# Changes in Concessionary Travel Policy for the Elderly and Disabled

Final Report

*Prepared by MVA for*

The Passenger Transport Executive Group

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# 1 Introduction

## Background

1.1 This report provides a high-level summary of MVA's forecasts of the financial impacts on the English Passenger Transport Executives[1] (PTEs) of the Government's proposed change to the National Minimum Standard for concessionary travel by the elderly and disabled in England. Scheduled to come into force in April 2006, this will require authorities to provide, at a minimum, free bus travel after 9:30 and before 23:00 on weekdays, and at all times at weekends and on public holidays. The current National Minimum Standard is half-fare travel at these times, within authority areas and for bus only. It is not expected that the Government will make any other changes, and any concessions beyond the new Minimum Standard, including child fares and for use on tram and train, will continue to be at the discretion of PTEs and the other concessionary travel authorities.

1.2 The change to the Minimum Standard will increase expenditure by most of the English Passenger Transport Executives on reimbursement of transport operators for provision of concessionary travel. We have produced forecasts of these increases in expenditure. Our forecasts are based on data from the six English PTES on current volumes of concessionary travel, and the associated levels of reimbursement; we are most grateful to our colleagues in the PTEs for provision of this data, and many other inputs into our work. Forecasts inevitably require assumptions of varying importance, some of which are particularly uncertain. Although we consider our results to be reasonably robust, they will continue to be refined as further consideration is given to key assumptions, and more up-to-date or detailed data becomes available.

## Report Structure

1.3 The remainder of this report is structured as follows:

- Section 2 – summary of nature of impacts of the proposed policy change on PTE finances;
- Section 3 – descriptions of the options represented in the forecasts;
- Section 4 – summary of key assumptions implicit in the forecasts;
- Section 5 - forecasts of changes in expenditure under each option;
- Section 6 – implications of the forecasts in the context of potential funding arrangements;
- Section 7 – overview of principal caveats and uncertainties in the forecasts;

[1] Namely Centro (in the West Midlands), Greater Manchester PTE, Merseytravel (in Merseyside), Metro (in West Yorkshire), Nexus (in Tyne and Wear), and South Yorkshire PTE.

- Section 8 - summary of other key results established in the course of the work.

1.4 The forecasts set out in Section 5 are for all the English PTEs, for the four most affected (in which the majority of concessionary passengers currently pay a fare) and for the other two which already provide a largely free scheme. More detailed results for individual PTEs are set out in appendices 1 to 6. These results are based on Version 9 of our forecasting spreadsheet and associated data and assumptions. Appendix 7 discusses the relationship between these most recent forecasts and those produced in late May at the conclusion of Stage 1 of our work for pteg. Appendix 8 summarises the results from a number of sensitivity tests that show the impact of alternative assumptions on our forecasts.

# 2 The Main Impacts of Free Fares

2.1 For the typical PTE currently charging a concessionary fare, the change to free fares will have two main impacts:

- The numbers of concessionary passengers being carried by operators will increase; many of these can be considered to be generated by the scheme, and therefore would not have been carried if full fares had been payable; and
- The fare revenue currently paid by concessionary passengers directly to the operators will cease.

2.2 Authorities are obliged under the 1985 Transport Act to compensate operators so that they are "no better off, and no worse off" as a result of participation in a concessionary travel scheme. Operators are entitled to reimbursement under two headings:

- Revenue foregone, that is compensation for revenue that would have been received if the concessionary scheme was not in place. Operators are not entitled to reimbursement for revenue foregone from "generated" passengers.
- Additional costs, necessarily incurred as a consequence of the scheme (and in particular, potentially, for carrying additional passengers generated by the scheme).

2.3 Consequently, with the abolition of current concessionary fares where currently payable, transport authorities must at least compensate operators for the loss of the direct revenue they currently receive from passengers. In addition, if the change in the concessionary fare from a flat fare to a free fare significantly increases the number of passengers generated by the scheme, as is likely, then the potential for operators to claim for additional costs will also increase.

2.4 Some increases in concessionary travel may also arise from higher levels of passholder take-up, which will have two effects:

- Commercial trips previously made at full fares by eligible individuals who had chosen not to apply for a concessionary pass will become concessionary trips. These cannot be considered to be generated trips (they would clearly occur in the absence of the scheme), and therefore operators are, in principle, entitled to receive compensation for them as revenue foregone;
- Some additional trips will be generated by "new" passholders making more trips since it will now be free.

2.5 Experience in Wales and Scotland was that the introduction of free travel increased passholder take-up significantly. This effect is not likely to be large for the English PTEs since they already have high levels of passholder take-up, and it is unlikely that there will be a national campaign to raise

awareness of the new National Minimum Standard of the sort that took place in Wales.

2.6 The financial impact of the introduction of free fares on buses therefore principally arises from the need to compensate bus operators for lost direct revenue, and potentially for additional costs associated with increases in generated trips. However, in the PTE areas, concessionary fares are also provided on local rail services, and on tram or Metro systems, or ferries, where these exist. The Government's announcement of free off-peak concessionary travel did not extend to these other local public transport modes. The aspiration of the PTEs is to provide the same concessions on these other modes as on bus, but this will increase the additional expenditure required to compensate train and tram operators for loss of revenue.

2.7 Potentially, if free travel is not extended to these other modes, and concessionary fares are retained on them, reimbursement to the tram and train operators might reduce. However, the existence of fare differentials between the modes is likely to lead to transfer of passengers away from tram, Metro or train and onto bus, and might increase the reimbursement requirements of bus operators. In addition, the non-bus operators may be entitled to compensation for loss of revenue if they are discriminated against in this way.

2.8 There are two other areas in which current PTE concessionary schemes may exceed the requirements laid down in the current and likely future National Minimum Standard:

- Some schemes allow a concessionary fare to be used earlier than the 9.30 am weekday start time specified in the National Minimum Standard (and in the case of Greater Manchester, they can be used at any time of day), and all allow travel after 11.00pm.
- Some also provide concessionary fares for cross-boundary travel to and from neighbouring authorities.

2.9 To some degree, these extensions to the Minimum Standard increase the cost of reimbursing operators. Looked at another way, abolition of these extensions might provide some scope for reducing expenditure to enable the new National Minimum Standard itself to be funded, should this prove problematic. However, doing so will worsen current concessionary provisions for some existing passengers.

# 3 Options Tested in the Forecasts

3.1 The fact that each PTE currently provides concessions which, to varying degrees, are more generous than the current National Minimum Standard provides a number of options for the schemes to be implemented in April 2006. These represent different combinations of concessionary fare on non-bus modes, changes to time of availability of the free concession, and availability of concessions for cross-boundary travel. The options for which we have produced forecasts of expenditure are summarised in the table below.

**Table 3.1 Summary of the Options**

| | Fare on Bus | Fare on Tram / Metro | Fare on Local Train | Time Restrictions | Cross-boundary Travel |
|---|---|---|---|---|---|
| **Option 1** | Free | Full fare (no concession) | Full fare (no concession) | National Minimum Standard times only | No Cross-boundary travel |
| **Option 2** | Free | Full fare (no concession) | Full fare (no concession) | Current time restrictions, if any | Cross-boundary travel as at present |
| **Option 3** | Free | Current concessionary fare | Current concessionary fare | Current time restrictions, if any | Cross-boundary travel as at present |
| Note: Option 3 represents no reduction in the availability of any existing benefits to current concessionary passengers | | | | | |
| **Option 4** | Free | Free | Current concessionary fare | Current time restrictions, if any | Cross-boundary travel as at present |
| **Option 5** | Free | Free | Free | Current time restrictions, if any | Cross-boundary travel as at present |

**Increasing Scale of benefit** ↓

3.2 In summary:

- Option 1 describes the absolute minimum required by the Government, and in particular takes away the concessionary fare on tram, Metro and train.
- Option 2 protects existing bus passengers who benefit from existing local extensions to the national standard but takes away any concessionary fare on tram, Metro and train.
- Option 3 is the 'minimum option' in line with *pteg*'s declared principle of 'no unintended adverse consequences' resulting from the Government's actions, in other words no worsening of the concession currently provided.
- Option 4 treats tram and Metro passengers the same as bus passengers, with the free concession, with train passengers continuing to pay their current fare;

- Option 5 retains full integration between all modes of local transport and broadly equates to the preferred solution for all PTEs.

3.3 It should be noted that for the purposes of preparing forecasts, all options have been interpreted in the context of the current local concessionary "package". Thus, for example, options 3, 4 and 5 are identical for Mereytravel as free fares for train are currently available. Similarly, local variations in the treatment of cross-boundary travel remain. Thus no attempt has been made to "level up" the generosity of concessionary arrangements across the PTEs, except with regard to the concessionary fare on bus services.

3.4 Centro is something of a special case. Although largely free, it has only provided the statutory half fare scheme for those coming into the 60 to 64 age group from April 2003, but decided to move to an early (July 2005) implementation of a scheme that is fully compliant with the new National Minimum Standard for all of its concessionary passengers. However, we have assumed that this decision was linked to the Government's announcement of the new National Minimum Standard, and therefore our "Do Nothing" forecasts of 2005-6 and 2006-7 expenditure for Centro assume the continuation of the pre-announcement mix of free and half fare arrangements.

# 4 Basis of Our Forecasts of Expenditure

**Main Forecasting Assumptions**

4.1 We have constructed a forecasting spreadsheet to estimate the changes in reimbursement that would arise from implementation of each of these options. The forecasts build on the most readily available figures for concessionary use and reimbursement from each of the PTEs. All figures represent best estimates but are subject to change as concessionary travel trends and commercial fares evolve during the year.

