AGENDA ITEM NO 4

West of England Partnership
Joint Transport Executive Members Meeting
22 January 2009

Transport Major Scheme Bid: Rapid Transit (RT) – Ashton Vale to Temple Meads

Purpose of Report

1. To inform Executive Members of the major scheme submission for the RT route from Ashton Vale to Temple Meads and seek their views, prior to consideration of the bid by the cabinets of Bristol City Council and North Somerset Council on 2 February 2009 and 17 February 2009 respectively.

Background

2. The Greater Bristol Strategic Transport Study (GBSTS) set out a strategy for meeting the transport needs of the West of England sub-region up to 2031. The underlying principles included reducing reliance on the private car and meeting future growth needs sustainably.

3. The GBSTS strategy included four rapid transit corridors, three of which are included in the SW Regional Funding Allocation (RFA) and the Joint Local Transport Plan, as part of an integrated package of measures to meet the sub-region's transport needs. £71million is currently identified in the RFA for the three routes. This bid represents the first phase of the first route.

4. To acquire this funding schemes have to go through the major scheme bidding process which comprises 3 stages: programme entry (the stage being sought here), conditional and full approval. To achieve programme entry schemes need to demonstrate that they meet DfT appraisal criteria including value for money, risk and deliverability.

5. The vision for the RT system is a network of rapid, reliable services with an emphasis on segregation from traffic, new vehicles offering a ride quality and experience similar to a tram, high quality, accessible interchanges and clear information/marketing. The RT routes are complementary to the Greater Bristol Bus Network corridors and integral to providing the West of England with a comprehensive public transport network. The routes also include significant improvements to parallel walking and cycling infrastructure.

6. Regarding vehicle technology, in 2006 GBSTS concluded that:

   "further work is required to identify the type of vehicle used to operate the service but modern, low-floor, articulated buses are likely to be the most appropriate, flexible and cost effective vehicles to satisfy the requirements of the service."

7. A review of technologies was first undertaken in 2007 looking at a wide range of options from monorail and light rail to conventional buses, as well as considering rubber-typed RT technologies. A subsequent study was commissioned in 2008 to specifically consider opportunities provided by newer RT technologies, focusing on

Tram-train, `Ultra Light Rail' and rubber-tyred RT.

8. The report concluded that the rubber-tyred mode, particularly if all elements of the system were delivered (segregation, fast/frequent services, direct access to destinations), met the scheme objectives, would meet DfT appraisal criteria and could be delivered within the regional funding allocation. The risks associated with delivering rubber-tyred rapid transit were considered to be *"considerably lower than the other two technologies".* The report does not discount these technologies for possible future routes, but considers them unlikely to be deliverable within the regional funding programme for the Ashton Vale – Temple Meads route.

9. The governance arrangements for the project include a Project Board comprising heads *of* transport from the 4 councils, SWRDA and the Highways Agency. The Senior Responsible Owner is Colin Knight (BCC) and the Project Manager is Sharon Daly of Steer Davies Gleave. The board reports to the Joint Transport Executive meeting and Joint Scrutiny Committee.

10. RT will have a key future role in meeting the objectives of the Joint Local Transport Plan, providing an effective transport system offering a real alternative to the car, promoting public transport, reducing congestion, supporting the sub-region's economy and improving quality of life. RT will also improve accessibility to services, jobs and facilities. As well as encouraging use of public transport, the parallel provision of walking and cycling facilities will encourage healthier lifestyles, and tackling traffic congestion will improve air quality.

