CABINET – 13 January 2015 EXECUTIVE SUMMARY OF AGENDA ITEM 8

Report title: Ashton Vale to Temple Meads and Bristol City Centre MetroBus Scheme – Contingency Funding and Risk Management

Wards affected: Cabot, Lawrence Hill, Southville and Bedminster
Strategic Director: Barra Mac Ruairi, Place
Report Author: Alistair Cox, Strategic City Transport Manager

RECOMMENDATION for the Mayor's approval:

1. To approve an additional £2.72m of contingency funding for the AVTM MetroBus project as Bristol City Council's contribution towards addressing potential future risks and pressures that could occur during the implementation of this project.

2. To note the additional resources put in place to ensure that risks and project change are thoroughly managed throughout the implementation of this project.

Key background / detail:

a. Purpose of report
To seek approval of £2.72m additional funding from Bristol City Council as its contribution towards addressing the potential increased risks to the project as set out in this report.

b. Key details:
The Ashton Vale to Temple Meads and Bristol City Centre MetroBus Scheme is the first of three schemes that form part of the MetroBus network with the overall aims to:

- Reduce carbon emissions;
- Support economic growth;
- Promote accessibility;
- Contribute to better safety, security and health; and
- Improve quality of life and a healthy natural environment.

Since the report 7th October 2014 the project has commenced with the mobilisation and award of contracts for specific work packages within the project.

Whilst the project remains within the agreed budget (last approved 7th October 2014) there are a number of increased risks that have been identified and some further costs pressures that have effectively reduced the contingency funding available. Officers are recommending through this report that the contingency budget should be strengthened to reflect the potential risks and financial exposure that the Council and its partner, North Somerset Council, could face.

This report is seeking approval for Bristol City Council to allocate £2.72m as additional contingency funding for the project, as part of an overall additional allocation of £3.4m. In line with the Joint Promotion Agreement for the scheme our partners North Somerset Council is proceeding with its own approval for an additional £0.68m local contribution.

AGENDA ITEM 8

BRISTOL CITY COUNCIL
CABINET
13 January 2015

REPORT TITLE: **Ashton Vale to Temple Meads and Bristol City Centre MetroBus Scheme – Contingency Funding and Risk Management**

Ward(s) affected by this report: **Cabot, Lawrence Hill, Southville and Bedminster**

Strategic Director: **Barra Mac Ruairi, Place**

Report author: **Alistair Cox, Strategic City Transport Manager**

Contact telephone no. & e-mail address: **(0117) 922 2357**
alistair.cox@bristol.gov.uk

Purpose of the report:

To seek approval of £2.72m additional funding from Bristol City Council as its contribution towards addressing the potential increased risks to the project as set out in this report.

RECOMMENDATION for the Mayor's approval:

1. To approve an additional £2.72m of contingency funding for the AVTM MetroBus project as Bristol City Council's contribution towards addressing potential future risks and pressures that could occur during the implementation of this project.

2. To note the additional resources put in place to ensure that such risks and project change are thoroughly managed throughout the implementation of this project.

The Proposal

1. Background

The Ashton Vale to Temple Meads and Bristol City Centre (AVTM) MetroBus Scheme is the first of three schemes that form part of the MetroBus network with the overall aims to:

- Reduce carbon emissions;
- Support economic growth;
- Promote accessibility;
- Contribute to better safety, security and health; and
- Improve quality of life and a healthy natural environment.

The Local Enterprise Partnership (LEP) has a target to delivery 95,000 jobs by 2030. Further to this will be the challenge of delivering 72,000 new homes and associated jobs by 2026 as set out in the Core Strategies of the West of England authorities. Core Strategies which will further strain a transport system that already suffers from chronic congestion because the development of transport infrastructure and services has not kept pace with economic development and expansion in the area. Investment in the MetroBus network is part of the strategy to deliver sustainable economic growth.

2. Policy

The scheme is consistent with Council policy and priorities which include the Joint Local Transport Plan and Core Strategy. The Joint Local Transport Plan provides the statutory basis for Bristol City Council's transport programme.

