# BRISTOL CITY COUNCIL CABINET

#### 25 MARCH 2010

**Report of:** Strategic Director - City Development

#### Title: North Fringe to Hengrove Package – Major Transport Scheme Bid

Wards: Frome Vale, Lockleaze, Eastville, Ashley, Easton, Lawrence Hill, Cabot, Southville, Bedminster, Windmill Hill, Filwood, Bishopsworth, Hartcliffe, Hengrove and Whitchurch Park

Officer Presenting Report: Alun Owen – Service Director (Major Projects) City Development

#### Contact Telephone Number: (0117) 903 7481

#### RECOMMENDATION

That Cabinet endorse the proposals for the North Fringe to Hengrove Package, and approve the submission to the Department for Transport of a Major Scheme Bid for Programme Entry.

#### Summary

The West of England sub-region is promoting a transport strategy that includes the North Fringe to Hengrove Package (NFHP). The rapid transit component would link South Bristol with the Northern and East fringes via the City Centre and would link with routes that are being progressed between Temple Meads and Ashton Vale, and as part of the South Bristol Link.

The programme level objectives of the scheme are:-

- a. To support a buoyant economy, improve quality of life through extended choices of transport modes for all to improve access to education, retail, tourism and employment;
- b. To encourage model shift to new forms of public transport and realise the associated environmental, climate change, safety and health benefits;
- c. To tackle congestion and therefore the economic, environmental and health damage that is associated with it;
- d. To enhance the opportunities for regeneration and sustainable growth through the linking of areas of economic and housing expansion;

e. To promote equality of opportunity and security through improved connectivity to education, employment, leisure, health and retail facilities.

This project is a key component of our integrated strategy for the West of England, underpinned by the Greater Bristol Strategic Transport Study, which is geared towards maintaining Bristol's economic competitiveness and prosperity, in the face of growing transport problems if no action is taken. The importance of this programme has been recognised by Government and the South West Region when earmarking unparalleled funds for the West of England schemes over the next 10 years.

The scheme currently has a benefit:cost ratio of 2 to 2.5 which, being above two, is in the DfT's 'high value for money' category. Public Consultation about the proposals indicated a high level of support with some concerns on the detail of the proposed routes. The Package has the support of the business community, the South West Regional Development Agency and the South West Councils.

If the bid for Programme Entry is successful then, subject to the satisfactory outcomes of the various legal matters referred to elsewhere in this report, scheme construction could start in 2013/14 and be completed in 2016/17.

# The significant issues in the report are:

This report is seeking approval to submit a bid to the Department of Transport;

If the Package is approved by the Department of Transport then it will be necessary to proceed to detail design;

The overall cost of the scheme is approximately £191 million. Initial estimates suggested the funding split between South Gloucestershire Council and Bristol City Council was 43% and 57% respectively. This will be reviewed as scheme costs are finalised. £168 million (excluding preparatory costs) will be funded by the Department of Transport and the balance by local contributions from the two authorities;

Considerable consultation has taken place to date with both residents and the business community. Further consultation will take place as the scheme progresses (para 2);

Development of the preferred option for the Package (para 3) See Appendix B;

The Package schemes (para 4).

# 1. Policy

Bristol Development Framework – Core Strategy

Relevant policies in the Council's Core Strategy include;

BCS1, South Bristol, which identifies South Bristol as a priority focus for development and regeneration including improvement of transport infrastructure;

BCS2, City Centre, identifies that the City Centre symbolises the City and provides a sustainable location for future growth including improved transport systems and connectivity;

BCS8, Delivering a Thriving Economy, which refers to provision of employment land and addressing barriers to employment; and

BCS10, Transport and Access Improvements, which supports the delivery of infrastructure.

# 2. Consultation

#### Internal

- Traffic Management
- City Transport
- Road Safety, Cycling and Walking
- Urban Design
- Land and Property
- Legal
- Finance
- Strategic and Citywide Planning
- Ward Councillors adjacent to route

# External

In the Bristol section of the proposed route the overall Package of consultation ran from 24 November 2009 until 8 January 2010 for all sections of the route. The City Centre area consultation was extended until 14 February 2010.

Engagement with key stakeholders was undertaken during the public consultation period and continues. Stakeholders include community groups in South Bristol, the Neighbourhood Planning Network, statutory and environmental groups, GWE Business West, local travel forums, public transport operators, Network Rail and the Highways Agency. A summary of Stakeholder Engagement is contained within Appendix A. In addition to key stakeholder engagement, widespread public consultation, branded under the Travel+ marketing logo was undertaken from November 2009 through January 2010. The following provides some context for the public consultation undertaken. Over 71,000 postcards were distributed to properties along the various route options. There were 10 staffed exhibitions with 575 members of the public at those exhibitions. Five un-staffed exhibitions were held along with 9 venues (such as local businesses) hosting information boards. 5 public meetings were held with the Neighbourhood Planning Network. Questionnaires were supplied at the staffed exhibitions and online.

Consultation with the Neighbourhood Planning Network for the South Bristol route options took place between 27<sup>th</sup> November and 21<sup>st</sup> January with five meetings held. The groups represented included a number of resident groups, business organisations and ward councillors who were affected by the potential route corridors. The meetings allowed council officers to brief the group on the scheme and then allowed the groups represented to give their feedback on the route options.

Consultation about the proposed plans for the City Centre, particularly focussing on the proposed improvements for the Centre, took place on the 'Ask Bristol' website from 31<sup>st</sup> December 2009 to 14<sup>th</sup> February 2010. GWE Business West has been briefed on the proposals for the City Centre and regular updates are being made through the City Centre Transport Working Sub Group with their views being considered.

There have been a number of briefings of members of both Bristol City and South Gloucestershire Councils. Members of Parliament were also advised of the consultation and the work being undertaken for the Major Scheme Bid Submission.

A summary of the public consultation feedback is as follows:

- There is general support for significant improvements in the quality, affordability and reliability of the public transport network;
- The majority of respondents to the questionnaire considered traffic congestion to be a problem when driving in Bristol and were also dissatisfied or very dissatisfied with the current public transport from their neighbourhood to the City Centre;
- In South Bristol, concern was expressed over route Option B (see Appendix F) which skirts the Northern Slopes. Clarification was also sought as to the level of intervention required in Knowle West, particularly along Creswicke Road in Option C (see Appendix F), and how the route would potentially fit within the Knowle West Regeneration Framework. The level of congestion that the route may encounter in West Street and East Street in

Bedminster was also seen as a challenge;

- Significant concern has been expressed over the location and potential environmental impact of the M32 park and ride site as well as the impacts on local roads and agricultural land. Consideration is being given to mitigation measures to address these matters as part of the environmental assessment to accompany the bid submission;
- Proposals to substantially improve public transport interchange in the city centre and implications for car access have provoked both strongly supporting and also opposing views in the local media.
- Results from the public consultation in South Gloucestershire indicated that there was strong support for the route to the North Fringe to be extended beyond Aztec West to Cribbs Causeway. . This section of the route is now included within the Package;
- Whilst support for the concept of rapid transit services is expressed, there is a desire to see opportunities for a wider range of operators to participate in the provision of services, and potential operating frameworks are being considered which will facilitate this.

# 3. Context

The North Fringe to Hengrove package is primarily a rapid transit scheme and part of a wider package of measures proposed by the current Joint Local Transport Plan. Core components of the Package have been identified for South West funding through the Regional Funding Allocation (RFA) since 2006. The schemes in the Joint Local Transport Plan form an integrated package of strategic measures geared towards addressing the transport problems of the West of England. The Greater Bristol Strategic Transport Study, commissioned by the four authorities, GOSW and the RDA confirmed the need for such a programme of measures including the South Bristol Link, public transport improvements, demand management, cycling and walking measures, to address the loss of productivity from congestion experienced by the sub-region at present (estimated cost £300m pa). See Appendix I. The study forecast that without these interventions the congestion situation in Bristol would get far worse by 2026, leading to the city losing its competitiveness. On the back of this analysis, and given the importance of the Bristol "economic battery" powering the whole of the South West economy, the Regional Funding Allocation has included a huge package of investment for the West of England over the next 10 years, and this scheme forms a major plank of that programme.