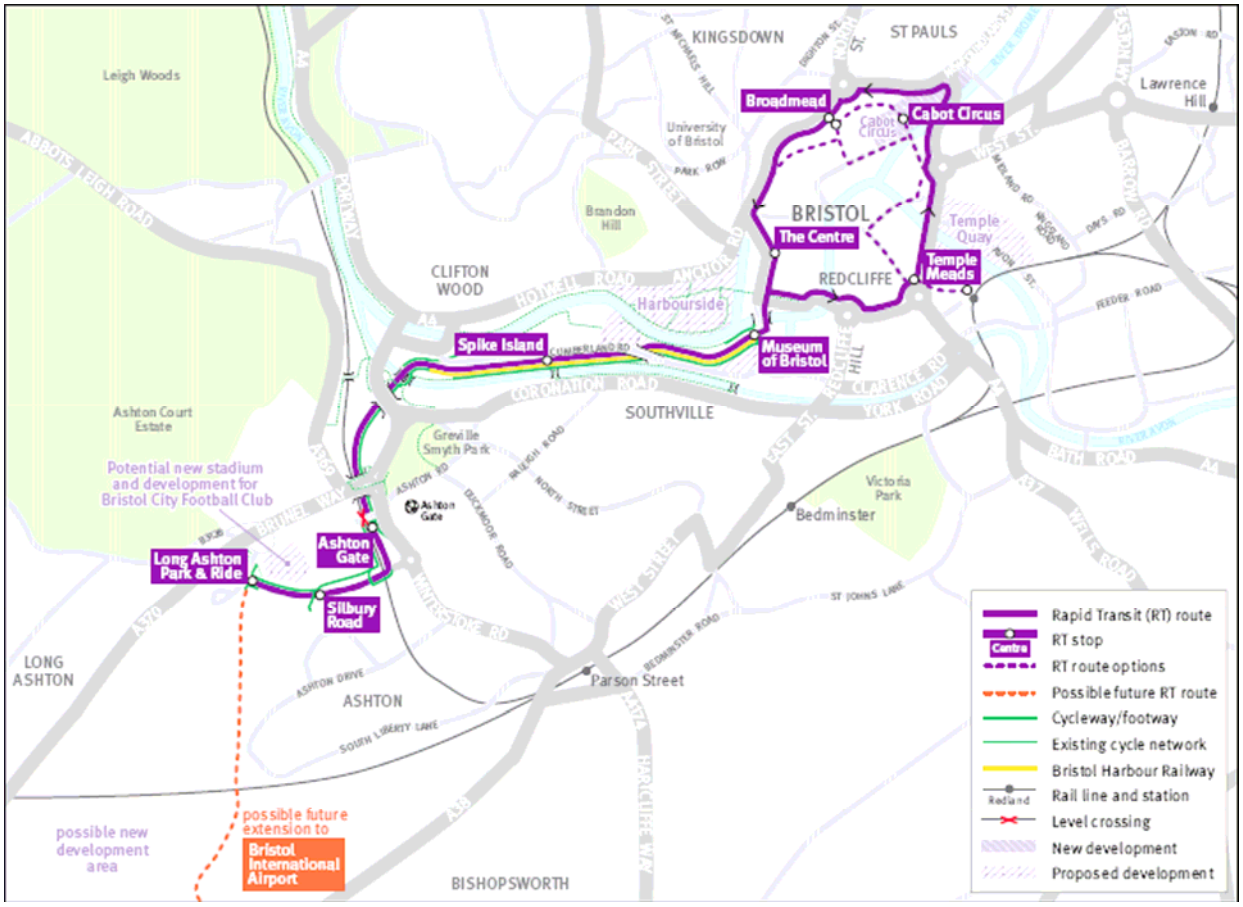
The Proposal

11. The route alignment is shown in Figure 1. Features to note include:

- A route segregated from general traffic, to minimize journey time and maximise reliability, with complementary parallel walking and cycling infrastructure, from the Long Ashton park and ride site to the city centre;
- Links with the potential development of a new stadium for Bristol City Football Club and other developments along the route;
- A bridge over Portbury freight railway (this replaced an earlier proposed level crossing following consultation with Network Rail) and proposed stop adjacent to the railway to facilitate future integration with Portishead passenger rail services when these are implemented;
- An improve link over the New Cut for pedestrians and cyclists parallel to the Ashton Avenue Swing Bridge, which will be refurbished for RT;
- Shared use of Harbourside Railway formation, retaining steam railway services on Sundays, and retention of the `Chocolate Path' pedestrian and cycle facility;
- Shuttle working under Cumberland Road Bridge to accommodate the parallel pedestrian and cyclepath link to the 'Chocolate Path'; this is being modelled to demonstrate no adverse impact on service reliability;
- Prince Street Bridge: there will either need to be a new bridge or the existing bridge rebuilt and/or widened to accommodate RT;
- City centre route options – an anti-clockwise loop around city centre has emerged as the preferred option following the consultation process. Features

include additional bus priority measures along Temple Way, Haymarket and Rupert Street to create a dedicated priority route to ensure fast, reliable running around the city centre. The measures are also designed to benefit park and ride and other bus services;

Figure 1 – Route Illustration



- New interchange at Temple Meads: this is proposed alongside Temple Way and will be located on land released by the conversion of Temple Circus roundabout to a signalised crossroads. The interchange, which will also be used by park and ride and other service vehicles, is proposed to be connected to the station via a high quality underpass and walkway through 'Plot 6' by Temple Meads station, and a route on The Friary is also reserved for future routes in the network;
- New walking and cycling infrastructure between Long Ashton and the CREATE Centre linking into the Connect 2 cycle project forms a key part of the scheme;
- Significant sections of the route would operate in 'guided' mode between Long Ashton and the CREATE Centre;
- Stop locations are proposed at Long Ashton P&R, Silbury Road, Ashton Gate, Spike Island, Museum of Bristol, The Grove, Temple Meads, Cabot Circus, Broadmead and The Centre. An additional stop is being assessed at Create following consultation;
- The potential for an extension to serve a possible new community in the Ashton Vale area and the Airport should be noted.

