

**Bristol City Council  
Audit Committee  
25th September 2015**

**Report of:** Service Director, Finance, Peter Gillett

**Report Title:** MetroBus Project

**Ward:** City Wide

**Officer presenting report:** Mike Allen, Finance Business Partner

**Contract Telephone Number:** 0117 922 4631

**RECOMMENDATION**

Members note the contents of the report and support the approach being undertaken by officers with respect to managing the following;

- Financial risk;
- Project governance, and;
- Value for Money.

**SUMMARY**

MetroBus is currently estimated to cost just over £203m and is funded by a Department for Transport Grant plus £89.9m of Local Authority contributions.

**SIGNIFICANT ISSUES IN THE REPORT ARE:**

Bristol City Council's approach to managing financial risk fits with the approach of the other two partner Councils. Each scheme has a risk allowance and budgets are reviewed regularly. The risk allowance covers both unplanned increases in cost due to changes in inflation and other cost increases resulting from changes to the projects.

Project governance is shared across the three Councils. Risk and finance matters are reported and recorded at Project Boards which in turn report to a Project Assurance Board. Project value for money was demonstrated as part of the application for funding from the Department for Transport.

**Policy**

1. The three schemes are consistent with Council policy and priorities, which Includes:
  - a. the Joint Local Transport Plan 3 (JLTP3);
  - b. Bristol's Core Strategy;
  - c. The Greater Bristol Strategic Transport Study (GBSTS).

They are also aligned with both South Gloucestershire's and North Somerset's Core Strategies. Joint Local Transport Plan 3 provides the statutory basis for how both Bristol City Council, and more widely the West of England Authorities, plan and deliver transport infrastructure within the region.

2. MetroBus overall aims are 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.
3. The implementation of these schemes will provide an effective Integrated bus rapid transport system that offers an alternative to car use, reduces congestion and consequential carbon emissions, supports the city's dynamic and growing economy and improves quality of life. These schemes also support the aspirations for a prosperous and inclusive community, and seek to ensure a sustainable future for Bristol, North Somerset and South Gloucestershire.

## **Background and Context**

4. Audit Committee requested that a report be brought to their meeting on 25<sup>th</sup> September 2015 on the MetroBus Project focussing on the following three areas as follows;
  - a. Potential financial loss;
  - b. Value for money;
  - c. Assessment of how the scheme would work in practice.
5. The MetroBus project is a £203million capital investment in transport infrastructure in the West of England. Bristol City Council is contributing £45.7m from local contributions towards this total. MetroBus is a joint project between Bristol City Council, North Somerset Council and South Gloucestershire Council. MetroBus is a high capacity rapid public transport. Similar schemes to MetroBus are planned or in operation in Manchester, Leeds, Swansea and Cambridge.
6. Schemes like MetroBus are designed to fit in between local bus and rail travel, providing rapid and reliable journeys to destinations not easily reached by rail. The first services are programmed to start operating in late 2016. A map of the three routes is included in Appendix A. Further details of all three schemes can be found at the Travel West website <http://travelwest.info/projects/metrobus>.
7. MetroBus services will be quicker and more reliable than existing bus services and will run on a combination of segregated busways and bus lanes, separate from general traffic where possible, with priority over other road users at traffic signals.

8. Direct routes also mean quicker journeys. Many passengers will save time by no longer having to change buses in Bristol city centre. It is predicted that MetroBus journeys from Hengrove Park to the University of the West of England will be 27 minutes quicker than the existing 73 bus service in 2017. In the same year, a MetroBus from the city centre to Bradley Stoke will be 22 minutes faster than the 73 bus service.
9. Please see Appendix B for some of images of how MetroBus may look. These images are mock ups and as such some of the detail may change.
10. MetroBus comprises three major schemes as follows;
  - a. Ashton Vale to Temple Meads (AVTM) – project managed by Bristol City Council. Funded by Department for Transport with local contributions by both Bristol (80%) and North Somerset (20%) Councils;
  - b. South Bristol Link Road (SBL) – project managed by North Somerset Council. Funded by Department for Transport with local contributions by both North Somerset (50%) and Bristol City (50%) Councils;
  - c. North Fringe to Hengrove Package (NFHP) – project managed by South Gloucestershire Council. Funded by Department for Transport with local contributions by both South Gloucestershire (69%) and Bristol City (31%) Councils. These percentages for local contributions relate to the period after Full Approval only. Prior to approval, costs were split on an equal basis.

