

Greater Manchester's Future Transport

How will the Transport Innovation Fund investment be realised?

A description of how the Transport Innovation Fund proposals will be delivered, governance, GMPTE organisation and capacity, funding, finance and risk management

July 2008

Information Pack Document no. 3







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Glossary

AGMA Association of Greater Manchester Authorities

ANPR Automatic Number Plate Recognition

CROPT Crime Reduction on Public Transport Partnership

CT Community Transport

DCSF Department for Children, Schools and Families

DfT Department for Transport

DRT Demand Responsive Transport

DVLA Driver and Vehicle Licensing Authority

FT Flexible Transport

GMBOA Greater Manchester Bus Operators' Association

GMP Greater Manchester Police

GMPTA Greater Manger Transport Authority

GMPTE Greater Manchester Passenger Transport Executive

HLOS High Level Output Specification
OGC Office of Government Commerce

P and R Park and Ride

PWLB Public Works Loan Board

RCTS Regional Centre Transport Strategy

RFA Regional Funding Allocation

TIF Transport Innovation Fund

YSB Yellow School Bus

Your views are important

We are particularly interested to hear the views of local residents and businesses – that's why a Consultation Brochure has been sent to all homes and businesses in Greater Manchester.

Within the brochure is a response form which can be used to record your views and which should be returned to GM Future Transport Consultation in the freepost envelope enclosed in the brochure **by 10 October 2008**.

GM Future Transport Consultation Ipsos MORI Admail Freepost 4115 Manchester M4 5ZZ

You can also send your responses in a number of different ways, as follows:

- Online at www.gmfuturetransport.com
- Via email to gmfuturetransport@lpsos-Mori.com
- In writing to the GM Future Transport Consultation freepost address
- By texting us free @ 60013. Simply text TIF plus your message.

If you represent an organisation or group you are encouraged to send us an email or a letter – the views of such groups may be made public.

Information in different languages and formats

To receive this document in other languages, or in Braille, large print or audio format, please ring **0800 234 6100**. If you use a text phone please dial 18001 before the phone number - you will then be connected to the BT Typetalk service.

Introduction

On 9 June 2008 the Secretary of State for Transport announced that Greater Manchester's bid for an investment of up to £3 billion to boost the City Region's public transport system had been approved for Programme Entry by the Department for Transport. This document is one of three which taken together explain in detail the rationale and details of the proposals as part of a comprehensive public consultation exercise which is now taking place.

This Document (Document 3) describes the delivery strategy and framework that will be necessary given the scale of investment and operational capability which is associated with the package. This Document also describes the programme of borrowing which is to be undertaken, as well as the more intensive approach to funding and managing financial risk which will characterise the delivery process.

The following specific issues are considered:

- a high-level programme for the implementation of each transport scheme and an explanation of how the delivery programme has been put together;
- the new local governance structures which are envisaged to deliver the programme in an accountable and responsive manner, including the development of new models of collaboration between GMPTE and local providers of public transport services:
- the organisational changes and skill base improvements which are taking place or are planned at GMPTE to create the capacity to deliver a

- programme of the scale envisaged by the TIF package; and
- an outline of the prudent approach that Greater Manchester has taken to securing and spending the financial resources required for the package, which has been the subject of significant Government scrutiny prior to the Programme Entry Announcement.

Document 1 addresses the key question of why a strategy of significant investment to transform Greater Manchester's public transport system alongside action to tackle congestion and to incentivise a switch from car travel to public transport is considered essential. Document 1 also explains the impact of this package on the future economic and social health of Greater Manchester and the alternatives that have been considered to explain why the "upfront" overall package of investment; why a greater influence over buses and rail services: and why after the bulk of investment has taken place, a weekday peak period only congestion charge is considered to be in the best long-term interests of the area.

Document 2 explains the details of the public transport investment proposals, including radical plans to transform the local bus network, investment in the Metrolink extensions and trams, improvements to rail and bus stations and interchanges, and provision for longer trains. Details are also provided of how facilities will be improved for cyclists and pedestrians, how changes in travel behaviour will be encouraged, and how the environment will be made safer for people to use public transport at all times of the day.

Document 2 also details the complementary proposals for a weekday peak period only congestion charge which is due to be implemented in 2013 when at least 80% of the public transport improvements will be in operation. This shows the options considered and how our proposals target only those journeys by car which contribute the most to congestion. Drivers will be charged if they cross either or both the M60 ring and/ or the Inner Ring inbound in the morning peak or outbound in the evening peak. No charge will be payable outside these times, at weekends or on Bank Holidays. There will be no charge during weekday periods if the journey concerned does not cross over one of the charging rings.

There are no other congestion charging proposals being considered for Greater Manchester.

Timeline

Overview of TIF Programme Delivery Schedule

The TIF Implementation Programme represents more than two years of planning work, which has been developed initially on a scheme-by-scheme basis and then combined to ensure compliance with AGMA's objective of ensuring the majority of the TIF schemes are completed prior to the congestion charging scheme becoming operational in July 2013.

Each project schedule represents the optimum timescale required to deliver that scheme, and has been established by lead consultants in each of the key public transport fields represented in the TIF Package. This has ensured that realistic timescales have been allowed for, together with appropriate levels of contingency, that overall give a robust framework for delivery of the schemes

In preparing the schedules for each project, GMPTE has drawn upon the experience gained from delivering the many recent schemes equivalent to those being proposed in the TIF Package, ie, Metrolink, quality bus corridors, rail station improvements and interchanges.

Recent bid work carried out on the Metrolink renewals programme and Phase 3a expansion has provided GMPTE with up to date light rail cost and schedule data, which is now being used to underpin the assumptions made in the TIF proposals.

The high-level delivery programme is currently predicated on delivering Congestion Charging and the majority of the transport infrastructure improvements by July 2013. The summary schedule in Figure 1 below

indicates the delivery milestones for the individual projects.

Schemes planned to extend beyond 2013

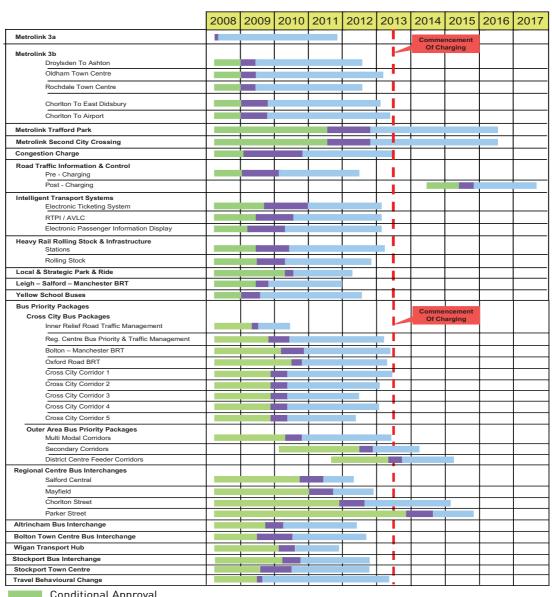
Schemes that are indicated to extend beyond 2013 include:

- Trafford Park and Second City
 Crossing schemes A Transport
 and Works Act (TWA) is required to
 enable the implementation of these
 schemes. The TWA consultation
 process will commence towards the
 end of 2008
 resulting in scheme completion by
 late 2016 (subject to TWA powers).
- Road Traffic Information and Control

 The delivery programme has been deliberately separated into a preand post-charging iplementation.
 This gives greater flexibility and will ensure traffic management initiativescan be implemented that respond to Greater Manchester's experiences of the live congestion scheme.
- Some of the Outer Area Bus Package schemes – The majority of the Outer Area Bus Package schemes will be delivered in advance of Congestion Charging commencing in 2013. GMPTE will then assess the actual effects of the introduction of charging prior to completing the Outer Area Bus Package schemes, thus allowing for the introduction of any refinement of the network that is found to be necessary.
- Regional Centre Bus Interchanges

 To achieve the overall package
 of work each interchange must
 be constructed in a specific order,
 commencing with the Mayfield site

Figure 1: Overview of TIF Programme Delivery Schedule



Conditional Approval
Full Approval
Implementation

which will facilitate the relocation of the inter-regional coach services currently operating from Chorlton Street. Once relocated the Chorlton Street site can then be comprehensively redeveloped to accommodate local bus services displaced from Parker Street, and the growth in services anticipated as part of th TIF strategy. During this time, the existing Parker Street bus station will remain in use for local bus services, supplemented by temporary on-street facilities, until the Chorlton Street site is available for use.

