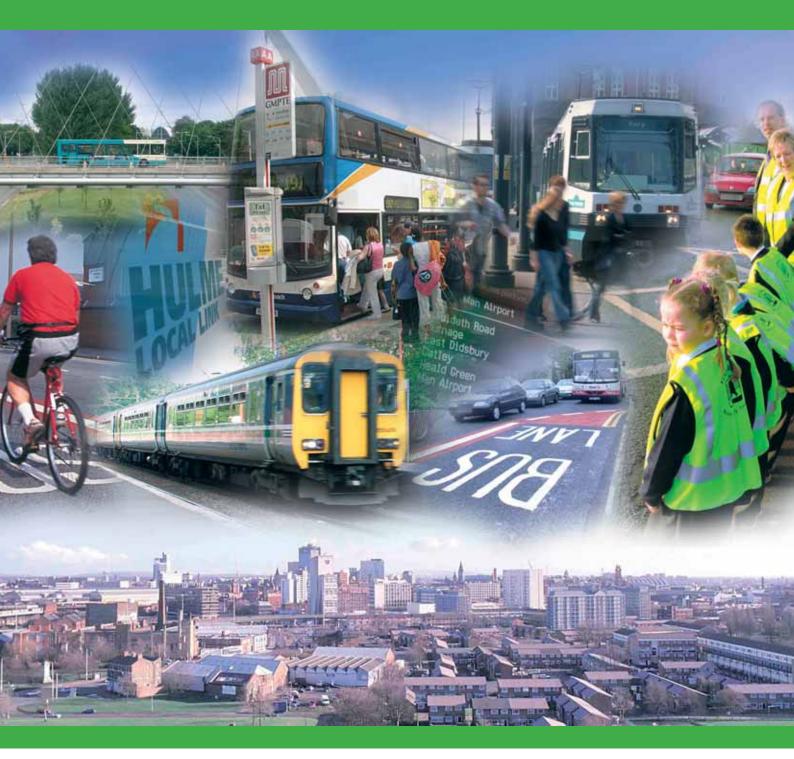
Greater Manchester Local Transport Plan 2 2006/07 - 2010/11





Contents

	Foreword	
	Summary	6
1	Introduction 1.1 The Greater Manchester Area and its Regional Context 1.2 Challenges for Greater Manchester	12 13 15
2	Greater Manchester's Longer-Term Vision and Integrated Transport Strategy 2.1 The Vision for Greater Manchester 2.2 The Greater Manchester Integrated Transport Strategy	16 17 19
3	3.1 Lessons Learned from LTP1 3.2 Work Completed Since Submission of Provisional LTP2 3.3 Strategic Environmental Assessment 3.4 Consultation and Engagement 3.5 Greater Manchester's Administrative Structure	22 23 24 25 27 30
4	Problems, Issues and Desired Outcomes 4.1 Overall Approach 4.2 General Results of Analysis 4.3 Problems in Shared Priority Areas 4.3.1 Congestion 4.3.2 Accessibility 4.3.3 Road Safety 4.3.4 Air Quality 4.3.5 Public Transport 4.4 Regional Centre 4.5 Other Quality of Life Issues 4.6 Rural Issues 4.7 Cross-boundary issues	33 33 38 38 41 43 47 49 51 54 55

Contents

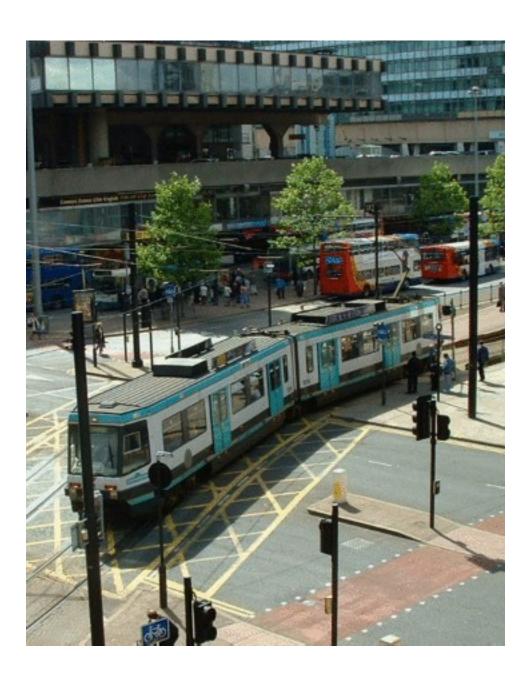
5	The 5-Year Programme	60
	5.1 Introduction	60
	5.2 Achieving Desired Outcomes by Tackling Shared Priorities	60
	5.2.1 Managing Congestion	60
	5.2.2 Delivering Accessibility	78
	5.2.3 Improving Transport Safety and Security	84
	5.2.4 Better Air Quality	91
	5.2.5 Public Transport Case Studies	94
	5.2.6 Other Quality of Life Issues	99
	5.3 Regional Centre	105
	5.4 Manchester Airport	107
	5.5 Rural Issues	109
	5.6 Asset Management	109
	5.7 Corridor Partnerships	115
	5.8 The SEMMMS Programme	118
	5.9 Transport Infrastructure Fund	120
	5.10 Major Schemes	122
	5.10.1 Metrolink	122
	5.10.2 Progress on Fully Approved Schemes	124
	5.10.3 Schemes with Programme Entry or Conditional Approval Status	126
	5.10.4 Schemes where Further Information has been Requested	127
	5.10.5 Major Schemes Bids	128
	5.11 Transport Innovation Fund	129
	5.12 Achieving Value for Money	130
	5.13 Risk Management	134
	5.14 Linkages with Other Strategies	134
	5.15 Use of Revenue Funding to Meet LTP2 Objectives	137
	5.16 Spending Programme Summary	137
	5.16.1 Internal Distribution of Integrated Transport Block Funding	137
	5.16.2 Complementary Funding Sources	138
	5.16.3 LTP2 Spending Programme Summary	141
6	Performance Indicators and Targets	142
	6.1 Introduction	142
	6.2 Targets for the Wider Vision	142
	6.3 Choice of Indicators	142
	6.4 The Basis for the Development of Targets	143
	6.5 Target Setting and Programme Development	144
	6.6 Monitoring Framework	145
	6.7 Improving Performance	146
	6.7.1 Annual Review of Targets and Programmes	146
	6.7.2 Strengthening the Relationship Between Performance and Actions	147
	6.8 Working with the DfT	148
	6.9 Headline Targets	149
7	Final LTP2 Checklist	155
8	Glossary	163

Contents

Figures	S	
Ü	Figure 1.1 - Location of Greater Manchester	12
	Figure 1.2 - Journeys to Work within and between Segments and to Key Centres	14
	Figure 4.1 - Driving Licence Holding in GM	34
	Figure 4.2 - Motorway Traffic Flows 1991-2004	35
	Figure 4.3 - Traffic Flows on 'A' and 'B' Roads 1991-2004	36
	Figure 4.4 - Greater Manchester Morning Peak (7 to 10am) Average Delay	39
	Figure 4.5 - Congestion	40
	Figure 4.6 - Accessibility to Key Centres with Interchanges	42
	Figure 4.7 - KSI Clusters for Motorways, 'A' and 'B' Roads	45
	Figure 4.8 - Child KSI Statistics for All Roads	46
	Figure 4.9 - Air Quality Management Areas	48
	Figure 4.10 - Public Transport Journeys in Greater Manchester	49
	Figure 4.11 - Cross Boundary Journeys to Work	59
	Figure 5.1 - LTP2 Cycle Investment Priorities	65
	Figure 5.2 - Corridor Partnerships	117
	Figure 5.3 - Metrolink Network	123
	Figure 6.1 - The Target Setting Loop	145
	Figure 6.2 - Target Review Process	146
Tables		
	Table 3.1 - Response to recommendations of the SEA	26
	Table 4.1 - Road Casualties Greater Manchester, 2000 to 2004	43
	Table 4.2 - 2005 Modal Split Weekdays Between 7:30 and 9:30 am	53
	Table 4.3 - 2011 Projected Modal Split	53
	Table 4.4 - Cross Boundary Issues by Authority Area	56
	Table 5.1 - Results of Cleaner Vehicles Tests	92
	Table 5.2 - RoWIPs can assist the shared priorities	111
	Table 5.3 - Appraisal Summary Table for LTP2 Integrated Transport Block compared	132
	to reference case	
	Table 5.4 - Relative weightings of national and local funding distribution mechanisms	138
	Table 5.5 - Examples of complementary funding sources	139
	Table 5.6 - Summary of support sought from LTP capital settlement (£k)	141
	Table 6.1 - Local LTP Performance Indicators	143
	Table 6.2 - Summary of LTP2 Headline Indicators and Targets	149
Index		166

Foreword

This document is the second Greater Manchester Local Transport Plan. It sets out our five year programme for investment in local transport, in order to help deliver our long term vision and strategy for Greater Manchester. If you would like more information on this document, or would like to obtain a large print, Braille, audiotape or an alternative language version, please telephone 0161 242 6085, or visit our website www.gmltp.co.uk



Foreword

We are pleased to present to Government our Second Local Transport Plan, which has been produced by the Ten Greater Manchester Local Authorities and the Greater Manchester Passenger Transport Authority. This Plan builds on the strategy and work undertaken as part of our first Local Transport Plan (2001/2-2005/6), our longer-term Greater Manchester Integrated Transport Strategy (GMITS) launched in Spring 2005, and our provisional Second Local Transport Plan (LTP2) which was published in July 2005. It also takes account of the Strategic Environmental Assessment which was undertaken on the provisional LTP2.

The Plan sets out our five-year programme as the starting point for delivering our longer-term vision and strategy for Greater Manchester. It sets out the targets we are seeking to achieve, which are fully in line with the Government's White Paper on Transport and the LGA/DfT Shared Priorities and are consistent with the funding guidelines set by central government. It also describes how we intend to monitor and manage the Plan over time. Expansion of Metrolink remains key for Greater Manchester, and we will continue to work hard with DfT to reach agreement on the expansion of the network in line with the Government's declared objective. We are currently taking forward the renewal and refurbishment of the Phase 1 and 2 network. Another key component of the Plan, and of our successful Transport Innovation Fund pump priming bid, is the development of corridor partnerships with key delivery organisations. These partnerships are looking at how we can integrate regeneration and land-use plans in individual corridors with transport modes, including the use of other complementary measures including travel planning, technology and demand management. They will commit partners, via a local area agreement mechanism, to delivery of their components of the plan and work is well advanced in the first four corridors. Buses remain central to our delivery plans and hence we have been working with the bus industry and other stakeholders to develop robust bus and accessibility strategies as part of LTP2.

We believe that the partnership of the ten Greater Manchester local authorities plus the Passenger Transport Authority is, despite its size, one of the most effective in the country. We have achieved much by working together on transport matters, and this cooperation is being strengthened further with this final second Local Transport Plan. It will ensure that Greater Manchester continues to become a better place to live, work and invest, increasing its economic competitiveness, and improving social inclusion and the quality of the environment.

We look forward to working in partnership with Government to deliver our shared vision for a fully integrated transport system which makes best use of existing infrastructure and supports the continued economic and urban regeneration of Greater Manchester.

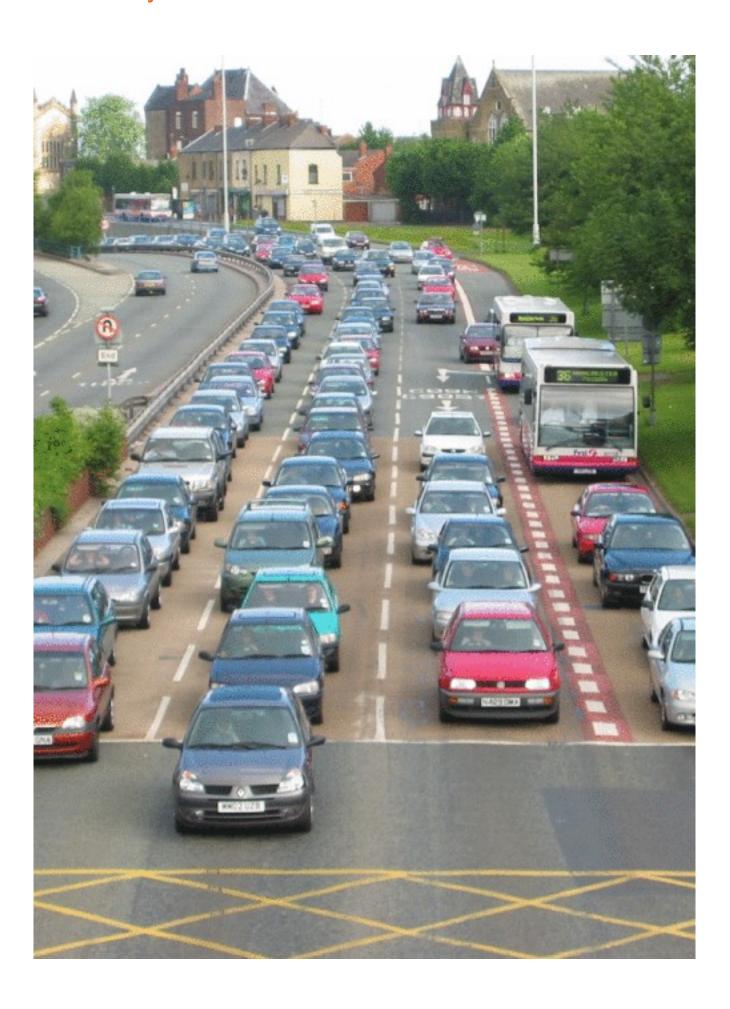
Councillor Peter Smith

Feter RChitz

Leader of AGMA

Councillor Roger Jones

Chair of GMPTA



This second Greater Manchester Local Transport Plan (LTP2) outlines the approach being taken by the Greater Manchester authorities towards transport planning and investment for the period 2006/7 to 2010/11. It builds upon the principles and context of the Provisional LTP2, submitted in July 2005. Since that time work has continued on strategy development, including the Accessibility, Air Quality and Bus Strategies, which are being submitted alongside this final Plan. Programmes of individual authorities have been further developed, along with the Plan's targets and trajectories.

Greater Manchester - A Dynamic City Region

Government is increasingly framing national economic policy around the economic success of City Regions and their direct relationship to, and major impact on, national economic competitiveness. Closing the productivity gap between London/the South East and the rest of the Country is a national priority, and the Northern Way Growth Strategy, Regional Economic Strategy and other national, regional and local strategies have identified the Manchester City Region as having the potential to make the most significant contribution to the future growth of the North of England.

GMLTP2 has been produced by a partnership of the ten Greater Manchester local authorities and the Passenger Transport Authority. This partnership is the largest to produce a joint plan in the UK. and the plan itself relates to a complex, diverse and dynamic city region which is home to 2.5 million people. The city region has an agreed vision for the future which sees its economy growing, its environment enhanced and more of its people able to benefit from the opportunities which a revitalised Greater Manchester will have to offer.

The plan describes the key drivers for change including the **Regional Centre** where very significant economic growth is forecast; the other **major town centres** which are local foci for employment and retail activity and which all have significant proposals for their regeneration and renewal; **Manchester Airport** the third largest airport in the UK which is forecast to grow to be handling 38 million passengers per year by 2015, and a range of **regionally significant development sites** which will provide a variety of new economic opportunities across the sub region.

Furthermore the Plan and the longer term Integrated Transport Strategy will have a significant part to play in beginning to address the impact that transport in Greater Manchester has on climate change and assisting the Government to meet its Kyoto obligations. In this regard note will be taken of the Government's forthcoming climate change review and our programme will be adjusted if necessary. City regions have a key role to play in developing more sustainable patterns of living and working and while what can be achieved within a five year period is inevitably limited, the plan sets out a clear "direction of travel" towards a more sustainable future.

The Vision for Greater Manchester

The overall context for the Plan is set by 'Sharing the Vision - a Strategy for Greater Manchester'. This is supported by all the key organisations in the conurbation. It is founded on 8 themes: to promote a dynamic economy; enhance the regional centre; promote culture, sport and tourism; improve connectivity; raise levels of education and skills; create sustainable communities; reduce crime; and improve health and healthcare services.

The Greater Manchester Integrated Transport Strategy (GMITS)

This forms the long-term, 15-year transport context for LTP2, and provides a framework for its transport policies and investment programmes. GMITS shows how the transport network needs to develop so that it can respond to the demands placed on it by a growing economy, and at the same time influence future patterns of spatial development and economic growth. It must also enhance the local environment and address the issue of social exclusion by the creation of more truly sustainable communities. The key strands of GMITS are:

- more use of public transport for trips to centres
- better facilities to encourage short journeys to be made on foot or by cycle
- land use planning and regeneration strategies to minimise trips to out of centre locations.

The longer-term economic growth needs of the Manchester City Region will require more transport investment and increasing use of a demand management "toolkit". Hence Greater Manchester authorities are working closely with the Department for Transport to identify the point at which congestion can significantly harm economic growth and the environment (the "tipping point"). This is the point when significant investment in public transport capacity will, therefore, be needed and when behavioural change strategies and other harder-edged demand management measures may need to be adopted. Detailed proposals for infrastructure investment, demand management, behavioural change, revenue raising, funding and financing, and local institutional reform will be included in our substantive Transport Innovation Fund bid.

LTP2 -Tackling the Shared Priorities and Prioritising Effectively

The Plan focuses on a five-year programme designed as the first stage of delivery of the Vision for Greater Manchester and GMITS. In doing so, it tackles the key problems and issues affecting the shared Department for Transport/Local Government Association priorities (Tackling Congestion, Delivering Accessibility, Safer Roads, Better Air Quality, and Other Quality of Life Issues). Wherever possible, schemes are designed to benefit a range of strategies particularly economic, social, environmental, and health.

The prime objective of our plan is to accommodate the trips generated by the projected increase in jobs in the most sustainable way so as to improve social inclusion and protect the environment and improve the quality of life. A key aim for the strategy is, therefore, for economic growth not to increase congestion significantly. Given that major schemes take a long-time to deliver, LTP2 prioritises schemes which can be implemented in the short-term, and hence there is a focus on measures to increase walking, cycling and the use of buses. The strategy is consistent with the financial planning guidelines provided by the Department for Transport (including the South East Manchester Multi Modal Strategy funding element), the transport infrastructure fund money provided by the Department for Transport for schemes predominantly in Bolton and Wigan, and the Regional Funding Allocation regional advice for major schemes.

We recognise the need to prioritise. There is a particular emphasis on measures which encourage the journey to work and school to be undertaken by more sustainable modes, given that the peak periods at which these trips occur are the times when the networks are under the greatest stress. The plan contains measures to encourage modal shift to cycling and walking for short trips. Tackling these issues holistically will enable us to facilitate continued economic activity yet achieve the greatest impacts, particularly on congestion and air quality, which in turn will have a positive impact on health. Furthermore, the accessibility strategy prioritises key measures for improving access to essential services to assist social inclusion, which in turn will assist economic growth and should also have positive benefits to health, particularly by improving access to healthcare. The road safety strategy targets the key locations where improvements would have the greatest impact on reducing the number of people killed and seriously injured in road accidents, whilst the maintenance strategy prioritises expenditure which not only meets local needs but also contributes to LTP objectives concerning economic and urban regeneration, social inclusion, and environmentally sustainable transport. This approach seeks to maximise the effectiveness of solutions in order to achieve high levels of value for money.

A key strength in delivering LTP2 in Greater Manchester is partnership working. To this end we have been developing closer working relationships with stakeholders, particularly the Highways Agency and bus operators. Mechanisms such as Integrate, QBC Review Group and Corridor Partnerships will be used to strengthen partnerships, identify and agree outcomes and targets, and coordinate the delivery of measures.

Key Elements of the Plan

The Plan seeks to accommodate the forecast economic growth in the most sustainable way by focusing investment in the areas where it can have the greatest impact on peak period movements, in particular Manchester City Centre, other key centres, schools and major employers/employment sites, and where it can aid regeneration. The aim is to:

- Enhance Metrolink (with extra capacity being provided by Phase1/2 improvements) and discussions continuing with Government over the delivery of the Phase 3 expansion
- Improve Rail (with additional capacity being generated through improvements being
 implemented by Train Operating Companies combined with LTP investment aimed at increasing
 the number of car parking spaces at key commuter stations and improvements to the station
 infrastructure at key stations)
- Make buses more attractive (with additional trips being attracted through development of Corridor Partnerships, continued investment in Quality Bus Corridors and a range of other measures detailed in the Bus Strategy including the potential introduction of bus based park and ride where this provides a cost effective solution for a particular corridor)
- Develop corridor partnerships which integrate the planning of services and capital investment with regeneration, housing and other local strategies. Though the early focus is on developing radial corridors, work will also be undertaken to identify and commence development of orbital corridor partnerships.
- Encourage more short trips to be undertaken by walking and cycling (by focusing on developing safe and convenient routes to town and local centres, schools and major employers, rather than piecemeal investments)
- Traffic management improvements to manage the demand on the network of the residual increase in car movements whilst at the same time optimising the network, particularly for the more sustainable modes (by investment in further improvements to the Urban Traffic Management and Control system and other more localised improvements)
- Continue development of workplace and school travel plans to encourage the use of more sustainable modes, with a particular focus on locations where capital investment is being made
- Refine the land use planning strategy such that it is complementary to our transport plans and which directs development likely to generate large numbers of trips to locations where it can be accessed by a range of modes
- To continue to review and refine our programmes so as to provide a balance of priorities with respect to economic and environmental aims.