### **MetroBus Governance**

11. Each project reports to a Project Board which comprises Service Directors from each of the authorities plus representatives of the West of England Partnership. Their role is to assess project and scheme progress, share assessments of risk and review the latest cost estimates. A Programme Assurance Board (PAB), meets quarterly to review the project as a whole and to receive issues from the Project Boards. PAB comprises Service Directors plus Heads of Transport from each of the three authorities plus a Director of Finance, currently, from North Somerset Council. Please see Appendix C for structure charts for each Project Board and PAB.

### **The Cost of MetroBus**

12. The current estimated cost of the MetroBus projects is set out in Table 1 below.
13. The current estimated cost for the whole MetroBus project is £203.3m. This is an increase of just under 4% compared to programme entry in 2011. The table below compares the cost estimates for each schemes as reported to the Project Boards on July 10<sup>th</sup> 2015, compared to the estimated costs at programme entry.

**Table 1 – current estimated costs by scheme**

<b>Scheme</b>	<b>Estimated current costs 2015 £m</b>	<b>Estimated costs at programme entry 2011 £m</b>
<b>NFHP</b>	101.8	101.6
<b>AVTM</b>	54.5	49.3
<b>SBL</b>	47.0	44.6
<b>Total</b>	<b>203.3</b>	<b>195.5</b>

**Financing MetroBus**

14. MetroBus is funded by the three partner local authorities and grant funding from the Department for Transport (DfT). This grant is worth £113.2m of the current estimated total cost of £203m. The grant being 55.8% of the total cost.

**Local funding for MetroBus**

15. The funding for each scheme is split between the local authorities and grant from the DfT. The amount each local authority pays into a scheme is an agreed percentage written into the project agreement. (see para 10 above) The local authority funding needs to cover all costs over and above DfT grant funding allocated to each scheme.

16. Any changes in cost are the responsibility of the local authorities. Table 2, below, sets out the funding for each scheme split by local authority. It also shows the DfT grant funding for each project.

**Table 2 – Current scheme funding by local authority**

<b>Scheme</b>	<b>BCC</b>	<b>NSC</b>	<b>SGC</b>	<b>DfT Grant</b>	<b>Total scheme funding</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>AVTM</b>	16.0	4.0	-	34.5	54.5
<b>SBL</b>	9.7	9.7	-	27.6	47.0
<b>NFHP</b>	20.0	-	30.5	51.1	101.6
<b>Total</b>	<b>45.7</b>	<b>13.7</b>	<b>30.5</b>	<b>113.2</b>	<b>203.1</b>

**Bristol City Council Funding of MetroBus**

17. Cabinet on 1<sup>st</sup> September 2011 agreed to fund MetroBus at a cost estimated to be £42m. The funding streams identified at that time were £5 million towards the local contribution from a combination of its own Local Transport Plan funding and Community Infrastructure Levy.

18. Cabinet on 26<sup>th</sup> January 2012 identified £10m from the “Investing in Bristol’s Future Package” for MetroBus.

19. Full Council on 18th February 2014 approved £27.68m of prudential borrowing as part of the BCC Capital Investment Programme, which provided a total BCC funding package of £42.68m.
20. A report to Cabinet in January 2015 set out the need to increase the local contribution to AVTM to allow an appropriate level of risk budget to be maintained within the project budget. This resulted in a £3.72m increase in AVTM funding of which BCC have agreed to fund £2.72m bringing funding for MetroBus to £45.40m
21. This additional funding will be provided from CIL and should be available by the end of 2015/16, a small local top up of £0.3m is included from Cycle Ambition Fund, bringing the total BCC funding to £45.70.

### Financial Risk

22. Each of the three projects has a risk allowance within their budgets. This allowance covers both unplanned increases in cost due to changes in inflation and other cost increases resulting from changes to the projects. The current risk budgets are set out in the table 3 below.