 The final phase of the programme sees the redevelopment of the current Parker Street bus station as the city centre termination for Bus Rapid Transit (BRT) services. The new Salford Central interchange can be constructed independently of this phasing and will thus be available prior to July 2013.

Making the programme happen

Accountable and Efficient Governance Arrangements

Overview

The Government has led a debate over recent years to consider how the major city regions outside London should be organised in future to maximise their potential contribution to national economic performance and to deliver best value across public services, culminating in the Sub-National Review of 2007 and legislation, which is anticipated shortly.

The Greater Manchester authorities have been active in working with Government throughout this period and have highlighted the critical role that the coordination of local transport investment and service planning will play in this regard. This is reflected in the prvisions of the 2008 Local Transport Bill allowing for the review of local transport governance arrangements, which AGMA intends to pursue at the earliest opportunity to secure a future strategic decision-making mechanism that will best meet the purposes of the TIF strategy.

The arrangements being considered and developed by AGMA reflect:

- the need to be able to deliver a very extensive local transport investment programme in an accountable and efficient manner;
- the importance of institutional reform to allow for a greater local influence over the procurement and management of bus and rail services, alongside greater integration of strategic motorway management into the local transport system;

- the effective management of the transport network so that it becomes more responsive to the changing demands being placed upon it, through enhanced strategic capacity and coordination between local authorities and other stakeholders;
- the full integration of local regeneration agencies and local businesses into Corridor Partnerships to support local prioritisation and performance management of investment programmes; and
- the need to provide for effective risk management across investment schemes and the delivery of key policy objectives.

Proposed New Arrangements

City Region Governance

At the City Region level, AGMA has been considering these issues as part of a wider review of City Region governance and in response to these challenges has already agreed to make some key changes to its current governance structure including:

- reforming the current AGMA
 Executive into a City Region
 Executive Board with a robust strategy framework and with a sharper focus and remit;
- establishment of a strategic transport commission;
- refocussing GMPTE to become a strengthened delivery agency;
- development of corridor partnerships comprising representatives of transport, regeneration and local business communities to oversee and guide the delivery of the strategy at local level; and

 strengthened governance, scrutiny and oversight arrangements.

The Local Transport Bill, when enacted, will be a key enabler for this agenda, but progress is already being made. As a key first step AGMA has agreed, in principle, that in order to manage risk and guarantee delivery, key decisions relating to the implementation of an agreed TIF programme should, if necessary, be taken on a binding majority voting basis. AGMA is committed to ensuring that this and any other changes necessary to deliver a successful combined investment and charging package, are delivered as part of the wider change agenda.

Greater Manchester Executive Board

At the heart of AGMA's approach to governance is the creation of an Executive Board comprising the ten local authority leaders to exercise oversight of the future economic and social development of the Greater Manchester area. It is here that the primary and accountable responsibility will lie for the effective coordination of economic, planning and transport policy for the City Region. The Executive Board has expressed an intention to become responsible for a number of key transport policy priorities:

- overseeing the delivery of the proposed combined investment and charging programme;
- overseeing the management and performance of Greater Manchester's transport networks, including road traffic congestion and public transport overcrowding;
- determining transport policy and ensuring that it is coordinated with the economic, planning and

- environmental policies of the City Region;
- ensuring that the financial interests of individual authorities are protected, including decisions affecting the deployment of contingency provision;
- ensuring that all strategic issues affecting the performance and delivery of the TIF delivery programme are resolved in an efficient and timely manner;
- providing a strategic focus for the work being undertaken through the Local Transport Plan/Integrated Transport Strategy to reduce road casualties across Greater Manchester; and
- ensuring a good strategic fit, at the Greater Manchester level, between the transport strategy and the parallel strategies for spatial planning and economic development.

Strategic Commissioning Board

AGMA has agreed that a Strategic Commission for Transport should be established to exercise day to day responsibilities for key strategic matters affecting the conurbation and to provide direction to individual stakeholders including Corridor Partnerships on the outcomes which need to be delivered to support AGMA policies and programmes. The responsibilities for a Commission would include:

 overseeing the performance of GMPTE in delivering the combined investment and charging programme and key supporting initiatives, such as behavioural change;

- providing a strategic focus for integrating transport with other policy priorities including social inclusion, environment, spatial planning and economic development;
- providing a performance management framework for measuring the impact of the transport programmes;
- monitoring of the risk management framework; and
- working closely with parallel commissions considering planning, housing and economic development to ensure that there is a good strategic fit.

Whilst this framework will need to be further developed over the coming months, it is believed to provide a firm foundation for changes to be made to future governance arrangements. The Local Transport Bill provides considerable flexibility for individual City Regions to come forward with proposals suited to their own circumstances, and the future review required by the Bill will consider the allocation of responsibilities between agencies. There may well be a case for AGMA to move towards these new governance arrangements on a phased basis.

The delivery agency: GMPTE

Greater Manchester Passenger Transport Executive will assume the role of delivery agency for the TIF programme. Its priorities will include:

- direct responsibility for procuring the public transport improvements, including Metrolink, local rail and bus services;
- direct responsibility for delivery of behavioural change outcomes

- related to TIF, including ticketing, the management of public transport facilities and marketing / promotion;
- working with corridor partnerships, the Highways Agency and local authorities on the full range of transport activity, including the delivery of strategic outcomes on the highway network, such as bus priority. GMPTE will also have responsibility for the management of strategic components of the transport network, for instance, the proposed traffic control centre and the Greater Manchester Urban Traffic Control (GMUTC) unit; and
- implementation and day-to-day management of the congestion charging scheme.

Corridor partnerships

In parallel with the proposals for reform at the strategic level, AGMA Executive has already agreed that a kev mechanism for local delivery and assurance would be the establishment of a series of locally based corridor partnerships which reflect the linkages between transport and land use planning. Their role will be to deliver corridor-based strategies against a series of targets for transport, economic and regeneration related outcomes. Building on existing partnerships and structures, where appropriate, the partnerships would comprise the relevant local authorities, GMPTA/E, regeneration agencies and other key private and public sector stakeholders. It will be for GMPTE to assimilate the work of these partnerships into wider transport planning and programme development. It will be for the Commissioning Board to ensure that the target-based outcomes are

delivered and coordinated into a total performance management framework for the network as a whole.

A significant amount of work has already been undertaken with constituent public sector partners in these local partnerships to assemble baseline information and identify the key transport and regeneration challenges that must be met. This will assist in the key task to align transport, planning and regeneration policies across the board. This work has already provided a key input to the discussions regarding the development of a Multi Area Agreement for Greater Manchester.

Scrutiny

Arrangements are being developed to strengthen the scrutiny of the structures described above taking into account provisions in the recent Local Government and Public Involvement in Health Act. Dominant themes in these arrangements will relate to public and wider stakeholder accountability, including the need to provide a key role for the business community, and transparent information and performance management processes.

Governance Outcomes

The key outcomes delivered by these reforms could include:

- consolidation of all strategic transport functions into a unified structure, allowing charging and public transport decisions to be integrated;
- effective influence over the local bus network allowing this mode to be fully integrated into the wider transport network;
- the opportunity for greater influence over the local rail network; and

 greater integration of the Highways Agency network into the local transport planning process.

Institutional Reform: Securing Third Party Commitment to the TIF Strategy

An essential complementary element of AGMA's approach to City Region governance is the need for more effective influence of the key components of the transport network, including the transport operations which are outside the direct control of AGMA and GMPTA. Greater Manchester's approach depends entirely on the ability to effectively influence the quality and capacity of the bus, rail and Highways Agency networks to ensure that all decisions taken by any transport operator or agency are complementary to Greater Manchester's integrated transport strategy for the area.

A major focus has been on the arrangements which are needed to create a step change in the quality and capacity of bus service provision, together with a new integrated approach to fares and ticketing, and supporting financial arrangements to ensure that this step change is delivered equitably, efficiently and cost effectively. A detailed Bus Partnership Prospectus has been agreed by GMPTA/E and the Greater Manchester Bus Operators Association (GMBOA) which:

- explicitly recognises a new leading role for GMPTE in facilitating the development of an integrated network and the need for a new performance-driven framework;
- incorporates a commitment to ensuring that any competition enhances the overall service to passengers, avoids undermining

public sector investment, and minimises over-capacity and inefficient congestion;

- incorporates a commitment to the development of a new simplified fares system, including a new multi-modal ticket and a system of public transport smart cards, and a principle of establishing a process for ensuring that fare levels complement road pricing proposals, as well as social and economic objectives; and
- includes a framework enabling all material financial dimensions to be addressed.

