ITEM: 11

REPORT TO: WEST OF ENGLAND COMBINED AUTHORITY

DATE: 30 October 2017

REPORT TITLE: AGREE BUSINESS CASE FUNDING FOR

INFRASTRUCTURE PROJECTS

AUTHOR: CHRIS JENNINGS, WEST OF ENGLAND COMBINED

AUTHORITY

Purpose of Report

- 1 To seek approval for funding feasibility studies and the development of business cases for strategically important infrastructure schemes within the West of England Combined Authority (WECA) area.
- 2 To seek approval to procure and part-fund a new and improved Real Time Information system.

Issues for Consideration

- The West of England Joint Spatial Plan (JSP) and supporting Joint Transport Study (JTS) identify a significant amount of infrastructure that needs to be delivered to support the West of England's (including North Somerset) ambition to improve the region for residents and support current and future economic growth. This paper recommends funding feasibility studies and business case development for a number of schemes that will deliver important regional improvements that will contribute towards realising this ambition within the Combined Authority area.
- There is a need to make this investment decision now to progress key schemes to address transport issues and ensure housing and commercial developments can be delivered in a timely manner. Whilst the feasibility studies relate to exploring schemes at an earlier stage of development, the schemes proposed for business case development, subject to those business cases being approved, will assist the creation of jobs and homes, including: 2000 jobs in the Somer Valley Enterprise Zone; 800 new homes at Lockleaze and circa 2000 more at Hengrove and will connect circa 8000 new homes to employment and infrastructure in the Filton Enterprise Area. These schemes would be expected to be completed by Winter 2022.
- The first proposed investment in scheme delivery is presented for approval to procure a new and improved Real Time Information (RTI) system to enhance the quality and reliability of information for bus passengers across the region. The upgrade will, in turn, help to deliver economic growth for the area, including to the development locations in the Joint Spatial Plan. A Full Business Case is set out in Appendix E.

- 6 These schemes all contribute to delivering the region's strategic aims of:
 - Improving connectivity in the region to increase access to jobs, reduce congestion and promote sustainable transport choices;
 - Finding ways of increasing the availability and affordability of a range of housing types creating communities where people want to live and work; and
 - Enabling employment space to provide opportunities that suit the needs of businesses at all stages
- 7 In addition, by investing devolved funds towards taking forward these infrastructure schemes, the Combined Authority will demonstrate its commitment to delivering the JSP and JTS adding support to its dialogue with the Government seeking additional support for the delivery of housing or improving transport infrastructure.

Strategic Transport Schemes

A key priority for the Combined Authority is to solve strategic transport issues in the region that will: deliver inclusive economic growth, make it easier for people to get around 'cleaner and greener'; and cut congestion. The first package of schemes proposed is to carry out a range of feasibility studies on key regional routes and arteries including a Southern Orbital route, initial feasibility studies for mass transit in the region and connections to the A38 corridor and taking forward the development of Temple Meads Station as the major rail gateway to the West of England. These schemes are listed in Appendix A, with more details on each scheme in Appendix D.

Housing & Employment Schemes

- 9 The second package of schemes will enable development of key housing and employment sites in the region. These schemes have been selected on the basis that they are regional and local authority priority schemes that support key strategic aims and can be delivered quickly. The schemes will deliver a range of improvements in the region including: unlocking key housing sites and opening up employment sites. Details of the priority schemes are in Appendix B with further detail in Appendix D.
- 10 In line with the West of England Combined Authority Assurance Framework the appropriate development proforma have been completed and are attached at Appendix D. Full Business Cases for these schemes will be reported back to WECA for a final approval decision and award of full funding.

Real Time Information Enhancement

- 11 WECA is responsible for the production of a bus information strategy and the provision of bus information. Real Time Information (RTI) and the TravelWest website are currently managed by Bristol City Council (BCC) on behalf of the four councils (including North Somerset).
- 12 Given the need to ensure a consistency of service provision the WECA meeting in March agreed that the three councils be commissioned to continue to deliver these services in 2017/18 with Bristol City Council continuing to lead on the re-procurement of the RTI contract.
- 13 WECA will be the procurement body for the new contract under its passenger information obligations. Due to the lead times involved in providing this there is an urgent need to confirm funding to enable the procurement to proceed and to avoid any lapse in service.
- 14 The WECA Investment Fund would cover the first year capital cost, with subsequent revenue funding provided by the councils via the Transport Levy to cover maintenance costs in the contract price.

15 In line with the West of England Combined Authority Assurance Framework a Full Business Case is attached at Appendix E for approval. The assurance framework requires all Full Business case to be subject to independent review although it has not been possible to complete this review in time for this meeting. It is requested that the resolution of any issues arising from the review of this Business Case are signed off by the Chief Executive in consultation with the Mayor.

Consultation:

- 16 Engagement has taken place with officers in the West of England Combined Authority Constituent Unitary Authorities throughout the development of these proposals.
- 17 Both the West of England Infrastructure Advisory Board and the West of England Combined Authority Oversight & Scrutiny Committee will have met and consider this paper and any views will be presented to the Combined Authority at the meeting.

Public Sector Equality Duties:

18 As a body exercising public functions the West of England Combined Authority is under an obligation to have regard to the public-sector equalities duty (PSED) under section 149 of the Equality Act 2010 when exercising its functions. The immediate decisions primarily relate to the funding of business case development rather than decisions that could be deemed to impact on the rights of groups or individuals with a protected characteristic or others protected under the PSED.

Economic Impact Assessment:

19 The economic impacts of the schemes will be developed as part of business case development.

Finance Implications:

- 20 It is proposed that up to £3.395m of capital and £3.15m of resource be made available to deliver feasibility studies, produce full business cases for the schemes set out in Appendix D and for the delivery of RTI Enhancement as per the business case set out in Appendix E.
- 21 The ongoing revenue impact of the RTI contract as set out in the business case will need to be considered as part of future year arrangements for the transport levy
- 22 In order to align funding with the relevant budget powers and responsibilities, it may be necessary for the funds to be transferred from the WECA Budget to the Mayoral Budget from where the grant funding will then be made available.
- 23 It is proposed that finalisation of the relevant grant funding arrangements for the delivery of the Business Cases be delegated to the Chief Executive in consultation with the Mayor, to include all relevant milestone reporting and performance monitoring requirements.
- 24 The Committee may in future wish to make additional investment decisions, for example, for projects relating to skills and business support as well as additional infrastructure projects.
- 25 A summary table of requested funding is included in Appendix C.

Advice given by: Tim Richens, Director of Investment and Corporate Services

Legal Implications:

26 There are no additional legal implications arising directly from this report.

Advice given by: John McCormack, Interim Monitoring Officer

Land/Property Implications;

27 Any land/property implications will be identified and analysed as part of the business case development.

Human Resources Implications:

28 No HR implications arise as a result of this report.

Recommendation:

Feasibility & Business Case approval

- 29 That the WECA approves a sum of up to £0.75m capital and £0.675m resource in 2017/18, £1.615m capital and £2.375m resource in 2018/19 and £0.43m capital and £0.1m resource in 2019/20 to support the costs for the development of feasibility studies and business cases for priority infrastructure schemes within the Combined Authority area.
- 30 That the Mayoral Budget be amended to include provision of up to £3.15m of resource and £2.795m of capital to provide grant funding of costs to deliver the feasibility studies as business cases for the schemes as set out in Appendices A and B.
- 31 That the Chief Executive in consultation with the Mayor be delegated responsibility for making appropriate arrangements for grant funding the constituent council(s) for the delivery of this work as set out in Appendix D.

Real Time Information

- 32 That, subject to available budget, following a competitive price and quality based procurement process, appoint the preferred contractor to provide an expanded and upgraded RTI system.
- 33 That the WECA approves a sum of up to £0.6m to be allocated to support the costs for the delivery of Real Time Information enhancement as per the Full Business Case set out in Appendix E.
- 34 That the Chief Executive in consultation with the Mayor be delegated responsibility to sign off the resolution of any issues arising from the review of this Full Business Case.
- 35 That the WECA note that from 2019/20 there will be a revised operating cost which is expected to impact on the transport levy at that time.