**Table 3 – Risk allowances**

Scheme	Risk budget	Total budget	Risk as a percentage of budget
	£m	£m	
AVTM	3.72	54.5	6.8%
SBL	2.11	47.0	4.5%
NFHP	7.27	101.6	7.2%
<b>Total</b>	<b>13.10</b>	<b>203.1</b>	<b>6.4%</b>

23. A series of Quantitative Risk Assessment (QRA) have been undertaken for each scheme. The main purpose of the QRA is to better understand the scheme costs by predicting the level of risk necessary to cover the construction of the scheme, at a defined level of confidence. Individual risks were defined in terms of their likelihood/probabilities, impacts and knock on effects etc through workshops, one-on-one discussions, and review meetings. For each risk, the inputs are; Cost/Delay Impact Estimate and Likelihood.
24. The monetary values for each risk are summed to arrive at the total risk budget that should be made available to cover predicted risk to the scheme. The risk budget is reviewed regularly with risk workshops and a re-running of the analysis. A risk model is used to determine a Mean Outcome and a Risk Exposure for risk and for each of 10,000 iterations. Confidence levels relating to the cost of the scheme are obtained from the distribution of the averaged results produced by the simulations. Monetary values are assigned to each risk based on cost and delay impacts.

25. Risk levels are considered at each Project Board as part of the review of funding and cost estimates. The level of risk appropriate for a project changes over time as contracts are let and costs are better known. This process will be ongoing until the scheme is finished.

### Project Risks

26. Project risks are reported to each of the Project boards on a monthly basis. At the last set of Project Boards in July 2015, the following risks were reported as the highest risks.

**Table 4 - Key risks reported to Project Boards July 2015**

<b>AVTM - Key Risks</b>		
Risk	Impact	Mitigation
Delay and/or failure to agree with Network Rail requirements for Portbury freight railway crossing	Preparatory and construction cost increase and programme slippage	Regular engagement with Network Rail.
Increase in Utility Diversions Costs specifically Bristol Water	Potential for increase in costs and programme delay	Bristol Water commissioned to design options which should lead to an economical solution
<b>NFHP - Key Risks</b>		
Risk	Impact	Mitigation
Direct action on sites	Significant time and delay	Operational plans being developed (SGC & BCC) to ensure effective response
Delay in Network Rail awarding contract for bridge works	Potential delay to start of works. Delay costs from contractor.	Regular meetings to monitor progress plus contractor meetings
<b>SBL - Key Risks</b>		
Risk	Impact	Mitigation
Network Rail supervision of works and possessions may cause scheme delay and impact upon main design and build (D&B) contract	Additional staff, project management, scheme and delay impact costs.	Liaison with Network Rail and main D&B contractor to mitigate delay, plus mitigation plans for main contract and recovery plan detailed for NR contract.

### Value for Money

27. The Department for Transport requires that all Major Transport Schemes meet a minimum Benefit Cost Ratio (BCR) of 2. The submitted business case for

each of the schemes can found on the TravelWest website at <http://travelwest.info/projects/major-transport-schemes> but the BCR have been summarised in Table 5 below with further detail available in Appendix D.

**Table 5 – DfT Benefit Cost Ratios**

Scheme	DfT CBR
South Bristol Link	12.3:1
Ashton Vale Temple Meads	4.21:1
North Fringe Hengrove Package	2.34:1

28. The South West contributes nearly 8% towards the National Gross Value Added of the UK with the West of England contributing one quarter of this. Congestion is already a serious problem and the Bristol area experiences the UK's lowest average car speeds of just 15 miles per hour (2006). Over the last ten years traffic on the area's roads has grown by 21% compared to 16% nationally. This has resulted in poor air quality, delays, unreliable journey times and unsustainable pressure on existing infrastructure and services. The continued growth of congestion, with its undesirable effects, threatens the quality of the environment and the quality of life for people who live within it.