Work is well advanced on a series of detailed agreements together with the development of a revised bus network following the completion of a Memorandum of Understanding earlier this year.

AGMA and GMPTA have also clearly stated that a contingency arrangement will be applied, if the partnership fails in providing the quality network stability that the TIF strategy requires. In such a case, the authorities have reserved the right to exercise the powers to develop quality bus contracts, as set out in the 2000 Transport Act as likely to be amended by the Local Transport Bill.

As far as the local rail network is concerned, the Local Transport Bill provides the mechanisms for places like Greater Manchester to take a greater role in the specification and funding of local rail services. AGMA and GMPTA intend to make maximum use of these opportunities to ensure that rail services are specified and planned in conjunction with local bus and highway measures. They also wish to develop a similar role in influencing the decisions on the

Highways Agencies network to ensure that the totality of the local network is considered in an integrated way.

Charging Regulator

In agreeing the submission of the TIF bid in July, AGMA noted the need to establish an independent regulator to provide additional assurance for the wider community and businesses that future decisions on the detail of the congestion charging scheme will be evidentially-based and subject to independent scrutiny. Since then, further consultation and engagement with businesses has assisted officers in developing these proposals. Whilst detailed work would be required in due course on the full role and responsibilities of the regulator, an outline proposal has been developed for consultation purposes.

The regulator would be an independent person, employed on a permanent, paid basis with a supporting research capability. The regulator would be appointed through a transparent process overseen by a panel of AGMA Leaders and key local business representatives. The regulator would produce public reports to the AGMA Executive on key matters relating to the TIF strategy, including congestion charging.

In particular, the following proposed responsibilities have been identified for the regulator:

 independent monitoring, with regard to the first AGMA test, of the public transport delivery programme and the requirement to secure sufficient public transport investment in advance of charging;

- independent scrutiny, with regard to the second AGMA test, of the long-term impact of congestion charging pricing strategy on Greater Manchester's economic competitiveness and social inclusion objectives;
- independent scrutiny, with regard to the fourth AGMA test, of the impact of the future congestion charging "price signals" on the extent of the current and projected congestion problem across Greater Manchester;
- independent advice on the future congestion charging pricing strategy, with regard to its ability to support the prudent borrowing arrangements that underpin the Greater Manchester TIF investment programme; and
- independent monitoring of the operating performance of the charging scheme, with regard to its ability to effectively manage costs of operation whilst retrieving maximum revenues owed.

Delivery Strategy

Whilst GMPTE undertakes a range of activities relating to operations and implementation within the Greater Manchester region, the scale and nature of the TIF programme of works will require a different delivery strategy and framework from those traditionally adopted. The scale of the programme will require a significantly larger management organisation with additional skill sets over and above those that are currently available within the GMPTE team.

GMPTE's Delivery Strategy

GMPTE's delivery strategy is addressing these challenges by:

- the introduction of a new and appropriate organisational structure that will successfully manage and implement a wider range of concurrent transportation projects contained within the TIF Programme and will operate the congestion charge;
- leadership: harnessing the skills and capacity of individual stakeholders

 highway authorities, transport
 providers etc. – to the delivery
 of programmes through active
 leadership and partnership;
- appointing Delivery Partners to work alongside existing GMPTE staff in Integrated Delivery Teams. These partnership arrangements with external companies will provide GMPTE with sufficient technically experienced capacity, flexibility and capability to be able to deliver the multiple schemes in parallel, and leave a legacy of a highly skilled workforce:

- developing the skills and capabilities
 of the organisation to address new
 opportunities –Delivery Partners
 will provide immediate skills but
 it is recognised that capabilities
 need to be further embedded such
 as procurement skills, commercial
 skills for bus operations, better rail
 and bus planning skills, improved
 long-term planning and forecasting
 skills and greater levels of
 technology experience;
- developing performance management and competency frameworks to align the organisation with the needs of the TIF programme delivery
- mobilising staff, equipment and associated services effectively and according to the delivery requirements of individual projects, utilising appropriate management skills and governance;
- engaging appropriately with stakeholders, internally and externally, throughout all stages, to ensure concerns are considered and dealt with effectively;
- introducing enhanced programme management, programme assurance, risk management and performance measurement techniques;
- developing, introducing and utilising Management Information Systems which are fit for purpose for the delivery of a portfolio of projects of up to £3 billion;
- delivering operating systems and revenue collection systems through the effective use of information technology that will be consistent across the schemes and enable us

- to deliver an effective and efficient integrated transport system in Greater Manchester; and
- recognising the particular challenges around road pricing schemes, learning from experiences from across the world and constructing an Integrated Delivery Team with knowledge gained from London, Stockholm, Edinburgh and beyond.

These fundamental actions around the appointment of a Delivery Partner have been successfully implemented for Metrolink Phase 3a and will be rolled out across the TIF Programme. This approach ensures that GMPTE can gain rapid access to world class delivery and project and programme management and procurement skills, and that the partners engaged are appropriately incentivised to deliver to time and budget.

Change Programme

A new high-level structure to transform GMPTE into a delivery agency for both TIF and Metrolink Phase 3a was set out in a paper to AGMA last September. The paper recognised that the success of GMPTE was not merely about changing the structure and recruiting more staff; it was also about a cultural change within the organisation.

GMPTE has set in motion a course of action to provide a step change in capability, new organisational structure, streamlined, efficient operating systems and more effective performance systems to manage internal staff, delivery partners and contractors.

The cultural change programme is underway, and a new organisational structure has been defined. The organisation is addressing the need to enhance the skills and capabilities across the organisation through training, staff development and performance management, as well as recruiting new staff to ensure that skill gaps are addressed.

GMPTE's core values include:

- Delivery delivering exemplary services to the travelling public of Greater Manchester to a high standard, on time and within budget;
- Partnership working in collaboration with others to achieve the GMPTE goals;
- Ambition continually improving the services provided to transform public transport in Greater Manchester;
- Respect behaving ethically, acting with honesty and being fair in everything the organisation does; and

 Responsibility – being accountable for actions and their consequences and taking personal responsibility for the achievement of goals and objectives.

GMPTE Organisational Structure

The high-level organisational structure endorsed by AGMA last year outlined six directorates, including Commercial, Organisational Development, Finance & Corporate Services, Information Systems, Metrolink, and Bus / Rail.

Significant progress has already been made in implementing this new structure to enable GMPTE to deliver the TIF programme in addition to its normal day-to-day activities. This new GMPTE organisation structure is shown in Figure 2.

Several key senior appointments have now been made, including the Finance and Corporate Services Director, the Information Systems Director, and the Metrolink Director. The appointment of the Commercial Director is currently ongoing.

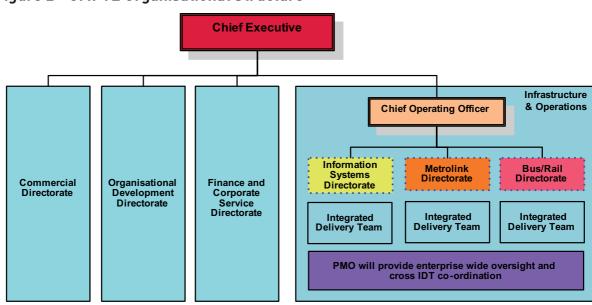


Figure 2 - GMPTE Organisational Structure

Further details of the roles and responsibilities of the GMPTE Directorates are included in the Appendix.

Capability and Capacity

Introduction

GMPTE requires substantial additional resource to undertake the delivery of the TIF programme. This additional resource will be procured through the appointment of Delivery Partners, the recruitment of permanent and interim client-side staff and the procurement of specialist Framework consultants.

Integrated Delivery Teams / Delivery Partner

GMPTE has adopted a programme delivery model, which is based around the use of specialist Delivery Partners working together with GMPTE staff in Integrated Delivery Teams. These partnership arrangements with external companies are required to ensure that GMPTE has sufficient technically experienced capacity, flexibility and capability to deliver multiple schemes in parallel.

The Delivery Partner role is used by clients worldwide to support major projects. Organisations such as the Olympic Delivery Authority, Transport for London and Network Rail all use Delivery Partners and the model is recognised as an appropriate option by OGC. The Delivery Partners for the TIF projects will be selected by a competitive process, to support GMPTE in being an "intelligent client", providing in depth and up to date industry knowledge and expertise including prior knowledge of implementing similar programmes. The Delivery Partners will provide a wide range of specialist skills and experience including programme management, technical, operational and commercial, and will work closely with GMPTE staff to form three Integrated **Delivery Teams:**

- a Metrolink Delivery Partner Parsons Brinckerhoff appointed July 07;
- a Charging and Systems Delivery

Partner – PricewaterhouseCoopers appointed in May 08; and

 a Bus and Rail Delivery Partner – to be appointed towards the end of 2008.