This Package is a sub-regional programme with governance arrangements including a Programme Board comprising Heads of

Transport from the four West of England Authorities, West of England Partnership, the South West Councils, the Government Office for the South West and the Highways Agency. The Programme Board reports to the Joint Transport Executive Committee and Joint Scrutiny Committee. As the route lies within Bristol and South Gloucestershire the programme is jointly promoted by the two Authorities.

It should be noted that this Package is being promoted as a 'Pilot' project for a new collaboration process between the DfT and the promoting Authorities. This aims to accelerate the process by ensuring closer working between the DfT and the promoting Authorities. This has allowed key decisions to be made earlier and key issues to be identified and dealt with as they arise.

The overall Package objectives are:-

- To support a buoyant economy, improve quality of life through extended choices of transport modes for all to improve access to education, retail, tourism and employment;
- To encourage model shift to new forms of public transport and realise the associated environmental, climate change, safety and health benefits;
- To tackle congestion and therefore the economic, environmental and health damage that is associated with it;
- To enhance the opportunities for regeneration and sustainable growth through the linking of areas of economic and housing expansion;
- To promote equality of opportunity and security through improved connectivity to education, employment, leisure, health and retail facilities.

The West of England Joint Transport Committee considered the scheme on 4<sup>th</sup> February 2010. The committee received a detailed presentation on all aspects of the project. There was significant support for the project particularly from the business community. The Committee unanimously approved the project and particularly emphasised the importance of the project to help deliver regeneration and employment opportunities for both authorities.

South Gloucestershire Council approved the submission of the bid at their Cabinet meeting on 1<sup>st</sup> March 2010.

Consideration of the projects was also undertaken the by West of England Partnership Scrutiny Committee on 19<sup>th</sup> February and Bristol City Council Sustainable Development and Transport Scrutiny Commission on 11<sup>th</sup> February. Their comments and suggestions have been incorporated within this report.

# 4. Proposal

Rapid Transit will provide a fast, frequent and reliable public transport service. Services will run on segregated routes where possible, separate from car traffic and will be given priority over other road users at traffic signals. The preferred route option will, wherever possible, include a parallel cycling and pedestrian route linking into existing networks thereby providing a further sustainable transport option. The preferred route option will also take advantage of the infrastructure improvements put in place by the Ashton Vale to Temple Meads rapid transit route, particularly in the City Centre.

A map showing the preferred route option is in Appendix B and a summary of the scheme, technology review and procurement options is contained in Appendix C. The Package is summarised as follows:

- A rapid transit route serving The Mall at Cribbs Causeway, Aztec West, Bradley Stoke, the proposed development at Harry Stoke, University of the West of England (UWE), Emersons Green and a spur to Parkway Station and a new transport link to Stoke Gifford.
- A park and ride site of up to 1,500 spaces on the current Stapleton Smallholdings site alongside the M32, accessed by a new junction from the motorway, with junction access to and from the city centre reserved for public transport vehicles.
- Major remodelling of the St Augustine's Parade and Colston Avenue area of the city centre to reallocate highway space to public transport users and deliver a significant improvement to public transport interchange facilities as well as for pedestrians, cyclists and the public realm. The remodelling will enable the separation of rapid transit from other traffic and to pass through the centre on its eastern side cross over to Lewins Mead and make its way to the St James Barton roundabout. The return route will be via Rupert Street and onto the remodelled centre. The remodelling will also create a significantly improved public space on the centre.
- A route across Prince Street Bridge along St John's Road through East Street/Malago Road, West Street, Parsons Street, Hartcliffe Way and Creswicke Road to Hengrove Park. This particular route was one of four routes that was selected for detailed consideration. See Appendix B and F.

The preferred route as outlined above produces the best opportunities to achieve the objectives as set out elsewhere in this report. However, the route in South Bristol could be subject to some change as emerging development opportunities are brought forward. A separate Technology Review has been undertaken which has assessed a range of potential modes. In line with its recommendations it is intended that the rapid transit routes will utilise new, high profile articulated vehicles offering a high quality ride. Although the specific vehicle type has not yet been confirmed, opportunities for low emission vehicles will be investigated as part of the overall quality of the specification. It is anticipated that other services may be able to use the rapid transit alignments providing they meet appropriate quality standards.

The performance of the Package against the programme objectives is summarised in Appendix H.

# 6. Other Options Considered

#### The Option Selection Process:

The option selection process can be described with the following main points:

- The Package has followed DfT's prescriptive guidance on the development and appraisal of major transport scheme bids;
- The Package governance team has worked with DfT officers to accelerate the programme and ensure that decisions are made in a timely manner;
- Whilst a number of options were identified for the Park and Ride site (Appendix G) only one was found to be compatible with the best performing options for the rapid transit service whilst allowing direct access to the M32 motorway. Detailed consultation took place on this option.
- The Package teams undertook a first sift of broad options in October 2009 particularly in South Bristol to leave the options that were appraised in more detail which then formed the basis for public/stakeholder consultation between November 2009 and February 2010 (See Appendix F);
- In addition, the Do Nothing option would result in none of the objectives in this report being achieved leading to a deteriorating position.

#### 7. Risk Assessment

The main risks of not agreeing to the course of action as set out in this report are as follows:-

• Failure to secure RFA funding with subsequent damage to credibility and reputation for the City Council and sub-region, and consequent risks for future funding bids;

- Failure to deliver the transport infrastructure that is needed to support the regeneration of South Bristol;
- Failure to contribute to the policies identified in Bristol's Core Strategy.

The action taken to mitigate these risks is:-

- Securing funding from councils' capital, developer contributions and other third parties;
- Maintaining close liaison with DfT;
- Engaging suitably experienced consultants;
- Early and on-going discussion with the Highways Agency and Network Rail;
- Following appropriate processes for planning applications, Side Road Orders, Traffic Regulation Orders, etc.

# 8. Equalities Impact Assessment

One of the outcomes of the scheme will be enhanced transport infrastructure that will help contribute towards regeneration and the creation of job opportunities, which will be available for all sectors of the local community. The EqIA Screening Assessment is attached (see Appendix D).

# 9. Environmental Impact Assessment

The Bid to DfT includes detailed appraisal of environmental impacts in accordance with prescriptive guidance. The standard Eco Impact Assessment Checklist is attached in Appendix E. The planning process that follows Programme Entry will include a full Environmental Impact Assessment, including site habitat surveys and protected species surveys.

The initial assessment suggests that the net effects of the proposals are positive.

# 10. Legal and Resource Implications

# Legal

The legal implications arising from the subject matter of this report are wide-ranging, complex and will require careful management and coordination to ensure that when the project timetable is set, it can be delivered on time and on budget.

The City Council is the relevant highway authority and traffic authority for its area and it has numerous statutory duties and powers in respect of highway generally and traffic management. In this connection, it has policy objectives set out in the JLTP. Since the proposed rapid transit scheme does not involve the laying of physical apparatus in the public highway (e.g. rail tracks), there is no obligation to seek an order under the Transport & Works Act 1992. In order to deliver the proposal, use may be made of the usual planning permission procedures and, in appropriate cases, compulsory purchase powers.

However, it is possible that a TWA order approach may merit further consideration. Further, more detailed work will be undertaken as the scheme progresses. Any joint promotion of a TWA order will need to be progressed in tandem with South Gloucestershire as much of the route lies within that Council's area.

In order to segregate or otherwise regulate part of the highway for the use of buses only, it will be necessary to promote traffic regulation orders. These also involve public advertisement of proposals. The same applies to provision of public car parking facilities. In addition, provision of pedestrian crossings requires publication of a statutory Notice also involving the invitation of objections. It is anticipated that roads will need to be widened. This may involve compulsory purchase orders and related public inquiries.

