

ASSOCIATION OF GREATER MANCHESTER AUTHORITIES

EXECUTIVE 31 OCTOBER 2008

TRANSPORT INNOVATION FUND ('TIF') FUNDING AND FINANCE STRATEGY

REPORT OF THE CLERK TO GMPTA AND THE CHIEF EXECUTIVE OF GMPTE

PURPOSE OF REPORT

To present the finance and funding strategy underpinning the TIF package

BACKGROUND INFORMATION

Reports to AGMA Executive:

Greater Manchester's proposed Transport Innovation Fund Bid	27 July 2007
Transport Innovation Fund (TIF) : Programme Entry Decision	27 June 2008

RECOMMENDATIONS

It is recommended that the finance and funding strategy underpinning the TIF package is noted.

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1. Introduction

- 1.1. In overview, the TIF package involves up to £3 billion of capital and supporting expenditure, of which approximately £2.7 billion relates to capital and other related expenditure that will be directly procured by Greater Manchester, with further investment being procured by the DfT and private sector bus operators. GMPTE will be responsible for the procurement of the elements of the package to be delivered by Greater Manchester.
- 1.2. At least 80% of the public transport improvements will be in operation before the proposed introduction of congestion charging in July 2013.
- 1.3. The expenditure required to deliver the package will be met through £1.3 billion of TIF capital grant from the DfT, £0.2 billion of resource grant from DfT, £0.1 billion of local third party (e.g. developer) and other local contributions, and £1.2 billion of borrowing, to be undertaken by GMPTA, which will be repaid from the revenues generated by the package, including from congestion charging.
- 1.4. Greater Manchester's TIF proposals have been built up from detailed cost and revenue analysis, with appropriate allowances for risks and uncertainty. The TIF proposals have been developed over a three year period and have involved detailed economic and financial modelling and planning throughout. This modelling has then been, and continues to be, subject to scrutiny from DfT and GMPTE's financial advisors.
- 1.5. The TIF bid has been developed on the basis of prudent assumptions designed to ensure that Greater Manchester has sufficient contingencies to support the borrowing requirement should outcomes not be as currently forecast. This in turn means that Greater Manchester residents will not be exposed to an inappropriate level of financial risk.
- 1.6. Since the original bid in July 2007, and following the Programme Entry decision in June 2008, a significant amount of work has been undertaken to develop the business cases for the individual schemes and for the TIF package as a whole. This has included reviewing the scope and deliverables within each of the schemes and reviewing and updating capital costs and, where appropriate, operating revenues and costs.
- 1.7. In addition, and as discussed in Section 6, a detailed review of project and programme risks has been undertaken and as a result, scheme and programme level risk allowances have been revised, however the total capital cost risk contingency is £0.6 billion which is the same level as at Programme Entry. This is approximately 31% of the anticipated capital cost, excluding risk and contingency allowances.

- 1.8. A number of changes to the package are reported in the accompanying AGMA paper “TIF Package Proposed Amendments” which have been accommodated within the available funding. As shown in Figure 2 there has been some movement in costs between different areas of the programme as costs have become firmer, risks have been more clearly defined and cash flow and contingency profiles have been refined. The total capital and supporting costs of the programme, including risk allowance however, remain unchanged from the £2.76 billion reported in July 2007.

2. Capital Expenditure

- 2.1. Figure 1 below sets out the public transport improvements that will be in operation before the proposed introduction of congestion charging in July 2013.

Figure 1

Scheme
Metrolink to Ashton under Lyne
Metrolink to East Didsbury
Metrolink to Manchester Airport
Metrolink into Oldham Town Centre
Metrolink to Rochdale Town Centre
Extra heavy rail rolling stock and station upgrades
Leigh-Salford-Manchester guided Busway (“LSM Busway”)
Extra TIF-funded bus services
Measures to improve bus access into the regional centre / other district centres
Yellow School Buses
Behavioural Change programme
Park and Ride enhancements
Flexible Transport service improvements
Measures to integrate public transport (e.g. integrated ticketing, enhanced passenger information systems)
Road Traffic information and control system improvements (pre-charging)
Altrincham public transport interchange enhancement
Bolton public transport interchange enhancement
Stockport public transport interchange enhancement
Wigan public transport interchange enhancement
Stockport Town Centre

- 2.2. The remaining schemes which will become operational after July 2013 include:
- further Metrolink line to the Trafford Centre;
 - a second City crossing for Metrolink;
 - further measures to improve bus access to more district centres; and
 - further regional centre interchange enhancements.
- 2.3. Figure 2 below analyses how the locally delivered capital programme is split between different transport modes (excluding additional DfT heavy rail and private bus operators' investment).