A major criterion in the selection process for a Delivery Partner is its cultural fit with the type of delivery focused organisation that GMPTE will become. This was one of the major factors that was relevant to the appointment of Parsons Brinckerhoff (PB) who were appointed as the Delivery Partner for Metrolink Phase 3a and Metrolink TIF projects in July 2007. Since their appointment, the PB team have demonstrated that they understand the approach and priorities of GMPTE and that they are committed to supporting the cultural change, which is needed within the organisation to enable a strong integrated delivery team to be formed. Future procurement of Delivery Partners will build upon this success.

The strengths of the Delivery Partner model are that it:

- helps establish strong integrated teams with GMPTE staff to manage all aspects of delivery;
- provides access to established teams which have previously worked together, enabling long-term GMPTE in-house skills and knowledge to be combined with the strength and depth of a world-class partner;
- provides immediate access to high calibre individuals with extensive expertise and experience; the knowhow and technical skills necessary to deliver;
- maximises flexibility of resources, the ability to draw down particular specialist skills as and when required for the Programme that can

- be expanded and contracted to meet GMPTE's needs;
- represents best value for money as experienced staff can be engaged and disengaged relatively quickly without going through an extensive recruitment process and without engaging people on short term contracts;
- enables risk to be shared by linking the Delivery Partner's remuneration to the achievement of project milestones and key performance indicators, including delivery within budget; and
- provides a genuine knowledge transfer and an associated legacy for future developments and operations.

Framework Consultants

GMPTE recognises that the resources required for technical studies, and design on the projects are large and varied, with a number of different skill bases required, sometimes over short periods. GMPTE has tendered, and following a technical and commercial evaluation, selected a panel of Framework Consultants with different skills which has been used successfully by a number of large clients in the past. Individual commissions and subprojects are then tendered among a number of consultants on the appropriate Framework.

Programme Management and Delivery

Programme management will be embedded at the heart of TIF programme delivery by the use of Integrated Delivery Teams. This will be supported by a suite of programme management and delivery procedures and processes which will assist in providing a structured approach to activities at the corporate, programme and project levels. These procedures have been developed with the assistance of professional programme managers and will be used to manage both the TIF projects and Metrolink Phase 3a.

Programme Management

This consists of the following workstreams which are integrated in a cohesive manner.

Business Cases

Business cases for the individual schemes have been and will be continually updated where appropriate as further scheme definition is developed by the Project teams. This has included further preliminary design and clarification with DfT, giving greater certainty over the scheme benefits, costs and delivery programmes.

Procurement Strategy

Preliminary procurement routes for the TIF schemes have been developed, giving consideration to:

- maximising Value for Money;
- mitigation of programme delay risk; and
- taking advantage of economies of scale and local knowledge.

It is expected that the TIF programme

will include a number of different procurement routes involving multiple stakeholders including Network Rail, Manchester City Council, local Boroughs and Northern Rail.

As the schemes are further developed, enhanced scope and requirements will be available, and the contracting strategies will be revisited and validated as appropriate.

Procurement strategies and the procurement team have been developed in line with delivering best value for money, which is managed and tracked on an ongoing basis. In terms of delivering TIF successfully, the framework of resources continue to be secured which includes: Delivery Partners for Metrolink and Charging & Traffic Systems, and further frameworks for "research and strategy" consultancies. These will continue to be strengthened with the procurement of a Delivery Partner for the Bus & Rail workstream and further frameworks under consideration.

To ensure that all the workstreams are aligned and best value for money can be delivered throughout the programme, the Procurement team will be responsible for managing collaboration opportunities and contract management. This will be delivered through a core team of Procurement and Contract management professionals and clear performance management and tracking.

Supply Chain Management

GMPTE is aware of the possible drain on resources and materials caused by major engineering projects in the south of England up to 2012 and beyond. The procurement team will invest time in understanding these constraints and proactively managing the supply chain, particularly focussing on opportunities for local suppliers and local labour.

Programme and Project Controls
Effective Programme and Project
Controls will be fundamental to the
success of the TIF Programme. Knowing
how, where and when the budget is
being spent relative to the progress
can be a complex undertaking on large
projects. GMPTE, and its Delivery
Partners, will use tried and tested
techniques such as those used by
London Underground's Programme
Assurance Office for the £30 billion PPP
Contracts.

Management of Costs

GMPTE will use best practice techniques to manage costs. Following competitive bidding, Delivery Partners will be employed to assist GMPTE to procure and manage the contracts. Cost control measures such as earned value, or rates with target prices, will be used so that suppliers are paid for the work they do and / or realistic target outturn prices are agreed under a competitive environment to ensure best value.

Recent bid work carried out on the Metrolink renewals programme and phase 3a expansion has provided GMPTE with up to date light rail cost and schedule data, which is now being used to underpin the assumptions made in the TIF proposals.

Management of Programme

An initial high-level TIF implementation schedule for the Congestion Charging and transport upgrade projects is included in the TIF Bid. Additional detail will be provided for each project at the time of tender for construction. The schedule will be cost and resource loaded to facilitate management of the

contract. The successful contractors will be required to update the project programme on a monthly basis and the Delivery Teams will review, approve and achieve necessary adjustments to these schedules.

Management of Risk

The cost, scale and complexity of the proposals in the TIF Programme inevitably require a significant focus on risk management, and therefore at the heart of our programme is a rigorous approach to risk identification, quantification and mitigation and the subsequent development of appropriate contingency plans.

Moreover, risk management forms a key component of GMPTE's strategic approach and is embedded within the programme and project management processes that have been adopted by GMPTE's TIF Project Team.

A great deal of work has been undertaken across the breadth of the TIF Project Team to comprehensively identify and appropriately treat risks associated with the TIF bid.

In general, our approach to risk mitigation is supported by five main principles:

- all reasonable steps will be taken to control costs;
- a risk-adjusted approach will be taken to the forecast of costs and revenues:
- a clear statement of assumptions has been included as part of the bid, for example regarding the status of the GMPTE's transport models;
- early engagement will take place with all stakeholders, to ensure that they understand what is happening

- and their role in the success of the programme delivery; and
- robust change management leadership, processes and implementation will be put in place, to enable a step change in corporate performance.

In line with government best practice, risks have been assessed by probability and impact and then classified as one of critical, significant, medium and minor. With the adoption of appropriate mitigation actions none of the risks associated with the TIF Programme are deemed to be at either the critical or significant level.

Systems and Processes

Introduction

New systems and processes are currently being implemented, including a Management Information System, Phase 1 of which is due to go live in November 2008, and a new Risk Management system which was implemented successfully earlier this year. Improvements are also being made to the project management processes, the document management system and the quality management system. These projects are supported by an overall Communications Programme.

Congestion Charging

There are a variety of challenges that face any major conurbation implementing a congestion charging scheme. Three key challenges are: managing the costs of operation, ensuring the right technology is selected and successfully implemented, and delivering the behavioural changes needed to enable drivers to modify journey patterns and / or select different modes of transport.

- Costs of Operation throughout the development of the TIF proposals GMPTE, in conjunction with DfT, has maintained a strong focus on managing the operating costs of the proposed congestion charging scheme in line with best practice. Two typical drivers of operating costs are the complexity of the scheme design and the commercial arrangements with an operating partner. A sophisticated financial model has been developed to support the design of the scheme. This model is used to understand, amongst other things, the impacts on operating costs of any changes to scheme design to ensure predicted operating costs are kept within acceptable limits. PricewaterhouseCoopers LLP is the Delivery Partner working with GMPTE on the charging scheme. They are developing the contracting strategy to procure any charging scheme service provider(s). Key objectives of this strategy will include appropriate risk transfer to the service provider(s) and establishing a contract management regime to ensure that service provider(s) deliver value for money at agreed levels of performance.
- Technology the congestion charging scheme is scheduled to go live in five years time, in 2013. This is a very different scenario to that faced in many previous implementations. GMPTE already has an initial technical design for the congestion scheme and will use the next five years to refine and improve this design. In addition to utilising experiences of live implementations worldwide, GMPTE will work closely with the DfT's Road

Pricing Demonstrations Project to provide further input and experience as part of technical design and implementation.