The transport outcomes and targets we plan to deliver

Through the measures identified in the plan we are planning to deliver the following outcomes over the period from 2006 to 2011 -:

- No significant worsening in congestion and area wide traffic flow growth on local roads of no more than 2%.
- Improving accessibility, to local facilities and making buses and rail stations more accessible for people with mobility difficulties
- A 50% reduction in the number of people killed and seriously injured on our roads by 2010 compared with the 1994 to 1998 average and a 55% reduction in the number of children killed and seriously injured
- A 39% reduction in the level of nitrogen oxide emissions from traffic on local roads and a 1% reduction in Co2 emissions compared with the "do nothing" scenario.
- An increase in bus patronage of 4% against the background of a historically declining trend
- An increase in bus punctuality of 12 percentage points to 85% of all journeys
- A five percentage points increase in satisfaction with local bus services amongst all residents
- An increase in Metrolink patronage of 11% between 2003/04 and 2010/11 with the completion of the phase 1 and 2 enhancements
- An increase in rail patronage of 12% between 2003/04 and 2010/11
- An increase of 4 percentage points in the proportion of peak hour trips to the regional centre made by modes other than the private car.

Linkage with Regional Strategies

The Plan is consistent with the emerging framework set out in the Regional Transport Strategy contained within the draft Regional Spatial Strategy (RSS) with its particular emphasis on developing high quality public transport, better management of the highway network, improved access to Manchester Airport and developing networks for walking and cycling. The Plan is also consistent with the transport investment and management priorities set out in draft RSS. Final LTP2 also takes account of the Regional Economic Strategy ministerial submission, published in January 2005, with its emphasis on facilitating the conditions for sustainable growth, in particular increasing the use of public transport, tackling congestion and improving the accessibility of Manchester Airport and the designated Strategic Investment Sites.

To take forward the Northern Way Growth Strategy, significant analysis and forecasting has been undertaken to assist with the development of the City Region Development Plan (CRDP). This work has assessed the potential for growth of the key growth sectors identified in the Regional Economic Strategy within the Manchester City Region. These forecasts have been input into our Strategy Planning, Public Transport and Sub-Regional Highway Network models to help understand the land-use and transport implications and develop a strategy to accommodate the growth in the most sustainable way. Hence this modelling work has helped to inform the development of the Sub-Regional Spatial Strategy and the CRDP Implementation Plan as well as further development of the Greater Manchester Integrated Transport Strategy, on a common basis to assist integration of the strategies.

Strategic Environmental Assessment

We have undertaken a Strategic Environmental Assessment (SEA) of Provisional LTP2, the draft work programmes and the proposed major schemes to assess their impact on the environment. Where needed, we have developed mitigation strategies to ensure that overall LTP2 protects the environment, improves social inclusion and enables economic growth to be sustainable over the long-term. We have used independent environmental experts to carry out the SEA, with a view to promoting sustainable development, and to ensure that impacts were taken into account at the earliest stage and throughout LTP2 development.

The SEA confirmed that LTP policies, major schemes and minor works programmes were broadly compliant with the environmental objectives identified in the scoping exercise. Clearly some transport schemes have negative environmental effects. However these will be assessed in detail and mitigation measures developed during the Environmental Impact Assessment work for each scheme, the role of SEA being to take a broader view. The SEA can be viewed at www.gmltp.co.uk

Structure of the Document

The document contains six main sections

- Chapter 1 explains the significance of the Greater Manchester City Region in its regional and North of England context and sets out the key challenges that we face.
- Chapter 2 sets out Greater Manchester's longer-term Vision and our Integrated Transport Strategy which will help to deliver the Vision and tackle the key challenges.
- Chapter 3 sets out how we have developed LTP2 as the first step to achieving our Vision by taking
 account of the key lessons we have learned delivering LTP1, the views of stakeholders about how
 they wanted to see LTP2 developed, the key messages from the Strategic Environmental
 Assessment; and the management process adopted to enable the Plan to be developed inclusively,
 whilst taking account of and influencing other related sub-regional strategies.
- Chapter 4 identifies the key Problems, Issues and Opportunities which affect our ability to achieve
 the longer-term Vision and contains details of the outcomes which we aim to deliver over the next
 five years.
- Chapter 5 describes the five year implementation programme which aims to address the identified problems and issues and hence achieve the objectives and outcomes; it also explains how our programme contributes towards delivering national policy, the Northern Way Growth Strategy, the Regional Economic Strategy, the existing Regional Spatial Strategy and the draft new Regional Spatial Strategy.
- Chapter 6 describes the Performance Management and Monitoring Systems for overseeing programme delivery and reacting to changing circumstances. It also sets out our specific performance indicators and targets that we seek to achieve.

A number of supporting documents have been produced. These provide more detail of the key component strategies which comprise LTP2. The following are submitted with this document.

- Accessibility Strategy
- Bus Strategy
- The LTP2 Consultation and Engagement Report
- The LTP2 Monitoring Technical Report
- South East Manchester Multi-Modal Study Implementation Plan
- Major Scheme Summaries
- Air Quality Local Transport Strategy and Action Plan
- Network Management Local Authority Proformas
- The Draft Greater Manchester Maintenance Strategy and Exceptional Maintenance Bids
- Progress on Transport Asset Management Plans
- Progress on Rights of Way Improvement Plans
- Greater Manchester Parking Standards

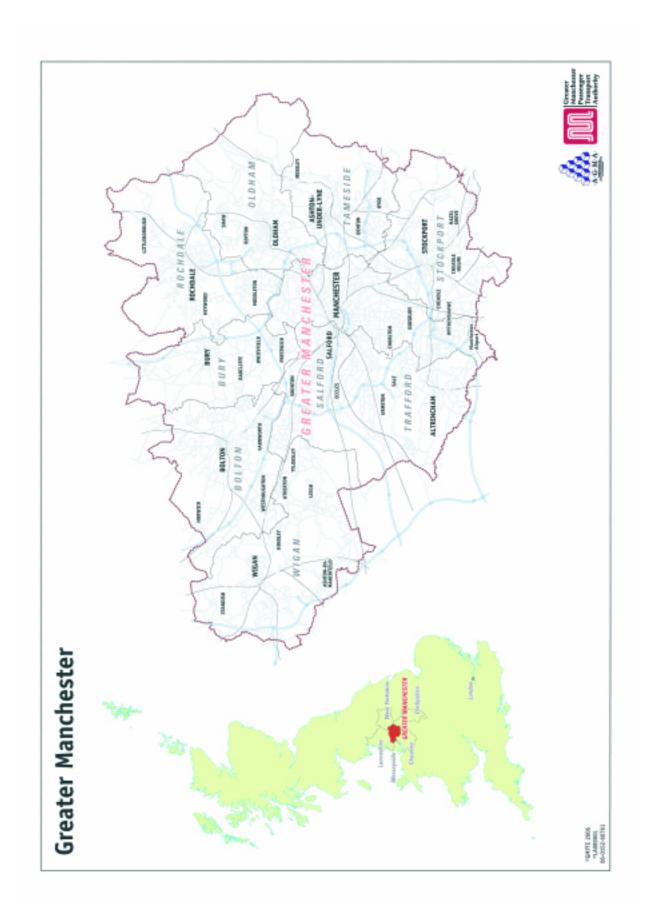


Figure 1.1 Location of Greater Manchester

1.1 The Greater Manchester Area and its Regional Context

A complex development pattern

Greater Manchester is a large and complex urban area, covering some 500 square miles and has around 2.5 million residents. There is a mix of high density urban areas, suburbs, semi-rural and rural locations, but overwhelmingly the pattern, and therefore movement, is urban. It has a strong Regional Centre, formed by Manchester City Centre and the adjoining parts of Salford and Trafford. However, it is also a polycentric conurbation with ten local authorities (i), each of which has a major town centre - and in some cases more than one - with local foci reflected in the transport network. It is arguably the most complex urban area in the UK outside London, and this is reflected in the density of its transport network and the scale of needs for investment to meet the growing and diverse movement demands generated by its development pattern. Fig 1.1 quantifies these movements.

Economic importance

However, it is not just its scale and pattern of development which is of significance. The Manchester City region, which covers the wider travel to work area, is the economic centre of the North of England. It generated £47.1bn of Gross Value Added in 2002, nearly 50% of the regional total, and is the largest single contributor in the UK outside London and the South East and, broadly, equals the output of Leeds, Liverpool and Sheffield combined. Furthermore, between 1995 and 2002 Manchester was one of only two cities outside of London & the South East which achieved an economic growth rate of more than 10 percent above the English average. (ii) It is not, however, a homogenous area, and a number of the most deprived areas in the country lie close to high performing economic centres.

The Manchester/Salford regional centre is the primary economic driver and main retail, leisure, cultural and tourism centre for the city region. Many of the Region's 6.7million residents travel

to this centre for these journey purposes, in addition to the daily commute for the current job total of 134,000. The Regional Centre has undergone a transformation in recent years. The key elements of the masterplan drawn up following the IRA bomb in 1996 are now in place and are acting as a catalyst for the regeneration of the rest of the central area, which is identified within the existing and draft revised Regional Spatial Strategy as a focus for new development and a primary economic growth for the North West. Furthermore, the Northern Way Growth Strategy, the Regional Economic Strategy and other national, regional and local strategies have identified the Manchester City Region as having the potential to make the most significant contribution to the future economic growth of the North of England.

Manchester Airport lies to the south of the regional centre. It is the third largest airport in the UK, and the largest regional airport outside London, acting as the 'gateway' to the north of England, parts of the Midlands and North Wales. Around 19,200 staff are employed on site, and it accounts for a further 25,000 associated jobs around the region. By 2015 it is forecast that this will increase to 28,000 staff on site and 36,000 jobs around the region, hence it has been identified within the Regional Economic Strategy as a key driver of economic growth for the region.

Whilst there has been significant economic growth in parts of Greater Manchester over the last five years, some areas are still not performing well. Thus, regeneration remains a key theme for us, with a particular focus on the Urban Regeneration Companies in Central Salford and New East Manchester and the Housing Market Renewal Initiatives in Manchester/Salford and Oldham/Rochdale. In addition, all the main town centres are developing master plans or have significant proposals for regeneration.

i Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan Local Authorities who are members of the Association of Greater Manchester Authorities (AGMA).

ii State of the English Cities, Office of the Deputy Prime Minister, March 2006

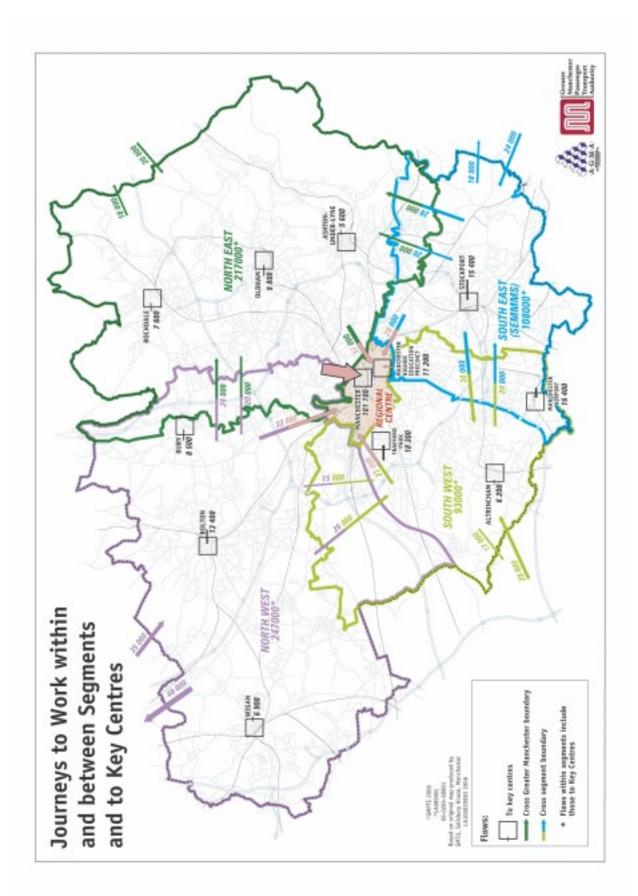


Figure 1.2 Journeys to Work within and between Segments and to Key Centres

Transport networks

As a consequence of this scale and complexity of development, Greater Manchester has extensive public transport, road and motorway networks. There are over 9000 kilometres of roads, and annual traffic on the motorways and A and B roads amounts to 12.9 million vehicle -km. The rail network carries 18 million rail journeys per annum, and is of significant importance in relation to commuting. In addition, there are 19.5 million passengers per year travelling on the Metrolink system, which is also heavily used for commuting. In 2004/5, 221 million passenger bus journeys were made. This scale of movement on the system not only generates extensive maintenance demands, but also considerable improvement needs. Many rail facilities, for example, are in need of renewal, and ever-increasing volumes of road traffic are taking their toll on carriageway surfaces.

As regards external links, the orbital M60 links to the east-west M62, serving Liverpool and communities across the Pennines, together with the M67/A628 route to South Yorkshire, the M61 and M66 serving south Lancashire and the M56 to Chester, North Wales and the Wirral, The main north-south links to the West Midlands, Cumbria and Scotland are the M6 and West Coast Main Line, which is being upgraded. Trans-Pennine rail routes offer an alternative mode of travel to many destinations along the Liverpool - Manchester -Leeds - York and Manchester - Sheffield - Hull lines as does the northern route to Preston and Manchester Blackpool. Greater currently generates around half of the rail journeys to and from the North West, underlining the importance of the City Region to the North West.(iii)

Greater Manchester is therefore distinctive in terms of:

- its size and the complexity of its development pattern and transport system
- its position in terms of an economic driver and contributor to increasing regional productivity
- its potential for future sustainable economic growth

 its role as a Regional Centre for over 6 million people

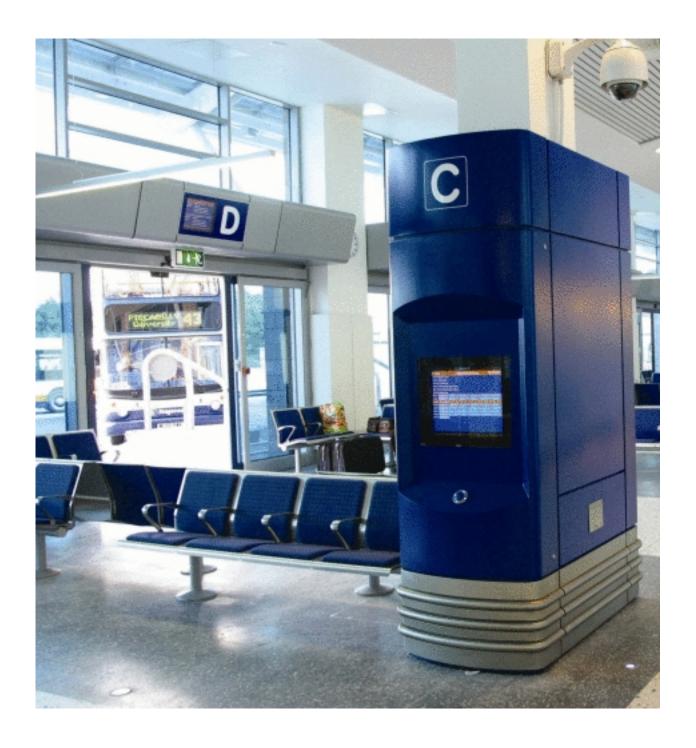
1.2 Challenges for Greater Manchester

The main challenges for Greater Manchester that this Plan seeks to tackle are how to:

- ensure that economic growth is not impeded by constraints on the transport system including
 - securing investment for the delivery of the Metrolink Phase 3 extensions
 - tackling congestion on the highway network and improving journey reliability
 - ensuring that bus patronage increases and that service quality is enhanced
 - taking further steps to encourage integration between modes
 - encouraging more sustainable transport for short journeys, and especially addressing the decline in walking trips
 - reducing the congestion and safety problems caused by the 'school run'
 - securing long-overdue investment in rail system capacity and passenger facilities
 - enforcing the traffic regulations necessary to ease congestion and improve safety, in relation to current driver behaviour
- continue the improvement of safety and security for both road and public transport users
- improve air quality to meet Government prescribed levels, through transport actions
- address problems of poor accessibility to jobs, health facilities and fresh food shops and education facilities
- maintain highways and structures in good condition to meet the demands of cumulative traffic growth over the past years, and expected growth over the LTP2 period

iii The North West Plan, Submitted Draft Regional Spatial Strategy for the North West of England - Technical Appendix, North West Regional Assembly, January 2006

2 Greater Manchester's Longer-Term Vision and Integrated Transport Strategy



Greater Manchester's Longer-Term Vision and Integrated Transport Strategy 2

In this chapter we identify how transport can help to deliver Greater Manchester's ambitions for economic growth, social inclusion and environmental protection and improve quality of life. We set out a longer-term transport strategy that integrates with other sub-regional strategies, especially spatial, economic and housing, to deliver our vision.

2.1 The Vision for Greater Manchester

Sharing the Vision, A Strategy for Greater Manchester (1) was published in 2003 by the Association of Greater Manchester Authorities. It has a shared agenda for the future of Greater Manchester and is supported by all the key agencies in the conurbation. By 2020, Greater Manchester aims to be:

- a creative and successful European Regional Centre with a strong knowledge driven economy
- recognised as a great place to build a business, to live in and to visit
- a conurbation which is leading the wider north west region to greater levels of prosperity and which is helping to close the gap in prosperity between the north and the south
- a place with a quality of environment, both built and natural, second to none.

'Sharing the Vision' is founded on eight key themes that aim to deliver the vision, to promote a dynamic economy; enhance the regional centre; promote culture, sport and tourism; improve connectivity; raise levels of education and skills; create sustainable communities; reduce crime; and improve health and healthcare services. The themes are closely interrelated and are set out in detail in 'Sharing the Vision', which can be found at the AGMA website www.agma.gov.uk.

The transport actions identified to help to underpin each of the themes are detailed below and form key elements of the Greater Manchester Integrated Transport Strategy:

Theme 1 : Promoting a dynamic economy - Key actions include:

- Reviewing the location of sites and their access requirements to nurture and attract growth-sector industries, with a particular emphasis on seeking to develop strategic sites in such a way as to minimise their impact on transport networks and to be accessible by the more sustainable modes.
- Improving surface access by the more sustainable modes to Manchester Airport to support the growth forecasts and policy direction set out in the Aviation White Paper
 and support the development of its ground transport strategy
- Improving accessibility so that the benefits and opportunities of new development and economic growth are available to all parts of the community.
- Improving awareness and take-up of e-commerce to help to reduce the need to travel

Theme 2: Enhancing the Regional Centre - Key actions include:

- Improving access to Manchester Airport by more sustainable modes to support a critical mass of internationally competitive growth sectors;
- Improving the radial bus, Metrolink and rail corridors to support the Regional Centre's potential to become the physical location of a world-class Knowledge Capital;
- Improving connectivity, particularly by public transport, between the Regional Centre and other key centres to ensure that the benefits of economic growth in the Regional Centre are spread across Greater Manchester. This will be achieved through the Corridor Partnership approach which seeks to develop an integrated public transport and congestion management strategy for each corridor

i Sharing the Vision, A Strategy for Greater Manchester – Association of Greater Manchester Authorities, June 2003

ii The Future of Air Transport, Department for Transport 16 December 2003

2 Greater Manchester's Longer-Term Vision and Integrated Transport Strategy

through partnership working of stakeholders. This should improve the efficiency and effectiveness of public transport.

