presented around the specification of each of the four elements and the location of measures.
- 3.29 The list of stakeholders is logical and reasonably comprehensive. It is not clear how many other bus operators have been engaged about the project and the opportunities for them to be involved to-date. It is recognised that GWR are supportive but there is no formal documented support from Network Rail, albeit there is no reason to suspect that they would be anything other than supportive. Letters of support from Reading and West Berkshire Councils are included with the submission.
- 3.30 Whist inputs from bus passenger user groups would have been beneficial (e.g. to verify the design of the scheme meets passengers' needs), it is recognised that the scheme is relatively small scale and would be expected to receive positive support.
- 3.31 The section on constraints and dependencies establishes that there are relatively limited internal or external factors that will affect the delivery of the scheme. In terms of overall approach, RBL are constrained to existing systems and suppliers, since the measures will build upon existing technologies and systems; however, these systems are considered to meet all the necessary requirements. The main dependency relates to necessary approvals from GWR and Network Rail, but we

recognise that GWR are fully supportive of the scheme and there are no reasons for Network Rail not to support the scheme that will benefit rail users.

- 3.32 The options assessment process was reviewed with the submission of the ASR and considered appropriate (see Section 2 above).
- 3.33 In conclusion, the project has clear strategic policy alignment at national, regional and local levels. It is recognised that there is a strong need to encourage public transport usage to reduce the dependency upon private car trips and that a key element of this is to provide potential users with the confidence to use these modes by providing accurate, 'live' travel information and ease of ticketing provision.
- 3.34 An independent assessment is being conducted in isolation to this independent assessor report to confirm the position of the project in relation to State Aid.

Economic Case

- 3.35 The Economic Case provides an assessment scheme options and then considers the level of demand, types of benefits, scheme costs, and provides an overall assessment of value for money.
- 3.36 The options appraised summarises the assessment process undertaken within the ASR and how the preferred scheme options has been identified.
- 3.37 The main assumptions for the appraisal process are set out (see Section 3.4 above) and identifies how the improvements in bus service facilities will be captured through the application of Generalised Journey Time savings, as set out within the DfT Transport Analysis Guidance.
- 3.38 The main scheme benefits from the scheme are associated with:
- Real Time Information (RTI) provision;
 - Audio announcements;
 - On-board Displays; and
 - Simplified ticketing.
- 3.39 The overall modelling approach adopted is set out considering trips by three journey purposes: business, commuting and other. Around 80% of trips are assumed to be within the 'other' category.
- 3.40 The forecast demand for RTI display screens at rail interchanges is presented, along with bus passenger data for the 30 routes that will benefit from new on-board information provision. The forecast demand for the Online Travel Shop is also considered, with sensitivity tests to account for uncertainties.
- 3.41 The scheme costs are presented in terms of the capital investment requirements, along with the on-going operating costs over a 5-year period.
- 3.42 A sensitivity test to take into account some of the uncertainties caused by Covid-19 is set out.

- 3.43 The potential positive distributional impacts are set out, demonstrating how RBL serve the local communities and reinvest locally. The potential social and environmental impacts are also described in broad terms.
- 3.44 A value for money statement is provided demonstrating that over the 5-year appraisal period the scheme is forecast to generate a 2.82 to 1 benefit to cost ratio. If this is extended over a 10-year period, it rises to 4.14 to 1.
- 3.45 The outcomes of the sensitivity test indicate that demand would need to fall by at 29% below pre-Covid-19 levels for the BCR to fall below 2 to 1 (over a 5-year appraisal period). Similarly, if only 2.5% of passenger use the Online Shop (instead of 5%) the BCR falls to 2.71 to 1 and increases to 2.93 to 1 if 7.5% of passenger use it.

Independent Assessor Comment

- 3.46 The Economic Case is well formulated and presents clear information on the approach adopted, the tools utilised, and the forecast economic costs and benefits.
- 3.47 The options assessment process reiterates the information presented within the ASR and demonstrates that consideration has been given to alternative approaches to delivering the scheme objectives.
- 3.48 The assumptions and parameters presented are all in-line with DfT Transport Analysis Guidance (TAG), specifically the TAG Databook, and are considered to provide the basis for a robust assessment process.
- 3.49 The approach to assessing levels of demand associated with each new element of bus service provision has been undertaken in a logical and sufficiently robust manner. The assessment of rail/bus interchange at Newbury Station has utilised specific bus boarding data at the station stops and the sense checks provide by RBL confirm this is an appropriate assessment of rail/bus interchange.
- 3.50 Whilst the same approach could not be applied for Reading Station (where, due to the city centre location, non-rail users will board buses at the station), the alternative approach, applying rail/bus interchange rates at major west coast mainline station, is considered suitable, albeit less accurate than actual outturn data.
- 3.51 Forecast usage of on-board bus information provision has utilised actual bus patronage data for the 30 routes on which the buses fitted with the new equipment will operate. This is considered to be an accurate assessment of demand.
- 3.52 RBL acknowledge that forecasting the likely usage of the Online Travel Shop is more challenging as there is limited case study evidence that can be applied. The central case forecast of 5% of bus users is considered to be a relatively conservative approach and further confidence in the outputs is provided through sensitivity tests for a lower (2.5%) and higher (7.5%) level of usage.

- 3.53 The approach adopted to incorporating the scheme costs within the economic case is considered appropriate, with the initial capital cost applied with a 10% optimism bias, and then on-going operating costs for the infrastructure of £209,000 pa.
- 3.54 The breakdown of scheme benefits is provided, highlighting the extent to which each individual element contributes to the overall estimation of scheme benefits. This indicates that the on-bus displays deliver the majority of the benefits (reflecting the proportion of capital cost to be spent on this element), but the significant benefits are also provided by the rail station displays and online shop and demonstrate value for money from all elements.
- 3.55 The assessment of distributional impacts is relatively overarching in nature but highlights the role that RBL plays in serving the local communities across Berkshire. The assessment of social impacts is also high level, but identifies important role of buses in serving disadvantaged groups, such as young people, older people, people on low incomes jobseekers, and disabled people.
- 3.56 Whilst the assessment of environmental impacts is limited in nature it is recognised that the scheme is likely to encourage bus usage and could encourage mode shift from private car usage, with associated benefits in terms of local air quality and emissions. The scheme is considered unlikely to have any negative environmental impacts.
- 3.57 The overall value for money assessment provides confidence that the scheme is likely to deliver at least 'high' value for money from investment and, on the basis that future revenue funding is formally secured from RBL to cover the operational costs between year 5 and year 10, then the value for money should be 'very high'. This provides a good degree of certainty that the scheme represents high value from public sector investment.
- 3.58 Whilst the full extent of Covid-19 upon public transport market remains unknown, the sensitivity analysis provides confidence that even if demand levels do not fully return to pre-Covid levels, then the scheme will continue to represent 'high' value for money.
- 3.59 The sensitivity tests for varying levels of usage of the Online Shop indicates that the outcome are not unduly sensitive to the assumed level of usage and that it does not affect the overall case for investment.

Financial Case

- 3.60 The Financial Case provides an assessment of the affordability of the proposed scheme and its funding arrangements.
- 3.61 Reference is made to formal sign-off for the financial provision from RBL by the Chief Financial Officer, as well as the position on why the project does not constitute State Aid.
- 3.62 A breakdown of the four main capital cost elements of the project is presented:
- Core, multi-operator, RTI system = £ 306,250

- Bus Departure Screens at rail stations = £ 108,000
- On-bus audio-visual customer information screens = £ 978,843
- Online shop = £ 98,150

- 3.63 Reference is made to the fact that these all relate to formal quotes from suppliers for the provision and installation of the provision. The quotes are out-turn prices and so allow for inflation.
- 3.64 The capital costs include a £50,000 allowance for a project manager to oversee the successful delivery of the project.
- 3.65 The estimates of revenue costs have been provided but the relevant suppliers of the capital equipment (R2P and Passenger Technology Group) and cover ongoing software licenses, hosting and maintenance of servers, hardware failure, and technical support.
- 3.66 The spend profile identifies that all capital spend will be within the financial year 2020/21, whilst the operating costs will extend over an initial, fully committed, period of 5 years, but more likely 10 years in total (to match the life expectancy of the capital asset).
- 3.67 The LEP contribution will cover 100% of the capital costs and make up 60% of the overall costs within the first 5-year period.
- 3.68 RBL has made provision in its forward planning for a revenue contribution of £1.045 million. RBL will cover any unexpected cost overruns.

Independent Assessor Comment

- 3.69 Overall the financial case for the scheme is considered strong.
- 3.70 The breakdown in the cost estimates provided demonstrates that each of the main cost elements is well understood. It is recognised that each of these elements represents a binding quote, based upon out-turn prices, for delivering each element of the scheme. As such, any risk associated with delivering each element of the project lie with the individual supplier, with contingencies included within their quotes.
- 3.71 The only financial risks associated with the project would relate to circumstances where a supplier was unable to deliver against their quote, or with the on-going revenue support required. Formal sign-off has been provided that clearly demonstrates RBLs commitment to fund the revenue element over the next 5-year period, with the intention to continue beyond this to cover the full 10-year life expectancy of the capital assets.
- 3.72 The operating costs are considered to reflect an accurate representation of the annual costs that will be incurred by RBL to maintain and operate the information and online systems. It is noted that RBL intend to operate the systems over the 10-year life-expectancy of the assets, but that they can only formally commit to 5-years of financing at this stage.

- 3.73 It is noted that the LEP will be solely be responsible for the capital investment on the project, with the match-funding element from RBL relating to revenue cost only, albeit RBL have stated they will cover any cost overruns, in the unlikely event they occur.

Commercial and Management Cases

- 3.74 The Commercial and Management Cases are presented in combination providing information upon the procurement strategy, evidence of previous project delivery, governance, project planning, as well as identification of risk, and monitoring and evaluation plans.
- 3.75 The procurement strategy is presented in relation to obtaining quotes from existing suppliers and RBLs previous record in procurement of these types of technologies. It highlights that the original RTI systems (upon which this project will expand upon) were subject to a full competitive tendering process.
- 3.76 Evidence of similar bus-related ITS projects is presented in terms of ticketing and audio-visual information provision.
- 3.77 An overview of governance, organisational structures and roles is presented identifying a Leadership Team, as well as the proposed enrolment of a dedicated Project Manager for delivery of the scheme. Reporting structures are outlined.
- 3.78 A project plan with key milestones is set out covering the general preliminary requirements, as well as the individual timescales for the central RTI systems upgrade, the rail interchange displays, the on-bus RTI screens, as well as the online ticket shop.
- 3.79 Reference is made to communications and stakeholder management and then the risks and mitigation measures are presented. Medium level risks identified include: political support for public transport agenda; cost overruns; maintaining implementation and maintenance programmes; and supplier staff resource. All risks have mitigating actions identified.
- 3.80 A brief monitoring and evaluation plan is described, outlining usage data as a potential source of data but with passenger satisfaction surveys as a key metric.

Independent Assessor Comment

- 3.81 The information provided within the combined commercial and management cases, whilst succinct, provides sufficient evidence to demonstrate that the project will be procured in an appropriate manner and that RBL will establish a robust process for delivery.
- 3.82 Whilst no outputs-based specification is directly provided, there is sufficient detail provided elsewhere within the FBC to demonstrate that the individual scheme elements have been clearly defined and that the supplier quotes reflect these requirements.

- 3.83 It is recognised that the procurement strategy is based solely around obtaining quotes from existing suppliers. Whilst this limits the competitive nature of process, it is recognised that the procurement of the original systems was based upon a fully competitive process. Given the nature of the scheme is incremental to existing systems, and the timeframes for delivery, the approach adopted is considered necessary and acceptable.
- 3.84 There is strong evidence provided around the delivery of previous projects of a similar nature that provides assurance that RBL has the experience to deliver the requirements of this project.
- 3.85 The information provided on governance and project roles, whilst relatively high level, demonstrates that a structure is in place to manage the delivery of the project. It is noted that a dedicated project manager will need to be recruited and so it will be important that an appropriate candidate is secured for this role. Whilst no specific assurance and approval processes are detailed it is understood that these will be established by the Leadership Team.
- 3.86 The project plan demonstrates that RBL have a clear programme for delivery of each project element and that this should be comfortably achievable by March 2021. The last element to complete is scheduled to be the on-bus RTI screens in February 2021.
- 3.87 There is no specific reference to programme and project dependencies. It is recognised that RBL will need to work with Network Rail and GWR to install the information displays at Reading and Newbury Rail Stations. Whilst there is no reasons to indicate any necessary agreements will delay the programme, this will still need to be managed carefully.
- 3.88 The communications and stakeholder management process indicates that both Network Rail and GWR will be kept regularly updated on issues surrounding the information screens at the rail stations. Information is also provided around how RBL intend to inform other stakeholders informed (e.g. local bus passenger user groups).
- 3.89 An overarching risk register is provided outlining a range of risk, most of which are considered to have a low likelihood of occurrence and none are considered to have a potentially high severity impact. The mitigating measures outlined are considered sufficient to minimise the risk of any occurrence.
- 3.90 There is no specific benefits realisation plan, but it is recognised that RBL will seek to maximise the impact of the measures to attract new patronage to their bus services. The monitoring and evaluation plan is brief but provides assurance that RBL have identified key metrics that they will need to capture to evaluate the impact of the scheme.
- 3.91 There is no specific discussion of contingency planning for unforeseen events e.g. suppliers are unable to delivery on the requirements or a suitable project manager cannot be appointed swiftly enough, albeit some of these are covered by the risk mitigation measures.