Behavioural Change - experience from congestion charging schemes elsewhere has shown that where drivers get significant support to change journey patterns, this leads to a reduction in congestion. Greater Manchester's future transport proposals provide this support in a variety of ways. Congestion charging will not go live before the bulk of the public transport improvements are in place, giving drivers alternative choices. Park and Ride facilities will extend the reach of public transport to those who feel they have to drive for part of their journey. The largest ever programme of individualised travel marketing in the UK will help people to understand their alternative travel options. In addition, the future transport proposals address car sharing, car clubs, improvements for cycling and also walking routes.

Figure 3: GMPTE Lines of Defence

Programme Assurance

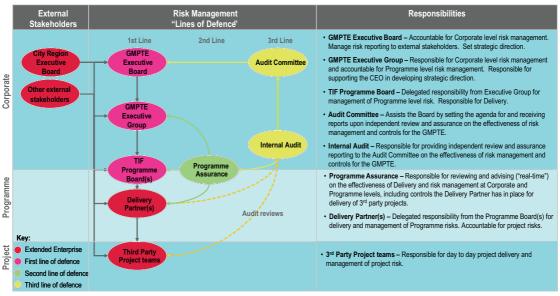
Programme Assurance is a technique which ensures that the projects are well managed in accordance with corporate governance requirements and offer the stakeholders best value.

The role of GMPTE Programme
Assurance function is outlined in the
Appendix, as part of the Finance and
Corporate Services Directorate. The
GMPTE Programme Assurance Strategy
for TIF is based on the "3 Lines of
Defence" model. This model is based
around tried and tested methodologies
that have been successfully applied
within many organisations including the
Olympic Delivery Authority (ODA) and
Transport for London.

Programme Assurance activities, in conjunction with the Risk & Assurance function, will act as the second and third mechanisms in helping GMPTE to manage its capital programme as indicated in the diagram below.

"3 Lines of Defence" Model

GMPTE has adopted a "3 lines of Defence" Programme Assurance model with reviews at different levels as shown in Figure 3:



Within this framework, the Programme Assurance function will address strategic issues using:

Assess, Improve, Monitor Methodology

- Phase I assess effectiveness of current programme / project control, governance and assurance mechanisms and compare to best practice;
- Phase II –improve project and programme processes, controls and capability appropriate to individual project circumstances; and
- Phase III monitor the performance of projects and programmes and effectiveness of processes by undertaking regular reviews.

Integrated Assurance

 GMPTE is proposing to adopt an "Integrated Assurance" approach, where Programme Assurance reports are shared with other stakeholders to reduce the need for duplication of assurance efforts, increasing efficiency and visibility.

A strategy has been developed for providing Joint Independent Assurance (JIA) across the TIF programme. The overall objective of JIA is to provide confirmation to GMPTE and DfT as to whether the TIF programme is being delivered effectively and in line with required standards. This will be

achieved through the operation of two

JIA teams:

Joint Independent Assurance

 The Programme Assurance Team will provide ongoing support and challenge to the TIF programme team on programme performance, organisational readiness and the quality of programme information; and

the Internal Audit Team will provide periodic evaluation of the TIF programme and individual projects as to whether projects are being delivered in line with the required standards.

Stakeholder Engagement

Effective stakeholder consultation and engagement is a prerequisite for all GMPTE projects. As the stakeholder issues vary in size and nature, it will be important for the Delivery Teams to ensure that there are very clear rules of engagement with each of the stakeholders involved. The Delivery Team structure provides for dedicated personnel to ensure the successful engagement and management of stakeholders and provides points of contact for consultation on the associated consents and approval requirements.

GMPTE will adopt a focussed approach to Stakeholder engagement based on dedicated, experienced Stakeholder Managers working as key members of the Integrated Delivery Teams (IDT) supported by existing GMPTE staff.

An important element in the approach is to link stakeholder engagement planning with the relevant activities in the TIF programme. This approach will ensure that communications with stakeholders are timely and relevant and will help the IDT members to recognise the importance of each stakeholder.

Stakeholder Impacts

The TIF programme, when complete, will provide a major improvement in public transport for the Greater

Manchester region and the impacts of the individual projects on the various stakeholders will be many and varied. All projects will be managed to ensure the appropriate balance between minimum disruption and greatest possible benefit.

Metrolink

With the exception of the East Didsbury Line, which is mainly routed along an abandoned railway corridor, the new extensions are on new rights of way which are in or alongside the street. There will be a requirement for highway works and utility diversions in the Metrolink corridors during construction. GMPTE is working closely with the highway authorities and utility companies to achieve agreed proposals with the minimum of inconvenience.

Metrolink works will also have the following impacts:

- land acquisition will be needed in some locations and these land requirements have already been identified for those extensions which have Transport and Works Act (TWA) approvals. Requirements will be subject to full consultation and a public inquiry where new TWA approvals are required;
- the Metrolink alignment will require alterations to road layouts. Full traffic modelling will take place to ensure road capacity is adequate for the predicted traffic and will be safe to use (traffic safety audits will be included in the design);
- traffic management will be required during construction and all temporary traffic arrangements will be designed to minimise the impact on traffic flows and will

be coordinated and approved by the local highway authority. The construction programme will be managed to ensure efficient working practices and to minimise road closure periods. Wherever practicable the rail network will be used to transport the materials required for the construction of Metrolink extensions; this will reduce the number of lorry movements required and hence the environmental impact of the construction. This was successfully achieved for the replacement of the existing Phase 1 track during 2007; and

 Third Party Agreements will be put in place where the Metrolink operation or the construction will impact on the property of third parties.

In addition to the infrastructure impacts, GMPTE will also address the environmental issues:

- noise and vibration will be minimised by efficient design of the wheel and rail interface and by the provision of noise limits emanating from the tram. Limits are set for noise from the tram system and these will be no greater than noise generated from normal road conditions;
- the trams are powered from electric overhead wires and pollution generated by the trams in operation will be negligible;
- the appearance of tram stops, overhead line poles and landscaping are all subject to the approval of the local authorities and will be designed sympathetically by architects on behalf of the project; and
- all extensions will be DDA (Disability)

Discrimination Act) compliant and designed in accordance with the appropriate current safety legislation.

Railway

It has been agreed that the responsibility for delivering the overall heavy rail package to support TIF will be split between DfT and GMPTE.

DfT is committed to deliver the additional rolling stock capacity and the associated infrastructure required to sustain the additional rolling stock including depots and stabling, maintenance equipment, platform extensions and turnbacks. GMPTE will deliver all the rail station quality enhancements and passenger facility developments.

DfT will deliver additional rolling stock capacity in conjunction with the HLOS programme to support the anticipated rail passenger growth journeys into the Regional Centre between 2008/9 and 2013/14 based on predictions stated in the White Paper 'Delivering a Sustainable Railway (2007). DfT will also deliver, during 2013, the incremental rolling stock capacity to meet the additional demand created by congestion charging.

In consultation with GMPTE, DfT will assess and finalise the programme of capacity enhancements on the network to support TIF. Post implementation, DfT again in consultation with GMPTE, will monitor that the additional capacity provided remains appropriate to the additional demand resultant from congestion charging.

GMPTE will work closely with DfT to ensure that the delivery of the committed schemes will be delivered to

the requisite quality and on time to meet the growth resultant from exogenous factors and congestion charging.

Consequently, GMPTE will review, monitor, influence and ensure the delivery of an appropriate level and allocation of rolling stock capacity.
Assessments will be made with regards to:

- train operations and planning train types, lengths, service pattern, routes, frequency, stock utilisation wholly within GM;
- appraisal value for money assessments of the emerging scheme proposals; and
- contractual the need to ensure that all operating, maintenance and renewals costs (rolling stock and stations) are appropriately accounted for.

Where necessary, staff with the relevant specialist skills to support the above work will be recruited.

Impacts to be addressed relating to the schemes DfT is to deliver are as follows:

- rolling stock working with DfT to ensure that there will be adequate capacity on all trains post-TIF;
- depots and stabling working with DfT to supplement the requirements of the HLOS programme;
- platform lengthening where construction impacts on the natural environment, including water courses, discussions will be held with English Nature and the Environment Agency, and local residents (and other property owners) will also be contacted. Good design practice, however, will be utilised to mitigate potential

problems wherever possible; and

 turnback facilities - for both turnback facilities and platform lengthening there will be a need for effective liaison with statutory organisations, residents and property owners.

GMPTE and Network Rail, together with the relevant Train Operating Companies (TOCs) where appropriate, are working closely to plan the implementation of the rail stations enhancement programme. An appropriate agreement will be put in place to cover the design and construction of the schemes.

