

West of England Partnership  
Joint Transport Executive Committee  
4 February 2010

## North Fringe to Hengrove Package - Major Scheme Bid Submission

### Purpose of report

1. To seek Executive Members' endorsement of the North Fringe to Hengrove Package major scheme bid to the Department for Transport prior to consideration of the scheme by the cabinets of South Gloucestershire and Bristol City Councils on 1 March 2010 and 25 March 2010 respectively.

### Background

2. The North Fringe to Hengrove Package is composed of a substantial set of inter-related transport schemes building on the findings of the Greater Bristol Strategic Transport Study (GBSTS) and the Joint Local Transport Plan, and including Rapid Transit routes to the North Fringe, Hengrove and Emerson's Green, a park and ride site alongside the M32 and the Stoke Gifford Transport Link. The Package is designed to facilitate a significant shift from the private car onto more sustainable modes to tackle congestion, improve air quality, facilitate sustainable development and meet national, regional and local goals and objectives for economic development, health, accessibility and quality of life.

### Key Elements of the North Fringe to Hengrove Package

3. An illustration of the overall Package is shown in Figure 1 and outlined below. The main features of the Package 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 Causeway, Aztec West, Bradley Stoke, the proposed development at Harry Stoke, University of the West of England (UWE), Bedminster 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.
  - 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.

- New or enhanced walking and cycling infrastructure alongside the rapid transit routes where possible.
  - 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.
4. 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.