Summary and Conclusions

Summary

3.92 The review of the five cases can be summarised below:

- The Strategic Case demonstrates clear policy alignment and presents a strong case for intervention for all elements of the scheme based upon the need to encourage public transport usage through enhanced information provision and ticketing options.
- The scheme will help meet a range of identified gaps in information and ticketing provision, either related to a complete absence, or due to existing provision becoming obsolete. A clear set of objectives and intended outcomes are established.
- There are limited constraints and inter-dependencies for delivery. In terms of overall approach, RBL are constrained to existing systems and suppliers as the measures will build upon existing technologies and systems; however, these systems are considered to meet all the necessary requirements.
- Whilst a number of the elements of the package are open-access to all potential bus operators, the scheme does incorporate the delivery of equipment directly on-board RBL buses. An independent assessment is being conducted in isolation to this independent assessor report to confirm this does not constitute State Aid or is subject to exemptions.
- The Economic Case demonstrates that the overall scheme will deliver at least 'high' value for money from investment. The approach adopted to assess the benefits is fully compliant with DfT Transport Analysis Guidance. The majority of benefits are derived through the on-bus audio-visual displays, but both the rail station displays and the Online Shops deliver significant benefits as well.
- The analysis is based upon an assumption of no underlying growth over the period of assessment. In reality, it is accepted that the measures should encourage additional bus usage over and above the reference case without the scheme. This should result in additional benefits not captured within the appraisal, particularly where they may be mode shift from private car use and associated highway decongestion impacts.
- The future year forecasting is clearly complicated by the impact of Covid-19. Public transport usage has been significantly impacted in the short-term and it is unclear over what time period the recovery will take place. By the time the scheme is fully operational (April 2021), there is a reasonable probability that demand for bus services will have substantially recovered. The sensitivity testing has demonstrated that, even if demand remains 29% below pre Covid-19 levels, the scheme will still offer 'high' value for money. Furthermore, the scheme will offer significant benefits in encouraging greater usage.
- A robust Financial Case is presented with a breakdown of costs between scheme elements. These are based upon binding quotes from existing suppliers and so should not be subject to variation. Any risk of cost variations will be covered by the suppliers and, it is assumed, that they have included sufficient contingencies within their quotes.
- The LGF funding allocation will cover 100% of the £1,541,243 capital investment costs. RBL have fully committed to covering the on-going operating costs (£209,000 per annum) for a minimum of 5-years. This equates to £1,045,000 over that period. Whilst RBL have not formally committed to

further funding, it is there intension to cover on-going costs for a further 5-years to match the life-expectancy of infrastructure provision. The private sector match-funding element will therefore equate to between 40% and 57.5%.

- The Commercial and Management Cases provide sufficient information to conclude that the project will be procured and delivered in an appropriate, and successful, manner.
- The procurement approach is straightforward, albeit is restricted to existing suppliers, as the circumstances of the project (as an extension to existing systems) and the timeframes mean an open procurement approach is infeasible. It is recognised, however, that the procurement of original systems was subject to a competitive tendering process and this represents an extension of that process.
- The project plan is considered robust and there appear to be limited risks to delivering the project prior to March 2021. RBL is required to work with both external suppliers, as well as Network Rail and GWR, to deliver specific project elements, but processes are in place.

Conclusions

- 3.93 The overall scheme is considered to align well with strategic priorities and will encourage travel by sustainable modes by improving information provision and enhancing options for ticketing. The measures combine well as an integrated package of improvements. The outcomes of a separate external State Aid assessment is required to ensure compliance with these regulations.
- 3.94 The overall economic case for the package of measure is forecast to deliver at least 'high' value for money, and potentially 'very high'. This is based upon the value to existing bus users from the enhanced provision. Whilst not captured within the assessment, the scheme should also encourage increased bus usage deriving higher benefits, including highway decongestion.
- 3.95 The financial case appears robust, with binding quotes for the supply and installation of the separate scheme measures. The financial risks for delivery will be the responsibility of the suppliers. The on-going operating costs are well understood and RBL are fully committed to covering these funding these costs for a minimum 5-year period but more likely, the full 10-year life-expectancy of the infrastructure measures.
- 3.96 The commercial and management cases are generally considered to be acceptable, although limited in detail in some areas. The risks to delivery appear relatively limited and are subject to mitigation measures.
- 3.97 It is our conclusion that there appears to be a strong overarching case for the scheme, with good strategic alignment, high overall value for money from investment, and robust proposals for delivery.
- 3.98 On this basis, we recommend the scheme for approval.

Appendix 3

Reading RTI - 'Completing the Connection' Full Business Case Document FBC | rev 1.0 June 2020 Reading Buses for Thames Valley Berkshire LEP

Full Business Case
Reading Buses

Jacobs Consultancy Ltd.

1 The Square, Temple Quay
2nd Floor
Bristol, BS1 6DG
United Kingdom
+44 (0)1179102580
+44 (0)1179102581
www.jacobs.com

© Copyright 2020 Jacobs Consultancy Ltd.. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.
Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Contents

Executive Summary v

1.	Introduction	1
1.1	Purpose and structure of this report	1
1.2	Supplementary documentation	1
2.	Strategic Case	2
2.1	Introduction	2
2.2	Project description	2
2.3	Policy context	3
2.3.1	National Planning Policy Framework	3
2.3.2	Bus Services Act 2017	4
2.3.3	Bus Open Data Service	4
2.3.4	Thames Valley Berkshire Local Enterprise Partnership Strategic Economic Plan	5
2.3.4.1	Thames Valley Berkshire Local Industrial Strategy	5
2.3.5	Reading Borough Council Local Transport Plan 4 (2020 – 2036)	6
2.3.6	West Berkshire Council Local Transport Plan 3 (2011 – 2026)	6
2.3.7	Royal Borough of Windsor and Maidenhead Local Transport Plan 3 (2012 – 2026)	7
2.3.8	Wokingham Borough Council Local Transport Plan 3 (2011 – 2026)	8
2.3.8.1	Wokingham Borough Council Public Transport Plan (2011 – 2026)	8
2.3.9	Bracknell Forest Borough Local Transport Plan 3 (2011 – 2026)	9
2.3.10	Slough Borough Council Local Transport Plan 3 (2011 – 2026)	9
2.3.10.1	Local Transport Plan Summary	10
2.4	The case for change	10
2.4.1	Impact of not changing	10
2.4.2	Internal Drivers for Change	11
2.4.3	Strategic Fit	11
2.4.4	Local Authorities:	12
2.4.5	Parliamentary Constituencies:	12
2.5	Objectives and Intended Outcomes	12
2.5.1	Objectives	12
2.5.2	Measures for success	13
2.6	Scheme Elements	14
2.6.1	Scheme element 1 - Core, multi-operator RTI system	14
2.6.2	Scheme element 2 - Bus Departure Screens at rail stations	14
2.6.3	Scheme element 3 – Audio-visual customer information screens on buses	14
2.6.4	Scheme element 4 - Online shop enabling smart travel via app or smartcard	15
2.7	Stakeholder engagement	16
2.8	Inter-dependencies	16
2.9	Options considered	16
3.	Economic Case	18
3.1	Introduction	18
3.2	Options appraised	18
3.3	Appraisal period	18
3.4	Assumptions	19
3.5	Modelling approach	19
3.5.1	Existing demand for RTI display screens at rail interchanges	20
3.5.2	Existing On-bus patronage Demand (on bus audio and visual)	20
3.5.3	Forecast demand for Online Travel Shop	20
3.6	Scheme cost	21

3.7	Distributional impacts	21
3.8	Social and environmental impacts	21
3.9	Value for Money Statement	21
3.10	Sensitivity Tests	22
4.	Financial Case	23
4.1	Introduction	23
4.2	Chief Financial Officer sign off	23
4.3	State Aid	23
4.4	Scheme Cost	23
4.4.1	Scope of capital works	23
4.4.2	Project Management	24
4.4.3	Revenue costs	24
4.4.4	Inflation	24
4.5	Spend Profile and Funding Sources	24
5.	Commercial & Management Case	25
5.1	Introduction	25
5.2	Procurement strategy	25
5.3	Evidence of similar projects	25
5.4	Governance, organisational structure & roles	25
5.5	Project plan	26
5.6	Communications and stakeholder management	27
5.7	Risks, Constraints and Dependencies	27
5.8	Monitoring and evaluation	28

Appendix A. Simplified map of the 30 bus routes that would benefit from the fitting of on-bus displays

Appendix B. Email of support from Great Western Railway

Appendix C. Letters of support from local authorities

Appendix D. Business Case Methodology Appraisal Summary Report

Appendix E. Sign-off from the Finance Director for Reading Buses

Appendix F. Letter from Reading Buses on State Aid.

Executive Summary

This report presents the Full Business Case (FBC) from Reading Buses for 'Completing the Connection' which is a package of customer information and ticketing enhancements for local bus services throughout the Thames Valley Berkshire (TVB) region and adjoining areas.

The bid is for:

- § A core, multi-operator Real Time Information (RTI) system;
- § Three bus departure screens at rail stations – two at Reading and one at Newbury;
- § Audio-visual customer information installations on 51 buses which serve 30 different bus routes in the TVB area; and
- § An online travel shop - enabling smart travel via app or smartcard.

This package of measures supports national and local policies including the TVB Local Enterprise Partnership (LEP) Strategic Economic Plan and the TVB LEP Local Industrial Strategy, as well as the six local authority Local Transport Plans. These highlight the need for a more accessible transport network which would provide an equal and inclusive service for all, which would be supported by the provision of audio-visual displays on buses and at railway stations. They also seek to make it easier to interchange between modes of transport, which this proposal will also address.

Implementation of this project would bring benefits to all six unitary authorities: Bracknell Forest Borough, Reading Borough, Royal Borough of Windsor & Maidenhead, Slough Borough, West Berkshire District and Wokingham Borough Councils

It is a compliant bid in accordance with the Department for Transport's Transport Appraisal Guidance, and as such presents a Strategic Case, an Economic Case, a Financial Case, a Commercial Case and a Management Case.

The proposals follow the principles and promote the Department for Transport's Bus Open Data programme

It is a low risk project using two trusted existing suppliers and can be delivered within the current financial year 2020/21. Reading Buses have considerable experience of delivering similar transport technology projects such as this. The three bus departure interchange displays at the railway stations have the full support of Great Western Railway (GWR) as the principal train operator.

This bid is for a total of £2,586,243 (out-turn prices) of which £1,541,243 (60%) is for the capital costs and is being sought from the TVB LEP. The remaining £1,045,000 is the ongoing revenue costs for a 5-year period to maintain the RTI system and new displays and will be funded by Reading Buses directly.

The Benefit Cost Ratio (BCR) in the central case over a 5-year period is 2.82, but the equipment has an asset life of 10 years, and over a 10-year period the BCR is 4.14.

Acronyms and Abbreviations

• ASR	Appraisal Summary Report
• BCR	Benefit Cost Ratio
• DfT	Department for Transport
• FAT	Factory Acceptance Test
• FBC	Full Business Case
• GJT	Generalised Journey Time
• GWR	Great Western Railway
• ITS	Intelligent Transport Systems
• NPC	Net Present Cost
• NPB	Net Present Benefit
• NPV	Net Present Value
• PSV	Public Service Vehicle
• RTI / RTPi	Real Time Information / Real Time Passenger Information
• SAT	Site Acceptance Test
• TAG/WebTAG	Transport Appraisal Guidance
• TVB LEP	Thames Valley Berkshire Local Enterprise Partnership

1. Introduction

1.1 Purpose and structure of this report

This report presents the Full Business Case (FBC) for a package of customer information and ticketing enhancements for local bus services throughout the Thames Valley Berkshire (TVB) region and adjoining areas. Government guidance states that the FBC should:

- § “provides details of the project’s overall balance of benefits and costs against objectives and set out plans for monitoring and evaluating these benefits when required;
 - § confirm the strategic fit and the case for change;
 - § provide the business and financial rationale for the project;
 - § detail the proposed contract management resourcing, processes and benefit realisation plans;
 - § show how the return would justify the overall investment of time and money;
- and
- § continue to be used to align the progress of the project towards achieving business objectives.”

The Strategic Case is presented in Section 2 and has been developed using headings outlined within the relevant Department for Transport (DfT) guidance document. It outlines the economic and policy context within which the scheme is developed, objectives and rationale for investment.

Section 3 of the report presents the Economic Case, which assesses whether the scheme offers value for money. This section includes a summary of the approach to, and headline results of the economic modelling.

Section 4 presents the Financial Case which provides evidence on the costs of the scheme and funding sources. It includes the financial profile.

The Commercial and Management Cases are presented in Section 5. The Commercial Case outlines the procurement strategy and implementation timescale. The Management Case ensures that the project is deliverable. It presents the project planning, governance, risk management, communications and stakeholder management, benefits realisation and assurance.

1.2 Supplementary documentation

Additional documents are included to support this bid in the Appendices.

- § Appendix A is a simplified map of the 30 bus routes that would benefit from the fitting of on-bus displays to 51 buses of three bus operators.
- § Appendix B is a letter of support from GWR as operator of most of the rail services at both Reading and Newbury railway stations.
- § Appendix C is the letters of support from local authorities.
- § Appendix D is the Business Case Methodology Appraisal Summary Report from June 2020.
- § Appendix E is a letter of sign-off for this bid from the Finance Director for Reading Buses.
- § Appendix F is a letter from Reading Buses to set out their position on this bid and to explain why this bid should not be considered to be State Aid.

2. Strategic Case

This section sets out the Strategic Case for the 'Completing the Connection' scheme. It explains the wider context, presents the rationale for the scheme and makes the case for why the investment is required.

2.1 Introduction

Reading Buses is a leading operator of local bus services throughout the TVB region, covering the wider Reading area and with routes serving Newbury, Fleet, Slough and Heathrow Terminal 5. Reading Buses has also won many national awards, including most recently in 2019, silver in the 'Top National Bus Depot' award - making Reading Buses second in the UK.

Now the parent of a group comprising three highly experienced public transport operators that help deliver over 90,000 journeys per day, Reading Buses' track record of progressive investment in its routes, vehicles and supporting services has helped spur passenger growth of 48% when compared with 2009 figures. Reading Buses is committed to working with the TVB Local Enterprise Partnership (LEP), local authorities and other stakeholders including other public transport providers, in order to deliver high quality connections that enable access to education, employment, leisure and shopping.