Report Author: Chris Jennings Telephone: 0117 428 6210

West of England Combined Authority Contact: Chris Jennings

Appendix A - Strategic Transport Feasibility

Scheme description	Lead Organisation	Detail
Orbital route	Bristol City Council	 This scheme comprises a combination of new links and improvements to existing highway, between Whitchurch and Hengrove. It would link up new housing opportunities at Whitchurch as set out in the Joint Spatial Plan, and support regeneration in South Bristol. The proposed orbital transport corridor will include provision for dedicated MetroBus lanes and a footway / cycleway and link to a new Park and Ride site at Whitchurch in addition to a connection to the A38 towards Bristol Airport. It is also important to note that this project will look to improve existing routes such as the South Bristol Link as well as provide the new routes as set out above. This initiative would undertake a feasibility study to inform development of Outline and Full Business Cases.
Mass Transit and Strategic Connections to A38 South Corridor options	Bristol City Council	 The JTS recommended four mass transit corridors linking Bristol city centre with Bristol Airport, the North Fringe, the East Fringe and via the A4 corridor to Hicks Gate/Keynsham. A West of England Mass Transit scheme would provide a step change in public transport connectivity: unlocking sub-regional growth and making the West of England an even better place to live, work, visit and enjoy. The scheme would dramatically cut travel times in the region and cut congestion, whilst enabling housing and public realm improvements. This initiative would fund an initial pre-feasibility study followed by procuring a full feasibility study, considering potential alignments (including whether the A4 route stops at Hicks Gate or Keynsham), technology options for the network, assessment of benefits and risks, engagement with stakeholder groups, and other details to move forward to the next step towards delivery. This study will link in with the existing A38 south corridor study currently underway led by North Somerset Council. This package will also fund initial feasibility work to explore underground options for the mass transit study prior to the main study.
East of Bath Link	Bath and North East Somerset Council	 The construction of a link road east of the city of Bath has been identified in the Bristol/Bath to South Coast Transport Study (2004) the Greater Bristol Area Strategic Transport Study (2006) and most recently in the Joint Transport Study.

		 This feasibility study will allow the development and promotion of a prospectus for North South Connectivity. This will form part of the compelling case to encourage the Secretary of State for Transport to mandate Highways England to carry out a Strategic Study, for eventual inclusion of the east of Bath link in the second Road Investment Strategy beyond 2020.
Freezing Hill Lane	Bath and North East Somerset Council	 It is proposed to undertake a feasibility study to assess options for access improvements from the A420 to Lansdown Park and Ride. The Freezing Hill / A420 junction is located on the boundary of Bath & North East Somerset and South Gloucestershire Council. The junction forms the core access to the Lansdown P&R site serving Bath city centre from the A46 corridor linking to J18 of the M4. The T junction is used to access the Lansdown P&R, vehicles travelling from the P&R give way to traffic on the A420, this can cause long delays to P&R users. If P&R use is to continue to grow, improvements to the junction are required. The feasibility study will enable outline designs, modelling and consultation to be undertaken, prior to any decision on the preferred option.
Temple Meads Masterplan	Bristol City Council	 The study will consider a range of major improvements at this key regional hub, including more platforms, better access to the northern entrance, and access improvements for passengers and cyclists. This element will enable the development of a station masterplan, essential to the delivery of station improvements. The study will be expected to produce a scheme which is deliverable, affordable and operationally efficient whilst also meeting the high expectations of the city, and wider region, in terms of delivering a new mixed-use quarter (Temple Quarter) and a gateway to the West of England region.
Wraxall Road roundabout improvements	South Gloucestershire Council	 The key objective of this investment is to reduce congestion at A4174 Wraxall Road roundabout. Congestion around the Wraxall Road roundabout has intensified with the emergence of the Lyde Green housing development and the continued growth of the Bristol and Bath Science Park as an employment hub. will provide traffic signal mitigations to enable traffic flow along the A4174 Bristol Ring Road.

 This feasibility study will identify the benefits available through remodelling the junction and its approaches. This scheme will facilitate traffic flows along a key strategic route, especially during peak hours connecting some of the region's newest housing developments, the emerging flagship employment space at the Science Park and access to the Bristol North Fringe. Longer-term it enhances the strategic connection to the M4.

Appendix B – Schemes for Business Case Development

Scheme description	Lead Organisation	Detail
Bath and Somer Valley Enterprise Zone	Bath and North East Somerset Council	 This study will look at improving the route from the Old Mills employment site on the A362 to the A37, to include pedestrian and cycling improvements. The site has the potential to create 1,700 to 2,000 new jobs but the current route from the A37 to the site requires upgrading to accommodate the increase in travel demand. The site forms part of the Joint Spatial Plan and supports one of its key aims; reducing the need to travel to Bath and Bristol for employment. The scheme will include: Improvement to the existing A37/ A362 junction to create additional capacity; Localised road widening to remove pinch points which create delays and queues; Pedestrian and cycling improvements to provide sustainable routes to the communities to the east and west along the A362.
Cribbs / Patchway New Neighbourh ood Cycling Package	South Gloucestershire Council	 The cycling package is part of a wider sustainable transport package for the Filton Enterprise Area and Cribbs/Patchway New Neighbourhood, which seeks to connect existing and new railway stations with the new housing and employment developments. This is set to provide an additional 5,000 new homes redeveloping the Filton Airfield site. The ambition is for it to become an exemplar development for integrated public transport, walking, cycling and innovative use of public open space. In addition to creating jobs during construction, the anticipated surge in cycle journeys facilitated by this scheme will support a further boost to local employment through sale of cycle equipment, services and accessories. The opportunity to provide an upfront package of walking and cycling routes to a new development on such a scale also provides a real opportunity to address the region's objectives for enhanced air quality, creating an integrated community with access to open and safe public space and a targeted reduction in car dependence.
Lockleaze	Bristol City Council	- Bristol City Council has identified land for 800 new homes and a new school at Lockleaze. This study will look at what transport infrastructure is needed for this development, including bus lanes, cycle routes, and junction improvements.

		 This investment would not only create jobs during the scheme itself but also unlock employment opportunities in construction and education as a result. The new homes created would be well located for both Bristol northern fringe and central employment opportunities.
Great Stoke roundabout	South Gloucestershire Council	 This scheme will redevelop the Great Stoke roundabout to reduce congestion, vehicle emissions and increase reliability of journeys to strategic housing and employment sites at Harry Stoke and Cribbs/Patchway. Traffic modelling indicates that it will operate significantly over-capacity in both peak periods by 2036, with particular problems on the Winterbourne Road approaches. Given its location, this junction is therefore expected to considerably restrict traffic movements from a key transport interchange at Bristol Parkway and the access to the economic centre of South Gloucestershire within the Bristol North Fringe. Any scheme would improve pedestrian and cyclist crossing facilities and complement the Cribbs/Patchway New Neighbourhood Cycling Package. As such this intervention will supports forecast job-creation in the Filton Enterprise Area.
Hicks Gate Roundabout	Bath and North East Somerset Council	 The Joint Transport Study recommends a package of major investment on the A4 corridor between Bath and Bristol. The A4 / A4174 Hicks Gate Roundabout is a key junction on the A4 between Bristol and Bath and is located at the western end of the Keynsham Bypass. This initiative would consider improvements to reduce peak time delays, including development of a new link between the A4 Keynsham Bypass and the A4174 to the north east to remove traffic from the roundabout. Any scheme would take into account and compliment the future A4 to A37 link road and potential relocation of the Hicks Gate Park and Ride. The roundabout is a known constraint to future growth that will impact on the strategic developments sites of Hicks Gate and Keynsham North. Improvements to the key roundabout would open up network capacity in this key area where the three Council boundaries meet.
Hengrove	Bristol City Council	- Bristol City Council is in the process of securing outline planning consent for around 1500 new homes, a large park, onsite highways and access. This initiative would look at the improvements needed to support the development of new homes here, including improvements to William Jessop Way, utilities infrastructure and new access and junctions from Hengrove Way and Bamfield.

	 Providing the physical and social infrastructure in a planned and co-ordinated way in advance of development will accelerate the delivery of high quality housing, stimulate a market shift and enable additional affordable housing to be delivered (minimum 30% affordable) to meet local housing need and create a buoyant local housing market.
--	---

Appendix C – Summary of Requested Funding

Initiative Short Name	Туре	17/18	18/19	19/20	Total Requested
Orbital Route		£50k	£200k	£0k	£250k
Mass Transit and Strategic Connections		£125k	£225k	£0k	£350k
East of Bath Link	Feasibility	£50k	£100k	£100k	£250k
Freezing Hill Lane		£75k	£25k	£0k	£100k
Temple Meads Masterplan		£0.3m	£1.7m	£0k	£2m
Wraxall Road		£75k	£125k	£0k	£200k
Subtotal		£0.675 m	£2.375m	£0.1m	£3.15m
			1	T	
Somer Valley EZ		£160k	£120k	£0k	£280k
CPNN Cycle Links	Business Case	£50k	£150k	£0k	£200k
Lockleaze	Development	£30k	£475k	£0k	£505k
Great Stoke Roundabout	Funding	£100k	£250k	£200k	£550k
Hicks Gate		£10k	£220k	£230k	£460k
Hengrove		£400k	£400k	£0k	£800k
Real Time Information	Full Business Case	£600k		k	£600k
Subtotal		£1.35m	£1.615m	£0.43m	£3.395m
TOTAL	l t	2.025m	£3.99m	£0.53m	£6.545m

Appendix D - Development and Feasibility Funding Application Forms

t Council
t Council
t Council
t Council
a

Spatial Plan at Whitchurch, Brislington (Hicks Gate) and North Keynsham. Besides the A4-A37 link as part of the Southern Orbital to which this form refers, the other elements of the SE Bristol

of mitigation works for the delivery of Strategic Development Locations as outlined in the Joint

package consist of:

package

1. A4 Metrobus (Bristol to Keynsham) and Callington Road Link, including gating options of

the A4:

- 2. Orbital Metrobus serving the ring road and new link road and connecting to a ring of parking and ride sites around the city;
- 3. A4 Hicks Gate Park & Ride including relocating to further to the east to unlock development land and expanding the site;
- 4. A37 Whitchurch Park & Ride to serve new housing developments in Whitchurch as part of the JSP.