The rail station enhancement works which will take place on land adjacent to operational railway will generally be undertaken by Network Rail or the relevant Train Operating Company, who will manage the day to day construction and installation impacts of these works under contract to GMPTE.

The majority of the minor station improvements will deal with issues of safety, security and passenger information. These works will usually have little disruptive impact on the travelling public during the implementation stages, but publicity of the proposed improvements will nevertheless be provided.

Delivery of the major station schemes (Victoria, Oxford Road, Piccadilly, Salford Central, Hattersley, Lostock, White City, Rochdale, Bolton and Stockport) will be managed in such a way to ensure that passenger disruption is minimised by efficient planning and design. The major station schemes have generally been developed in conjunction with the local planning authority, Network Rail and the relevant Train Operating Company and are located on Network

Rail land. GMPTE will continue to work with the key stakeholders to deliver these schemes whilst simultaneously minimising disruption to the travelling public.

The Park and Ride sites at rail stations will be the subject of detailed discussion with local authorities and other stakeholders such as local businesses and residents. The appearance and impacts of the works will be subject to planning approvals from the local authorities.

Bus Packages

The works associated with the introduction of new bus partnerships and improved/dedicated bus corridors will require some modifications to current road layouts facilitated through consultation, coordination and agreement between the respective highway authorities, the bus operators and other stakeholders. It is important to plan and phase the works, and coordinate construction with other maintenance works required by utility agencies and highway authorities, in order to keep the traffic and bus operations moving at efficient levels and minimise the impacts on current journey times for both public and private transport in the region.

- Land acquisition is not envisaged for the planned bus network, although a land option agreement will need to be exercised to implement the Leigh-Salford-Manchester bus scheme.
- In some cases road space will be lost to private vehicles and road layouts remodelled in many locations where bus alignments have exclusive right of way. Full traffic modelling will take place to ensure remaining road capacity is adequate for the

predicted traffic and safe to use (traffic safety audits will be included in the design).

- Traffic management will be required during construction and all temporary traffic arrangements will be designed to minimise the impact on traffic flows and will be coordinated and approved by the local highway authority. The construction programmes will be managed to ensure efficient working practices to minimise road closure periods.
- Third Party Agreements will be put in place to the mutual benefit of both parties where the bus operation or the construction will impact on the property of third parties

In addition to the infrastructure impacts, GMPTE and local authorities will also address the environmental issues:

- pollution will be reduced through quality partnerships with the bus operators requiring modern well maintained buses to be used. The dedicated Bus Rapid Transit vehicles will be new purpose built low emission buses: and
- the locations, appearance and accessibility of bus stops are all subject to the approval of the local authorities and will be located sympathetically to minimise impacts on adjacent properties and maximise safety.

As part of the TIF strategy the bus network is being re-designed to address a number of shortcomings that passengers have identified as problems. These include:

 a lack of buses in the early morning and late evening;

- services in parts of Greater
 Manchester being too infrequent;
- the inability to change between buses without paying a second fare;
- a lack of services which link to local rail or Metrolink stations.

This new network is being designed to provide improved frequencies, access and better integration. A new partnership agreement with bus operators is being developed that will deliver the improved bus network and do so in a way that would secure stability by minimising and managing change. This will result in the biggest change to the provision of bus services since deregulation in 1986.

The network design proposals will be subject to consultation with local authorities and with local communities before they are implemented, so that local issues are fully understood and reflected within the network of services.

Regional Interchanges

The regional interchanges are centred around existing infrastructure and will be self contained sites having only local impacts.

- Land acquisition will be required in some locations and these land requirements have already been identified and will be subject to full consultation and planning approvals.
- Road layouts and access arrangements into the bus interchanges will be remodelled in many locations and full traffic modelling will take place to ensure remaining road capacity is adequate for the predicted traffic and safe to use (traffic safety audits will be

included in the design).

- Localised traffic management will be required during construction and all temporary traffic arrangements will be designed to minimise the impact on traffic flows and will be coordinated and approved by the local highway authority.
- Third Party Agreements will be put in place to the mutual benefit of both parties where the bus operation or the construction will impact on the property of third parties.

In addition to the infrastructure impacts, GMPTE and local authorities will also address the environmental issues:

- the locations, appearance and accessibility of the bus interchanges are all subject to consultation and the approval of the local authorities and will be designed sympathetically by architects to match the aspirations of the local communities and be fit for purpose; and
- construction impacts of noise, vibration, dust and nuisance will all be managed on a site- by-site basis to minimise the impact of construction on the local community.

The design of the interchanges will include requirements for the structures to provide a safe environment, be environmentally friendly in terms of pollution and noise nuisance.

Funding and Financing

Introduction

Greater Manchester's TIF proposals have been built up from detailed cost and revenue assumptions which are underpinned by a secure and affordable package of funding and finance. The TIF proposals have been developed over a two year period which has involved detailed financial modelling and planning throughout. This modelling has then been subject to rigorous scrutiny from DfT and GMPTE's financial advisors.

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 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.

At least 80% of the public transport improvements must be in operation before the proposed introduction of congestion charging in Summer 2013. In round numbers, 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 £1.15 billion of borrowing undertaken by GMPTA, which will be repaid out of the significant local revenues generated by the package, including from congestion charging.

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. Examples of this prudence include:

- an allowance of some £0.6 billion (equivalent to 31% of the anticipated capital cost of the locally delivered schemes) in case the cost of the capital items that will be delivered locally (and for which Greater Manchester is at risk) escalates above the anticipated cost. This is included in the £2.7 billion above. The terms of the Government's TIF offer mean that a significant proportion of any unspent contingency can be available for additional investment locally;
- an interest rate assumption of 6% per annum for GMPTA borrowing. This compares to the current fixed rate available to GMPTA (as at 1st July 2008) for 30 year maturity debt from the Public Works Loan Board (PWLB) of 4.86%;
- prudent economic growth forecasts. 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 continue to be 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: and

- additional contingencies relating to the revenues and operating costs of both the charging scheme and the public transport investments. These include:
 - a cautious view on the number of drivers crossing the charge points and thus of charging revenues. Greater Manchester's 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 20-30% 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 some £11 million of net revenue by 2016; and

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

These last two contingencies amount to some £36 million per annum by 2016, equivalent to 52% of the net revenues assumed to be available for debt service and debt repayment.

The net revenue contingencies provided for in the financial plans increase over time, reaching £47 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.

Funding of expenditure

Greater Manchester's TIF package involves up to £3 billion of capital and supporting expenditure across the various transport improvement schemes. Capital costs are excluding directly funded capital for additional heavy rail (rolling stock) and the estimated investment in additional buses and depots that is anticipated will be provided by private operators as part of the bus partnership.

An additional package of measures

has been identified for early delivery in Trafford Park.

The remaining schemes (which will become operational after 2013) include:

- further Metrolink line to the Trafford Centre and the Second City Crossing;
- further measures to improve bus access to more district centres; and
- further regional centre interchange enhancements.

Figure 4: Schemes operational before the introduction of congestion charging

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 stations upgrades
Leigh-Salford-Manchester guided Busway ("L-S-M Busway")
Extra TIF-funded bus services
Measures to improve bus access into the regional centre and some of the 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

Figure 5 below shows how the locally delivered capital programme is split between different transport modes (excluding additional DfT heavy rail and private bus operators investment).

The figure below includes £63 million of RFA funding in addition to the specific TIF package.

Figure 5: Modal split of TIF capital and supporting expenditure

Mode	Capital expenditure £m
Congestion Charging Scheme	318
Metrolink	1,182
Rail	149
Bus	368
Other schemes (whole network costs and interchanges)	526
Total Capital Expenditure	2,543
Supporting non-capital expenditure	220
Total Capital and supporting non-capital expenditure	2,763

Note: Rounding differences occur

The Rail capital expenditure shown in Figure 5 above 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

£0.6 billion of capital cost contingency (calculated in a manner consistent with Treasury guidance) has been included. This contingency is added on to the cost of capital projects to reflect the risk that costs have been under-estimated, and provides a buffer for cost over-runs. If the schemes are delivered for less than the financial plans assume, the gains are shared between DfT and Greater Manchester (in line with scheme funding proportions), with GMPTA's borrowing being substantially reduced.

Sources of capital funding/financing

The sources of capital funding/ financing for the Greater Manchester TIF bid are shown in Figure 6. These sources are explained below, and exclude RFA funding.