Recent research by Greener Journeys has confirmed local experience that, owing to congestion, bus journey times in urban areas are rising on average by 1% per annum, in turn requiring additional and unsustainable outlay by operators such as Reading Buses to maintain frequency. Greener Journeys have calculated that for every 10% decrease in operating speeds there is an associated 8% increase in operating costs. If passed on to customers that can lead to a 5.6% reduction in patronage, in turn contributing to further congestion.

On the other side of the equation, Greener Journeys have identified that a 10% reduction in journey times will enable 50,000 people to access employment.

Evidence presented by Transport Focus to the House of Commons Transport Select Committee in October 2018 underlined the need for customers to:

- § Have access to Real Time Information so they know when their bus will arrive;
- and
- § Know the cost of the journey and how they can pay for it.

This adds to research findings presented by Greener Journeys, emphasising that the primary factor in encouraging a shift from private to public transport is speed and convenience of services, followed closely by quality of information and thirdly ticketing.

2.2 Project description

The 'Completing the Connection' initiative will improve connectivity to, from and within towns, development sites and transport hubs across the TVB region. It seeks to complement high quality public transport services delivered by Reading Buses, Courtney Buses in eastern Berkshire and Newbury & District Ltd in West Berkshire – with significantly enhanced customer information for multiple operators' routes and ticketing enhancements. It will help enable and encourage employees of local businesses, residents and visitors to switch to public transport for some or all of their journeys.

The 'Completing the Connection' initiative has specifically been designed to:

- § Provide a complete travel picture to existing and prospective public transport customers by enabling and spurring bus operators across Berkshire to securely store, manage and make available live bus time predictions to customers via the RTI system; and
- § Be scalable, by allowing, for example, the subsequent addition of new or upgraded screens at transport interchanges, bus stops and on-board buses.

Coupled with investment in new vehicles, marketing and – in conjunction with stakeholders including local authorities and Heathrow Airport Ltd - publicity for key urban and inter-urban routes, this initiative will assist in making the bus a more attractive option both for local and longer-distance journeys. It will do this by providing richer information content and smart ticketing through multiple media.

Our proposals follow the principles and promote the Department for Transport's Bus Open Data programme.

A vibrant public transport network is key to supporting Town Centre economies. Surveys carried out by the Reading Business Improvement District indicate that two thirds of visitors to Reading Town Centre arrive by bus.

2.3 Policy context

This section outlines the national and local transport and planning policies that the scheme needs to consider. The emphasis throughout is to demonstrate the extent that the scheme is aligned to priorities and policies.

National

- § National Planning Policy Framework (NPPF)
- § Bus Services Act 2017
- § Bus Open Data Service Regional and Local
- § TVB LEP Strategic Economic Plan
- § TVB LEP Local Industrial Strategy

Due to the widespread reach of the three bus operators' services, this proposal covers the Unitary Authorities (UA), listed below, all of whose transport plans are therefore relevant transport policy:

- § Reading Borough Council Local Transport Plan 4 (2020 – 2036)
- § West Berkshire Council Local Transport Plan 3 (2011 – 2026)
- § Royal Borough of Windsor and Maidenhead Local Transport Plan 3 (2012 – 2026)
- § Wokingham Borough Council Local Transport Plan 3 (2011 – 2026)
- § Bracknell Forest Borough Local Transport Plan 3 (2011 – 2026)
- § Slough Borough Council Local Transport Plan 3 (2011 – 2026)

2.3.1 National Planning Policy Framework

The NPPF published by the Ministry for Housing, Communities and Local Government (MHCLG) sets out the planning policies expected to achieve sustainable development. The NPPF seeks to promote growth whilst creating a high-quality built environment underpinned by vibrant communities.

This proposal needs to be considered against the following relevant policies within the NPPF:

- § Promoting sustainable transport (policy 9): This states that opportunities to promote public transport are identified and pursued and the environmental impacts of traffic and transport infrastructure are identified, assessed and taken into account. Furthermore, supporting development that reduces greenhouse gases and reduces congestion, facilitates the use of sustainable modes of transport and develops strategies for the provision of viable infrastructure. 'Completing the Connection' will contribute to this policy by reducing congestion throughout the wider area by increasing bus patronage. The changes will also help to increase accessibility and connectivity via multiple public transport modes for new and existing developments.
- § Achieving well-designed places (policy 12): Good design is seen as a key aspect of sustainable development and indivisible from good planning. It should also create places that are safe, inclusive and accessible with a high standard of amenity for existing and future users. The 'Completing the Connection' scheme will allow further development by improving accessibility and reducing congestion, which will help in ensuring that new developments can function well and are created as safe and accessible environments for all.

2.3.2 Bus Services Act 2017

The Department of Transport's (DfT) Bus Services Act 2017 presents local authorities with new powers to bring about change and unlock potential for growth in the bus industry. Regulations have been made under new open data provisions and ticketing powers to make it easier for passengers to use buses and move between different transport modes through access to timetables, fares and routes.

The Bus Services Act allows for the establishment of multi-operator ticketing schemes that can accept contactless bank cards, mobile technology and smart cards and provide a number of different ticketing options. The provision of this type of ticketing scheme is an aim of this scheme.

It also provides guidance for planning improvements to bus services which can contribute to:

- § Providing inclusive services for passengers:

- Audible and visible information identifying routes and upcoming stops.
 - Ensure that ticketing systems, such as websites are accessible to those needing to use them.
- § Improving environmental outcomes.
- § Tackling congestion:
 - Bus pricing – ensuring pricing is clear and encourages frequent use, that services are affordable and seen to represent value for money when compared with other means of travel.
 - Better integration – a bus journey is usually only one stage of a door to door trip. Buses need to integrate with other forms of transport, with the transition made as seamless as possible
 - Smart transport innovations can be used to tackle congestion in new ways, in line with local needs. These innovations include: Data initiatives – to enable users to make informed travel choices through the provision of reliable real time, user specific information.
 - Cooperative Intelligent Transport Systems – using technology to allow vehicles to communicate with other transport systems.

The ‘Completing the Connection’ Scheme looks to provide improvements in all of these areas. Through the sharing of data between local operators and the presentation of this data through new audio-visual output on-board 51 extra buses the scheme looks to increase inclusivity of bus travel, and tackle congestion by making bus travel more popular. The provision of screens at railway stations will also improve integration of the bus services with other transport modes. Improvements to the ticketing system will help accessibility and ensure more consistent and across operator prices, including the provision of smart cards.

2.3.3 Bus Open Data Service

Published by DfT in January 2020 the Open Data Service aims to make it easier to travel by bus wherever you are in England. They are making accurate timetable data available so passengers can; plan their journeys with confidence, spend less time waiting and find the best value tickets available.

Bus operators will be required to provide the relevant information to DfT by the dates shown in Table 2 1 below. ‘Completing the Connection’ will facilitate the collation of data of local bus operators into one area to not only be used locally but also can be passed onto DfT for inclusion in this scheme well within the timetable shown.

Table 2 1: Bus Open Data Timetable

Date	Event
31 December 2020	Obligation to provide bus timetable data to the Bus Open Data Service.
7 January 2021	Obligation to provide vehicle location and basic fares and tickets data to the Bus Open Data Service.
7 January 2023	Obligation to provide complex fares and ticket data to the Bus Open Data Service.

The aims of this service and the scheme line up in looking to increase bus patronage by improving the passenger experience by reducing frustration around bus arrival times and allow time savings for passengers. Increasing the information available to passengers including fares, ticket options and vehicle location will further drive improvements in bus patronage.

2.3.4 Thames Valley Berkshire Local Enterprise Partnership Strategic Economic Plan

The TVB LEP Strategic Economic Plan covers the period from 2015 – 2021. It notes: “The vibrancy of our business community will be internationally envied. The ambition and creativity of our established businesses will be energised through strong, knowledge-rich, networks. Our workforce will be the lifeblood of our economy: young people will be inspired and older workers valued. Our infrastructure will match the scale of our ambition and potential. And people will choose Thames Valley Berkshire as the place to live and work” “However, the transport and communications infrastructure on which we rely is simultaneously a local, national and international resource. It is very congested. This in turn is threatening to undermine our intrinsic growth potential. It is therefore essential to invest in it and also to encourage local sustainable transport networks that promote active travel on foot, on bicycle and on public transport”.

2.3.4.1 Thames Valley Berkshire Local Industrial Strategy

The TVB Local Industrial Strategy was published in November 2017 and aims to improve the areas overall productivity performance and ensure future economic growth is more inclusive. Within this it sets out five Foundations of Productivity in order to interrogate the causes of productivity performance. One of the five foundations is Infrastructure. Under Infrastructure the document highlights ‘Transport and Congestion’ and that transport-related stakeholders have noted that ‘the appetite for virtual and IT-enabled solutions is growing quickly.’ It notes that ‘Berkshire is ripe for intelligent mobility – one of the Grand Challenges from the 2020 Industrial Strategy White Paper. There is also widespread recognition that behavioural changes will need to be a central part of the solution. This will require more flexibility from employers over working hours, and a greater commitment to sustainable transport modes. Relatively small changes (such as the provision of bicycle storage facilities at more railway stations) could make a big difference in terms of the efficiency and capacity of the transport network overall.’

The small changes as proposed in this scheme can be seen as similar to bicycle storage in making a big difference to the efficiency and desirability of the bus service. An increase in bus patronage will help remove other users from the road and can help to reduce congestion.

2.3.5 Reading Borough Council Local Transport Plan 4 (2020 – 2036)

Reading is currently developing its Local Transport Plan (LTP) 4 to cover the period up to 2036, which outlines key objectives for transport in Reading. The salient key objectives are listed below with policy relevant to the scheme highlighted:

- § Enabling Sustainable and Inclusive Growth - Enable sustainable growth and connect communities so that everyone can benefit from Reading’s success.
- § Connecting People and Places - Promote the use of sustainable modes of transport by providing attractive alternatives to the private car, helping to provide a transport network that is fast, affordable, connected and resilient.
- Policy RTS3 | Equality and Inclusivity

2.3.6: We will work with transport operators to deliver an accessible network for all, taking action to address barriers caused by physical infrastructure.

2.3.7: We will continue to work with partners to deliver public transport, such as bus, community transport and taxi operators, that is affordable and accessible to all and reduce inequalities in our communities.

- **Policy RTS7 | Public Transport**

3: We will continue to build on the well-established bus and rail connections and work with partners across Reading and the wider region to establish an accessible, affordable reliable and sustainable, integrated public transport network.

3.1: We will support the evolution of public transport as technologies advance and new types of services become viable.

§ Embracing Smart Solutions - Use technology to manage the network efficiently and allow informed travel choices, whilst enabling Reading to become a smart, connected town of the future.

- Policy RTS6 | Smart Solutions and Innovation

3.2: We will embrace the latest technologies to improve the efficiency and resilience of the transport network for the benefit of our residents.

3.3: We will continue to promote Reading as a town that actively encourages and supports the testing of innovative solutions to defined transport challenges.

- **Policy RTS29 | Travel Information**

4.0: We will support and promote the use of a wide range of data and technology to influence travel behaviour and manage the transport network.

4.1: We will work with partners to deliver high quality, accessible, real-time data to assist users to make sustainable travel choices, recognising the differing needs of travellers.

4.2: West Berkshire Council Local Transport Plan 3 (2011 – 2026)

The West Berkshire LTP3 covers the period from 2011 – 2026 and it sets out a number of Local Transport Goals, the ones relevant to the scheme have been set out below, with further policy relevant to the scheme presented.

§ To improve travel choice and encourage sustainable travel;

§ To support the economy and quality of life by minimising congestion and improving reliability on West Berkshire's transport networks;

§ To maintain, make best use of and improve West Berkshire's transport networks for all modes of travel;

- Policy LTP SC3 New Technology - The Council will work with partners to embrace and facilitate the use of new technologies in transport to reduce carbon emissions, reduce congestion and make travel smarter.

- Policy LTP NMP2 Intelligent Transport Systems - The Council will seek to develop further use of Intelligent Transport Systems to help manage transport networks and to provide better information to transport users.

i. This can include Real Time Passenger Information (RTPI) systems provide passengers at bus stops with up to date information on bus services. Other information-based systems, such as customer information points at local rail stations, can also provide the travelling public with useful information on service times and availability.

- Policy LTP PT1 Bus Services - The Council, in partnership with local bus operators, will seek to:

i. Provide safe, integrated and efficient bus services that permit easy interchange with other modes of transport and that meet the travel needs of customers who choose not to use, or are unable to use, a private car.

iii. Promote the availability of bus services through appropriate marketing, in conjunction with other initiatives such as ticketing and customer information improvements.

iv. Improve access to bus services and promote the use of vehicles that are accessible to all customers including those with a disability (as defined in the [Equalities Act]).

- Policy LTP PT5 Passenger Transport Information, Promotion and Ticketing - The Council, in partnership with local transport operators and user groups, will look to provide and improve transport information, promotion and ticketing through:

ii. Continuing the delivery and improvement of Real Time Information on the District's bus and rail networks (including audible announcements) to support and enhance other forms of customer information.

iv. Extending ways in which information can be made available, such as text and mobile internet.

vii. Continuing to actively promote and develop integrated ticketing initiatives and smartcard options.

- **Policy LTP PT6 Infrastructure and Interchange –**

The Council, in partnership with local transport operators will seek to:

i. Facilitate provision of appropriate facilities at transport interchange locations including rail stations and coachways, at individual bus stops and at other nodes on the public transport network in accordance with a prioritised programme

iii. Deliver adequate, easily-understood signage to assist customers when using interchanges

5.1 Royal Borough of Windsor and Maidenhead Local Transport Plan 3 (2012 – 2026)

The Windsor and Maidenhead LTP3 covers the period from 2012 to 2026 and it sets out a number of Over-Arching Objectives, listed below alongside Policies that are relevant to the scheme:

§ To improve access to everyday services and facilities for everyone.