29. MetroBus will provide the following benefits;

- a. Improved journey times and reliability from the south west of the sub-region to Bristol City Centre; Need to include comments re NFHP and SBL;
- b. Provision of a high-quality, more sustainable choice of travel - rapid transit and cycling or walking;
- c. Shift of trips to more environmentally sustainable transport modes, reducing carbon emissions and local pollutants;
- d. Improving physical activity and quality of life through encouraging walking and cycling;
- e. Improved connectivity between existing centres of activity with new and proposed development. Contributing to a more reliable and efficient transport network to improve business efficiency, movement of labour and connections to national and international networks;
- f. Improved accessibility to and from the south west of the sub-region to the existing public transport network, without the need for interchange, particularly Bristol Temple Meads Railway Station;
- g. Shift of trips to a safer transport mode.

30. Each of these benefits are monetised when submitting a business case for the DfT. The monetised benefits for each of the three schemes can be found in Appendix D.

31. The Rapid Transit Scheme has a strong and supportive strategic background and assists in the delivery of local, regional and national policies. The scheme objectives and benefits align closely with Government's goals of addressing climate change, maximising competitiveness and efficiency of our economy,

contributing to health and longer life expectancy, improving the quality of life and producing greater equality of transport opportunity.

### **Consultation:**

**Internal:** Consultation has been carried out throughout the development of these schemes within both Bristol City Council but more widely with partner authorities within the West of England region.

**External:** Consultation has been carried out with stakeholders and members of the public through both informal consultation but also the the statutory Planning processes which included a public inquiry for AVTM and SBL.

### **Other Options Considered**

Not applicable. This has been covered in previous Cabinet reports.

### **Risk Assessment**

Please refer to sections 22 – 26 above.

### **Equalities Impact Assessment**

None necessary for this report but each of the three MetroBus schemes have Equalities Impact Assessments which have been detailed in previous Cabinet Reports.

### **Legal and Resource Implications**

**Legal** – No specific legal implications arising from this report

Comments provided by Joanne Mansfield, Solicitor, Legal Services

**Human Resources** - Bristol City Council each scheme has a dedicated project or assistant project manager in post funded by the individual project be it AVTM, SBL or NFHP.

For AVTM the contract design and tendering is jointly being carried out by our own Engineering Design service, funded by the project, and our Procurement Service. The major phases of this project are design and build so the resources are provided by the Contractor. For SBL the design, contract and site supervision work has been or is being carried out by consultants employed by North Somerset Council. For NFHP our own Engineering Design Service is undertaking the design and site supervision work, funded by the project, for city centre linking to Hengrove. The remainder of the project is being designed by consultants working directly to South Gloucestershire Council.

In all instances there is a considerable amount of work required with Council



officers to discharge planning conditions, approve Design and Build proposals and agree integration issues such as bus stop specifications, Quality Partnership Scheme (QPS) standards and maintenance standards.

Comments provided by Mark Williams, HR Business Partner

## **Appendices**

Appendix A – MetroBus Network Map;  
Appendix B – Images of MetroBus;  
Appendix C – Project Governance Structure  
Appendix D – Benefit Cost Ratios

## **LOCAL GOVERNMENT ACCESS TO INFORMATION**

### **Access to information (background papers):**

Bristol City Council Cabinet Report 2<sup>nd</sup> February 2009  
[https://www.bristol.gov.uk/committee/2009/ua/agenda/0202\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2009/ua/agenda/0202_1800_ua000.html)

Bristol City Council Cabinet Report 10<sup>th</sup> December 2009  
[https://www.bristol.gov.uk/committee/2009/ua/agenda/1210\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2009/ua/agenda/1210_1800_ua000.html)

Bristol City Council Full Council 19<sup>th</sup> January 2010  
[https://www.bristol.gov.uk/committee/2010/ta/agenda/0119\\_1400\\_ta000.html](https://www.bristol.gov.uk/committee/2010/ta/agenda/0119_1400_ta000.html)

Bristol City Council Cabinet Report 25<sup>th</sup> March 2010  
[https://www.bristol.gov.uk/committee/2010/ua/agenda/0325\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2010/ua/agenda/0325_1800_ua000.html)