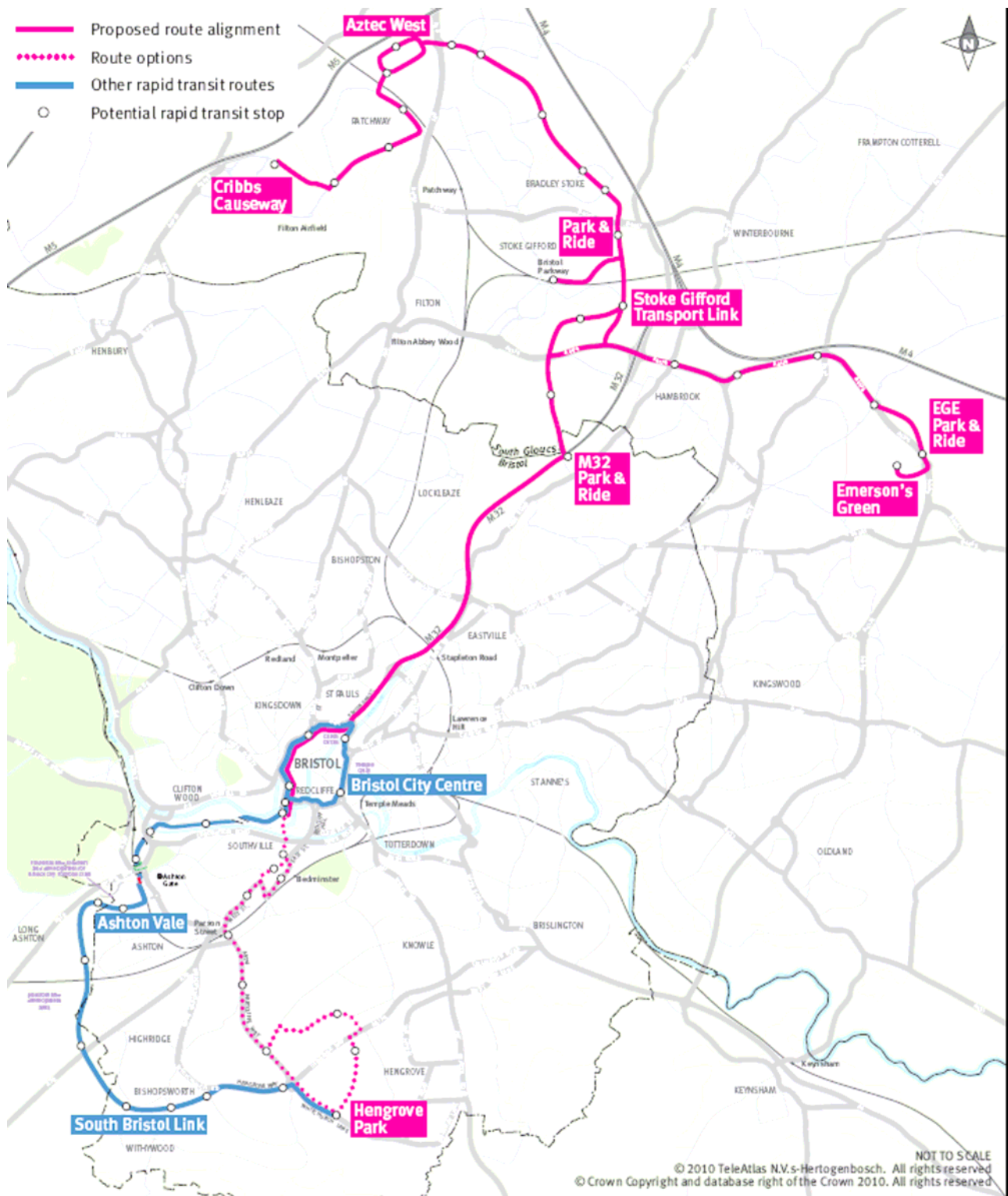


Figure 1 – North Fringe to Hengrove Package and other Major Schemes.

5. As well as placing an emphasis on segregation (potentially guided) from general traffic where possible, the rapid transit routes will also be served by new, high profile articulated vehicles offering a ride quality and experience similar to a tram, high quality, accessible interchanges and clear information/ marketing, to maximise patronage and mode shift from the private car. Whilst detailed designs are still being finalised a significant proportion of the overall routes will be segregated from general traffic and impact on private land is expected to be limited.

6. Park and ride sites are included at Emerson's Green (to be developer funded) and Stapleton Smallholdings alongside the M32 in Bristol. The rapid transit will also run past a further Park & Ride provision adjacent to Bristol Parkway. The M32 site, illustrated in Figure 2, has been prioritised following consideration of a range of sites in the corridor on the basis of access to the rapid transit route, minimisation of congestion on local roads, sufficient size and potential for landscaping and environmental mitigation. Proposals include the retention of 60% of the allotments currently on the site together with relocation of smallholdings. The proposal will require a new motorway junction on the motorway for which a proposal to relax design standards has been submitted to the Highways Agency following considerable discussion of the proposal and identification of measures to address safety and capacity considerations.



*Figure 2 – Rapid Transit Motorway Access and Park & Ride Proposal*

7. 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 the 'West End' and Harbourside. This will necessitate the removal of general traffic from Baldwin Street between its junctions with Broad Quay and Marsh Street (see Figure 3), and the traffic and diversionary implications of this measure are being carefully assessed and where appropriate additional remedial measures identified to address its impact. 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. These include the current Showcase bus routes and the Greater Bristol Bus Network, existing park and ride sites, rail service enhancements, Cycling City infrastructure and marketing, the Ashton Vale to city centre rapid transit route and the rapid transit and park and ride schemes making up the North Fringe to Hengrove Package itself. 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.