4.2 The largest, and least uncertain, element of the forecasts of increased expenditure are associated with the "direct" revenue lost by operators from the change to free travel. With current estimates of actual reimbursement that will be paid to operators in 2005-6 under existing arrangements, these two figures give relatively robust estimates of the vast majority of the expenditure that can be expected in 2006-7 when the new National Minimum Standard comes into force.

4.3 It should be noted that the sum of current revenue foregone payments, plus any direct concessionary revenue paid to the operator can be regarded as an estimate of the 'hypothesised commercial revenue'. This is the passenger revenue that the operator would have received in the absence of the concessionary scheme[2], and hence the benchmark for any reimbursement intended to leave the operator no better off and no worse off in revenue terms.

4.4 However, various additional assumptions and judgements are necessary to estimate the potential scale of changes in operator reimbursement arising from other factors, including:

- Increases in trip making by existing passholders, and potential new passholders;
- the associated potential for additional cost claims (from generated travel) or agreed payments to obviate the need for claims;
- transfers between public transport modes, where options would create fare differentials;
- reductions in the time of availability of the concession; and also
- elimination of cross-boundary travel.

[2] The hypothesised commercial revenue is a crucial concept in operator reimbursement. All other things being equal, the sum of direct revenue received and reimbursement for revenue foregone should be the same as this figure, irrespective of the level of the concessionary fare (e.g. whether zero, a low flat fare or near the commercial fare). However, at different concessionary fares, the proportion contributed as reimbursement for revenue foregone (by the scheme promoter) or directly by passengers will vary with the concessionary fare. The principle of adjusting reimbursement to maintain the value of hypothesised commercial revenue is used throughout our expenditure forecasting process.

4.5 Sections 7 and 8 provide some further discussion of these various assumptions and judgements.

**Other Financial Consequences**

4.6 An estimate has also been made of other direct financial impacts of the policy change. This relates to pre-existing contractual obligations or direct losses as a result of revenue abstraction from services where the revenue risk is carried by PTEs. The mechanism through which this would operate varies between the PTEs. In the clearest example, South Yorkshire PTE is contractually obliged to keep concessionary fare arrangements on Supertram in line with those on bus. Although it is no doubt possible for SYPTE to come to an arrangement with the Supertram operator to release it from this obligation, this would inevitably come at a cost which will be closely related to the revenue that would otherwise have been earned by the operator had free travel also been made available on Supertram (with appropriate reimbursement).

4.7 We have therefore calculated a figure for "operator compensation" based on the 2006-7 Do-Nothing forecast of the hypothesised commercial revenue of the operator, less reimbursement for those concessionary passengers actually carried, and less any direct revenue earned. The same approach has been used for Greater Manchester, with regard to Metrolink, and also for Centro with regard to Midland Metro (for which Options 1 and 2 abandon concessionary fares on tram).

4.8 The Tyne and Wear Metro would also suffer from revenue loss under Options 1, 2 and 3, although since it is publicly owned, revenue risk lies with Nexus and the contractual obligations with regard to its fares regime are different from those with the other PTEs. Nevertheless, fare differentials between bus and Metro would abstract passengers and revenue, and would create a situation of revenue loss that would have to be made good by Nexus, hence increasing its expenditure.

4.9 Similar considerations do not appear to apply to train operators, and on the basis of client advice, our assumption has been that franchise agreements with heavy rail operators would insulate PTEs from financial penalties arising from any patronage abstraction from their services.

4.10 It should be emphasised that this element of cost is an estimate based on a relatively crude assessment of potential revenue abstraction. It also relies on a limited understanding of the legal obligations that PTEs may have to the operators of the systems affected. These estimates should therefore be treated with some caution. Although it seems clear that some PTEs will see expenditure rise to a somewhat greater degree than additional reimbursement payments alone, more certainty about the potential extent of liability is needed, as is further analysis of the scale of transfer between modes.

4.11 Finally, it should be noted that we have assumed no change in administrative costs as a result of the policy change. However, with an approximate doubling in expenditure for four of the PTEs, and the more challenging audit task represented by a fare system in which no cash transaction takes place, it may be appropriate to consider the need for greater survey, administrative and audit resources to reflect the higher levels of spending involved. In particular, there may be a need for costly, detailed research to validate any operator claims for significantly increased operating costs. Other cost increases or reductions in revenues may arise, for example from the transfer of disabled children into the free concession.

**Underlying Principles**

4.12 It is important to note that our estimates constitute our best estimates of the reimbursement required to maintain the 'no better off, no worse off' principle as currently applied by individual PTEs. They take as a starting point anticipated levels of reimbursement in 2005-6, which are presumed to deliver fair reimbursement, but do not attempt to anticipate how current reimbursement regimes and formulae might need to be adapted to a free fare scenario. The focus of the estimates is rather on accurately identifying the scale of change in expenditure necessary to reflect policy from April 2006, from the current base. If operators have historically been over or under-compensated, this situation will remain unchanged.

4.13 The forecasts are based on an extrapolation of the trend in concessionary travel reimbursement from estimated or budgeted 2005-6 values to 2006-7 "Do Nothing" expenditure. This is our estimate of what PTEs would spend in 2006-7 if the National Minimum Standard did not change from half fare to free fare, and other elements of the concessionary offer (especially the concessionary fare) were to remain unchanged from the present. The Do Nothing forecasts build on the latest available information on actual concessionary travel volumes and reimbursement, and take into account the secular decline in concessionary travel volumes by the Elderly and Disabled that has been observed for a number of years. The forecasts also incorporate current indications of trends in commercial fares. In many areas, bus operators have been increasing fare levels at significantly more than the rate of inflation, and there is little indication of this trend not continuing.

4.14 Our spreadsheet has been designed to provide transparent access to the assumptions necessary in developing the forecasts, and also provides scope for testing alternative assumptions as and when further refinement is possible. Section 7 sets out the principal caveats and uncertainties in the forecasts, although we believe that the figures quoted below are reasonably robust and defendable, and Appendix 8 provides the results of a range of sensitivity tests that we have carried out on the principal forecasting assumptions.

# 5 Forecasts of Expenditure in 2006-7 under each of the Options

**Overall changes in total operator reimbursement**

5.1 Our Do Nothing forecasts suggest that expenditure on reimbursement for Elderly and Disabled concessions by the six English PTEs will be about £138 million in 2005-6 and rise to about £143 million in 2006-7 if there was no change in policy. Of this, £129 million will be spent on reimbursement of bus operators; of the rest, approximately £8 million will be provided to train operators, and £6 million to the operators of the tram systems in Manchester, South Yorkshire and the West Midlands, and the Tyne and Wear Metro.

5.2 Table 5.1 summarises our forecasts of total expenditure on bus, local rail and tram/Metro operator reimbursement for "Do Nothing" scenarios, and for each of the five options representing alternative ways in which the new National Minimum Standard could be delivered. The figures have been grouped into three, representing all the English PTEs, then the four most affected by the change to free travel, and then the two which already largely have a free scheme.

**Table 5.1 Summary Forecasts of Expenditure on Reimbursement for Elderly and Disabled Concessions, all modes, £ million**

| | All English PTEs | | GMPTE, Metro, Nexus and SYPTE | | Centro and Merseytravel | |
|---|---|---|---|---|---|---|
| | Expenditure | Change from 2005-6 Base | Expenditure | Change from 2005-6 Base | Expenditure | Change from 2005-6 Base |
| 2005-6 Base | £138.4 | | £56.9 | | £81.5 | |
| 2006-7 Base | £143.4 | £5.0 | £60.8 | £4.0 | £82.5 | £1.0 |
| Option 1: Free on Bus, full fare imposed on tram and train, NMS time restrictions, no cross-boundary facilities | | | | | | |
| | £199.4 | £61.0<br>44% | £119.8 | £62.9<br>111% | £79.6 | -£1.9<br>-2% |
| Option 2: Free on Bus, full fare imposed on tram and train, no change to existing time restrictions or cross-boundary facilities | | | | | | |
| | £201.3 | £62.9<br>45% | £121.3 | £64.4<br>113% | £80.0 | -£1.5<br>-2% |
| Option 3: Free on Bus, current concessionary fare retained on tram and train, no change to existing time restrictions or cross-boundary facilities | | | | | | |
| | £206.2 | £67.8<br>49% | £120.8 | £63.9<br>112% | £85.4 | £3.9<br>5% |
| Option 4: Free on Bus and Tram, current concessionary fare retained on train, no change to existing time restrictions or cross-boundary facilities | | | | | | |
| | £206.8 | £68.4<br>49% | £121.4 | £64.5<br>113% | £85.4 | £3.9<br>5% |
| Option 5: Free on Bus, Tram and internal Train, no change to existing time restrictions or cross-boundary facilities | | | | | | |
| | £207.5 | £69.1<br>50% | £122.1 | £65.3<br>115% | £85.4 | £3.9<br>5% |

5.3 In headline terms, we forecast that the change to free travel will increase total expenditure on reimbursement for elderly and disabled concessions by the six PTEs by between £61 million and £69 million, depending upon the option adopted.

5.4 The vast majority of the forecast increase in expenditure from free travel arises from loss of revenue currently paid direct to operators by concessionary passengers. We estimate that this represents about £59 million of the total increase in expenditure forecast under Option 5. Since this figure can be calculated relatively robustly from the extensive survey data collected by the PTEs, we have some confidence that the order of magnitude of our forecasts of increased expenditure is broadly correct.