Timetables for bus services are registered with the Traffic Commissioner. This can be changed where the current de-regulated market for bus services is excluded where the relevant local authority enters into a Quality Contract with a specific operator - timetables and other matters may be set.

It should be noted however that a number of procurement options have been identified for the delivery of the rapid transit services. This review shows that a Contracted Service supported by Statutory Quality Partnership Schemes may be the best approach to meet the project objectives.

It should also be noted there are special rules in connection with bridges carrying highways across the M32. This will need to be undertaken in close liaison with the Highways Agency and the appropriate agreements entered into. These will also need to deal with the possible construction of a new access off the M32 itself and any other proposed works on or immediately adjacent to the strategic road network. Any affected public rights of way may require diversion by due statutory process.

The Green Belt is affected requiring planning permission for the motorway access and proposed Park and Ride site. Permission can only be granted in 'very special circumstances'. The package will need to be referred to the Secretary of State for Communities & Local Government, which might well culminate in public inquiry. In addition, statutory protections will also apply to any part of the route lying within a conservation area. The establishment and regulation of a park and ride car park will be by way of an off street parking order – which, again, is subject to formal statutory process.

It must also be noted that the proposed motorway access and Park and Ride site is currently used smallholdings and allotment land. The smallholdings are not allotments and their tenancies will therefore have to be terminated in accordance with their tenancy agreements. Any allotment land will, in any event, have to satisfy the criteria required by the Secretary of State in order to use it for the junction, accesses and park and ride. Careful consideration will need to be given to these issues as, although existing allotment garden holders can be accommodated, if there is an allotment waiting list, alternative space will be required – otherwise, all the land will not be able to be considered surplus. Any new allotment land may need to be acquired, in the absence of agreement, through the compulsory acquisition process.

Reference has been made in this report, to developer contributions to part fund the scheme. Such payments can be secured by way of planning agreements as part of the terms of the planning permissions in appropriate cases.

In the event of approvals referred to above being granted and the proposals being constructed, there may be further issues such as compensation payments to adversely affected householders.

Detailed legal advice will be required for each stage of the delivery process.

**Legal advice given by**: Peter Malarby – Senior Solicitor (Highways and Transport) Legal Services

# Financial

# Capital

The overall cost of the Package is £191 million (excluding preparatory costs), of which funding of £168 million has been identified in the SW Regional Funding Allocation (RFA).

If the local contribution of £23m cannot be achieved through developer and Sec 106 contributions it will be supplemented by LTP allocations. The RFA allocation of £168m is fixed and therefore any increase on the above implementation costs would need to be funded by Bristol City Council and South Gloucestershire. To mitigate this risk there is a contingency of £12m included within the Quantified Risk Assessment.

Post programme entry feasibility costs, to final approval, are estimated at approximately £10m of which a further RFA contribution of £5m will be provided.

The balance of funding required for both elements of these feasibility costs will be met with by the authorities on the basis of an initially

agreed 57/43 split between Bristol and South Gloucestershire. This will be reviewed as scheme costs are finalised. It is anticipated that developer contributions or LTP monies will provide this funding.

#### Revenue

It is assumed that all services using the routes will operate commercially. Therefore the only revenue costs falling upon the City Council will be maintenance of the tracks and stop infrastructure, which either would be met from existing budgets or depending on the procurement model adopted would be defrayed through, for example, an operator's access charge.

*Financial advice given by:* Peter Barralet, Finance Team Manager (Major Projects)

#### Land

Some land purchases will be required as part of the package. Work to acquire the land interests will take place at the appropriate time.

#### Personnel

There are no personnel issues arising from this report.

Appendices:	Appendix A -	Stakeholder Engagement Summary
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- Appendix B Map of North Fringe to Hengrove Package and other Schemes
- Appendix C Scheme, Technology and Procurement Summary
- Appendix D Equalities Impact Assessment
- Appendix E Eco Impact Assessment Checklist
- Appendix F Map of the South Bristol Options
- Appendix G Map of the M32 Park and Ride site Options
- Appendix H Performance against Package Objectives

Appendix I - Network Map

# ACCESS TO INFORMATION

Background Papers:

www.travelplus.org.uk/north-fringe-to-hengrove-package for Bublic Consultation Foodback Bonort

Public Consultation Feedback Report

Public Consultation Feedback Report Addendum

Technology Review Report

# Appendix A

# - Summary of Stakeholders Engagement Activities and Comments Received

Stakeholder	Engagement	Key Comments	Actions
Neighbourhood Groups & Community Interest Groups	Association	Option A or B was acceptable, but only if little intervention to existing environment. Option A would be preferred if feeder busses could be introduced. This could not be guaranteed as a deliverable option. From Parson Street, it was considered that the best value option would use West Street, East Street and then via a new bridge over the New Cut into Wapping Road where it would connect into the City Centre. Prince Street Bridge was seen as a better crossing than Bedminster Bridge.	Bristol City Council and the NPN will undertake a feedback meeting to the NPN at a later date before submission of the Major Scheme Business Case.

Stakeholder		Engagement	Key Comments	Actions
	Marksbury Area Community Association	24 letters received on 12 January 2010	Opposition to Option B (via Knowle West). Objection to the removal of the green spaces at Northern Slopes.	No further action at this stage
	Snuff Mills Action Group	E-mail notification in advance of consultation	No direct response received. Likely to have been represented at public meeting where overwhelming majority against use of Stapleton smallholdings site for motorway junction and park and ride	No further action at this stage
	Stapleton and Frome Valley Conservation Society	E-mail notification in advance of consultation and discussion at community exhibition venues	Opposition to use of the Stapleton smallholdings site - impact on prime agricultural land	No further action at this stage
	Stapleton Allotment holders (and smallholding tenants)	E-mail to Site representative Individual postal invitations to exhibition venues at start of consultation	Generally opposed to the northern Bristol route, and in particular the use of the Stapleton site for a junction on the M32 and associated park and ride	<ul> <li>Improvements to retained site, mitigation measures and suitable relocation sites to be considered</li> </ul>
Transport Groups	Highways Agency	Member of the Programme Board Ongoing correspondence on initial design and modelling of proposals. Letter received on 1 March 2010	Generally supportive of the objectives and proposals being put forward for the Package. Agreeable to working in partnership to resolve potential challenges on the M32.	Further liaison and discussion will be required with the Highways Agency.
	First Group	Meetings and ongoing discussions	-	A letter of support for the concept of rapid transit is awaited at the time of writing
	Wessex Connect	Meeting and ongoing discussions	-	A letter of support for the concept of rapid transit is awaited at the time of writing
	Network Rail	Meetings and ongoing discussions Letter received on 5 February 2010	Generally supportive of the proposals and look forward to working with the scheme promoter, particularly in the North Fringe.	Further liaison and discussion will be required with Network Rail.
	Sustrans	Meeting and initial discussions	-	No further action at this stage
Business Community	GWE Business West	Regular briefings with GWE Business West Standing briefings to the City Centre Sub Working Group	Generally supportive of the rapid transit proposals, particularly linking the North Fringe/South Bristol to the City Centre and vice versa.	No further action at this stage
			Some concerns over how the City Centre will work for businesses.	