Theme 3: Promoting culture, sport and tourism - Key actions include:

- Improved access to Manchester Airport (which will be important to facilitate increases inbound tourism), the Regional Centre and to District Centre destinations by public transport to facilitate sustainable tourism, retail and leisure movements;
- High quality public transport access to football and cricket stadia and other sports complexes to encourage more sustainable travel
- Improvements in public transport access to river valleys, forest parks and open countryside close to the urban area and development of Rights of Way Improvement Plans
- Improved accessibility by more sustainable modes to local leisure centres or community centres

Theme 4: Improving Connectivity - Key actions include:

- Partnership with regional bodies, and other agencies, leading to the identification of strategic transport priorities for the North West region;
- Improving surface access to support the growth of Manchester Airport's role as an economic key driver for the city-region and the North West;
- Development of affordable options for increasing rail capacity for commuters;
- Delivery of a continued programme of public transport improvements including extensions to Metrolink and Quality Bus measures;
- Promoting local transport solutions to problems of access to healthcare, education and training, leisure and culture, job opportunities and to meet specific community needs in partnership with local authorities, communities, health, education and training providers, employers and regeneration agencies;
- Working with the Government and transport operators to seek solutions to enable bus

- provision to better meet the needs of socially excluded communities.
- Developing a Greater Manchester e-Government Strategy.

Theme 5: Raising levels of education and skills - Key actions include:

- Improving access to jobs and training opportunities, for example to the Knowledge Capital area;
- Reducing transport barriers to new businesses;
- Improving accessibility by more sustainable modes to and reducing the impacts of travel to school.

Theme 5: Raising levels of education and skills - Key actions include:

- Improving access to job and training opportunities, for example to the Knowledge Capital area;
- Reducing transport barriers to new businesses;
- Improve accessibility by more sustainable modes and reduce the impact of travel to school and further education

Theme 6 : Creating sustainable communities - Key actions include:

Contributing to the creation of better living and working environments which are sustainable, for example Neighbourhood Renewal, Housing Market Renewal and other housing action areas, by land-use planning which minimises the need to travel and by enhancing accessibility by non-car modes.

Theme 7: Reducing Crime - Key actions include:

- Introducing measures which combat fear of crime in design of local transport networks and on public transport;
- Implementing a range of safety measures.

Theme 8: Improving Health and Healthcare services- Key actions include:

 Ensuring good access by more sustainable modes to existing and re-organised health facilities, including travel planning and parking control measures, and by

Greater Manchester's Longer-Term Vision and Integrated Transport Strategy 2

- encouraging more walking and cycling as healthier forms of travel:
- Working with Health Authorities to ensure that transport is considered when they develop their plans and programmes.

2.2 The Greater Manchester Integrated Transport Strategy

The task of planning for the future transport needs of an area such as Greater Manchester is a complex one. It requires us to take a long term perspective of the problems and opportunities facing our area today and likely to be facing us in five, ten and twenty years time. While an effective transport system is critical to the future well being of our city region it is important also to recognise that transport is ultimately a means to a wider end and that transport planning needs to be informed by, and in turn, inform the wider economic, spatial, social and environmental goals for our area which we have set out above.

Recognising the importance of setting out a long-term vision for transport in the city region. the Greater Manchester authorities published our Integrated Transport Strategy (GMITS) in April 2005. This sets out a fifteen year perspective of how the transport system needs to develop to both influence future patterns of spatial development and economic growth and to respond to the demands which a growing economy will place on the transport network. The vision, which we have shared with Government and asked them to work with us in delivering, is ambitious but achievable. We recognise that we will need to make some difficult choices if we are to deliver the transport system that Greater Manchester needs and recognise that resources are finite. We also fully appreciate the importance of demonstrating that our investment plans represent the best possible use of available resources. We need to continue to show how investment is delivering real improvements on the ground in terms of the issues that matter most to local people.

Fundamental to our strategy is the need to bring about a step change in the quality and capacity of public transport alternatives to the private car if we are to be able to persuade more people to make a higher proportion of their journeys by non-car modes. This investment led approach needs to be coupled with an approach to demand

management which is based on understanding the linkage between congestion and its impact on the economy and environment. We are currently undertaking this research work as part of our TIF pump priming work, and are developing a toolkit of demand management measures which, when coupled with investment in public transport, will achieve the behavioural change necessary to continue to support economic growth whilst protecting the environment. Furthermore, we will continue to adopt a fully integrated approach to influencing travel behaviour with a range of measures to encourage more of the large number of shorter trips to be undertaken by bike or on foot rather than by the private car. Our transport strategy will also be fully integrated with our future land use strategy that will continue to direct activities generating large numbers of trips to areas where they can be accessed by a range of transport modes.

A full version of the GMITS can be found on the Greater Manchester LTP website www.gmltp.co.uk. Further details of the analysis are set out in the LTP2 Technical Annex.

A central objective of GMITS is to support Greater Manchester's continuing economic growth agenda. We already account for nearly 50% of the total Gross Value Added of the North West and are the fastest growing sub-regional economy outside London and the South East. We alone among the northern city regions have the potential to make a major and lasting contribution to the Government's target of narrowing the output gap between London and the south east and the north, not by deflecting activity away from London but by growing our own economy and providing all the necessary components for a city region to rival the most dynamic in Europe.

A key mechanism for delivering the GMITS will be our Corridor Partnerships initiative. This will involve the relevant local authorities, GMPTA/E, regeneration agencies and other major public and private sector stakeholders jointly agreeing a series of outcome based targets covering economic, transport, demographic and other quality of life indicators within the relevant corridor. We will commit to delivering these outcomes in return for agreement to investment resources being made available to improve the local

2 Greater Manchester's Longer-Term Vision and Integrated Transport Strategy

transport system, and recognise that these resources will be at risk should we fail to deliver our proposed outcomes.

In this Plan, we demonstrate how our justified growth projections will place demands on the transport network, which we believe we can meet with the appropriate policies and balance of investment and demand management measures. By the end of 2006-2011 period, the Greater Manchester conurbation is anticipated to be substantially wealthier and stronger economically. The downside is that without interventions to tackle transport problems, the rate of growth could slow and inward investment might also slow or disappear, environmental quality would be adversely affected, and the benefits of growth will not be shared by all as current problems of accessibility will not be addressed. GMITS, therefore, proposes a range of solutions to the sub-region's current transport problems and those anticipated over the next 20 years.

The analysis underpinning GMITS has taken into account the following key drivers of major developments in the conurbation's economy, all of which are identified as key delivery components of the Regional Economic Strategy:

- The Knowledge Capital initiative, forecast to generate 50,000 jobs in the Regional Centre and a further 50,000 jobs throughout the conurbation (iii)
- Manchester Airport, where the number of jobs is expected to increase to 28,000 by 2015 in association with a growth in passenger numbers from 21 million per annum currently to 38 million (with a further increase to 51,000 jobs associated with 54 million passengers per annum by 2030). (iv)
- Rejuvenation of New East Manchester where the population is planned to double, from 30,000 to 60,000, by 2015 and where the Central Park business park will bring 10,000 jobs. (v).

- Kingsway Business Park, forecast to create 8,000 jobs. (vi)
- Further office and service sector growth in the Regional Centre. (vii).
- The Housing Market Renewal areas in Manchester/ Salford and Oldham/Rochdale.

Without interventions and assuming current modal split, this would result in a significant increase in the number of cars entering the Regional Centre along a limited number of radial routes. Increased activity elsewhere in the conurbation will bring problems for town centres similar in nature if not in scale. Hence, to accommodate this growth we are adopting an integrated policy approach embracing spatial and transport planning and economic development. This is an iterative process so, for example, work is currently underway to develop a longer-term spatial strategy which takes GMITS as an input. It will seek to facilitate economic growth, making best use of existing transport infrastructure, improving social inclusion and protecting the environment. As part of this work, consultants have been employed to identify the likely levels of demand for each of the growth sectors and to develop a brief for the follow-on work which will be undertaken by the local authorities to look at identifying appropriate development sites to accommodate the growth. This brief will include transport considerations, in particular the need to consider the effect on transport networks of the level of trip generation by type of employment envisaged on the site (with those having higher levels of peak hour trip generation preferably being located close to public transport nodes) and the need to locate the sites close to the relevant type of housing stock (to try to attract people to live close to where they work to minimise travel distances and make walking and cycling more practical). The outcomes of this work will be used as an input for further refinement of GMITS.

iii RES transformational actions 9,13 and 80.

iv RES transformational action 72.

v RES transformational actions 52 and 80

vi RES transformational action 80.

vii RES transformational action 80

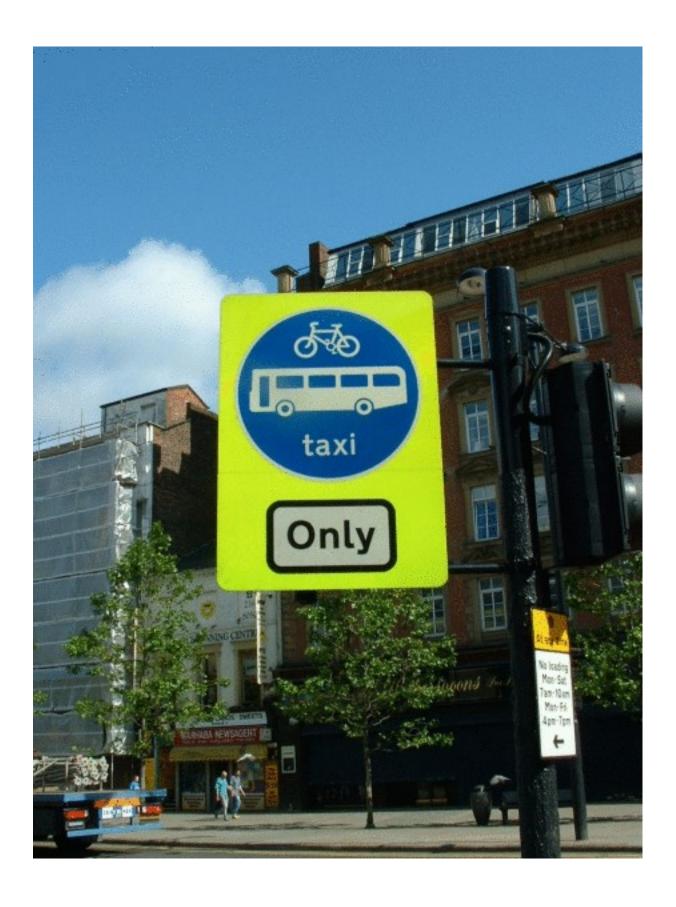
viii RES transformational action 52.

Greater Manchester's Longer-Term Vision and Integrated Transport Strategy 2

The main elements of GMITS, therefore, include proposals for:

- Delivery of the expansion of the Metrolink network.
- The development of corridor partnerships with a range of organisations working together to implement an agreed integrated plan for each corridor which will have the delivery of agreed outcomes as a central component.
- Bus improvements, including both network enhancements and service improvements to improve
 journey quality and reliability.
- Development of rapid transit systems including busways and tram-train for some non-Metrolink corridors
- Improvements to the rail networks, especially in relation to increasing capacity.
- Development of a toolkit of demand management measures which underpin economic growth rather than harm it.
- Better integration of modes including smarter travel and behavioural change initiatives, better ticketing, and more park and ride facilities where these contribute to modal shift.
- Network management measures to make the best use of the existing infrastructure.
- Investment in cycling and walking infrastructure to make it more safe, secure and convenient
- Targeted investment in major highway schemes, especially for improving access to regeneration priority areas.
- Better highway maintenance.

3 Development of LTP2



Development of LTP2 3

This chapter deals with the development of the final LTP2 from the Provisional submission in July 2005. It sets out the lessons learned from implementation of the first Greater Manchester Local Transport Plan from 2000/01 to 2005/06. It lists the work carried out since submission of the Provisional LTP2, and includes two elements of external involvement - consultation and the Strategic Environmental Assessment (SEA). Finally, it describes the arrangements for managing the LTP through Greater Manchester's administrative structures.

3.1 Lessons Learned from LTP1

The first Greater Manchester Local Transport Plan provided a comprehensive strategy for transport in the Greater Manchester conurbation and was awarded Centre of Excellence status for the quality of the strategy. This strategy has now been further developed into the longer-term GMITS. Overall, as stated in our Fifth Annual Progress Report, we are on course to meet 61% of our targets for LTP1, confirming that the strategy is one which is capable of being delivered, and is producing beneficial outcomes. The key areas where we are on track for LTP1 are:

- Most road safety targets
- Modal share to the regional centre
- Rail and Metrolink patronage
- School travel
- Accessibility

However, the delivery of the LTP1 strategy has proved problematic in some areas, in particular:

Rail

LTP1 included ambitious plans to improve stations and open new ones, but we have had limited success in this area, partly due to the financial difficulties of the rail industry and partly due to the fragmented nature of the industry at the time which made it difficult to negotiate solutions. For LTP2, proposed improvements will be brought forward in the context of the Regional Planning Assessment, Route Utilisation Strategy and Franchise Review processes. In terms of increasing capacity, service and/or infrastructure enhancements are likely to be difficult to achieve, so we are focusing on seeking to acquire more rolling stock to increase the length of existing

trains. While this will meet the short-term need for additional capacity until 2011 we need to continue to work with Government over the need for longer-term infrastructure enhancements.

Bus

We have reviewed the outcomes of the Quality Bus Corridors. The original aims were to reduce bus journey times, reduce the variability of bus journey times, increase the comfort and convenience of bus travel for all users, ensure that bus services provide a real alternative to car use and improve pedestrian and cycling facilities along the corridors. Experience has now shown that it is difficult to achieve significant journey time savings from bus priority measures on all-purpose roads. The need to improve safety for pedestrians and cyclists, as well as to provide for parking and servicing in local centres, can increase journey times for all traffic. However, the schemes have achieved a significant improvement in bus journey time reliability, improved journey times relative to the car and increased patronage. Hence further QBC improvements will be implemented during LTP2 to deliver more of these outcomes. However, more significant improvements to bus journey times will require us to develop a 'QBC plus' approach and to develop stretches of segregated busway, where possible, to complement Metrolink expansion and provide high quality and dedicated priority for buses.

Since LTP1, improvements have been made to the bus network through GMPTE and the District Councils working with operators on a voluntary basis via the Integrate project. However, performance still falls short of passenger requirements in a number of respects. Significant interventions are needed if the bus is to attract people away from their cars in sufficient numbers to respond to the forecast economic growth without adding to congestion. For LTP2, the Corridor Partnerships approach will be adopted to integrate bus services and infrastructure improvements with wider economic and social strategies in partnership with operators. Where this does not prove possible or successful, and the only practical way of delivering the required improvements is through either a statutory Quality Partnership or, as a last resort, a Quality Contract, we will seek the powers to introduce these and have undertaken preparatory work to facilitate this.

3 Development of LTP2

Walking and Cycling

LTP1 has not been as successful in increasing walking and cycling as had originally been envisaged. There are a number of reasons for this, including:

- Over-ambitious targets, including a reflection of the Government's National Cycle Strategy target at the time,
- Underestimating the length of time it takes to develop a positive societal change in attitude towards walking and cycling,
- Continuing increases in car ownership and use, and trends encouraging longer journeys,
- The time taken in planning our approach and establishing the necessary delivery conditions, which, although essential in ensuring the effectiveness and value of future projects, did not result in sufficient actual schemes on the ground
- Insufficient attention was paid to marketing improvements in a coherent and targeted way
- Resources tended to be spread too thinly across the sub-region

In LTP2 a more realistic target setting exercise has been undertaken to take account of the issues above. For the investment programme, resources will be targeted on routes which link key origins and destinations to provide a more focused approach to the provision of facilities. More attention will be given to the roles of marketing and travel planning. We are therefore going to direct resources more effectively on those areas where we believe we can make a real difference.

Road Safety

During LTP1 some authorities tried an area based approach to improving road safety, for example Manchester City Council initially focused on area wide traffic calming schemes as a measure to improve community safety. However, analysis of the impact of this strategy has shown that it has not provided the optimum value-for-money in terms of the numbers of accidents saved. For LTP2 the City Council will therefore focus on developing site-specific local safety schemes to address those areas with the worst accident

records. This approach is also being mirrored in the other nine authorities within Greater Manchester.

Partnership Working

Over the past five years a number of sub-regional and regional strategies have been developed, but each of the separate transport delivery agencies have developed their own plans and programmes to implement these strategies. During LTP1 there has been a move towards more partnership working to try to align these plans and programmes. However, this has been only partially successful, and there is a need for a greater degree of partnership working to develop detailed LTP2 implementation plans. We are therefore developing Corridor Partnerships to align objectives and targets between partners and ensure that public transport modes complement one another

3.2 Work Completed Since Submission of Provisional LTP2

The Provisional Second Local Transport Plan for Greater Manchester was considered "promising" and work has continued to develop our plan utilising the detailed comments received. Much work has progressed since the submission of the provisional LTP2:

- Greater Manchester Congestion Study completed
- Bus Strategy completed
- Segment workshops held
- Strategy Planning Model used to test Programme and targets
- Prioritisation of Major Schemes within Greater Manchester
- Contributions made to Regional Transport Prioritisation and Spatial Strategy processes
- Consultation with stakeholders undertaken using Provisional LTP
- Transport Matters magazine published
- Completion of the Strategic Environmental Assessment of LTP2
- Strategic Partnerships for Accessibility established
- Indicators and Targets developed and confirmed

Development of LTP2 3

- Substantial work undertaken towards establishing our first four Corridor Partnerships
- TIF pump-priming bid was successful, with full bid being developed
- Air Quality local transport strategy action plan and targets developed
- Further investigation of Great Manchester growth scenarios and impacts, including those of Manchester Airport

3.3 Strategic Environmental Assessment

Strategic Environmental We undertook a Assessment (SEA) of the Provisional LTP2, the draft work programmes and the proposed major schemes, to assess their impact on the environment. Mitigation strategies were developed where needed, to ensure that overall our Final LTP2 protects the environment, improves social inclusion and enables economic growth to be sustainable over the long-term. We used independent environmental experts (Steer, Davies Gleave -SDG) to carry out the SEA with a view to promoting sustainable development, and to ensure that impacts were taken into account at the earliest stage and throughout LTP2 development. The SEA was split into five stages. For the provisional LTP stage A set the context, established the environmental baseline and set SEA objectives. Stage B included production of a Scoping Report, considered strategic alternatives and consulted locally and wider with relevant bodies. Stage C assessed the environmental effects of the plan. Stage D was the production of a Final Environmental Report. Stage E will be devising and implementing a monitoring programme.

After examination of the detailed LTP2 work programme, SDG suggested that for the schemes proposed 'it is unlikely there will be many significantly adverse impacts, and indeed ...(may) improve the environment in many ways'. However some mitigation and enhancement measures were proposed. These are set at the end of this section.

Health Impact Assessment (HIA)

The main impacts of LTP2 on health include access to healthcare and a healthy lifestyle (these are considered in detail as part of the Accessibility Strategy), road safety, air quality and modal shift

to walking and cycling. It is clear that local transport strategy has a major role to play in improving health.

The SEA incorporates the results of a separate Health Impact Assessment carried out by specialist, independent consultants. Their proposed approach was discussed and agreed with Directors of Public Health in Greater Manchester.

The SEA specified a health objective: To improve general levels of health and well being and reduce health inequalities in Greater Manchester. Related indicators were also designated:

- Estimation of changes in activity levels (cycling and walking)
- Air quality indicators, and
- Accident rates

The HIA examined the compatibility between the objective and LTP2 plans and policies. The HIA also considered an advice note prepared by the Directors of Public Health in Greater Manchester, which provided a set of five public health aspirations (see Table 3.2 of the SEA document):

- To promote walking and cycling as the main transport mode for journeys of less than 5 miles
- To reduce congestion and improve air quality by promoting responsible car use and reducing the use of the car
- To ensure that those without a car are able to access all that they need to choose a healthy lifestyle
- To ensure that disabled people are able to travel
- To promote the use of modes other than the car as the means of access to health facilities

The HIA's overall conclusion was that LTP2 broadly meets the health aspirations of our partners. Some recommendations were made, and these will be incorporated into the LTP2 work programme as appropriate.

The LTP2 partners will use the HIA and existing but strengthened partnerships with the health sector to ensure that LTP2 leads to the optimum possible health outcome.