Figure 2: Capital and supporting expenditure, including risk allowances

Mode	October 2008 £m	June 2008 £m
Congestion Charging Scheme	328	318
Metrolink	1,154	1,182
Rail	134	149
Bus	390	368
Other schemes	537	526
Total Capital Expenditure	2,543	2,543
Supporting non-capital expenditure	220	220
Total Capital and supporting non-capital expenditure	2,763	2,763

- 2.4. The figure above includes £63 million of RFA funding in addition to the specific TIF package relating to Leigh Salford Manchester BRT (£45 million) and the Outer Area Bus Priority Package (£18 million).
- 2.5. Bolton Interchange is included in Other scheme costs in Figure 2 above. The costs included in TIF assume that £24 million (in outturn prices) is funded by the RFA.
- 2.6. The Rail capital expenditure shown in Figure 2 excludes the expenditure that DfT has agreed to fund directly. Similarly, the bus capital expenditure figure excludes any investment from private sector bus operators to deliver the extra TIF bus services.

Capital Cost Contingency

- 2.7. Since June 2008, further risk assessments have been undertaken, for all schemes, to ensure that all risks have been captured and costed, are being appropriately managed. The total amount of contingency included in Figure 2 above for capital costs is £0.6 billion.

3 Sources of capital funding/ financing

- 3.1 The sources of capital funding/ financing shown in Figure 3 below. These sources are explained below, and exclude RFA funding.

Figure 3

TIF Package	October 2008 £m
Grant and borrowing	
TIF Capital grant	1,221
TIF Resource grant	220
Local prudential borrowing up to 2018-19, borrowed against charging revenues	1,150
Local resource contribution 08/09	14
Third-party and other contributions	95
	<hr/>
	2,700
Rail items to be procured by DfT	
TIF Capital grant	71
TIF Resource grant	6
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Total	2,777
In addition, local borrowing for renewals, 2019-20 to 2023-24	96

- 3.2 Additional funding for renewals of approximately £1 billion, to be funded from cash flows, is included up to 2041.

TIF capital grant

- 3.3 The TIF capital grant will be provided by the Department for Transport and is wholly conditional on the implementation of the planned congestion charging scheme within the proposed timeframe.

Local third party contributions

- 3.4 The finance plans include local third party contributions from developers and others who will directly benefit from the public transport elements delivered through the TIF package.

GMPTA borrowing

- 3.5 Although the precise mix of lending has yet to be determined, GMPTA will borrow £1.2 billion for the TIF programme through the most appropriate route, balancing cost with interest rate risk and flexibility.
- 3.6 A number of different options are available to GMPTA to secure borrowings, including the Public Works Loan Board (PWLB), the European Investment Bank ('EIB') and the commercial banks.
- 3.7 The advantages of PWLB funding are that it is simple and quick to access, it is available over different repayment periods and interest margins are relatively low. The disadvantages of PWLB are that the rate of interest cannot be fixed until the loan is drawn down, although it can then be fixed for the full term of the loan.
- 3.8 Both commercial banking and EIB loans can be arranged in such a way that interest rates can be fixed, however both commercial bank and EIB rates are likely to be higher than PWLB rates and the commercial banks may require arrangement and or commitment fees. Provision has been included within the financial model for these fees.
- 3.9 It is intended to utilise a mixture of all three debt sources to provide a package which provides best value, balancing low interest rate margins with protection against future increases in interest rates. Financial instruments are currently available to match the repayment profile included in the financial model. The financial plans also include an allowance for interest rate risk, with a rate of 6% being assumed. This compares to a rate of 4.7% (at 21 October 2008) for fixed rate 30 year maturity debt.

- 3.10 In addition to the borrowing of £1.2 billion for the initial capital investment, the financial appraisal provides for borrowings of £0.1 billion for capital renewals. The total borrowings of £1.3 billion are forecast to be repaid in full by September 2041.
- 3.11 In addition, the DfT has provided for borrowing cover of £420 million for Phase 3a and other purposes. The projected borrowing profile is detailed later in this document. The package agreed in principle with Government includes Treasury agreement to this level of borrowings. This is a similar agreement to that secured by Transport for London ('TfL') and ensures that delivery of the programme would not be threatened by any future rationing of local authority prudential borrowing.