12. The estimated cost of the route is £47.3M with contingencies. A costed risk log is being maintained and reappraised as further design work and investigations are progressed, and a full Quantified Risk Assessment has been undertaken. Of this, a minimum of 10% has to be funded locally. Originally this was envisaged to be entirely achievable through S106 contributions, but the economic downturn may impact on the timing of some developments. It may be appropriate for authorities to underwrite any possible shortfall though the JLTP integrated transport allocation.

13. The remaining 90% will be obtained through the DfT's major scheme bidding process. The estimated BCR for the route meets DfT appraisal criteria, and the methodology and modelling has been subject to DfT scrutiny throughout the process.

14. It should be noted that the specification and scope of the project has changed since the original RFA funding proposal of £71M was made. The increased costs and reasons for them have been reported to the Regional Assembly and their support is being sought for the proposed bid as set out in this report. Furthermore, an increased level of RFA funding to support the RT routes from Hengrove to the North Fringe and city centre to Emersons Green is being sought through 'RFA2.'

15. It is proposed that a core RT service of every 5 minutes (peak) will operate between Ashton Vale and the city centre. The likely approach to specify the service will be a form of quality partnership either voluntary or statutory, taking advantage of powers under the new Local Transport Act to specify maximum fares and frequencies. Alternatively, services may be tendered as per the existing P&R service.

16. In addition to the core service, it is anticipated that services from North Somerset (such as the X1 from Weston-super-Mare) will use the RT route into Bristol to avoid delays entering the city. These services will also be subject to strict quality standards covering vehicle specification. This demonstrates a major advantage of rubber-tyred technology in that the benefits of the route can be experienced by a greater number of passengers from further afield, further reducing car dependency.

17. The specific type of vehicle has yet to be determined. The recent visit of the 'streetcar' (para 30) was a useful test of public reaction, which was largely positive although comments were also received on aspects of the vehicle that could be improved. One of the vehicle's key features is a diesel hybrid power source, which provides a smoother and quieter ride than conventional buses. Cambridgeshire County Council's guided busway, currently under construction, is proposed to use vehicles powered by bio-diesel derived from food waste and it is considered that the vehicles in Bristol should seek to use similar innovative technology. Although concern has been expressed in the media about the accident record of articulated buses, data supporting this concern has been shown to be inconsistent, and more comparative assessments from experience in London show no significant difference in the safety performance of articulated vehicles.

18. The modelling undertaken in the development of the route indicates that services will be commercially viable. These services will also replace the existing 903 Long Ashton Park and Ride service, currently subsidised by Bristol City Council. Revenue costs falling upon the Councils are envisaged to be limited to maintenance costs for track and stop infrastructure, although means of defraying these costs through the Quality Partnerships are being explored.

19. The powers to construct the route are likely to be obtained through a Transport and

Works Act Order. This provides both powers to acquire land and planning permission to construct and operate. Although a significant process requiring a public inquiry, it effectively delivers necessary powers in one procedure, and may also provide greater opportunities for specification of operation if necessary.

20. The segregated section of the route is currently envisaged to be delivered through Bristol City Council acting as lead authority, prior to the implementation of a proposed joint delivery vehicle for the sub-region. The city centre section will delivered through the city council's term contractors.

21. Modelling of the scheme options to date has demonstrated a robust Benefit to Cost Ratio (BCR), satisfying DfT appraisal criteria. Modelling of the city centre loop option is still being completed at the time of writing, but officers are confident that the BCR will remain robust and a verbal update can be provided at the meeting. Subject to approval, it is proposed to submit the bid in February/March 2009. It is expected that the DfT may take up to 24 months to consider the bid, together with the use of further `Gateway Review' appraisal processes to assist in clarifying supporting information to robustly demonstrate the value for money and effectiveness of the scheme to the DfT. This time will also be used to further consult on the scheme and achieve the necessary powers to implement. It is envisaged that full approval will be granted by Summer 2011, with construction commencing shortly afterwards and the route opening in 2013.