3 Development of LTP2

SEA Section	Suggestion	Response
Traffic levels	LTP2 does not include policies and proposals specifically aimed at reducing vehicle miles: congestion relief is targeted as a priority, but this will not reduce overall mileage.	Dealing with congestion is specifically part of the GMITS/TIF programme, but there is no policy on reducing mileage. This is because the LTP process does not contain the policy measures to achieve it. Measures which would encourage less travel may be found in the land use planning system, with regard to the location of facilities in relation to areas of residence, although even here the scope for reducing travel is subject to people exercising personal choice. The LTP's support for town centres may, in conjunction with planning policies, help to reduce travel distance over the longer term compared with a journey pattern based on out-of-centre development
Alternative fuels	Consider cleaner fuels that are better for the environment such as biofuels, and landfill gas.	GMPTE is developing specific projects to use alternative fuels in public transport
Noise	Consider low noise road surfaces such as porous asphalt in maintenance programmes.	See note below
Air Quality	Transport information and guidance programmes to encourage drivers to avoid polluted areas.	Local press efficient at alerting people to poor air quality. The Air Quality Group will consider this suggestion.
	Workplace parking levy	To be considered as part of the toolkit of demand management measures being developed through the GMITS/TIF programme.
	High occupancy vehicle lanes	To be considered as part of the toolkit of demand management measures being developed through the GMITS/TIF programme.
	Traffic calming to reduce traffic speeds and aggressive driving	Evidence on the effect of traffic calming on air quality is not conclusive. Casualty reduction is likely to remain the driving force for traffic calming.
	Speed limits on roads where traffic speeds are high and air quality poor	This would apply primarily on the Motorway network and would require the support of the Highways Agency
	Park and Ride	Park and ride for Greater Manchester has been evaluated and can lead to more vehicle miles. Selected, well targeted, schemes will, however, be progressed
Greenhouse Gas	Better integration of land use and transport planning	This is being considered as part of the development of the sub-regional spatial strategy and will also considered by local authorities when producing their Local Development Frameworks.
	Focus on access to facilities rather than mobility	This has been progressed as part of the parallel Accessibility Strategy work stream.
Biodiversity	Mitigation Banking (planting to offset habitat loss)	This is already integrated into Metrolink plans, but could be extended for other major schemes, and for climate change gas emissions.
	Review impact of traffic management and maintenance programmes	See note below
Soil and Water	Review traffic management and maintenance programmes	See note below

Table 3.1 Response to recommendations of the SEA

Note: The planned road maintenance and traffic management work programmes were identified in several categories as an opportunity to secure environmental improvements. The LTP team will work with Greater Manchester district partners to identify where changes in practices or common standards could help to improve the overall strategic environmental impact of the LTP2 programme.

Development of LTP2 3

GMPTE hosted a seminar and workshop on 1 March 2006 to discuss the findings of the Strategic Environmental Assessment and Health Impact Assessment with stakeholders. The messages from this were that stakeholders were comfortable with the process and broadly agreed with the findings, although a number of comments were made and these have been fed back into the LTP process. Some of the views worth noting were:

- The LTP2 process involved much more working with partners than LTP1, and stakeholders welcomed this.
- Targets particularly for walking and cycling should be challenging and not just set at a level that could be easily met.
- Physical activity such as walking and cycling can help in tackling obesity and other illnesses - and are essential parts of a health lifestyle as well as being a good way of getting around.
- Some participants were worried about some potentially environmentally damaging road schemes.
- The economy is growing faster than traffic, so there is no causal link. Greater Manchester should avoid falling into the trap of linking economic growth with more traffic. The economy is not dependent on cars.

3.4 Consultation and Engagement

Extensive consultation and engagement has been carried out with stakeholders to underpin the wider vision of our transport strategy. This included a conference in November 2004 to initiate the work; meetings of the LTP External Liaison Group, extensive work with key agencies such as the Chamber of Commerce, consultation with neighbouring authorities and the use of the LTP website. The Greater Manchester Forum, a group made up of the voluntary sector, higher and further education representatives, Trade Unions, the Private Sector and the 10 District Council Local Strategic Partnership (LSP) chairs, has also been involved in the development of the Provisional Local Transport Plan, from the early vision work through to development of the key elements of the strategy. This has informed the policy framework within which the GMITS was developed. We have ensured that the policy framework reflects the key themes of the 2004 White Paper and the Shared Priorities for transport developed between central Government and the Local Government Association. A copy of the Transport 2020 Vision can be found on the Greater Manchester LTP website www.gmltp.co.uk. In addition, an advertorial was placed in a wide range of local newspapers, together with leaflets at Council offices and other public buildings to encourage the general public to get involved in the process.

Consultation on the Plan since the submission of the provisional document has consisted of a number of initiatives

- Gaining detailed feedback from an extensive list of stakeholder. This method has greatly aided the formulation of our strategies. For example, Manchester University's atmospheric research group became a consultee during our extensive consultation throughout 2005. They have given advice and assisted in the formulation of our air quality strategy.
- Signing of a concordat by bus operators to deliver the objectives of corridor partnerships
- Consultation with the public through the 'Transport Matters' exercise
- Officer discussion with neighbouring authorities on how linkages can be improved between neighbouring plans
- Cross departmental consultation such as Local Transport Plan Steering Group and Strategy Co-ordinating group. This also involved gauging opinions from the other network operators, specifically the Highways Agency, the rail industry and Manchester Airport.
- Local Authority consultation on draft programmes.

3 Development of LTP2

Key messages from the consultation exercises are:

- Both the public and stakeholders agree with the public transport led approach proposed by the Greater Manchester Authorities. In short, a range of improvements to public transport were suggested, including support for Metrolink expansion and other major schemes, punctuality, integration, more comprehensive routes and services, investigations into new approaches to ticketing, developments and improvements to stations and interchanges; and improved cleanliness of vehicles.
- In terms of people's aspirations, both 'carrot' and 'stick' approaches were proposed. Consultees made reference to the importance of aligning land use and regeneration policy with any emerging transport agenda and the awareness of changing lifestyle choices which impact on the transport requirements of the travelling public in Greater Manchester.
- Links with major employers, schools and health facilities were seen as vital. These destinations
 are major trip generators that will increasingly require innovative approaches to relieve localised
 congestion and car parking shortages. Representatives from these organisations expressed
 support for Travel Plans, safe walking routes and high quality bus services.
- Problems with traffic flow were raised for certain routes at certain times. Improving traffic flow
 by better traffic signaling was a popular suggestion. There is also a belief that more emphasis
 needs to be placed on integration of different modes of transport. There was support for
 improvements to Interchange facilities, and increased parking near public transport links (e.g.
 park and ride).
- The public and stakeholders cited traffic as the major contributor to air and noise pollution in Greater Manchester. This was complemented by support for sustainable modes such as improvements to routes and facilities to encourage walking and cycling.
- The issue of safe and secure public transport was a recurrent theme, particularly from young people. Respondents believe that public concerns regarding safety and antisocial behaviour are discouraging use. Although this may only be a perception, stakeholders are supportive of improving safety at interchanges, and extending the use of CCTV and real-time information.
- Stakeholders believe that there are areas in Greater Manchester where accessibility to key
 facilities is a problem. The accessibility planning work, using the Accession software, has been
 used to identify specific areas where problems exist. Solutions being investigated include
 assessment of different transport options including demand responsive transport for areas
 with relatively low demand. Consultation also highlighted concerns that some housing and
 retail developments have been built on sites without consideration of access by public transport,
 walking or cycling.

Examples of how consultation has influenced our approach

Consultation has helped shape and improve Greater Manchester's transport policy and programmes. The examples below show how the engagement process has guided LTP development, and demonstrates how views have been expressed both in specific LTP consultations and in on-going continuous consultation.

(1) Directors of Public Health

When assessing the provisional LTP2 the directors of public health strongly recommended that LTP2 included a clear commitment to complete the Greater Manchester Cycle Network by the end of the plan period and identified at least two orbital corridor partnerships perhaps as a first step towards the high quality express orbital network previously proposed by the Directors. Whilst we consider that we will not be able to complete the cycle network during the lifetime of LTP2, as we are focusing resources to achieve value for money, our long-term aim will remain the

Development of LTP2 3

development of a comprehensive network. A number of other organisations also raised the issue of orbital partnerships, therefore, we will investigate areas where these may be suitable and aim to have at least one operational during LTP2. The Directors of Public Health also expressed concern at the provisional walking target (halting the decline in walking by the end of the plan period). A number of other stakeholders raised concerns about this (see consultation annex). Due to these concerns, further modelling and analysis has been carried out, resulting in a modification to the target.

(2) Cycle England

Cycle England were provided with the provisional LTP and the cycling strategy and asked to comment. They gave broad support for the document, and thought that whilst our revised targets were ambitious, they were not unrealistic. Cycle England also supported our policy of targeting funding for cycle improvements at key areas around Greater Manchester in a bid to increase cycling numbers in these particular potential hot spots. Because of this endorsement the overall approach in final LTP2 remains unchanged from the provisional plan.

(3) Quality Bus Corridors

All QBCs undergo a two-stage consultation process. The first stage is a 'whole route' consultation which identifies issues. The results are used as the basis for developing detailed proposals which are then consulted upon. This ensures that local concerns are incorporated where possible in the development of a strategic scheme. Chorlton is a good example of this approach. Local traders were concerned about having sufficient parking and loading facilities. The proposals, therefore, made the best use of the existing limited space by introducing several formalised parking and loading bays, which also helped to prevent parked cars blocking the road or parking in the cycle lanes. In addition, some bus stops were relocated to create more on street parking for local shops and businesses.

(4) Bus Strategy

Results from both GMPTE's regular 'Tracking Survey' and a survey of bus passengers have shown that reliability/punctuality is the issue of

greatest concern to passengers. As a result, a major study was commissioned into the causes of unreliability. The Bus Strategy was revised to include measures aimed at tackling the issues identified. It now places far greater emphasis on improving the monitoring and management of punctuality (including operator specific monitoring, with trigger points for call in meetings and production of Performance Improvement Plans), developing a cashless/changeless fare strategy and on tackling the 'school run' (through the introduction of dedicated Yellow School Buses) rather than introducing bus priority measures alone.

Specific proposals for Park and Ride sites were put forward by bus operator Stagecoach in their response to consultation on the bus strategy. GMPTE is working with Stagecoach to look at the economic and commercial case for Park and Ride. If that proves positive GMPTE will work with them to identify suitable sites

More details of consultation, including methodologies, results, Greater Manchester responses to the points raised and information as to how they have shaped the document can be found in the consultation report in the LTP2 Technical Annex.



3 Development of LTP2

3.5 Greater Manchester's Administrative Structure

The structure through which transport decisions are developed, taken and scrutinised is shown in the chart overleaf. This structure has been developed to enable effective joint working of the ten Greater Manchester authorities (via the Association of Greater Manchester Authorities) and the Greater Manchester Passenger Transport Authority together with stakeholder input and scrutiny, to both prepare and monitor the implementation of the LTP.

Greater Manchester is currently in dialogue with ODPM about the future governance within city region. A case is being prepared which advocates a strategic board for transport within Greater Manchester. This would be one of a number of such boards operating within a framework of accountability via a high level Executive Board, comprising the Leaders of the 10 Greater Manchester Authorities. The Executive Board would act as the primary commissioning agent for key services and activities for the conurbation as a whole, act to integrate, at a strategic level, key public agencies across the conurbation and provide a clear focal point for regional agencies and Government at the level of the city-region. Within this framework the strategic board for transport would assume the responsibility for the development and implementation of the Integrated Transport Strategy for the city region. It would deliver the integrated plan through a restructured Passenger Transport Executive that would become a new equivalent of Transport for London -"Transport for (Greater) Manchester"

The main bodies within the current structure are detailed below.

AGMA Executive

This group comprises the Leaders of each of the ten District Councils. The Chair of the Passenger Transport Authority is also in attendance. It provides the political steer for transport policy and plan development.

GM Passenger Transport Authority

The Passenger Transport Authority is the statutory body which assess the public transport needs of Greater Manchester and makes policy decisions about public transport provision. It is made up of 33 councillors appointed by the 10 local authorities Councils in Greater Manchester. The Authority provides a grant to GMPTE which is the body responsible for implementing the Authority's policies. GMPTA does not directly provide bus, train or tram services, which are now operated in the private sector.

AGMA Transport Executive Members' Panel

This is the political advisory level for LTP policies and programmes. It comprises the Executive Members responsible for transport in the Cabinet of each of the ten local authorities in Greater Manchester, and the Chair of the Passenger Transport Authority is also in attendance. The group provides political advice to AGMA Executive.

Transport Chief Executives Group

This is the highest officer-level group considering local transport policy issues. It discusses such issues before their presentation to Members and clears reports to the AGMA Transport Executive Members' Panel and AGMA Executive. The Group comprises the Chief Executives of Manchester City Council, Bolton Metropolitan Borough Council, Stockport Metropolitan Borough Council, the Deputy Chief Executive of Trafford Metropolitan Borough Council and the Director General of GMPTE, advised by the relevant officers, including the Head of the GM Joint Transport Team (GMJTT).

LTP Steering Group

This is the officer level working group which co-ordinates the preparation, implementation and monitoring of the LTP across Greater Manchester. It comprises transportation planners and engineers from each of the ten Metropolitan Boroughs, together with representatives from GMPTA/E, GMTU, Manchester Airport, GONW, the Highways Agency and the Greater Manchester Economic Development Officers Group. It is chaired by the Deputy Chief Executive of Trafford Metropolitan Borough Council. Reports are presented by the

Development of LTP2 3

GMJTT, and AGMA provides the secretariat. Reports are circulated to a wider reference group of interested stakeholders.

AGMA Thematic Transport Partnership

The group supports the Greater Manchester Forum in the delivery of particular transport strategy areas of the Greater Manchester Strategy, by agreeing, monitoring and scrutinising an action plan to deliver the transport elements of the It comprises representatives Strategy. organisations, agencies and companies involved in delivering transport services across Greater Manchester. A Wider Reference Group will be established to offer specific, technical or campaigning perspectives on issues being considered by the main group, and consideration is being given to the value of an annual conference to widen the discussion on LTP related matters with a large range of interests who have a stake in Greater Manchester's transport decisions.

Since the submission of Provisional LTP2, two additional groups have been set up:

Greater Manchester Strategy Coordinating Group

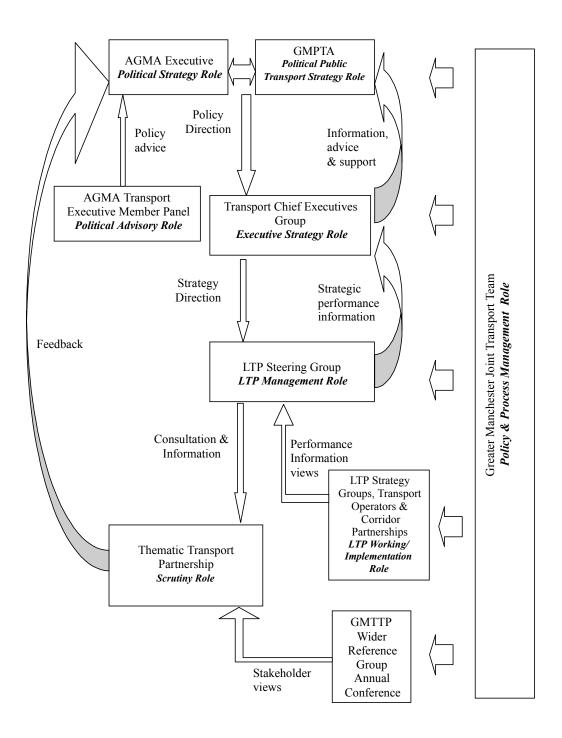
Work is currently being undertaken within the sub-region on a number of strategies including, but not limited to, a sub-regional spatial strategy, an economic plan underpinning the City Region Development Programme, a sub-regional housing strategy and the Integrated Transport Strategy. To ensure that these strategies complement each other a Strategy Coordinating Group has been established, comprising the senior officers responsible for coordinating the development of the individual strategies. The Group meets on a regular basis to assess the implications of the emerging strategies, which in the case of transport means that it both influences, and is influenced by, spatial, economic and housing considerations.

Greater Manchester Evidence Group

This group of senior officers has been established to oversee the co-ordination of the collection, distribution and analysis of data to provide a common evidence base for a variety of strategies. The group is multi-disciplinary and will enable a more robust approach to be undertaken for the monitoring of strategies and assessing their impact on each other.



3 Development of LTP2



Picture 3.1 Greater Manchester Administrative Structure

Problems, Issues and Desired Outcomes 4

In this chapter we identify the key transport problems and issues in Greater Manchester, both now and in the future. In identifying the problems, we also identify how we intend to deal with them, with fuller detail provided in Chapter 5 (The 5 Year Programme).

First, we describe our overall approach to the task of problem identification. Then we provide some overall results of our current and forecast analysis. Finally we identify the key problems and issues in the four shared priority areas.

4.1 Overall Approach

Given the complexity of Greater Manchester, there is a need to analyse problems both at the conurbation level, and also at the local level.

We have analysed our comprehensive monitoring data from recent years to identify current trends, and quantify issues and problems. These analyses have been undertaken separately for the whole of Greater Manchester, and also for five segments: the Regional Centre and the North West, North East, South West, and South East segments. The results have been discussed by representatives of authorities in each of the respective segments, to enable a fuller interpretation and understanding of the problems and issues to be obtained.

Clearly many of the problems and issues identified are of a local nature. But when we set them down segment by segment we identified very many consistent themes. We have therefore chosen, for the most part, to set down the problems and issues within the separate 'shared priority' areas, with specific local examples where appropriate. The exception to this is the regional centre which is different in kind from the other segments, and is therefore dealt with individually in a separate section (4.4).

We have then sought to look at future problems. Our approach has begun by taking on board the assumptions and agreements of the various regional and sub-regional plans in related areas (housing/economic development). We have fed these into our Strategy Planning Model (SPM) to provide estimates of transport patterns and conditions in 2011 and beyond.

The SPM was originally developed in the mid-nineties by a partnership between the Greater Manchester local authorities / GMPTE and the Highways Agency. DfT transport economists/modellers have also been involved throughout its birth and subsequent development. While its outputs need to be interpreted with care, we believe it provides useful guidance of the likely broad trends in transport in Greater Manchester under various assumptions of future economic conditions.

In addition, because of the centrality of 'congestion' as a key problem in urban transport, we commissioned an independent study of congestion in Greater Manchester. This was intended to provide guidance in a number of areas, including:

- an assessment of current and future levels of congestion
- an assessment of how the identified congestion is likely to impact on the sub-regional economy in the future

We have also used the analysis carried out in the multi-modal studies conducted over previous years.

4.2 General Results of Analysis

It is well known that increases in car ownership, and the subsequent use of the cars are the main contributors to increasing problems of congestion and poor air quality. In Greater Manchester, car ownership has continued to grow. National Census results show an increase of 184,000 cars between 1981 and 1991, and an increase of a further 194,000 cars between 1991 and 2001. There were over 1 million cars owned in Greater Manchester in 2001, an average of almost one per household. Licence holding trends are shown in Fig 4.1.

Some 42,500 additional cars were used for the journey to work in Greater Manchester in 2001 compared with 1991. In addition people have continued to increase the length of their journey to work, with the average length of car journeys to work up from 9.2 km to 10.0 km. Most of these journeys to and from work take place in the already congested morning and evening peak periods.

4 Problems, Issues and Desired Outcomes

It is clear that car ownership provides additional freedoms, and is regarded as essential by many individuals and households. However, transport planners need to try and ensure that appropriate alternatives and incentives / disincentives are provided to ensure that car use is moderated, particularly for the journey to work.

There are other related problems. Travel to school by car has also been increasing, adding to local congestion and air quality problems. This is linked to falling levels of cycling and walking, to school and work, but also more generally. All these trends relate, in some measure, to concerns about personal safety and security which now appear to be felt more keenly. There are also issues with some of the public transport services which are essential for the 33% of households in Greater Manchester who do not own a car, and which provide an alternative for those who do. In particular, there are peak capacity problems on the very popular Metrolink services and some rail services, including those from Bolton and Wigan to the regional centre. For the most part, buses share road space with other vehicles and hence, as congestion increases, so the buses are also delayed.

Forecasting

We have used our Strategy Planning Model (SPM) to make forecasts of future problems, and assess the extent to which we can tackle them under

different scenarios. This output was considered alongside a range of other information when considering the nature and scale of future conditions. It was also used to inform target setting.