It is important to note the key links and dependencies between this proposed A4 – A37 orbital link and the proposed Callington Road link within Bristol. Both routes will provide for orbital movements where existing options are very limited. Currently many orbital movements are made via the A4 in Brislington and West Town Lane (A4174). The impacts of the A4 / A37 link and the Callington Road link are therefore collectively expected to reduce delays on the A4.

The remaining section of the Southern Orbital that connects up to the A38 towards Bristol Airport is at a stage prior to the above, where a feasibility study is required. The outcomes of this feasibility study and the A4-A37 report will determine the geographical extent of the Southern Orbital for further investigation.

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	£50k (initially to investigate the link up to the A38, not including the A4-A37 link, of which the feasibility study is currently out to tender	£200k (for further investigation of the extent of the Southern Orbital once the A4-A37 study and the separate A38 link study have both been completed)	0	£250k
Match Funding - please state source(s)	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme	to be delivered:		

Whitchurch is located on the southern edge of the Bristol urban area. Growth at this Strategic Development Location (SDL) is focused on the A37 radial corridor into Bristol and will have impacts on the road network across south east Bristol. Currently, due to poor road connectivity in the area, orbital movements between these corridors use congested roads through Bristol and rural lanes between Whitchurch and the Hicks Gate area. Additional highway capacity and improved public transport provision will be needed to address underlying congestion issues, provide access to new development and release space for public transport improvements.

To address traffic impacts on these routes, improved road connectivity is required around south east Bristol, with improved links from Whitchurch to Hicks Gate roundabout. Improving orbital connectivity in south Bristol will present the opportunity to reallocate road space for walking, cycling and public transport on the A4 and A37 corridors. The proposed orbital transport corridor will include provision for dedicated MetroBus lanes and a footway / cycleway and link to a new Park and Ride site at Whitchurch.

In addition, a connection will be provided west of the A37 to link to the existing road network and Whitchurch Lane. This will help cater for demand for the orbital movement of traffic and mitigate the impact of increased flows on A37 through Whitchurch village.

The connection to the A38 towards Bristol Airport then completes another section of the outer ring road, providing a connection from the north and east of the sub-region to the south and particularly Bristol Airport, without the need to travel through the congested city centre.

It is also important to note that this project will look to improve existing routes such as the South Bristol Link as well as provide the new routes as set out above.

Details of the activities to be undertaken through this feasibility or development phase: A procurement process will be followed to identify a consultant to carry out the feasibility study of the link to the A38, as the feasibility work for the A4-A37 link is currently out to tender. Once both feasibility studies have been completed further investigation of the extent of the Southern Orbital will be established, moving the study on to generating a full business case.

8. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Details: Consultants will carry out the feasibility study, client managed by 1 officer in Bristol City Council. To date, the procurement of consultants for the A4-A37 link feasibility study is currently being carried out through the West of England's NEPRO system. It is proposed that either the same method is used for the A38 link feasibility study, or framework consultants used. Advice on this will be sought from WECA.

9. What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		A4-A37 link due March 2018, A38 link proposed to fall in line with this.
Option Development Report		
Option Appraisal Report		A4-A37 link due March 2018, A38 link proposed to fall in line with this.
Outline Business Case		July 2018
Full Business Case	\boxtimes	November 2018
Other (please state)		

10. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Commission A4-A37 feasibility study	Oct 2017
Write brief for A38 link	Nov 2017
Commission A38 link feasibility study	Dec 2017
Feasibility studies completed	March 2018
Outline Business Case completed	July 2018
Full Business Case completed	November 2018
Funding identified through WECA	Early 2019
Handed over to delivery teams and construction commissioned	Spring 2019
Completion of build (more detailed milestones unknown until feasibility studies completed)	2028-2029

Date approved by WECA Committee:	
----------------------------------	--

SCHEME: Mass Transit and Strategic Connections to A38 South Corridor Options

Lead O	rganisation				
Bristol City C	Council				
2. Partner	organisations				
	and North East Somerset Counci	I, South (Gloucesters	shire Council,	North Somerset
3. Scheme	e contact details				
Name:	Chris Mason				
Email:	Chris.mason@bristol.gov.uk				
Telephone:	0117 35 74388				
4. Scheme	e Type – mark with an X				
Transport					
Non-Transpo	ort Housing Enabling				
Business Su	pport				
Skills					
Other (pleas	e specify)				
program Details: Wes is a need to	nvestment linked to any others with nme? If so please set out the relati et of England Mass Transit is linked consider the capacity for future ex or a Mass Transit system.	onship a	nd linkages levelopmen	s. nt of Park & R	ide sites. There
	development of a Mass Transit sys				

included in the Joint Transport Study. In the longer term, development of a West of England

Mass Transit system will be a transformational project for the region, shaping transport and housing delivery across the region post 2036.

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
	£50k for underground pre-feasibility study			
Investment Fund	£75k for mass transit and airport link feasibility study yr 1	£225k for mass transit feasibility study yr 2		£350k
Match Funding - please state source(s)	0	0	0	0

Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

A West of England Mass Transit scheme would provide a step change in public transport connectivity: unlocking sub-regional growth and making the West of England an even better place to live, work, visit and enjoy. It has the potential to shape the spatial development and economy of the area, driving housing delivery, jobs and productivity. The scheme would dramatically cut travel times in the region and cut congestion, whilst enabling public realm improvements. It would enable more concentrated development that would increase land values and drive productivity growth.

The Joint Transport Study proposes a new mass transit network that will comprise high-capacity, segregated corridors connecting major destinations and integrating with other modes to transport public transport across the Bristol urban area. This includes routes connecting Bristol City Centre to:

- Bristol Airport
- North Bristol and the North Fringe
- East Bristol and the East Fringe
- Hicks Gate/Keynsham

These routes were identified as they connect the major trip origins and destinations in the Bristol urban area. Further work is needed to determine the alignments and technology options that should be considered for these routes. The Joint Transport Study suggests that underground running in some locations may need to be considered due to streetspace constraints on some routes.

Details of the activities to be undertaken through this feasibility or development phase:

An initial pre-feasibility study has been commissioned to improve regional knowledge and understanding of the benefits and challenges of underground mass transit construction and operation. This will enable underground options for mass transit set out in the JTS to be compared with other more established and understood options such as trams and guided buses.

Following completion of the pre-feasibility study, a procurement process will be followed to identify a consultant to carry out a feasibility study of the mass transit options identified in the JTS. This feasibility study will consider potential alignments (including whether the A4 route stops at Hicks Gate or Keynsham), technology options for the network/each of the routes, assessment of benefits and risks, advice building support for the scheme amongst stakeholder groups, and other details to an extent that it can move forward to the next step towards delivery.

A separate multi-modal study is looking at links between the airport and key strategic routes in the WECA area including bus, light rail, heavy rail, and road options. This 'Bristol South West Economic Link' study is currently underway and is being led by North Somerset Council. It is critical that this study is complementary with the southern orbital study and the mass transit studies to ensure we investigate thoroughly access routes to the Airport with the key strategic routes from the North and East, within the WECA geography. Provision has been made within the £300k mass transit funding to ensure all these studies inform each other across multiple modes and transport interchanges.

7. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Details: Consultants will carry out the feasibility study, reporting to a client group comprised of officers from WECA and each of the West of England authorities. One officer from Bristol City Council will act as lead client.

To date, the procurement of the pre-feasibility study was carried out by Bristol City Council. All large consultancies in the region were invited to tender, generating a high level of interest and high quality bids.

Commissioning of the feasibility study could be carried out either via our term consultants, or via another competitive tender process. Advice on this will be sought from WECA.

8. What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		Initial findings to inform JSP EiP studies end March 2018
		Final report Autumn/Winter 2018
Option Development Report		
Option Appraisal Report		
Outline Business Case		
Full Business Case		
Other (please state)		

9. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to

be undertaken through this application ${\bf and}$ the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Completion of West of England Metro pre-feasibility study	End Oct 2017
Commission Mass Transit feasibility study	November 2017
Feasibility study initial findings to inform JSP EiP studies	End March 2018
Feasibility study final report	Autumn/Winter 2018

SCHEME: East of Bath Link

1.	Lead Organisation
Bat	th and North East Somerset Council

2. Partner organisations

Wiltshire Council, Dorset County Council, and Highways England

3. Scheme contact details

Name:	Gary Peacock	
Email:	gary_peacock@bathnes.gov.uk	
Telephone:	01225 395307	

4. Scheme Type – mark with an X

Transport	x	
Non-Transport Housing Enabling	x	
Business Support		
Skills		
Other (please specify)		ality and built heritage vement scheme

5. Is this investment linked to any others within the early investment or wider Investment Fund programme? If so please set out the relationship and linkages.