Stakeholder		Engagement	Key Comments	Actions
Business Community	Bristol International Airport	Letter received 8 January 2010.	<ul> <li>Support scheme.</li> <li>BRT will provide opportunity to improve public transport opportunities for passengers using Bristol International Airport.</li> <li>Would be willing to help to secure the success of the scheme.</li> <li>Route options A and C would provide most benefit for local services between Bedminster and BIA.</li> <li>Main concern is for a suitable transport interchange at Temple Meads Station.</li> </ul>	No further action at this stage
	South West Regional Development Agency	Meeting	-	A letter of support is awaited for the proposals at the time of writing.
Environment Groups	Environment Agency	Awaiting comments on the proposals at the time of writing	-	Notification of the proposals
	English Heritage	Awaiting comments on the proposals at the time of writing		Notification of the proposals
	Conservation Advisory Panel	Awaiting comments on the proposals at the time of writing	-	-
	Avon Wildlife Trust	Letter received 8 January 2010	<ul> <li>Local Sites comprise the best habitat in the region and are essential to ensure meeting of regional, national and local Biodiversity Action Plans targets.</li> <li>Concern the BRT will lie too close or traverse some of these sites.</li> <li>State that it is unacceptable for any of these Local Sites to be destroyed or damaged during construction or by road location.</li> <li>Essential for a detailed site assessment of chosen route.</li> </ul>	<ul> <li>Detailed site assessment:</li> <li>Evaluation of the ecological and green infrastructure value of a preferred route,</li> <li>Assessment of potential effects of development on any nearby Local Sites, as well as those with national designations, BAP priority habitats and notable or protected species.</li> <li>Assessment of the amount of damage and loss of biodiversity and this must be fully mitigated or compensated for in the final scheme put forward.</li> </ul>

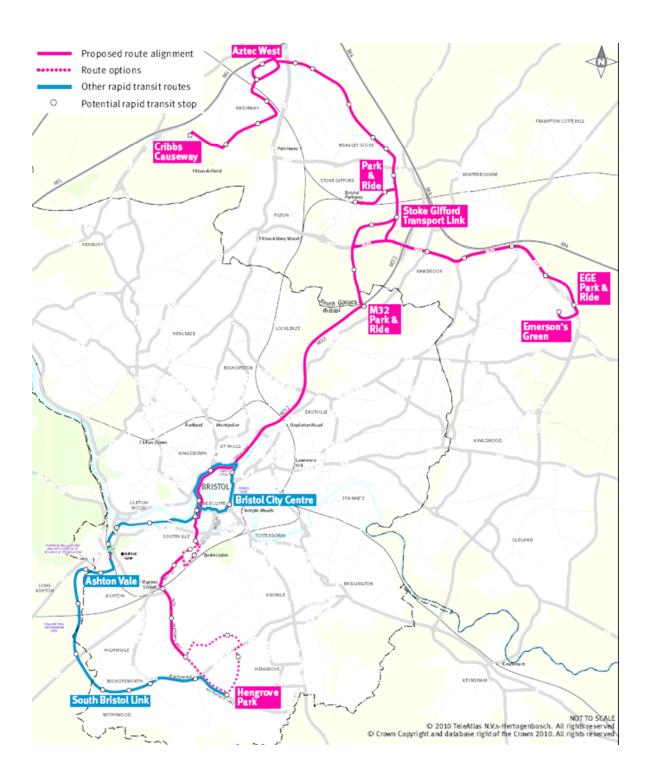
Stakeholder		Engagement	Key Comments	Actions
			No objections in principle to the proposed route on biodiversity and fisheries grounds	
	Natural England	Comments on the proposals received on 23 February 2010	Note the historic industrial nature of the Bathurst Basin area and the river crossing of the route (early consultation with BCC archaeologist is vital)	- Contact BCC archaeologists

Stakeholder		Engagement	Key Comments	Actions
Environment Groups	Soil Association	Letter received 17 <sup>th</sup> December 2009	<ul> <li>Reservations over proposals for package at the M32 P&amp;R site on Grade 1 or 2 agricultural land</li> <li>Cannot support building on productive or potentially productive land in the 'blue finger' (land alongside M32 and up to north of the M4).</li> <li>Urge to seek an alternative 'brownfield' site.</li> </ul>	<ul> <li>Detailed site assessment</li> <li>Considering relocation of smallholdings to suitable alternative site.</li> </ul>

Stakeholder	Engagement	Key Comments	Actions
Local Government NHS Bristol	Letter from Director of Public Health for Bristol, Hugh Annett on 8 January 2010.	<ul> <li>Welcomes development of an efficient public transport system as an alternative to the private car.</li> <li>Essential for health and wellbeing of Bristol residents that they can access their workplaces, local services, retail outlets and leisure opportunities by means of public transport, especially when they can be combined with walking or cycling.</li> <li>Recommends that to support active travel, BRT vehicles should be designed and equipped to take bicycles and secure cycle storage at all BRT stops.</li> <li>Recommends stops as close to the major health facilities as possible.</li> <li>Suggests more stops along M32.</li> <li>Concern that Knowle West routes do not serve two of the main centres: Jarman's Square and Melvin Square and the majority of Knowle West residents live &gt;5 minutes from stops.</li> <li>Suggests combining services with a transport hub increases options and encourages exercise.</li> <li>Recommends that the route runs along Leinster Avenue and Filwood Broadway (to serve Melvin Square).</li> <li>Recommends that BRT includes a loop from Hartcliffe Way via Imperial Park, Hengrove Way, Hareclive Road, Hartcliffe Campus to Hengrove Park and to Knowle West to support connectivity of Knowle West and Hartcliffe with each other and other parts of the city and bridging social capital and health benefits.</li> </ul>	No further action at this stage

Stakeholder	Engagement	Key Comments	Actions
Members o Parliament	5	<ul> <li>Concern into use of allotment land for M32 P&amp;R for allotment owners and environmental implications for the local community.</li> <li>Concerns the allotment holders have not been consulted enough.</li> <li>Would like the P&amp;R location reconsidered.</li> </ul>	No further action at this stage
Ward Councillors	Letter received 18 January 2010 from Colin Smith and Mark Bradshaw, councillors for Bedminster Statement to Full Council by Councillor Alexander dated 10/11/09	<ul> <li>BRT offers potential to support regeneration in South Bristol, reduce congestion and consequent poor air quality and offer the travelling public a real quality alternative to the car.</li> <li>NFHP extremely important given the large number of daily car trips to the North Fringe for work and study and to address the deprivation and inequality challenges in South Bristol, including the physical environment and economic prosperity.</li> <li>More work needed to explain passenger related factors e.g. vehicle and service procurement.</li> <li>BRT should make use of existing road space where safe and practicable.</li> <li>Support public transport interchange at Parson Street.</li> <li>Preference for option C, to retain greenspaces in Bedminster, support regeneration in Knowle West, support retail services and link Parson Street.</li> <li>Objecting to proposed site for Park &amp; Ride for the M32 on the grounds of loss of agricultural land impact on green belt.</li> </ul>	Formal response issued by Exec Member for Transport and Sustainability

# Appendix B – Map of North Fringe to Hengrove Package and other Rapid Transit Schemes



#### Appendix C – Scheme Summary, Technology Review Summary and Procurement Summary

#### Scheme Summary

Rapid Transit will provide a fast, frequent and reliable public transport service. Services will run on segregated routes where possible, separate from car traffic and will be given priority over other road users at traffic signals. The preferred route option will, wherever possible, include a parallel cycling and pedestrian route linking into existing networks thereby providing a further sustainable transport option. The preferred route option will also take advantage of the infrastructure improvements put in place by the Ashton Vale to Temple Meads rapid transit route, particularly in the City Centre. Where bus lanes are used, other services may be able to use them providing they achieve appropriate quality standards. As with the current bus lanes, most other motor vehicles will be excluded from them. Further consideration will be given to this aspect of the project during the detailed design stage.

The main features of the preferred option can be summarised as follows:

- A rapid transit route between the North Fringe and Hengrove via the M32 and the city centre, serving The Mall at Cribbs Stoke, the Causewav. Aztec West, Bradley proposed development at Harry Stoke, University of the West of England (UWE), a Park & Ride on the M32, Cabot's Circus, Broadmead, the Centre, Bedminster, Knowle West and Hengrove Park. Where possible, the route is segregated from general traffic to provide a rapid journey time attractive to current car drivers, and elsewhere incorporates junction remodelling, potential parking restrictions and traffic signal optimisation to ensure reliability for the new system. The route includes a spur serving Bristol Parkway station, and is being incorporated into development proposals at Filton Northfield, Harry Stoke, UWE and wider regeneration options in South Bristol, particularly at Knowle West and Hengrove Park.
- A park and ride site of up to 1,500 spaces on the current Stapleton Smallholdings site alongside the M32, accessed by a new junction from the motorway, with junction access to and from the city centre reserved for public transport vehicles.