In order to provide a context for the SPM results, it is worth highlighting some recent observed trends in travel in Greater Manchester:

- average trips per person per annum are remaining stable, but there is a continuous modal transfer to car from other modes
- average trip lengths by all motorised modes are increasing
- as a result, vehicle mileage has been increasing, but with most of it on motorways 41% overall increase on motorways compared with just 2.5% on local roads in the last 10 years (with respective figures for cars being 46% and 4%) Figs 4.2 and 4.3 indicate recent traffic trends.
- more recently in the last five years we have seen trips by car to the regional centre remaining stable, while trips by rail / Metrolink have increased by 10%
- we have information on journey times on local roads in 1999 and 2003: the results show little change, partly because of the completion of the M60 in 2000

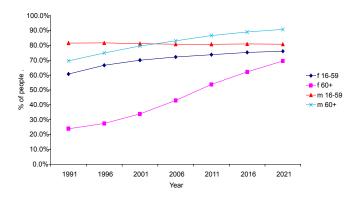


Figure 4.1 Driving Licence Holding in GM

Problems, Issues and Desired Outcomes 4

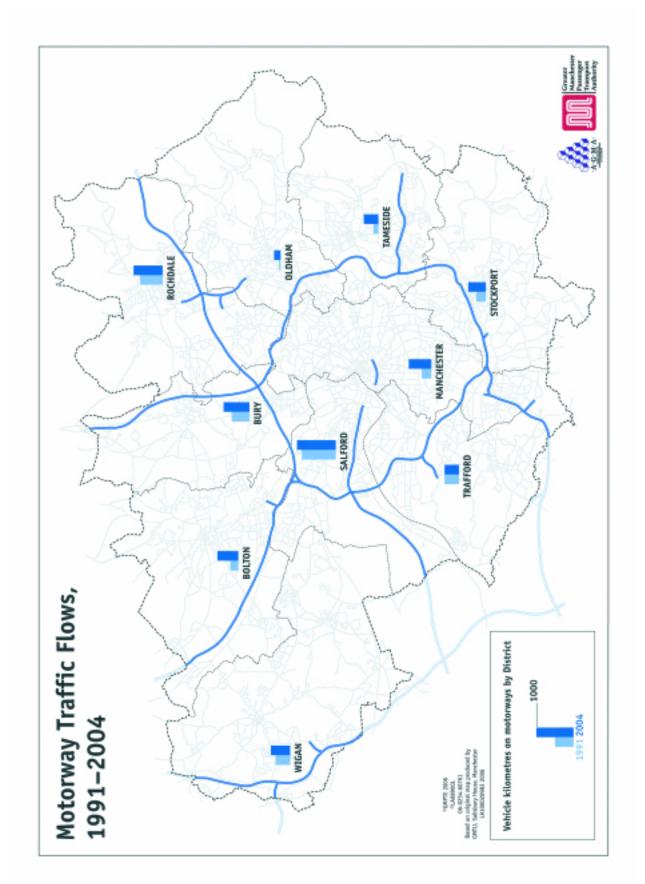


Figure 4.2 Motorway Traffic Flows 1991-2004

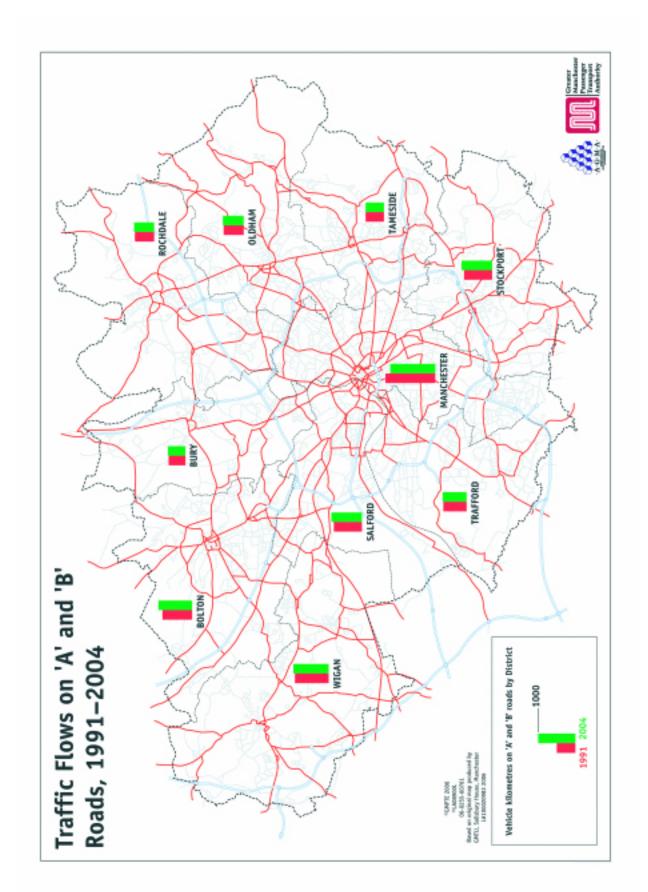


Figure 4.3 Traffic Flows on 'A' and 'B' Roads 1991-2004

The Strategy Planning Model

The SPM is a complex computer based tool which is able to test and quantify the interactions of transport and land use policies. It was developed between 1996 and 1999, and has been updated and refined in the period to date. It is able to give an indication of the relative outcomes of different transport and land use policies under different economic scenarios.

Two economic growth scenarios were used for LTP2 testing: the first replicated the assumptions in the national TEMPRO forecasts, while the second reflected the more optimistic growth envisaged under the City Region Development Plan case. We also examined a do minimum reference case against a LTP1+ LTP2 scenario. It is also worth noting that we have included the provisionally approved enhancements to Metrolink Phases 1 & 2 in all the transport strategies, including the reference case. These tests have provided us with a range of quantified outcomes to guide our subsequent analysis, and have been particularly useful in ensuring that many of our key targets have been set in a consistent manner. The SPM is particularly useful in distinguishing between different overall transport strategies, and the relative effects of economic, land use and transport factors. It is better at considering traffic and public transport rather than walking and cycling. It is not intended to examine the effect of smaller scale transport interventions, and cannot always provide output on an exactly comparable basis with our LTP2 indicators.

The SPM forecasts that economic growth could generate between 25,000 and 35,000 new jobs by 2011. It also forecasts that between 2001 and 2011 there will be a general growth in travel in Greater Manchester by car and public transport. Traffic growth on local roads is forecast to be in the range 4% to 6% compared to the range 5% to 7% in the reference case (ie without LTP1 and LTP2 investment), while daily bus trips are forecast to grow by 5% to 12% against a reference case of a reduction of between 2% to 7%. In addition, rail passengers are forecast to continue the robust growth displayed through the late 1990s and early 2000s: 13% to 20% compared to 4% to 11%. In contrast, Metrolink passengers are forecast to grow at a more modest rate of 7%-15%. This result arises because the model is forecasting that the investment proposed in competing non-Metrolink modes in LTP2 will allow some people to choose to travel by other modes who would otherwise have used Metrolink. Evidence to date suggests that the model may be overly optimistic about the attractiveness of these modes compared to Metrolink.

Travel to the Regional Centre and other key centres is forecast to increase between 2001 and 2011, with a greater share of the trips using non-car modes. LTP2 reinforces this trend, so supporting the CRDP's objective for regenerating the centres.

The SPM suggests a continuing decline of cycling and walking; although this area is not well modelled by the SPM, this does highlight the pressures on these modes and the need to take action to boost their attractiveness.

Our strategy for accommodating anticipated economic growth during the LTP2 period is, therefore, to:

- improve public transport for trips to centres, in particular by
 - increasing Metrolink usage by 11% by providing extra capacity through the approved phase 1/2 renewal scheme
 - increasing bus usage by 4% by implementing a range of coordinated measures through the Corridor Partnership approach
 - increasing rail usage by 12% through station improvements, including additional car parking

- target investment in better facilities to encourage short journeys to be made by foot or by cycle (to stop the decline in walking and to increase cycling by 6%)
- use land use planning and regeneration strategies to minimise trips to out of centre locations
- implement network management measures to avoid a worsening of congestion.

4.3 Problems in Shared Priority Areas

As explained above the more detailed segment analysis we have undertaken has been combined into common themes, with local examples highlighted where appropriate. The conclusions are summarised in the following five sections.

4.3.1 Congestion

This is recognised as the key issue. As such it has been the subject of a separate study, and has also been considered at length internally and in collaboration with DfT officials. We have used the initial set of ITIS journey time data for 2003 (See Figure 4.4), to produce network maps in various ways for the ten authorities to give them an insight into the performance of the highway network. Consideration of these maps and associated statistics enabled us to select our key congestion routes in line with DfT requirements. Following discussions with DfT, 15 routes were finally agreed and are shown in Figure 4.5. Most of them are on radial routes into the regional centre or other key centres, and many are also on our Quality Bus Corridors (QBCs) on which we intend to continue to make further improvements.

Our congestion study was undertaken mainly in 2005, and completed in early 2006. The study was undertaken during the period when the DfT itself was grappling with the issue of appropriate congestion indicators, and the final choice of indicator was taken too late to be incorporated in our study.

The study showed that:

- the existing general level of congestion in Greater Manchester is similar to that of other major urban areas in England
- congestion is not homogenous; not all the network is affected to the same extent in the morning peak by congestion, and, despite common perception, the most severe delays on average tend to be on classified roads

- rather than motorways. However motorways are affected by incidents, which because of the large flows, have a disproportionate effect on journey time reliability.
- businesses in Greater Manchester have learnt to live with morning peak congestion and seem to be fairly inelastic to small increases in delay
- congestion is expected to increase in the longer-term with traffic growth over the next decade and beyond as the sub-region's economy develops and prospers
- the LTP2 strategy should be able to cope over the coming 5-year period, but will need augmentation in the future if the economic aspirations of the city region are to be achieved

The study has been useful, although it has not been able to answer all the questions definitively. As the DfT itself has found, while the availability of ITIS journey time data is a great step forward, the most appropriate way to analyse and interpret it is not yet clear. However, the study has provided us with a sound foundation on which to build, and we are currently undertaking further analysis as part of our pump-priming work as we develop our bid for TIF funding.

Our desired outcome for LTP2 is that there is no significant worsening in congestion and that area wide traffic flow growth on local roads is no more than 2%.

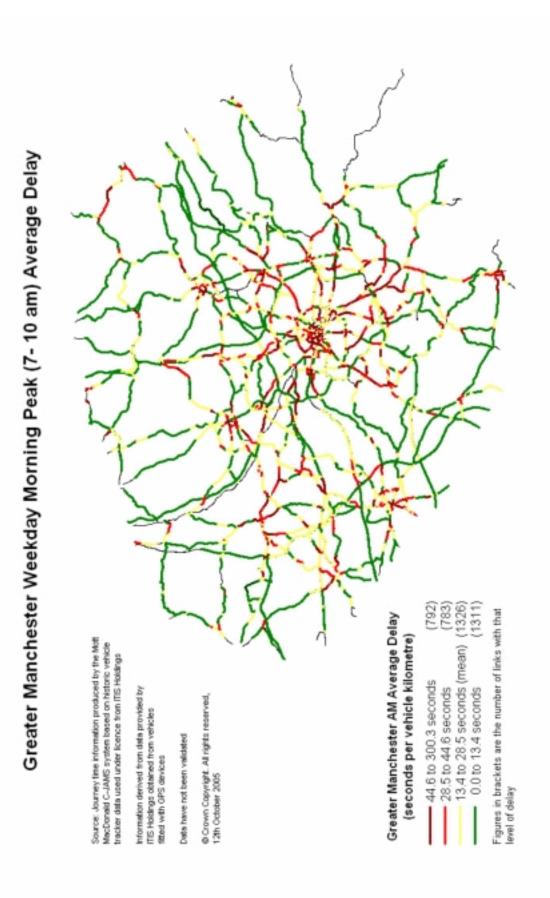


Figure 4.4 Greater Manchester Morning Peak (7 to 10am) Average Delay

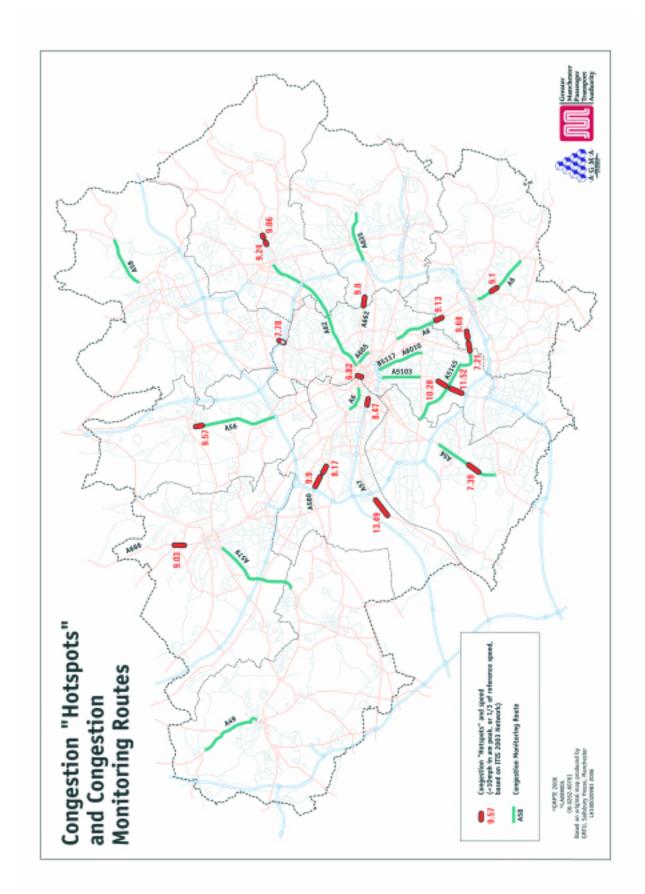


Figure 4.5 Congestion

4.3.2 Accessibility

In order to understand existing and future accessibility problems and to determine our Strategy and plans to deal with them, we have established three Strategic Accessibility Partnerships – in Education, Employment, and Health/Food – which include key partners from all relevant sectors. We have used Accession software to identify the location and extent of accessibility problems, and have informed the discussions and action plans of the respective partnerships.

There are some common problems across the three sectors:

- Location of Facilities Employers and supermarkets have a tendency to start up or to relocate without considering public transport access. Rationalisation and specialisation of education will also have implications for the way in which people access schools and colleges. To ensure facilities are accessible we understand the need to integrate the land use planning process so that accessibility is an important consideration in the granting and submission of applications for developments, particularly those which will create significant travel demand (such as a large number of new jobs) across the conurbation. Direct access by bus to many supermarkets is often not available. This can be a significant barrier to some non-car owners who consequently have difficulty accessing fresh food.
- Evening accessibility Accessibility to services in the evenings (after 6.00pm) can be very poor in many areas because of the low frequency of bus services generally available. Many evening routes are supported financially by the PTE and frequencies have to reflect the subsidy budget available. People believe that when travelling in the evening they are more likely to encounter anti-social behaviour. This perception contributes to a feeling of insecurity on public transport, and therefore creates a major barrier to accessibility.
- Bus service coverage There are low levels of bus services provided to some important destinations, such as higher and further education colleges, and some hospitals

(including Rochdale and Wythenshawe). This is likely to become increasingly significant as the process of reconfiguration of front line services progresses, as demand for new trips currently not served by public transport will begin to emerge. Coverage of bus services also tends to be less comprehensive in semi rural and rural areas reflecting the lower levels of demand that exist. (see Fig 4.6). The challenge has been to ensure that residents of these areas without access to a car are still able to access key facilities. In addition there have been some specific findings from our studies, including:

- central Rochdale and Oldham wards have poor access by public transport to employment
- job vacencies at Trafford Park are not well linked to areas of unemployment in Salford by public transport
- access to higher/further education is generally poorer than to primary/secondary education (this is largely because trips to higher/further education are less localised)
- cycle access to education facilities, particularly in the north and east of the conurbation, is in need of major improvement
- access to healthcare by public transport on the northern and eastern rural fringes of Greater Manchester is generally poor
- some residential areas have poor access to fresh food outlets (despite problems defining what constitutes such an outlet)

There are opportunities to deal with these issues, including:

- better location of facilities through work with major employers to explain the benefits of taking locational decisions with accessibility planning in mind
- work with big employers and operators to understand how traditional shift patterns have changed and how public transport timetables can react to this
- work with the health sector to understand and react to the impacts of front line service reform through continued close involvement

- in the ongoing reconfiguration of services across Greater Manchester
- changes in the method of service delivery
- providing better information to users so that people are aware of the public transport options available to them
- persuading / assisting operators to provide specific improvements in services through schemes such as Kickstart and demand responsive services to plug the gaps in the conventional network
- continue the close collaboration with education institutions to make sure transport operators keep pace with changes to the

- timing of the school day and in the longer term the potential impact on school travel of the choice agenda in ongoing education reform
- providing better access and secure storage provision for bicycles at identified secondary schools and higher / further education establishments. This is underway through improved travel planning processes at district level

We have identified measures to meet these issues in the work programme in Chapter 5.

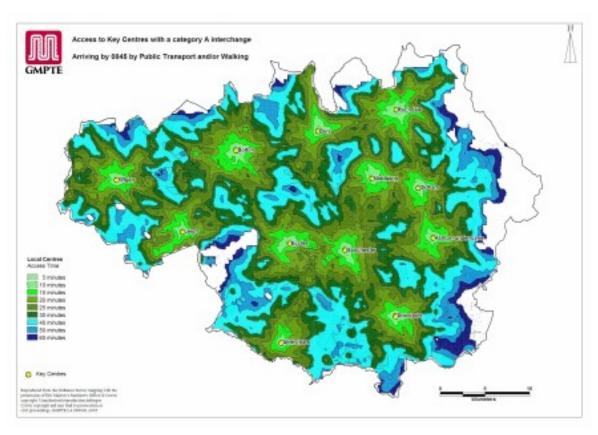


Figure 4.6 Accessibility to Key Centres with Interchanges

(Note: white areas are sparsely populated)

External Accessibility

In addition to the above, there is a wider definition of accessibility, which applies to the connectivity of Greater Manchester with the rest of the region, the country and indeed other countries. This very much relates to economic growth in the city region. While most measures to improve these links are outside the remit of the LTP2, it is important that

local transport and wider Greater Manchester economic, social and environmental issues are taken into account by the relevant organisations to ensure an holistic approach. This is particularly true in terms of congestion objectives as changes to the strategic road and rail networks can directly influence the amount of traffic on local networks and vice versa. Particular attention will need to be

given to Trans-Pennine rail links, management of motorway capacity, links to the Airport, freight paths on the modernised West Coast Main Line and congestion at ports and rail interchanges which receive containers bound to and from Greater Manchester.

Improvements for People with Mobility Difficulties

Our transport plans and strategies need to improve the accessibility of facilities for people with mobility difficulties. Our concessionary fares scheme and our Ring & Ride service are both designed to ensure that people who find it difficult to use conventional public transport are still able to access the facilities they need to reach. The ten Greater Manchester authorities also intend to continue to improve local accessibility by introducing more dropped kerbs and tactile surfaces, and upgrading crossing facilities to make them as user friendly as possible. We also recognise the need to continue to improve the accessibility to the local public transport network, and have adopted three specific targets designed to make the bus fleet, bus stops and local rail stations more accessible.

Our desired outcomes for LTP2 are that:

- 85% of households remain within 30 minutes access by public transport to a Category A interchange by 08:45
- 90% of people in receipt of Jobseekers Allowance remain within 30 minutes access by public transport to a Category A interchange by 08:00
- 66% of buses are wheelchair accessible by 2008/09
- 4 additional rail stations are made accessible by 2007/08

4.3.3 Road Safety

The main focus here has been in continuing to monitor trends in Killed and Seriously Injured (KSI) casualties, both in total and for children, and to address the worst problem areas. We have enhanced our countywide road accident / casualty database / GIS (GMAXI) to provide enhanced analytical and mapping features to road safety specialists in their respective District Offices and

in Greater Manchester Police (GMP). Analysis is provided quarterly, including the latest twelve months totals in the key KSI categories, but also for the vulnerable categories of pedestrians and pedal cyclists. The analysis is undertaken countywide, and separately by District, and is discussed at the regular meetings of the Road Accident Prevention Group attended by all authorities and GMP.

We have sought to identify areas of concern on two separate subsections of the road network: the main roads (motorways / A class roads / B class roads) network and the minor roads network. Table 4.1 below shows that almost two thirds of all KSI casualties in Greater Manchester occur on main roads. However, the picture is very different for Child KSI casualties, with 55% occurring on minor roads. To meet our local targets for 2010 (our contribution to the national targets), a two-pronged approach is needed targeting accidents separately on major and minor roads.

	Motorways, A roads and B roads	Other Roads
All KSI casualties	3449	1951
Child KSI casualties	506	627

Table 4.1 Road Casualties Greater Manchester, 2000 to 2004

In Spring 2005 a new tool was provided within our mapping software to enable a new type of cluster analysis to be undertaken. Rather than using traditional methods to identify accident hotspots by allocating accidents to predefined junctions, road lengths or grid squares, this new analysis allows clusters to emerge naturally from the data itself. The user sets a radius and minimum casualty criterion, and the software identifies all clusters where the criterion is met. By selecting separately on main roads and minor roads, it is possible to identify much more accurately where the major hotspots lie. The clusters shown in Figure 4.7 were created by this method and show countywide KSI accidents on Motorways, A and B roads. Similar plots have been produced and used to look at hotspots for other subsets of road accidents including accidents involving child KSIs (Figure 4.8) and those involving other vulnerable road users.