Figure	6: TIF	capital	funding	and fina	ancing

TIF Package	£m
Greater Manchester 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
	2,700
Rail items to be procured by DfT	
TIF Capital grant	71
TIF Resource grant	6
Total	2,777
In addition, local borrowing for renewals, 2019-20 to 2023-24	96
Note: Rounding differences occur	

In addition to the £2,700 million above, £63 million of RFA funding is available; there is therefore £2,763 million, which is available to deliver the investment programme shown in Figure 5 above.

TIF capital grant

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

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

of lenders including the PWLB, and potentially the European Investment Bank, commercial loans and the bond markets. The precise mix of lending has yet to be determined and GMPTA will borrow £1.15 billion for the TIF programme through the most appropriate route, balancing cost with interest rate risk and flexibility. In addition the DfT have provided for a cover of £420 million for Phase 3a and other purposes. The expected borrowing profile is discussed later in

the Financing section of 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 TfL and ensures that delivery of the programme would not be threatened by any future rationing of local authority prudential borrowing.

Operating costs and revenues

Net revenue position by mode

After construction of the transport infrastructure within the TIF package, Greater Manchester will bear the costs of operating that infrastructure and receive the revenues from the additional public transport and congestion charging scheme. The net revenues from the package will be used to support GMPTA borrowing, additional operating costs (public transport and other) and any necessary renewals.

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.

Charging

The congestion charging scheme will generate revenues through payment of the congestion charge by road users crossing the proposed rings. On the conservative growth and behavioural response forecasts built into the financial modelling, in 2015/16 gross congestion charge revenue is forecast to

be £174 million in nominal terms (e.g. after inflation), based on a £6 nominal charge when the scheme is introduced in 2013 for a trip crossing both charging rings during both peak periods.

Congestion charge operating costs in the same period are forecast to be £31 million, which results in a net revenue forecast in 2015/16 of £143 million.

Charging schemes have been working successfully across the world for over 20 years. In many cases schemes have had to be designed and implemented relatively quickly, for example Stockholm's scheme went live 2.5 years after the initial decision to introduce a scheme was made. In such cases. scheme operators have to focus on driving down operating costs and improving performance in subsequent years once the scheme is live. For example, Transport for London has just retendered its operating contract for the London scheme and is now in the process of changing suppliers. London is expected to include tag and beacon technology in the coming years, in part to help reduce operating costs.

Stockholm has been operating fully for less than a year, so is reviewing its operations with a view to reducing costs. Singapore's scheme is very mature, has compulsory use of tags, almost no exemptions and very high levels of compliance so costs are relatively low. Oslo's scheme is also somewhat mature, with high levels of tag use, but also manual tolling options which are typically more expensive to maintain.

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.

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 ANPR technology (eg Dartford and Queensland) tending to involve higher transaction costs than those where a higher proportion of users are handled through tag and beacon systems (eg Oslo, Melbourne City Link, and Singapore).

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 does not need to go live for another five years, the design will continue to be refined by benchmarking against the rest of the world over a long period with a focus on efficiency.

However, for the purposes of prudent financial planning, higher operating costs have been allowed for, with costs per transaction being assumed to average 30 pence (at 2007 prices), rather than the lower costs 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

A substantial increase in Metrolink revenues and costs 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.

Rail

The expansion to rail services contained within the TIF bid will not require any ongoing support nor provide 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 provision. This reflects the fact that 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

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 are used to fund additional services. In addition to this, an allowance has been made for additional support for bus services, drawing on net charging revenues.

Other costs

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 interchanges, a public transport integration scheme (which includes integrated ticketing and real time passenger information systems),

an increased Park and Ride offering, better road traffic control systems and a discount scheme for lower income workers exposed to the charge. These schemes are an essential part of delivering the improved transport system which Greater Manchester requires, however they are not expected to directly generate revenue. Overall these schemes will have operating costs of £48 million in 2015/16.

Figure 7 below provides a snapshot of revenues and costs for 2015/16 in nominal terms.

Figure 7: Summary net revenue position – 2015/16

Revenues and operating costs	£m revenue	£m cost	£m net
Revenue (post growth and charging impact	contingency, see sect	ion 4.1 above)	
Charging	174	(31)	143
Public Transport	69	(74)	(5)
Other	5	(48)	(43)
Net position (pre general contingency)	248	(153)	95
General contingency	-	(25)	(25)
Debt Service (at the assumed 6% rate)	-	(56)	(56)
Principle repayment reserve	-	(8)	(8)
Cash reserves	-	-	6

Note: Rounding differences occur

Programme level revenue contingency

In addition to the charging and growth contingencies described above, the TIF package financing assumptions include a programme level revenue contingency. 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

As described above, net revenues after allowing for the general contingency are used to service GMPTA debt and provide for loan principle repayments. The above debt service figures assume that all the capital cost contingency provided for on local capital spend (31%) is spent and is calculated at 6% interest. At the interest rates GMPTA could access today, the above debt service costs for 2015/16 would be £10 million lower.

Financing

GMPTA borrowing

The agreement in principle from the DFT provides for the following profile shown below in Figure 8.

Figure 8: Expected GMPTA borrowing

£m	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
GMPTA borrowing	0	56	138	270	257	67	98	167	86	8	3	1,150

In addition GMPTA may borrow occasionally for larger renewals costs where this is the most efficient approach to managing the variation in cash flows due to lumpy renewals requirements.

GMPTA will undertake this borrowing 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.

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 Greater Manchester's TIF financial model and confirmed that in the context of foreseeable contingencies, the scheme meets the requirements of Prudential Borrowing.

In addition, the approach here may include forward fixing of interest rates, for example through similar products to those which TfL has secured through the European Investment Bank.

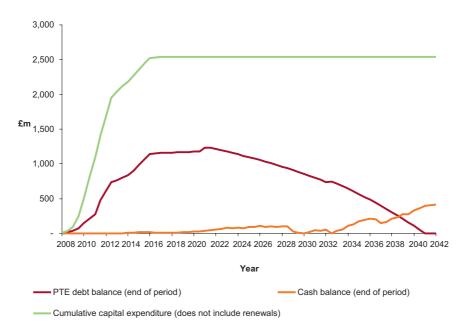
Although the Prudential Borrowing regime provides additional freedoms for

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, 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.

The programme of borrowing planned has many similarities with TfL's Investment Programme. In 2004 TfL marked the start of a funding programme by the issuance of a headline £3.3 billion Medium Term Note (MTN) facility. At 31 March 2007, outstanding borrowings had reached £1.35 billion (excluding financial leasing and PPPs).

Figure 9 shows the expected borrowing and repayment profile of GMPTA borrowing. It shows 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.

Figure 9: Expected GMPTA borrowing, cash balance and cumulative locally delivered capital expenditure and borrowing



The interest costs of the proposed debt profile shown in Figure 9 have been calculated on the assumption that all £0.6 billion of the capital cost contingency is spent and 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 for principle repayments begin earlier. The 6% is a prudent interest rate assumption; however the exact nature and source of the eventual GMPTA borrowings will be determined by the available products in the market. GMPTA will identify a mixture of products which minimises costs whilst reducing interest rate risk to an affordable level.

Financial risk

Key financial risks and how they will be managed

Figure 10 below summarises some of the key financial risks, the mitigating actions that have already been taken to reduce these risks and the options that are available to Greater Manchester in the event of the remaining risks crystallising. The risk management plan will be further developed for presentation to local authorities and AGMA later in the year.

Figure 10: Key financial risks

Risk	Existing mitigation	Mitigating actions
Increase in capital expenditure costs	£0.6billion of optimism bias included in capital costs for over-runs; Substantial Rail procurement risk now lies with DfT as they are implementing these schemes; Metrolink prices have already been obtained as part of the 3a procurement process.	Overruns will be identified early. Options to offset overruns include: • Possibly de-scoping some optional parts of schemes; • Delay non-essential capital expenditure until the charging scheme is operational; • Consider alternative forms of procurement for some aspects of the programme – for example, leasing; • Align GMPTA/E mainstream expenditure to maximise the synergies with the TIF programme.
Net revenues are lower than forecast	The revenues are based on low growth and a cautious view of the impact of charging on traffic. In addition, over £25m per annum of revenue contingency is included in case net revenues are lower than forecast. If charging revenues are lower than forecast it would be expected that public transport revenues would increase; Economic growth assumptions are prudent.	Revenue shortfalls will become apparent early on in the process. If they exceed the already substantial contingency then actions could include: • Reduction in costs on non-essential schemes; • Delay in implementing some non-essential schemes until revenues reach a level which can support those services; • Align GMPTA/E mainstream expenditure to maximise the synergies with the TIF programme.
Interest rates are higher than those included in the model	Interest rates assumed are more than 1 percentage point higher than current rates.	 GMPTA will enter into fixed rate loans for a portion of the borrowings; Borrowings can be timed to match lower market rates. GMPTA can opportunistically target low rates.

