West of England

Full Business Case

Real Time Information Systems Upgrade

		Originated	Reviewed	Authorised	Date
1	Version 1.0	Matthew Barrett/Tom Alexander	Bill Davies		18/10/2017
2	Version 2.0	Matthew Barrett/Tom Alexander	Bill Davies/Ed Plowden		19/10/2017
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Redactions have been made to this Business Case where information relates to a commercially confidential procurement.

Executive Summary

Bus based-public transport are essential to the vitality and effective functioning of city regions including the West of England. Buses help reduce levels of traffic congestion which the West of England's Joint Transport Study has forecast to cost £800 million per year if no action is taken to address its impacts. Bus services also play a vital role in providing and improving access to employment, education and retail opportunities particularly for those living and/or working in deprived areas.

Real Time Passenger Information (RTI) has provided a major uplift in the quality and reliability of bus services in the West of England. RTI provides passengers with a clear reassurance that their bus is operating, and via a `countdown' display at stops, piece of mind regarding arrival time of the service. This is particularly crucial for more vulnerable passengers including women, the elderly and young people. RTI also plays a role in attracting new passengers, thereby reducing car dependency, tackling traffic congestion and improving air quality, in line with the objectives of the current Joint Local Transport Plan and the future Transport Vision set out in the Joint Transport Study.

Bristol City Council have undertaken a procurement on behalf of the West of England councils to replace and upgrade the current RTI system [redacted] to deliver the upgrade provided through the procurement to improve the efficiency and quality of the information provided to the passenger. This investment will be matched by a seven year revenue investment by the West of England councils, contributions from private sector bus operators and future capital investment in expanding the system (such as through major transport schemes including the MetroBus Rapid Transit network).

1 Strategic Case

1.1 State Aid Considerations

1.1.1 Whilst this submission is an application for state funding, it does not give an advantage to one undertaking over others (as it helps fund an existing, robust procurement for equipment and maintenance already underway), it does not distort or have the potential to distort competition, and it does not affect trade between Member States.

1.1.2 We have assessed the procurement process which was open and transparent and are content that there is no over compensation to the provider as the costs reflect prevailing market rates.

1.2 Project Description

1.2.1 [redacted]

1.2.2 After 8 years and a contract extension the current RTI contract will come to an end on 31st March 2018. After this date, the availability of an RTI system in the West of England is dependent upon the re-procurement of an RTI system.

1.2.3 During the 8 year lifetime of the current contract there has been significant technological progress in this field. The re-procurement, therefore, has come at an auspicious time and is an opportunity to develop the breadth and capability of the RTI system.

1.2.4 Bristol City Council, as previous lead authority on RTI for the sub-region, commenced with re-procurement of the RTI system in April 2016 in partnership with the other Unitary Authorities and participating bus operators.

1.2.5 As part of the procurement process officers undertook soft market testing and benchmarking / evaluation of the RTI systems in other local authorities. These exercises helped to assist the development of the specification, project timescales and transitional arrangements.

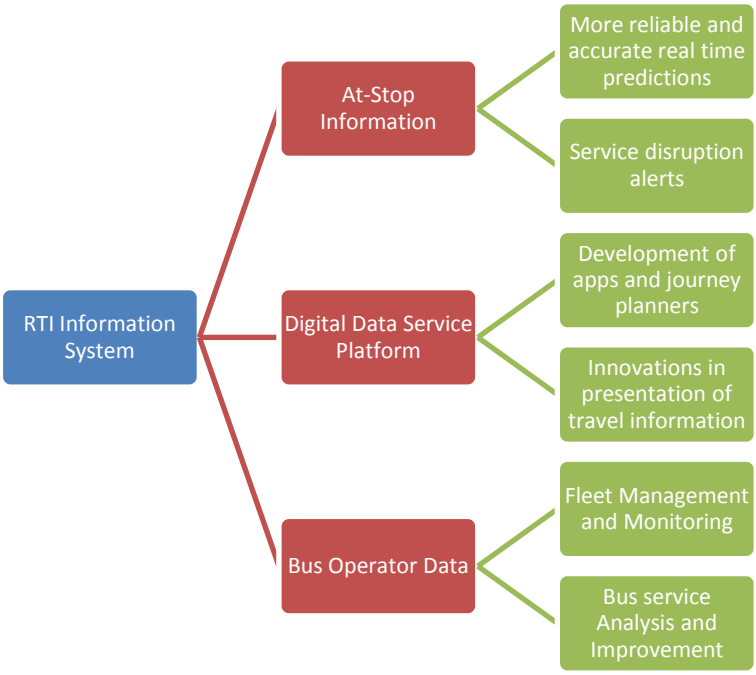
1.2.6 In addition to the at-stop information, the new upgraded RTI systems will provide an enhanced platform for expanding and improving existing digital services such as apps, trip planners etc, and developing new digital services in the future, e.g formats that will support digital personal assistants. This will extend the benefits of RTI far beyond the at-stop displays.