3. Review of Project Costs and Risks

Since the report 7th October 2014 the project has commenced with the mobilisation and award of contracts for specific work packages within the project.

Whilst the project remains within the agreed budget (last approved 7th October 2014) there are a number of increased risks that have been identified and some further costs pressures that have effectively reduced the contingency funding available. Officers are recommending through this report that the contingency budget should be strengthened to reflect the potential risks and financial exposure that the Council and its partner, North Somerset Council, could face.

This report is seeking approval for Bristol City Council to allocate £2.72m as additional contingency funding for the project, as part of an overall additional allocation of £3.4m. In line with the Joint Promotion Agreement for the scheme our partners North Somerset Council is proceeding with its own approval for an additional £0.68m local contribution.

As part of our grant agreement with the Department for Transport all additional funding over and above the agreed level has to be met 100% by the local authorities and additional government funding is not an option.

The West of England does have financial flexibility across the whole MetroBus programme meaning that there is potential that some of this additional contingency could be met from other areas of the programme. It is however, prudent to make financial provision given the

early stage of delivery across all three MetroBus schemes but this option will continue to be reviewed.

The additional contingency funding is being requested for the following key reasons:

I. Contractor inflation – With the delay to full approval sign off we are not able to hold all the contractors to the prices in their original tenders. During the period of delay tenders expired and a change in market conditions led to inflationary price increases. As a consequence prices have increased and we need to use some of the existing contingency to cover the additional funding to address increased costs (the total cost impacts are just over £1m).

II. Review of key risks – we have reviewed the risk register and the status of the scheme in light of feedback from the contractors. A summary of the key changes to the risk profile for the project is set out in Appendix A. It should be noted that these risks have not occurred at this point in time but given the revised Quantified Risk Assessment (QRA) recommended level of 'contingency' budget it is prudent to make additional provision at the earliest opportunity.

Updated financial Position

Previous position Reported to Cabinet 7th October 2014		Proposed Change 13th January 2015	
Description	Cost	Description	Cost
Scheme Costs	£49,584,675.00	Scheme Costs	£50,631,119.23
Risk (Contingency)	£1,421,026.00	Risk (Contingency)	£374,582
Part 1 Claims	£140,000.00	Part 1 claims	£140,000.00
Total	**£51,145,701**	**Total**	**£51,145,701**
		Additional Funding Bristol City	**£2,720,000**
		Additional Funding North Somerset	**£680,000**
		New Scheme Cost	**£54,545,701**

This report also gives further clarity to the Mayor and Cabinet about the measures in place to ensure robust management of risks and issues throughout delivery of the project. Mitigation measures for all risks have been identified as part of the on-going risk management process. The risk register is regularly updated through workshops, one-on-one discussions, and review meetings to identify risks that have not occurred and can be removed from the QRA or where the likelihood of risk has increased or new risks identified. Mitigation measures are regularly reviewed to cater for changes in existing risks or new measures are identified to deal with the new risk.

The appointment of the NEC Contract Project Manager and support team for the main contracts will ensure that early warning of any risk will be escalated through the client Project Manager and SRO. NEC contracts are collaborative and allow for risks and costs to be understood in 'real time' throughout the duration of the contract rather than a more traditional approach when contractors can 'claim' costs at the end of contract. It is through

collaboration that we can ensure the most cost effective management of risks. The main contract is a pain/gain contract where savings and overruns are shared between the Council and the contractor to further encourage innovation and delivery within or below the target price.

Whilst there is sufficient funding within the existing project to proceed without additional risk funding this report is recommending that an increased 'contingency' allocation is made to reflect the cost inflation pressures and changes to the QRA risk profile.

Consultation and scrutiny input:

A scrutiny briefing will be arranged prior to the cabinet meeting.

a. Internal consultation:

Internal consultation has been on going in terms of detailed design and construction programme.

b. External consultation:

There has been no additional external consultation since the previous cabinet report 7th October 2014. However ongoing engagement with statutory stakeholders and interested parties continues.