As can be seen clearly from Figure 4.7, the main clusters of accidents on major roads lie in Manchester, particularly in Manchester City Centre and along the road to the south (Oxford Road) that runs through the university and hospital area, reflecting the large number of pedestrian / vehicle conflicts in these areas. Other clusters lie on the main radial routes to the city centre particularly from the south and east including the A57 and A6. The A6 from Stockport town centre to the county boundary is also heavily clustered. Accident clusters can also be seen in other Greater Manchester town centres, particularly Ashton-under-Lyne, Bolton, Oldham, and Rochdale.

Manchester City Council have identified that pedestrian / vehicle conflicts at signalised junctions are a major contributor to the clusters in the city centre. They have embarked on a programme of converting many of these junctions to an all red phase for traffic, allowing pedestrians to cross safely on all arms. As part of this conversion programme the junctions are being remodelled.

The area through the university and hospitals has a lot of pedestrian activity. A study is currently underway to look at through traffic movements in the area and see whether such traffic can be rerouted to reduce the amount of vehicle / pedestrian conflict.

Sites with high numbers of KSI accidents where there is evidence of a speeding problem are being targeted by fixed and mobile safety cameras. The safety camera programme is operated through the Greater Manchester Casualty Reduction Partnership (Drivesafe), in which all ten districts and the Greater Manchester Police co-operate closely.

Many of the accidents off the main road network occur on housing estates, for example to the south of Bolton centre, to the west of Wigan centre, and in Wythenshawe in South Manchester. All districts have a set of criteria by which such sites are prioritised for implementation of road safety schemes. These criteria typically involve the number of casualties, with weighting being given to children, KSIs, traffic speed and the proximity of schools and health centres.

Additionally, where there is felt to be a speeding problem, mobile enforcement may be undertaken. These sites may be enforced by the police or by the safety camera partnership under the 15% of enforcement allowed at sites of community concern. The districts and police have worked closely on an agreed methodology for identifying such sites.

More generally, it is cluster analysis of this kind which is driving our road safety programme, both in engineering measures and in the education and training programmes in schools and the wider community.

The Greater Manchester authorities welcome the announcement by the Secretary of State on 15th December 2005 that from April 2007, funding for safety camera activities and partnerships is to be integrated into the Local Transport Plan system alongside other road safety measures. This will allow us to enhance the wider road safety delivery process, and to give greater flexibility to use a mix of road safety measures so that we can make the greatest contribution to reducing road casualties.

The new detailed GM Road Safety Strategy will be submitted along with the Delivery Report in July 2006.

Our desired outcomes for LTP2, when compared to the 1994 to 1998 baseline, are:

- a 50% reduction of the number of people killed and seriously injured by 2010,
- a 55% reduction of the number of children killed and seriously injured by 2010, and
- a 30% reduction in the number of slight casualties by 2010.

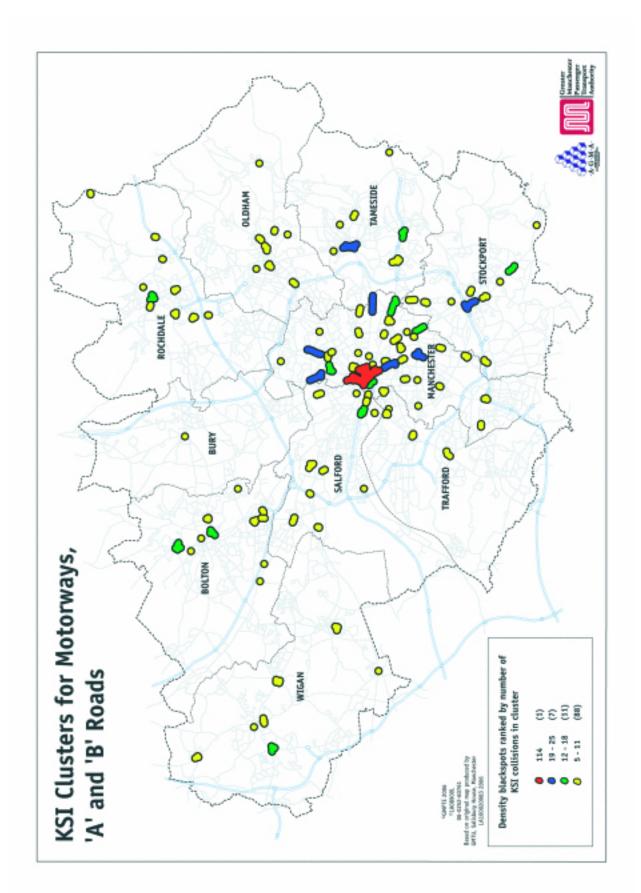


Figure 4.7 KSI Clusters for Motorways, 'A' and 'B' Roads

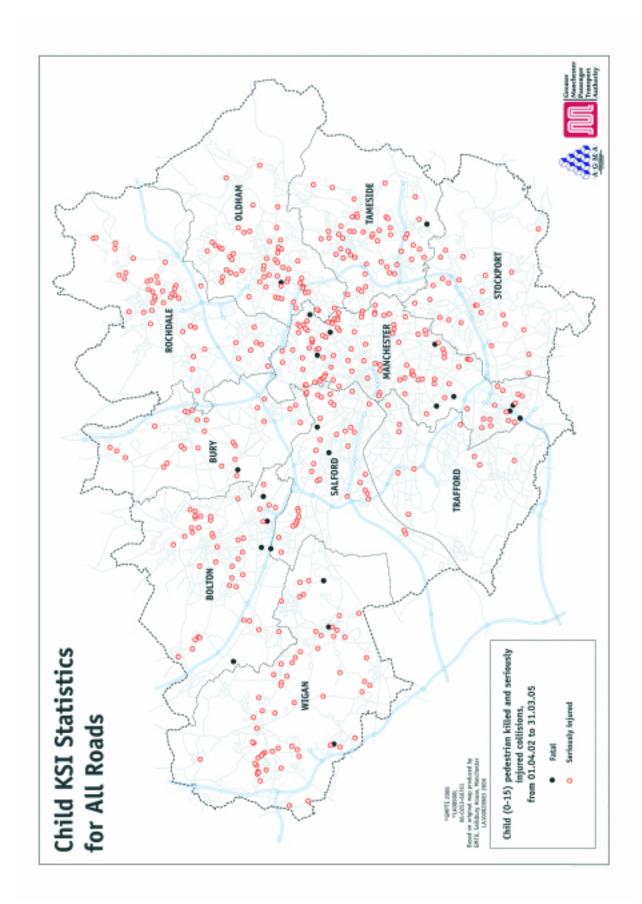


Figure 4.8 Child KSI Statistics for All Roads

4.3.4 Air Quality

Like many urban centres in the UK, GM's air quality is heavily affected by road transport emissions. All of Greater Manchester's AQMA's, depicted in Fig 4.9, have been declared on the basis of predicted exceedances of the nitrogen dioxide NO_2 objective in 2010 if corrective action is not taken. Potentially harmful "peaks" of particulates and NO_2 occur in urban centres throughout GM.

In GM, emission levels linked to the average active car stock are falling in line with the national trend; however, there is a forecast increase of over 200,000 cars from 2001 to 2010, with an associated increase in car journeys. In particular, the extra car kilometres travelled per year are contributing significantly to transport linked CO₂ emissions. A further issue negating the impact of cleaner technologies concerns the rise in popularity of sports utility vehicles (SUVs). In general, SUVs produce more emissions than other types of car due to larger engine sizes .

The key emission associated with buses in GM is particulate (PM10) and fine particulate matter (PM2.5). Although across Greater Manchester buses contribute only a small proportion of total emissions, diesel engines are the main source of both particulate and nitogen dioxide. The GMPTE and GM Districts actively work with bus operators to promote clean technologies, and buses with less polluting Euro-standard engines are gradually increasing in number. Many air quality issues associated with buses in GM are localised due to the nature of bus transport i.e. fixed routes and stationary public transport hubs. The most vulnerable sites are urban areas with high bus use and/or a high proportion of older buses, such as Oxford Road and Piccadilly Gardens in the regional centre. As a consequence, even though buses produce a proportionally small amount of pollution compared to other forms of transport in GM, they tend to have a significant health impact due to the high level of population exposure.

Despite making up a relatively small proportion of vehicles on the GM roads, heavy and light goods vehicles contribute over 60% of the emissions of nitrogen oxides and over 40% of PM10s. National measures, such as the introduction of Euro

standards will partially address this issue but further local transport measures and action is required.

Chapter 5 sets out the main measures by which we intend to tackle air quality.

Our desired outcome for LTP2 is a reduction of 39% in emissions of oxides of nitrogen (NOx) from traffic on local main roads from a 2004 base.

Climate Change

Recognising the need to "think global and act local" the Greater Manchester Authorities are keen to play their part in ensuring that, over time, the impact of transport on the global environment is reduced through measures designed to reduce carbon emissions. Opportunities will also be taken to encourage the wider use of alternative fuels in line with the Government's strategy to increase the use of renewables.

While, within the next five years, we are not forecasting an overall reduction in the number of vehicle miles, LTP2 does however contain a range of measures which, combined, will reduce the level of road traffic when combined with the "do nothing" scenario.

The longer term GMITS strategy proposes a programme of measures including -:

- investment in high quality public transport alternatives to the private car
- measures to encourage higher levels of walking and cycling for shorter trips
- a land use planning strategy which seeks to reduce car dependency
- all underpinned by a strategy designed to encourage behavioural change

The direction of travel set by LTP2 is towards a future in which enhanced public transport combines with modernised vehicle fleets to deliver accessibility with lower levels of carbon emissions.

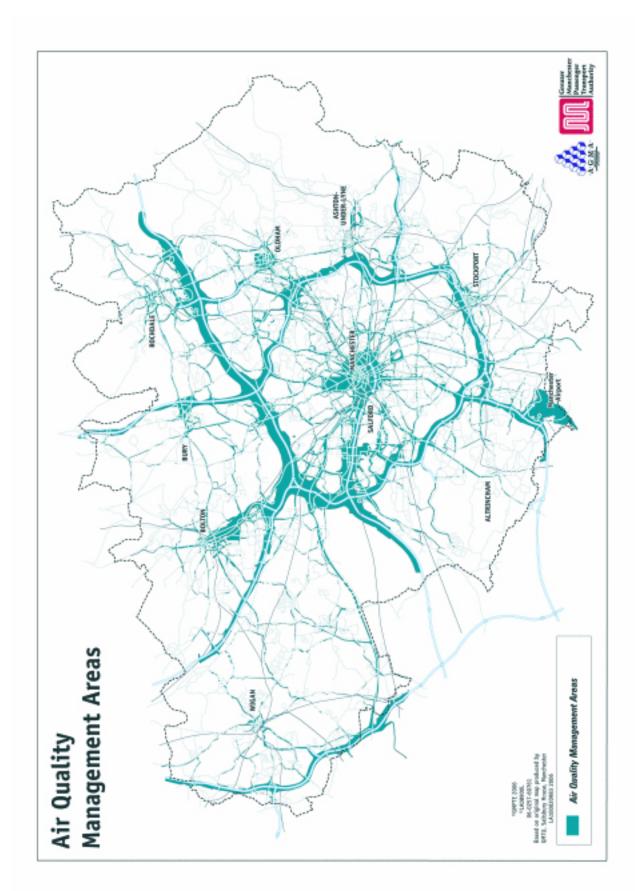


Figure 4.9 Air Quality Management Areas

4.3.5 Public Transport

If we are to be successful in achieving our targets in other areas, we need to ensure our public transport network improves its attractiveness to those who generally do not use it. Since the Greater Manchester local authorities are not the operators of any public transport services, our role is to work in partnership with the various operators to achieve common objectives. Figure 4.10 below shows the recent trends in patronage.

Of course, as highlighted earlier in this chapter, public transport is an industry operating against a background of a steady increase in car ownership. We do not expect, nor do we wish, to change this. But we are seeking to persuade more people to choose public transport for their regular trips, and especially those who make a regular journey to work.

So, what are the problems? There are three separate modes of public transport in Greater Manchester: tram (Metrolink), bus and rail. These are dealt with in turn.

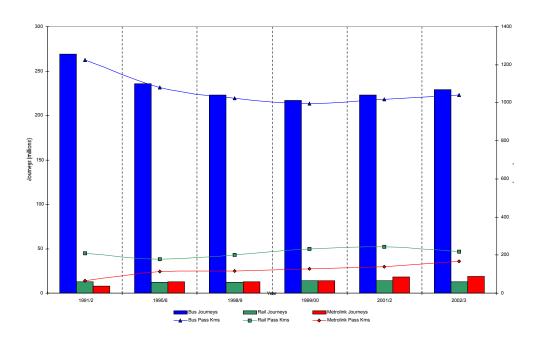


Figure 4.10 Public Transport Journeys in Greater Manchester

Metrolink

Phase 1 of Metrolink (between Bury and Altrincham through central Manchester) has been running since 1992 and Phase 2 (between central Manchester and Eccles) since 2000. The system has been very successful in achieving high patronage and securing modal switch from the car. However, the total tram stock is insufficient to deal adequately with demand and with the need

for trams to be out of commission for repairs and/or regular maintenance. This should be dealt with as the provisional approval for Phase 1 and 2 renewals and capacity upgrades proceeds to full approval, and the improvements are then secured. We believe there is substantial extra potential for the use of these services, particularly in the peak period for those travelling to work, and we will be seeking to achieve this within the lifetime of LTP2.

The uncertainty relating to the further extensions of Metrolink (which underpin our longer term strategy) and their operation, together with the rolling stock issues referred to above, have led to some slight reductions in service performance. We are seeking to ensure that GMPTE continues to support and encourage the operator in providing the best possible service while negotiations continue with regard to the further extensions we are seeking.

Bus

As the main mode of public transport in Greater Manchester, the bus has a key role to play in securing modal shift away from the car, and also contributing to social inclusion. The Greater Manchester Bus Strategy has assessed its current performance, and the following description of problems and issues is taken from that document.

In common with almost all other areas outside London, trends in bus patronage have been generally downwards in recent years. However, there was a period of growth from 2000/01 to 2003/04, after which decline has resumed. Passenger loss is concentrated on the concessionary group of passengers, who are not only sensitive to fare increases, but are also shrinking owing to increased licence holding and more travel to school by car. Full fare-paying patronage has, by contrast, increased or remained stable over recent years. Our studies indicate that patronage is higher than it would have been if action had not been taken. The main reason for this is thought to be the introduction of cheaper weekly tickets by the main operators, and at a local level the success of our Quality Bus Corridors. However problems remain. They are identified from three main sources:

- internal analysis of monitoring and patronage information
- surveys of, and complaints from, passengers
- the views of operators

The most recent survey of all Greater Manchester residents (2003/04) showed that only 55% were satisfied with the local bus services. Whilst satisfaction amongst users is higher, this data suggests that the current regime is not delivering what people want. The key problems identified by passengers are reliability, frequency, quality of

some waiting facilities, accurate information and the cost of fares. These all add up to a need for better service quality.

Poor reliability is a particular problem affecting less frequent services. Congestion contributes to this and to punctuality issues.

Rail

The railway network is now generally operating more reliably than in the recent past, with fewer cancellations and better time keeping. This is probably the main reason why we have seen steady increases in rail patronage at all times of day over the last few years. However, we believe there is the opportunity to secure further growth during the LTP2 period. Furthermore, several long-term closures in the south of the conurbation have held back demand.

To help achieve net benefits and better value for money, the GMPTE hopes to work closely with Network Rail as they develop the Route Utilisation Strategy (RUS) for North West England. There is concern, however, that the Regional Planning Assessment (RPA) is making unduly pessimistic assumptions especially with respect to the future level of economic activity in central Manchester and the geographic spread of development. These assumptions and those regarding future changes impacting on the highway network may adversely influence other pieces of work, including the RUS.

In addition to the RPA and RUS there is the ongoing review of the Northern Franchise. These three studies create considerable uncertainty over the future shape of the rail network in the North West of England and the ability of the rail industry to contribute to delivery of the GMITS, including mode shift away from cars to public transport. We are hopeful, however, that through partnership a realistic rail strategy can be developed that is acceptable to stakeholders.

As to the problems with the network itself in Greater Manchester, they are not new. If we are to be successful in continuing to increase patronage we need more and better rolling stock, comprehensive enhancement of passenger waiting facilities and improvements in capacity into and through the Manchester Rail Hub.

The Railways Act 2005 opens up new opportunities as well as raising issues of concern. The way in which the GMPTE responds will be dependent on how the details of the arrangements work out in practice.

The Greater Manchester Authorities are supportive of the need to ensure optimal use of the railway and recognise the difficulties caused by the considerable fixed costs associated with railway infrastructure and stations, as well as the difficulty of disaggregating shared costs between individual operators and services. The authorities will therefore wish to work with partners so as to achieve increasing benefits from past and new investment, and ensure the efficient provision of railway services. Section 5.2.1 sets out our proposals for the rail network.

The GMPTA/E is also aware of the implications of under-utilised stations, both in financial terms and in opportunity cost. Before agreeing a way forward for these stations, however, more information is needed on the costs associated with these assets and how financial savings could be used elsewhere, both to make the local rail network more attractive overall and to improve the effectiveness of the transport network as a whole. Associated with this is changes that may be made to ensure the delivery of the objectives set out within our Bus Strategy. It is essential that any revisions to the rail network have clear advantages overall so that the number of current and future passengers benefiting exceeds those who are inconvenienced and that improved value for money is achieved from any changes. Therefore, any network change consideration must be made not only in the light of current usage of assets but also in the context of future demand generated by new residential or commercial development.

Our desired outcomes for LTP2 are to:

- Increase bus patronage by 4% by 2010/11against a background of a previously declining trend
- Increase bus punctuality by 12 percentage points to 85%
- Increase bus satisfaction for residents by 5 percentage points to 60%

- Continue to increase Metrolink patronage (11% between 2003/04 and 2010/11)
- Continue to increase rail patronage (12% between 2003/04 and 2010/11)
- Development of further improvements to QBCs (including additional routes) and lengths of segregated busway to complement Metrolink and provide higher level of bus priority.

4.4 Regional Centre

The Regional Centre lies at the heart of the Manchester City Region. It contains within it the largest concentration of office and retail accommodation in the region, three universities with the largest concentration of students in Europe, major hotels and entertainment, conference and exhibition venues. The number of people who live in the heart of the city centre is increasing – from just 900 in 1991 to 10,000 in 2005 – and is forecast to increase further to 19,000 in 2007.

Our grounds for continued optimism are well founded as the city's growth path to becoming a global force in the knowledge economy is now clear, with our Manchester Knowledge Capital initiative expected to generate up to 100,000 new jobs in high value added sectors across Greater Manchester over the next ten years.

Accessibility is the key to the continued success of the Regional Centre. This LTP therefore puts considerable emphasis on ensuring that the transport system will be able to continue to deliver people to the centre in an efficient and effective way without significant growth in **congestion** levels. Our public transport led strategy has been developed with this objective at its core.

It is also vital to ensure that the Regional Centre remains an attractive place to visit and that its environment continues to improve. Managing the transport network effectively to ensure that **road safety** and **air quality** improves is a central objective of the two city councils.

We recognise that there are still problems to be dealt with in all the shared priority areas referred to in the previous two paragraphs. The main problems themselves are:

- vehicle/pedestrian conflicts because of the high levels of activity
- poor air quality because of the large numbers of motor vehicles

Our long term strategy has been to reduce the amount of vehicular traffic which is merely passing through the centre. We have been dealing with this incrementally for at least twenty years with much success. From the eighties and early nineties we have the pedestrianisation of most of Market Street, Albert Square and St Ann's Square, and the traffic management arrangements which accompanied the introduction of Metrolink in 1992.

Subsequently following the IRA bomb explosion in 1996, we drew up a masterplan for the renewal and further development of the city centre. This included the creation of new public open spaces including Exchange Square and New Cathedral Street with accompanying major and specialist retailers.

During all this time, we were gradually completing the Manchester and Salford Inner Relief Route (M&SIRR) to provide a high quality route so that through traffic would largely avoid the centre itself. More recently, in January 2006, we have closed sections of Cross Street and Corporation Street to all vehicles except for Metroshuttle buses between 11.00 am and 7.00 pm. We have also been installing 'all red' phases at key junctions to provide more priority for pedestrians.