- Remodelling of the St Augustine's Parade and Colston Avenue area of the city centre to reallocate highway space to public transport users and deliver a significant improvement to public transport interchange facilities as well as for pedestrians, cyclists and the public realm.
- A rapid transit route to Emerson's Green via the Avon Ring Road serving the proposed Science Park (`SPark') and major housing development at Emerson's Green East (including Park and Ride), running via the A4174 Avon Ring Road and including additional priority lanes to deliver attractive journey times.
- The Stoke Gifford Transport Link, a new highway and rapid transit link connecting Great Stoke Way and the Avon Ring Road, with a new bridge over the London to Cardiff railway line near Parkway station, and linking with the proposed Harry Stoke development.

The Package proposals are closely linked to other major transport schemes including the Ashton Vale to City Centre rapid transit route and the South Bristol Link, particularly in terms of consistency of infrastructure specification and rapid transit service patterns.

The rapid transit routes will be served by new, high profile articulated vehicles offering a high quality ride. The Package will also include purpose built accessible interchanges and clear information/marketing to maximise patronage and mode shift from the private car.

Park and ride sites are included at Emerson's Green (to be developer funded) Bristol Parkway and Stapleton Smallholdings alongside the M32 in Bristol. The M32 site, illustrated in Figure 1, has been identified following consideration of a range of sites on the basis of access to the rapid transit route, minimisation of congestion on local roads, sufficient size, deliverability and potential for landscaping and environmental mitigation. Proposals include the retention of the allotments currently on the site overall and nearby relocation of existing smallholdings to other sites in the area. Where allotment holders and smallholdings are relocated they will also be given assistance where necessary to improve their new allotment or smallholding to at least the current standard they enjoy. In addition significant new landscaping will be completed on the existing site. Discussions have also taken place with the Highways Agency. The proposal will require a new motorway junction for which a proposal has been submitted to them. The works will also include for local traffic measures to improve cycling and pedestrian facilities in this part of the M32 corridor. In addition, consideration will also be given as to how local residents may benefit from the rapid transit service.



Figure 1 – Rapid Transit Motorway Access and Park & Ride Proposal

Proposals for the city centre are based on the creation of a major public transport interchange on Colston Avenue with associated public realm improvements. Facilities for rapid transit and bus passengers, pedestrians and cyclists are intended to be substantially enhanced in this critical area, including better pedestrian links between the `Old City' and Harbourside. This will necessitate the removal of general traffic from Baldwin Street between its junctions with Broad Quay and Marsh Street (see Figure 2). Notwithstanding the local impact on car access, overall accessibility to the city centre by all modes will, however, also be maintained by a wide range of complementary measures. The Rapid Transit route will where appropriate take advantage of measures being delivered by the Ashton Vale to City Centre scheme together with assessment of further infrastructure improvements.

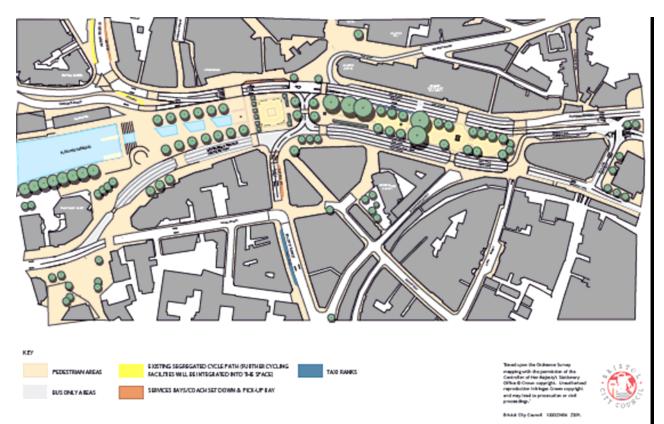


Figure 2 – The Centre – Interchange Proposals

From South Bristol the Rapid Transit route approaches The Centre via a new crossing of the New Cut (reserved for public transport, cyclists and pedestrians), and Prince Street Bridge (sharing the alignment of the Ashton Vale to city centre scheme). Routes serving South Bristol have been prioritised following detailed discussions with stakeholders in the area and are closely aligned with emerging redevelopment proposals. The 'central case' will use a one-way loop system in Bedminster using Malago Road, Sheene Lane and East Street (with additional public realm enhancements in East Street) before heading via West Street and onto Hartcliffe Way. The 'central case' route will then turn right at Nover's Lane into Knowle West and use Creswicke Road before crossing Hengrove Way into Hengrove Park where it would terminate and integrate with the South Bristol Link Rapid Transit route. An option of using Hartcliffe Way and Whitchurch Lane only rather than entering Knowle West is also being considered. The route in South Bristol could be subject to change as emerging development opportunities are brought forward.

From Emersons Green District Centre, the Rapid Transit route serves the Park & Ride site and SPark at Emersons Green East then along the A4174 in a westerly direction towards UWE, approaching the M32 Park & Ride from Stoke Lane. This route was selected following consultation on two route options for the East Fringe; no strong preference was indicated and the route has therefore been selected largely on the basis that it provides a quicker journey time than the alternative route through residential areas.

In the North Fringe, the exact route at Harry Stoke remains dependent on the timing of this development; however routing through the new development is favoured, as it would provide the new community with a high quality public transport service.

Discussions with the master planners for the UWE campus are ongoing to provide a route through the new campus, although for the purposes of appraisal a 'central case' has been assumed running along Coldharbour Lane. Therefore the exact alignment is yet to be determined following completion of the UWE master planning exercise.

In response to views of the public expressed during consultation, the rapid transit is now planned to terminate at Cribbs Causeway. For the purposes of appraisal the route is assumed to run along Pegasus Road, Highwood Road, Coniston Road and connecting into Aztec West via a new link for rapid transit. However further options will be considered and consulted on at a later stage. The route then runs through Bradley Stoke along the new proposed Stoke Gifford Transport Link, which links Great Stoke Way and the A4174.

# **Technology Review – Summary**

A technical review for appropriate technologies for this package was carried out by Steer Davies Gleave in December 2009. The technology review followed professional guidance documents and accepted industry practice.

A high level review of capacities and costs and previous assessment work undertaken, has concluded that the technology options of mass rapid transit, heavy rail, tramtrain and light rail are not appropriate technologies for the proposed rapid transit network. This does not mean that these technologies are not appropriate in specific circumstances but they fit less well with the proposed objectives of the rapid transit scheme and they are less likely to provide a successful case for government funding for this particular scheme. Light Weight Rail (LWR) and Bus Rapid Transit (BRT) were considered.

LWR is still in development. Both the vehicles and the track for LWR need to be developed, trials undertaken, required approvals obtained and large scale procurement and construction undertaken. This is unlikely to happen before 2016 and therefore is outside the current regional funding allocation programme. The costs for LWR are likely to significantly exceed the current funding available for rapid transit. Without demonstration of costs in delivery of the technology on a similar project of this size LWR would require the West of England Authorities to take on considerable capital cost and development risk. The risks associated with delivering bus rapid transit are considerably lower than LWR.

Diesel power remains the most practical fuel technology for now. New technologies, offering low emissions, such as hybrid technology, are continuing to be developed, and are likely to be a viable and more cost effective alternative in the next few years with consideration of these to be given nearer the time of construction.

The report concludes that, BRT should be pursued for the North Fringe to Hengrove Package rapid transit routes as it; best meets the rapid transit scheme objectives; is the most cost effective, flexible; and can be delivered within the current programme and available funding.