Other options considered:

Not applicable. This has been covered in previous report.

Risk management / assessment:

FIGURE 1

The risks associated with the implementation of the *(subject) decision* :

No.	RISK Threat to achievement of the key objectives of the report	INHERENT RISK (Before controls) Impact	INHERENT RISK (Before controls) Probability	RISK CONTROL MEASURES Mitigation (ie controls) and Evaluation (ie effectiveness of mitigation).	CURRENT RISK (After controls) Impact	CURRENT RISK (After controls) Probability	RISK OWNER
1	Delays to Programme	**High**	**High**	• Extensive pre-contract work has taken place • Updated risk management • Additional specialised staff have been brought into project team	**High**	**Medium**	SRO / Project Manager
2	Risk of Legal Challenge	**High**	**Medium**	• TWA powers to be used • Planning secured for revised route • Traffic Regulation Orders for revised route will be consistent with Residents Parking Scheme	**High**	**Low**	SRO / Project Manager
3	Cost Increases above budget	**High**	**High**	• This report provides an enhanced risk budget exists to deal with unforeseen circumstances • The main contract contains a pain/gain change control to provide incentives o the contractor • The DfT has given flexibility to the programme as a whole.	**High**	**Medium**	SRO/Project Manager

FIGURE 2

The risks associated with <u>not</u> implementing the *(subject) decision*:

No.	RISK Threat to achievement of the key objectives of the report	INHERENT RISK (Before controls) Impact	INHERENT RISK (Before controls) Probability	RISK CONTROL MEASURES Mitigation (ie controls) and Evaluation (ie effectiveness of mitigation).	CURRENT RISK (After controls) Impact	CURRENT RISK (After controls) Probability	RISK OWNER
1	Not implementing the recommendation of the report will mean that the two promoting authorities will need to consider if it is acceptable to proceed with a limited risk budget. If it is considered unacceptable to proceed with a limited risk budget, the main contract would terminate and the contractor could bring a claim for the losses it incurs which may include its loss of profit.	**High**	**High**	• To consider value engineering and reduction in scope of the scheme. • Make additional risk contingency funding available.	**High**	**High**	SRO / Project Manager

Public sector equality duties:

Before making a decision, section 149 of the Equality Act 2010 requires that each decision-maker considers the need to promote equality for persons with the following "protected characteristics": age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation. Each decision-maker must, therefore, have due regard to the need to:

i) eliminate discrimination, harassment, victimisation and any other conduct prohibited under the Equality Act 2010.

ii) advance equality of opportunity between persons who share a relevant protected characteristic and those do not share it. This involves having due regard, in particular, to the need to:

- remove or minimise disadvantage suffered by persons who share a relevant protected characteristic.

- take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of people who do not share it (in relation to disabled people, this includes, in particular, steps to take account of disabled persons' disabilities);

- encourage persons who share a protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

iii) foster good relations between persons who share a relevant protected characteristic and those who do not share it. This involves having due regard, in particular, to the need to tackle prejudice and promote understanding.

Guidance:

**** Insert a note on how the public sector equality duties are relevant to the proposals and how these duties have been taken into account in developing the proposals. Where an equality impact assessment has been undertaken, summarise its findings here, and provide a link to the full document, or include the equality impact assessment as an appendix. Where no equality impact assessment has been undertaken, give the reasons why this has not been carried out.***

Public Sector Equality Issues

See previous cabinet reports for relevant considerations.

Advice given by N/A
Date

Eco impact assessment

See previous Cabinet reports for relevant considerations.

Advice given by N/A

Resource and legal implications:

a. Financial (revenue) implications:
At present, any increase in costs will be capital.

Advice given by: Mike Allen Finance Business Partner
Date 9th December 2014

b. Financial (capital) implications:

MetroBus is funded by a mix of local contributions and funding from the Department for Transport (DfT). DfT funding is fixed and there is no prospect of additional DfT funding should costs increase. DfT have been very flexible in their allocation of funding. They have allowed funding to be split across two CSR periods. The current period CSR period ends on 31st March 2015.