- Policy ASF10: Interchange - The Council will work with public transport operators and the rail industry to deliver improved interchange between transport modes through the creation of new / enhanced facilities, particularly within town centre locations and at rail stations.

- Policy ASF11: Travel Information - Working in partnership with public transport providers, the Council will improve the quality, timeliness and accessibility of travel information to enable people to make the best travel choices for their particular journey, making use of new and emerging technologies where these add value for the end user.

- Policy SEG2: Smarter Choices - A programme of Smarter Choices initiatives designed to influence travel behaviour and encourage a modal shift from private car use to public transport, walking and cycling, will be implemented to complement investment in new transport infrastructure

§ To improve quality of life and minimise the social, health and environmental impacts of transport.

- Policy ASF12: Access for All - The Council will seek to improve access to everyday services and facilities in a way that considers the needs of all transport users, particularly the young, the elderly, people with mobility impairments, and those on low incomes.

5.2. Wokingham Borough Council Local Transport Plan 3 (2011 – 2026)

The Wokingham LTP3 covers the period from 2011 to 2026 and it sets out a number of goals for the region, some of which are relevant to the scheme:

- § Highways Goal: “To have a resilient, safe highway network that balances capacity for all users, enhances the economic prospects of the Borough, and promotes sustainable travel.”
- § Public Transport Goal: “To promote an integrated and inclusive public transport network that provides a convenient, acceptable, reliable and affordable alternative to car travel. “
- § Smarter Choices and Demand Management Goal: “To enable people who live, visit and work in the Borough to make informed, safe and sustainable travel decisions from a range of transport options.”

5.3 Wokingham Borough Council Public Transport Plan (2011 – 2026)

Wokingham have also produced a Public Transport Plan as a supplementary document to the LTP, this details key strategic objectives for public transport in the authority as well as a number of policies relevant to the scheme:

- § Objective 1: To work with train operating companies and Network Rail to address station access and conditions and the range of destinations available.
- § Objective 2: To work in partnership with bus operators to deliver high quality and effective services, linking both rural locations and urban centres.
 - B7 - Monitor and ensure a quality waiting environment - To work with all partners to ensure a quality waiting environment is maintained. This might include the re-negotiation of advertiser funded bus shelter contracts.
 - B10 - Identify funding opportunities for improvements to all services
 - B11 - Improve accessibility for vulnerable or isolated residents - To ensure that Community Transport is delivered as an effective service to those who operate it as well as those who use it. This will include a review of existing pickup and set down points in key locations.
- § Objective 3: Ensuring the best use of limited funding for Council supported bus services.
- § Objective 4: Using technology to make bus services more efficient and easier use.

- ITS2 – Real time passenger information (RTPI) - The Council will explore the feasibility of further integration of Wokingham Borough’s existing RTPI system with those in surrounding authorities. This will include:

Expanding the existing RTPI system to cover the Reading journey to work area;

Encouraging operators to equip new vehicles with on-board displays that incorporate audio announcements; and

Integrating audio announcements into key bus stops, e.g. business parks.

- § Objective 5: To work with partners to effectively promote information concerning public transport to all user groups.
 - Com3 – Promote services and improve public transport information - Promote public transport services, to include:
 - Provide improved transport information at key stops; and
 - Provide information through a range of media and formats.

§ Objective 6: Create the necessary framework for improved public transport environmental sustainability

5.4 **Bracknell Forest Borough Local Transport Plan 3 (2011 – 2026)**

The Bracknell Forest LTP3 covers the period from 2011 to 2026 and sets out a number of local transport objectives as well as relevant policy to the scheme:

2) Maintain and improve, where feasible, the local transport network.

4) Encourage and promote accessibility by sustainable modes of transport.

§ Policy TP3 Buses - The Council aims to increase the use and availability of buses, and to continue improving passenger satisfaction and bus punctuality through:

- Partnership working with bus operators and other interested parties.
- Promoting bus travel and making up-to-date information including Real Time Information available.
- Promoting easy and efficient ticketing for bus use.
- Seeking to improve connections between bus and train services.

5.5 **Slough Borough Council Local Transport Plan 3 (2011 – 2026)**

The Slough Brough Council LTP 3 covers the period from 2011 – 2026, it sets out a number of objectives for this LTP which they aim to achieve in terms of transport, including the below, which also have further salient information from the plan included:

§ To make sustainable transport options accessible to all:

- Delivering an accessible transport network - investment in the provision of audio announcements at bus stops and on-board buses to assist those with visual impairments.
- Public transport information - We will carry on working with operators to ensure that transport information is consistent, effective and provided in various easy to understand formats. As well as making information more accessible our aim is to create a better journey experience for public transport users by providing better information through real time information systems and stop specific timetable and network information
- Fares and ticketing

§ To improve the journey experience of transport users across Slough's transport networks:

- Public transport interchanges – Building on LTP2, transforming the way people interchange between services in the town centre with a modern transport hub used by local bus services and those into the wider Thames Valley.
- Ticketing and information - In the short term we will work with the rail and bus operators to promote existing bus/rail combined tickets. However, we foresee advances in multi-operator ticketing and development of smart card and mobile phone technology, all aimed at making journey planning easier and more convenient.

Information is another vital ingredient of improving passenger journeys. We will work with bus and rail operators to improve the provision of information, ranging from displays at bus stops and on buses, to journey planning, (including Traveline) and more Internet-based information.

§ To ensure that the transport system helps Slough sustain its economic competitiveness and retain its position as an economic hub of the South East:

- Better bus travel information - When reliability is poor, passengers are particularly reliant on information about when the next bus will arrive. However, even when reliability is improved, providing real-time passenger

information at bus stops or at work or home enhances the quality of the service and passenger choice.

5.6 Local Transport Plan Summary

As can be seen above the LTPs for all of the local authorities included very similar policies, that would be supported by the introduction of this scheme.

They highlighted the need for a more accessible network which would provide an equal and inclusive service for all, which would be supported by the provision of audio-visual displays on buses and at railway stations.

Also featured in policy in all LTPs was the need for smart solutions, real time information, big data or ability to make smarter choices, this scheme will directly help to improve the amount of information and particularly real time information that will be available to passengers both on bus services and rail stations and on the internet. This information will aid passengers in making smarter choices in the way they travel and improve the attractiveness of the service.

Improved ticketing options were also highlighted, and this scheme will provide wider ticketing options and more options in how to obtain a ticket.

The authorities also committed to better interconnectivity between transport modes, providing more information about continued bus travel at railway stations will help encourage more people to use the bus to continue their journey from rail stations, providing an improved connection between these modes.

Increase in patronage of sustainable transport modes is also highlighted in all the LTPs as a way to reduced congestion and to respond to the climate change and reducing emissions from transport. This scheme looks to increase the attractiveness and efficiency of using bus travel in the local area, therefore increasing its patronage.

The case for change

Impact of not changing

The consequences of a 'do nothing' option would be:

- 1) A reduction in customer confidence in presently available RTI which relies on legacy software and can result in bus departure predictions not being available for bus journeys, and these incidences will increase as the system gets older and more out-dated;
- 2) Non-availability of audio-visual information which can otherwise increase customer confidence when travelling on local bus services; and
- 3) Failure to meet the sub-region's strategic objectives of supporting the local economy and providing accessibility to the labour market for all.

A legacy RTI system is in operation, using an outdated platform that is subject to intermittent outages. The legacy RTI system is difficult to import data into and extract reports from and requires considerable manual intervention. In addition, the data feed to the estate of RTI on-street signs currently comes from a separate interface – thus requiring a separate data load - instead of being fully integrated into a single portal. This is a legacy from when the ageing roadside signs was the responsibility of the local authority. The project will address these significant shortcomings.

The current ticketing system also has significant short-comings. For example, passengers using the 'mTicket' app on their smartphones must have a separate log-in and account details if they also want to purchase tickets online using a web-browser. Also, the 'Bus to Work' tickets are a different software system, and again do not integrate with the other bus

ticketing options. Similarly, it is currently difficult for parents/guardians to purchase tickets via the current online facility and 'gift' them to a young person in their care. The new online ticket office will address these deficiencies.

Incomplete picture available of bus travel options, for existing and potential customers

Opportunity to promote and actively encourage local bus operators of all sizes across TVB to participate in a multi-operator RTI initiative developed to adhere to Open Data standards and established RTI data transfer protocols and enable a complete picture of bus travel options to be presented to customers.

Lack of live information on onward bus travel opportunities at rail stations This project encompasses provision of 3 bus RTI information screens at rail stations, to raise the profile of multiple operators' bus services by providing arriving rail passengers with live information on local bus services that allow onward travel.

Limited availability of audio-visual real time 'next stop' information on board local buses, hampering access to employment and other opportunities for visually or sensory-impaired customers This scalable project includes the fitting of 51 buses from three bus operators across the TVB area with internal audio-visual equipment to give real time 'next stop' and relevant customer service information and provide reassurance for customers travelling who may be unfamiliar with, or unable to sense their location on, the bus route that they are using.

5.7 Internal Drivers for Change

This scalable initiative aims to significantly enhance the provision and content of live journey planning information, coupled with increased availability of smart ticketing across the six local authority areas in which Reading Buses operate. The enhanced RTI system would include the latest, low-power information screens, located at two major rail interchanges and on-bus audio and visual screens on 51 buses to provide real time locational information to passengers.

The system will be configured to allow for addition and dissemination of live information for multiple operators' services, while the proposed online shop will allow customers to easily purchase and renew mobile and smartcard-based travel tickets for our range of local bus and coach services. This initiative tallies with national, regional and sub-regional objectives to tackle congestion, enable economic growth and - through enabling modal shift in favour of the bus, helping to indirectly reduce transport-related emissions and help meet wider climate change objectives.

5.8 Strategic Fit

This project reflects a key tenet of TVB LEP's Strategic Economic Plan which is to achieve better connectivity through improving sustainable transport links for residents to education, employment, learning and retail opportunities. It tallies with the priority of ensuring that economic potential is not constrained by labour supply and with the concepts of strengthening networks and making the towns in TVB genuine hubs in the ideas economy. The concept of 'Completing the Connection' is also in line with the priority, identified by the majority of the Berkshire Unitary authorities, to reduce or offset transport-related emissions and reduce climate change impacts in accordance with diverse declarations of Climate Emergencies.

Further, the project ties in not only with each authority's Local Transport Plan Policy objectives that emphasise the desire to see provision of accurate, comprehensive public transport information, but also with the Government policy as reflected in the Bus Services Act 2017 and secondary legislation, particularly in respect of Open Data.

5.9 Local Authorities:

Implementation of this project would bring benefits to all six unitary authorities: Bracknell Forest Borough, Reading Borough, Royal Borough of Windsor & Maidenhead, Slough Borough, West Berkshire District and Wokingham Borough Councils

5.10 **Parliamentary Constituencies:**

Implementation of this project would be of benefit to eight constituencies: Newbury, Reading West, Reading East, Wokingham, Bracknell, Maidenhead, Windsor and Slough. This initiative will help to support economic growth in the Thames Valley region by enhancing local connectivity, delivering value for money by improving the utilisation of existing highway infrastructure, encouraging more efficient journey choices and improving digital connectivity. It will also support the strategic objective of encouraging sustainable transport choices, objectives in each area's Local Transport Plan, and the aim to reduce overall carbon emissions.

6 **Objectives and Intended Outcomes**

6.1 **Objectives**

A series of objectives and their intended outcomes for the scheme have been identified and are presented in Table 2.3 below.

Objective	Intended Outcome
-----------	------------------

- | | | |
|----|---|--|
| 1) | Support and drive further economic growth in the local area | § Support and drive further economic growth in the local area through reduction of congestion, increasing capacity and increasing efficiency on the local transport network |
| 2) | Enable and encourage use of local buses instead of private vehicles. | § Increase the number of people using local buses in the TVB LEP area.
§ Support the concept of sustainable commercial and residential development across the TVB LEP area. |
| 3) | Enable and encourage easy interchange between public transport modes, and other sustainable modes. | § Improve access to, and visibility of, live bus information at specific rail stations where it is possible to interchange between rail and bus services.
§ Provide a complete picture of upcoming bus and coach departures for onward travel, for arriving customers at specific rail stations, also augmented by consistent and complete RTI available on mobile devices. |
| 4) | Significantly improve the availability, accuracy and content of live information for local public transport services, coupled with greater resilience in the underlying RTI system. | § Deploy improved algorithms as part of new software on a proven, advanced platform to underpin the RTI system and accurately calculate anticipated time to departure for multiple operators' local bus routes. Subsequently disseminating that information to multiple customer and media outputs including apps, journey planners, bus stop screens and foyer screens.
§ Increase the use of and improve content relayed to customers via, the service status messaging component of the RTI system. Make it easier to compose, authorise, despatch and clear down (remove) disruption information on bus stop screens and foyer screens
§ Significantly improve availability and content of next stop and customer service information on board 51 buses on 30 different bus routes, through the installation and configuration of additional in-bus audio-visual screens and speakers.
§ Improve accessibility for all, by increasing the proportion of buses operated by Reading Buses, Courtney and Newbury and District with audio and visual information on-board from 62% to 100%. |

- § Deliver a scalable system that will allow for further incremental or large-scale enhancements e.g. upgrading of legacy bus stop information screens.
- 5) Allow personalised purchase of mobile or smartcard-based tickets. § Improve facility to purchase tickets in advance of a journey or on the move, via an online shop. Thus, enabling easy purchase of mobile or smartcard-based tickets for travel with the format suitable to customer's requirements.
- § Reduce the amount of on-bus cash transactions to speed up journey-time and reduce risk of Covid19

Context and Rationale

Significantly enhance customer information for multiple operators' routes and ticketing enhancements with smart and mobile ticketing. It will help enable and encourage employees of local businesses, residents and visitors to switch to public transport for some or all of their journeys and help economic growth in the region.