Bristol City Council Full Council 29<sup>th</sup> June 2010  
[https://www.bristol.gov.uk/committee/2010/ta/agenda/0629\\_1800\\_ta000.html](https://www.bristol.gov.uk/committee/2010/ta/agenda/0629_1800_ta000.html)

Bristol City Council Cabinet Report 21<sup>st</sup> July 2011  
[https://www.bristol.gov.uk/committee/2011/ua/agenda/0721\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2011/ua/agenda/0721_1800_ua000.html)

Bristol City Council Cabinet Report 1<sup>st</sup> September 2011  
[https://www.bristol.gov.uk/committee/2011/ua/agenda/0901\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2011/ua/agenda/0901_1800_ua000.html)

Bristol City Council Cabinet Report 26<sup>th</sup> January 2012  
[https://www.bristol.gov.uk/committee/2012/ua/agenda/0126\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2012/ua/agenda/0126_1800_ua000.html)

Bristol City Council Cabinet Report 4<sup>th</sup> October 2012  
[https://www.bristol.gov.uk/committee/2012/ua/agenda/1004\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2012/ua/agenda/1004_1800_ua000.html)

Bristol City Council Cabinet Report 29<sup>th</sup> May 2013  
[https://www.bristol.gov.uk/committee/2013/ua/agenda/0529\\_1600\\_ua000.html](https://www.bristol.gov.uk/committee/2013/ua/agenda/0529_1600_ua000.html)

Bristol City Council Cabinet Report 27<sup>th</sup> June 2013  
[https://www.bristol.gov.uk/committee/2013/ua/agenda/0627\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2013/ua/agenda/0627_1800_ua000.html)

Bristol City Council Cabinet 16<sup>th</sup> January 2014

[https://www.bristol.gov.uk/committee/2014/ua/ua000/0116\\_9.pdf](https://www.bristol.gov.uk/committee/2014/ua/ua000/0116_9.pdf)

Bristol City Council Cabinet 7<sup>th</sup> October 2014

[https://www.bristol.gov.uk/committee/2014/ua/ua000/1007\\_7.pdf](https://www.bristol.gov.uk/committee/2014/ua/ua000/1007_7.pdf)

Bristol City Council Cabinet 7<sup>th</sup> October 2014

[https://www.bristol.gov.uk/committee/2015/ua/agenda/0113\\_1800\\_ua000.html](https://www.bristol.gov.uk/committee/2015/ua/agenda/0113_1800_ua000.html)