1.2.7 The RTI systems are also a critical element of the bus operators' management of their bus fleets and service operations. The upgraded system will provide improved functionality and monitoring to bus operators, as well as enabling more extensive use of selective priority for late-running buses at traffic lights which will translate to improved service efficiency and reliability.

1.3 Project Objectives and Case for Change

1.3.1 The RTI re-procurement will deliver benefits for passengers through three key channels as summarised in the diagram below.

Figure 1 - Delivering Passenger Benefits



1.3.2 The upgraded RTI system will deliver enhancements to the passenger experience. Key benefits include:

- Improved accuracy and reliability
- Better bus fleet management for operators, resulting in more efficient operation and improved / expanded services.
- Better alert systems where there are incidents or delays to services
- Improved accessibility & functionality for people with disabilities
- Extended use of selective bus priority at traffic lights.
- More remote fixing of faults
- A platform for expanding and improving digital services - e.g apps, trip planners, digital assistants, as well as providing data to other information providers -e.g google - extending access to RTI far beyond the 1,000 at-stop displays.

1.3.3 The system enhancements highlighted above will help to improve the attractiveness of bus services and encourage passenger growth.

1.3.4 Increased patronage will help to support the objectives of Joint Transport Study which sets a target of increasing the modal share of public transport from 9% in 2011 to 17% by 2036.

1.3.5 The RTI system will also be a valuable source of information to help inform strategic decisions. For example, it could be used to identify pinch points on the road network where bus services are delayed or journey times are inconsistent and unreliable.

1.3.6 The monitoring of bus journey times via RTI, will allow for more accurate timetabling of services to the prevailing traffic conditions.

1.3.7 The system will help to improve bus journey times through the expansion of the existing Traffic Signal Priority (TSP) network through both 'central' and 'local' TSP systems.

1.3.8 The re-procurement will take advantage of the latest technological innovations in RTI, for example, GPRS communications to all displays, AVL via ETM, central TSP, new display designs/functionality and bus to base communicationss via Voice Over IP – VOIP. This additional functionality will ensure that the system is more robust and reliable ensuring that service users demands are met.

1.3.9 The new RTI system will better support the needs of people with disabilities through improved passenger information such as taking displays, tailored apps, on-bus next stop announcements and displays, so that they can live a more independent lifestyle.

1.3.10 The re-procurement will provide improved alert systems where there are incidents or delays to bus services.

1.3.11 The new RTI system will provide a data platform for expanding and improving digital services. Data feeds will present opportunities to develop software and deliver innovative solutions to present travel information. As well as extending the reach of RTI beyond the 1000 at-stop displays, the data platform will be an opportunity for the West of England's entrepreneurs and SMEs in the technology sector.

1.4 Rationale for Public Intervention

1.4.1 This submission will facilitate the continuation of a core public service.

1.5 Strategic Fit

1.5.1 The local bus network plays a key role in supporting the spatial strategy of the West of England area. The Joint Transport Study (JTS) highlights the need to improve accessibility from residential areas to areas of employment through improved transport networks and acknowledges that our current transport systems are inadequate to support future growth. Facilitating the movement of people is a key driver in enabling future economic growth, and improving the competitiveness of the West of England, attracting investment and jobs to the region.

1.5.2 The JTS recognises that car ownership levels in the West of England area are amongst the highest for city regions in the UK and that the modal share for bus transport is amongst the lowest. It follows, therefore, that there is an opportunity to encourage modal shift away from the private car towards more sustainable modes if these modes can be made more attractive.

1.5.3 The region currently benefits from over 60 million bus journey per year and the West of England is one of the few areas where the bus market is growing thanks to the ongoing investment by the local authorities in partnership with local operators. People travelling by buses are estimated to account for around 29% of spending in cities, with an estimate of around £30 spent per trip on retail and leisure activities in town and city centres centres.

1.5.4 Effective transport information is vital to retaining and growing bus patronage and real-time information systems are at the core of the region's information offer. Surveys have shown that the introduction of RTI systems can result in a direct 1-3% uplift in bus patronage.