Objectives Resources/ Input Outputs Direct & Indirect Outcomes

The aims/ objectives of the scheme are: In order to achieve the set of activities to fulfil these aims/ objectives we need the following: We anticipate that, once accomplished these activities will produce the following deliverables: We anticipate that if accomplished these outputs will lead to the following change:

- Support and drive further economic growth in the local area.
- Enable and encourage use of local buses instead of private vehicles.
- Enable and encourage easy interchange between public transport modes, and other sustainable modes.
- Make live passenger information available.
- Allow personalised purchase of mobile or smartcard-based tickets. • One core, multi-operator RTI system.
- Three bus RTI departure screens at two rail stations.
- audio-visual customer information installations on 51 buses.
- An online shop enabling smart travel via app or smartcard. • More reliable and better quality RTI data for buses from multiple operators in the region
- Easier and better-informed interchange between rail passengers and bus services at Reading and Newbury stations.
- Useful audible and visual RTI on 51 buses not currently equipped.
- Easier and more convenient ticket purchase via smart or mobile media. • Higher passenger satisfaction with bus travel in the region.
- More useful management information on bus service performance to help refine timetables to reflect real-life traffic conditions.
- More use of buses by passengers who currently struggle with audio or visual impairments.
- Less use of cash transitions and more use of 'smart' ticketing to speed up bus boarding times.
- Modal shift from the private car to the bus.

6.2 Measures for success

As other factors such as bus timetables, bus routes, fares, traffic congestion and the economy will not remain constant, it is impossible to measure success by passenger numbers as all these other factors will also have an influence. Therefore, the success of

the 'Completing the Connection' would be measured through passenger satisfaction, measured by survey and through customer feedback.

Reading Buses undertakes an annual survey of passenger satisfaction through the independent watchdog, Transport Focus. This is normally undertaken between September and December each year. In 2019 they interviewed 858 passengers. The survey covers many different aspects of a passenger's journey experiences, but include the passenger's journey purpose; their reason for choosing the bus; whether passengers checked arrival times and if so, how; at-stop facilities; waiting times and punctuality; satisfaction with the bus; how tickets were purchased; and on-bus features including on-bus information displays.

Scheme Elements

Scheme element 1 - Core, multi-operator RTI system

One core RTI system developed in accordance with Open Data and RTIG standards, with multiple operators being encouraged and enabled to add their data to the system to provide a complete picture to customer. Incorporating:

- enhanced algorithms and content management;
- facilities for secure, importing, compartmentalised storage and management of schedule data by each respective operator to ensure commercial confidentiality;
- calculation and appropriate dissemination of Real Time departure predictions;

and

- enhanced user software interfaces for the tracking system and timetable database management portal and licences.

This would be delivered by the existing RTI supplier for the TVB area, R2P, due to their proven track record in delivering RTI with Reading Buses; also that this offers the most cost-effective solution to upgrade the existing RTI system, rather than discontinue it and start again from scratch with an all-new RTI system; and due to the short timescale to deliver this project in this financial year.

Scheme element 2 - Bus Departure Screens at rail stations

Three large bus departure screens at rail stations. In accordance with the requirements of GWR, these will be weighted free-standing 49" flat-screens, including Bluetooth audio trigger for announcements. The cost of these elements include supply, installation, configuration, testing and licences for the software.

Reading station is a priority for these two bus departure screens, one for the north exit and one for the south exit, as this is by far the largest station in terms of number of passengers in the TVB region. Newbury station is also a priority as this station is seeking addition investment to provide wider footways, safer crossing facilities, enhanced bus stop facilities and reduced vehicle speeds. The preferred scheme for the station building improvements includes a new ticket hall and gate-lines on the north side, additional secure cycle parking and cycle hub, increased retail and vending machines, improved passenger waiting facilities and toilets.

This element would also be delivered by the existing RTI supplier, R2P, given their track record on delivering RTI displays elsewhere in the region and to eliminate any risk of non-compatibility of the new bus departure screens with the upgraded core RTI system.

Scheme element 3 – Audio-visual customer information screens on buses

51 audio-visual installations on buses operating across the TVB LEP region, providing customers with Next Stop, connecting train and relevant customer service information. These are for fitting on 51 double deck buses, so will have one 19” full-colour flat screen display, and one 28” flat screen display on each bus, plus eight speakers fitted in total. They also include an on-bus computer to control the display context on each bus. Again, the cost of these elements include supply, installation, configuration, testing and licences for the software.

This element would also be delivered by R2P given their track record on delivering audio-visual on-bus RTI display screens for Reading Buses and to eliminate any risk of non-compatibility of the new bus departure screens with the upgraded core RTI system. Appendix A contains a schematic map of the 30 bus routes that currently do not have on-bus display screens but will benefit from the fitting of the audio-visual screens on 51 buses, and these are listed below:

Table 2.5: Bus routes to benefit from the 51 on-bus display screens

Operator	Route(s)
Newbury and District	Kennections route 2
Newbury and District	Kennections route 3
Newbury and District	Kennections route 4
Newbury and District	Kennections route 6
Newbury and District	Kennections route 8
Newbury and District	Kennections route 9
Newbury and District	1A
Newbury and District	1C
Newbury and District	103
Reading Buses	Claret 21
Reading Buses	Claret 21a Spritzer
Courtney Coaches	Bracknell 53
Courtney Coaches	Bracknell 108/150
Courtney Coaches	Bracknell 151
Courtney Coaches	Bracknell 156
Courtney Coaches	Bracknell 157/8
Courtney Coaches	Bracknell 171/172
Courtney Coaches	Bracknell 194
Courtney Coaches	RBWM 4/238/239
Courtney Coaches	RBWM 5/7/9
Courtney Coaches	RBWM 8
Courtney Coaches	RBWM 10/10A/10S
Courtney Coaches	RBWM 16/16A
Courtney Coaches	RBWM F10
Courtney Coaches	Slough 459
Courtney Coaches	Slough/RBWM 2/S5
Courtney Coaches	Slough/RBWM 15
Courtney Coaches	Wokingham 121/122/123/124
Courtney Coaches	Wokingham 128/129
Courtney Coaches	Wokingham / Bracknell Forest 299/598/125A/125B

Scheme element 4 - Online shop enabling smart travel via app or smartcard

Online shop delivering smart travel. This will:

- § Allow the online shop to be managed by their Reading Buses staff (prices, tickets, descriptions, etc.);
 - § Provide mTicket and smartcard sales, the latter being achieved through integration with Unicard;
 - § Deliver a single login for both the website and app;
 - § Enable customers to choose how their ticket is received (mTicket or smartcard);
 - § Give customers the option to set up a recurring payment option for specific ticket(s);
- and
- § Provide reports for both mTicket and smartcard sales.

2.7 Stakeholder engagement

Consultation has taken place with GWR who are fully supportive of the proposal for bus RTI departure screens for Reading and Newbury railway stations. An email of support is given in Appendix B.

Letters of support from local authorities are included in Appendix C.

Discussions have also taken place to make other operators aware of the plan by Reading Buses to upgrade and enhance the existing RTI system and to offer them the opportunity to use it using secure operator management software and dedicated sections of the database for their commercially confidential data.

Passenger representative groups such as Bus Users UK do not normally comment on relatively small passenger information and ticketing projects such as this.

Inter-dependencies

As these project elements are enhancing the existing RTI and ticketing systems currently in use with current suppliers, there are no potential technical constraints to adding these new elements. For the 51 on-bus audio-visual display screens, these are already in use on other Reading Buses vehicles, and the supplier had a good track record of successfully installing them on similar vehicles and their compatibility with the core RTI system.

For the bus departure screens at the railway stations, these will require the co-operation and agreement of GWR at Reading and Newbury stations, and Network Rail at Reading station. However, the displays are free-standing (although weighted down to stop them being moved), so do not require planning permission. As noted above, GWR has already been consulted and are fully supportive of this proposal.

This project is not dependent on any other internal or external factors, nor any other projects.

Table 2 6 below sets out the main inter-dependencies with the project partners.

Table 2 6: Inter-dependencies with the project partners

Partner	Status
Great Western Railway	Essential partner for provision of bus departure information at Reading and Newbury rail stations;
Network Rail	Essential partner for provision of bus departure information at Reading rail station;
R2P UK Limited	Specialist supplier - implementation and management of Real Time Information systems – central RTI system, on-bus audio and visual RTI displays, and three large interchange RTI displays – 2 at Reading Station and 1 at Newbury Station
Passenger Technology Group	Specialist supplier – delivery of mobile and smart passenger transport ticketing

Not an inter-dependency as such, but it is worth noting that the very significant Crossrail (the Elizabeth Line) scheme will serve Reading railway station, and when it is open will offer significantly increased travel opportunities for employment.

2.9 Options considered

Five options were considered in accordance with achieving the scheme objectives, Table 2 7 describes the shortlisted options identified.

Table 2 7: Option descriptions

OptionDescription

Option 1: Operate a more frequent bus service

§ Operate a higher frequency of buses on bus routes in the six district council areas

Option 2: Increase the number of bus lanes

§ Increase the number of bus lanes in the in the six district council areas

Option 3: Subsidise reductions in bus fares

§ Give bus operators subsidies to reduce bus fares

Option 4: Upgrade to RTI system and smart ticketing

§ Core, multi-operator RTI system.

§ Three bus departure screens at rail stations.

§ 51 interior audio-visual customer information installations on buses.

§ Online Shop - enabling smart travel via app or smartcard.

Option 5: Improvements to walking and cycling routes

§ New and improved cycle lanes in the six district council areas

§ New and improved walking routes

§ New and improved signage, waymarking and cycle stands

The next chapter sets out the Economic Case including the options appraisal.

3. Economic Case

3.1 Introduction

The Economic Case assesses options to identify all their impacts, and the resulting value for money, to fulfil Treasury's requirements for appraisal and demonstrating value for money in the use of taxpayers' money.

3.2 Options appraised

Table 3-1 below sets of a qualitative assessment of whether the five options meet the five defined objectives with a simple scoring system of:

++ strong positive

+ weak positive

* neutral

- weak negative

-- strong negative

Table 3.1: Option Assessment

Objective 1: Supporting and driving further economic growth in the local area

Objective 2: Enable and encourage use of local buses instead of private vehicles.

Objective 3: Enable and encourage easy interchange between public transport modes, and other sustainable modes. Objective 4: make live passenger information available Objective 5: Allow personalised purchase of mobile or smartcard-based tickets

Option 1: Operate a more frequent bus service	++	++	+	*	*	
Option 2: increase the number of bus lanes	+	+	*	*	*	
Option 3: Subsidise reductions in bus fares	+	++	*	*	*	
Option 4: Upgrade to RTI system and smart ticketing	++	++	++	++	++	++
Option 5: Improvements to walking and cycling routes	++	-	+	*	*	*

Option 4 (upgrade to RTI system and smart ticketing) has the strongest positive score in the qualitative assessment of the five options against the four defined objectives. Therefore, this is the option taken forward as part of this business case bid for funding.

3.3 Appraisal period

The four elements of this project (the core RTI system; the on-bus audio-visual display screens; the rail station bus departure screens; and the online ticket office) all have a design life of 10 years. However, as Reading Buses can only currently commit to funding the revenue costs for a 5-year period, this 5-year period has been used in the appraisal as the central case. As Reading buses expects to be able to fund the revenue costs for 10 years, an alternative assessment period of 10 years is also given in this FBC for comparison purposes.

3.4 Assumptions

A benefit-cost ratio (BCR) quantifies the benefit received to the economy for every £1 invested in the scheme.

The main non-project specific economic appraisal parameters and assumptions are drawn from the requisite units of the DfT's appraisal guidance, contained in various TAG guidance units and the TAG databook. Key assumptions made for the economic assessment are as follows:

- Modelled opening year 2021; with preparation, installation and testing all in the financial year 2020/2021.
- Appraisal period. We have run two scenarios, the central case is for 5 years as noted above, but with an alternative assessment period of 10 years for comparison purposes.
- Price base year and base year for discounting = 2010.
- Discount rate = 3.5% for 10 years from the current year.
- PVC includes annual running cost expenditure of £209k per year.
- Scheme costs have 10% optimism bias applied. The scheme is considered a standard ITS scheme at FBC stage with procurement completed and firm quotes received. It is not therefore (a) innovative, (b) mostly unique or (c) involves high degree of complexity/difficulty. As such, an optimism bias of 10% on the costs is considered appropriate.
- The number of passengers at both the railway stations and on the buses will remain constant during the appraisal period (i.e. no assumption on growth). This is a conservative assumption as the improved passenger information will increase demand for services, but this demonstrates the strength of the case with the base level of demand in socio economic terms. However, a sensitivity test in relation to the implications of Covid-19 has been undertaken, as described below.

The improvements to the facilities (the bus services) are captured through Generalised Journey Time (GJT) savings experienced by the user, as per the guidance set out in TAG. Section M3.2.1 of the WebTAG data book provides the GJT values for many of the public transport improvements proposed as part of this intervention; the values of which are set out in Table 3.2 below.

Table 3.2: Generalised time savings & applied proportions (source TAG Databook v1.13 2020; Table M3.2.1)

Measure	Generalised Journey Time Saving (bus users) in minutes
RTI	1.47
Audio Announcements	1.22
On-Screen Displays	1.90
Simplified Ticketing	0.84

3.5 Modelling approach

Table A1.3.4 of the TAG Databook provides proportions of trips and persons that fall into three distinct journey purpose categories, those being business, commuting and other trips. This information is provided for a range of daily time periods (peak / interpeak), days of the week and transport modes. For the purposes of this analysis the proportions applied related to an all-week average for bus user trips (note - TAG uses the term 'public service vehicle' – PSV), the values for which are presented in the below table.

Table 3.3: Trip purpose by mode (Person trips, PSV user, all-week average, source TAG Databook v1.13 2020; Table A1.3.4)

Trip purpose (PSV user)	Value
Business	1.86%
Commuting	18.00%
Other	80.14%

3.5.1 Existing demand for RTI display screens at rail interchanges

To model the time savings realised by the passengers interchanging from rail to bus at the two rail interchanges of Reading and Newbury Stations, the annual number of passengers estimated to be interchanging between the two modes was used.