4 Operating costs and revenues

- 4.1 2015/16 is shown in this section as an example year as it is when the TIF package achieves a broadly steady state. However, over time the net revenue position will change due to economic growth, differential changes in prices and costs, increased public transport uptake and variable renewals costs. The figures reported in the example year in Figure 4 below take account of the congestion charging policy propositions reported in detail in the accompanying AGMA Executive report, 'TIF Package Proposed Amendments'.

Charging

- 4.2 The congestion charging scheme will generate revenues through payment of the congestion charge by road users crossing the proposed rings. On the basis of the conservative growth and behavioural response forecasts built into the financial modelling, in 2015/16 gross congestion charge revenue is forecast to be £178 million in nominal terms (e.g. after inflation), based on a £5.00 charge (in 2007 prices – £6.00 in 2013 prices) for a trip crossing both charging rings in the direction of peak traffic flow during both peak periods.
- 4.3 Congestion charge operating costs in the same period are forecast to be £32 million, resulting in a net revenue forecast in 2015/16 of £146 million. This compares to net revenue of £143 million at Programme Entry.
- 4.4 The projected congestion charge revenue reflects the proposed refinements to the boundary and more detailed transport modelling work that has been carried out since Programme Entry.

- 4.5 Research into the operating costs of cordon charging and road tolling schemes across the world with some similarities with the charging scheme proposed for Greater Manchester has been undertaken. None of the schemes are directly comparable with that proposed for Greater Manchester, but many employ similar technologies.
- 4.6 Costs per transaction are the key measure of financial efficiency of a charging scheme. These costs vary between schemes largely as a result of the mix of technologies used, with those schemes which are reliant on a significant amount of manual processing and/or number plate recognition technology ('ANPR') (e.g. Dartford and Queensland) tending to involve higher transaction costs than those where a higher proportion of users are handled through tag and beacon systems (e.g. Oslo, Melbourne City Link, and Singapore).
- 4.7 The AGMA proposals are designed to make the most of the efficiency opportunities offered by sophisticated technology and automated billing systems. The AGMA design philosophy is therefore one which seeks to match the efficiency levels of approaches such as those used in places like Oslo, Melbourne and Singapore. As the scheme will not go live for nearly five years, the design will continue to be refined, by benchmarking against similar schemes across the world, with a focus on optimising efficiency.
- 4.8 For the purposes of prudent financial planning, operating costs have been assumed to average 30 pence (at 2007 prices), rather than the lower costs that research suggests have been achieved with similar design philosophies elsewhere. Delivering lower transaction costs than those assumed would increase the net revenues available for reinvestment in the Greater Manchester transport network.

Metrolink

- 4.9 A substantial increase in Metrolink gross and net revenues will result from the increase in services and routes created as part of the TIF package and as a result of the modal switch to Metrolink generated by the charging regime.
- 4.10 Net revenues generated from Metrolink are incremental and in addition to those net revenues generated from the already approved extensions to the network to Oldham / Rochdale, Droylsden and Chorlton (together referred to as Metrolink 3A').

Rail

- 4.11 The expansion to rail services contained within the TIF bid will not require any ongoing support nor provide any incremental revenue to Greater Manchester. DfT Rail, through the rail franchising process, will receive all revenues and bear all operating and renewals costs associated with the increased rail capacity that the DfT is committed to provide under the TIF package.
- 4.12 DfT will be procuring the additional rolling stock and infrastructure investment required as part of the package directly, and therefore bearing the associated risks, rather than this element of the package being delivered by Greater Manchester.

Bus

- 4.13 Additional bus services (in addition to BRT and other bus infrastructure) will be provided through bus partnerships, which are designed to ensure that additional revenues that bus operators gain as a result of the introduction of charging, bus priority schemes, interchanges and other measures including an increased Park and Ride offering, are used to fund additional services.
- 4.14 In addition, an allowance has been made for additional support for bus services, funded from net charging revenues.

Other costs

- 4.15 In addition to the Metrolink, Rail and Bus infrastructure that will be improved in Greater Manchester, a broad spectrum of other public transport measures will be provided, including the upgrade of public transport interchanges; a public transport integration scheme (which includes integrated ticketing and real time passenger information systems); enhanced road traffic control systems and a programme of behavioural change activities. These schemes are an essential part of delivering the improved transport system, however they are not expected to directly generate revenue. Overall these schemes will have operating costs of £48 million in 2015/16.

