Follow-up response

Reform of the railways

Submission to the Transport Committee

July 2012
1. **Introduction**

1.1. *pteg* represents the six English Passenger Transport Executives (PTEs) in England which, between them, serve more than eleven million people in Tyne and Wear (‘Nexus’), West Yorkshire (‘Metro’), South Yorkshire, Greater Manchester, Merseyside (‘Merseytravel’) and the West Midlands (‘Centro’). Bristol, Leicester and Nottingham City Councils, Transport for London (TfL) and Strathclyde Partnership for Transport (SPT) are associate members of *pteg*, although this response does not represent their views. The PTEs plan, procure, provide and promote public transport in some of Britain’s largest city regions, with the aim of providing integrated public transport networks accessible to all.

1.2. *pteg* submitted an initial response to this consultation in April 2012. This document provides additional evidence at the request of the Chair of the Transport Select Committee, in respect of the following two areas:

- Net public funding of regional rail networks (within the context of the first question in the original consultation document);
- Level of commuter fares in PTE areas (within the context of the fourth question in the original consultation document).

2. **Net public funding of regional rail networks**

“Regional rail networks do benefit from a significant degree of public funding, but so do intercity networks, and rail services in the South East. What is important to understand is that the allocation of network costs (and hence the resulting level of subsidy) is a construct based on a series of assumptions and principles (some of which are implicitly political). As a result, it can be misleading to infer potential cost savings from current subsidy estimates.” (Quote from our original response, para 2.6)

2.1. The analysis in this section is based on the best evidence available to us. There is a significant lack of data transparency across the rail industry which makes it difficult to cross-reference and verify the figures quoted by different sources. We have made our best efforts to ensure that our analysis is internally consistent.

2.2. The key point to stress in making the points below is that there is a lack of transparency about how funding figures are derived (and the assumptions that lie behind them); and therefore making policy decisions based upon such figures can disadvantage the position of regional rail services in terms of their apparent efficiency and value for money.

**McNulty’s (unexplained) analysis of rail costs**

2.3. The Rail Value for Money study attempted to estimate the net public support implicitly accruing to long distance, regional and London/SE passenger franchises (but excluding capital investment). Given that a large proportion of Network Rail’s costs are funded directly by government rather than through the access charges paid by operators, the results of this exercise depend critically on what proportion of Network Rail’s direct grant is spent on each part of the network. We would argue that some of the assumptions made by McNulty lack a robust rationale and try to show below that more realistic assumptions would shift a greater proportion of public support towards inter-city and London commuter services.
2.4. Excluding capital investment, the total cost of providing passenger rail services was taken by McNulty to be £9.7bn, allocated between different parts of the network as follows:

- £2.8bn – Long distance franchises (LD)
- £3.8bn – London and South East franchises (London SE)
- £3.1bn – Regional franchises

2.5. However, few details are provided on how these figures are arrived at so we have attempted to develop our own bottom-up cost estimates. We began by working out the total operating cost of passenger rail franchises, excluding DfT’s direct grant to Network Rail and profit:

- £2.4bn – Long distance franchises
- £3.1bn – London SE franchises
- £1.4bn – Regional franchises

2.6. In addition to this £6.9bn, Network Rail receives a further £2.8bn through central government’s direct grant. Added together, the two figures correspond to the £9.7bn implicit in McNulty’s analysis.

2.7. The way in which the £2.8bn (or 29% of total industry costs) are allocated between different franchises is critical in estimating how much public funding each group of franchises is actually receiving, both directly (through TOC payments) and indirectly (through DfT’s direct grant to Network Rail).

2.8. One obvious approach is to allocate these costs proportionally to the current level of infrastructure charges levied on TOCs by Network Rail. Based on the information available to us, we estimate that this approach would load 40% of costs (£1.1bn) onto LD franchises, 35% (£1.1bn) onto London SE franchises and 25% (£0.7bn) onto regional franchises. An alternative approach would be to use just fixed charges as a proxy for TOCs’ share of infrastructure costs – this would load £0.9bn onto each group of franchises. Interestingly, the McNulty team appear to have taken neither of these approaches by loading more than half of the unallocated infrastructure costs onto regional operators (£1.4bn), and attributing only £0.4bn to LD franchises.

2.9. Re-allocating these costs as suggested above brings the level of subsidy for long distance and regional franchises much closer together (from a ratio of 1:4.5 to a ratio of 1:2.5) than assumed in the McNulty report. This means, for example, that on the basis of this analysis the level of subsidy per passenger trip would be higher for long distance than for regional franchises.