1.5.5 The JTS recommends the development of Major Public Transport Schemes along several key transport corridors in the region. RTI systems are an integral part of modern bus based transport systems and re-procurement of an RTI system is fundamental to achieving the vision set out in the JTS.

1.6 Options Appraisal

1.6.1 An options appraisal was undertaken prior to the re-procurement process being initiated.

1.6.2 Consideration of the 'Do Nothing' option concluded that RTI had become a core public service and was a vital element to improve public transport. Continued improvements and growth of public transport use underpin the economic growth of the region (as noted in section 1.5), so the removal of all RTI information systems was not considered to be a viable option.

1.6.3 Options to continue with the existing contract was discounted as the contract could not be extended any further.

1.6.4 An option for a procurement waiver was considered but procurement specialists advised against taking this route. In addition, this option would not have provided an opportunity to upgrade the RTI systems to be fit for purpose and enable the development needs of the next 10 years. Cost increases would be likely from renegotiating the contract with the supplier.

1.6.5 Full re-procurement including system upgrades to deliver improved efficiency and quality was considered to be the best performing option.

1.7 Environmental Sustainability Considerations

1.7.1 The re-procured central RTI system and hardware will have a number of sustainability benefits, by reducing power consumption, extending the operational life of on-street hardware and electronics.

1.7.2 Improved fault reporting and remote management of the system will reduce the number of site visits and servicing which have CO2 benefits by reducing the annual vehicle mileage associated with the contract.

1.7.3 The system will also enable efficiencies and better management of bus services and disruptions which will have emissions benefits.

1.7.4 As noted above, RTI has a proven contribution to growth in bus passenger numbers. Bus patronage in the West of England is growing, bucking a national trend of decline, and its importance will continue to grow against the backdrop of addressing future growth in the West of England as set out in the Joint Transport Study, including tackling traffic congestion and addressing poor air quality.

1.8 Equality and Diversity Impact Assessment

1.8.1 Improvements to bus services enhances access to travel and employment opportunities for those without access to a car – who currently represent around 30% of households, focussed in more deprived wards or those with more specific requirements.

1.8.2 The new RTI systems will offer improved functionality for disabled users, particularly visually impaired people, including at-stop audio systems.

1.8.3 The procurement of a more advanced RTI system will also provide a platform for improved digital services and open-data that will facilitate the development of services specifically aimed at enhancing access to information for disadvantaged groups (e.g. in-app functionality and speech functions).

1.8.4 The new system will also enable improvements to web sites and apps - including vehicle location, interactive route mapping, better alerts, warnings of delays, diversions and closures. These facilities will enhance accessibility and provide reassurance to passengers.

1.8.5 The new system will also deliver enhancements to the on-street information displays (adjustable colours & contrasts etc) which will be of benefit to visually impaired users.

1.8.6 An EQIA relevance check has been undertaken which indicated that a full EQIA assessment is not required.

2 Economic Case

2.1 Economic Appraisal

2.1.1 The total level of bus patronage in the West of England area is estimated at 63.7 million trips per Annum (DfT statistics). Public transport models (e.g. Centro's VURT Model) demonstrate that real time information provision can have a significant impact on bus passenger uplift. Modelling for expanding the provision of RTI on specific corridors in Bristol predicted an uplift ratio for boarding numbers after implementation of 0.8%. This level of passenger uplift translates to 1,019 unique additional passengers per day, once annualisation and two-way trip conversion factors are applied. Of these additional passengers, it is estimated that up to two thirds could be transferred trips from other modes, with the remainder being new trips. Therefore, the uplift in passenger numbers could include 340 new two-way trips per day across the West of England.

2.1.2 The procurement specification for the new RTI system delivers significant passenger benefits in addition to the current RTI provision (as outlined in section 1). The passenger uplift ratio of 0.8% (as cited above) is at the lower end of expectations for a cutting edge RTI system and it is predicted that patronage growth attributable to the new RTI system will exceed this figure.

2.1.3 Around 21% of all bus trips are for commuting and business. Therefore, 21% of the new two-way bus trips could represent new FTE employees travelling to and from work. This would suggest that 71 new two-way trips, or 71 new FTE jobs have been facilitated by the project and the accessibility and connectivity improvements it delivers.

2.1.4 On average, the typical level of GVA generated per employee in the South West is around £26,000 per annum. Therefore, job creation at the scale of 71 FTE employees could generate £239,000 in GVA per annum.