Details: N/A		

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	£50,000	£100,000	£100,000	£250,000
Match Funding - please state source(s)	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

Bath & North East Somerset is crossed by two strategic transport corridors of regional, national and European significance. These routes experience considerable congestion and road safety problems, and their increasing unreliability is significantly constraining development and business growth across the region, including plans to grow the port of Poole. The A36 and A46 which pass through Bath are major routes which form part of the strategic road network and as such are operated by Highways England. The route of the two corridors results in Bath contending with an unacceptable level of through traffic. This includes large numbers of HGVs travelling to or from the Channel ports.

The construction of a link road east of the city has been a long-held aspiration of Bath and North East Somerset Council and the need for such a measure has been identified in the Bristol/Bath to South Coast Transport Study (2004) the Greater Bristol Area Strategic Transport Study (2006) and most recently in the Joint Transport Study which includes an estimate of the costs of £100m.

Bath and North East Somerset Council alongside Wiltshire Council, Dorset County Council and Highways England have collaborated to bring forward a case for investment. There is a strong economic case for improved north south links in the south of England as a whole.

Details of the activities to be undertaken through this feasibility or development phase: Dorset, Wiltshire, and Bath and North East Somerset councils are working together to study the current transport connections between the M4 and the south coast and their impact on our economy.

We are gathering evidence to support a case to improve north-south transport connections in the south west, which could help grow our economy, support local businesses and improve people's quality of life.

The £250k funding will fund the development and promotion of the prospectus for North South Connectivity. This will form part of a compelling case to encourage the Secretary of State to for Transport to mandate Highways England to carry out a Strategic Study, for eventual inclusion of the east of Bath link in the second Road Investment Strategy beyond 2020.

8. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Details:		
9. What output will be produce	ed and when will this be	completed?
	Mark with an X	Date (mmm/yy)
Feasibility Study Report		
Option Development Report		
Option Appraisal Report		
Outline Business Case		
Full Business Case		
Strategic Study Mandated	X	Early 2018
		-

10. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to

be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Strategic Study Mandated	Early 2018
Draft Road Investment Strategy	Spring 2018/19
Government Approval of Road Investment Strategy	Winter 2018/19*

*Note: The timeline has been assessed in order to accommodate timescales required working with Highways England through the strategic review process.

Date approved by WECA Committee:	
----------------------------------	--

SCHEME: Freezing Hill / A420 junction

1. Lead O	rganisation		
Bath and No	orth East Somerset Council		
2. Partner	organisations		
South Gloud	estershire Council		
3. Scheme	e contact details		
Name:	Gary Peacock		
Email:	gary_peacock@bathnes.gov.uk		
Telephone:	01225 395307		
4. Scheme	e Type – mark with an X	·	
Transport		X	
Non-Transpo	ort Housing Enabling		
Business Su	pport		
Skills			
Other (pleas	e specify)		
	nvestment linked to any others within nme? If so please set out the relation		ly investment or wider Investment Fund d linkages.
Details: Join	t Transport Study		

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	£75,000	£25,000	0	£100,000
Match Funding - please state source(s)	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

The Freezing Hill / A420 junction is located on the boundary of Bath & North East Somerset and South Gloucestershire Council. The junction forms the core access to the Lansdown P&R site serving Bath city centre from the A46 corridor linking to J18 of the M4 Lansdown Park and Ride. The T junction is used to access the Lansdown P&R, vehicles travelling from the P&R give way to traffic on the A420, this can cause long delays.

The Park and Ride expansions form part of the Joint Transport Study and Getting Around Bath Transport Strategy. There are three Park and Ride sites that intercept traffic for Bath, Lansdown Park and Ride serves traffic demand from M4 corridor and Bristol, poor access, constrains its current use and potential for expansion.

It is proposed to undertake a feasibility study to assess options for access improvements from the A420 to Lansdown Park and Ride, the feasibility will cost £100k, dependant of the selected option the improvements are not expected to cost greater the £1.5m.

Details of the activities to be undertaken through this feasibility or development phase:

The first stage would be a feasibility study which will assess two potential routes, Freezing Hill and Bath Road, which would include the A420/Gorse Lane junction. This should enable outline designs, modelling, safety assessments and consultation to be undertaken leading to a decision on the preferred option and full business case.

B&NES would procure the study, working with South Gloucestershire Council who will form part of the project team.

8. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Details.	The Study	will be proc	urea mrougi	i the Councils	i namework a	igreement with	CHZIVI.

9. What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report	X	
Option Development Report		
Option Appraisal Report		
Outline Business Case		
Full Business Case	Х	June 18
Other (please state)		

10. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Feasibility Commissioned	Nov 17
Preferred Option agreed	Mar 18
Full Business Case	June 18

Date approved by WECA Committee:	
----------------------------------	--

SCHEME: Bristol Temple Meads Masterplan

1. Lead O	ganisation		
Bristol City C	Council (BCC)		
2. Partner	organisations		
Network Rai	I		
2 2 1			
3. Scheme	e contact details		7
Name:	Richard Marsh Programme Director – Bristol TQEZ Bristol City Council		
Email:	Richard.marsh@bristol.gov.uk		
Telephone:	07393 007648		
4. Scheme	e Type – mark with an X		
Transport			
Non-Transpo	ort Housing Enabling		
Business Su	pport		
Skills			
Other (pleas	e specify)		
	ovestment linked to any others within nme? If so please set out the relation		ly investment or wider Investment Fund d linkages.
			sibility work relating to Bristol Temple er early investment or Investment Fund
	unding requested will also leverage the work to be undertaken.	circa £1	.6m of Network Rail funding, which will

Commissioning and completion of the Masterplanning works in a timely fashion is important to the city and wider West of England region on several levels;

- To deliver a viable plan for the refurbishment/redevelopment of the station; allowing it to fulfil its nationally significant role, to support local and regional travel and support wider ambitions (specifically around housing) as set out through both the West of England Joint Spatial Plan (JSP) and the Joint Travel Plan (JTS).
- 2. To help realise the West of England's economic ambitions investment in the station will be crucial in continuing to support business development in the West of England and within Bristol. This will support the delivery of jobs within the region, the generation of business rates (supporting the growth of the EDF fund) and deliver opportunities for skills and training.
- 3. To ensure that the full transformational and catalytic impact of the development of the University of Bristol's Enterprise Campus can be realised to the benefit of the Temple Quarter, wider city and wider region ensuring and facilitating the delivery of direct access from the refurbished station will be of great importance in this regard. The feasibility and masterplan work can help in delivery of this access.
- 4. To leverage further funding the investment in Masterplanning work to support investment in Temple Meads will provide BCC with detailed information in order to support future funding bids. This will allow the opportunity to secure and leverage additional public funding at a West of England and National level in order to support the refurbishment of the station. It will also offer scope to attract additional private sector investment within the wider Temple Quarter area.

It is crucial to immediately commence the masterplanning work – which will be facilitated through the £2m to be released. Without the masterplanning work, it is unlikely that other sources of funding will be secured to support the redevelopment or refurbishment of the station.

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	£0.3m*	£1.7m*		2m
Match Funding - please state source(s)		£1.6m*		1.6m

^{*}phasing of funding to be confirmed upon finalisation of feasibility brief.

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Scheme to be developed:

The masterplanning and feasibility work will focus upon Bristol Temple Meads station. It will consider how the refurbishment and redevelopment of the station could be undertaken in order to deliver the operational and capacity requirements of Network Rail whilst also unlocking and enabling key development sites and opportunities in the wider area around the station - to the benefit of the city and its stakeholders. The study will be expected to produce a scheme which is deliverable, affordable and operationally efficient whilst also meeting the high expectations of the city, and wider region, in terms of delivering a new mixed-use quarter (Temple Quarter) and a gateway to the west of England region.

Details of the activities to be undertaken through this feasibility or development phase: at your end

The detailed brief for the masterplanning work is currently under development, but work is anticipated to include:

- A re-assessment and re-stating of the objectives of the refurbishment/redevelopment of Temple Meads, its relationship to the Temple Quarter, Bristol city and the wider region;
- A review of work undertaken to date in relation to options for the refurbishment/redevelopment of the station and development of surrounding sites;
- Revisions to previous work and, where required, new work in order to support the
 masterplanning and ensure the maximisation of outputs (financial, economic,
 environmental and social) for all parties. A key area of focus will be to deliver cost
 effective and efficient options for the station redevelopment.
- Identification of the key costs and barriers associated with delivery of a refurbishment/redevelopment scheme (including enhancements within the immediate vicinity of the station);
- Consideration of delivery options for the refurbishment of the station and development
 of surrounding areas. These must be capable of meeting the objectives of the parties.
 Indicative delivery and phasing plans are also expected to be developed. And;
- Delivery of a set of proposals for review and agreement between the parties.
- Further operational requirement work to be undertaken will be identified in collaboration with Network Rail.
- 8. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Details:

Release of the £2m of funds will allow BCC, together with Network Rail, to procure experienced consultants to deliver a comprehensive, deliverable and cost effective masterplan/feasibility study for Bristol Temple Meads station.