4.16 Figure 4 below provides a summary of revenues and costs for 2015/16 in nominal terms (after inflation).

Figure 4: Summary net revenue position – 2015/16

	October 2008 revenue £m	October 2008 cost £m	October 2008 net £m	June 2008 net £m
Charging	178	(32)	146	143
Public Transport	69	(76)	(7)	(5)
Other	5	(48)	(43)	(43)
	252	(156)	96	95
General contingency	-	(25)	(25)	(25)
Interest Payment Net cash flow (at 6% rate)	-	(57)	(57)	(56)
Net cash flow	252	(238)	14	14
Principle repayment reserve	-	(6)	(6)	(8)
Cash Reserves	252	(244)	8	6

Programme level revenue contingency

4.17 In addition to the charging and growth contingencies described above, the TIF package financing assumptions include a programme level revenue contingency of £25 million in 2015/16. This reduces the net revenues assumed to be available to service borrowings, providing additional headroom in the event that outcomes are not as expected. After March 2014, the contingency escalates at a rate of 5.3% p.a.

Debt servicing and Principle repayment

4.18 Net revenues after allowing for the general contingency are used to service debt and provide for principal loan repayments.

4.19 The debt service figures in the table above assume that all the capital cost contingencies are spent. If the general capital cost contingency included in the financial model is not spent, and at the interest rates that could be accessed today, the above debt service costs for 2015/16 of £57 million, would be approximately £20 million lower.

5 Borrowing Profile

5.1 The projected borrowing profile is set out in the graph below:

Figure 5: Projected borrowing profile

- 5.2 The borrowing profile above shows the cumulative borrowing position in the period from 2008/09 and demonstrates that borrowings are projected to be fully repaid by 2041. The borrowing profile is aligned to the projected capital expenditure profile and to the borrowing profile at Programme Entry.
- 5.3 In addition borrowing can be undertaken occasionally for larger renewals costs where this is the most efficient approach to managing the variation in cash flows due to lumpy renewals requirements.
- 5.4 This borrowing will be undertaken using the power gained under the Local Government Act 2003. The system allows a Local Authority to raise finance ("Prudential Borrowing") providing that the plans are Affordable, Prudent and Sustainable. The Prudential Code states the indicators that the authority must use to determine this.

- 5.5 These indicators of prudence have been incorporated into the TIF financial model. The indicators look at the authority's ability to service and ultimately repay all external debt within a reasonable time-limit. During discussions with DfT, Government has reviewed the TIF financial model and confirmed that in the context of foreseeable contingencies, the scheme meets the requirements of Prudential Borrowing.
- 5.6 In addition, the approach may include 'forward fixing' of interest rates, for example through similar products to those available, and which TfL has secured through the European Investment Bank.
- 5.7 Although the Prudential Borrowing regime provides additional freedoms for Local Authorities, the Government still needs to control overall public sector borrowing. To ensure that such controls do not undermine Greater Manchester's ability to deliver the TIF programme, or other elements of GMPTE's capital plans, the proposed agreement with Government includes a clause that ensures that should an overall cap be introduced on Local Authority prudential borrowing; this will not limit Greater Manchester's ability to borrow sufficient funds to deliver the entire TIF programme.
- 5.8 It is forecast that all debt is repaid by 2041 and that cash balances are expected to become available for further investments towards the end of the package lifespan.
- 5.9 The interest costs of the proposed debt profile shown in Figure 5 have been calculated on the assumption that all of the capital cost contingency is spent and is calculated on the basis of a 6% per annum interest charge. Debt repayments broadly match an annuity repayment profile with repayments beginning in 2021, although provisions, in accordance with the requirement to make provisions for principal repayments, under the Minimum Revenue Provision guidance, begin in the year following the year in which the assets, to which the borrowings relate, are brought into operation.
- 5.10 Borrowings will be undertaken to match, as far as possible, borrowings with the assets that are being funded. Asset lives vary between 12 and 50 years, however the assumed average asset life is in the region of 30 years. The exact nature and source of the eventual borrowings will be determined by the available products in the market. A mixture of products will be identified which minimises costs whilst reducing interest rate risk to an affordable level.

