

# WEST YORKSHIRE PASSENGER TRANSPORT AUTHORITY

DATE: 17 NOVEMBER 2006

AGENDA ITEM NO: 21

**SUBJECT: LEEDS BUS RAPID TRANSIT – INITIAL FUNDING SUBMISSION**

## Report of the Passenger Transport Executive

### 1. MATTER FOR CONSIDERATION

- 1.1. The submission of an Initial Business Case for the Leeds Supertram bus replacement scheme.

### 2. INFORMATION

#### Background

- 2.1. The Secretary of State for Transport cancelled the Leeds Supertram scheme in November 2005, stating that a bus-based alternative would be supported. The press statement issued by the Department for Transport included a statement by the Secretary of State for Transport that:

*“My Department will continue to work constructively with West Yorkshire PTE, and I am very keen to pursue this top of the range rapid bus scheme with them.”*

The letter informing Metro and Leeds City Council that the Supertram Scheme had been cancelled also contained a statement that:

*‘the money will be there for the right scheme’.*

- 2.2. Work has therefore been undertaken in developing a bus-based replacement scheme, which will form a future bid for funding to the DfT.
- 2.3. The scheme development work has been overseen by the Authority's Development and Environment Working Group and also reported to Leeds City Council.
- 2.4. It is also important to consider areas of Leeds (and beyond) not covered by the current Supertram replacement scheme. It is proposed to develop, in line with the recently published Leeds City Region Transport Vision, further bus-based proposals for West Leeds, including links to universities, St James' Hospital and the Aire Valley Employment Area.

## Funding Process

- 2.5. Funding for the bus replacement scheme will come from the Department for Transport (major schemes) and local contributions (including Metro / Leeds City Council as well as developer and other contributions).
- 2.6. The scheme will need to be formally considered by the Regional Transport Board, who now provide advice (through the Regional co-ordination Board) to Government on regional priorities. The Supertram bus replacement scheme was omitted from the original priority list although referred to in the text submitted from the Regional Transport Board. The Supertram bus replacement scheme was acknowledged in the DfT's response to initial Regional Funding Advice as an emerging proposal.
- 2.7. Metro asked in February 2006 when emerging schemes, such as the Supertram bus replacement, would be considered. Unfortunately, the process and timescales for this consideration are still not yet clear. The Regional Transport Board will meet again in January 2007.
- 2.8. DfT have agreed to receive an Initial Business Case submission from Metro/Leeds City Council in advance of formal consideration by the Regional Transport Board.
- 2.9. This Initial Business Case, developed using existing data and transport models, will be used to seek more formal feedback from DfT and to initiate the process of formal consideration by the Regional Transport Board.
- 2.10. The full bid for funding to DfT for the Supertram replacement scheme will need to comply with current DfT guidance. This guidance has changed significantly since the Supertram business case was developed. Further work during 2007, including transport model development, data collection will be required to meet current guidance. There is also a need for public and stakeholder consultation.

## Scheme Description - Route Proposals

- 2.11. The route proposals are based upon the Supertram scheme, with variations to the east to take account of the East and South East Leeds (EASEL) housing and mixed-use regeneration area and initial consideration of high quality public transport access to the Aire Valley Employment Area (Leeds).
- 2.12. The Initial Business Case will set out a 'Core Route Option' for each leg, which will be refined through the further scheme business case development described above. The further scheme development will also review, and optimise, the provision of park and ride sites.

- 2.13. The proposed core option for the Headingley corridor is as the Supertram route to Bodington, including Arndale Centre/Headingley segregated route, with an extension to Holt Park being subject to the further appraisal.
- 2.14. The proposed core route option for the south corridor adopts the Supertram route to Stourton, but uses Low Road rather than land adjacent to railway. The railway route was a central component of the Supertram scheme, since it was the location for the tram depot. Whilst a depot will be required for the Supertram bus replacement scheme vehicles, there are a wider range of options for a bus based system.
- 2.15. The proposed core route option for the east corridor is a revision to the Supertram route to service the EASEL regeneration area via St James' Hospital and South Parkway to Seacroft District Centre. A circular routeing in the EASEL area is being appraised.
- 2.16. The proposed initial route to the Aire Valley Employment Area would utilise East Leeds Link road in short term, with a Park and Ride site at Junction 45 of the M1. A subsequent addition, into the emerging employment sites (North of the Motorway and West of East Leeds Link road), would be considered as development takes place.
- 2.17. City Centre routes would be largely based on the Supertram routes, and are provided for in the proposed Eastgate development.

#### Scheme Description – Mode Options

- 2.18. In addition to the route options, there are also choices about the vehicle type. Choice of vehicle plays a key role in terms of defining the overall infrastructure/cost requirements as well as the potential attractiveness of the scheme to public transport users and procurement method.
- 2.19. It is proposed, to prepare the Initial Business Case on the basis of three potential bus-based options. This is in line with DfT major scheme guidance, which requires alternatives to be appraised, and the Affordable Mass Transit Guidance published last year by the Commission for Integrated Transport. The final choice will be recommended in the light of the full appraisal and affordability.
- 2.20. The highest quality is likely to be a very high quality electrically powered bus with the visual appearance of a tram (bus-tram). The advantages of this option are high performance, low noise, air quality benefits, reduced maintenance costs, and public acceptability for using environmentally sensitive sections of route. An electrically powered mode with overhead wires would have the benefits of a sense of 'permanence' associated with fixed track systems, although visual impacts would feature during the process to acquire powers. It would also reduce climate change emissions and avoid future reliance on fossil fuels.