The consultants will be procured through a framework agreement in line with public procurement rules.

9. W	nat output v	vill be produ	ced and when	will this be	completed?
------	--------------	---------------	--------------	--------------	------------

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		Mar 19
Option Development Report		
Option Appraisal Report		
Outline Business Case		
Full Business Case		
Other (please state)		

10. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
WECA approval of grant	Oct 17
Appointment of Consultants	Jan 18
Completion of feasibility study	Mar 19

Date approved by WECA Committee:	
Date approved by WEOA Committee.	

SCHEME: A37 to A362 Improvements – Somer Valley Enterprise Zone

1. Lead Or	ganisation		
Bath and No	rth East Somerset Council		
2. Partner	organisations		
None			
3. Scheme	e contact details		
Name:	Gary Peacock		
Email:	gary_peacock@bathnes.gov.uk		
Telephone:	01225 395307		
4. Scheme	e Type – mark with an X		
Transport		х	
Non-Transpo	ort Housing Enabling		
Business Su	pport	Х	
Skills			
Other (pleas	e specify)		
	nvestment linked to any others within		arly investment or wider Investment Fund
	t Transport Study		in inageo.

6. Total Funding required for this phase of works (£)

	16/17	17/18	18/19	19/20	Total
Investment Fund	0	£160,000	£120,000	0	£280,000
Match Funding - please state source(s)	0	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

- Bath and North East Somerset Council is supporting the development of the Bath & Somer Valley Enterprise Zone which includes the 13.5ha allocated employment site at Old Mills located on the A362. B&NES see this as a key employment site for the Somer Valley and would want to progress this as a priority due to the potential to create 1,700 to 2,000 new jobs. The Bath & Somer Valley EZ does form part of the Joint Spatial Plan and as such contributes to and supports the delivery of 105k new homes.
- A key element of the plan is to develop the Old Mills Enterprise Zone in the Somer Valley to reduce the need to travel to Bath and Bristol for employment. There has been significant additional housing provided in the Somer Valley area over the last 10-20 years with further housing development planned for and committed through the Core Strategy which needs to be balanced by additional employment development. The Core Strategy makes provision for around 2,400 additional homes in the Somer Valley between 2011 & 2029. The current route from the A37 to the site requires upgrading to accommodate the increase in travel demand from the Enterprise Zone.
- The upgrading of the route will ensure good connectivity to the A37 and surrounding areas and will enable the Zone to be delivered without further offsite improvements. This will remove a major hurdle to the delivery of the Old Mills site, is a pre-requisite for a successful Enterprise Zone and will allow its development to be accelerated.

The scheme will include:

- Improvement to the existing A37/ A362 signalised junction to create additional capacity.
- Localised road widening to remove pinch points which create delays and queues
- Pedestrian and cycling improvements to provide the sustainable routes to the communities to the east and west along the A362.

The estimated cost of the scheme is £2.8m.

Details of the activities to be undertaken through this feasibility or development phase: Initially an outline business case will be developed that will include an updated preliminary design, environmental assessments, economic benefits including GVA, and traffic modelling / forecasts. Following any statutory approvals, a Full Business Case will be submitted.

8. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

	eloped by the Council	Design Leam.	
9. What output will be produce		e completed?	
	Mark with an X	Date (r	nmm/yy)
Feasibility Study Report			
Option Development Report		complete	
Option Appraisal Report		Jan 2018	
Outline Business Case	X	Nov 2018	
Full Business Case	Х	Sept 2019	
Other (please state)			
 When do you plan to start a milestones? Please include be undertaken through this 			
implementation phase through	application and the mi ugh to completion.		lity or development wo
implementation phase throu Milestone			lity or development wo ne subsequent Date (mmm/yy)
implementation phase throu Milestone			lity or development wo
implementation phase throu Milestone Option appraisal			lity or development wo ne subsequent Date (mmm/yy) Jan 2018
implementation phase throu Milestone Option appraisal Outline business case			Date (mmm/yy) Jan 2018 Nov 2018
implementation phase through Milestone Option appraisal Outline business case Full business case			Date (mmm/yy) Jan 2018 Nov 2018 Sept 2019

SCHEME: Cribbs/Patchway Cycle Links

1. Lead O	rganisation
South Gloud	restershire Council
2. Partner	organisations
	this package of schemes, South Gloucestershire Council will work in partnership City Council, and the developers of sites within the Cribbs Patchway New bod.
3. Scheme	e contact details
Name:	Richard Gillingham Major Schemes SRO
Email:	Richard.Gillingham@southglos.gov.uk
Telephone:	01454 864448
4. Scheme	e Type – mark with an X
Transport	
Non-Transpo	ort Housing Enabling
Business Su	pport
Skills	
Other (pleas	e specify)
	nvestment linked to any others within the early investment or wider Investment Fund nme? If so please set out the relationship and linkages.
strategic cyc	re are no links to other early investment schemes, but this scheme links to the cle routes proposed within the Joint Transport Study, and to the Access to Bristol ne within the 2017-18 LGF (Local Growth Fund) Sustainable Transport package.

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	50,000	150,000	0	200,000
Match Funding - please state source(s)	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

The Cribbs/Patchway New Neighbourhood (CPNN) cycling package of investment is a key component of a comprehensive sustainable transport package for the Filton Enterprise Area and CPNN. This will connect existing and new rail stations with the expansive new housing and employment developments in this area. It supports the ambition for CPNN to be an exemplar development for integrated public transport, walking, cycling and innovative use of public open space.

The CPNN is set to provide an additional 5,000 new homes redeveloping the Filton Airfield site and this development is entirely dependent on the full implementation of the sustainable transport package, of which this is part. There is an opportunity through early investment funding to accelerate the delivery of the sustainable transport package and in doing so we can both expedite the delivery of housing and explore the opportunities for a potential increase in densities alongside enhanced public realm.

This stage of the scheme will develop an Outline Business Case and subsequently a Full Business Case for the full scheme. It is anticipated that a £2 million package of cycle schemes will be delivered, focusing on enhancing connectivity to jobs and housing, in order to provide GVA uplift appropriate to the scale and nature of the schemes.

Schemes within the package will complement both the Council's adopted cycle strategy and the onsite cycle corridors identified within developer masterplans for the CPNN and will include improvements to existing cycle routes around the development site, provision of new cycle routes, and improvements to crossing points and junctions.

The key objective of this scheme is to reduce dependency on solo car use through the provision of a package of strategically important cycle improvements. Expected impacts of the scheme, when compared to a do-nothing alternative, include:

- · An improvement in Air Quality through reduced vehicular emissions
- Reduced levels of traffic congestion
- Improved access to employment and essential services
- Significantly improved facilities for walking and cycling

Details of the activities to be undertaken through this feasibility or development phase:

- Phase 1:
 - Surveys
 - Outline design and costing
 - Internal scheme scrutiny
 - Options appraisal
 - Production of Outline business case
 - Stage gate (internal)
- Phase 2:
 - Detailed design
 - Planning applications and other consents (if required)
 - Public consultation

 Advert/Reporting ob 	ejections (if required)					
 Production of full but 	Production of full business case					
o Stage gate						
8. Please set out how the activother third parties is propos						
Details:	docian and implementati	on with coloctive use of	ovtant aupply			
In-house project management, of chain consultants/contractors as		on with selective use of (extant supply			
9. What output will be produce	ed and when will this be	completed?				
	Mark with an X	Date (mmm/yy)	7			
- " " o l b			+			
Feasibility Study Report						
Option Development Report	Option Development Report					
Option Appraisal Report	Option Appraisal Report					
Outline Business Case						
Full Business Case		March 2019				
Other (please state)						
		•	_			

10. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to

be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Commence phase 1 (mobilisation, outline design, costings and option appraisal)	Nov 2017
Outline Business Case produced	June 2018
Commence phase 2 (detailed design, consents and business case development)	July 2018
Consultation	Jan 2019
Full Business case submission	March 2019
Commence phase 3 (construction)*	Summer 2019
Project completion*	Spring 2021

^{*} Subject to the need for Traffic Regulation Orders and the ability to occupy the network, depending on other programmed works, both of which will be considered as part of the development phases.

Date approved by WECA Committee:	
----------------------------------	--

SCHEME: Wraxall Road Roundabout Improvements and Signalisation – Stage 1 Feasibility Study and Options Appraisal.