2.1.5 Research conducted by Passenger Focus has highlighted that at-stop RTI information is seen as a major draw for non-bus users and is therefore a major factor in inducing modal change. Modal shift from cars to public transport options would have wider benefits for the West of England Area by reducing congestion and improving air quality.

2.1.6 Improvements in accessibility and other benefits would proportionately fall to more deprived wards in the West of England Area where household car ownership is lowest and reliance on bus services is highest.

2.2 Value for Money Statement

Table 2-1 - Value for Money

Total project cost	[redacted]
Grant sought (EDF/LGF/RIF)	*£558,900*
Net Quantified Benefits	*£1,880,932 GVA*
VfM indicator	*GVA per £ spent: 3.08*

Table 2-2 - Calculations and assumptions

Operational Stage Impacts	Estimate	Source	Comments
A. Annual Passenger Journeys on Bus Services in the West of England area	63.7 million	Department for Transport statistics (Table BUS0109a)	
B. Uplift factor (after implementation of RTI)	0.8%	Centro VURT Model	Estimate based upon predicted passenger uplift on corridors in Bristol.
C. Passenger uplift per annum	509,600	Estimate	C = A x B
D. Annualisation Factor	250	Estimate	Weekday trips only
E. Passenger uplift per day	2038	Estimate	E = C/D
F. Unique passenger uplift per day	1019	Estimate	F= E/2 (two way trips converted to unique passengers)
G. Unique passenger uplift per day – new trips	340	Estimate	G = F/3 (one third of trips are new journeys, two thirds are transferred from other modes)
H. Proportion of bus journeys that are for commuting/business	21%	National Travel Survey, 2015	Table NTS0409-chart 1 data
I. Unique Passenger Uplift per day - new trips for commuting	71	Estimate	I = G x H
J. Per employee GVA in West of England	£26,492	Annual Business Survey	Regional Value, South West
K. Proportionate GVA impact of scheme	£1,880,932	Estimate	K = I x J

3 Financial Case

3.1 Chief Financial Officer sign off

3.1.1 Final sign off of the bid to be progressed in conjunction with BCC Section 151 Officer.

3.2 Scheme Cost

3.2.1 Ongoing revenue costs to be met by UAs and bus operators. Capital cost elements are shown in the Table below.

Table 3-1 - Revenue Elements

Cost Heading	***Total projected eligible expenditure***	***Amount to be claimed***
RTI Officer Post	[redacted]	*£0*
RTI Maintenance - BCC	[redacted]	*£0*
RTI Maintenance – B&NES	[redacted]	*£0*
RTI Maintenance - SGC	[redacted]	*£0*
TOTAL	[redacted]	*£0*

Notes - * subject to Local Government Pay Award inflation

Table 3-2 - Capital Elements

Cost Heading	***Total projected eligible expenditure***	***Amount to be claimed***
RTI display migration & upgrades	[redacted]	[redacted]
Upgraded central RTI system	[redacted]	[redacted]
Enhanced CMS system	[redacted]	[redacted]
Training	[redacted]	[redacted]
On demand bond	[redacted]	[redacted]
TOTAL		*£558,676.58*

3.3 Spend Profile and Funding Sources

3.3.1 The capital and revenue spending profiles are shown in the Table below.

Table 3-3 - Capital Spend Profile

[redacted]

Table 3-4 - Revenue Spend Profile – for information only (revenue costs not included in submission)

[redacted]

3.3.2 [redacted]

4 Commercial Case

4.1 Procurement

4.1.1 Bristol City Council, as previous lead authority on RTI for the sub-region, commenced with re-procurement of the RTI system in April 2016 in partnership with neighbouring unitary authorities and participating bus operators. Since this time WECA has become responsible by statute for bus information as noted by the WECA committee on 15/3/2017.

4.1.2 As noted in section 1.2, the procurement process for a new RTI contract for the region commenced in April 2016.

4.1.3 The procurement process included soft market testing with suppliers to help inform the specification, project timescales and handover arrangements.

4.1.4 Officers also met with other local authorities who had recently undergone re-procurement of their RTI systems in order to gain information that would assist with the design of the specification and other project objectives.

4.1.5 Due to the project timescales a six month contract extension with the incumbent supplier was agreed until 31st March 2018.

4.1.6 Tender bids were received and tender evaluation, clarifications and moderation undertaken between July and September. Officers from each of the four unitary authorities contributed throughout this process. A full tender report has been prepared and is available subject to the usual procurement confidentiality.