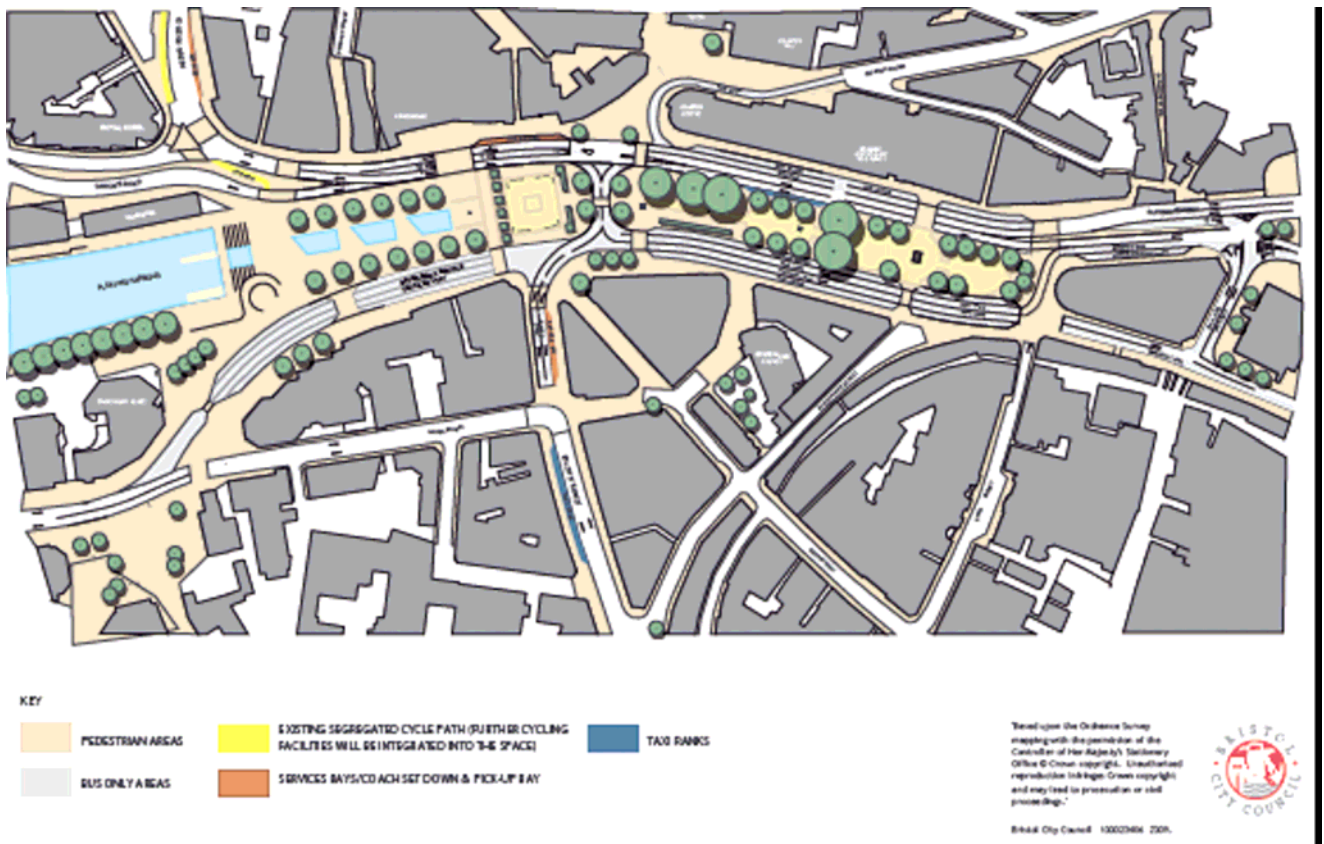


Figure 3 – The Centre – Interchange Proposals

8. 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 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.
  
9. 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.

10. 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.
11. 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.
12. 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.
13. 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 ride quality and experience similar to a tram. 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 and set out in the operating criteria for the new system. In addition to the core service, it is anticipated that services from further afield will also be able to use the rapid transit alignments providing they meet appropriate quality standards.

## Financial Implications

14. The Package has a total of £168 million plus preparatory costs identified in the SW Regional Funding Allocation (RFA). To access this funding schemes have to undergo a major scheme bidding process with the Department of Transport (DfT) comprising three stages: Programme Entry (the stage being sought here), Conditional and Full Approval. Studies are nearing completion to facilitate the submission of a major scheme bid for Programme Entry status to the DfT in March 2010, demonstrating the Package meets DfT appraisal criteria including value for money, risk and deliverability. In addition to the RFA allocation, an additional, local funding contribution needs to be provided towards the Package cost, to be secured largely through contributions from developers. The overall cost of the Package is £191 million (excluding preparatory costs).