 Lead Or 	ganisation		
South	Gloucestershire Council		
. D.			
2. Partner	organisations		
None			
3. Scheme	e contact details		
Name:	Jon Munslow		
Email:	jonathan.munslow@s	southglosd.gov.uk	
Telephone:	01454863910		
4. Scheme	Type – mark with an X	-	
Transport			
Non-Transpo	ort Housing Enabling		
Business Su	pport		
Skills			
Other (please	e specify)		
program	ovestment linked to any other nme? If so please set out the t Transport Study	rs within the early investment or wider Investre relationship and linkages.	ment Fund

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	75,000	£125,000	0	£200,000
Match Funding - please state source(s)	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

Feasibility Study and Options Report detailing the results of a study and traffic modelling of improvements to the A4174 Wraxall Road Roundabout and the approaches of Wraxall Road and Tower Lane. The study will identify the benefits available through remodelling the junction and its approaches. The feasibility study report will provide costed estimates of potential interventions. A recommended option and an outline plan for delivery of the recommended scheme.

The key objective is to reduce congestion at A4174 Wraxall Road roundabout.

Expected impacts (compared to the 'do nothing') include:

- Reduced levels of traffic congestion;
- Improved journey time reliability;
- Reduced vehicular emissions:

Reducing congestion on the A4174 is expected to provide economic benefits, supporting the economy on in the East Fringe of Bristol including Emersons Green Enterprise Area.

Details of the activities to be undertaken through this feasibility/development phase:

Traffic study, Traffic modelling, Intervention options development, Options appraisal,
Cost benefit analysis, recommended next action and outline design.

8. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Details:

In-house project management, design and implementation with selective use of extant supply chain consultants/contractors as required.

9. What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		July 2018
Option Development Report		
Option Appraisal Report		
Outline Business Case		
Full Business Case		
Other (please state)		

10. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone – Stage 1	Date (mmm/yy)
Development - Commencement and project set up.	Nov 17
Development - Traffic Study	Dec 17
Development - Traffic Modelling results	Feb 18
Development - Options development	April 18
Development - Benefits Analysis	May 18
Development – Feasibility study final Report	July 18

Date approved by WECA Committee:	
----------------------------------	--

SCHEME: Unlocking Lockleaze Development

1. Lead O	rganisation			
Bristol City C	Council			
2. Partner	organisations			
No external	partner organisations			
3. Scheme	e contact details			
Name:	Paul Owens	Melanie Bufton		
Email:	paul.owens@bristol.gov.uk	melanie.bufton@bristol.gov.uk		
Telephone:	07810506981	0117-9036815		
4 0 1				
	e Type – mark with an X			
Transport				
Non-Transpo	ort Housing Enabling			
Business Su	pport			
Skills				
Other (pleas	e specify)			
5. Is this ir	avestment linked to any others within	n the early investment or wider Investment Fund		
	nme? If so please set out the relation			
	very of approximately 800 new home ckleaze Housing Delivery Programm	es in Lockleaze which is part of Bristol City ne.		
The investment will also support the Lockleaze Estate Regeneration Programme supported by DCLG.				

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	£30,000	£475,000	0	£505,000
Match Funding - please state source(s)	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

Bristol City Council owns some 16ha of land (development plots held in both the Housing Revenue Account and General Account) within the Lockleaze Estate suitable for the development of approximately 800 new homes and to support local regeneration.

Due to constrained vehicular access to the Lockleaze estate, transport modelling suggests that without additional sustainable transport infrastructure this potential level of development is unlikely to comply with Planning Policy requirements and unlikely to receive necessary Planning Consents. Potential additional congestion and air quality deterioration can however be mitigated against by provision of new infrastructure which will unlock this development.

Provision of new infrastructure will help achieve the Travel Plan mode shares and realise the sustainable development that local and national policy requires all new development to deliver, in the interests of minimising car reliance in favour of forms of movement that impact positively on the health of the local

community, including walking, cycling and public transport.

Such investment would reduce the reliance on the private car (and subsequently car parking) which could help deliver higher density development and therefore maximise the number of dwellings that are achievable on any given site. Existing residents of Lockleaze and the wider area can be expected to benefit from transport infrastructure improvements. Specific sustainable transport investments to be made on Muller Road and within the Stoke Park Estate, subject to consultation, are expected to be:

The Muller Road works:

- Provide pedestrian Dropped Kerbs
- Upgrade/ relocate existing bus stops to include low-floor platforms to meet current accessibility standards.
- Replace bus shelters to improve waiting facilities
- Provide Left Turn filter signal at the Gloucester Road junction
- Introduce sections of northbound bus lane week day peak hour only
- Introduce sections of southbound bus lane week day peak hour only
- Improve the surface of access lanes to enable residents to use off street parking during week day peak hour when the bus lane is in operation
- Remove Downend Road signal junction control and replace with a Toucan
 Crossing. Consideration to be given to closing the eastern arm to remove the
 through movement from the western arm which would also prevent HGVs from
 accessing the narrow double bend
- Signalise the Ralph Road junction
- Close Springfield Avenue junction to through traffic

An indicative Muller Road implementation scheme is shown at Appendix B.

The Stoke Park Estate work will:

 Provide an all-weather shared use accessible path through Stoke Park Estate from Romney Avenue to Broomhill/Stapleton Details of the activities to be undertaken through this feasibility or development phase:

Activities to be undertaken at this phase include: design, surveys, statutory Planning Consents, TRO (Traffic Regulation Orders), consultation and information required for full business case development.

9. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Details: Transport Delivery Board – responsible for providing overall direction and management of the infrastructure project, and making key decisions such as the commitment of resources. Transport Programme Team – the 'PMO' for the Transport Service, this team supports the delivery of the projects that form the Transport Capital Programme. Project manager – responsible for day-to-day management of the project and work tasks and will delegate responsibility for the delivery of these to

the Project Team, specialists or consultants as appropriate. Project Team – will deliver work packages as identified by the Project Manager through utilisation of internal resources, consultants and technical specialists as appropriate e.g. Framework contract. The project team will comprise officers from Traffic Signals, Network Management, Engineering Design, Procurement, Legal Services, and others as appropriate.

The sustainable transport infrastructure implementation required to unlock development will be delivered by the Transport Delivery Board as noted above. The implementation of housing delivery will be managed by the Council's Housing Delivery Team under the supervision of the Housing Delivery Board. Two sites, accommodating 347 new homes will be transferred to a Local Housing Company to be delivered through

a Local Housing Company. Bristol City Council has benefitted from Estate Regeneration to provide internal delivery capacity.

10. What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		2/2018
Option Development Report		4/2018
Option Appraisal Report		6/2018
Outline Business Case	\boxtimes	10/2018
Full Business Case	\boxtimes	5/2019
Other (please state)		

11. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Feasibility commencement	11/2017
Preliminary design commencement	4/2018
Public consultation commences	8/2018
All-weather accessible path (incl: new cycle paths) completed	7/2020
Muller Road corridor public transport, cycleway and pedestrian capacity enhancements implemented	3/2021

Date approved by WECA Committee:	
----------------------------------	--

SCHEME: Great Stoke Roundabout Capacity Improvements

1. Lead O	. Lead Organisation		
South Gloucestershire Council			
2. Partner	organisations		
None			
3. Scheme	e contact details		
Name:	Richard Gillingham		
Email:	ail: Richard.gillingham@southglos.gov.uk		
Telephone:	01454 864448		
4. Scheme	e Type – mark with an X		
Transport			
Non-Transp	ort Housing Enabling		
Business Support			
Skills			
Other (pleas	e specify)		
	nvestment linked to any others within nme? If so please set out the relations	the early investment or wider Investment Fund ship and linkages.	
cycling pack	•	(Cribbs/Patchway New Neighbourhood) vestment Programme, through incorporating where possible.	

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	100,000	250,000	200,000	550,000
Match Funding - please state source(s)	-	-	-	-

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

This scheme will increase capacity at the Great Stoke roundabout. Traffic modelling indicates that it will operate significantly over-capacity in both peak periods by 2036, with particular problems on the Winterbourne Road approaches. Given its location, this junction is therefore expected to considerably restrict traffic movements from a key transport interchange at Bristol Parkway and the access to the economic centre of South Gloucestershire within the Bristol North Fringe.

Harry Stoke and the Cribbs/Patchway New Neighbourhood are two critical strategic housing sites for South Gloucestershire. Between them they will release circa 8,000 homes, such that effective strategic transport links are a priority for sustainable travel. The proposed scheme is complementary to other roundabout capacity schemes successfully delivered in the North Fringe, such as Aztec West roundabout, as part of a package of investments to support the Filton Enterprise Area and the sustainable growth of housing.

The scheme will re-develop the problematic roundabout to improve general traffic flow through the junction. This is expected to have a significant impact, reducing congestion and connecting to a comprehensive sustainable transport package for the Filton Enterprise Area and Cribbs/Patchway New Neighbourhood (CPNN).

The resultant reconfigured roundabout is likely to be a three-lane circulatory system, including a segregated left turn slip from Winterbourne Road east and three-lane entry from Winterbourne Road west. It is expected to cost approximately £4.7m, including development & construction costs. This scheme will include enhanced pedestrian and cyclist crossing facilities. It is anticipated that the improvements can be accommodated on highway land.