Much has been done, but some problems remain, albeit at a lower level than in the past. As the M&SIRR and the pedestrianisation measures have been completed, so the through routeing has reduced substantially. But we recognise that the safety record in the centre remains unsatisfactory, and there is still scope to improve the the total environment for visitors. During the LTP2 period we intend to deal further with these issues. The key is continued improvement in the level of public transport provision to the Regional Centre .We need to ensure that even more through traffic is discouraged from passing through the centre, and that almost all traffic is accessing the centre to take advantage of its wide-ranging first class facilities in all aspects of business and entertainment. We intend to extend our priorities for pedestrians, so that the centre is a safer, less noisy, healthier and altogether more attractive place for its large number of diverse visitors. Details of our proposals are provided in Section 5.3.

Desired Changes in Modal Split for the Regional Centre

Targets

There are three mutually compatible targets concerning trips into the Regional Centre: LTP6 am peak traffic into the regional centre, LTP12a modal split of am peak trips into the regional centre, and Manchester City Council's PSA target for 2008/09. The LTP indicators continue to use the methodology we used in LTP1 period, because it is cost-effective and provides continuity in the data both over time and between regional and other key centres. The PSA indicator methodology differs from the LTP indicators as there have been a greater frequency of surveys, slightly more survey stations have been used, and a more accurate method of establishing bus patronage employed. This PSA method is the basis of the figures given below.

Baseline Position

The baseline setting out how people currently travel across the city centre cordon is being established through comprehensive surveys carried out under the direction of the Greater Manchester Transportation Unit in September and November 2005, and due for completion in May 2006. The surveys were conducted on representative days (ie not in school or university holidays) at a cordon

on the inside of the inner relief route. The surveys were carried out in accordance with the survey methodology agreed with Department for Transport for the purposes of monitoring the Manchester City Council's Public Service Agreement target for the period 2005/6 to 2008/9.

Mode	Number of Person Trips	%
Car	31,200	35
Bus	25,100	28
Rail	18,000	20
Metrolink	6,300	7
Walking	7,600	8
Cycling	800	1
All non-car	58,000	65
TOTAL	89,000	100

Table 4.2 2005 Modal Split Weekdays Between 7:30 and 9:30 am

2011 Projection

Our estimate is that by 2011 there will have been an increase in 12% in the number of people employed in the city centre. This represents a net gain of 17000 jobs on the current base figure of 134 000. Based on our baseline survey every three city centre jobs generate two daily peak period trips across the cordon. We therefore project that given employment growth of 17,000 by 2011, there will be an increase of 11,000 trips (bringing the total to around 100,000 trips) crossing the cordon between 7.30 and 9.30 am by the end of the LTP period. Our assessment of how we intend to meet this demand, while at the same time limiting the growth in car trips to the heart of the city centre, is set out below. Overall we are setting a target for increasing the proportion of non-car modes from the current figure of 65% to 69% by the end of LTP2 in order to accommodate this growth. The estimated mode split shown below correspond with outputs from our Strategy Planning Model and is consistent with modal split targets:

Mode	Number of Person Trips	%
Car	31,300	31
Bus	28,400	28
Rail	21,600	22
Metrolink	8,500	9
Walking	9,000	9
Cycling	1,200	1
All non–car	68,700	69
TOTAL	100,000	100

Table 4.3 2011 Projected Modal Split

Notes

- 1. Figures rounded to nearest 100 and percentage point.
- 2. Bus patronage in the peak hour to the city centre is projected to rise by around 13%, significantly higher than the average for greater Manchester as a whole, but this difference is consistent with past trends.
- 3. Rail patronage is forecast to grow at the same rate as in the last 3.5 years an increase of around 600 daily peak period trips each year.
- 4. The rise in Metrolink patronage is consistent with the capacity increases on phases 1 and 2 which are due to be delivered towards the end of the LTP 2 period.
- 5. Growth of 50% in the number of cycling trips and 18% in the number of walking trips is assumed, reflecting higher levels of development on the edge of the city centre and the impact of measures to encourage greater use of these modes for shorter journeys.
- 6. The number of car trips is expected to remain roughly constant due the continued capacity constraints on long stay car parking in the heart of the city centre and greater utilisation of the inner relief road and other alternative routes for through trips.
- 7. The employment projection has been provided by the Oxford Economic Forecasting model and is consistent with the level of economic growth assumed in the Greater Manchester Economic Development Plan, the City Region Development Programme and the Greater Manchester Implementation Plan.

Note that targets LTP6 (am peak traffic into the regional centre) and LTP12a (am peak modal split into the regional centre) use a different survey method from the PSA method described above, particularly regarding the collection of bus patronage data. This is to maintain consistency with previous surveys undertaken since 1997, in order to maintain a continuous dataset. In consequence, the two survey methods give slightly different, but compatible, results.

4.5 Other Quality of Life Issues

In addition to the stated objectives of LTP2, there are a number of other objectives to which our strategy should contribute, and these form part of the wider economic, social and environmental agenda of Greater Manchester.

Personal Health

Walking and cycling can make a significant contribution to the amount of exercise needed to tackle obesity and to maintain good physical and mental health. Personal health problems tend to correlate with indices of multiple deprivation, from which it can be seen that the areas where we need

to make an impact are the inner areas of towns and cities, and peripheral estates originally in local authority ownership.

Liveability

This relates to the satisfaction with the transport environments we create. Significant within this is the quality of design within the street scene. There is no doubt that many carefully designed schemes, especially in town centre areas where there has been complete pedestrianisation, or where particular categories of traffic have been excluded at specific times, have improved the appearance of the urban area, but the task is by no means complete, and has a new dimension in residential areas - especially in Housing Market Renewal

Areas where transformation of the street scene is needed to match improvements to the built environment.

Minimising the Environmental Impact of Transport

There is a need to ensure that all schemes are designed to be sensitive to the environment - with particular reference to biodiversity, landscape protection and noise. The noise impacts of maintenance activity must also be addressed.

4.6 Rural Issues

Although Greater Manchester is primarily an urban area, there are a significant number of rural and semi-rural wards towards the edge of the conurbation. Many of these have similar transport needs to those of the more urban areas, but there can be difficulties of access to public transport for those who do not have the use of a car. Fig. 4.6 shows areas which have poor accessibility of this type. An example from the accessibility analysis is poor access to healthcare facilities on the northern and eastern fringes of the conurbation, noted in para 4.3.2

Rural areas also provide a focus for leisure activity and may attract considerable traffic at weekends and in holiday periods. The most obvious example of this is the cross-boundary issue of traffic to the adjacent Peak National Park.

Rural and semi-rural routes are carrying increasing amounts of traffic as a result of commuting into urban areas and their use as short cuts to avoid congested major routes. Safe walking, cycling and horse riding routes are therefore required. Problems on the rights of way network (paths and bridleways in poor condition, and obstructions) are more prevalent in rural and semi-rural areas.

This problem of increasing traffic puts such roads under stress, and is manifested in problems such as inappropriate speed and over-running of verges, sometimes supplemented by fly-tipping, which lead to a degradation of the road environment as well as safety problems.



4.7 Cross-boundary issues

Fig 4.11 shows the number of journeys to work across Greater Manchester's boundaries.

Contacts and discussions with adjoining local transport authorities have identified the following transportation issues that will need to be addressed during the LTP2 period:

Authority	Issue	Action to resolve
Blackburn with Darwen	Peak hour commuting effects on A666 and capacity on rail service from Clitheroe and Blackburn to Bolton and the Regional Centre	Address by Blackburn-Bolton-Manchester Corridor Partnership. Examination of potential for increased train capacity with Northern Rail and as part of RUS
Merseyside LTP authorities	Capacity of Manchester Rail Hub	Also a Greater Manchester countywide issue. Major investment to resolve it seems unlikely to be forthcoming within the LTP2 period, despite the clear case for it, but opportunities may exist to recast services in ways which create more capacity and serve proposed land use patterns in the sub-regional strategy. Needs better definition of problem and investigation by a regional body given its likely importance in the RSS
	M62 traffic levels	M62 Route Action Study under way by NWDA. Need for further regional level study to establish effect of development strategies over the length of the route.
	Improved public transport access from Greater Manchester to Liverpool John Lennon Airport	Potential interchange between Manchester trains and airport bus links at Liverpool South Parkway interchange (currently under construction), subject to train operators agreeing the additional stop; provision of direct coach links if the latter cannot be achieved.
	Accessibility to local facilities in Greater Manchester and Warrington	Accessibility Strategy and integrated ticketing. Discussions with developers and promoters.
	Parkside Intermodal Freight scheme	Need to ensure good public transport access and that general traffic is routed on the motorway. Discussions with developers and promoters.
	Headbolt Lane (Kirkby) electrification scheme offers potential of low cost extension to Wigan via Rainford	Investigation of recovery of superseded electrical equipment from SE England
Warrington	Capacity of Manchester Rail Hub(see above)	See above
	Strategic park and ride concept around motorway box to secure more efficient use of Highways Agency roads and reduce congestion between them	A study is needed at a regional level to consider the cross-boundary effects. GMPTE is currently undertaking a park and ride study within Greater Manchester in response to proposals from Stagecoach.
	Weak rail links between Warrington and Wigan; rail service determined by other destinations.	Ongoing discussions with rail operators and SRA/DfT, particularly regarding relationship with Golborne Station proposal. Scale of finance unlikely to be sufficient to address this, if new capacity required

Authority	Issue	Action to resolve
	Omega development proposal	Should the development go ahead at the scale planned, there is a need to ensure that the scale of highway impacts and public transport access needs is recognised as wider than the Warrington LTP area and that the developer(s) provides the necessary level of funding. For example, the current proposed public transport framework does not include and infrastructure in Greater Manchester, yet there be a need for improvments to local bus services to Wigan
Lancashire	Preston-Chorley- Greater Manchester rail services: train frequency, peak overcrowding, and platform lengths	Corridor in forthcoming review of Northern franchise and preparation of RUS. May need consideration of additional rolling stock and platform lengthening issues.
	M61 Corridor capacity management	Highways Agency network management and proposed HOV lane. Needs relating to park and ride strategy.
	Local train services Preston-Wigan- Warrington corridor	See above
	Further QBC corridors eg Wigan - Skelmersdale	At initial proposals stage
	Wigan – Southport rail service and facilities	Community Rail Partnership set up to promote line.
	Improved rail services from East Lancashire to Greater Manchester	See Blackburn with Darwen
	Improve attractiveness of express bus services from East Lancashire to Greater Manchester	Operator investment in quality vehicles to be maintained and delay points addressed. Study with Lancashire CC, Blackburn with Darwen Council and Highways Agency ongoing to assess potential highway improvements to assist bus operations.
	Accessibility to local facilities either side of the boundaries, with seamless public transport journeys.	See Merseyside
Cheshire	SEMMMS proposals	Funding has now been separately identified for SEMMMS minor works proposals in the last local transport settlement. As regards the SEMMMS Relief Road major scheme ,it has been placed in the top quartile of regional priorities ,and the SEMMMS area authorities and Cheshire will need to progress the case for PFI funding to supplement that already identified in the RFA
	Smartcard/Cheshire Travelcard interface – possible extension of latter into SE Greater Manchester	Cheshire/GMPTE discussions
	Alderley Edge bypass effects on Greater Manchester. (Improved access to Astra Zeneca employment opportunities, but potential increased inward car commuting)	Scheme appears in top quartile of RFA prioritisation, and is therefore likely to be constructed subject to resources. Effects on Greater Manchester roads would need to be kept under review with regard to the desirability of modal shift

Authority	Issue	Action to resolve
	Linked to SEMMMS programme	
	Public transport access to Manchester Airport from Cheshire, and to Greater Manchester as part of the City Region Sub-Regional Statement	Development of schemes eg Crewe gateway and further promotion of travel plan activities. Provision of third platform at Manchester Airport Rail station. Consideration of how transport improvements in Cheshire could feed into and support the Greater Manchester Integrated Transport Corridors
Derbyshire/Peak District National Park	Traffic impact, speed and safety for both motorised and non-motorised users.	See separate South Pennines Integrated Transport Strategy (SPITS) statement.
	Travel behaviour.	Continued joint working of SEMMMS authorities
	Better rail routes and services.	
	Improved local and long distance bus/coach services	
	Standard of the A57/A628/A616 core trunk road across the National Park	
West Yorkshire LTP authorities	Cross boundary rail ticketing	Revenue issue. Support principle of smoothing rail fare changes.
	Lack of rolling stock capacity	Joint PTE solution required owing to absence of funding from Northern Rail and DfT. Capacity of Class 185 new trains will need to be kept under review.
	Trans- Pennine route capacity, to assist Manchester-Leeds access as part of Northern Way strategy	No prospect of major funding. Northern Way transport budget may assist. Platform extensions study on Todmorden - Manchester route.
	Loading gauge restriction for containers	Maintain pressure for loading gauge enhancement to accommodate 9'6" high containers
South Yorkshire LTP authorities	Access between Manchester and Sheffield core cities in context of Northern way initiative	Advocacy to improve South Trans-Pennine rail services and consideration of road links, via the SPITS working arrangements

Table 4.4 Cross Boundary Issues by Authority Area

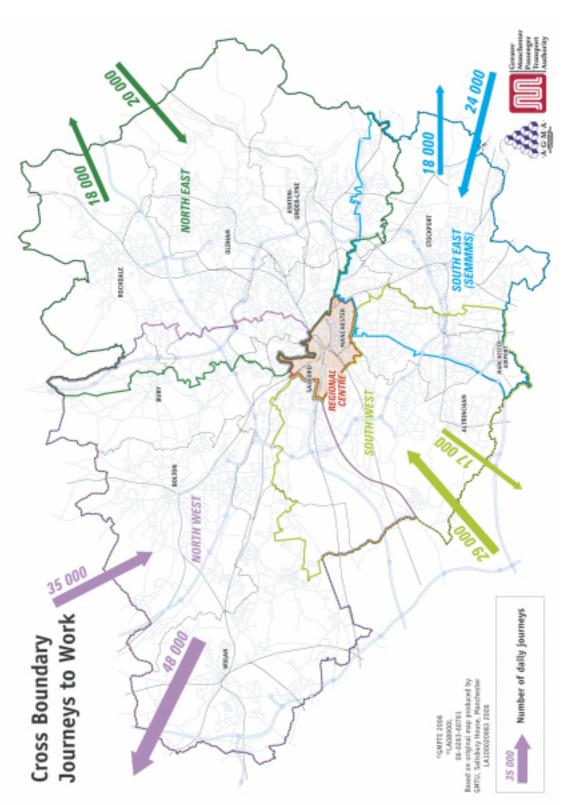


Figure 4.11 Cross Boundary Journeys to Work

5.1 Introduction

This chapter sets out what action we propose to take to address the problems and opportunities described in the previous chapter. Given the size of Greater Manchester programme, which covers 10 local authorities and the PTA/E we have not included every component, rather we have set out how we broadly intend to address our desired outcomes by tackling the shared priorities, with examples provided to illustrate some of the measures we will be implementing, and set out how we have prioritised expenditure to get best value. We identify the Integrated Transport Block (ITB) proposals, the proposed major schemes, the continuing programme to deliver the South East Manchester Multi-Modal Study (SEMMMS) proposals, and other programmes complementing the ITB spending. In addition, we set out our proposed approach for bidding for resources from the Transport Innovation Fund to deliver a more effective strategy.

The 5-year implementation programme is the vehicle for delivering the initial five-year stage of the longer term strategy set out in GMITS. It is an **affordable** programme which is based on the Integrated Transport Block (ITB) guidelines, as described in the December 2005 settlement letter, and the Regional Funding Allocation (RFA) programme. It also exploits the potential of contributions from other funding sources.

The programme also contains proposals for a further two years of minor works for Transport Infrastructure Fund schemes in the Wigan and Bolton areas. Public transport infrastructure in these areas needs further improvement, and it is important that such funding continues throughout the life of the Plan. A minor works programme continues in the SEMMMS area, using the funding separately identified in the settlement of December 2005.

We shall integrate the measures in our Integrated Transport Corridor Partnerships, the first four of which, based on Metrolink and QBC routes, are currently being progressed (see 5.7)

Maintenance and asset management, although not one of the shared priorities, figures prominently in our programme, bearing in mind the wear and tear imposed on transport networks by increasing flows of traffic, existing maintenance backlogs, and the need to maintain measures already introduced such as white lining in safety schemes and markings on QBCs.

5.2 Achieving Desired Outcomes by Tackling Shared Priorities

This section outlines how we will seek to achieve our desired outcomes under the headings of the shared priorities agreed with Government. We do this by showing how the LTP component strategies will be used in this process, and what we intend to have achieved by the end of the LTP period.

5.2.1 Managing Congestion

In LTP1 our approach to demand management was to focus on measures which encouraged modal switch and improved alternatives to the private car. In the case of Quality Bus Corridors and cycle routes these also involved the reallocation of roadspace away from the car.

Over the period of LTP2, we shall continue the integrated approach commenced in GMLTP1 that provides incentives to use public transport, and discourages the use of private cars in the peak period. We shall focus on trying to ensure that congestion does not worsen as a result of our plans for economic growth; any reduction secured will be regarded as a bonus.

We are looking at various options for managing demand as part of our TIF pump-priming work to develop a 'toolkit' of demand management measures that will support sustainable economic growth. These will be coupled with development of an investment programme for public transport combined with investigation of techniques to achieve the behavioural change necessary.

Actions for Public Transport

Metrolink

The expansion of Metrolink is central to our strategy of achieving modal shift, particularly for journeys to the Regional Centre

By the end of the LTP2 period, as part of the Phase 1/2 renewal approved scheme, we shall have

- introduced additional trams, to relieve overcrowding and to maximise the benefits from additional car parking currently being introduced
- improved stops in terms of lighting, accessibility and new ticket machines
- renewal of track to improve ride quality and reduce noise

We will continue to work closely with DfT to identify a way of procuring the full Phase 3 expansion which is central to our longer-term strategy: namely the lines to Oldham-Rochdale, Ashton-under-Lyne and Manchester Airport. In future we also aim to develop Metrolink to Stockport and, subject to availability of private funding, to Trafford Park.

Bus

Through our bus strategy we aim to provide the following during LTP2 in order to achieve modal shift and so combat congestion:

 continuation of the Integrate Project which since 1998 has consistently brought all partners together to deliver service improvements.

- a focus on improving service reliability, vehicle quality, and integration of services, modes and fares to develop a bus network to support the sustainable and inclusive growth of Greater Manchester. These will be delivered through partnership with bus operators (see the GMITS bus operator concordat overleaf), using mechanisms such as Corridor Partnerships and, through these, Statutory Quality Partnership schemes.
- completion of the current QBC programme, involving a package of measures including bus priority and improved waiting facilities, on radial routes to the Regional Centre and in the Northern Orbital, SEMMMS and JETTS corridors
- more Yellow School Buses to reduce car usage on the school run
- detailed appraisal of future bus park and ride facilities and work to implement facilities where these provide value for money and complement our overall strategy
- other specific measures, detailed in the Bus Strategy, including improvements to waiting facilities, ticketing (including Smartcards) and information (including the continued roll-out of RTPI)



GMITS

Bus Operator Concordat

The Greater Manchester Authorities and GMBOA recognise the role that bus services will play in the development and implementation of the Greater Manchester Integrated Transport Strategy. They have agreed this Concordat to set out the principles on which they will work together to deliver the bus network that will be required under the Strategy.

The Authorities welcome the active participation of GMBOA members in the development and implementation of the Strategy and the Strategic Corridor Partnerships.

GMBOA supports the principles of the Integrated Transport Strategy covering all transport modes, public and private, and through its members will participate in the Strategic Corridor Partnerships.

The Authorities and GMBOA recognise that to deliver the modal shift required by the Strategy will require a significant increase in the level, quality and reliability of bus services and will work in both the Corridor Partnerships and the Integration Project to deliver this to complement demand restraint measures.

GMBOA members will work with the Passenger Transport Authority, individual district councils and other key partners to agree and deliver transport and regeneration outcome based targets in individual corridors. It is anticipated that statutory quality partnerships will be developed, on a corridor basis, as an important mechanism for delivering those elements of the corridor agreements relating to bus services.

GMBOA will continue to work with GMPTE to deliver, at countywide level, the objectives set out in the County-Wide Quality Partnership Agreement including:

Improvements to information for passengers and potential passengers

Integration of ticketing

Improvements to reliability and bus journey times

Raising vehicle quality

Improvements to waiting facilities and interchange.

Rail

Our approach during LTP2 will be to enhance local facilities in line with the Greater Manchester Railplan. These measures will focus on improving information, accessibility, safety, security and car parking. We will also direct other investment to improve the station environs in accordance with the Railplan's Station Development Zone(SDZ) concept. (1) Research shows that the majority of a station's catchment patronage comes from within 800 to 1000 metres of the station. A fully accessible, safe and secure station with good facilities will not achieve its potential if access routes, especially close to the station, are inaccessible or dangerous. In SDZs, authorities will develop co-ordinated proposals to better link stations and the areas they serve, identifying improvements to local roads (including pedestrian crossings), walking and cycling routes, car parking, information local signage, boards landscaping. In this way, we believe that more people will be encouraged to use local stations.