Consultation

Internal

22. Consultation with Bristol City and North Somerset Council officers has included the following teams:

- Public Transport
- Traffic Management
- Planning & Urban Design
- Parking Services
- Parks and Leisure
- City Docks (including Bristol Living Rivers Project)
- Industrial Museum
- Land and Property
- Legal
- Finance
- Corporate Communications

There have been a number of briefings of members of both North Somerset and Bristol City Councils along with affected parish councils. Barrow Gurney and Dundry Parish Councils have written in support of the scheme.

External

23. Public consultation on the proposals was undertaken during October/November 2008. 36,000 invitation flyers were sent out to households within all wards along the proposed corridor. A series of exhibitions was held and attended by approximately 900 people. Additional meetings have also been held with interested groups in response to the exhibitions.

24. In total, 112 paper questionnaires and 169 on-line responses were received. Of these 65% were in favour of the scheme, 20% against with 15% undecided. The most common concern is that the proposal is not rail based. However, when asked to choose and rank their top 5 features of the proposed system, the following were selected:

1. Separate route and priority measures

2. Integration with other modes

3. Integrated with new and existing developments

4. Walking and cycling

5. Environmentally friendly vehicles.

25. Business Community: GWE Business West, Broadmead Board and Bristol Alliance are all supportive. GWE Business West, representing over 2,300 businesses in the West of England, have stated that "improving transport systems across the west of England is the top priority for business." The Broadmead Board and Alliance are keen to see significant traffic management in the city centre to remove general traffic from the heart of the city.

26. Developers: A number of developers have been contacted and are supportive in principle. Their issues tend to relate to specific areas. SWRDA are a keen advocate of the scheme.

27. Transport Groups: Transport operators (including First Group, Wessex Connect as well as Network Rail) are either supportive or have yet to confirm their position. Sustrans have provided detailed comments which have been incorporated into the scheme where possible, including improved links with the Connect2 project, better segregation between the route and the adjacent proposed cycle/walkway and better links to existing cycle routes. Groups promoting rail-based solutions are generally opposed to the scheme on the basis that the existing rail sections should either be converted to tramways or included as part of the suburban rail network.

28. Environment Groups: The following groups have been consulted:

- Avon Wildlife Trust
- Environment Agency
- Natural England
- BRERC

No major issues have been highlighted. There are specific concerns over impact on sensitive sites and protected species, urban realm, flood risk and construction impact, with a need to identify appropriate remedial measures. English Heritage have expressed concerns about potential impacts on Prince Street Bridge and the area around the Cenotaph.

29. Community Interest Groups: Redcliffe Futures support the principle of RT provided it follows a route via Redcliffe Way. They would prefer a rail-based mode. The Friends of Avon New Cut have expressed concerns about the impact on Cumberland Road. Other groups consulted include the Harbourside Forum and Redcliffe Parade Environmental Association. Two meetings have been held with the Greater Bedminster Partnership where a wide variety of views were expressed, including aspirations for a rail-based alternative, concern over impact on the New Cut, Cumberland Road and the extent of segregation from general traffic, and the impact of possible adjacent development. The Ashton Vale Heritage Group is concerned about the impact on the fields to the north of Ashton Vale including wildlife and biodiversity, open space and green belt issues and increased flood risk.

30. On 3 December 2008 a Wrights 'Streetcar' vehicle, destined for an RT system in Las Vegas, visited Bristol. A number of stakeholders and the media were invited to view and ride on the vehicle. The vehicle is a type that could operate the service and overall reaction was favourable.

Other options considered

31. Other technologies have been considered as discussed in paragraphs 6 - 8.

32. Other route options have included on-road routes through the Cumberland Basin and along Hotwell Road. The best of these options will be included as the 'Low Cost Alternative' in the bid. However all of these options demonstrate a poorer business case due to either significant dis-benefits to traffic or lower benefits to RT users (depending on the configuration of bus lanes necessary for this option).

33. Two options for the city centre have been considered - a 2 way route via the Centre, Broadmead and Cabot Circus to Temple Meads and the anti-clockwise loop, the latter selected following consultation responses.

Recommendation

That Executive Members give their views on the major scheme submission for the RT route between Ashton Vale and Temple Meads, as described in this report, prior to consideration of the bid by the cabinets of Bristol City Council and North Somerset Council on 2 February 2009 and 17 February 2009 respectively.

Background Papers:

Greater Bristol Strategic Transportation Study

2006 Joint Local Transport Plan

September 2008 West of England Rapid Transit Technology Review

Officer presenting report: Colin Knight, Bristol City Council