5.5 For the four PTEs which currently charge a concessionary fare, moving to the new National Minimum Standard of free travel will more than double expenditure on all options, increasing it by between £63 million and nearly £65 million.

5.6 For the two PTEs currently providing a largely free scheme, options 1 and 2 would reduce expenditure since these options involve charging non-zero fares for non-rail modes, and some other loss of benefits. Note also that prior to the Government's announcement, Centro charged the statutory half fare for those aged between 60 and 64 born after 1st April 1943. Our do-nothing forecasts assume the continuation of this arrangement (although in fact it reverted to free fares on bus in July 2005. Our forecasts therefore show an increase in Centro's costs, reflecting the change from our forecast "Do Nothing" situation. Relative to the 2005-6 base as shown, Merseytravel's expenditure also increases in 2006-7 as a consequence of expected commercial fare increases, even though there is no change in the concessionary scheme under options 3, 4 and 5.

**Impacts on the four most affected PTEs**

5.7 Forecast expenditure of the four most affected PTEs is summarised in Table 5.2.

**Table 5.2** Forecast Expenditure for GMPTE, Metro, Nexus and SYPTE, £ million

| | All four PTEs | GMPTE | Metro | Nexus | SYPTE |
|---|---|---|---|---|---|
| **2005-6 Base** | | | | | |
| Bus | £50.9 | £19.3 | £11.8 | £14.2 | £5.7 |
| Train | £1.4 | £0.6 | £0.6 | £0.1 | £0.2 |
| Tram/Metro | £4.5 | £1.4 | | £2.7 | £0.5 |
| **Total** | *£56.9* | *£21.2* | *£12.4* | *£16.9* | *£6.4* |
| **Option 1: Free on Bus, full fare imposed on tram and train, NMS time restrictions, no cross-boundary facilities** | | | | | |
| Bus | £115.0 | £38.4 | £26.4 | £33.6 | £16.6 |
| Train | £0.0 | £0.0 | £0.0 | £0.0 | £0.0 |
| Tram/Metro | £0.0 | £0.0 | | £0.0 | £0.0 |
| Compensation to Tram/Metro | £4.8 | £1.4 | n/a | £2.9 | £0.5 |
| **Total** | *£119.8* | *£39.7* | *£26.4* | *£36.5* | *£17.1* |
| *Change from Base* | *£62.9* | *£18.5* | *£14.1* | *£19.6* | *£10.7* |
| *As %* | *111%* | *87%* | *114%* | *116%* | *168%* |
| **Option 3: Free on Bus, current concessionary fare retained on tram and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £113.8 | £38.5 | £26.4 | £32.4 | £16.5 |
| Train | £1.4 | £0.5 | £0.6 | £0.1 | £0.2 |
| Tram/Metro | £3.5 | £1.0 | | £2.1 | £0.4 |
| Compensation to Tram/Metro | £2.1 | £0.5 | n/a | £1.2 | £0.3 |
| **Total** | *£120.8* | *£40.6* | *£26.9* | *£35.8* | *£17.4* |
| *Change from Base* | *£63.9* | *£19.4* | *£14.6* | *£18.9* | *£11.0* |
| *As %* | *112%* | *92%* | *118%* | *111%* | *173%* |
| **Option 5: Free on Bus, Tram and internal Train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £112.1 | £38.2 | £26.3 | £31.4 | £16.2 |
| Train | £2.2 | £0.8 | £1.0 | £0.1 | £0.3 |
| Tram/Metro | £7.8 | £2.0 | | £4.6 | £1.3 |
| **Total** | *£122.1* | *£40.9* | *£27.3* | *£36.1* | *£17.8* |
| *Change from Base* | *£65.3* | *£19.7* | *£15.0* | *£19.2* | *£11.4* |
| *As %* | *115%* | *93%* | *121%* | *113%* | *179%* |

5.8 At headline level, we expect expenditure by GMPTE to increase by up to £20 million, by Metro to increase by about £15 million, by Nexus to increase by about £19 million, and by SYPTE to increase by about £11 million.

5.9 Forecast expenditure is shown separately for bus, tram/Metro and train, of which the bus component is much the most significant. Note that reimbursement to the bus operators increases under Option 1 and 3 relative to 5. This is because it is assumed that passengers transferring to bus under Options 1 and 3 (when fares will still be charged on train and tram/Metro) are treated as non-generated for reimbursement purposes (on the basis that the majority can be regarded as having been non-generated when they previously travelled by train and tram).

5.10 As discussed above, for Options 1 and 2 in which fares on tram/Metro and train revert to full commercial levels, or remain at current levels (in Option 3), we have shown potential compensation to tram and Metro operators for

lost revenue arising from the market distortion introduced by free fares on bus. As discussed above, the figure shown has been calculated so as to maintain the total revenue of the operator at the level that would have been obtained if fares were the same on all modes.

5.11 Increases in additional cost payments (that is, payments for additional operating costs associated with carrying generated passengers, over-and-above payment for revenue foregone) are a small element of the forecast increase. Under Option 5, these would amount to less than £4 million of the total increase in expenditure. As discussed below, this estimate is probably on the high side, given the extent of current payment for additional costs.

5.12 Appendices 1 to 6 contain summaries of our forecasts of trips and reimbursement by mode separately for each of the PTEs, and for each of the options.

# 6 Implications of Forecasts for Funding Issues

**Relationship between increased expenditure and increased funding**

6.1 The forecasts set out above relate purely to the likely increases in expenditure that PTEs will incur in reimbursing operators for providing the elderly and disabled with the concessionary travel required by the new National Minimum Standard. When the policy of free travel was announced, central Government stated that it had set aside a total sum of £350 million to enable authorities throughout England to fund free travel, for distribution through existing local government rate support grant mechanisms or an adaptation of them.

6.2 We have briefly reviewed the basis on which we understand Government arrived at its allocation of £350 million, and, given the many uncertainties involved, concluded that it is not out-of-line with what might be expected at a national level. However, the distribution of additional moneys could create difficulties for the PTEs whose concessionary travel schemes currently involve charging a flat fare, and which are generally more intensively used than those in other areas.

6.3 The current arrangement through which central Government contributes to concessionary travel funding is through the Environmental, Protection and Cultural Services (EPCS) block grant, which is distributed to local authorities through a formula largely driven by population statistics. By default, additional funding to pay for the change in policy would probably be distributed through the EPCS block grant and associated funding formula. The additional grants that could arise from the distribution of the Government's £350 million through these different formulae are summarised in Table 6.1, together with our forecasts of additional expenditure under Option 3 (no diminution of benefits). The grant calculations are based on those of pteg.

**Table 6.1 Funding of Additional Expenditure - EPCS formula, £ million**

| PTA/PTE | Spend under current policy (2005-6) | Forecast spend under Option 3 (2006/07) | Increase in expenditure | EPCS grant formula | |
|---|---|---|---|---|---|
| | | | | Additional grant | Funding gap |
| Greater Manchester | £21.2 | £40.6 | £19.4 | £17.9 | -£1.5 |
| West Yorkshire | £12.4 | £26.9 | £14.6 | £13.9 | -£0.7 |
| Tyne & Wear | £16.9 | £35.8 | £18.9 | £7.9 | -£11.0 |
| South Yorkshire | £6.4 | £17.4 | £11.0 | £8.5 | -£2.5 |
| West Midlands | £45.9 | £48.4 | £2.4 | £18.6 | £16.2 |
| Merseyside | £35.6 | £37.0 | £1.4 | £10.4 | £9.0 |
| **Total** | **£138.4** | **£206.2** | **£67.8** | **£77.2** | **£9.4** |

6.4 Under the default funding mechanism of the EPCS formula, then all four of the most affected PTEs would be significantly worse off. Nexus would have to

find over £11 million in additional resources to implement the new National Minimum Standard.

**Alternative grant distribution formulae**

6.5 However, the Office of the Deputy Prime Minister (ODPM) is currently consulting on changes to the formula used for distributing finance to local authorities, and an alternative has been proposed that could go some way to addressing the concerns of the PTEs. This proposal puts greater emphasis on variables that are linked to social deprivation and therefore to higher levels of dependence on bus services. A further complication arises from the fact that the formula now proposed has moved away from one largely based on population. Since PTAs may only levy their District Councils on a per capita basis, this may create further tensions. With the proposed formula, some Districts will receive the additional grant at a per capita rate up to about twice the level of other Districts within the same PTA, and there is the potential that grant would be "rounded down" to the District with the lowest per capita rate.

6.6 Table 6.2 shows the implications of these alternative formulae arising from the ODPM consultation paper. These calculations all assume that a pound increase in Formula Spending Share (FSS) relates to a pound increase in Revenue Support Grant (RSG). Whilst the link is a close one, it is not, in practice, an exact relationship, and will depend upon circumstances relating to each individual District. The calculations of the potential additional grant under these options are also those of pteg.

