

EDINBURGH TRAM SCHEME - SERVICE AND INTEGRATION ISSUES: IAN BARLEX REPORTS

1. Activities

Since appointment by the Scottish Executive, I have:

- Attended an initial meeting with tie in Edinburgh (Ian Kendall, Stuart McGarrity). Transdev representatives were also present (Andy Wood, Jim Harries). tie indicated their concern at the potential for buses to compete with the tram service if they are not pruned back in key corridors;
- Attended a meeting with Transdev (in Nottingham) (Kevin Bellfield and Andy Wood) to understand their issues in more detail;
- Attended a meeting with Lothian Buses in Edinburgh (Neil Renilson and Bill Campbell) to establish their perspective, also the TEL view;
- Attended the February MRSB meeting in Edinburgh;
- Visited key points on the ground, alone or with John Bygate or Bill Campbell;
- Reviewed a copy of the TEL Business Plan, provided by Neil Renilson.

(ref individual reports, below)

2. *Integration Issues*

I indicated that I would examine three areas of integration between trams and buses:

- Service proposals;
- Fares and ticketing proposals;
- Physical interchange issues.

Service Proposals

The impression I was given at the start of the exercise was that there were serious issues between tie/Transdev and Lothian Buses regarding the future bus network, and its propensity to abstract passengers from the tram. tie's concerns seemed to be on the back of Ian Kendall's view of what happened in Croydon; from Transdev's perspective, although they deny it, there are clearly thoughts ahead to the time when they are to be subject to a degree of revenue incentivisation, as operator of the tram system.

It seems that the two sides are not as far apart as had been suggested; some of the numbers regarding bus withdrawals are clouded by the fact that the X48 Ingliston Park & Ride (8 buses) was omitted from the calculations - these were made on the basis of the August 2005 bus network, and the X48 did not start until September. It will, of course, be withdrawn and directly replaced by the tram.

The key remaining components of the bus/tram proposals and issues are:

- That the majority of buses that travel along Leith Walk (apart from those that then proceed on the bridges alignment rather than Princes Street) are withdrawn in favour of the tram. Bus services are re-aligned at the foot of Leith Walk, and there is effectively a “forced interchange” there to transfer passengers to and from the trams. The parties appear to be in agreement with these proposals - there are minor differences between Transdev’s network suggestions and those of Lothian Buses, but they are not the cause of significant disagreement between them;
- The Airbus (service 100). Transdev contend that this service should be withdrawn upon introduction of the tram. Lothian Buses point to the difference in routeing (the bus travels via Corstorphine and serves a number of stops which are close to hotels). Lothian Buses’ current proposal is to halve the frequency of the service from 7/8 minutes to 15 minutes;
- Service 22. This very popular and heavily used service operates from the Gyle Centre to Ocean Terminal. The level of demand is such that the 22 now has been progressively enhanced to a current peak frequency of 4 minutes. Its route parallels or meets that of the tram at various points, although they diverge elsewhere. Transdev also believe that this service should be withdrawn; Lothian Buses plan to curtail the service from the west at Leith Street and to reduce the frequency.

I have looked closely at both of these services on the ground, and I cannot support the case for their complete withdrawal.

In the case of the Airbus, it is clear that the tram would not provide a service to customers for, for example, the Marriott Hotel, or the Holiday Inn at the Zoo. Certainly through traffic from the Airport to the city should use the tram rather than the bus, but all the anecdotal experience I can gather from my own and others’ experiences suggests that the intermediate stops on the Airbus that lie away from the tram alignment are regularly used, and need to retain a service, albeit a reduced one would be sufficient. It seems to me that TEL will be in a position to promote the tram as the means of travelling through to the city; also that assuming the tram is suitably and prominently sited outside the Airport Terminal (and that the operational proposal that there should always be a tram waiting at the Airport is followed), and perhaps the bus in future is less advantageously situated, then this should be a satisfactory arrangement.