For Newbury Station, the estimate is based on actual passenger boarding data from the on-bus ticket machines. This was 6,687 passengers for the month of October 2019, so factored by 12 months to give an annual number of passengers of 80,244. Of these, as Newbury Station is a short distance from the town centre and has a limited local catchment, it is assumed that 80% of the passengers boarding buses at the Newbury Railway Station bus stop are railway passengers. 80% of 80,244 is 64,195 passenger per year interchanging from rail to bus at Newbury Station. As a logic check, according to the Office of Rail Regulation (ORR) official published statistics, the number of annual rail passengers at Newbury Station is 1,665,096, so the estimate of 64,195 interchanging from rail to bus is 3.9%, which seems reasonable.

For Reading Station this is not so easy to estimate from bus passenger boardings as the bus services stop at a large number of different bus stops both north and south of the railway station and estimating the number of bus passengers who alighted from rail services from bus passenger boarding numbers is impractical. However, a recent study at two other large mainline railway stations on the Great Western Mainline showed that at one station 14% of rail passengers exiting the station were interchanging with bus services for onward travel, and at a second station it was 16%. Therefore, an average of the two (15%) has been taken and applied to Reading Station for this economic evaluation.

The number of passengers (boarding and alighting) at Reading is given by the ORR as 17,080,738. Given only 50% of these will be alighting, this gives 8,540,369. Of these, 15% are estimated to be interchanging with the bus, giving 1,281,055. All bus and rail passenger figures given here are pre-Covid-19.

Table 3.4: Annual passengers, interchanging between rail and bus

Station	Interchanging passengers from rail to bus/yr
Reading	1,281,055
Newbury	64,195
Total	1,345,250

3.5.2 Existing On-bus patronage Demand (on bus audio and visual)

To model the generalised journey time savings realised by the bus users on the 51 buses with the new audio and visual displays, bus passenger data for the 30 different routes that these 51 buses will operate was provided by the three bus operators. Factors were applied to the daily or monthly data to give a total of 3,890,320 passengers on these 30 routes per annum.

3.5.3 Forecast demand for Online Travel Shop

To model the time savings realised by the passengers using the Online Shop for smart travel via app or smartcard the annual number of passengers estimated to use this was used. The annual number of all passengers on all bus services for the three bus companies of Reading Buses, Courtney Buses and Newbury and District Buses is 27,526,000.

It is estimated that 5% of passengers will get this benefit, given many purchases are for multi-journey trip tickets, some passengers have free concessionary passes, and some users will continue to use cash. However, a sensitivity test of 2.5% and 7.5% passengers using the online travel shop has also been undertaken.

3.6 Scheme cost

The total scheme cost is £2,586,243 in out-turn prices, which is £1,541,243 of capital, and £1,045,000 of revenue for 5 years. The breakdown of the capital scheme cost is shown in section 4.

Annual maintenance and operation costs are £209,000 per year with this expenditure assumed to start when the system goes live in 2021. Reading Buses have committed to funding the scheme operation costs for the initial 5 years of operation and will review the success of the system at that point. On this basis scheme economics have been generated assuming a 5-year and 10-year period of operation.

3.7 Distributional impacts

Reading Buses is acknowledged through multiple national awards as one of the UK's leading bus operators and is one of eight remaining municipally owned bus companies, and as such places the community it serves at the heart of everything it does. All returns from operations are reinvested locally to deliver the best possible services. Reading Buses are Reading's 10th largest employer and are proud of their record in developing young talent, including recruiting and apprentice engineers, and promoting diversity.

3.8 Social and environmental impacts

Buses are used more often by disadvantaged groups such as young people, older people, people on low incomes jobseekers, and disabled people. By improving information about buses through RTI, improving the accessibility of buses to passengers when on the bus through the new audio-visual information displays screens, new rail station bus departure displays, and an online travel office offering more user-friendly ticket options, bus travel will become more accessible to these disadvantaged social groups, giving a small positive improvement.

Similarly, by making buses more accessible, it is expected that there will be an increase in bus use, including attracting people out of private cars, which will bring an overall environmental benefit from a reduction in congestion and emissions. This benefit will only be a small positive improvement overall, and therefore has not specifically been used in the business case, but it should still be noted as a positive benefit of this bid.

3.9 Value for Money Statement

Achieving value for money is described by DfT as “using public resources in a way that creates and maximises public value”. Value for money considers the economic, social and environmental impacts of the proposal across 10 years.

Present Value of Benefits (PVB) scheme benefits are built up of the three categories which are calculated independently:

§ PVB of on-bus displays = £3,528,618

§ PVB of rail station displays = £574,890

§ PVB of online ticket office = £336,092

PVB total of the three scheme elements above = £4,439,600.

Present Value of Costs (PVC) total of all scheme elements = £1,573,331.

Please note that the core RTI system is needed for both the on-bus displays and the rail station displays so the cost was divided equally to work out the individual cost.

The economic impacts estimated for the scheme based on the modelling approach are detailed in Table 3.5

Table 3.5: Scheme Summary and Value for Money Statement – scenario 1 (5 years) – Central Case

Total project cost £2,586,243 (Out-turn prices)

Scheme PVC £1,573,331 (2010 values and prices)

Optimism Bias of 10% included in the scheme assessment

Scheme Opening Year 2021

5 Year benefit assessment from 2021 – 2025

Net Quantified Benefits 5-year transport benefits (2010 prices and values)

Benefit Stream

5 Years PVB

Present Value of Benefits (PVB) £4,439,600

Present Value of Costs (PVC) £1,573,331

Net Present Value (NPV) £2,866,268

Benefit to Cost Ratio 2.82

VfM indicator A BCR of 2.82, achieving high value for money

Sensitivity Analysis A sensitivity analysis has been undertaken in the light of Covid-19 to show the level of patronage that would still be needed to get a BCR of 2.0.

This showed that even with a reduction of 28% of the pre-Covid-19 this investment returns a BCR of 2.0.

Table 3.6: Scheme Summary and Value for Money Statement – scenario 2 (10 years) – alternative case

Total project cost £3,631,243 (Out-turn prices)

Scheme PVC £2,047,012 (2010 values and prices)

Optimism Bias of 10% included in the scheme assessment

Scheme Opening Year 2021

10 Year benefit assessment from 2021 – 2030

Net Quantified Benefits 10-year transport benefits (2010 prices and values)

Benefit Stream 10 Years PVB

Present Value of Benefits (PVB)	£8,469,097
Present Value of Costs (PVC)	£2,047,012
Net Present Value (NPV)	£6,422,085
Benefit to Cost Ratio	4.14

VfM indicator* A BCR of 4.14, achieving very high value for money

3.10 Sensitivity Tests

Given the current concerns about the effect of the Covid-19 pandemic on bus passenger numbers in the future, a sensitivity test has been undertaken to show the level of patronage that would still be needed to get a BCR of 2.0. This has shown that if passenger numbers dropped by 29% from current levels, then a BCR of 2.0 would still be returned.

A sensitivity test has also been undertaken on the percentage of passengers using the online travel shop. The core assumption is 5%, but tests of 2.5% and 7.5% have been undertaken. If only 2.5% of passengers use the online travel shop, the BCR (central case, 5 years) decreases from 2.82 to 2.71, and If 7.5% of passengers use the online travel shop, the BCR (central case, 5 years) increases from 2.82 to 2.93.

The next chapter sets out the Financial Case.

4. Financial Case

4.1 Introduction

The financial case concentrates on the affordability of the proposal and its funding arrangements. It presents the financial profile of the scheme.

A Business Case Methodology Appraisal Summary Report was written in June 2020 to set out the approach to modelling the business case, and a copy of this can be seen in Appendix D.

4.2 Chief Financial Officer sign off

The Finance Director for Reading Buses has signed-off this FBC. A letter from the Finance Director is included in Appendix E.

4.3 State Aid

Appendix F has a letter from Reading Buses to explain why this bid is not considered to be State Aid.

4.4 Scheme Cost

4.4.1 Scope of capital works

The total investment in public transport information and ticketing improvements is £2,586,243 in out-turn prices (£1,541,243 capital and £1,045,000 revenue). The complementary package of measures of the core RTI system, the railway station departure screens and the audio-visual screens on the buses will all be supplied by the current RTI provider, R2P due for compatibility with current systems and for speed of implantation. The work has been carefully scoped between Reading Buses and R2P and a formal, binding quotation has been obtained. This quote also includes a reasonable allowance of risk.

The online ticket shop will be provided by Passenger Technology Group, again an existing supplier to ensure compatibility. As with the RTI elements described above, the work has been carefully scoped between Reading Buses and Passenger Technology Group and a

formal, binding quotation has been obtained. This quote also includes a reasonable allowance of risk

Any potential additional capital cost over-runs will be covered by Reading Buses.

The breakdown of the capital costs is shown in Table 4 1 below.

Table 4 1: Capital Elements

Cost Heading	Cost (£)	Supplier
1 core, multi-operator RTI system	£306,250	R2P
3 Bus Departure Screens at rail stations	£108,000	R2P
Audio-visual customer information screens on 51 buses	£978,843	R2P
1 Online shop enabling smart travel via app or smartcard	£98,150	Passenger
Technology Group		
1 Project Manager	£50,000	To be confirmed
TOTAL	£1,541,243	

4.4.2 Project Management

It is proposed that an experienced project manager would be appointed by Reading Buses for the duration of the project to ensure successful delivery to time, to budget and to meet project expectations. This is accounted for the capital elements above.

4.4.3 Revenue costs

As part of the scoping of the above works and quotations, both R2P and Passenger Technology Group have given quotations for the ongoing revenue costs of the RTI and ticketing systems. These total £209,000 per annum and cover ongoing software licenses, hosting and maintenance of servers, hardware failure, and technical support.

4.4.4 Inflation

Inflation is included within the core scheme costs, which are informed by out-turn prices. Supplier quotes have been given and are binding and protect against inflation. As such, no additional inflation layer has been included on top of the scheme cost estimates.

4.5 Spend Profile and Funding Sources

Table 4 2: Capital and Revenue Spend over 5 years (£) – Out-turn prices
2020/21

TVB LEP funding	£1,541,243
Reading Buses	£1,045,000
Total	£2,586,243
% Capital to overall cost	60%

Reading Buses has made provision in its forward planning for a revenue contribution of £1.045 million from their own budgets towards running costs associated with the substantially-enhanced RTI system and ticketing facility, covering five financial years. The next chapter sets out the commercial and management case.

5. Commercial & Management Case

5.1 Introduction

This section provides a commercial and management case for the scheme.

The promoter of the scheme is Reading Buses. The management case assesses whether a proposal is deliverable.

The scheme comprises of information technology systems which are well understood and unlikely to present any significant delivery challenges.

5.2 Procurement strategy

The scheme would be delivered by Reading Buses, and quotations have been obtained from existing suppliers due to the upgrade of the existing embedded systems for

compatibility reasons and for best value. The existing RTI systems supplied by R2P was previously competitively tendered by the local authorities, and similarly for the existing ticketing system this was competitively tendered by Reading Buses.

If a new procurement exercise was undertaken, the costs of replacing all the elements of the existing RTI system and ticketing system would by far outweigh any cost saving that may be made through retendering.

Reading Buses has a strong record in procuring and delivering such IT projects. The use of existing suppliers to build upon the existing systems also offers best value for money compared to replacing the whole systems with all-new suppliers.

5.3 Evidence of similar projects

Reading Buses has an excellent track record of successfully delivering bus-based ITS projects. This includes the roll-out of the 'Ticketer' electronic ticket machines (ETMs) across the whole bus fleet to offer passengers a modern and user-friendly on-bus ticketing solution, including acceptance of contactless payments and smartcards. These ETMs also give the locational information to feed into the central RTI system to enable predictions of arrival time to be made and disseminated. This means the delivery of the online ticket office for mobile and smart ticketing is low risk.

Reading Buses also has extensive experience of delivering on-bus audio and visual information via the display screens and speakers fitted in buses. This means the delivery of the display screens for the additional buses as part of this bid are very low risk as the bus types have already been surveyed and had examples fitted by the supplier.

Reading Buses also has 12+ years' experience of central RTI systems to national Real Time Information Group (RTIG) standards, including the data inputs required, and the outputs to feed information to a range of display types, websites, and mobile-based apps. Again, this makes that part of this bid low risk.

5.4 Governance, organisational structure & roles

Progress of the project will be reviewed by the Reading Buses Leadership Team as part of their fortnightly meetings. These are chaired by Reading Buses' Chief Executive Officer.

A dedicated Project Manager with a background in procurement and implementation of ITS will be recruited by Reading Buses on a short-term contract basis to ensure that the project is delivered on time and within specification and budget, seeking additional financial authorities as necessary.

The Leadership Team also consists of:

- Finance Director
- Chief Engineer
- Service Delivery Director
- HR Director

A fortnightly highlight report would be submitted by the Project Manager for review and discussion. The two Operations Managers from the smaller depots could join in on calls as necessary, especially in terms of progress with the installation of the on-bus audio-visual RTI screens.

There will also be a Project Board every two months to specifically focus on progress on this project in more detail than will be possible in the fortnightly Leadership Team meetings.

5.5 Project plan

The key milestones are set out in Table 5 1 below.