# **Procurement Summary**

Procurement routes are being considered for the construction elements of the package and for the provision of rapid transit services. The following details the approach at the time of submission of the MSBC:

- The Authorities have established a framework for identifying and assessing procurement options which includes the establishment of procurement objectives;
- Where the rapid transit scheme involves more bespoke or innovative approaches the Authorities have already established relationships with other scheme promoters to share best practice and learn from experience. It is our intention to continue to develop these relationships and to work with other rapid transit scheme promoters as the package progresses. The Authorities have also procured specialist advisors with experience in designing and procuring rapid transit schemes across the UK;
- For system wide aspects, such as CCTV and real time passenger information, existing contractual relationships exist which have already been assessed for value for money and deliverability. These will be reviewed as the package progresses;
- Construction of the highway, park and ride and rapid transit works are additional to the 'regular' works delivered through existing tendered contracts. Therefore a review of procurement options for the construction of the scheme has been undertaken. This shows that a design and build procurement strategy is favoured at the present time with a single or multiple contracts let. This will be reviewed and developed as the scheme progresses;
- The Authorities have identified a number of procurement options for the delivery of the rapid transit services and a review of these options has been undertaken. This review shows that a Contracted Service supported by Statutory Quality Partnership Schemes may be the best approach to meet the project objectives. It is also considered that a TWA order approach may merit further consideration. Further, more detailed work, will be undertaken as the scheme progresses.

With the increased levels of funding coming through this bid, the Authorities will have to ensure that adequate technical capacity as well as wider resources and risk management processes are available to ensure the delivery of the commercial aspects of the scheme.

#### BRISTOL CITY COUNCIL Equality Impact Assessment – Part One - Screening

Part one of an EqIA – the screening – should be carried out at the planning and development stage of a policy, project, service, contract or strategy. This form should be used in conjunction with the guidance and as the first part of a full EqIA.

Name of policy, project, service, contract or strategy being assessed	North Fringe to Hengrove Package – Preparation of Major Scheme Business Case
Directorate and Service	City Development – Major Projects
Names and roles of officers completing the assessment	David Prosser (Project Manager North Bristol and M32 P&R section) and Darren Pacey (Project Manager – City Centre and South Bristol section)
Main contact telephone number	0117 903 6826
Date	4 <sup>th</sup> February 2010

#### **Project summary**

The West of England sub-region is promoting a transport strategy that includes the North Fringe to Hengrove Package (NFHP). The rapid transit component would link South Bristol with the northern and east fringes via the City Centre and would link with routes that are being progressed between Temple Meads and Ashton Vale, and as part of the South Bristol Link.

The local objectives of the scheme are detailed in the following paragraphs.

# City Centre and M32 corridor

- Support at buoyant economy, improve quality of through and extended choice of transport modes for all, to improve access to education, retail, tourism & employment in central Bristol
- Encourage the shift to new and existing forms of sustainable transport for orbital movements through and radial journeys to/from central Bristol and the M32 corridor, realising the associated environmental, climate change, safety and health benefits
- Tackle congestion in Bristol City Centre & the M32 corridor to limit the economic, environmental and health damage that is associated with it.
- Support sustainable development in the developments of central Bristol such as Harbourside, Temple Quay, Cabot Circus, Temple Meads, St Pauls, Old Market and Lawrence Hill, linking with South Bristol, North Fringe and East Fringe.
- Promote equality of opportunity through improved connectivity for, to/from the North Fringe, East Fringe and South Bristol to central Bristol, to education and employment facilities.

# North and East Fringe

- Support a buoyant economy, improve quality of life through an extended choice of transport modes for all, to
  improve access to education & employment in the North and East Fringe of Bristol, including the proposed Science
  Park.
- Encourage the shift to new and existing forms of sustainable transport for orbital and radial journeys and realise the associated environmental, climate change, safety and health benefits, in particular on the M32 and A4174 corridors.
- Tackle congestion in the Stoke Gifford Area and along the A4174 and M32 corridors to limit the economic, environmental and health damage that is associated with it.
- Support sustainable development in the committed developments of Harry Stoke, East of Coldharbour Lane, Cheswick, Emerson's Green East and SPark by linking with key employment areas including Bristol City Centre and the North Fringe and onward connectivity into South Bristol.
- Promote equality of opportunity through improved connectivity for the Bradley Stoke, Stoked Gifford and Emerson's Green areas to education and employment facilities as well as onward connectivity into Bristol City Centre and South Bristol.

#### **South Bristol**

- Support a buoyant economy; improve quality of life through an extended choice of transport modes for all, to improve access to education & employment.
- Encourage the shift to new and existing forms of sustainable transport for orbital and radial journeys and realise the environmental, climate change, safety and health benefits.

- Tackle congestion in the Bedminster area and limit the economic, environmental and health damage that is associated with it.
- Support sustainable development and regeneration in South Bristol, including at Hengrove Park and Knowle West by providing transport links that facilitate inward investment in South Bristol and onward connectivity into Bristol City Centre and the North / East Fringe.
- Promote equality of opportunity through improved access to employment, retail, community, leisure and educational facilities, particularly in Hengrove Park, Bedminster, Bristol City Centre and the North / East Fringe.

# 1. Identify the aims of the policy, project, service, contract or strategy and how it is implemented

	Key Questions	Notes / Answers	Any actions needed? By whom?
1.1	Is this a new policy, project, service, contract or strategy or a review of an existing one?	New project / service The North Fringe to Hengrove package is a programme of measures including new rapid transit services from South Gloucestershire (Cribbs Causeway and Emerson's Green, and including links to Bristol Parkway) via Stoke Lane and the M32 to the City Centre and south to Hengrove Park. It also includes a Park and Ride at the Stapleton smallholdings site, two park and ride sites in South Gloucestershire (Emerson's Green and Parkway) and a transport link road at Stoke Gifford.	
1.2	What is the main purpose of the policy, project, service, contract or strategy?	<ul> <li>To encourage a shift to new forms of public transport and realise the associated environmental, climate change, safety and health benefits.</li> <li>To help reduce congestion</li> </ul>	

		<ul> <li>To enhance access and opportunities for economic regeneration and sustainable growth.</li> <li>To promote equality of opportunity and security through improved connectivity to education, employment, leisure, health and retail facilities.</li> </ul>	
1.3	What are the main activities of the policy, project, service, contract or strategy?	To develop a major scheme business case, for submission to the Department for Transport at the end of March 2010 for funding. For potential development, design and procurement of rapid transit services and associated construction between 2013/14 and 2016/17. Start of operation in 2017	
1.4	Who are the main beneficiaries? Whose needs is it designed to meet?	People and employees in South and Central Bristol and the North Fringe.	
1.5	Which staff carry out the policy, project, service, contract or	Combined staff of West of England partnership, Bristol City Council and South	

	strategy?	Gloucestershire Council Transport projects and associated teams during development.	
1.6	Are there areas of the policy or function that could be governed by an officer's judgement? eg. home visits "where appropriate". If so, is there guidance on how to exercise this to prevent any possible bias/prejudice creeping in?	Yes Elements of the project / service rely on an officer's judgement, however key decisions are subject to members (Cabinet approval) and Department for Transport decisions.	
1.7	Is the Council working in Partnership with other organisations to implement this policy or function? Should this be taken into consideration? eg. Agree equalities monitoring categories Should the partnership arrangements have an EqIA?	Yes The project is a sub-regional transport project established through the West of England Partnership Office. The project is jointly promoted and funded by BCC and South Gloucestershire Council.	
1.8	Taking the six strands of equalities, do you have any initial thoughts that any of the six equalities strands have particular needs relevant to the	This project is the first stage in preparing a business case to apply for funding to achieve a transport improvements for Bristol.	

policy or function?         Or is there anything in the project, service, contract of that you can think of at this that could discriminate or disadvantage any groups ie.	Transport Plan (JLTP), which include key projects such as the following:of people?South Bristol Link Cycling City • Ashton Vale to Temple Meads Rapid Transit.The above key projects are either in the process of or will need to complete an EQIA.It is recognised that some equality groups may have specific concerns / issues which will be established via the current consultation process being undertaken by the Project Manager for the Ashton Vale to Temple Meads and City Centre rapid transit route as this project has progressed further.Ongoing engagement with equalities representatives to be undertaken throughout
Gender (include Transger Disability Age Race	the scheme development process.