**Table 6.2 Funding of Additional Expenditure - ODPM Consultation, £ million**

| PTA | Increase in spend | ODPM formula | | ODPM formula lowest District grant per head) | |
|---|---|---|---|---|---|
| | | Additional grant | Funding gap | Additional grant | Funding gap |
| Greater Manchester | £19.4 | £25.9 | £6.5 | £16.7 | -£2.8 |
| West Yorkshire | £14.6 | £16.9 | £2.3 | £15.4 | £0.8 |
| Tyne & Wear | £18.9 | £12.8 | -£6.1 | £10.8 | -£8.0 |
| South Yorkshire | £11.0 | £12.4 | £1.3 | £11.3 | £0.2 |
| West Midlands | £2.4 | £24.2 | £21.7 | £14.2 | £11.7 |
| Merseytravel | £1.4 | £17.2 | £15.8 | £13.7 | £12.2 |
| **Total** | **£67.8** | **£109.4** | **£41.6** | **£82.0** | **£14.2** |

6.7 Under the ODPM consultation paper proposal, under-funding is eliminated for all the PTEs except Nexus, which continues to be faced with an increase in expenditure of over £6 million more than the associated increase in funding. It is worth noting that for Nexus, the lowest-cost option that we have tested (which would involve reverting to commercial fares on the Metro and local trains) would only save £1.2 million compared with Option 3.

6.8 If grant under the ODPM formula was restricted to the lowest District grant per head, then the situation would be worse for Nexus, but also become highly marginal for the other three PTES changing to free travel, with Greater Manchester potentially having to address a funding gap of £2.3 million.

# 7 Principal Caveats and Uncertainties associated with the Forecasts

7.1 The forecasts we have produced have required a large number of assumptions. Although we have sought to make these as robust as possible, it is inevitable that some uncertainties remain. The most significant of these assumptions are as follows. We have indicated with a "*" where we have carried out sensitivity tests to show the effect of varying the assumptions on the forecast increases in expenditure.

- All our 2006-7 forecasts have required assumptions about increases in commercial fares from 2004-5 or 2005-6 levels. The indications are that these are likely to be of the order of 5% to 10%. Alternative assumptions would make some difference to the absolute forecasts of expenditure in 2006-7, but little difference to the relative changes in expenditure between options.
- The 2006-7 forecasts also reflect assumptions about continued decline in concessionary travel, as has been observed relatively consistently over a number of years. Based on previous analysis of these trends by MVA for pteg, these vary between -1% (e.g. GMPTE and Nexus) per annum to -2.5% (Centro).*
- Forecasts of reimbursement for revenue foregone under free fares scenarios are largely based on 2006-7 "Do Nothing" revenue foregone payments plus lost direct revenue, and are thus relatively robust.
- Forecasts of reimbursement for bus additional costs under free fares scenarios are based on increases in generated passengers associated with free fares. We have assumed that these will be paid at a standard rate, which for the present forecasts has been assumed to be 9 pence per newly generated passenger[3]. This is additional to any existing arrangements (implicit or explicit) which we have assumed cover any additional costs arising from current schemes.*
- The forecast of increased bus patronage from free fares is based on an overall assumption of a 30% increase, largely based on analysis of Welsh and Scottish data. We have considered varying this rate to reflect the fact that the "headline" flat fare currently charged by the four PTEs varies significantly (from 35 pence to 50 pence). However, the average concessionary fare paid varies relatively little between the PTEs (from 35 pence to 41 pence, because of statutory half fares for short trips and various discounted concessionary products) and we have taken the view that there is not a strong justification for using different rates.*

[3] This is not a rate that it is recommended should be paid, but represents the most generous rate currently applied by any PTE. Individual PTEs may wish to deal with additional cost issues by means of operator claims, or by examining the local relationships between total demand and system capacity to derive a fair local rate for compensation.

- Where scenarios maintain fares on local train or tram when bus travel is free, we have made estimates of potential diversion from these rail-based modes to bus and increased reimbursement to bus operators accordingly. For Option 3, where current concessionary fares are maintained on these other modes, typical levels of diversion are about 25% of tram/metro travellers and about 7% for train users. For Option 1, where it is assumed that rail and tram fares revert to commercial levels, we have interpreted this as there being no effective concessionary fare, with no reimbursement due. Typical levels of diversion from tram/Metro are about 60%, and about 30% for train.*
- We have assumed, on the basis of experience in Wales, that the availability of free travel increases passholding by 10%, and that these "new" passholders have a trip rate that is 25% of the rate of existing passholders.*
- The impact of reducing the time availability of concessions to current NMS hours has been estimated by analysis of detailed data from GMPTE, applied appropriately to the other PTEs.

# 8 Summary of Other Key Results

**Experience from free travel in Wales, Scotland and Northern Ireland:**

- Very substantial increases in the total volume of concessionary travel were reported – e.g 42% - 55% in Wales
- Expenditure on reimbursement more than trebled in Wales (where the predecessor scheme was a minimum half fare), going from £8.7m in 2001-2 to £32.7m in 2003-4 (excluding Cardiff, which already had a free scheme). In Strathclyde, expenditure has gone from £21.2m to £63.8m, and in the joint Edinburgh/East Lothian/Midlothian scheme from £4.4 to £10.9m.
- The largest increases in trips were in rural areas, partly because of large increases in passholding;
- For the English PTEs with flat fares, our view is that likely increases in trips arising from the introduction of free fares will be between 20% and 40%;
- Some increase in trips and expenditure is possible even where a free fare is currently provided, but this is unlikely to be to the extent seen in, for example, Cardiff.

**Basis for Government increase in funding of £350 million:**

- TAS' forecasts for DfT of increased expenditure appear to be reasonable "bottom-up" estimates, based on data on existing direct revenue received by operators and some allowance for additional cost. These estimates, updated early in 2005, indicate additional expenditure of £250m. However, this estimate ignores the fact that formula funding distributes money to all authorities including those with free fare scheme at present, and also ignores the continuing impact of general rises in bus fares;
- "Top-down" estimates, if based on the actual increases in expenditure experienced in Wales and Scotland, would suggest that £350 million is of the correct order of magnitude, but with wide margins of error;
- MVA's central forecast for England as a whole on a "top-down" basis, applying the increases in expenditure observed in Wales and Scotland (made as part of our Stage 1 work but not subsequently revisited) was that £362 million is required; but the implied £12 million funding gap is well within the likely margin of error. Actual out-turn expenditure could be higher than this forecast, or lower.
- There is some inconsistency between the bottom-up and top-down forecasts, and it is essential that a clear view is formed of the lessons to be learned from Welsh and Scottish experience of implementing free travel. This is particularly important for the non-PTE schemes in England, which are most analogous to those in Wales and Scotland in terms of pre-existing arrangements for

concessionary fare reimbursement, and levels of pass-take up and scheme use.

**Additional Costs:**

- All PTE schemes make provision for operators to make justified claims for additional costs, but in practice this facility is used rarely, if at all.
- In the past, GMPTE, Nexus, Centro and Merseytravel have all used an explicit formula for calculating additional cost payments, in some instances (e.g. Merseytravel, Nexus) supported by detailed analysis of monitoring data.
- GMPTE, Merseytravel and Nexus make explicit additional cost payments, but from a pool, the size of which is largely determined by negotiation (although to varying degrees, negotiations are backed up by explicit analysis).
- Centro makes an explicit payment of £0.09 per generated passenger; the figure has been periodically reviewed and updated for inflation, but its origins are obscure.
- SYPTE implicitly pays an allowance for additional costs, which is subsumed in its revenue foregone calculations.
- Metro has taken the view that the case for additional cost payments is weak and have not made any such payments for some time.
- Various specific studies of additional costs have been carried out in the past by a number of PTEs; to varying degrees, these continue to inform payment negotiations, although in most cases the direct link between the analysis methodology and payments has not been maintained;
- The change to operator circumstances brought about by the introduction of free travel will provide a stronger justification for additional cost claims than may have been the case in the past. However, it is essential that local arrangements for robust monitoring of levels of bus supply and demand are established in good time to provide a sound platform for measuring any changes in provision that come about following the introduction of free fares.
- Our examination of these issues has informed our judgement that a rate for travel generated by the change to half fare of 9p per passenger is a reasonable first estimate, but this combined with an estimated 30% uplift in journeys and an assumption (at lower trip rates) of a 10% increase in pass holding makes this aspect of the forecast particularly uncertain. PTEs may wish to undertake further in-depth local analysis to refine this element of our expenditure estimates. These estimates are subject to further judgement in Options 1 to 4 as regards the extent of transfer of trips from rail-based modes to bus.

**Cross Boundary Travel**

- Currently, only GMPTE, Metro and SYPTE provide significant concessions for cross-boundary travel, although Merseytravel allow limited use of trains to Cheshire;
- where provided, cross-boundary trips tend to be a very small proportion of concessionary bus trips, of the order of 1%. Cross-boundary proportions of rail trips can be more sizeable, representing over 25% of rail trips in South Yorkshire.
- Generally, data on cross-boundary trips is poor, especially for rail.
- Total reimbursement associated with cross-boundary trips amounts to less than £0.350 million for bus trips and £0.2 million for rail, out of a total of £138 million (2006-7 Do Nothing forecasts of reimbursement, all modes).

**Concessionary Travel in the Weekday Morning Peak**

- Some PTEs currently provide concessions outside the times specified in the National Minimum Standard for weekdays, which are after 9.30 am and before 11.00 pm;
- GMPTE does not provide any restrictions on time of travel; others do to varying degrees, including 9:00 am start rather than 9:30 am. Availability is sometimes different depending on the category of passholder (for example, SYPTE offers an all-day concession to disabled passengers).
- Both Centro and Metro only provide concessions after the NMS start time of 9:30 am
- The forecasts include options in which availability of the concession is reduced to the NMS minimum. Overall, we estimate that this could reduce concessionary travel by 2.5%, although the largest part of this change is in Manchester, where we expect that 3.6% fewer concessionary trips would be made as a result of withdrawal of the concession in the weekday morning peak.