Table 1. pteg analysis of net public support (excluding capital investment)

<table>
<thead>
<tr>
<th>Franchise groups</th>
<th>Op. costs (£bn)</th>
<th>McNulty implicit allocation of NR fixed costs (£bn)</th>
<th>pteg allocation of NR fixed costs (£bn)</th>
<th>TOC net subsidy (£bn)</th>
<th>Net public support (NPS) (£bn)</th>
<th>NPS per pax (£)</th>
<th>NPS per train-km (£)</th>
<th>NPS per pax-mile (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Distance (LD)</td>
<td>2.4</td>
<td>0.4</td>
<td>1.1</td>
<td>-0.16</td>
<td>-0.16 + 1.1 = 0.94</td>
<td>5.3</td>
<td>6.6</td>
<td>10.4p</td>
</tr>
<tr>
<td>London SE</td>
<td>3.1</td>
<td>0.7</td>
<td>1.0</td>
<td>0</td>
<td>0 + 1.0 = 1.0</td>
<td>1.2</td>
<td>5</td>
<td>6.4p</td>
</tr>
<tr>
<td>Regional</td>
<td>1.4</td>
<td>1.6</td>
<td>0.7</td>
<td>0.82</td>
<td>0.82 + 0.7 = 1.52</td>
<td>6</td>
<td>12</td>
<td>25p</td>
</tr>
</tbody>
</table>
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Funding gap - regional inequalities in Network Rail’s capital investment spend

2.10. The McNulty analysis excludes Network Rail’s substantial capital investment budget, which is funded directly by the DfT. However, investment is heavily skewed towards inter-city routes and London and the SE. Once this expenditure is taken into account then the estimated level of public support per passenger can actually be shown to be greater for inter-city passengers than for those travelling on regional services.

2.11. Over the CP4 period, Network Rail’s capital expenditure will total £8bn (in 2010/11 prices), equating to an average yearly spend of £1.6bn. Of this amount, we estimate less than 15% will directly benefit regional railways (whereas they contribute more than 30% of fixed charges). In contrast, almost half will fund investment in the London and South East network. Adding in these figures almost doubles the subsidy received by London SE passengers and brings the net public cost of LD and regional franchises even closer together.

<table>
<thead>
<tr>
<th>Franchise groups</th>
<th>Net public support (franchise + NRopex + NRcapex) (£bn)</th>
<th>NPS per passenger (£)</th>
<th>NPS per train-km (£)</th>
<th>NPS per pax-mile (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Distance (LD)</td>
<td>-0.16 + 1.1 + 0.56 = 1.5</td>
<td>8.5</td>
<td>10.5</td>
<td>16p</td>
</tr>
<tr>
<td>London SE</td>
<td>0 + 1.0 + 0.8 = 1.8</td>
<td>2.1</td>
<td>8.8</td>
<td>11.5p</td>
</tr>
<tr>
<td>Regional</td>
<td>0.82 + 0.7 + 0.24 = 1.76</td>
<td>7</td>
<td>13.8</td>
<td>29p</td>
</tr>
</tbody>
</table>

2.12. It is easy to lose sight of the fact that the quality of current infrastructure and future investment levels play a key part in the ability of train operating companies (TOCs) to grow demand and generate additional revenue. Higher quality infrastructure can also lead to lower operating costs (and hence lower subsidy requirements) for TOCs. For example, an increase in track speed would reduce the number of trains, drivers and conductors required to operate a given service level.

2.13. In that sense, it is only reasonable to expect that decades of under-investment in regional rail infrastructure will lead to a widening gap in terms of subsidy requirements relative to other parts of the network.

Track access charge bias against local rail services

2.14. The above analysis allocates infrastructure costs in proportion to the track access charges paid by operators to Network Rail. However, we believe there are two strong sources of bias in the current charging framework, which act to overestimate the true infrastructure costs of local rail services.

2.15. Firstly, it assumes fixed costs are uniformly shared between different passenger operators running services across a shared network. We would argue that this tends to shift too much of the cost of providing, operating and maintaining high quality (and hence expensive) sections of track from high speed/heavy weight/lower frequency inter-city services onto low speed/light weight/higher frequency local services. Whereas local services could (and often do) run on much cheaper track, inter-city services would be unable to do the same.
2.16. Secondly, freight trains are only charged a fraction of the track access charges paid by passenger operators even where freight could be deemed as the main user of the infrastructure. The case of the Settle-Carlisle line is paradigmatic: in 2008, freight tonnage north of Hellifield was 6 times greater than passenger tonnage; from 2009, freight tonnage on the line increased ten-fold due to capacity constraints on the West Coast Mainline. As a result there was a need for a step-change in the scale and type of renewal work carried out on the line. But whereas the additional cost would have been reflected in higher fixed charges for local passenger operators, freight operators would have carried on paying only a variable charge at their previous rates.

2.17. In making the latter point we do not argue that freight should pay its full infrastructure costs but that this example illustrates that the subsidy figures are a construct. The effect of ignoring the shared infrastructure costs between passenger and freight services is to overestimate the actual level of public support going towards regional rail in the North and the Midlands while underestimating the value for money achieved from that subsidy (which should include the external benefits from rail freight).