The Total DfT funding for AVTM is £34.5m and we are currently predicting that Bristol will spend £11.3m of DfT funding on AVTM by the end of 2014/15, with the rest being used up by the end of 2016/17. It is important that across all three MetroBus schemes, the predicted spend of DfT money is achieved as there is a clear risk that DfT will not roll forwards any of their funding which is not spent at as 31st March 2015.

Each of the three partner councils need to make local contributions to cover the remaining MetroBus costs. Bristol is the only council that provides local contributions for all three MetroBus schemes.

Bristol's currently approved local contribution across all three MetroBus schemes is £42.68m. This is made up of £10m from Bristol Futures, approved by Cabinet on 26th January 2012, £5m from a combination of LTP and CIL and additional £27.68m approved at Full Council on 18th February 2014, as part of the BCC Capital Invest in Bristol's Future Programme.

The additional £27.68m of funding will be secured from prudential borrowing as and when this is required. The Bristol City Council contribution to AVTM is contained within the £42.68m.

This report identifies that due to a combination of factors, an additional £3.4m is required to support the AVTM scheme. AVTM is jointly funded by Bristol City Council and North Somerset Council, with Bristol liable for 80% of local contributions. Therefore, Bristol City

Council will need to find £2.72m with the remaining £0.68m to be provided by North Somerset Council. We will need to get final confirmation from North Somerset that this funding is available.

Potential sources of funding available to Bristol City Council are from CIL and LTP** pls spell out. The original funding included £5m from CIL and LTP. The Planning Division has confirmed that it anticipates there will be approximately £5m of CIL available by the end of 2015/16, and that should any shortfall occur, this would be received within a few months of the start of 2016/17. This funding would therefore be available at the correct time to fund spending on AVTM. LTP has already contributed to MetroBus.

It is recommended that £2.72m of CIL in addition to that previous identified is allocated to AVTM

Advice given by: Mike Allen Finance Business Partner
Date 9th December 2014

Comments from the Corporate Capital Programme Board:

Not Applicable

c. Legal implications:

Included in Appendix B.

d. Land / property implications:

Included in Appendix B.

e. Human resources implications:

There are no immediate Human Resources implications or risks arising from this report.

Advice given by N/A

Appendices:

Appendix A – Updated Quantified Risk Assessment – AVTM MetroBus

Exempt Appendix B – Legal/Land Implications.
Exempt information as defined in paragraph '3' of Part I of Schedule 12A of the Local Government Act as amended by the Local Government (Access to Information) (Variation) Order 2006 (EXEMPT)

Access to information (background papers):

Bristol City Council Cabinet Report 2nd February 2009
https://www.bristol.gov.uk/committee/2009/ua/agenda/0202_1800_ua000.html

Bristol City Council Cabinet Report 10th December 2009

https://www.bristol.gov.uk/committee/2009/ua/agenda/1210_1800_ua000.html

Bristol City Council Full Council 19th January 2010
https://www.bristol.gov.uk/committee/2010/ta/agenda/0119_1400_ta000.html

Bristol City Council Cabinet Report 25th March 2010
https://www.bristol.gov.uk/committee/2010/ua/agenda/0325_1800_ua000.html

Bristol City Council Full Council 29th June 2010
https://www.bristol.gov.uk/committee/2010/ta/agenda/0629_1800_ta000.html

Bristol City Council Cabinet Report 21st July 2011
https://www.bristol.gov.uk/committee/2011/ua/agenda/0721_1800_ua000.html

Bristol City Council Cabinet Report 1st September 2011
https://www.bristol.gov.uk/committee/2011/ua/agenda/0901_1800_ua000.html

Bristol City Council Cabinet Report 4th October 2012
https://www.bristol.gov.uk/committee/2012/ua/agenda/1004_1800_ua000.html

Bristol City Council Cabinet Report 29th May 2013
https://www.bristol.gov.uk/committee/2013/ua/agenda/0529_1600_ua000.html

Bristol City Council Cabinet Report 27th June 2013
https://www.bristol.gov.uk/committee/2013/ua/agenda/0627_1800_ua000.html

