

EDINBURGH TRAMS – NOTE ON APPRAISAL AND FBC ISSUES

Purpose

1. To provide forewarning of issues surrounding the Business Case and Appraisal of Edinburgh Trams.

Priority

2. Medium High – For information and discussion.

Background

3. The Edinburgh Tram Business case is due early November 2006. There is a meeting of the Tram Board on Thursday 19th October where the Business case will be presented. A group of consultants, termed the JRC, consisting of SDG and Buchanan are responsible for producing this.

4. A first pass was produced on 7th September that showed a very weak economic case for the Tram. Further work was undertaken to refine this case resulting in a more healthy picture as of 29th September and refined again at 16th October. A comparison of these results is shown in Annex A.

5. It will be noted that there are extremely significant differences between the initial and the later versions (which have small refinements and corrections) and work is ongoing to examine the reliability of the current position. There are two streams to this – the without Tram model and the with Tram model. The important details are

6. The without tram model has been revised as follows:

- 6.1 Planning growth to 2031 brought forward to 2021
- 6.2 Incorporation of new without tram bus service patterns
- 6.3 Priority to cater for increased buses and to maintain bus journey time and reliability introduced into model.

7. As the without tram model, in theory, is the Do-Minimum (the basis for comparison), 6.2 and 6.3 have resulted in the notion of a pure Do-Minimum being rejected. The without-tram model should now be viewed as a “reference case”. This has a severe implication in that it is contrary to STAG guidance – See Appendix B. It is worth noting the definition of a Do-Minimum in the Green book and in WebTAG (also detailed in Appendix B). There are also concerns over the 6.1 measure.

8. The with tram model has been adjusted as follows:

- 8.1 Removal of some need for bus/tram interchange
- 8.2 Optimised with-Tram highway network
- 8.3 Higher proportion of PT passengers on employers business applied to journeys from airport.
- 8.4 Adoption of light rail values of time

9. The figures used in 8.3 (44%) have already been amended following discussion. This was one of the changes to the October 16th presentation. 8.4 is currently being investigated.

Progress 11th October

10. Bill Reeve and Andy Park met with the JRC and officials from TIE on 11 October to attempt to resolve the issues detailed above – primarily the Do-minimum or lack thereof. A strong suggestion was made that the appropriate way forward was to construct a Do-Minimum in line with guidance and compare Do-Something and Reference case against this.

11. BR and AP were informed that the nature of the transport model, constructed by the JRC, meant that the JRC are now of the view that it was not possible to agree and construct a formal Do-Minimum that would be “sensible”.

Progress 16th October

12. No significant changes have been made, other than that outlined in 9 but both sensitivity results and non-economic criteria appraisal detail was provided. The major points to note are:

13. An explanation of the lack of a true Do-Minimum was provided (Slide 6). It may be viewed that at least one of the points made – “very high degree of simulation in the highway model across the network means that forecasts of highway time impacts are highly sensitive to relatively small network changes” is problematic. Although this statement is made in support of the approach taken, it may be alternatively interpreted as casting doubt on the modelling results more generally, or specifically reinforcing the case for a true Do-Minimum – if small changes in the without tram case can have a large impact then it is surely sensible to compare to a no-change position.

14. A sensitivity on Tram In-vehicle time weighting over bus shows that reducing the TRAM IVT weighting (i.e. showing the tram as less desirable to bus compared with the main appraisal) significantly reduces the user benefits. Two comments are made – “in purely journey time terms the tram does not have any advantage over bus in certain instances” and “if the tram IVT weighting were to be zero, then the BCR would fall significantly below 1.0”. Slide 15. The notion of the assumptions made about Tram IVT are currently being investigated by TEAR.

15. The EALI results reported are not the results of modelling but are, in essence, the assumptions on which the modelling is based.

16. There are moderate negative impacts on Cultural heritage and Major Negative impacts on Landscape, both relating to the alignment through the World Heritage site. Other Environmental impacts are assessed as neutral to minor.

17. There are small safety disbenefits.

18. In terms of accessibility around 2.5 times the number of households benefit than those who disbenefit.

Discussion

19. Edinburgh trams, as the only light rail project in Scotland at present, is distinctly different to “standard” road and rail projects. The model that has been developed by JRC is considerably more detailed, although not more sophisticated, than models such as TMfS.

20. It would appear that the redefinition of the Do-Minimum is a major responsible factor for the change in the economic case. Put simplistically, the tram causes severe highway disbenefits but if these disbenefits are already in place in the (redefined) without tram case, then they do not count against the tram. It may be argued that what is within the new without tram case is appropriate but it should still be compared with a true Do-Minimum – this would be defensible as it would place the tram system in a public transport in Edinburgh context. This approach has been rejected by JRC for technical reasons.

21. A view may be taken that these technical reasons did not seem to be an issue in the first pass. As such, it will be useful for the Transport Planning team within S&I, TEAR to examine the model in detail, not least to obtain a clearer understanding of this technical reasoning.

22. Some of the reasoning given in the October 16th presentation serves, on reflection, to weaken the case as it discusses the sensitivity of the model used to minor changes. This is important in terms of the lack of a true Do-Minimum. There may be potential for an argument to be made that the Without Tram case is defined in such a way to improve the With Tram case. This would, in the circumstances, be a claim that would be very difficult to refute.

Risks

23. The timescale for this work has been very tight. The most basic risk is that the JRC work does not present a true assessment of the Edinburgh tram scheme.

24. There is a political risk if Transport Scotland take the view that the FBC is an unacceptable document.

25. If the document is accepted it is likely to be very difficult to defend, particularly in terms of the Do-Minimum issue – it is in relatively clear contradiction to our own and wider guidance, notwithstanding the discussion above.

Recommendation

26. That the board be aware of the potential issues to be raised.

27. The risks detailed above would be mitigated if a true Do-minimum were constructed and both the current without tram and with tram scenarios appraised against it. Although this might present less favourable economic results, it would be a more transparent analysis of the scheme.

John can you provide briefing for Bill and I for later next week with some background info/evidence on other tram schemes plus anything other relevant info regarding - general background in terms of expected vs actual patronage, BCRs, road & transport user evaluations etc

Bill / Frances

So my suggested request: along the following lines

We have had several discussions of the lack of a pure Do-minimum option in the Business Case, and the difficulties this raises in the context of the STAG guidance. It would be extremely useful to have a short summary of the approach which was taken on other comparable schemes – for instance in Manchester and Dublin. SDG have worked extensively on both Manchester Metrolink and Luas and should be able to provide a comparative defence of the methodology you are using in Edinburgh. I am not thinking of a large amount of work – perhaps a short document of no more than 2 to 3 pages. Without this it will be very hard to sustain the argument that light rail is an exception to the normal Scottish approach. Could you instruct SDG to produce this by the end of the month, please.

Frances Duffy has requested some background info/evidence on how / what approaches were adopted by other tram schemes would be useful