4.1.7 The contract can be awarded once funding and governance arrangements are agreed.

4.1.8 The RTI re-procurement process has also included a revision to the Bus Operator Agreement. This needs to be agreed and signed by all participating bus operators and Unitary Authorities.

4.1.9 An Inter-Authority Agreement (IAA) will also be required between WECA and its constituent authorities, with separate arrangements to be put in place for North Somerset Council. This will be based on apportionment of maintenance costs based on share of assets.

4.2 Operation and Financial Viability

4.2.1 The project will be managed as per the existing WoE delivery and financing structures with the amendments to reflect the recent transfer of responsibilities from three of the local authorities to WECA.

4.2.2 WECA will act as the lead authority. Co-ordinate the delivery of the RTI system including management of upgrades, the ongoing maintenance contract and performance monitoring. These arrangements will be covered in the IAA and can be fully transitioned to WECA at a later date should that be required.

4.2.3 The ongoing revenue costs for managing the RTI systems and maintenance will be met from the WECA levy (for Bristol, B&NES and South Gloucestershire Councils) and separately by North Somerset. This is largely a continuation of the delivery and financing structure that has functioned well for the past 7 years (with modifications to reflect the WECA responsibilities).

4.2.4 There are limited review periods for adjustments for price inflation in the contract which will give greater cost and budgeting certainty. The costs for the main systems upgrades are fixed in the tender.

4.3 Social Value Act

4.3.1 [redacted]

4.3.2 [redacted]

4.3.3 The environmental benefits of local bus services are noted in section 1.7, including their key role in improving air quality.

4.3.4 Improving the quality and reliability of the bus service has a strong social benefit, particularly for disadvantaged groups, in terms of access to employment and other opportunities.

5 Management Case

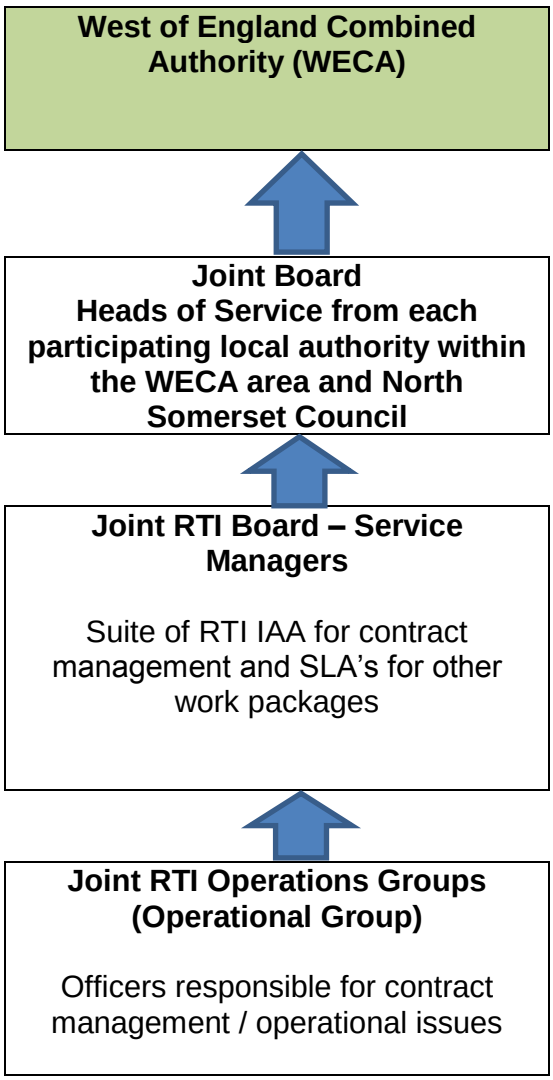
5.1 Promoter and Delivery Arrangements

5.1.1 Joint working arrangements are already established through the West of England's RTI working group. BCC will directly manage the contract on behalf of WECA with support from officers at B&NES, North Somerset and South Gloucestershire.

5.1.2 The delivery of the project will be overseen by the senior RTI officer as the project manager, co-ordinating with leads from the Authorities and Bus Operators where necessary.