	Sexual Orientation Faith/Belief Do any other specific groups have particular needs relevant to the policy, project, service, contract or strategy?	<ul> <li>and that service delivery from Providers is regulated and appropriate enforcement powers are considered.</li> <li>Older people are concerned as to whether the concessionary fare scheme will apply to the new services.</li> <li>As the fares in Bristol are already high Equality groups on a low income are concerned that the cost of travel will increase.</li> <li>Request that the project monitors the services being provided as the new routes could effect other bus routes, which could then mean less choice for vulnerable individuals.</li> </ul>
1.9	Did you use any data to inform your initial thoughts above? What data do you already have?	The scheme is derived from the 2005 Joint Local Transport Plan (JLTP). This assessed the current and forecast transport needs for the sub-region and identified the rapid transit scheme as part of the solution for those issues. The JLTP was based on consultation and analysis of user needs and demands for the

		transport system this included information about existing public transport services and equalities data as well as social inclusion and accessibility data (amongst others).	
1.10	Are there gaps in the data that require you to do further work? What are these gaps?	Further consultation with representatives from equality groups is needed to help inform the design of the scheme proposals. Consultation will either be direct or via the linked projects.	

If the result of the screening process is that there is the potential for a significant impact on any equality group or if any equality group has significantly different needs, then a full equality impact assessment must be carried out. If you are unsure please seek advice from a directorate or corporate equalities officer.

#### Additional comments / recommendations

The draft screening Equalities Impact Assessment for the North Fringe to Hengrove Package – Preparation of Major Scheme Business Case has been signed off at this stage as it is being presented to Cabinet in March 2010.

#### Recommendations

Further equalities work with stakeholders will need to be progressed as the project moves forward.

As this project links into other major transport schemes in the Joint Local Transport Plan (JLTP) attention will need to be given to the following key projects so that issues / concerns that overlap are identified and considered.

- South Bristol Link
- Cycling City
- Ashton Vale to Temple Meads Rapid Transit.

The signing of this screening form has been agreed on the basis of the above recommendation.

Signed: Bob Fowler	Signed: Jane Hamill
Service Manager:	Directorate Equalities Adviser
Date: 2 <sup>nd</sup> March 2010	Date: 2 <sup>nd</sup> March 2010

#### Appendix E

#### - Environmental Impact Assessment

#### Eco Impact Assessment Checklist

Title of report: North Fringe to Hengrove Package – Major Transport Scheme Bid

Report author: N Rowson (Atkins Consultants)

Anticipated date of key decision: 25<sup>th</sup> March 2010

#### Summary of proposals:

Recommendation that Cabinet endorse the proposals for the North Fringe to Hengrove Package, and approve the submission to the Department for Transport of a Major Scheme Bid for Programme Entry.

This Eco-Impact Assessment summarises the resultant environmental impacts of such a project.

Will the proposal impact	Yes/ No	+ve or -ve	If yes	
on			Briefly describe impact	Briefly describe Mitigation measures
Emission of Climate Changing Gases?	Yes	+ ve	In the long-term, it is anticipated that the North Fringe to Hengrove BRT should reduce emissions assuming there will be a modal shift from the private car to public transport.	The construction of the Rapid Transit Scheme should aim to achieve CEEQUAL (Civil Engineering Environmental Quality Assessment) "Very Good" standard as a minimum.
		- ve	In the short-term, emissions from the use of energy and materials during the physical construction / infrastructure development works.	
		- ve	Once delivered, Rapid Transit Vehicles will emit climate changing gases during operation.	Energy efficient, low- emission vehicles to be used.
Bristol's vulnerability to the effects of climate change?	Yes		In the long term, the Rapid Transit Scheme may;	
		- ve	- Be at risk of flooding & increase water run- off by creating more	Full flood risk assessment and inclusion of all flood and

		- ve	impermeable surfaces or removing trees - Not be robust enough to cope with extreme temperature variations, or violent storms	water management measures (SUDS) within the scheme. Will require approval of the Environment Agency. Sites will be screened by Planning Officers to identify the appropriate mitigation in relation to any impacts identified and determine whether an Environmental Impact Assessment is required.
Consumption of non- renewable resources?	Yes	- ve + ve	In the short-term, there will be a requirement for fossil fuels and other non- renewable materials & products for the construction of infrastructure & vehicle provision. In the long term, it is anticipated that the modal shift from the private car to public transport should reduce the consumption of fossil fuels, although this is not quantifiable at this stage.	Consider environmental performance of design and materials. The environmental performance of the construction contractor, including accreditation to ISO14001 will be considered during the tendering process.
Production, recycling or disposal of waste	Yes	-ve	In the short term, waste will arise from demolition & construction works.	Construction contractors will be legally obliged to prepare site waste management plans for projects over £300k, which detail how waste will be minimised, and recycling promoted.

The appearance of the city?	Yes	+/-ve	The construction of the BRT infrastructure will impact on the appearance of the city e.g.	A Full Environmental Impact Assessment of all effects and appropriate landscape mitigation should be included in the scheme
		+ ve	Highway improvements such as the upgrading of surfaces and street furniture such as bus	in consultation with BCC Urban Design team. The identification of opportunities for street
			stops are likely to improve local visual impact.	scene improvements in areas adjoining the scheme.
		- ve	Significant earthworks, road widening, new sections of bus way and the M32 park and ride facility are likely to cause significant visual impact, particularly through open areas of the city.	The retention of vegetation and mitigation planting where appropriate.
		- ve	Proposal for new bridge over New Cut within Conservation Area / potential alterations to Prince Street Bridge (GII LB)	Agreeing all works to listed structures with English Heritage & sensitive treatment in line with character of the structure and local area.
Pollution to land, water, or air?	Yes	+ ve	An improved sustainable transport system should reduce the level of traffic on Bristol's roads and therefore local air pollutants such as PM10 and NOx	
		- ve	Demolition & construction works may cause accidental pollution to land.	Contractors performance in this area will be considered during the tendering process.
		- ve	Demolition & construction works may cause accidental contamination of local	In addition, the chosen contractor(s) must work in accordance with

	- ve	watercourses and surface water drains. lition & construction may produce sed emissions & dust.	guidance issued in all relevant Environment Agency Pollution Prevention Guidelines (PPGs).
	- ve	Noise will be created during construction works & upon completion. Light pollution may	Contractors to use best practicable means to control noise
	- ve	cause a nuisance to nearby residents.	Low level lighting & cut off lighting to be installed.
Yes	- /+ ve	The creation of new infrastructure / developments may impact on flora and fauna	Works to minimise construction phase disturbance and disruption.
			Relocation/ Translocation of any protected species.
			Habitat creation/ improvement, creation and repair of habitats and corridors.
			Retention of existing vegetation.
			Replanting of any vegetation removed during construction
	Yes	- ve - ve Yes - /+	Yes- /+ veSurface water drains.Yes- /+ veition & construction may produce sed emissions & dust.Noise will be created during construction works & upon completion.Noise will be created during construction works & upon completion veNoise will be created during construction works & upon completion veLight pollution may cause a nuisance to nearby residents.Yes- /+ veThe creation of new infrastructure / developments may

Consulted with: Tanya Saker, Celia Beeson & Alex Minshull Sustainable City Group

Summary of impacts and Mitigation - to go into the main Cabinet/ Council Report

The BRT should deliver long term environmental benefits for Bristol's carbon footprint and local air quality and these outweigh the short term impacts outlined within the Eco Impact Assessment.

The proposals include the following measures to reduce the impacts ...