This is the next stage of a broader package of transport interventions to support traffic movements in and around the Filton Enterprise Area. The case was made in 'Unlocking Our Potential: The Economic Benefits of Transport Investment in the West of England' (a study to assess the potential of transport schemes to unlock the GVA and job potential of priority growth locations in the West of England) that without transport interventions only 1,200 of the forecasted 12,000 jobs in the Filton Enterprise Area could be delivered.

The increased capacity of critical pinch points is essential to the development of the region's infrastructure, to meet the housing and economic growth ambitions. This increased capacity scheme will serve a critical access route for both the Filton Enterprise Area and the Cribbs/Patchway New Neighbourhood, which between them represent both the predominant economic hub for South Gloucestershire and the largest strategic development site in the Core Strategy.

The key objective is to mitigate forecast traffic congestion at Great Stoke Roundabout.

Expected impacts (compared to the 'do nothing' option) include:

- Reduced levels of traffic congestion;
- Improved journey time reliability;
- Reduced vehicular emissions;
- Improvements for pedestrians and cyclists

Details of the activities to be undertaken through this feasibility or development phase:

- Phase 1
 - Refinement and update of traffic modelling;
 - Topographic, GI and Utility surveys;
 - o preliminary design;

0	internal consultation (scrutiny)
0	preparation of Outline Business Case:
0	internal stage gate:
• Phase	e 2
0	public consultation;
0	detailed design;
0	environmental assessment;
0	planning application and other consents (if required);
0	Full Business Case.
0	stage gate
	et out how the activities will be managed and resourced. If use of consultants or d parties is proposed please describe how these have been, or will be procured
•	ect management, design and implementation with selective use of extant supply ants/contractors as required.

9. What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		
Option Development Report		
Option Appraisal Report		
Outline Business Case	\boxtimes	June 2018
Full Business Case	\boxtimes	Spring 2020
Other (please state)		

10. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to

be undertaken through this application **and** the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Start phase 1 (surveys, prelim design)	Nov 2017
Outline Business Case produced	June 2018
Start phase 2 (consultation, detailed design & consents)	Aug 2018
Full Business Case submission	Feb 2020
Start of phase 3 (construction)*	Spring 2020*
Project completion**	Winter 2021/22**

^{*} Subject to the ability to occupy the network, depending on other programmed works (e.g. CPME, Gipsy Patch Lane bridge), which will be considered as part of the development phases.

Date approved by WECA Committee:	
----------------------------------	--

^{**} Subject to the construction start date, detailed design and construction methodology, which will be determined through the development phases and set out in the full business case. Note: the timeline above has been assessed as challenging but deliverable. Therefore, it is not able to bring this forward to commit to delivering any earlier than currently stated.

SCHEME: Hicks Gate Roundabout

1. Lead Or	ganisation		
Bath and No	rth East Somerset Council		
2. Partner	organisations		
South Glouc	estershire Council and Bristol City Co	ouncil	
3. Scheme	e contact details		
Name:	Gary Peacock		
Email:	gary_peacock@bathnes.gov.uk		
Telephone:	01225 395307		
4. Scheme	e Type – mark with an X		
Transport		x	
Non-Transpo	ort Housing Enabling		
Business Su	pport		
Skills			
Other (pleas	e specify)		
	nvestment linked to any others within nme? If so please set out the relations		ly investment or wider Investment Fund d linkages.
Details: Joint	t Transport Study		

6. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	£10,000	£220,000	£230,000	£460,000
Match Funding - please state source(s)	0	0	0	0

7. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

- The JTS recommends a multi-modal package of major investment on the A4 corridor between Bath and Bristol. The A4 / A4174 Hicks Gate Roundabout is a key junction on the A4 between Bristol and Bath and is located at the western end of the Keynsham Bypass. This is also the terminal junction at the southern end of the A4174 Ring Road route through East Bristol and the North Fringe. In the peak time period 'exit blocking' results in delay to all arms. Improvements to the roundabout would involve the provision of a link from the A4174 to the A4 removing traffic from the roundabout. Any scheme would take account of and accommodate the consultation on an M4 Junction 18A, the A4 to A37 link road, MetroBus and the relocation of the Brislington Park and Ride.
- The roundabout is a known constraint to future growth that will impact on the strategic development sites of Hicks Gate and Keynsham North. Improvements to the key roundabout ahead of the longer-term Joint Spatial Plan infrastructure mitigations would provide improvements to network capacity, bringing forward the potential for housing on the non-Strategic Development sites. Additionally, it would provide significant improvements to a key part of the network where the three Council boundaries meet.

The scheme involves the provision of a new link between the A4 Keynsham Bypass and the A4174 to the north east of the roundabout. The link will remove right turning traffic from the westbound A4 to A4174 and from the left filter from the A4174 to the eastbound A4. The proposed arrangement would require a new traffic signal junction on the bypass and A4174 in the vicinity of the roundabout. The estimated cost is £4.7m.

Details of the activities to be undertaken through this feasibility or development phase: Initially an outline business case will be developed that will include: an updated preliminary design; environmental assessments; and economic benefits, including GVA and traffic modelling / forecasts. Following statutory approvals a Full Business Case will be submitted.

8. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

	Details: Consultant support will be tendered through the B&NES BLOOM system.
a	What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		
Option Development Report		
Option Appraisal Report		
Outline Business Case	х	Nov 2018
Full Business Case	х	Dec 2019
Other (please state)		

When do you plan to start and complete your project and what are the main project 10. milestones? Please include the milestones related to the feasibility or development work to be undertaken through this application and the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Out to tender	Jan 2018
Appointment	April 2018
Outline Business Case Submitted	Nov 2018
Statutory Powers and Procedures Granted	Nov 2019
Full Business Case Submitted	Dec 2019
Construction Start	April 2020
Completion	June 2021*

^{*} Note: The outline business case will need to take account of the JSP mitigations to ensure the design accommodates the longer term aspirations. This information is being developed and will be ready by

April 2018. Therefore the outline business case would be submitted in Nov 18 and full business case 13 months later, allowing for planning approval.

Date approved by WECA Committee:

SCHEME: Hengrove

Distol Oity	Council	
12. Partne	organisations	
n/a		
13. Schem	e contact details	
Name:	Emily Price	
Email:	Emily.price@bristol.gov.uk	
Telephone:		
		 J
14. Schem	e Type – mark with an X	
14. Schem Transport	e Type – mark with an X	
Transport	e Type – mark with an X ort Housing Enabling	
Transport	ort Housing Enabling	
Transport Non-Transp	ort Housing Enabling	
Transport Non-Transp Business S	ort Housing Enabling upport	
Transport Non-Transp Business S Skills	ort Housing Enabling upport	

16. Total Funding required for this phase of works (£)

	17/18	18/19	19/20	Total
Investment Fund	£400,000	£400,000	0	£800,000
Match Funding - HCA Housing zone Capacity Funding (£224k) - Bristol City Council Capital programme (£776k)	£500,000	£500,000	0	£1,000,000

17. Please describe the scheme to be developed (including its objectives and expected impacts) and the proposed activity to be undertaken through this investment.

Details of the scheme to be delivered:

As a significant land owner within Hengrove, the Council wishes to use its land assets to drive the delivery of high quality mixed tenure housing. A clear vision and delivery framework has been established, a dedicated programme board and project team has been assigned to this priority area.

Historically, there has been a lack of market led residential development in this area.

Hengrove Park, the largest of the development sites has a number of constraints which need to be unlocked before housing development is deliverable.

To accelerate the delivery, infrastructure funding is sought to allow the Council to act as master developer and install the social and physical infrastructure upfront and dispose of serviced land parcels to developer partners on land owned by the Council at Hengrove Park and Hartcliffe Campus, with conditions to comply with the requirements of the design codes. This will stimulate a market shift and create a buoyant local housing market which meets local housing need.

The infrastructure required includes:

- Onsite highway infrastructure including new access and junctions from Hengrove Way and Bamfield, plus north-south and east west links.
- Improvements to William Jessop Way
- Strategic utilities to service the development parcels (including gas, electicity, water supply, waste water, telecoms, storm water attenuation,
- Ground contamination remediation, demolition
- Public realm delivery of a new park
- Education provision of additional primary school places
- District Heating
- Land clearance relocation of existing rugby club and provision of off-site facilities.

Details of the activities to be undertaken through this feasibility or development phase:

- Activities to be undertaken at this phase include design, surveys, planning, TRO, consultation and Project Management costs.

18. Please set out how the activities will be managed and resourced. If use of consultants or other third parties is proposed please describe how these have been, or will be procured

Bristol City Council has established a dedicated programme board to oversee delivery and appointed a dedicated Senior Project Manager to lead the delivery of housing led development in this area.

The Housing Delivery Board reports to Bristol City Council Homes Board, chaired by Cllr Paul Smith, which is a partnership that brings together different areas of the housing sector to tackle housing issues in the city.

A dedicated multi skilled housing team is being established to drive the delivery of housing across the City. The Council has a wealth of experience of leading and delivering residential led development in Bristol having recently directly delivered and enabled partners to develop new homes.