5.1.3 WECA will act as scheme promoter. WECA governance/reporting arrangements are shown below.

Table 5-1 - Governance



5.2 Programme Plan

Table 5-2 Key Milestones - completion dates

Key Milestone Completion Dates	Baseline
Commencement of RTI re-procurement led by BCC	April 2016
Award of Contract	November 2017
[redacted]	
[redacted]	
[redacted]	
Annual Review of Contract Performance	November 2018
Annual Review of Contract Performance	November 2019
Annual Review of Contract Performance	November 2020
Annual Review of Contract Performance	November 2021
Annual Review of Contract Performance	November 2022
Annual Review of Contract Performance	November 2023
Re-Procurement of Contract Commences	April 2024
Annual Review of Contract Performance	November 2024
Annual Review of Contract Performance	November 2025
Contract Completion	November 2026

Table 5-3 Indicative Programme Plan (detailed plan to be confirmed after inception meeting)

Indicative Programme Plan	Baseline
[redacted]	
[redacted]	
[redacted]	
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	
[redacted]	[redacted]
[redacted]	

5.3 Risks, Constraints and Dependencies

5.3.1 Risk Log attached in Appendix 3.

5.4 Land Acquisition, Planning and Other Consents

Not applicable

5.5 Service Diversions

Not applicable

5.6 Engagement and Consultation

5.6.1 During the procurement process the Lead Authority, BCC, has sought to engage with other stakeholders including the officers from the other three local authorities in the sub-region and with participating bus operators.

5.6.2 Soft market testing was conducted with potential suppliers.

5.6.3 This is a technical project, largely upgrading internal systems and functionality therefore broader public consultation is not required at this stage. The project will enable future developments that deliver more public-facing improvements. These would require more input from external stakeholders but this is out of scope for this project.

5.6.4 At a strategic level, there is strong engagement with the public and stakeholders undertaken through the Joint Local Transport Plan, consultation on the transport major scheme programme and supporting business cases, and associated planning approvals. The West of England works in close partnership with bus operators (through partnership agreements and the West of England Bus Operators Association), Highways England and the Department for Transport.

5.7 Project Assurance

5.7.1 Specialist technical support on the RTI re-procurement including the specification for upgrading the system has been provided by consultants from CH2M.

5.8 Monitoring and Evaluation

5.8.1 Monitoring activities will focus on evaluating performance in the three key channels identified in section 1 namely,

- At-Stop Information
- Bus Operator Information
- Digital Data Service Platform

5.8.2 Objectives from within these three channels will be assessed using KPIs submitted by the preferred tenderer and Traveline data statistics.

5.8.3 In addition to the above, Monitoring related to the strategic objective of increasing patronage growth will be assessed through DfT regional bus patronage statistics and the annual bus passenger satisfaction surveys.

Appendices:

- Monitoring & Evaluation Form
- Logic Model
- Risk Log

[redacted]

Real Time Information Systems Upgrade
Full Business Case Monitoring & Evaluation Plan

1. Scheme background and context

Bristol City Council have undertaken a procurement on behalf of the West of England councils to replace and upgrade the current RTI system. The new system, will deliver improvents in the efficiency and quality of information provided to the passenger. This investment will be matched by a seven year revenue investment by the West of England councils, contributions from private sector bus operators and future capital investment in expanding the system (such as through major transport schemes including the MetroBus Rapid Transit network).

Key Milestone Completion Dates	Baseline
Commencement of RTI re-procurement led by BCC	April 2016
Award of Contract	November 2017
[redacted]	
[redacted]	
[redacted]	
Annual Review of Contract Performance	November 2018
Annual Review of Contract Performance	November 2019
Annual Review of Contract Performance	November 2020
Annual Review of Contract Performance	November 2021
Annual Review of Contract Performance	November 2022
Annual Review of Contract Performance	November 2023
Re-Procurement of Contract Commences	April 2024
Annual Review of Contract Performance	November 2024
Annual Review of Contract Performance	November 2025
Contract Completion	November 2026

3. Evaluation design and methodologies

Key evaluation questions

- *Have outputs been delivered?*
    - *Upgraded at-stop RTI displays.*
    - *Implementation of back office system architecture, including delivery of fleet management functionality.*
    - *Implementation of digital data platform*

- *Have measurable direct and indirect outcomes been achieved including:*
    - *Increase in passenger trips.*
    - *Uplift in GVA in operation stage.*
    - *Increase in bus passenger satisfaction scores.*
    - *Uptake of RTI data feeds for real time journey planning applications.*

- *Have any unanticipated outcomes been achieved?*

Evaluation Methodology

Process – scheme delivery through contract supplier, engagement with bus operators and other stakeholders, lessons learned.