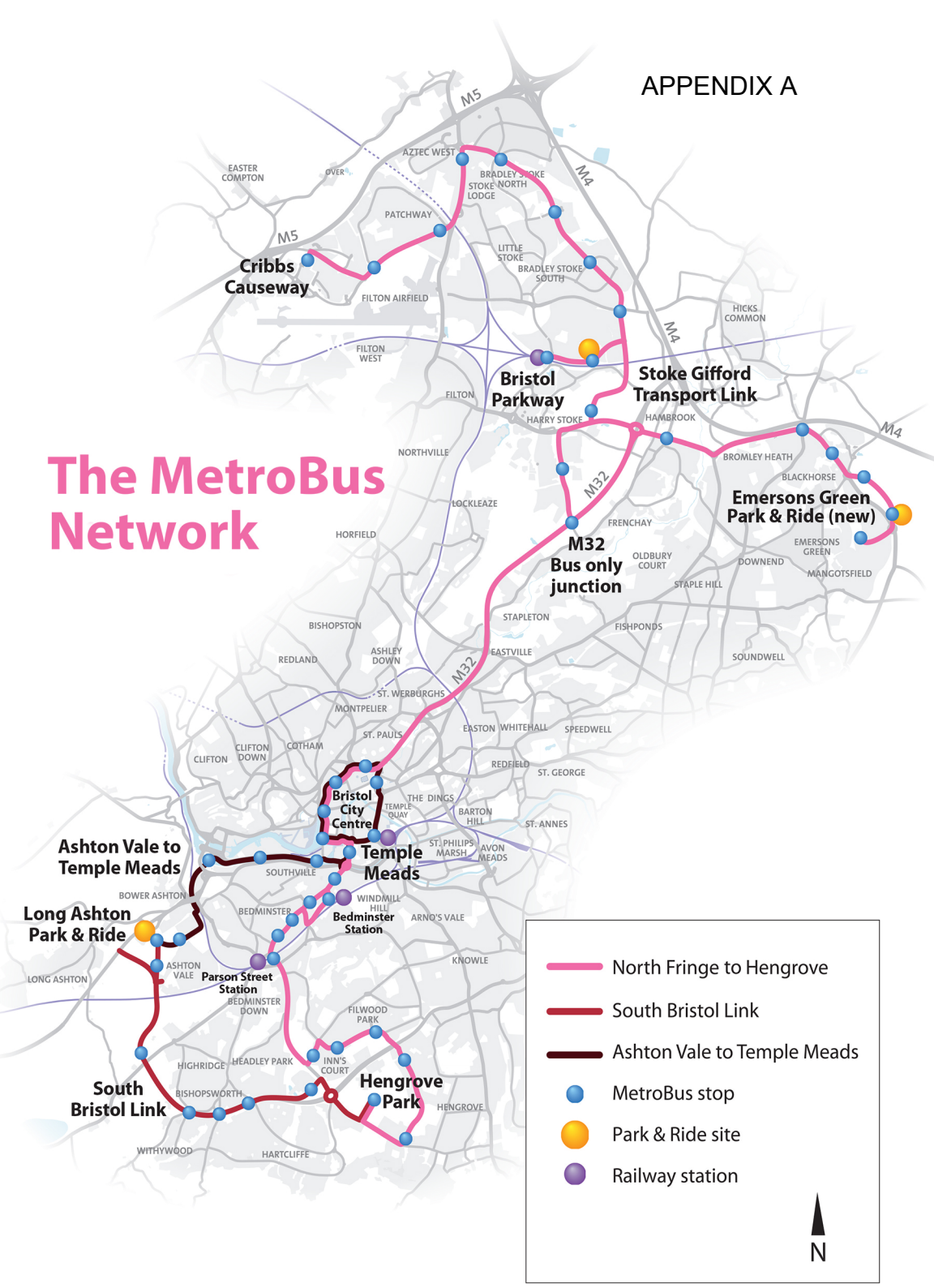
Bristol City Council Cabinet 13<sup>th</sup> January 2015

[https://www.bristol.gov.uk/committee/2015/ua/ua000/0113\\_8.pdf](https://www.bristol.gov.uk/committee/2015/ua/ua000/0113_8.pdf)