The situation regarding the 22 is clearly a debate between two bus operators, their respective views of the likely travelling habits of residents post tram implementation, and their opinions of what is a reasonable walk to expect people to make to reach a tram stop if the bus is no longer an available option. The route can be examined in sections:

- There is no disagreement between the parties regarding the removal of the northern end of the 22;
- Between the West End and the busway at Saughton, the tram runs to the north of the railway, while the bus is to the south, in some parts well to the

south, and there is only one point at which it is possible to cross the railway to reach a tram stop, namely the road and foot tunnel at Balgreen;

- The tram crosses to operate south of the railway at the eastern end of the busway. Along the busway, the tram and bus operate along the same alignment;
- At the western end of the busway, the tram remains to the south of the railway and continues to Edinburgh Park. The bus turns north into Gyle, crosses the railway, and serves the industry along South Gyle Avenue before terminating at Gyle Centre.

It is clear that for passengers boarding at the stops along the busway in the Broomhouse area, a retained 22 would represent a direct alternative to the tram. However, given the fact that the tram route to the city is so much more direct, quicker, and fares will be the same (see later), I cannot see that the bus will abstract any significant traffic. Given that a transfer of passengers to the tram is expected, it is proposed to reduce the frequency of the bus service.

Over the sections where the bus and tram are on opposite sides of the railway with no available crossing points, I cannot see that they should be regarded as “competing”, and I am inclined to Lothian Buses’ view that it would be unacceptable locally to withdraw the bus.

Even at Balgreen, where there is a railway crossing, I would be nervous about forcing people originating on the south side of the railway to use the tram, which stops on the north side, to the west of the crossing point. To reach the tram stop from the south side will require crossing a busy road twice (the footway is only on the eastern side), and negotiating the foot tunnel, which is dingy and looks poorly lit. While some will prefer the tram option from here, again to obtain time advantage, I am sure that others, particularly the less mobile, will be uneasy about the nature of the walk, and will certainly not want to undertake it after dark.

Having looked at the detail, I believe the principle is a bigger issue - if TEL is to operate as an integrated business managing both buses and trams, and responsible for the operating result of both, then why continue with an arrangement whereby the tram operator is partly remunerated through a revenue risk incentive? It is clear that TEL will be held accountable for the operation and financial result of all of its business to its (primary) shareholder, the City. So it will not be in its interest to bear the cost of any unproductive duplication between buses and trams, and with the legislation permitting changes to bus services at 56 day’ statutory notice, it can act as necessary to optimise the network on a continuing basis.

To continue along the current line with Transdev seems to me to be an invitation for continued difficulty over these issues as the scheme progresses. I believe that a better basis to contract with the operator would be on a gross cost arrangement (he is paid an agreed fee to deliver the service, including his profit margin, with fares passing to TEL). Rather than revenue risk, a more effective means of providing some suitable financial incentivisation to the operator would be around

the delivery of a high quality service (with matching penalties for under-delivery), and particularly around revenue protection and the control of fraudulent and ticket-less travel.

Fares and Ticketing

I am given to understand that there should be no serious issues over fares and ticketing - fares will be set at the same level for bus and tram journeys and there will be complete inter-availability across the network (Airport journeys will retain a premium fare). I have not detected any serious concerns over this area.

Physical Integration

From what I have seen to date, I am much more concerned about this area than either service or fares issues. There are a number of points where physical integration is crucial, and there does not seem to be a common consensus among all parties regarding what is to be done. The key locations are:

- ***Foot of Leith Walk*** - as indicated above, most buses are removed from Leith Walk in favour of the tram, and passengers will be required to transfer to and from buses and trams at the foot of Leith Walk. This is at present a busy and congested crossroads, and there is no straightforward solution to make this change as slick as it needs to be. I understand that the proposal which Transdev and Lothian Buses both support is that a building on the north west side of the junction (currently used as licensed premises) should be demolished to create space for buses to loop via Academy Street and Laurie Street, and for trams to stop in both directions in Constitution Street north of the crossroads. This would provide a relatively quick and convenient interchange.