Bristol City Council Cabinet 16th January 2014
https://www.bristol.gov.uk/committee/2014/ua/ua000/0116_9.pdf

Bristol City Council Cabinet 7th October 2014
https://www.bristol.gov.uk/committee/2014/ua/ua000/1007_7.pdf

Ashton Vale to Temple Meads Full Approval Business Case
http://www.travelwest.info/avtm/fa

Appendix A – Updated Quantified Risk Assessment – AVTM MetroBus

13th January 2015 Cabinet

Introduction

A review of the Quantitative Risk Assessment (QRA) was undertaken on the Ashton Vale to Temple Meads (AVTM) Package. This technical memorandum briefly outlines the QRA process and its outputs.

The main purpose of the QRA is to support the scheme costing by predicting the level of risk contribution, having a defined level of confidence, to cover the construction of the scheme. The level of confidence is enhanced through greater certainty around specific costs as a result of design work and risk management undertaken to date. QRA allows for uncertainty in unplanned additional cost items that cannot be included in the project costs.

The QRA process involved four steps. Step 1 is identification of all risks affecting the project through various risk workshops, one-on-one discussions, and review meetings resulting in risk registers that are continually reviewed and updated. Step 2 is analysis of the various risks by defining their distributions in terms of probabilities, impacts and knock-on effects, also as part of abovementioned workshops and other interactions. Step 3 is undertaking the risk modelling using Monte Carlo simulation using (@Risk software). Step 4 is analysing the results against required contingency needs for the project.

The risk model has been constructed by CH2M HILL using a Microsoft Excel spreadsheet and the @Risk software package. The model used the Monte-Carlo simulation theory by replicating 10,000 iterations of likely project risk scenarios. Confidence levels relating to the cost of the scheme are obtained from the distribution of the averaged results produced by the simulations.

Risk Model Inputs

Baseline Capital Expenditure

The current capital cost of the scheme has been used to determine the extent of risks used in the QRA analysis.

Risk Categories

The risks that are input into the QRA are taken directly from the risk register for the scheme. Each risk is assessed for its financial risk and delay risk.

Risk Quantification

Individual risks were defined in terms of their distributions, likelihood/probabilities, impacts and knock on effects, etc., through workshops, one-on-one discussions, and review meetings. For each risk, the key inputs recorded to use in the QRA model are; Cost/Delay Impact Estimate (i.e. Minimum, Maximum, and Likely values) and Likelihood (in broad categories of Almost Certain, Likely, Possible, Unlikely, or Rare) from which the model determined a Mean Outcome and a Risk Exposure for risk and for each iteration.

Risk Model Outputs

Risk Value

The table below shows the Grand Total Risk value (financial + delay) for AVTM; the @Risk output report is shown in the following page. Both 50th Percentile risk value and 80th Percentile risk value (referred to as P(50) and P(80) respectively) are shown in the table.

We have been advised that the P(50) risk exposure is reported/required.

AVTM Risk Register	P(50) ('000)	P(80) ('000)
Grand Total Risk (Financial + Delay)	**£3,799**	**£4,907**

Highest Ranked Risks

The top 10 risks (grand total, financial + delay) identified by the sensitivity testing are listed in the table below.