3. Level of commuter fares in PTE areas

“(…) fares in much of the north of England lag so very far behind the rest of the country (…)”
(Theresa Villiers, 20th October 2011, Northern Rail Conference)

“The DfT has persistently given the impression that commuter fares across PTE areas are comparatively lower than London and the South East. It is more complex than that. DfT’s current analysis, based on a small sample of flows, shows a more complex picture than at first meets the eye. For example, there are some commuter rail fares between stations in the South East that are generally much lower than for journeys into central London, and often lower than commuter fares into northern cities – possibly because for these journeys the car remains a feasible alternative. (…)” (Quote from our original response, para 2.23)

3.1. In this part of our response, we try to address some of the commonly held misconceptions about commuter fares outside London and the South East. It is important to stress, as we did in our original submission, that a much more sophisticated debate is required on comparative fare levels.

Commuters in PTE areas are being subsidised by commuters in London and the South East

3.2. There are, in fact, many commuters in the South East which get a better deal than their Northern counterparts. Take the example of an annual season ticket between Banbury and Oxford: at 60p/mile this is a bargain compared to the cost of 82p/mile for a similar distance journey between Stalybridge and Leeds. But even an annual season ticket between Oxford and London turns out to be cheaper at 72p/mile.

3.3. An average PTE rail commute tends to be shorter than in the South East. Hence, average load factors on routes serving a wider rural hinterland look low compared to those routes serving London’s sprawling commuter belt. In reality, many short distance PTE commuters actually pay higher fares per unit of distance travelled because of the historical discount applied to longer distance trips. Compare, for example, an annual season ticket between East Didsbury and Manchester costing £1.40/mile with average figures of 80-90p/mile for a
typical commute into London. So it could be said that shorter distance PTE commuters are actually subsidising longer distance commuters in the South East.

Regional fares are too low

3.4. Discrepancies between different parts of the country are not great – the average fare per passenger kilometre in the Midlands and the North is broadly in line with other areas, particularly when you take into account differences in income, investment levels, competition from other modes and journey length:

- Fare-box revenue on local and regional services across the North is around 20% lower on average, per passenger-mile, than on London and South East services\(^{\text{xiii}}\). In comparison, average wage levels in inner London are three times higher than in PTE areas\(^{\text{ix}}\).
- Investment levels lag behind London and the South East (see earlier ‘funding gap’ section of this response), meaning poorer quality and less frequent services. If this was any other product, consumers would expect to pay less for an inferior service. Take, for example, a journey between Watford and London, which takes around 20 minutes, with 7 peak trains an hour. In contrast, the fastest train between Macclesfield and Manchester, a similar distance apart, takes 25 minutes with the remaining 4 peak trains taking between an extra 5 and 15 minutes. Perhaps surprisingly, a Watford to London annual season ticket only costs an extra £4 per year for what is a substantial difference in service quality.
- Critically, the car is a genuine competitor for journeys in PTE areas, unlike London where commuters have little choice – this necessarily requires lower fare levels in the North if rail is to remain competitive and contribute to reduced congestion and pollution from car use.

Putting up fares in PTE areas is a simple solution to getting more investment

3.5. As set out above, PTE rail fares are actually higher, relative to average wage levels, than in London. And, the higher the fare, the higher the sensitivity of passengers to further increases\(^{\text{iv}}\). This is more so where there are viable alternatives to rail travel such as the private car.

3.6. Our analysis, using standard rail industry models, suggests that even a substantial uniform increase in fares across the North\(^{\text{vi}}\) could generate little more than a 2% increase in revenue at the expense of a 25% fall in demand\(^{\text{xii}}\). And given that a substantial proportion of infrastructure costs are fixed or shared with other types of service there is probably little or no saving to come out of such a policy. Instead, it would often make more sense to maximise revenue from the use of existing infrastructure by increasing service levels and through targeted and cost effective investment than by chipping away at the existing network.

3.7. Analysis by TfGM and WYPTE suggests that a more targeted local approach to fares and investment could generate a larger revenue gain at a lower cost to passengers and the local economy.

\(^{\text{i}}\) Estimated as the sum of passenger revenues, net operating subsidy (or payment) (Source: TAS Rail Industry Monitor) and an estimate of other revenues. Other revenue (£0.6bn according to the McNulty Scoping Study) was allocated proportionally to passenger revenue. This figure excludes profit of around £300m.
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Source: pteg analysis based on Network Rail’s CP4 report

Such costs are roughly allocated on the basis of train-kms

Other obvious examples include Carlisle-Newcastle, Doncaster-Cleethorpes - which is shared with the access route to the port of Immingham - other parts of the network around Hull and Humberside, parts of South/West Yorkshire and several routes in the Midlands

Expressed as equivalent gross tonnes (EMGTPA) as defined by Network Rail

Northern is the only TOC operating services on this route so they would have borne the entire cost of the change in track access charges.

Annual season ticket prices are taken from the National Rail Enquiries website and distances represent the shortest route by road between stations.


Source: HMT estimates of workplace GVA per head by NUTS2 area - 2009 figures

The rail industry’s Passenger Demand Forecasting Handbook (PDFH) recommends the use of an elasticity modifier – yet, this often seems to be ignored when talking about major fare increases.

Purely for illustration purposes, we have assumed a 50% increase in fares.

Source: pteg analysis based on PDFH parameters. Detailed calculations are not provided here given that access to PDFH is restricted to PDFC members. However, these can be provided on request.