Cost (£ mill)	Source	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Total
Preparatory Cost	Local	1.1	3.0	4.2	1.2	0.8				10.3
	RFA (Reimbursement)			(2.0)	(1.2)	(0.8)				(4.0)
Scheme Cost	RFA					38.0	50.0	52.0	28.0	168.0
	Local					4.5	7.1	7.4	4.0	23.0

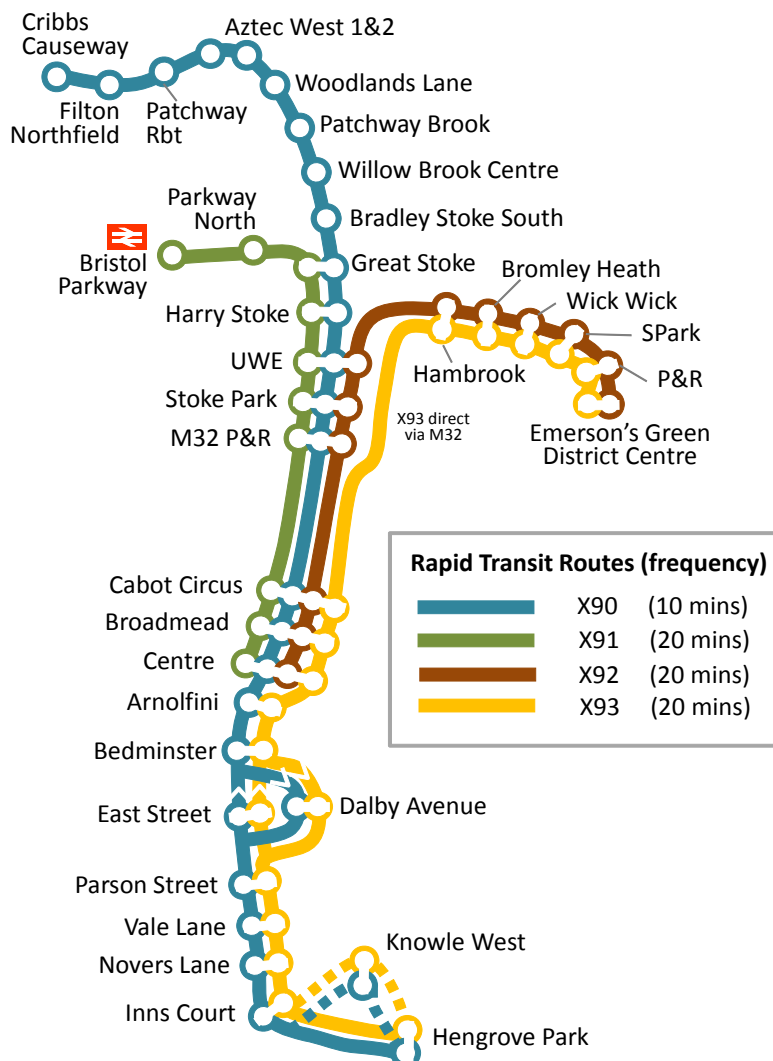
## Consultation

15. Engagement with key stakeholders has been undertaken during the public consultation period and continues. Stakeholders include community groups in South Bristol, Neighbourhood Planning Network, statutory and environmental groups, GWE Business West, local travel forums, public transport operators, Network Rail and the Highways Agency, and engagement with Sustrans is underway. Overall most groups have been supportive of the Package proposals although concerns over some environmental impacts have been registered.
16. In addition to stakeholder engagement widespread public consultation, branded under the Travel+ marketing logo was undertaken in December 2009 including the circulation of 70,000 postcards to residents along the routes in the Package, a range of public exhibitions, leaflets and questionnaires, public meetings and media and web-based material. In particular, residents have been asked for their views on rapid transit route options in the North Fringe, Bromley Heath/Downend and South Bristol.
17. The Package consultation period ran from 24 November until 8 January 2010 and assessment of responses received is still underway, fuller reports to be provided to the South Gloucestershire Council and Bristol City Council Cabinet meetings on 1 March 2010 and 25 March 2010 respectively. However, initial comments received include the following:
  - There is general support for significant improvements in the quality, affordability and reliability of the public transport network.
  - Emerging results from public consultation during December indicated that there was strong support for the route to the North Fringe to be extended beyond Aztec West to Cribbs Causeway. In response to this, some feasibility work was carried out and concluded that the route adds benefits to the package and the cost of this additional section can be incorporated into the funding available.
  - Significant concern has been expressed over the location and environmental impact of the M32 park and ride site, impacts on local roads and agricultural land, and consideration is being given to mitigation measures to address these matters as part of the environmental assessment to accompany the bid submission.
  - 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.
  - Proposals to substantially improve public transport interchange in the city centre and implications for car access have provoked both strongly supporting and opposing views in the local media. In addition, support was widespread for improved interchange with existing bus services in other locations, including UWE, Parkway and park and ride sites.