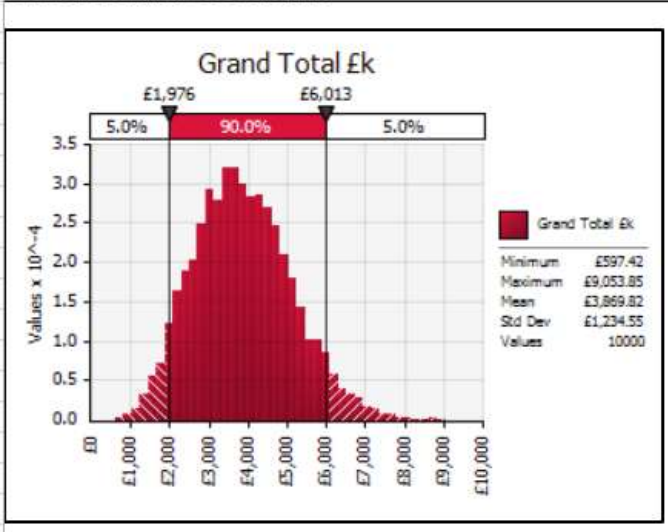
Top 10 Financial Risks

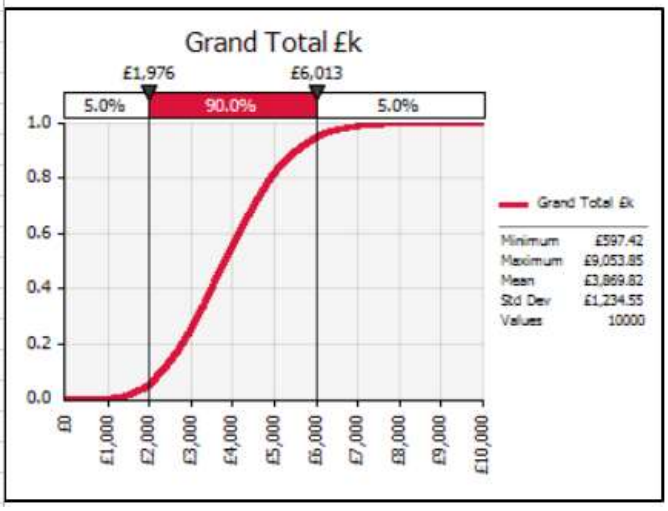
Rank	Risk Log Ref	Description
1	Risk 19	Construction change due to potential design change arising from previous risk (design risks for Ashton Avenue Swing Bridge)
2	Risk 127	Inability to secure land at Bathurst basin due to contract negotiations breaking down
3	Risk 124	Temple Circus and surrounding area to be built if Temple Circus scheme not progressed
4	Risk 118	Instability of Avon Cut walls in proximity to AVTM cause delay
5	Risk 25	Unforeseen utilities requires design changes or diversion / appropriate treatment of utilities
6	Risk 16	Unforeseen ground conditions at Ashton Fields forces design changes for construction
7	Risk 122	Additional design & construction cost to Cumberland Rd retaining wall if railing replacement and reconstruction required
8	Risk 31	Cost inflation higher than anticipated which increases outturn scheme cost
9	Risk 120	Increase in Utility Diversion Costs (C4s outstanding)
10	Risk 35	Project delay for whatever reason by Contractor causes programme delay

@RISK Output Report for Grand Total £k

Performed By: Premathilaka, Anuradha/UKS

Date: 03 December 2014 14:16:55





*

Simulation Summary Information	
Workbook Name	AVTM RR+QRA V4 031220
Number of Simulations	1
Number of Iterations	10000
Number of Inputs	184
Number of Outputs	4
Sampling Type	Monte Carlo
Simulation Start Time	03/12/2014 14:16
Simulation Duration	00:00:13
Random # Generator	Mersenne Twister
Random Seed	1545197656

Summary Statistics for Grand Total £k				
Statistics			Percentile	
Minimum	£	597	5%	£ 1,976
Maximum	£	9,054	10%	£ 2,293
Mean	£	3,870	15%	£ 2,556
Std Dev	£	1,235	20%	£ 2,794
Variance	1524120.834		25%	£ 2,978
Skewness	0.312650111		30%	£ 3,147
Kurtosis	2.913914203		35%	£ 3,333
Median	£	3,799	40%	£ 3,492
Mode	£	3,563	45%	£ 3,630
Left X	£	1,976	50%	£ 3,799
Left P	5%		55%	£ 3,970
Right X	£	6,013	60%	£ 4,138
Right P	95%		65%	£ 4,319
Diff X	£	4,037	70%	£ 4,501
Diff P	90%		75%	£ 4,688
#Errors	0		80%	£ 4,907
Filter Min	Off		85%	£ 5,149
Filter Max	Off		90%	£ 5,500
#Filtered	0		95%	£ 6,013