However it is understood that the City may not be happy about demolishing this building. If this is the case, then it is hard to see how an effective interchange can be provided in the limited space available. This is potentially disastrous. The only other attempt at forced interchange of this nature in the past - to and from the Tyne & Wear Metro at Gateshead and Heworth, also provided sub-optimal interchanges - after deregulation the buses were soon all reinstated as passengers did not want to change mode to complete their journeys. If an effective solution cannot be found, then one can imagine considerable clamour from those who are being forced to leave buses to walk to the tram and vice versa and there will be no space on current alignments for waiting facilities of any quality.

- ***St Andrew's Square*** - Transdev have produced a design for an interchange on the East side of St Andrew's Square close to the bus station which Lothian Buses regard as excellent. However, it is understood that the City's planners want to move this further down the square, producing a sub-optimal arrangement. St Andrew's Square is a sensitive area locally.

- **Princes Street** - The width available in Princes Street is limited. The kerb line on the south side is effectively fixed by the presence of the gardens, and it is understood that the City have indicated they will not move the north kerb line. With George Street pedestrianisation, this means (many) buses and trams will have to share the available space. Detailed designs are still to be finalised
- **Haymarket** - With the Haymarket scheme having a separate timescale of its own and not in any case being settled, it is not easy to envisage at this stage how things will operate here. Key will be how to provide priority for trams in both directions through such a heavy junction; what to provide in the way of interchange facilities between buses and trams; and whether the City will grasp the nettle over the volume of private road traffic here.

It seems to me that the effectiveness of the scheme could easily stand or fall on how the design at these key points is resolved. We shall also have to be careful to observe what interchange penalties SDG propose in the modelling process, and whether we believe they are appropriate in the light of the potential designs at the sites.

Other Operators

We have discussed the fact that the 1985 Transport Act remains in place and as a result other bus operators are free to register such commercial operations as they please. This could encompass an attempt to compete with the tram, or to exploit any weaknesses arising from points above, justified by consumer interests. I raised this at the MRSB in February, and it was agreed that it would be wise to attempt to model some sample scenarios.

I am inclined to agree with Neil Renilson that FirstGroup and Stagecoach would think hard before any competitive incursion against the tram on the grounds that as leading Scottish businesses it would be very insensitive of them and would be very badly received. It probably also helps that Edinburgh does not have the same history of low cost scruffy small operators that have come and gone in the likes of Sheffield and Liverpool. Nevertheless we should not be complacent and the less effectively the integration issues above are addressed, the more of an invitation for somebody to intervene.

FirstGroup have heavy bus movements coming into Edinburgh from West Lothian - at present they run through the city and terminate mostly at Waterloo Place. Clearly if it were possible to persuade the operator to terminate any of these services west of the City to feed on to the trams this would both benefit the tram and reduce the number of buses to be accommodated in the City Centre. Neil Renilson will discuss this with FirstGroup, but does not hold out too many hopes for success at this stage.

TEL Business Plan

Neil Renilson gave me a copy (attached) of the latest (post January Board Meeting) TEL Business Plan - I assume this has been shared with the Executive. Studying it raised a number of issues or concerns in my mind. I have provided an initial summary of these below - I raised several informally with Bill Campbell when I saw him, and he generally accepted them to be valid points. I have not yet got back to Neil, but he did suggest a further discussion before too long once I had completed my initial fact finding process.

- The Business Plan is entirely based on a one-line, Ocean Terminal to Airport tram system. It assumes that the section from Haymarket to Granton will not be part of the initial scheme. Neil seems very clear in his own mind that the Granton line should not be built at present - “we can’t make a profit there on a half hourly bus service” - rather that the route should be protected for the time when developments justify its completion. This does not appear to be entirely consistent with the aspirations of others that the Haymarket line will be built.

Clearly what does get built will depend on the bids/available funding. My own concern would be if the funding situation becomes marginal after bids have been received, i.e. if there is adequate funding for line 1 and Granton would also be possible with some savings on the cost of the main system, thus there was a temptation to build line 1 “cheaply” to ensure Granton gets built too. The last thing Edinburgh needs is a credibility problem with engineering works two years into the scheme to replace the track in key City Centre sections, or something similar. This sort of thing has happened in Croydon, where the construction joint venture tried to save some money on the build. It seems to me Edinburgh should be looking for a high quality sustainable build of Sheffield quality, not the problems of Croydon, or worse still, Midland Metro.