**Concessionary Travel on Rail-based Modes**

- Of 271 million concessionary trips forecast to be made in 2006-7 under “Do-Nothing” assumptions, about 8.6 million would be made by train and 8.3 million by tram or Metro.
- Sub-mode shares of the rail based-modes vary: Metro accounts for 11% of concessionary travel in Tyne and Wear, Supertram 7% in South Yorkshire and train 8.5% in Merseyside, but elsewhere sub-mode shares are generally less than 4%
- Free travel on train and tram introduced at the same time as free travel on bus would increase total expenditure on reimbursement by

about £4 million, in theory. But data on rail travel tends to be poor and financing of concessions on rail services is often somewhat arbitrary (because of the way in which local rail as a whole is funded) and this increase may be overstated.

- If free travel is introduced on bus but fares are retained or imposed on train and tram, then some concessionary passengers would switch to bus, increasing reimbursement to bus operators while reducing reimbursement to tram and train. The extent of possible switching to bus is highly speculative; we have made estimates based on cross-elasticities from research elsewhere, but it is necessary to make assumptions about the extent to which bus journeys are practical substitutes for all train journeys, and likewise trams/Metro.
- Making such judgements as we can, we estimate that if current concessionary fares were retained on train and tram/Metro, as in Option 3, then about 7% of concessionary rail passengers and about 25% of concessionary tram and Metro passengers would switch to bus. Under Option 2, in which commercial fares were charged for rail and tram, these proportions would rise to about 30% and 65%.
- As discussed in Section 4, in addition to our forecasts of the change in reimbursement that would be associated with a switch of passengers from tram, Metro and train to bus, we have also made assumptions about the potential scale of compensation that tram and Metro operators could claim from their respective PTEs for loss of revenue. The detailed forecasts for individual PTEs (provided in Appendices 1 to 6) identify this part of the forecasts separately.

# Appendix A
# Detailed Forecasts of GMPTE Operator Reimbursements

# Detailed Forecasts of GMPTE Operator Reimbursements

Source: V9 of spreadsheet as at 1/09/2005

**Summary of Forecasts of GMPTE Reimbursement to Operators**

| **2005-6 Do Nothing** | **Reimburs-ement** | | | **Trips** | |
|---|---|---|---|---|---|
| Bus | £19,288,141 | | | 38.846 | |
| Train | £562,500 | | | 0.550 | |
| Tram | £1,350,000 | | | 1.500 | |
| Total | £21,200,641 | | | 40.896 | |
| | | (Change from 2005-6) | | **Trips** | (Change from 2005-6) |
| **2006-7 Do Nothing** | | | | | |
| Bus | £20,640,204 | £1,352,063 | 7.0% | 38.457 | -1.0% |
| Train | £579,150 | £16,650 | 3.0% | 0.545 | -1.0% |
| Tram | £1,382,754 | £32,754 | 2.4% | 1.485 | -1.0% |
| Total | £22,602,108 | £1,401,467 | 6.6% | 40.487 | -1.0% |
| **Option 1: Free on Bus, full fare imposed on tram and train, NMS time restrictions, no cross-boundary facilities** | | | | | |
| Bus | £38,378,427 | £19,090,286 | 85.9% | 50.971 | 31.2% |
| Train | £0 | -£562,500 | -100.0% | 0.000 | -100.0% |
| Tram | £0 | -£1,350,000 | -100.0% | 0.524 | -65.0% |
| Compensation to tram operator | £1,368,227 | £1,368,227 | | | |
| Total | £39,746,654 | £18,546,013 | 75.9% | 51.495 | 25.9% |
| **Option 2: Free on Bus, full fare imposed on tram and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £39,153,887 | £19,865,746 | 89.7% | 52.025 | 33.9% |
| Train | £0 | -£562,500 | -100.0% | 0.000 | -100.0% |
| Tram | £0 | -£1,350,000 | -100.0% | 0.524 | -65.0% |
| Compensation to tram operator | £1,368,227 | £1,368,227 | | | |
| Total | £40,522,114 | £19,321,473 | 79.3% | 52.549 | 28.5% |
| **Option 3: Free on Bus, current fare retained on tram and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £38,547,929 | £19,259,788 | 86.8% | 51.375 | 32.3% |
| Train | £542,936 | -£19,564 | -6.3% | 0.510 | -7.2% |
| Tram | £1,023,958 | -£326,042 | -25.9% | 1.100 | -26.7% |
| Compensation to tram operator | £517,350 | £517,350 | | | |
| Total | £40,632,173 | £19,431,532 | 79.8% | 52.985 | 29.6% |
| **Option 4: Free on Bus and Tram, current concessionary fare retained on train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £38,188,455 | £18,900,314 | 85.0% | 50.990 | 31.3% |
| Train | £542,936 | -£19,564 | -6.3% | 0.510 | -7.2% |
| Tram | £1,993,800 | £643,800 | 44.2% | 1.968 | 31.2% |
| Total | £40,725,191 | £19,524,550 | 80.2% | 53.468 | 30.7% |
| **Option 5: Free on Bus, Tram and internal Train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £38,156,692 | £18,868,551 | 84.9% | 50.956 | 31.2% |
| Train | £780,795 | £218,295 | 34.8% | 0.618 | 12.4% |
| Tram | £1,993,800 | £643,800 | 44.2% | 1.968 | 31.2% |
| Total | £40,931,287 | £19,730,646 | 81.1% | 53.541 | 30.9% |

# Appendix B
# Detailed Forecast of METRO Operator Reimbursements

# Detailed Forecast of METRO Operator Reimbursements

Source: V9 of spreadsheet as at 1/09/2005

**Summary of Forecasts of Metro Reimbursement to Operators**

| | Reimburs-ement | (Change from 2005-6) | | Trips | (Change from 2005-6) |
|---|---|---|---|---|---|
| **2006-7 Do Nothing** | | | | | |
| Bus | £12,394,717 | £612,695 | 5.2% | 36.238 | -2.3% |
| Train | £585,092 | £9,259 | 1.6% | 1.209 | -2.3% |
| Tram/Metro | £0 | | | 0.000 | |
| Total | £12,979,809 | £621,955 | 5.0% | 37.446 | -2.3% |
| **Option 1: Free on Bus, full fare imposed on tram and train, NMS time restrictions, no cross-boundary facilities** | | | | | |
| Bus | £26,434,777 | £14,652,756 | 124.4% | 48.097 | 29.7% |
| Train | £0 | -£575,832 | -100.0% | 0.000 | -100.0% |
| Tram/Metro | £0 | | | 0.000 | |
| Total | £26,434,777 | £14,076,923 | 113.9% | 48.097 | 25.5% |
| **Option 2: Free on Bus, full fare imposed on train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £26,584,928 | £14,802,906 | 125.6% | 48.378 | 30.4% |
| Train | £0 | -£575,832 | -100.0% | 0.000 | -100.0% |
| Tram/Metro | £0 | | | 0.000 | |
| Total | £26,584,928 | £14,227,074 | 115.1% | 48.378 | 26.2% |
| **Option 3 and 4: Free on Bus, current concessionary fare retained on train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £26,383,267 | £14,601,246 | 123.9% | 48.085 | 29.6% |
| Train | £551,327 | -£24,506 | -4.3% | 1.139 | -7.9% |
| Tram/Metro | £0 | | | 0.000 | |
| Total | £26,934,594 | £14,576,740 | 118.0% | 49.224 | 28.4% |
| **Option 3 and 4: Free on Bus, current concessionary fare retained on train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £26,383,267 | £14,601,246 | 123.9% | 48.085 | 29.6% |
| Train | £551,327 | -£24,506 | -4.3% | 1.139 | -7.9% |
| Tram/Metro | £0 | | | 0.000 | |
| Total | £26,934,594 | £14,576,740 | 118.0% | 49.224 | 28.4% |
| **Option 5: Free on Bus and internal Train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £26,335,349 | £14,553,327 | 123.5% | 48.015 | 29.5% |
| Train | £1,002,446 | £426,614 | 74.1% | 1.390 | 12.4% |
| Tram/Metro | £0 | | | 0.000 | |
| Total | £27,337,795 | £14,979,941 | 121.2% | 49.405 | 28.9% |