Table 5 1: Key Milestones

Milestone Description	Date
Bid submission and Inception	
FBC submission	end Jun 2020

Full Approval expected Jul 2020
 Confirm orders with suppliers end Jul 2020
 Appoint an experienced project manager end Jul 2020
 Formulate and agree detailed project plan in conjunction with the two suppliers and stakeholders Aug 2020
 Central RTI Systems upgrade
 Test central RTI system upgrades offline Dec 2020
 Rollout RTI system upgrades to live system and sign-off Jan 2021
 Rail interchange displays
 Confirm programme with GWR and Network Rail, and commence draft Risk and Method Statements Aug 2020
 Agree fitting arrangements for rail interchange displays Oct 2020
 Factory Acceptance Tests (FATs) for rail interchange displays Dec 2020
 Fitting of rail interchange displays at Newbury and Reading and Site Acceptance Tests (SATs) and sign off Jan 2021
 On-bus RTI screens
 FATs of the first sets of on-bus equipment Nov 2020
 on-bus installations (51 buses in total), SATS and sign-off Dec 2020 – Feb 2021
 Online ticket shop
 FAT of online ticket shop for mobile and smart ticketing Oct 2020
 Roll-out ticket shop for mobile and smart ticketing to live environment, SAT and sign-off Nov 2020
 Close-out
 Close out of project Mar 2021
 Monitoring and Evaluation Report to TVB LEP Apr 2022

5.6 Communications and stakeholder management

The Project Manager will be regular contact with the suppliers and stakeholders, including GWR and Network Rail for the installation of the three RTI display screens at the two railway stations.

Regular feedback will also be given to the TVB LEP on progress and assurance that the project will be delivered on time and to budget.

Externally, Reading Buses will maintain contact with local passenger groups and through satisfaction surveys to ensure that the information presented on the on-bus audio-visual displays and rail station bus departure screens is presented in a clear, accessible and easy-to-understand way.

5.7 Risks, Constraints and Dependencies

Reading Buses have agreed to cover the revenue costs of running the substantially-enhanced RTI system and ticketing facility for the next five financial years. This will ensure their ongoing operation over this time.

Reading Buses have long-established, strong working relationships with the two suppliers of R2P and Passenger, and are very confident that, working with them, the Completing the Connection initiative will deliver tangible benefits to existing and potential public transport users. The upgrade to the central RTI system will also enable additional capability and components such as updated at-stop RTI display screen equipment to be added at a later stage as additional funding allows.

The principal risks associated with project delivery and mitigation measures that have been identified or implemented are shown in Table 5.2 below.

Table 5.2: Risks and mitigation measures

Risk Likelihood

(H / M / L) Severity

(H / M / L) Mitigating actions

Changes to political agenda or composition at local or sub-regional level M M

Pursuing means to offset transport emissions and reduce climate change impacts is a primary issue for majority of the Berkshire Unitary Authorities;

Local Transport Plan Policy objectives highlight desire to enhance provision of accurate, comprehensive public transport information provision, also reflected in Bus Services Act; and

Members and senior officers at local authorities have been made aware of age and capability limitations of legacy RTI systems.

Cost over-runs in relation to capital works and/or system maintenance L M

Robust programme and Task Management, documenting of changes, ongoing close liaison with principal suppliers and highlight reports to Project Board.

Failure to achieve spend profile L L Scrutiny of cost estimates, close monitoring of and liaison with the contractor and of invoicing; keep stakeholders informed and retain their buy-in.

Failure to keep to implementation and/or maintenance programme L M Robust project management by designated, specialist Project Manager;

Documentation of changes; and

Close liaison with principal suppliers and with partners in respect of necessary permissions.

Supplier bankruptcy L L As the principal suppliers are now part of larger groups, this is considered low risk.

Lack of supplier staff resources L M Robust project management by designated, specialist Project Manager; and

Close liaison with principal suppliers and good existing supplier relationships.

Lack of client staff resources L L Intention to appoint designated, specialist Project Manager on fixed term contract, augmented by in-house knowledge.

Problems and delays in fitting and maintaining on-bus RTI equipment M L

Supplier has a proven track record, coupled with qualified, experienced staff; Full surveys and method statements will be requested for each vehicle type before fitting.

5.8 Monitoring and evaluation

Reading Buses will produce a monitoring and evaluation report in April 2022 to cover one full year from the delivery of the elements of this project. This will report on the operations of the upgraded central RTI system and the benefits it has brought to Reading Buses and other operators in the TVB region, and the same for the online ticket office for smart and mobile ticketing. This will include overall figures on usage and passenger and staff feedback.

The report will also contain an evaluation of the benefits of the on-bus RTI screens for audio and visual RTI, taken from passenger satisfaction surveys and customer feedback through all the usual channels made available by Reading Buses. These channels include phone calls, emails and social media feedback, as well as the annual Passenger Focus Bus Passenger Survey as noted earlier.

The report will also evaluate the benefits of the three interchange displays for bus RTI at Reading and Newbury stations in the same way.

Appendix 4

Legally Privileged and Confidential

Thames Valley Berkshire LEP Limited

Advice in relation to State aid and proposed funding to Reading Buses

6th July 2020

This report is provided subject to our Terms of Engagement, for the stated purpose and for the sole use of Thames Valley Berkshire LEP Limited. It is confidential to Thames Valley Berkshire LEP Limited and its professional advisers and Browne Jacobson accepts no responsibility whatsoever to any other person. Neither the whole nor any part of this report nor any reference hereto may be included in any published document, circular, or statement, or published in any way without Browne Jacobson's prior written approval of the form and context in which it may appear.

Advice to Thames Valley Berkshire LEP Limited in relation to State aid and proposed funding to Reading Buses

Background and Instructions

Thames Valley Berkshire LEP Limited (the LEP) is considering the award of approximately £1.5 million in Local Growth Funding (LGF) to Reading Transport Limited (Reading Buses), a wholly owned subsidiary of Reading Borough Council (the Council) since 1901. It is run on an arms length basis from the Council.

The funding is requested for a project called “Completing the Connection” which has the aim of enabling and encouraging employees of local businesses, residents and visitors to switch to public transport for some or all of their journeys to, from and within Thames Valley Berkshire.

The project will involve:

- New core Real Time Information (RTI) software and applications that will allow the secure storage and management of bus location and schedule data for multiple operators' bus routes, coupled with dissemination of accurate Real Time bus departure predictions. The aim is to provide intending customers with a complete picture of the travel opportunities available to them. This will be made accessible to bus operators across the sub-region, with compartmentalised facilities to import, manipulate and export bus operational data in open data format, enabling generation of live departure predictions for display on downstream customer information systems.
- Deployment of advanced audio-visual display equipment at rail stations and on-board buses, with the station displays capable of showing departures for multiple operators' bus services and helping to assist travel for people with visual or aural impairments. The station concourse screens will show live departure information for services run by all operators who are maintaining current, accurate data within the RTI system core, or relaying it via a SIRI-format data feed.
- Creation of an online travel shop, allowing customers to purchase and receive tickets either on their mobile or in smartcard format. The available ticket products will include some multi-operator products such as the Connect suite of tickets sold and accepted on bus routes in West Berkshire.

Reading Buses has said that it intends to ensure that the RTI system and associated public display outputs will be openly accessible to other local bus operators running services in Thames Valley Berkshire, in competition with Reading Buses and otherwise.

We are asked to advise whether there will be State aid to Reading Buses as a result of the proposed funding.

Executive Summary

In summary, we consider that the LEP could rely on either Article 56 of the General Block Exemption Regulation or treat Reading Buses as providing a service of general economic interest so there are, in principle, State aid compliant routes. In each case, there are criteria to be fulfilled and in each case the two key requirements are to ensure that:

- Reading Buses is not being funded to a greater extent that it needs to be (in the context of the relevant route taken); and
- Operators (including Reading Buses) benefiting from the Project pay their way on a market price basis, recognising that the establishment of a market price will not necessarily an easy or clear cut task as transport authorities do not charge for other comparable systems. Alternatively, charging operators for their share of operating costs should be adequate for this purpose.

We understand that Reading Buses has provided the information required. If the LEP is satisfied that the figures add up (either for Article 56 or for SGEI) and the funding agreement fulfils the relevant requirements, then the funding should be State aid compliant.

At a practical level, in the case of Article 56, the LEP will need Reading Buses to provide the numbers to show that the funding is no more than gap funding i.e. (in essence) the capital costs of the project minus the operating profit (discounted operating revenues minus discounted operating costs over the accounting lifetime of the assets acquired through the funding). The sums paid by Reading Buses and other operators to use the assets funded by the LEP would count as the operating revenues and, as noted below, Reading Buses should be asked to demonstrate that these are (as far as possible) market prices). There would have to be some monitoring provisions in the funding agreement to make sure that the figures remain within the thresholds (alongside the LEP's usual monitoring) and there would have to be a clawback of funding if, in the future, it could be seen that the funding was greater than the "gap".

As far as the SGEI route is concerned, Reading Buses should demonstrate to the LEP that:

- (a) that the funding is no greater than the costs of the project (and can include a reasonable profit); and
- (b) that the costs of setting up the project and running it are no more than required by a typical well-run and adequately resourced provider. Most of the costs will presumably fall within the category of hardware, software and other equipment and will be procured, so it will be fairly clear that the costs are appropriate. Any other costs (internal costs, for example) should be justified on the basis that they are not excessive and reflect a cost effective and efficient operation. The absence of any profit element will help with justifying this and we understand that Reading Buses has provided information in its application and business case.

Otherwise, as with the Article 56 route, Reading Buses should be asked to demonstrate that the usage charges (as far as possible) reflect market prices. There should be an act of entrustment from the Council and the funding agreement should set out the required details.

Advice

We have had the benefit of having discussed the proposed activities with the LEP and Reading Buses and talked around the possible State aid solutions and this has been very helpful.

Is it State Aid?

Article 107 of the Treaty on the Functioning of the European Union lays down the basis general rule prohibiting State aid measures:

“Any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market”.

Broken down into separate tests, in order to be considered State aid, a particular measure must meet all of these criteria:

- It is granted by the State or through State resources;
- It favours certain undertakings or the production of certain goods (i.e. it is selective rather than being of general application);
- It distorts or threatens to distort competition; and
- It affects or is able to affect trade between Member States.

This means that each measure that falls under the definition may not be implemented before receiving the approval of the Commission.

The most obvious recipient of aid is Reading Buses:

Is the aid being granted by the State or through State resources?

Reading Buses will be receiving aid from the State in that it will (if successful in its application) be receiving a grant from central government resources via the LEP’s accountable body.

Is it an undertaking?

State aid can only be received by entities which are “undertakings” for the purposes of State aid regulation. An undertaking is an entity which engages in “economic activity”, which means that it offers goods and services on a market which could, at least in principle be carried out by a private operator in order to make profits. This will be the case whether or not the activity is carried out by a public sector body and/or on a not for profit basis. This was made clear in *Glöckner*, a case about emergency transport services and patient transport services and reiterated by a further decision concerning healthcare transport services in Tuscany.

There are exceptions to this where a public sector body is carrying out certain “public functions” but it seems to us that Reading Buses will not amount to a public sector body carrying out public functions. If Reading Buses only provided services to the Council, there would be a respectable argument that it was not offering goods and services on a market and therefore was not an undertaking. This derives from the argument that the Council and Reading Buses would form a single economic undertaking (in competition terms) and that neither would be operating on a market in this context. However, Reading Buses operates

on an arm's length basis from the Council and is offering goods and services on a market (where there are competitors) and therefore it is acting as an economic undertaking. Is Reading Buses receiving a selective advantage?

Reading Buses is receiving public funding specifically to assist its operating on a market which competitor bodies are not and is (at least potentially) receiving an economic advantage from this. There may be additional benefits to it compared to other bus operators or potentially compared to rail operators (although they may benefit as well). It is, therefore, receiving a selective advantage.

There may be an argument for saying that what is proposed is the equivalent of public realm infrastructure i.e. it is the equivalent of a road or a bridge (or a bus lane, for that matter) because there is no charge for it and all bus operators (and rail operators, where relevant can use it). However, it is a fairly bold argument and the LEP may not wish to rely on it.

Does the aid distort or threaten to distort competition?

For the purposes of Article 107 of the TFEU, a measure distorts or threatens to distort competition where it is liable to improve the competitive position of the aid recipient over its competitors. The test is very sensitive and in all but the most unusual cases it is safe to assume that when the State grants a benefit to an undertaking, that benefit will provide an advantage capable of distorting or threatening to distort competition. There is no requirement that the distortion is significant or material. In this case, the competitive position of Reading Buses may improve compared to its competitors because it has received a cost subsidy to operate this system and, accordingly, this criterion is likely to be met.

Does the aid affect, or is it able to affect trade between Member States?

Similarly to the question of whether a measure distorts or threatens to distort competition, the question as to whether a measure affects or is able to affect trade between Member states is sensitive and will often be triggered if the criteria discussed above are met. However, where a measure has a very localised effect, it may be that it can be said that there is no effect on trade between Member states.

Decisions over the last few years from the European Commission suggest that when considering whether a particular measure has effects which are purely local, the courts will consider whether:

- the beneficiary of the aid competes in a market in which undertakings from other EU countries participate (i.e. is there an European market in the goods or services provided by the beneficiary); and
- whether there is European investment in the sector in which the beneficiary operates?

Decisions over the last few years from the European Commission suggest that when considering whether a particular measure has effects which are purely local, the courts will consider whether:

- the beneficiary of the aid competes in a market in which undertakings from other EU countries participate (i.e. is there an European market in the goods or services provided by the beneficiary); and
- whether there is European investment in the sector in which the beneficiary operates?

It is difficult for us to say with certainty that there is competition within the EU internal market between operators of buses and that there is European investment in that market in the UK. However, the Commission noted in its approval of the UK's Ultra Low Emission Bus (ULEB) scheme as follows:

“In addition, the scheme strengthens the position of these enterprises in relation to their competitors in the Union and therefore has potentially distorting effects on competition. In view of the fact that the scheme concerns a sector where undertakings from any Member State can operate, the aid is likely to affect trade between Member States.”

It is also worth noting that the Commission said in its 2015 Notts and Derby decision in relation to a much smaller and localised scheme that:

“Whereas the impact of CTOs on competition in the UK already appears very small, the impact on the broader EU market would be negligible. Indeed. It seems unlikely that EU companies would be interested in providing special transport services on any significant scale to local communities in the UK or that CTOs would seek to offer such services on a significant scale in other MS.”