- There is a clear proposal in the Business plan to use “large” (240 pax) rather than “small” (180 pax) trams, and arising from this to reduce the proposed frequency of the tram service from 16 per hour Leith - Haymarket/8 per hour Haymarket - Airport to 12/6 per hour.

The paper argues that there is little discernable difference between a four and a five minute service, and at the Airport the key issue is that timetabling arranges for there always to be a tram waiting outside the terminal, rather than the difference between a 7.5 or ten minute service. Thus passengers will board that tram rather than seek out taxis. The paper also points out that total hourly capacity is the same.

I have several concerns at this proposal:

- The presumption of the impact of frequency on demand seems to be at odds with Lothian Buses own experience with the likes of the 22 bus, where I understand they have seen the benefits of progressive frequency increases from 6 minutes, to 5, to 4. Bill Campbell acknowledged this point;

- The paper does not make it clear if the assumption on the number of trams required makes due allowance for the desire to have one tram always at the airport. This must effectively cost a tram at a 10 minute service level, with a 10 minute layover implied;
 - There appears to be an over-riding concern to reduce operating costs given the anticipated gap (see below). At the same time, it is stated that there is considerable uncertainty over tram (and infrastructure) maintenance costs - for the moment figures provided originally by Transdev have been reduced, but clarity is still sought. This is not helpful, and the ultimate numbers applied will need to recognise that the engineering costs applied to larger trams carry a burden because of the additional high maintenance equipment involved (an extra bogie set);
 - When looking at revenues, the paper assumes the 2005 bus network patronage, plus one-off growth of 14% for additional travel generated by the tram, plus 2% per annum compound growth reflecting historical trends on Lothian Buses, plus 4.1% per annum compound growth to and from the airport, consistent with BAA forecasts. Ignoring for a moment the airport and considering Leith Walk, this must mean growth of around 20% against today's bus traffic. Bill told me that the bus network is running close to capacity at peak times. So if about 40 buses per hour are withdrawn from Leith Walk in the peaks in favour of the tram, carrying say 60 people each on average, then that accounts for 2400 people. A 20% increase on that means that the tram is running at capacity from day 1. To me, this suggests that we should be looking at 16/8 trams per hour with large trams, not small ones. We need to get to the bottom of this.
- Like me, the paper expresses clear nervousness about the interchange issues at Leith, St Andrew's Square and Haymarket. There is further clear nervousness about whether (a) desired tram operating speeds will be achieved and (b) bus operating speeds will not be impaired. A failure to achieve either or both will adversely affect operating costs.
 - The desired 2010 TEL financial outcome is stated as an equivalent result to projected Lothian Buses performance at 2010, i.e. an operating profit of £8 million, dividend to the City (as now) of £2 million, and remaining pre tax profit of £6 million. The current projection sees those numbers at £4m, £2m and £2m respectively, so there is a gap of £4m to be closed. The paper envisages a number of means of achieving that, including assuming extra passengers from developments, reduced services at quiet times, further bus priorities to speed services and cut operating costs, and withdrawal of loss making bus services.

These measures carry various doubts and inconsistencies for me:

- How to carry extra passengers if the network (see above) is already full?

- What is the likelihood of more beneficial help from the Council given its apparent nervousness over car restraint measures generally?
- The local acceptability of reducing somebody's un-remunerative bus service in parts of the City probably not benefiting directly from the tram. The present Lothian network is run entirely commercially, but includes a number of services which are effectively cross-subsidised by the successful ones - a typical situation within the remaining municipal bus companies. Ease of withdrawal is not the message I get regarding what would be acceptable in Edinburgh.
- A separate issue for the Scottish Executive, but the Business Plan states that all current and projected Airport demand is handled by TEL. **tie** believes that Airport traffic growth will exceed BAA's estimates. The assumption in the TEL Business Plan is that if EARL is built, it will only carry such excess traffic growth above BAA's projection, i.e. that it would have no negative impact on TEL airport based passenger traffic. This causes two questions:
 - Can that really be the case?
 - What price EARL if that is the case?

Ian Barlex
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