# Appendix C
# Detailed Forecast of NEXUS Operator Reimbursements

# Detailed Forecast of NEXUS Operator Reimbursements

Source: V9 of spreadsheet as at 1/09/2005

**Summary of Forecasts of Nexus Reimbursement to Operators**

| | Reimbursement | | | Concessionary Trips | |
|---|---|---|---|---|---|
| **2005-6 Do Nothing** | | | | | |
| Bus | £14,180,000 | | | 31.360 | |
| Train | £103,950 | | | 0.046 | |
| Tram | £2,654,000 | | | 3.899 | |
| Total | £16,937,950 | | | 35.305 | |
| | | (Change from 2005-6) | | | (Change from 2005-6) |
| **2006-7 Do Nothing** | | | | | |
| Bus | £15,574,561 | £1,394,561 | 9.8% | 31.047 | -1.0% |
| Train | £107,027 | £3,077 | 3.0% | 0.045 | -1.0% |
| Metro | £2,820,096 | £166,096 | 6.3% | 3.860 | -1.0% |
| Total | £18,501,684 | £1,563,734 | 9.2% | 34.952 | -1.0% |
| **Option 1: Free on Bus, full fare imposed on Metro and train, NMS time restrictions, no cross-boundary facilities** | | | | | |
| Bus | £33,584,124 | £19,404,124 | 136.8% | 43.396 | 38.4% |
| Train | £0 | -£103,950 | -100.0% | 0.000 | -100.0% |
| Metro | £0 | -£2,654,000 | -100.0% | 0.000 | -100.0% |
| Compensation to Metro Operator | £2,942,401 | £2,942,401 | | | |
| Total | £36,526,525 | £19,588,575 | 115.6% | 43.396 | 22.9% |
| **Option 2: Free on Bus, full fare imposed on Metro and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £33,735,666 | £19,555,666 | 137.9% | 43.589 | 39.0% |
| Train | £0 | -£103,950 | -100.0% | 0.000 | -100.0% |
| Metro | £0 | -£2,654,000 | -100.0% | 0.000 | -100.0% |
| Compensation to Metro Operator | £2,942,401 | £2,942,401 | | | |
| Total | £36,678,067 | £19,740,117 | 116.5% | 43.589 | 23.5% |
| **Option 3: Free on Bus, current fare retained on Metro and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £32,409,033 | £18,229,033 | 128.6% | 42.190 | 34.5% |
| Train | £99,190 | -£4,760 | -4.6% | 0.042 | -8.2% |
| Metro | £2,052,959 | -£601,041 | -22.6% | 2.810 | -27.9% |
| Compensation to Metro Operator | £1,240,649 | £1,240,649 | | | |
| Total | £35,801,831 | £18,863,881 | 111.4% | 45.042 | 27.6% |
| **Option 4: Free on Bus and Metro, current concessionary fare retained on train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £31,413,580 | £17,233,580 | 121.5% | 41.140 | 31.2% |
| Train | £99,190 | -£4,760 | -4.6% | 0.042 | -8.2% |
| Metro | £4,560,790 | £1,906,790 | 71.8% | 5.114 | 31.2% |
| Total | £36,073,561 | £19,135,611 | 113.0% | 46.296 | 31.1% |
| **Option 5: Free on Bus, Metro and internal Train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £31,410,426 | £17,230,426 | 121.5% | 41.137 | 31.2% |
| Train | £127,518 | £23,568 | 22.7% | 0.052 | 13.9% |
| Metro | £4,560,790 | £1,906,790 | 71.8% | 5.114 | 31.2% |
| Total | £36,098,734 | £19,160,784 | 113.1% | 46.303 | 31.2% |

# Appendix D
# Detailed Forecast of SYPTE Operator Reimbursement

# Detailed Forecast of SYPTE Operator Reimbursement

Source: V9 of spreadsheet as at 1/09/2005

**Summary of Forecasts of SYPTE Reimbursement to Operators**

| | Reimbursement | | | Concessionary Trips | |
|---|---|---|---|---|---|
| **2005-6 Do Nothing** | | | | | |
| Bus | £5,656,290 | | | 25.081 | |
| Train | £194,935 | | | 0.297 | |
| Tram | £526,593 | | | 1.969 | |
| Total | £6,377,818 | | | 27.347 | |
| | **Reimbursement** | (Change from 2005-6) | | **Concessionary Trips** | (Change from 2005-6) |
| **2006-7 Do Nothing** | | | | | |
| Bus | £5,996,064 | £339,774 | 6.0% | 24.454 | -2.5% |
| Train | £197,664 | £2,729 | 1.4% | 0.290 | -2.5% |
| Tram | £553,824 | £27,231 | 5.2% | 1.920 | -2.5% |
| Total | £6,747,553 | £369,735 | 5.8% | 26.663 | -2.5% |
| **Option 1: Free on Bus, full fare imposed on tram and train, NMS time restrictions, no cross-boundary facilities** | | | | | |
| Bus | £16,603,556 | £10,947,266 | 193.5% | 32.874 | 31.1% |
| Train | £0 | -£194,935 | -100.0% | 0.000 | -100.0% |
| Tram | £0 | -£526,593 | -100.0% | 0.000 | -100.0% |
| Compensation to tram operator | £473,920 | £473,920 | | | |
| Total | £17,077,476 | £10,699,658 | 167.8% | 32.874 | 20.2% |
| **Option 2: Free on Bus, full fare imposed on tram and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £17,028,199 | £11,371,909 | 201.0% | 33.715 | 34.4% |
| Train | £0 | -£194,935 | -100.0% | 0.000 | -100.0% |
| Tram | £0 | -£526,593 | -100.0% | 0.000 | -100.0% |
| Compensation to tram operator | £473,920 | £473,920 | | | |
| Total | £17,502,118 | £11,124,300 | 174.4% | 33.715 | 23.3% |
| **Option 3: Free on Bus, current concessionary fare retained on tram and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £16,503,743 | £10,847,453 | 191.8% | 32.875 | 31.1% |
| Train | £188,426 | -£6,509 | -3.3% | 0.276 | -7.1% |
| Tram | £421,003 | -£105,590 | -20.1% | 1.459 | -25.9% |
| Compensation to tram operator | £307,326 | £307,326 | | | |
| Total | £17,420,497 | £11,042,679 | 173.1% | 34.611 | 26.6% |
| **Option 4: Free on Bus and Tram, current concessionary fare retained on train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £16,216,341 | £10,560,051 | 186.7% | 32.415 | 29.2% |
| Train | £188,426 | -£6,509 | -3.3% | 0.276 | -7.1% |
| Tram | £1,281,450 | £754,857 | 143.3% | 2.544 | 29.2% |
| Total | £17,686,217 | £11,308,399 | 177.3% | 35.234 | 28.8% |
| **Option 5: Free on Bus, Tram and internal Train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £16,207,895 | £10,551,605 | 186.5% | 32.401 | 29.2% |
| Train | £278,171 | £83,236 | 42.7% | 0.321 | 8.2% |
| Tram | £1,281,450 | £754,857 | 143.3% | 2.544 | 29.2% |
| Total | £17,767,516 | £11,389,698 | 178.6% | 35.266 | 29.0% |

# Appendix E
# Detailed Forecast of Centro Operator Reimbursement

# Detailed Forecast of Centro Operator Reimbursement

Source: V9 of spreadsheet as at 1/09/2005

**Summary of Forecasts of Centro Reimbursement to Operators**

| | Reimbursement | | | Trips | |
|---|---|---|---|---|---|
| **2005-6 Do Nothing** | | | | | |
| Bus | £42,368,585 | | | 73.881 | |
| Train | £2,156,575 | | | 1.809 | |
| Tram | £1,421,514 | | | 1.054 | |
| Total | £45,946,674 | | | 76.743 | |
| | **Reimbursement** | (Change from 2005-6) | | **Trips** | (Change from 2005-6) |
| **2006-7 Do Nothing** | | | | | |
| Bus | £41,969,414 | -£399,171 | -0.9% | 72.034 | -2.5% |
| Train | £2,138,495 | -£18,081 | -0.8% | 1.763 | -2.5% |
| Tram | £1,409,596 | -£11,918 | -0.8% | 1.028 | -2.5% |
| Total | £45,517,505 | -£429,170 | -0.9% | 74.825 | -2.5% |
| **Options 1 and 2: Free on Bus, full fare imposed on tram and train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £45,526,046 | £3,157,462 | 7.5% | 73.532 | -0.5% |
| Train | £0 | -£2,156,575 | -100.0% | 0.000 | -100.0% |
| Tram | £0 | -£1,421,514 | -100.0% | 0.000 | -100.0% |
| Compensation to tram operator | £1,096,022 | £1,096,022 | | | |
| Total | £46,622,068 | £675,394 | 1.5% | 73.532 | -4.2% |
| **Options 3, 4 and 5: Free on Bus, Tram and internal Train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £44,598,521 | £2,229,937 | 5.3% | 72.034 | -2.5% |
| Train | £2,281,915 | £125,339 | 5.8% | 1.763 | -2.5% |
| Tram | £1,501,346 | £79,832 | 5.6% | 1.028 | -2.5% |
| Total | £48,381,782 | £2,435,108 | 5.3% | 74.825 | -2.5% |

# Appendix F

# Detailed Forecast of Merseytravel Operator Reimbursement

# Detailed Forecast of Merseytravel Operator Reimbursement

Source: V9 of spreadsheet as at 1/09/2005

**Summary of Forecasts of Merseytravel Reimbursement to Operators**

| | Reimbursement | | | Concessionary Trips | |
|---|---|---|---|---|---|
| **2005-6 Do Nothing** | | | | | |
| Bus | £31,152,075 | | | 52.044 | |
| Train | £4,401,739 | | | 4.829 | |
| Tram | n/a | | | n/a | |
| Total | £35,553,814 | | | 56.873 | |
| | **Reimbursement** | (Change from 2005-6) | | **Trips** | (Change from 2005-6) |
| **2006-7 Do Nothing** | | | | | |
| Bus | £32,421,903 | £1,269,829 | 4.1% | 51.523 | -1.0% |
| Train | £4,581,164 | £179,425 | 4.1% | 4.781 | -1.0% |
| Tram | n/a | | | n/a | |
| Total | £37,003,067 | £1,449,253 | 4.1% | 56.304 | -1.0% |
| **Option 1: Free on Bus, full fare imposed on train, NMS time restrictions, no cross-boundary facilities** | | | | | |
| Bus | £32,949,985 | £1,797,910 | 5.8% | 52.362 | 0.6% |
| Train | £0 | -£4,401,739 | -100.0% | 0.000 | -100.0% |
| Tram | n/a | | | n/a | |
| Total | £32,949,985 | -£2,603,829 | -7.3% | 52.362 | -7.9% |
| **Option 2: Free on Bus, full fare imposed on train, no change to existing time restrictions or cross-boundary facilities** | | | | | |
| Bus | £33,376,309 | £2,224,234 | 7.1% | 53.040 | 1.9% |
| Train | £0 | -£4,401,739 | -100.0% | 0.000 | -100.0% |
| Tram | n/a | | | n/a | |
| Total | £33,376,309 | -£2,177,505 | -6.1% | 53.040 | -6.7% |
| **Options 3,4 and 5: Free on Bus, Tram and internal Train, no change to existing time restrictions or cross-boundary facilities [No change from Do-Nothing]** | | | | | |
| Bus | £32,421,903 | £1,269,829 | 4.1% | 51.523 | -1.0% |
| Train | £4,581,164 | £179,425 | 4.1% | 4.781 | -1.0% |
| Tram | n/a | | | n/a | |
| Total | £37,003,067 | £1,449,253 | 4.1% | 56.304 | -1.0% |