Thus while there was considered to be little actual or potential trade, there was at least some.

On the whole, it would therefore be difficult to argue that any benefit to Reading Buses would not have the potential to affect trade between Member states.

All the State aid tests have, therefore, been met as far as Reading Buses is concerned. What are the potential solutions?

Possible exemptions

Article 56 of the General Block Exemption Regulation

We have considered the exemptions that might be available and Article 56 (Aid for local infrastructures) of the General Block Exemption Regulation (GBER) is likely to be applicable.

How it applies here and what special conditions are relevant:

Article 56 applies to funding for the construction or upgrade of local infrastructures which concerns infrastructure that contribute at a local level to improving the business and consumer environment and modernising and developing the industrial base. There is no further definition from the Commission, although Recital 75 of GBER notes that:

“A number of measures taken by Member States with regard to local infrastructures do not constitute aid because they do not fulfil all the criteria of Article 107(1) of the Treaty, for example because the beneficiary does not carry out an economic activity, because there is no effect on trade between Member states, or because the measure consists of

compensation for a service of general economic interest which fulfils all the criteria of the Altmark case-law”.

That said, the Commission also takes the view that infrastructure which is purely local is unlikely to affect trade, trade might be affected directly or indirectly – hence why Article 56 of GBER exempts aid for local infrastructure.

In our view the provision of the information and associated infrastructure for the reasons explained by Reading Buses is capable of amounting to the provision of local infrastructure within the meaning of Article 56.

The LEP should note that infrastructures which may be supported using Articles 14 to 55 of GBER (ie. everything other than regional aid) may not be assisted through Article 56. There is no obvious other category for exemption under GBER.

In terms of the specific requirements, for Article 56 to apply, the infrastructure must be made available to interested users on an open, transparent and non-discriminatory basis. The price charged for the use or the sale of the infrastructure must correspond to market price. We understand that Reading Buses has not been able to find any evidence of its investigating what a market price might be (not least because transport authorities do not charge for use of central systems. The important point here is that the payment of a market price is to ensure that there is no State aid to any bus (or other) operator that benefits from the project. This will include Reading Buses, of course, so it should also pay a market price to benefit from the project. Any sums paid either by Reading Buses or by other operators should go towards the project - whether capital or operating costs. It is helpful to note that the Commission has commented, in the context of transport infrastructure, that incremental cost coverage by users, where other methodologies aren't possible, will exclude aid to those users. Reading Buses has suggested having the operators cover the operating costs, so that should be adequate.

Any concession or other entrustment to a third party to operate the infrastructure must be assigned on an open, transparent and non-discriminatory basis, having due regard to the applicable procurement rules (i.e. via OJEU). We assume that any provider (and operator?) of the hardware and software required will be procured via a competitive tender.

Aid limits:

The aid amount to Reading Buses must not exceed the difference between the eligible costs and the operating profit of the investment. (i.e. the aid amount = the investment costs – the operating profit). Operating profit is defined in Article 2(39) of GBER as being "the difference between the discounted revenues and the discounted operating costs over the relevant lifetime of the investment, where this difference is positive".

The Commission has said that the “relevant lifetime” is defined as “the lifetime of the investment that can be assimilated to the depreciation period in most accounting systems.” so Reading Buses’s accountants should assess what is the most appropriate period.

The operating profit must either be deducted from the eligible costs ex ante, on the basis of reasonable projections, or through a claw-back mechanism. So, it is possible to use either an advance definition of aid levels as an alternative to a claw-back based on

actual revenues and costs. “Reasonable projections” must be verified by appropriate analysis and this should be kept for audit purposes.

Accordingly, Reading Buses must (in order to demonstrate that Article 56 will apply) be able to show the LEP that the grant funding from it will not be greater than the difference between the eligible costs incurred by Reading Buses in developing the infrastructure and the operating profit (if any) made by Reading Buses from it over of the relevant lifetime of the investment.

Eligible costs:

The exemptions in GBER allow for the funding of ‘eligible costs’. These are types of costs that can be funded using the particular exemption being relied upon under GBER. The eligible costs under Article 56 are the investment costs in tangible and intangible assets. Tangible assets are assets consisting of land, buildings and plant, machinery and equipment (so this includes the hardware required for the infrastructure, for example). Intangible assets are assets that do not have a physical or financial embodiment, such as patents, licences, know-how or other intellectual property.

Notification threshold:

The threshold for individual notification to the Commission is €10 million for the project, so significantly higher than the costs involved.

General GBER considerations

There are a number of other, more general, considerations which are relevant to the funding by the LEP to Reading Buses and the use of GBER and these (mostly) apply whichever article is used:

- The project must deliver commercial benefits to Reading Buses.
- The project would not be able to proceed at all or at the same scale or speed without the funding.
- The aid must have an incentive effect i.e. there has been a written application before the project has started and Reading Buses must be able to show a material increase in scope, amount spent or speed of completion of the project as a result of the funding.
- Eligible costs must be supported by clear and itemised documentary evidence.
- Aid must be transparent (i.e. it must be possible to calculate precisely the gross grant equivalent of the aid in advance). This will be satisfied if the sums to be provided are set out in the grant agreement with Reading Buses.
- The total amount of public support measures for the project must be taken into account, whatever the source. Aid exempted by one part of GBER may be cumulated with any other aid exempted under another part of GBER provided that those aid measures apply to different identifiable eligible costs. This is presumably not relevant, given that only Article 56 is likely to apply.
- Aid exempted by one part of GBER may not be cumulated with any other aid exempted under another part of GBER or under the De Minimis Regulation or with any other public funding which relates to the same (either partly or wholly

overlapping) eligible costs if that cumulation exceeds the highest aid intensity or aid amount applicable to the aid in question under GBER.

- The recipient must not be an “undertaking in difficulty” – the definition in GBER is fairly long and complex but this relates to undertakings being in financial difficulty.

Once aid has been provided under GBER, the LEP must submit a notification through the BEIS state aid unit and publish details of the aid measure on its website. This is set out at Article 9 of GBER. We can provide further information on this if necessary.

Services of General Economic Interest

A service of general economic interest (SGEI) is a service of an economic nature that public authorities identify as being of particular importance to citizens, but which are not supplied by market forces alone, or at least not to the extent and under the conditions required by society. Their provision may therefore require public intervention. There are a range of SGEI activities, including postal services, public transport itself and a wide range of health and social services. SGEI are carried out in the public interest under conditions defined by the State, which imposes a public service obligation on the providers.

The Commission has said in its Quality Framework for Services of General Interest that SGEIs are economic activities which deliver outcomes in the overall public good that would not be supplied (or would be supplied under different conditions in terms of objective quality, safety, affordability, equal treatment or universal access) by the market without public intervention.

As an SGEI provision may not generate a sufficient profit for the provider, public service compensation might be needed to offset the additional costs stemming from the public service obligation.

Member states have discretion as to which services they classify as SGEIs, but the Commission has a residual oversight to make sure that Member states’ decisions on this are not completely outside the SGEI parameters.

We understand that a project of this nature would not be undertaken by a private sector operator on its own initiative, as it simply would not pay its way. We also understand that some local authorities set up systems comparable to those proposed for the project as part of their public functions. They use their statutory powers to do so. It would be helpful to understand whether there are any specific powers to enable them to this.

If not, then a local authority could presumably use its general powers of competence under the Localism Act 2011.

We have read the very helpful letter from the Council in which it explains:

“Reading Borough Council, in partnership with Reading Buses, has a successful history of delivering real time information systems over many years and in 2019 Reading Buses took over complete operation of the existing real-time system from the Council on the basis it would remain open to all operators. This project will, through the provision of a new real time information system platform, significantly increase the accuracy, availability and

content of information of the system. This will benefit multiple operators' services, current and potential bus passengers, and enable easier rail to bus interchange at major hubs, complemented by ticketing system enhancements. The Council supports this scalable and deliverable scheme which is intended to enable and encourage employees of local businesses, residents and visitors to switch to public transport for some or all of their journeys. This will also support economic growth in Reading and the Thames Valley by enhancing local connectivity and encouraging sustainable transport choices."

The Council also notes that it is

"happy to entrust to Reading Buses the continued delivery of open standards-based Real Time Information on the premise that the system will be available to other local public transport operators providing that those operators meet reasonable costs associated with the system, principally in relation to data transmission/communications costs, and undertake or fund data management and importing in accordance with appropriate standards themselves."

This is, therefore, a good base for dealing with the project as an SGEI and dealing with the funding as for an SGEI would mean (if the arrangements are compliant as a whole) that the provision of State aid to Reading Buses would not amount to illegal State aid.

What needs to be done?

The easier SGEI option would be based on the Commission's 2012 Decision (the SGEI decision), but this cannot be used in relation to land transport.

Accordingly, the Council and the LEP will need to apply the criteria set out in Case C-280/00 *Altmark Trans v Regierungsprasidium Magdeburg* [2003] (*Altmark*).

In the *Altmark* ruling, the ECJ set out a four stage test which, if met, means that public service compensation does not constitute state aid.

1. The recipient must have public service obligations to discharge which are clearly defined.
2. The parameters on which the compensation is calculated must be established in advance in an objective and transparent manner.
3. The compensation must not exceed that which is necessary to cover all or part of the costs incurred in the discharge of the public service obligations (taking into account the relevant receipts and a reasonable profit).
4. The level of compensation needed must be determined on the basis of an analysis of the costs which a typical undertaking, well run and adequately equipped, would have incurred.

In short, therefore, the Council and the LEP could rely on *Altmark* if they ensure the following:

- There must be clear obligations on Reading Buses to provide the public service obligations using the funding provided. This will form the "act of entrustment" which entrusts the public service obligation on Reading Buses.
- The LEP (and the Council) establishes in advance the compensation required by a typical well-run and adequately resourced provider to comply with those obligations,

and ensures that the aid element in the subsidised price does not exceed this. It is important to note that this is not necessarily the costs of Reading Buses, which may be different to those of a typical well-run provider so, if basing this on Reading Buses' costs the LEP (and the Council) ought to carry out sufficient due diligence to show that these costs do not exceed those which would be incurred by a typical well-run provider. It is helpful to note that Reading Buses has already provided evidence of its supply arrangements and costs.

The agreement with Reading Buses must include:

- the methodology for calculating the compensation;
- a mechanism for the LEP/Council to monitor Reading Buses' costs to ensure that the permitted levels of compensation are not exceeded; and
- a claw back mechanism to recover any aid exceeding that which is permissible, or any aid in the event of a State aid breach.

Reading Buses would also have to have a separate accounting procedure for the project and ring fence the use of the funded assets.

So in terms of the practicalities, there would have to be an act of entrustment from the Council to Reading Buses for the SGEI and this would have to cross refer to the funding agreement between the LEP and Reading Buses to deal with the levels of compensation and clawback and so on. An alternative would be to roll the act of entrustment into the LEP's funding agreement, with the Council as a party to that agreement. We have seen both types of arrangements.

For completeness, the SGEI arrangements deal with provision of funding to Reading Buses to set up the project. As with the Article 56 solution, it is still important to ensure that a market price is paid to benefit from the project to ensure that there is no State aid to any bus (or other) operator, including Reading Buses, that benefits from the project. This is clearly anticipated by the Council. As with the Article 56 estimate of market pricing, this is more of an art than a science and the LEP should ensure that Reading Buses benchmarks the pricing as best it is able.

SGEI De Minimis

The Commission has established ceilings up to which it believes that aid will not affect trade or competition. Aid for the provision of an SGEI not exceeding a ceiling of €500 000 over any period of three fiscal years is, under the SGEI DE Minimis Regulation, deemed not to affect trade between Member states and/or not to distort or threaten to distort competition and therefore does not fall under Article 107. We mention this for completion as the threshold is considerably lower than the level of funding proposed.

The providers of the systems and software and any other suppliers enabling the project to be carried out

It is important to ensure that the providers and suppliers appointed by Reading Buses do not benefit from State aid as a result of the LEP funding.

The public funding of goods, works and services through open and non-discriminatory public tenders, performed according to public procurement rules does not normally involve

State aid. As a general principle, an OJEU compliant (or comparable) tender process (whether directly procured or let under a compliant framework) should ensure that providers are not being remunerated at greater than market rates and are thus not receiving State aid. If a competitive procurement is not possible for any reason then Reading Buses should ensure that the rates are robustly benchmarked to ensure that the providers are not being paid at better than market rates. The LEP funding conditions will presumably have their own robust requirements for procurement down the chain of funding in any event.

Browne Jacobson LLP

Appendix 5 – Response from Reading Buses

To Bill Hicks Head of Infrastructure, Thames Valley Berkshire LEP Ltd, 100 Longwater Avenue
Green Park READING RG2 6GP

06 July 2020

Dear Bill,

Re: Completing the Connection proposal

I write further to our previous correspondence in respect of the above project and to the advice note provided to the Local Enterprise Partnership by Browne Jacobsen.

We consider that, in taking on legacy Real Time Information (RTI) components from local authorities and in our stated commitment to establish the new RTI core system in order that it is available for other operators to import their data into - so as to provide a fuller travel information picture to intending customers - our proposal is in line with the Services of General Economic Interest (SGEI) strand outlined in the Browne Jacobsen advice note.

Reading Buses can demonstrate clear evidence of delivering public service obligations - our purpose is to deliver public bus services and it is a condition of our Public Service Vehicles Operator's licence that services we register are provided; further, we operate services on behalf of local authorities in line with contracts issued by local authorities, therefore we have public service obligations that we deliver against.

Further, we consider that the prior proposal and Full Business Case, as independently reviewed on the LEP's behalf, clearly identify robust costs associated with our proven, contracted suppliers delivering this project under our instructions and within the tight timelines in which implementation is intended to be substantially complete.

Yours sincerely,

Clive Tombs Commercial Manager Clive Tombs

Commercial Manager

07769 099 992

clivetombs@reading-buses.co.uk

Readingbuses

Great Knollys Street

Reading RG1 7HH

www.reading-buses.co.uk