- Mitigation to effect the use emissions of climate changing gases.
- The construction of the Rapid Transit Scheme should aim to achieve CEEQUAL

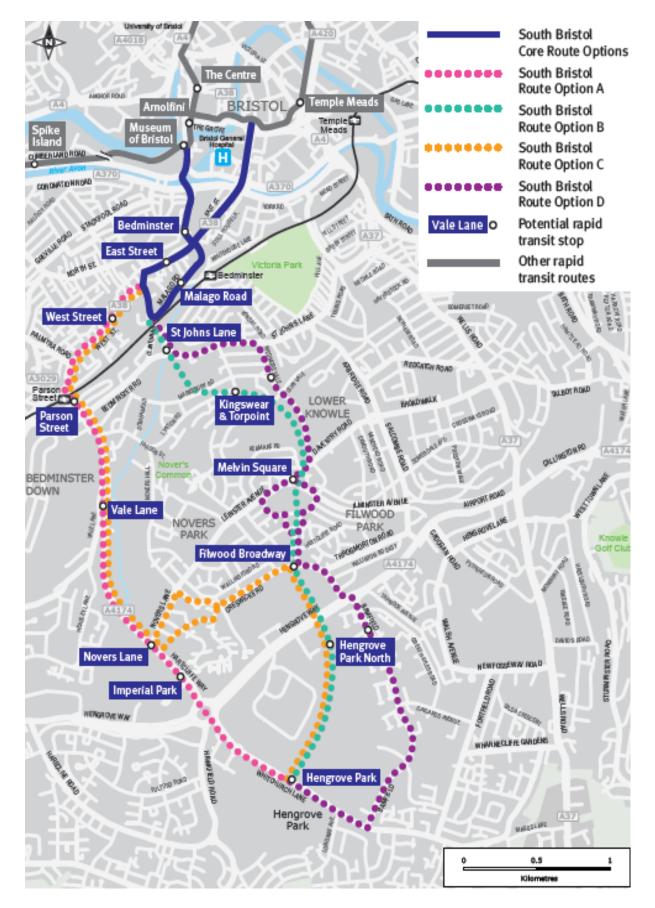
(Civil Engineering Environmental Quality Assessment) "Very Good" standard as a minimum

- Mitigation to address Bristol's vulnerability to the effects of Climate Change
- Mitigation to address the use of raw materials for construction & operation of the BRT.
- Energy efficient, low-emission vehicles to be used.
  - Mitigation to address changes in the appearance of the city.
  - Mitigation to address the risk of land, air, water, noise & light pollution.
- Mitigation to address impact on wildlife & habitats.

The net effects of the proposals are.... Positive.

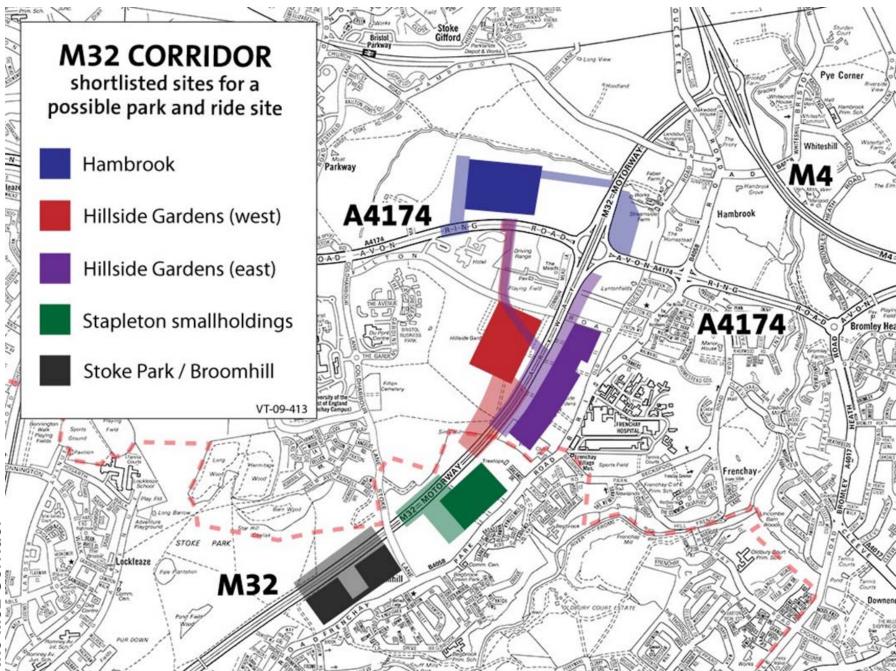
Checklist completed by:				
Name:	Darren Pacey			
Dept.:	CD-Major Projects			
Extension:	07827-859739			
Date:	16 <sup>th</sup> February 2010			
Verified by Sustainable City Group	Sustainable City Group			

## Appendix F



#### - Map of the South Bristol Options

# Map of Short listed Options for Park and Ride Sites to Serve **M32** Corridor the



#### - Performance against Package Objectives

The performance of the Package against the programme objectives is summarised in the following paragraphs:

### **Objective 1**

To support a buoyant economy, improve quality of life for sub-regional residents and improve local and national travel

- The Package will link a number of major development areas and improve access to new employment opportunities and housing for local residents, particularly in South Bristol;
- This connection will increase employment densities as well an overall improvement in the quality of jobs;
- Commitment to the Package would be taken as a clear signal to the private sector that local and national policy makers are tackling the current poor perception of, in particular, South Bristol's ability to address its economic problems.

#### **Objective 2**

To encourage the shift of new forms of public transport and realise the associated environmental, climate change, safety and health benefits

- The Package will aim to encourage a shift to new and existing forms of sustainable transport on key radial and orbital corridors, therefore tackling congestion and reducing CO2 emissions;
- The Package is expected to reduce forecast congestion levels within the North Fringe and Stoke Gifford areas, on the main radial corridors between the North Fringe and Bristol City Centre (including the M32) and on the radial corridors from South Bristol into the City Centre;
- The Package will result in a movement of trips away from car journeys, as people who would otherwise not use public transport realise the advantages afforded by fast and reliable journey times, comfortable and clean vehicles, an integrated network offering quick and easy access to many parts of the city;
- The Package will cause a reduction in vehicle kilometres and greenhouse gas emissions with environmentally friendly vehicles to be used;
- The Package will contribute a benefit to safety through a reduction in road traffic and a reduction in personal injury accidents by encouraging mode shift.

# **Objective 3**

To tackle congestion and therefore the economic, environmental and health damage that is associated with it

- The Package is expected to reduce forecast congestion as previously described in Objective 3 and encourage a shift away from the private car to public transport;
- The additional infrastructure provided for rapid transit will provide journey time reliability improvements not only for rapid transit but also for other public transport;
- Journey times of the rapid transit services (over existing bus services) are anticipated to decrease result in a total journey time saving over the scheme appraisal period.

# **Objective 4**

To enhance the opportunities for regeneration and sustainable growth through the linking of areas of economic and housing expansion

- The Package will relate directly to locations of proposed housing and employment growth and help reduce congestion to and from those areas;
- It is anticipated that the Package will reduce vehicle flows on key radial routes in South Bristol and on key routes through the North Fringe, reducing the impact of community severance;
- The package is expected to encourage a shift away from using the private car to more sustainable modes of transport, which in turn can promote more active lifestyles;
- The Package promotes social inclusion by improving access to employment, retail, community, leisure and educational facilities. It will bring major regeneration benefits to South Bristol, improving job opportunities and facilitating urban renewal.

# **Objective 5**

To promote equality of opportunity and security through improved connectivity to education, employment, leisure, health and retail facilities

• The Package, as part of the wider integrated JLTP and Major Schemes programme, is expected to significantly improve the links between the key activity centres of employment, education and health with residential areas. In particular, the Package will include improved links from areas of deprivation in Hengrove and South Bristol to job opportunities in the city centre and the North Fringe.

# Appendix I

# - Network Map