# Appendix G
# Reconciliation of Stage 1 and Stage 2 Forecasts

# Reconciliation of Stage 1 and Stage 2 Forecasts

## Introduction

The forecasts we produced at the end of Stage 1 of our work for pteg, based on Version 4 of our forecasting spreadsheet, were used to inform various discussions regarding the financial impacts of free fares. Our Final Report discusses revised forecasts, based on Version 9 of our forecasting spreadsheet, which have developed beyond the earlier forecasts in a number of ways. This appendix contrasts the two sets of forecasts, and identifies the reasons for variations between the two.

Insofar as the more recent forecasts incorporate more up-to-date data, a more precise methodology in many instances and substantial cross-checking of results, the more recent forecasts can be considered to be more accurate prediction of the potential impacts from the introduction of free travel. Some uncertainties remain, however, and there continues to be scope for refinement of the assumptions and judgements that are implicit in the forecasts.

## Principal Changes to the Forecasting Process

The key changes that have been made relative to Version 4, are, in no particular order:

- Incorporating more recent base data on concessionary travel volumes, reimbursement and fare levels, where available from individual PTEs;
- Development of an explicit 2006-7 Do-nothing forecast;
- Refinement of the process of extrapolating base data to 2006-7; this had a particular effect on the forecasts for Centro, where previously the impacts of the half-fare scheme for those aged 60-64 had only been dealt with at a broad-brush level;
- Alternative approach to additional costs where these have not been explicitly included in reimbursement in recent times;
- Extension of the scope of the forecasts to include concessionary travel on local train, tram and Metro services (and attendant inter-modal diversions for scenarios with different fares charged on the different modes);
- Inclusion of estimate of potential compensation to tram/Metro operators for lost revenue arising from diversion of passengers to bus;
- Provision for estimating the impact of changes in the times at which the concession is available;
- Provision for dealing with cross-boundary trips;
- Restructuring of the calculation process to simplify the chain of calculations, thus eliminating the need for some data and helping the transparency of the process.

The net effect of these changes is that forecast costs for different scenarios have generally shifted somewhat for most PTEs, quite sizeably so in some instances, although the relative orders of magnitude of change remain similar between the two sets of forecasts. Estimates of the change in expenditure arising from various free-fare scenarios are therefore compounded by both the effect of the change itself (and the differences between the methods adopted) and also the need to project trends forward to 2006-7 from the 2005-6 base.

### Comparisons of 2005-6 Do Nothing Forecasts

Table G.1 compares the V4 and V9 forecasts of elderly and disabled concessionary fares reimbursement to bus operators for 2005-6.

**Table G.1 Forecasts of Bus Operator Reimbursement 2005-6**

| All figures in £million | All PTEs | GMPTE | Metro | Nexus | SYPTE | Centro | Mersey-travel |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Version 4 Forecasts** | *£128.412* | £19.173 | £12.892 | £14.782 | £5.875 | £44.895 | £30.794 |
| Version 9 Forecasts | £124.427 | £19.288 | £11.782 | £14.180 | £5.656 | £42.369 | £31.152 |
| Difference | -£3.985 | £0.115 | -£1.110 | -£0.602 | -£0.219 | -£2.527 | £0.358 |
| Percentage | -3.2% | 0.6% | -9.4% | -4.2% | -3.9% | -6.0% | 1.1% |

Overall, the latest forecast suggests that in 2005-6 overall expenditure on bus operator reimbursement by the six PTEs will be about 3% less than that anticipated in the Version 4 forecast. For individual PTEs, the most significant changes have been brought about by:

- Availability of more up-to date passenger, fares and reimbursement data (Metro, Nexus and SYPTE);
- Incorporation of historic trends into projections (most noticeable for Merseytravel, but implicit in some of the other forecasts where 2005-6 forecasts were not provided explicitly by PTEs);
- More accurate detailed treatment of Centro's half fare scheme (which, all other things being equal, would progressively save money to 2006-7 as the proportion of half-fare concessions increases).

### Comparison of Do-Something Forecasts

Because the V9 forecasts are multi-modal, at first sight it is not possible to directly compare them with V4 forecasts. The V4 forecasts were intended to represent a situation in which free travel was only provided on bus, and the quoted costs were concerned only with reimbursement to bus operators. However, at the time it was not possible to incorporate the potential for diversion from other public transport modes if fares continued to be charged on these non-bus modes, and hence cross-modal effects were ignored.

In practice, the scenario modelled in the V4 forecasts was therefore similar to that of the V9 Option 5, in which free travel is provided on all local public transport modes, with no transfer of concessionary passengers to bus (and hence also no complexities with regard to bus operator reimbursement). Consequently, the V4 "Do Something" forecast for bus operator reimbursement is functionally equivalent to the V9 Option 5 forecast of reimbursement to bus operators, allowing the two sets of forecasts to be compared. This is shown in Table G.2.

**Table G.2 Comparison of V4 and V9 2006-7 "Do Something" Forecasts (Bus Reimbursement Only), £ million**

| | All PTEs | GMPTE | Metro | Nexus | SYPTE | Centro | Mersey-travel |
|---|---|---|---|---|---|---|---|
| **Version 4 Do Something Forecast** | *£205.093* | £43.175 | £29.338 | £31.521 | £18.547 | £50.098 | £32.415 |
| Change relative to V4 2005-6 Do Nothing | *£76.681* | *£24.002* | *£16.446* | *£16.739* | *£12.672* | *£5.202* | *£1.621* |
| Percentage | *59.7%* | *125.2%* | *127.6%* | *113.2%* | *215.7%* | *11.6%* | *5.3%* |
| **Version 9 Do Something (Option 5) Forecast** | *£189.131* | £38.157 | £26.335 | £31.410 | £16.208 | £44.599 | £32.422 |
| Change relative to V9 2005-6 Do Nothing | *£64.704* | *£18.869* | *£14.553* | *£17.230* | *£10.552* | *£2.230* | *£1.270* |
| Percentage | *52.0%* | *97.8%* | *123.5%* | *121.5%* | *186.5%* | *5.3%* | *4.1%* |

In overall terms, there is an 8% reduction in the 2006-7 forecast of "Do Something" expenditure on bus operator reimbursement between the V4 and V9 forecasts. The forecast increase in overall expenditure (in 2006-7) relative to the respective 2005-6 "Do Nothing" situation is £12 million less in the V9 forecasts than the V4 forecasts.

The largest single difference between the forecasts is for GMPTE. We recognised at the time of the Stage 1 report that our estimate for GMPTE was out-of-line with GMPTE's own forecasts, and we subsequently identified a problem with a commercial fare estimate that was significantly too high in V4[1]. Our V9 forecast is now very close to that produced by GMPTE.

The forecasts for both Metro and SYPTE are affected by a change of approach with regard to estimating the impacts of additional costs. In V4 we sought to estimate the total volume of generated travel in the Do Something scenarios, and applied a "standard" value per generated passenger to estimate the additional costs associated with all these generated passengers. While reflecting additional cost payment practice in some PTEs (notably GMPTE and Nexus), this does not reflect practice in Metro and SYPTE, where additional cost payments are subsumed into revenue foregone payments. Consequently, in V9 we apply the additional cost rate/passenger to increases in generated passengers (e.g. from the change from flat fare to free fare), and add them to existing additional cost payments where these are already made. In effect, we have assumed that all PTEs will pay some additional costs for new passengers generated by the free scheme, but that this is additional to, and does not replace, any pre-existing arrangements.

The other PTE where there is a major difference between V4 and V7 is Centro, where we now have an explicit and more accurate calculation of the effect of the half-fare scheme becoming free, as well as a more accurate build up of the 2006-7 Do Nothing with which to compare the "Do Something" figure.

[1] One of the objectives of our restructuring of the spreadsheet was to avoid reliance on estimated commercial fare values, given that these can be difficult to establish and are subject to a variety of interpretations.

# Appendix H
# Sensitivity of Forecasts to Alternative Assumptions

# Sensitivity of Forecasts to Alternative Assumptions

There are clearly a large number of sensitivity tests that could potentially be carried out to demonstrate the robustness (or otherwise) of the various assumptions that are implicit in the forecasts.