6 Risk

- 6.1 The TIF bid has been developed on the basis of prudent assumptions designed to ensure that Greater Manchester has sufficient contingencies to support the borrowing requirement should outcomes not be as forecast. This in turn means that Greater Manchester residents will not be exposed to an inappropriate level of financial risk.
- 6.2 An allowance of some £0.6 billion is included (equivalent to 31% of the anticipated capital cost, excluding risk and contingency allowances, of the locally delivered schemes) in case the cost of the capital items that will be delivered locally escalates above the anticipated cost. This is included in the £2.7 billion above.
- 6.3 An interest rate assumption of 6% per annum for GMPTA borrowing. As detailed earlier, the rate for 30 year maturity debt from the Public Works Loan Board (PWLB) the rate was 4.7% at 21 October 2008.
- 6.4 The financial model that supports the TIF bid has been developed on the basis of TEMPRO forecasts of economic growth, in line with the standard DfT growth assumptions that are used for transport appraisal purposes. TEMPRO, however, has tended to underestimate the level of job growth in Greater Manchester in recent years. Going forward TEMPRO forecasts employment growth of 0.5% per year through to 2021. AGMA's economic model has employment growth at 1% per year. It is estimated that, if local forecasts were a more accurate predictor of employment growth than TEMPRO, this would generate an additional £9 million per annum of net revenue by 2016 compared to what has been assumed in the financial model.
- 6.5 Additional contingencies relating to the revenues and operating costs of both the charging scheme and the public transport investments. These include:
- a cautious view of the number of drivers crossing the charge points and thus of charging revenues. The latest transport models forecast a 10% to 15% reduction in peak traffic (vehicle kilometres) to the Regional Centre as a result of the TIF package. This translates into 20-30% fewer vehicles crossing the charge cordons after the introduction of charging. These forecasts compare to experience gained from the Stockholm Charging Scheme, where the reduction in cordon crossings has been a little over 20%. The impact of charging on the number of vehicles crossing the cordons is a key factor in determining revenues. For the purposes of assessing financial revenues a more cautious view of the impact of the proposed charging scheme on cordon crossings has been taken and a 35% reduction has been assumed rather than the 27% forecast by the transport models. This cautious view results in approximately 7% less forecast charging revenue than would be predicted by Greater

Manchester's latest transport models. This additional contingency is estimated to be worth at least £13 million of net revenue by 2016; and

- a further general annual revenue contingency which is worth some £25 million by 2016.

6.6 The net revenue contingencies provided for in the financial plans increase over time, reaching some £48 million per annum by 2021. If these contingencies prove not to be required then further funds would be available to support additional transport improvements in Greater Manchester beyond those provided for in the TIF package.

6.7 The DfT has set out in their Programme Entry decision letter a number of conditions that must be satisfied before full approval will be granted. The key programme level conditions are set out below:

Achieving Value for Money

6.8 GMPTE must continue to demonstrate that the overall package delivers value for money.

Approval of the Financial Plan

6.9 A detailed financial plan must be submitted to DfT that demonstrates that the plan remains aligned with the funding envelope. A detailed financial plan will be submitted to DfT as part of the Programme level Business Case.

6.10 District Section 151 Officer sign off demonstrating approval to the financial plan and its implications will be required prior to conditional approval being given by DfT. This sign-off process would not take place until after the Referendum. An initial briefing session has been held with District Treasurers in respect of the financial and funding implications of the TIF package and further sessions are scheduled.

Capability and Capacity

6.11 It will be necessary to demonstrate that the capability and capacity of the organisation is appropriate to the scale and complexity of the programme proposed. The filling of key posts with people with relevant experience is one element of this assessment. A second element of this capability and capacity assessment will be an examination of the internal governance and controls environment.

Risk Management

- 6.12 A full risk management strategy is required to include all risks associated with the liabilities set out in the DfT Programme Entry decision letter.

Independent Assurance and Scrutiny

- 6.13 Ongoing scrutiny of capability and capacity is being undertaken as a key part of the Joint Independent Assurance process that has, in accordance with DfT's Programme Entry decision letter, been ongoing since June 2008.
- 6.14 Further scrutiny of the capability and capacity of the organisation and compliance with the conditions set by DfT at Programme Entry in June 2008, will be carried out in two key reviews.
- OGC 'Gate 0' Review ; and
 - Major Projects Review Group ('MPRG') Assessment.
- 6.15 GMPTE is required to set the timing and scope of future Gateway and MPRG reviews that will be completed as the programme progresses. The current proposal is for the OGC 'Gate 0' review to be undertaken in January 2009 followed by the MPRG review in February 2009. The exact timing and scope of these reviews will be developed in conjunction with DfT.

7 Conclusion

- 7.1 Detailed economic and financial modelling has been undertaken which has then been reviewed in detail by DfT. This work has developed a robust TIF funding package that is both cautious and affordable, whilst providing sufficient contingencies and assurance to ensure that Greater Manchester can afford the required levels of debt.
- 7.2 Detailed recommendations appear at the front of this report.

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