Conclusion

Two years of 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.

A convincing package has been developed which the DfT regards as generating value for both Greater Manchester and the UK as a whole.

Appendix

Roles and responsibilities of GMPTE Directorates

Commercial Directorate

The Directorate provides a commercial focus to the organisation in terms of marketing and promoting services, understanding the different needs of all sections of the community across Greater Manchester.

The Directorate contains the following areas:

- Strategy leading transport strategy, research and planning, transport solutions, new project ideas, development of initial business cases and research and development of local transport plans;
- Economic, Business and transport planning modelling – modelling future requirements to feed into the corporate plan;
- Business intelligence collecting and analysing data to inform commercial decisions and the promotion of new services;
- External behavioural change for example, encouraging the public to switch between modes of transport;
- Social inclusion ensuring that projects successfully deliver accessible and appropriate public transport services to the whole community, in compliance with new equalities legislation;
- External communications, marketing and public relations; and
- Long-range transport planning and strategies including the environment.

Organisational Development Directorate

The Organisational Development
Directorate is responsible for ensuring
that GMPTE's growth, structure,
resources and capabilities (skills and
know-how) are effectively developed and
focussed to enable GMPTE to deliver its
priorities.

The Directorate is responsible for:

- Human Resources, including recruitment and HR policy, pay and grading and implementation of a new performance management system;
- Training and Development, including a training needs analysis and implementation of a new training plan to up-skill staff to meet future challenges;
- Environmental issues (internal);
- Internal communications, including for the change programme; and
- Liaison with GMPTA members and District partners.

Finance and Corporate Services Directorate

The Finance and Corporate Services Directorate includes financial accounting, management accounting, procurement, corporate finance, risk and assurance and legal.

The Directorate is responsible for:

- Financial accounts preparation and delivery of GMPTE's financial statements;
- Management accounts; standard management and cost accounting activities:

- The preparation of the annual business plan and associated directorate, departmental and project service plans and budgets;
- The long-term GMPTE business / corporate strategy the purpose of this activity is to provide the interface between the long-range transport planning and strategies and the annual business planning and budgeting processes. GMPTE business / corporate strategy will be developed in conjunction with the Organisation Development Directorate with respect to the future resource and capability needs of the organisation;
- Procurement this includes both strategic procurement and the management of long lead items along with the purchasing and buying functions;
- Corporate Finance including Treasury Management;
- Legal services;
- Estates focusing on the best value property and property management;
- Audit, Risk and Assurance a programme assurance function has been established through the appointment of an external Assurance Partner. Through this partnership, which focuses on providing assurance on programmes and projects, GMPTE has significantly enhanced GMPTE's risk and assurance capability.

Through this partnership GMPTE has access to a variety of specialist skills, including Engineers, Project Managers, Accountants, Auditors, Financial Modellers, Procurement

Specialists and Contract Managers, depending on the nature of the specific project or programme being reviewed.

The focus of this function provides assurance on programmes and projects and has significantly enhanced GMPTE's risk and assurance capability generally.

Infrastructure and Operations

The three operational directorates are grouped together under the control of a delivery-focussed Chief Operating Officer (COO) who will be accountable for Operations teams and for delivering the TIF projects to time, budget and quality.

Each of the directorates will utilise Integrated Delivery Teams based on the Delivery Partner model (further discussed in section 3.5.1), which will comprise of personnel from both GMPTE and Delivery Partner organisations, to ensure knowledge and expertise transfer.

Information Systems Directorate

The Information Systems Directorate is charged with managing delivery and operation of the Congestion Charging system and Intelligent Transport Systems solutions in addition to the provision of IT and telephony systems and services to GMPTE.

The TIF schemes will see a significant increase in the number of technology-based systems being implemented across the organisation. In a number of cases these systems are interdependent and make use of shared resources. The IS Directorate brings together all such systems under a coordinated lead,

making use of specialist skills and dedicated management to ensure that the advanced technology systems are fully integrated across GMPTE.

Continued focus is placed on maintaining, developing and integrating internal systems and services, as well as delivering the new systems for ITS and Congestion Charging.

PricewaterhouseCoopers have recently been appointed as the IS Delivery Partner for Congestion Charging, and are initially responsible for providing the resources and access to the knowledge and expertise needed to develop the business case and material for consultation. Subsequently, they will provide support through the detailed specification and procurement process. The Delivery Partner presence will also be an incentive to develop information and knowledge sharing to the benefit of GMPTE's own staff.

The IS Directorate is responsible for the following areas:

- Internal IT and Telephony systems and services;
- Safety and Security Systems;
- Management Information System (MIS);
- Congestion Charging;
- Smartcard;
- Real Time Passenger Information (RTPI); and
- Road Traffic and Control Systems.

The IS directorate also provides the systems integration and systems engineering capabilities needed to coordinate, design and build the Congestion Charging and Integrated Transport Systems together with other systems as an integrated and coherent

set of services for GMPTE. This includes overall requirements management and coordination of the technology requirements across all Delivery Partners.

Metrolink Directorate

This directorate operates on a matrix basis with other GMPTE Directorates including Finance and Corporate Services, Information Systems and Commercial, which provides expertise, support and resources as required by Metrolink. The Metrolink Directorate includes the following workstream, populated by GMPTE and Delivery Partner employees together in an Integrated Delivery Team.

- Operations manages the relationship with the operators of Metrolink, including management of the operations and maintenance requirements for the existing infrastructure and future extensions;
- Finance and Commercial Services focuses on the financial aspects, Treasury Management and legal issues associated with the Metrolink Operations;
- Commercial concentrates on the contract finances and commercial issues;
- Project Services sets up, maintains and administers the required project controls associated with document control, risk management, value engineering / value management (VE / VM), programme / schedule and the management and auditing of Health, Safety, Quality and Environmental aspects;
- Delivery ensures project requirements are met and focuses on systems assurance, managing

design reviews, construction supervision and contract management, and environmental compliance; and

 Stakeholder Management is responsible for coordinating and managing stakeholder interfaces and supporting the approvals process.

The Metrolink Directorate also includes a systems engineering function which is responsible for translating customer and performance requirements into operational designs, coordinating and integrating the design functionality delivered via key suppliers and subcontractors.

Bus and Rail Directorate

The Bus and Rail Directorate includes Delivery Management, Stakeholder Engagement, Asset Management, Operations and Health & Safety, These functions operate on a matrix basis with the other GMPTE Directorates. More specifically, Delivery Management is responsible for specifying "user" and performance requirements and accepting into service operational assets during the acceptance and handover phase of the project, and will act as the GMPTE intelligent customer for the integrated delivery team for highway, bus, Park and Ride, transport interchanges and rail improvement projects.

Asset Management will be responsible for implementation and operations of the overall Asset Management and Work Management Strategies, including the use of appropriate tools such as "Agility" and the link into Management Information Systems applications.

Programme Management Office

A Programme Management Office (PMO) is being formed, which will be responsible for coordinating the delivery of projects and for monitoring performance against the delivery timetable and budget.

The PMO, which will report into the COO, will consolidate data and information from all parties with a delivery responsibility, analyse it and prepare standardised business-wide reports. These reports will provide progress and trend information and highlight areas where management attention is required. They will provide an effective means of communicating this information throughout the delivery organisation, within GMPTE and upwards to the Executive Board and DfT.

The PMO will also:

- provide independent advice and support to strengthen cross-business processes and organisational capability;
- support the Executive Board to identify, escalate and assist with the resolution of issues and challenges;
- establish formalised governance arrangements to ensure that projects are both initiated and reviewed at the appropriate level;
- coordinate programme delivery at a high-level to ensure that the work of the Delivery Partners across the various Directorates is properly integrated and that risks sit in the appropriate area;
- resource manage GMPTE staff input to projects and work with other Directorates to ensure that future resource needs are met. In addition

the PMO will identify the training needs across the projects roles in order to make sure a high standard of service is provided;

- develop and maintain the PMO "toolkit" of processes, tools and templates to support the delivery of the PMO deliverables; and
- manage the interfaces between Delivery Partners in conjunction with the systems engineering and integration functions within the IS Directorate.