**Trend Decline in Concessionary Travel Volumes**

An initial area of uncertainty, and one in which a different approach has been taken in the current forecasts compared with Stage 1, concerns the treatment of the secular decline in concessionary travel. The Stage 1 forecasts took no account of this, but in the current forecasts our projection of 2006-7 Do Nothing scenarios has explicitly included a presumption of the continuation of the secular decline observed in MVA's work for pteg in late 2004.

Table H.1 contrasts forecasts of reimbursement for the 2005-6 Base, 2007-7 Do Nothing, and Option 5 for our core V9 forecasts and a variant in which underlying trends in concessionary travel volumes have been set to zero.

**Table H.1 Total Reimbursement – With / without allowance for trend decline, £ million**

| | All Six PTEs | | GMPTE, Metro, Nexus and SYPTE | | Centro and Merseytravel | |
|---|---|---|---|---|---|---|
| | V9 Forecast | Variant – no trend decline | V9 Forecast | Variant – no trend decline | V9 Forecast | Variant – no trend decline |
| Base (2005-6) | £138.4 | £139.9 | £56.9 | £56.9 | £81.5 | £83.0 |
| Do Nothing 2006-7 | £143.4 | £147.4 | £60.8 | £61.7 | £82.5 | £85.6 |
| Option 5 | £207.5 | £213.0 | £122.1 | £124.3 | £85.4 | £88.6 |
| Increase Option 5 from 2005-6 | £69.1 | £73.0 | £65.3 | £67.4 | £3.9 | £5.6 |
| % increase | 50.0% | 52.2% | 114.7% | 118.6% | 4.8% | 6.8% |

As would be expected, the impact of ignoring the trend is to increase levels of expenditure relative to V9, by about £1.5 million overall in 2005-6, £4 million in 2006-7 under a Do-Nothing scenario, and by £5.5 million under Option 5. Patterns for individual PTEs are similar, but since the V9 trend assumptions vary between PTEs (based on MVA's earlier work for pteg on concessionary travel trends) the impact differs somewhat between PTEs. It would seem unlikely that the decline that has been in evident for some years will suddenly cease, and the more robust assumption is that it will continue, as reflected in our V9 forecasts.

**Increased Concessionary Travel Volumes with Free Fares**

One of the most immediate impacts of the introduction of free travel will be that more concessionary trips will be made as existing and potentially new passholders make more use of a more generous concession. In principle, increased trip making by existing passholders can be regarded as generated by the concession, and therefore should not affect the quantum of reimbursement received by operators for revenue foregone; however, increased generated trips may give rise to justifiable claims for additional costs.

The extent of the increase in trips is difficult to predict, although evidence from Wales and Scotland suggests that it will be in the range of 20% to 40%. Our V9 forecasts are based on an assumption of a 30% increase. However, we have looked at how the forecasts would vary if an increase of 40% was experienced.

In addition to varying the assumption about generated trips from existing passholders, we have also tested the impact of more generous assumptions with regards to potential new passholders. In V9 we assume that passholders increase by 10% in the four flat fare PTEs only, and that on average the trip rate of the "new" passholders is 25% of existing passholders. Under the variant, these percentages change to 15% and 50%,

and in addition it is assumed that passholding in Centro and Merseytravel also rises, by 7.5%[1] . The implications are summarised in Table H.2.

**Table H.2 Impact of Alternative Assumptions about Passenger Growth and Pass Take-up**

| | All Six PTEs | | GMPTE, Metro, Nexus and SYPTE | | Centro and Merseytravel | |
|---|---|---|---|---|---|---|
| | V9 Forecast | Forecast Increase in Reimbursement | V9 Forecast | Forecast Increase in Reimbursement | V9 Forecast | Forecast Increase in Reimbursement |
| Base (2005-6) | £138.4 | | £56.9 | | £81.5 | |
| V9 Option 5 | £207.5 | £69.1 | £122.1 | £65.3 | £85.4 | £3.9 |
| Option 5 with 40% growth only | £208.5 | £70.1 | £123.1 | £66.2 | £85.4 | £3.9 |
| Option 5 with 40% growth, plus larger "new passholder" affects | £213.4 | £75.1 | £126.5 | £69.6 | £87.0 | £5.5 |

It can be seen that if the increase in trips generated by the change to free fares is larger than our V9 assumption, the impact on expenditure is very modest, increasing total expenditure on reimbursement by £1 million. This arises purely from assumed increases in additional cost payments, at the "standard" rate we have assumed throughout. If significant increase in passholding takes place, the impact on expenditure is more significant – about £6 million - especially since under the variant we have tested there is assumed to be some increase in the West Midlands and Merseytravel as well as the other four PTEs.

Overall, our view is that although some increases in passholding will take place, at least in the four PTEs currently charging a concessionary fare, it will be fairly modest in scope and will not have a large impact on reimbursement. The reimbursement associated with "new passholders" under our V9 assumptions is of the order of £2 million overall.

**Alternative Assumptions about fare differentials and bus/tram/train transfer**

Under Option 3, current concessionary fares are assumed to be retained on tram, Metro and train when free fares are introduced on bus, and under options 1 and 2, it is assumed that concessionary fares are withdrawn on train (Option 2) and on all non-bus modes (Option 1). The consequence of different fares being charged on the different public transport modes is that:

- concessionary passengers will transfer from tram/Metro/train to bus;
- increases in bus operator reimbursement;
- some reduction in revenue foregone payments to the tram/Metro/train operators;
- but the possibility of the respective PTEs having to pay the rail-based operators some compensation for loss of revenue.

[1] As might be encouraged by national publicity about the introduction of the new National Minimum Standard.

The basis of our calculation of the financial impacts of these changes is outlined in the main text, but clearly they are dependent upon a variety of assumptions, some of which are speculative. The sensitivity of our V9 forecasts to alternative assumptions is illustrated in Tables H.3 and H.4. Table H.3 shows forecast expenditure on reimbursement under Option 1 (the most extreme of the scenarios) if diversion from train to bus is 60%, which is approximately double what we have assumed in V9, and diversion from tram to bus is about 90%, as opposed to 60%.

**Table H.3 Reimbursement with Increased Diversion to Bus under Option 1, £ million**

| | **All Six PTEs** | | **GMPTE, Metro, Nexus and SYPTE** | | **Centro and Merseytravel** | |
|---|---|---|---|---|---|---|
| | V9 | Variant | V9 | Variant | V9 | Variant |
| Bus reimbursement | £193.48 | £196.71 | £115.00 | £117.08 | £78.48 | £79.63 |
| Tram/Metro compensation | £5.88 | £8.21 | £4.78 | £6.99 | £1.10 | £1.22 |
| Total | £199.36 | £204.91 | £119.79 | £124.07 | £79.57 | £80.84 |
| Increase in Total Expenditure | | £5.55 | | £4.28 | | £1.27 |

With these more extreme assumptions, total expenditure under option 1 would increase by about £5.5 million.

Table H.4 shows the impact of half the V9 rate of diversion.

**Table H.4 Reimbursement with Reduced Diversion to Bus under Option 1, £ million**

| | **All Six PTEs** | | **GMPTE, Metro, Nexus and SYPTE** | | **Centro and Merseytravel** | |
|---|---|---|---|---|---|---|
| | V9 | Variant | V9 | Variant | V9 | Variant |
| Bus reimbursement | £193.48 | £190.37 | £115.00 | £112.83 | £78.48 | £77.54 |
| Tram/Metro compensation | £5.88 | £2.36 | £4.78 | £2.08 | £1.10 | £0.29 |
| Total | £199.36 | £192.73 | £119.79 | £114.91 | £79.57 | £77.82 |
| Increase in Total Expenditure | | -£6.63 | | -£4.88 | | -£1.75 |

If diversion to bus under option 1 is much less than V9 has assumed, the overall increase in expenditure associated with free fares would be £6.6 million less than the V9 forecast.

**Rate of compensation for additional costs**

The objective determination of an appropriate rate of compensation for additional operator costs is very difficult and subject to many areas of debate. The base position is in a constant state of change as operators change commercial registrations, (often in response to real or perceived competitive threats), and passenger number change (generally through decline, but with notable exceptions). A further variable is change in the vehicle fleet arising from renewal and, within larger companies, internal cascading of vehicles between local subsidiaries.

Our forecasts are based on an illustrative additional cost rate of 9p per generated concessionary passenger, which is the highest rate currently paid by any of the PTEs. Some PTEs currently make no explicit payments for additional costs, on the basis that the justification for such payments has not been demonstrated. However, the experience of SPT is that additional cost claims could reflect a much higher proportion of total costs than would be generated by this assumption. Moreover, there is no doubt that the introduction of free travel will create a once-off increase in the volume of bus travel that could have an impact on available capacity in some locations and at some points in time, depending upon current overall load factors and the relationship between supply (of bus services) and passenger demand by time of day.

Table H.5 shows the impact on reimbursement of half and doubling the rate of compensation for newly generated trips for Option 3.

**Table H.5 Reimbursement with different rates of Additional Cost Payment**

| | V9 assumption – £0.09 per new generated passenger | Variant - £0.18 per new generated passenger | Variant - £0.045 per new generated passenger |
|---|---|---|---|
| **Option 5 Total Expenditure on Reimbursement** | £207.52 | £211.12 | £205.72 |
| **Change in Expenditure** | | £3.60 | -£1.80 |

Thus doubling the rate of payment for new generated passengers would increase overall expenditure on reimbursement under Option 5 by £3.6 million, whereas halving the rate relative to the V9 assumption would reduce the forecast Option 5 expenditure by £1.8 million.