18. There have been a number of briefings of members of both Bristol City and South Gloucestershire Councils. Town and Parish Councils were informed of the consultation and consultation materials were displayed at area forums during the consultation period. Consultation with Bristol City and South Gloucestershire Council officers has included the following teams:

- Public Transport and Park & Ride
- City Transport
- Road Safety, Cycling and Walking
- Urban Design
- Parks and Leisure
- Land and Property
- Legal
- Finance
- Corporate Communications
- Spatial Planning
- Highways, Structures & Contracts
- Integrated Transport Unit
- Major Sites

### Evaluation of the Package



#### *Figure 4 – Proposed Rapid Transit Service Network*

19. The North Fringe to Hengrove rapid transit route envisages a minimum 8-minute frequency service, augmented by services from Parkway and Emerson's Green to provide a core frequency between UWE and the city centre of at least every 5 minutes (see Figure 4). Although patronage forecasts are still being generated initial estimates show the core section of the route between UWE and the city centre to be a particularly strong performer. The rapid transit routes will also fully integrate with the Ashton Vale to city centre and South Bristol Link routes currently being progressed with the DfT, facilitating easy interchange between routes, a wider choice of destinations and consequently greater patronage. Design of the schemes is also incorporating additional cycling infrastructure and taking account of the Cycling City package of schemes, to maximise shift from the private car onto more sustainable modes.
20. Currently designs are being worked up to a level of detail to include in the bid documentation, including proposed bus lanes and priority measures, junction remodelling, traffic management measures and rapid transit stops and interchanges. Alongside this work, environmental studies and economic appraisal are underway to deliver a Benefit-Cost Ratio (BCR) consistent with DfT appraisal criteria (where benefits outweigh costs by at least 2 to 1) and to identify further environmental mitigation measures.
21. Studies to date have been undertaken in close liaison with the DfT through the designation in the sub-regional Multi-Area Agreement of the Package as a national pilot to identify opportunities to accelerate the appraisal process. The work programme supporting the Package is on track to submit a funding bid to the DfT by the end of March 2010.
22. Notwithstanding the pilot status of the Package, it is expected that it will require up to 24 months to progress through the DfT approvals process prior to awarding full funding approval facilitating a construction start in 2013. This time will also be used to undertake further engagement and to achieve the necessary powers to deliver and operate the Package, and to undertake procurement. Operation is scheduled to commence in 2017.

#### **Operation of the Package**

23. Service operation has featured prominently in consultation responses, and officers are liaising with potential operators of the rapid transit services to clarify support and investigating opportunities provided by the 2008 Local Transport Act to maximise affordability for passengers. Opportunities include tendering for service provision as well as statutory partnerships and more formalised operating frameworks for both the rapid transit services and feeder services from further afield. Investigations into operation frameworks will continue following submission of the bid and prior to commencement of construction.

#### **Other options considered**

24. Other technologies have been considered as discussed in paragraph 13 above. A range of route options for the rapid transit elements of the Package have been

considered including alternative locations in the North Fringe, Downend, and Knowle West in South Bristol. In addition, the bidding process includes the need to demonstrate the robustness of the option assessment process and that proposals offer value for money.

## **Recommendation**

That Members:

1. Provide their views and comments on the proposed North Fringe to Hengrove Package major transport scheme bid.
2. Endorse the North Fringe to Hengrove Package major transport scheme bid, and recommend it for consideration by the cabinets of South Gloucestershire and Bristol City Councils on 1 March 2010 and 25 March 2010 respectively.

## **Background Papers**

Greater Bristol Strategic Transportation Study

2006 Joint Local Transport Plan

December 2009 North Fringe to Hengrove Package Technology Review

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