Full Business Cases for all of the MetroBus schemes

<http://travelwest.info/projects/major-transport-schemes>

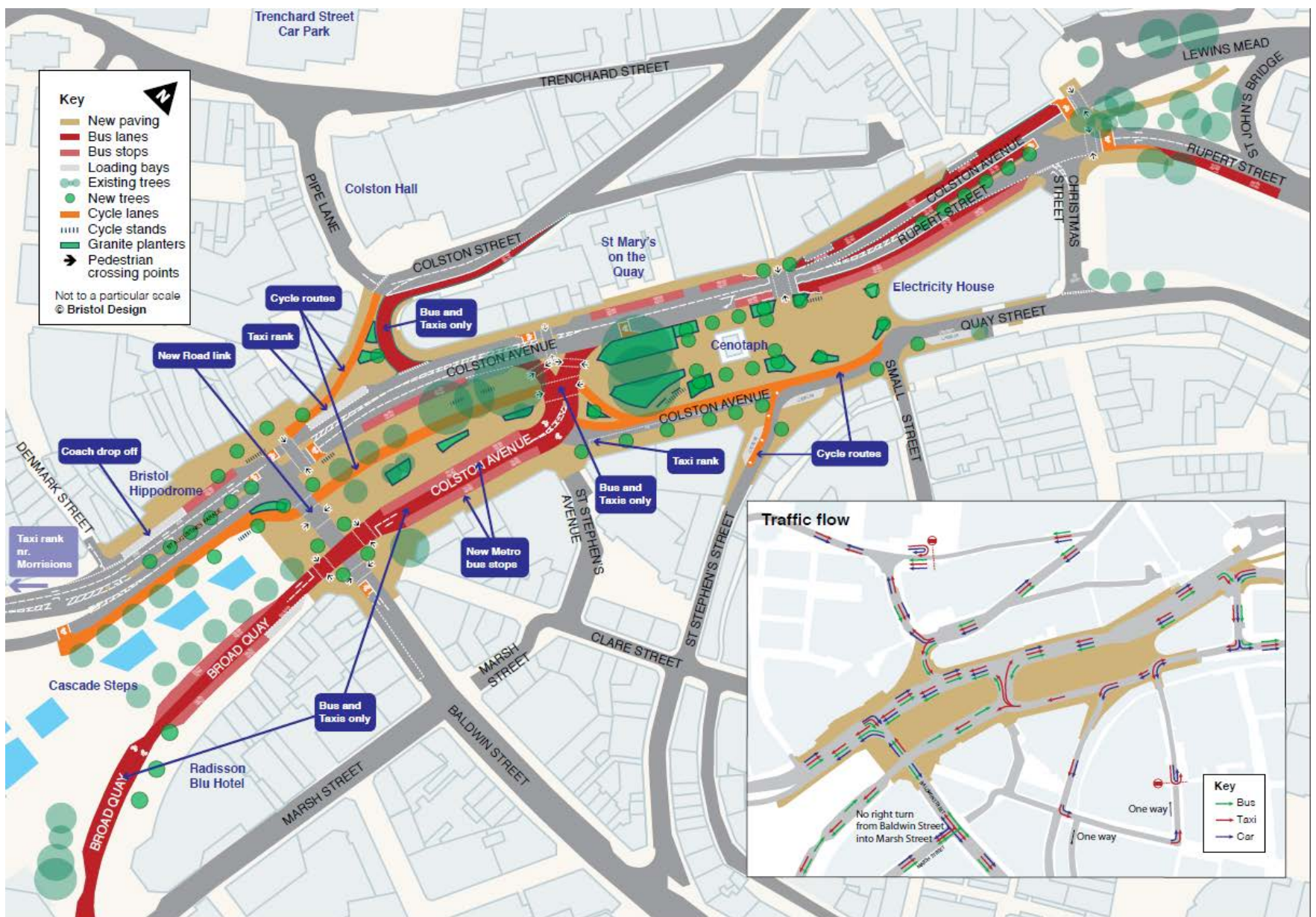
# The MetroBus Network



- North Fringe to Hengrove
- South Bristol Link
- Ashton Vale to Temple Meads
- MetroBus stop
- Park & Ride site
- Railway station