Combination of outcome and impact – by capturing metrics provided through the RTI contract itself and other data sources:

Audience

To be reported to WECA

4. Data requirements

4.1 Data collection methods

Bus passenger trips uplift*: measured using DfT statistics provided quarterly and annually.*

Bus Passenger Satisfaction*: measured by analysis of National Travel Surveys.*

Uptake of RTI data feeds*: uptake of RTI data obtainable through Traveline and Bristol Open Data.*

Contractual KPIs*: measure of RTI system performance through contractual KPIs.*

4.2 Data collection and establishing the baseline

- *Refer to the scheme logic model to help structure the baseline data collection and reporting activities.*

Metric	*Unit*	*Frequency*	*Data source*	*Baseline date*	*Reporting to?*

(inc. Target)			*(& Responsibility)*		
Inputs					
Investment Fund	*£610k*	*Annual*	*grant claims – Finance Officer*		*WECA highlight report*
Officer Resource					
Supplier Costs					
Bus Operator Resource					
Outputs					
Upgraded at stop RTI displays	*%*	*Annual*	*Comparison of total number of displays with displays that have been upgaded.*	*Nov 2017*	*WECA highlight report*
Implementation of RTI system architecture	*n/a*				*WECA highlight report*
Availability of digital data platform	*n/a*				*WECA highlight report*
Outcomes and impacts					
Increased number of passenger trips – increase in 0.8% bus service patronage.	*Passenger trips*	*Annual*	*DfT statistics*	*Nov 2017*	*WECA highlight report*
Improved reliability of bus journeys - increased passenger satisfaction 5 percentage point over first three years.	*%*	*Annual*	*National Travel Survey*	*Nov 2017*	*WECA highlight report*
Improved functionality – Contract KPIs					

5. Delivery plan

KPI data collated quarterly in accordance with contract and reported to RTI working group. RTI coordinator responsible for collating annual bus passenger statistics.

6. Resourcing and Governance

The budget for monitoring is built into the revenue costs. Reporting of KPIs is a contractual requirement and patronage figures and passenger satisfaction scores are freely available from external sources.

7. Dissemination

The evaluation will be used to improve future investment in Public Transport.

Logic Model

Context and Rationale
Provide a brief description of the strategic and policy context (link to local and national strategy policy). Briefly describe the market failure rationale for the intervention.

Objectives	Resources/ Input	Activities	Outputs	Direct & Indirect Outcomes	Impact
The aims/ objectives of the scheme are: *(Ensure that all aims/objectives are SMART)*	*In order to achieve the set of activities to fulfil these aims/ objectives we need the following:* *(Resources should not be limited to money e.g. grant, match funding, in-kind, project team, specialist support, etc. The inputs define the scope of the project being considered in the logic model)*	*In order to address the aims and objectives we will accomplish the following activities:* *(What will the money be used for? e.g. construction, project management, equipment/fit out, etc):*	*We expect that, once accomplished these activities will produce the following deliverables:* *(Provide measurable outputs e.g. length of new road/cycle path, m^2 of space constructed/refurbished, number of businesses supported, learners engaged, etc)*	*We expect that if accomplished these outputs will lead to the following change e.g. new products or services, skills, behaviour, new business/contracts, etc:* *(Ensure that all outcomes are SMART and relevant to the aims/objectives to allow for attribution; distinguish between direct and indirect outcomes)*	*We expect that if accomplished these activities will lead to the following changes in service, organisation or community:* *(quantitative economic impacts e.g. indirect jobs and/or GVA to be cross-referenced with FBC as appropriate)*

• Provision of enhanced real time information system across West of England,
  • Improved accuracy and reliability of at-stop information displays through better predictions and service disruption alerts.
  • Digital data platform enabling innovation in travel planning tools, and increased penetration of bus information.
  • Fleet management and strategic data improving route planning and resource management.
	• Investment of £609,950
	  • £558k WECA.
	  • £51k North Somerset
	• Officer resource to procure, develop, deliver and manage the programme.
	• Input from specialist advisers.
	• Input and staff resource from bus operators.
	• Input from elected members and other key stakeholders.
	• Contractor time to deliver infrastructure and maintain system.
		• Re-procurement of RTI system already in advanced stages with award of contract expected in November 2017.
		• Programme for transition to new RTI systems will commence in December 2017.
		• Contract management and monitoring.
			• Improved RTI displays at 1000 bus stops in West of England.
			• Upgrade to back office RTI system providing improved accuracy and more reliable real time predictions.
			• Data that can be made available to third parties for development of travel and journey planning applications.
			• Improved functionality for day to day bus fleet operations.
				• Direct and indirect benefits during the operational stage amounting to approx. £1.8 million GVA.
				• Estimated 500,000 additional passenger trips per annum across the West of England.
				• Improved reliability in bus journey times leading to increased passenger satisfaction.
				• At-stop disruption warnings, improving journey planning options for passengers, leading to increased passenger satisfaction.
					• Increased access to job opportunities including access to the region's Enterprise Zones and Areas.
					• Uplift in Employment in Enterprise Zones and Areas.
					• Improved access to sustainable travel options.
					• Reduced congestion, airborne pollutants and carbon emissions.
					• Improved journey planning information and tools.