- 2.21. The vehicle would operate in 'electric mode' for most sections of the network other than when negotiating around highway obstacles, or when diverted from route. Such a system would avoid the need for substantial costs to be incurred in relocating utilities. Overhead power lines would be introduced for a significant proportion of the network. Indicative costs for this vehicle type are around £700,000 each. Discussions will be held with potential UK and other manufacturers of right-hand drive buses
- 2.22. An alternative vehicle would be a hybrid diesel-electric bus, which would operate in 'electric mode' for environmentally sensitive sections of route. Current battery capacity would not allow for 100% operation in 'electric mode' and diesel operation would also be required. Indicative costs for this vehicle type are around £550,000 each.
- 2.23. A further option would be a diesel powered bus. Current versions of the ftr bus (as an example) are Euro-3 compliant. Euro-4 versions are in development. Current costs for this vehicle type are in the order of £325,000 plus.

#### Initial Appraisal

- 2.24. Work to date indicates that the options being considered would have a cost (2006 prices, including 44% Optimism Bias as well as indicative figures for contingencies, promoter and land costs) of between £200 million and £300 million. The electric bus-tram option would cost, in capital, approximately £35 million more than the diesel powered bus option – the additional costs being on vehicles, overhead wiring and sub-stations and depot equipment. The appraisal will include the lifetime costs (operational and capital expenditure) of each option.
- 2.25. Initial appraisal work indicates the following key scheme appraisal performance indicators for the scheme:
- Present Value Costs                      c£350 million
  - Present Value Benefits                    c£1,000 million
  - Net Present Value                         c£650m
  - Benefit : Cost Ratio                        over 2.5:1 (ie well above the DfT threshold for most schemes to proceed )
- 2.26. The Initial Business Case will also include the Supertram type option as comparator. A tram option would cost around £550-600m, with a Benefit : Cost ratio of around 2.5:1.

### Other Considerations, Including Risks

- 2.27. The appraisal will cover whole-life costs, patronage, revenues, de-congestion and safety benefits, the whole-life costs of each option and other impacts (such as environmental and economic impacts). This work will also include consideration of the potential impact of future fuel price rises and the benefits of avoiding reliance on fossil fuels.
- 2.28. It will also be necessary to develop further approaches to powers, procurement and deliverability of each of the options. These may be key factors since each of the options will carry risk around the deliverability and certainty of benefits to passengers over the life of the scheme.
- 2.29. As the process moves forward, a register of project risks will be developed and updated on a regular basis. This is to ensure that there is a clear ongoing understanding of the issues such as the control of potential cost escalation for certain aspects of the scheme proposals.
- 2.30. Key current risks relate to the availability of funding through Regional Funding Allocations, the profile of funding required and available funding over time, the risks of acquiring powers, and risks of such major investment in a de-regulated bus environment. There are likely to be greater risks of powers and public acceptability with the diesel powered mode options.

### Affordability

- 2.31. The DfT expect the scheme to be funded from advised Regional Funding Allocations and that there should be a local funding contribution. Current (consultation) guidance from the DfT states that a local contribution of 10% will be required for transport schemes of this nature (the equivalent figure for light rail projects is 25%).
- 2.32. The current published headroom (unallocated funding) in Regional Funding Allocation is £285 million (outturn) for the Yorkshire and Humber region for the period to 2015/16. It is not clear how consistently local contributions and optimism bias have been treated in the scheme costs considered by the Regional Transport Board, and what impact these and slippage / cost escalations may have on future headroom.
- 2.33. The challenge is to secure commitment to implement a very high quality system (which formed the basis for the Secretary of State's decision to cancel Leeds Supertram) through current or increased Regional Funding Allocations and / or DfT recognition of the special circumstances arising from the cancellation of Leeds Supertram and Minister's statements.
- 2.34. It would be helpful to seek ways of maximising local contributions, for example developer contributions (which are the subject of a current national review), as well as seeking a phased approach to high quality

public transport access to the Aire Valley through a conventional bus service, with Park and Ride provision, as an interim measure. Further work will be required to optimise phasing with development and trip generation within the Aire Valley.

### Next Steps

2.35. Following submission of the Initial Business Case document, the indicative timescales to implementation, subject to confirmation with the DfT, are set out below:

- Early 2007 DfT feedback on Initial Business Case submission, work towards inclusion Regional Funding Advice .
- Through 2007 Data collection (Spring), development of appraisal tools, public consultation
- Late 2007 Submission of Full Business Case, confirmation of prioritisation by Regional Transport Board
- Early 2008 Subject to DfT approval submit Transport and Works Act
- Mid-Late 2008 Transport and Works Act Inquiry
- Mid – Late 2009 Outcome of Inquiry
- 2010 Appoint contractors, Start construction
- 2011-12 Phased scheme completion

2.36. To obtain funding within the above timescale of activity, there is a 4-stage process that will be followed by Department for Transport, as follows:

- Initial Business Case approval Early 2007
- Programme Entry Early 2008, following submission and review of Full Business Case
- Conditional Approval Late 2009, following Inquiry outcome

**3. FINANCIAL AND LEGAL IMPLICATIONS**

3.1 The costs of the further development of the scheme would be met from the Local Transport Plan and will be reported to the Authority as part of the budget process for 2007/08.

**4. STAFFING IMPLICATIONS**

4.1 The further development work will be resourced through the joint working with Leeds City Council.

**5. EQUAL OPPORTUNITY IMPLICATIONS**

5.1 The development of the bus-based alternative will take account of equal opportunity considerations.

**6. RECOMMENDATIONS**

6.1 That the approach set out in this report is endorsed.

6.2 That the Authority approve the submission of the Initial Business Case to the Department for Transport and Regional Transport Board.

6.3 That the Regional Transport Board be requested to give the Supertram bus replacement scheme urgent consideration for inclusion within Regional Advice.

6.4 That progress be reported to the Authority and to Leeds City Council.

**Director General  
West Yorkshire Passenger Transport Executive**