A full multi disciplinary team is in place to secure planning consents for housing and infrastructure at Hengrove Park and Hartcliffe Campus. If this application is successful the Council will consider procuring the same team through OJEU compliant Scape Framework to continue with the detailed infrastructure design and develop the business case to secure infrastructure funding.

19. What output will be produced and when will this be completed?

	Mark with an X	Date (mmm/yy)
Feasibility Study Report		
Option Development Report		
Option Appraisal Report		
Outline Business Case		
Full Business Case	\boxtimes	Autumn '18
Outline planning consent for c2000 new homes		Autumn '18

20. When do you plan to start and complete your project and what are the main project milestones? Please include the milestones related to the feasibility or development work to

be undertaken through this application ${\bf and}$ the milestones for the subsequent implementation phase through to completion.

Milestone	Date (mmm/yy)
Submit outline planning application for Hartcliffe Campus	12/2/18
Submit outline planning application for Henrgove Park	1/4/18
Planning consent granted Hartcliffe Campus	31/7/18
Planning consent granted for Hengrove Park	31/8/18
Detailed scheme design for highways infrastructure	30/9/18
Business Case for infrastructure investment	30/10/18

Date approved by WECA Committee:	
----------------------------------	--

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
3					
4					
5					

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.

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

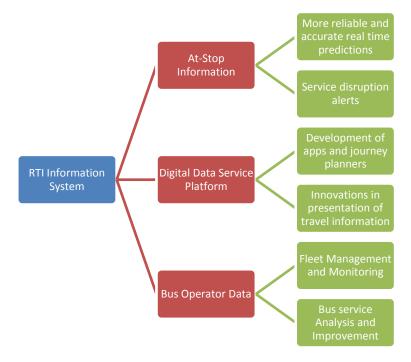
1.2.1

- 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 reprocurement 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:
 - o 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
 - o Improved accessibility & functionality for people with disabilities
 - o 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	
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

Operat	ional 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)	
В.	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		£0
RTI Maintenance - BCC		£0
RTI Maintenance – B&NES		£0
RTI Maintenance - SGC		£0
TOTAL		£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		
Upgraded central RTI system		
Enhanced CMS system		
Training		
On demand bond		
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

Ţ	·				

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

	·		į		
	-				

3.3.2

4 Commercial Case

4.1 Procurement

- 4.1.1 Bristol City Council, as previous lead authority on RTI for the sub-region, commenced with reprocurement 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.

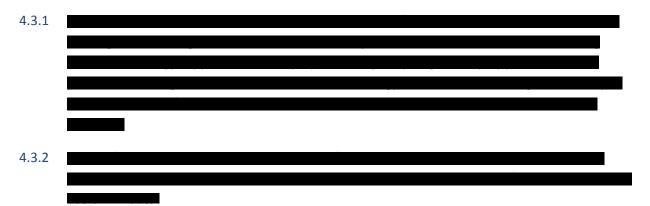
 This needs to be agreed and signed by all participating bus operators and Unitary Authorities.
- 4.1.9 An Inter-Authority Agreement (IAA) will also be required between WECA and its constituent authorities, with separate arrangements to be put in place for North Somerset Council. This will be based on 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



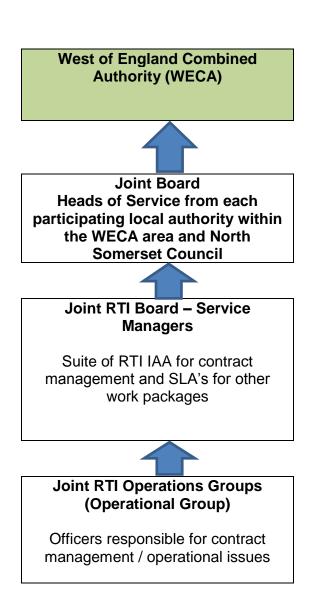
- 4.3.3 The environmental benefits of local bus services are noted in section 1.7, including their key role in improving air quality.
- 4.3.4 Improving the quality and reliability of the bus service has a strong social benefit, particularly for disadvantaged groups, in terms of access to employment and 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
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
	_

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

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
Construction Start on Site	December 2017
Contract with incumbent supplier ceases	March 2018
Central System and priority stops operational	April 2018
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.
 - o 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	Reporting to?
				date	

(inc. Target)			(& Responsibility)		
Inputs					
· 	T	1	1	I	I
Investment Fund	£610k	Annual	grant claims – Finance Officer		WECA highlight
			Ojjicei		report
					Тероге
Officer Resource					
Supplier Costs					
Bus Operator Resource					
Outputs					
Upgraded at stop RTI	%	Annual	Comparison of total	Nov 2017	WECA
displays .			number of displays		highlight
			with displays that		report
			have been upgaded.		
Implementation of RTI	n/a				WECA
system architecture					highlight
					report
Availability of digital	n/a				WECA
data platform					highlight
					report
Outcomes and impacts	- L			<u> </u>	
Increased number of	Passenger	Annual	DfT statistics	Nov 2017	WECA
passenger trips –	trips				highlight
increase in 0.8% bus					report
service patronage.					
Improved reliability of	%	Annual	National Travel Survey	Nov 2017	WECA
bus journeys - increased					highlight
passenger satisfaction 5					report
percentage point over					
first three years.					
Improved functionality –					
Contract KPIs		1			

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:	In order to achieve the set of activities to	In order to address the aims and	We expect that, once accomplished these	We expect that if accomplished these	We expect that if accomplished these
	fulfil these aims/ objectives we need the	objectives we will accomplish the	activities will produce the following	outputs will lead to the following change	activities will lead to the following changes
(Ensure that <u>all aims/objectives are</u>	following:	following activities:	deliverables:	e.g. new products or services, skills,	in service, organisation or community:
SMART)				behaviour, new business/contracts, etc:	
	(Resources should not be limited to money	(What will the money be used for? e.g.	(Provide measurable outputs e.g. length of		(quantitative economic impacts e.g.
	e.g. grant, match funding, in-kind, project	construction, project management,	new road/cycle path, m² of space	(Ensure that <u>all outcomes are SMART and</u>	indirect jobs and/or GVA to be <u>cross-</u>
	team, specialist support, etc. The inputs	equipment/fit out, etc):	constructed/refurbished, number of	<u>relevant</u> to the aims/objectives to allow	<u>referenced</u> with FBC as appropriate)
	define the scope of the project being		businesses supported, learners engaged,	for <u>attribution</u> ; distinguish between direct	
	considered in the logic model)		etc)	and indirect outcomes)	
Provision of enhanced real time	• Investment of £609,950	Re-procurement of RTI system	Improved RTI displays at 1000 bus	Direct and indirect benefits during	Increased access to job opportunities
information system across West of	• £558k WECA.	already in advanced stages with award of contract expected in	stops in West of England.	the operational stage amounting to	including access to the region's Enterprise Zones and Areas.
England,Improved accuracy and	£51k North SomersetOfficer resource to procure, develop,	November 2017.	 Upgrade to back office RTI system providing improved accuracy and 	approx. £1.8 million GVA. • Estimated 500,000 additional	Uplift in Employment in Enterprise
reliability of at-stop	deliver and manage the programme.	Programme for transition to new RTI	more reliable real time predictions.	passenger trips per annum across the	Zones and Areas.
information displays through	 Input from specialist advisers. 	systems will commence in December	Data that can be made available to	West of England.	 Improved access to sustainable travel
better predictions and service	 Input and staff resource from bus 	2017.	third parties for development of	 Improved reliability in bus journey 	options.
disruption alerts.	operators.	Contract management and	travel and journey planning	times leading to increased passenger	Reduced congestion, airborne
Digital data platform enabling	Input from elected members and	monitoring.	applications.	satisfaction.	pollutants and carbon emissions.
innovation in travel planning	other key stakeholders.	-	 Improved functionality for day to day 	 At-stop disruption warnings, 	Improved journey planning
tools, and increased	Contractor time to deliver		bus fleet operations.	improving journey planning options	information and tools.
penetration of bus information.	infrastructure and maintain system.			for passengers, leading to increased	
 Fleet management and 				passenger satisfaction.	
strategic data improving route					
planning and resource					
management.					

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	Туре	Category	Description	Likelihood	Priority	Date identified	Countermeasure or response	Likelihood	Impact and a subject of the subject	Owner / Actioner	Notes	Date of last update	Status	Related RAID ID
6	Risk	О/М												
7	Risk	Т/О												
8	Risk		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		Experience in West of England and elsewhere has shown that when specified correctly, this is not an issue	20/09/17	Open	
9	Risk	т/о	RTI system hardware and software fails in use and is not repaired in a timely manner	3 4	1 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 onbus 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	3 9	70/09/16	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	1 8		rigorous financial assessment process to determine stability as part of tender process. Also - possibly - supplier to put source code into a Escrow agreement.		3 3		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	3	IAA drafted. Can potentially be signed after the contract is awarded.	20/03/17	Open	
14	Risk	F/F	Cost escalation resulting in budget pressures -e.g. changes in exchange rates as a result of Brexit etc.	3 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	Т/О												