RISK LOG

PROJECT NAME:	**West of England Real Time Information Re-procurement**	**PROJECT ID**	
PROJECT MANAGER:	**Ian Saywell**	**DATE LAST AMENDED**	**18/10/2017 - v1**

KEY: **Category** - **'E/F'** Economic/Financial'; **'E'** Environmental; **'L'** Legal/Regulatory; **'O/M'** Organisational/management; **'P'** Political; **'S/C'** Strategic/Commercial; **'T/O'** Technical/Operational **Likelihood/Impact** - **4** = Very high; **3** = High; **2** = Medium; **1** = Low
Priority Score - **Red** (12-16: Major/ Catastrophic Risk); **Red/Amber** (6-9: Moderate/ High Risk); **Amber/Green** (3-4: Low/ Moderate Risk); **Green** (1-2: Low Risk)

ID	Type	Category	Description	Likelihood	Impact	Priority	Date identified	Countermeasure or response	Residual Likelihood	Residual Impact	Residual Priority	Owner / Actioner	Notes	Date of last update	Status	Related RAID ID
6	Risk	O/M	[redacted]					[redacted]					[redacted]			
7	Risk	T/O	[redacted]					[redacted]					[redacted]			
8	Risk	T/O	New RTI displays are easily damaged / vandalised inc scratching, graffiti, breakages, and/or discolour / crack	3	3	9	20/09/16	Specification includes requirement to use robust materials high IK ratings, and easy to replace items that could get broken, (e.g. screens). Specification informed by best practice elsewhere, appointment of an experienced contractor.	2	2	4	G Dean	Experience in West of England and elsewhere has shown that when specified correctly, this is not an issue	20/09/17	Open	
9	Risk	T/O	RTI system hardware and software fails in use and is not repaired in a timely manner	3	4	12	20/09/16	Specification needs to include a robust maintenance contract including short attend and repair times and suitable balance of risk on service credits between client and contractor. Specification needs to be for proven elements and not 'cutting edge' functionality.	2	2	4	G Dean	Service Credits to be based on similar amounts as with current contract. Will not apply to PMR system and on-bus equipment as this will become the responsibility of bus operators going forward.	20/03/17	Open	
10	Risk	O/M	Risk of delays in approving tender process and appointing supplier due to BCC internal approval / acceptance issues	3	3	9	20/09/16	Early engagement of internal BCC stakeholders including ICT with advice from Jane Iles	1	2	2	I Saywell		20/09/17	Open	
12	Risk	All!	New RTI Contractor goes out of business, meaning a loss of RTI	2	4	8	20/09/16	rigorous financial assessment process to determine stability as part of tender process. Also - possibly - supplier to put source code into a Escrow agreement.	1	3	3	J Iles / T Wilson	SMT indicates that most suppliers happy to have ESCROW agreement but will include costs as part of tender submission.	20/03/17	Closed	
13	Risk	L	Delays in agreeing / approving Inter-Authority Agreement holds up RTI procurement process	3	3	9	20/09/16	IAA drafted - awaiting amendments to reflect WECA governance.	1	3	3	I Saywell / T Wilson	IAA drafted. Can potentially be signed after the contract is awarded.	20/03/17	Open	
14	Risk	E/F	Cost escalation resulting in budget pressures -e.g. changes in exchange rates as a result of Brexit etc.	3	3	9	20/09/16	Tender includes specific unit costs and supplier is bound by these. Severe cost escalation may result in supplier being unable to meet contract requirements, potentially resulting in withdrawal from contract. Monitor contract costs, rapid implementation following award of contract should minimise risk.	2	2	4	I Saywell	Monitor closely and report any potential cost issues to Board at earliest opportunity to discuss appropriate course of mitigation action.	20/03/17	Open	
16	Risk	T/O	[redacted]					[redacted]					[redacted]			