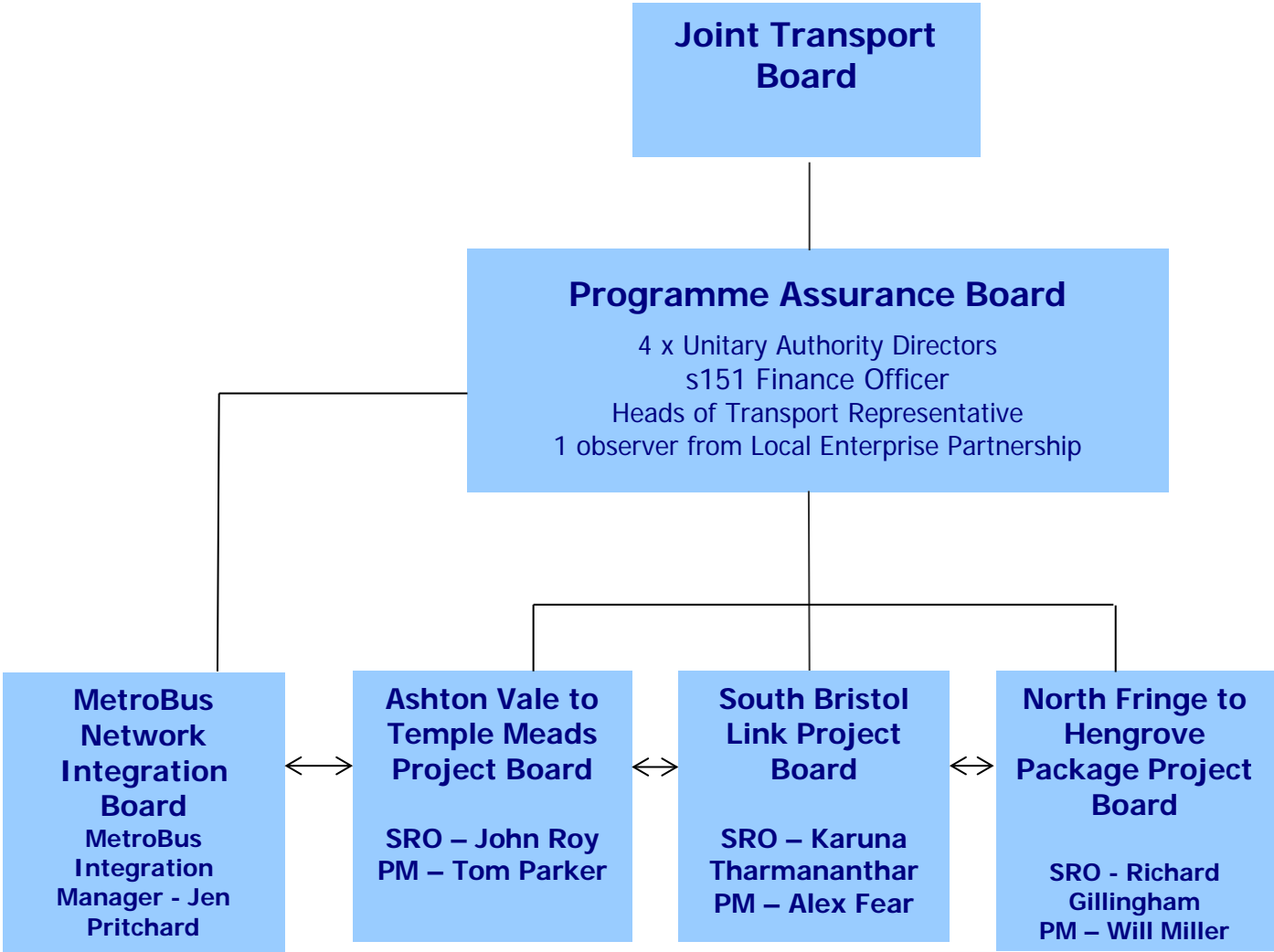
City Centre Visualisation



Proposed City Centre Layout



Bus Stop and Ipoint visualisation



SRO = Senior Responsible Owner  
PM = Project Manager

## Appendix D Monetised Benefits

Scheme	Greenhouse Gases £m	Accidents £m	Economic Efficiency £m		Wider Public Findings (Indirect Taxation Revenues) £m	Reliability impact £m	Wider impacts £m	Net Present Value of Benefits £m	Net Present Value of Costs £m	Benefits to Cost Ratio	Comments
			Consumer Users (Commuting & Others)	Business Users and Providers							
South Bristol Link	1.332	-19.877	228.778	166.871	-3.390	95.440	49.568	521.721	42.427	12.30	As can be seen, 75% of the benefits come from economic efficiency, much of which is made up of journey time savings. In addition, there are a number of non-monetised impacts that may provide slight or moderate benefits, including physical activity, journey quality, security, access to services, severance, and option values.
Ashton Vale to Temple Meads	-0.343	4.303	88.997	30.468	-1.973	7.242	14.650	143.344	42.243	3.17	The majority of the NPV of benefits is due to economic efficiency,(88.9 and 30.4m) which are made up of public transport travel time benefits and highway travel time benefits. There are accident benefits at £4.3m and wider impacts (of £14.6m) due to agglomeration benefits and labour market benefits.
North Fringe to Hengrove Package	2.090	-2.493	185.843	26.084	-8.314	6.042	7.097	123.860	92.489	2.34	The majority of the NPV of benefits is due to economic efficiency,(£108.633m and £73.858m) which are made up of public transport travel time benefits and highway travel time benefits