We will also work with the rail industry to increase capacity by identifying funding mechanisms which will enable delivery of:

- additional rolling stock to alleviate overcrowding on services
- additional platforms at existing stations (e.g. Salford Central, Salford Crescent and Manchester Airport)
- new stations (e.g. Golborne).
- schemes for the possible future conversion of other routes to tram-train technology.
- new station car parks, and extensions to existing ones where further park and ride trips can be encouraged.

We intend to make a major input to the forthcoming review of the Northern Rail Franchise. We are aware that a number of stations in Greater Manchester are under-utilised, and we shall review their future. However, it is essential that any revisions to the rail network have clear advantages overall (eg in terms of allowing the improvement of other parts of the rail network or the local bus network) so that the number of current and future passengers benefiting exceeds those who are

SDZs are areas within station catchments where associated transport and planning measures will be taken to increase station patronage

inconvenienced. Furthermore, we will ensure that any proposals deliver improved value for money. Any review must take into account future demand generated by new residential or commercial development, especially in relation to sub-regional and City Region strategies.

Coaches

Coaches need facilities for picking up and setting down passengers at venues so that congestion is avoided, and pedestrian movement takes place safely. In addition, safe parking areas are required.

We shall continue to implement and monitor the Coach Parking Strategy for the Regional Centre, which has been devised in partnership with coach operators and major venue operators. This will be done by a Coach Parking Liaison Group for Manchester and Salford. Coach parking / drop off will also be considered by other authorities across the conurbation as part of Sustainable Tourism initiatives which also encourage visitors to walk / cycle to attractions.

Taxis

Hackney and private hire cabs provide an alternative to the private car, and play a role in reducing congestion by providing the final 'leg' of a public transport journey or a 'backup mode' should a connection be missed.

We shall continue to fund a taxi home for travellers at some bus stations when their last bus has failed. We will support their continued presence at transport interchanges and in other convenient and safe locations.

Our ten Licensing Authorities have reviewed the number of licences they issue by undertaking surveys of unmet demand. As a result, eight authorities currently follow a policy of restricting the issue of plates. Bolton has no restrictions, and Manchester has a policy of controlled expansion. Circumstances do vary between Districts and therefore a single approach across the county may not be appropriate. The number of licences will be kept under review. In Manchester, Bolton and Wigan, the Nightbus services will continue to supplement taxis in serving the weekend night-time economy.

We are developing a Taxi Strategy to improve their integration with other modes. GMPTE will maintain their training guide for taxi drivers, particularly incorporating diversity and disability awareness, in conjunction with Local Authority licensing officers.

Integration

We shall continue to promote increased integration between transport modes, as we want our transport systems to offer a more comprehensive network and as seamless a journey as possible when being assessed against the private car alternative. In the deregulated and privately-operated public transport system, we shall work with our partners to achieve this, building on the successes we have delivered through the Integrate project.

- Through our Corridor Partnerships, we aim to ensure that different public transport modes complement rather than compete with each other.
- We will continue our work to improve physical integration (eg by providing car and cycle parking at interchanges, encouraging the development of feeder services), building on the work we have already done to provide information about connecting modes at interchanges.
- We will work with operators to simplify tickets and fares structures across the board, whilst at the same time examining the case for specialist tickets such as City Centre Visitor Card or a "carnet" type card that could give the benefit of discounted fares to occasional users.
- We will continue to develop park & ride schemes for rail stations and Metrolink stops, and will also consider bus-based schemes where these conform with our wider objectives.

Actions for Cycling

In LTP2, we aim to facilitate trips to local centres, schools and key employment locations. We aim to deliver and promote a safe cycle network in order to encourage those people who have been considering but not yet undertaking short cycle journeys, to switch from habitual use of the car.

During the next five years, we shall take the following steps to improve cycling:

- Invest in better cycling facilities, targeted at busy centres, schools and major businesses, in areas most likely to attract cycle use.
- Focus promotion on increasing levels of cycling at selected locations where infrastructure has been improved, to be verified by automatic cycle counters
- Focus resources on areas with the greatest potential to increase cycle usage. In 2005/06, Manchester will invest £100,000 in improving conditions for cyclists on the Oxford Road/HEP corridor.
- Publish a new Greater Manchester cycle map to complement a bi-annual 'On Yer Bike in Greater Manchester' magazine and a Districts' cycling website (www.cyclegm.org)
- Delivery of improved school cycle training and establishing adult cycle training - the latter inline with the recommendations of a study to be commissioned
- Substantially complete the National Cycle Network within Greater Manchester, as described in Figure 5.1 (N.B. changes to the route network can be expected as the project develops)
- Update the Concise Pedestrian and Cycle Audit document (COPECAT),⁽ⁱⁱ⁾ informed by experience of its utilisation to date
- Incorporate cycle facilities into authorities'
 Transport Asset Management Plans (TAMPs)
- Share good practice, with effective dissemination around the Districts via the LTP Cycle Group, ensuring that we adopt the latest techniques and measures

Through these measures, we aim to achieve the LTP2 indicator for cycle flows across a range of monitored sites on main and unclassified roads and on off-road routes.

Actions for Walking

To increase the proportion of short trips made on foot, the Greater Manchester Walking Strategy's Action Plan targets the following types of trip:

- School trips
- Other education trips
- Trips to both leisure and shopping destinations
- Commuter trips
- Trips to public transport

These are ranked in order of potential for growth with trips to schools showing the most likely area for growth. A major focus over the next Plan period will be on school trips as the car accounts for 35% of school journeys and there is a considerable potential for a modal shift to walking.

During the next five years, we shall take the following steps to improve walking:

- Create and promote travel plans for business and educational sites
- Encourage training such as kerbcraft in schools to encourage greater levels of walking amongst younger people
- Implement engineering measures e.g. improved lighting, crossing points, surfacing, and the removal of other obstructions to walking to increase the attractiveness of walking as a mode of transport.
- establish more direct and safe routes for pedestrians, provide safe and convenient crossing points on key routes, and reduce speeds

Through these measures we aim to meet the target for indicators LTP 10e and 114

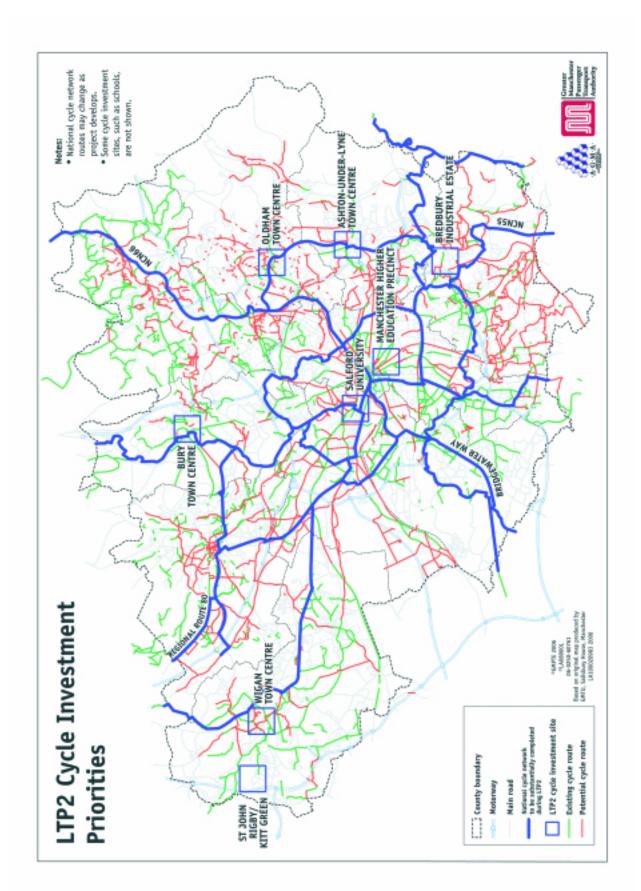


Figure 5.1 LTP2 Cycle Investment Priorities

Smarter Choices

The Greater Manchester authorities will continue to build on the foundations laid during our first LTP for the next five years:

- We will employ School Travel Advisers to meet the DfT Travel To School Initiative target of every school having a school travel plan in place by 2010. To date, 207 of our 1161 schools have been assisted in producing a STP.
- We will continue to encourage and support employers to develop workplace travel plans where we feel that this will have the most impact on local traffic.
- Where appropriate, we will encourage developers to implement residential travel plans, and are revising our Supplementary Planning Document on travel plans to reflect this.
- GMPTE will continue to work on providing bespoke public transport information to support employers implementing travel plans and hospitals, through timetable provision and, where possible, personalised journey advice.
- We will continue to promote car sharing, through use of our rebranded car sharing website www.carsharegm.com
- We will continue to support travel awareness campaigns such as In Town Without My Car and BikeWeek.
- Additionally, opportunities to implement other Smarter Choices measures will be seized upon. For example, Manchester City Council is at an advanced stage in procuring a car club, providing access to a car for city centre residents. The car club is expected to deliver modal shift and reduce congestion.

Continuing efforts will be made to secure funding and commitments for these measures through the planning system, using section 106 agreements which we trust will still be available for this purpose. We have some concerns over our ability to do this if proposals contained in the recent Government consultation document on planning gain support are implemented.

In addition to continuing the work begun in our first LTP, we also are seeking to bring about a step change in this area of work, through implementation of the Travel Behaviour Change Strategy that forms part of the GMITS.

Research conducted by Sustrans and Socialdata on our behalf shows that implementing this strategy could being about a reduction in car use of up to 15% in the four priority corridors and increase public transport patronage by 17% between 2008 and 2020. However, a work programme on this scale is unprecedented and will only be achieved through a successful Transport Innovation Fund bid.

Development Planning and Parking Policy

We are working to ensure that Regional Spatial Strategy continues the emphasis established in the Unitary Development Plans developed during the period of LTP1. These sought to steer significant traffic generating development to locations which are highly accessible by public transport, and will be incorporated in the new Local Development Frameworks which will be developed over the LTP2 period.

We shall work to ensure that a higher percentage of newly-approved developments are in locations with good public transport access and that appropriate parking standards are applied (a copy of the Greater Manchester Parking Standards can be found in the Annexe.....)The aim is to ensure these tie in with our accessibility and congestion targets.

We shall continue to ensure that short stay parkers currently receive priority in terms of pricing and provision in order to sustain the economy of our town centres. We will work to reduce long-term provision and increase its cost over LTP2, particularly where investment has been made in public transport.

Freight

Local authorities, with the assistance of the Freight Quality Partnership, will take actions on freight that will assist in a more economically prosperous Greater Manchester.

Congestion Related Activities that will be progressed;

- Possible use of some bus lanes at certain times, or HGV-only lanes
- Route network signing for freight
- Examination of delivery restrictions
- Using Decriminalised Enforcement powers to protect loading areas from illegal parking
- Investing in and encouraging freight modal switch

Powered Two Wheelers (PTWs)

These vehicles are relatively economical in their use of road space. However, their accident rate is high thus conflicting with the road safety shared priority. We will continue our objective of improving their safety on the road by assessing all road markings for skid hazards, especially on bends and installing anti-skid markings where necessary and providing adequate and secure stands for their parking requirements. The Greater Manchester authorities will analyse the research that has taken place into allowing Powered Two Wheelers into bus lanes in British Cities and in Dublin. We will develop a PTW strategy to develop these themes further.

Case Study 1

GMPTE advice on travel plans

PPG 13 recommends that Travel Plans should be submitted alongside planning applications that are likely to have significant transport implications. A Travel Plan is considered to be a useful tool to help deliver 'sustainable transport objectives' and the production of Travel Plans is therefore a key element of LTP strategy. Guidance produced by the AGMA Travel Co-ordinator (ref: Best Practice Model -Supplementary Planning Guidance) sets down the thresholds, based on PPG13, which should trigger the request for a Travel Plan alongside a planning application.

In responding to consultations on planning applications, GMPTE will check to see if a Travel Plan is required in accordance with the AGMA guidance and will request the submission of a Travel Plan if one has not already been submitted. GMPTE also advises on the types of measures it would like to see

included in a Travel Plan such as improvements to, and promotion of public transport e.g. additional services and stops, better access to information, discounted tickets, promotional campaigns. This area of work is expanding owing to the scale of new development taking place in Greater Manchester and the potential traffic impact, which means that the 'softer' measures are becoming more essential in order to encourage the use of public transport.

GMPTE has also used Neighbourhood Renewal Funding to provide personalised travel advice for job seekers. Travel Advisers have been placed in Job Centres in Newton Heath and Wythenshawe, offering advice on routes, timetables and ticketing, with the aim of making new jobs accessible to people that were previously unaware that they could get to them. In addition to cutting car use, this has helped to address the Accessibility shared priority. GMPTE is bidding to continue this work.

Additionally, workers at Job Centres have been trained in the use of the GMPTE internet journey planner, so that they can offer similar advice to job seekers. Travel Shop Assistants also attend job fayres to offer advice to those seeking new employment.

<u>Greater Manchester's Approach to the Traffic Management Act</u>

Effectively managing the highway network to keep all modes of transport moving safely contributes to reducing congestion and casualties and improving accessibility and air quality. The LTP Technical Annex provides details of progress of individual authorities in Greater Manchester.

Coordination arrangements have been introduced in Greater Manchester so that the highway authorities, Passenger Transport Authority (on behalf of the public transport operators), the police (on behalf of the emergency services), freight association and utilities work together to maximise the traffic management benefit for all parties. Ten Traffic Managers have been appointed, and they meet on a sub-regional basis.

The Highways Agency, ten Greater Manchester local authorities and one neighbouring unitary authority have collectively agreed a key highway network for the sub region, which includes main roads, distributor roads with over 10,000 vehicles/day, high usage bus routes, on-street tram routes and access to local centres including hospitals and industrial estates.

Cycling and pedestrian routes to local centres have been identified and their conflicts with the priority road traffic network are being considered. Where appropriate, pedestrian crossing points of pedestrian routes to key centres are being given an increased share of the available highway capacity to create safe walking routes.

Two aspects of traffic management activity are being coordinated across the conurbation:

- regular congestion or delays because of inadequate capacity, and
- disruption due to events, incidents, or temporary works.

Identification of congestion hotspots in a systematic way is planned utilising the ITIS data supplied by DfT. As an interim measure bus delay data from bus operators and moving observer data on radial routes is being utilised to identify hotspots for further investigation. Actions currently being undertaken include changes to signal junction timing and targeted enforcement of parking offences. Actions planned include reviews of parking and loading arrangements on radial routes and improving pedestrian and cycling access to local centres. In the longer term, reviews of the highway capacity at hotspots identified by the ITIS data and the provision of better information to the travelling public are proposed.

Disruption has been identified by a Greater Manchester study into the causes of bus service unreliability as a minor proportion of the overall delay to bus services. Congestion, due to limited highway capacity, and the dwell time at bus stops were identified as the major delaying factors. Although the actual delay as a proportion of all journeys is minor, the impact is significant as the disruption delays are a variation to the normal or anticipated journey times.

More timely information to public transport operators and the travelling public is proposed. This requires a more rigorous approach to the coordination of highway authority, utility and developers' works on or immediately adjacent the highway. A conurbation wide roadworks on-line information project has been completed and is currently being rolled out across the sub region. Essentially the project shares road and street works information, edited by local highway authorities to identify disruption to the key highway network, with other users such as Greater Manchester Fire Service and the Passenger Transport Executive. It is proposed to make this more widely available to transport operators and the travelling public.

Consideration of the benefits of a permit system to better coordinate road and street works is currently underway and it is anticipated that a permit system which gives more attention to works affecting the key highway network would be beneficial and consistent with the Greater Manchester approach to traffic management.

Cooperation between the emergency services, led by Greater Manchester Police, and the local highway authorities on responses to incidents such as road traffic collisions is already operating well. It is proposed to improve the dissemination of information by extending the current media arrangement for strategic routes to the recently developed key highway network.

Events such as football matches, and pop concerts can have a significant disruptive effect on journeys on both public and private transport in a significant area around the venues of the event. Greater Manchester Passenger Transport Executive is coordinating the identification of events likely to affect the key highway and public transport networks and local highway authorities are coordinating the development of management plans for each event.

Whilst Greater Manchester Police have confirmed that congestion is not a national policing priority, they are fully involved in helping to prepare the management plans for events and in deploying resources to assist in managing the congestion. Event organisers have generally welcomed the proactive approach of local authorities, the Police and the Passenger Transport Executive.

Within the five year LTP2 period it is anticipated that the corridor partnership work of the Greater Manchester Integrated Transport Strategy will lead to better coordination of mass transit movements with regeneration activity, and the management of congestion and disruption on corridors will involve a wider partnership than is currently the case.

Smarter Travel options will be developed involving the coordination of real time travel information across the conurbation and the dissemination of this via on-street displays and personal messages by text and computer in addition to improvements to the quality of information on local radio, television, and in local newspapers.

Camera enforcement of parking and moving traffic offences is seen as a positive way to manage congestion hotspots across Greater Manchester. Preparations to support such initiatives are currently underway along with bids for the recently introduced bus lane enforcement powers. Liaison between local authorities, the Highways Agency and the Police are in hand to ensure that a coordinated approach to each transport corridor can be supported.

Case Study 2

Bolton Town Centre Study



Picture 5.1 Churchgate, Bolton Town Centre

Introduction

Bolton is a key centre for one of the larger metropolitan boroughs, and lies in the north west of the conurbation. It is an important retail and employment centre, and pioneered town centre pedestrianisation in Greater Manchester. These traffic-free areas have been enhanced and extended over the years, but the popularity of the centre means that there are still issues to be addressed in order to maintain and increase its attractiveness.

Current Problems and Issues

- Poor bus circulation and reliability due to congestion
- Congestion on main roads into the centre, especially in the north-east quadrant
- Poor interchange between bus services and rail services
- Poor linkages between arrival points (bus station, rail station and car parks) and town centre attractions / facilities
- Incoherent cycling and walking network
- Rat-running in peak period resulting in congestion

Proposed approach

Development of a major scheme bid (identified as a regional priority for RFA) for a new bus and rail interchange, with the introduction of a bus gyratory system in the town centre and contra-flow traffic lanes, will improve modal interchange and town centre traffic circulation. Junction improvements on the highway box to improve bus flow between the QBCs and bus gyratory system will also improve traffic flow, in particular for buses. The public realm will be improved by redesigning the layout of main town centre streets, including upgraded pedestrian and cycle routes through the centre. Car parking will be rationalised and managed to improve accessibility and manage demand. Servicing arrangements for commercial properties will also be improved.

Funding Sources

A major scheme bid is included in LTP2 to develop a new interchange and improve pedestrian, cycling and bus movement within the town centre. Additional funding will support the work, including Transport Infrastructure Funding, PTA Capital Programme and Developer Contributions.

Targets and Objectives Met

Main LTP targets addressed include LTP1 accessibility, LTP2,6 and 12a traffic flows and modal split, LTP3 and 11 cycling and walking, and LTP8 and 9 air quality and climate change.

Case Study 3

Routes to Ashton-under-Lyne

Introduction

Ashton-under-Lyne is a key centre in the east of the conurbation. It is an important retail focus, and there are plans for a major extension to its Arcades shopping centre. Areas to the west of the town centre have been the subject of an extensive regeneration exercise, and close by is the A635 intersection with the M60 Manchester Outer Ring Road , which has significantly increased the accessibility of Ashton and also been instrumental in the development of a large strategic site at Ashton Moss, adjacent to the town centre.

Routes to Ashton - under - Lyne include A6017 Ashton-Denton, A670 Ashton-Mossley, A627 Ashton-Dukinfield, A635 Ashton -Stalybridge and A635 Ashton-Audenshaw.

Current Problems and Issues

- Severe and increasing congestion is being experienced on the routes into and out of Ashton town centre, in particular to Manchester, Mossley, Denton, Hyde and Stalybridge.
- Poor accessibility by cycle is currently being experienced along these routes from Ashton town centre to the other local centres within Tameside, such as Denton and Hyde, as well as poor accessibility by cycle to Ashton town centre from the nearby residential areas.
- There is also poor pedestrian access to the public transport interchanges, particularly railway stations, from the surrounding residential areas which is currently inhibiting the role public transport can play by encouraging modal shift and reducing congestion.

Proposed approach

In order to resolve these problems and issues the following schemes will be pursued in the LTP2 period:

- provision of on road cycle facilities between Ashton and Denton. The cycle flow between Ashton and Denton is currently the highest in Tameside, but on-road cycle facilities are presently only provided on A6017 Guide Lane between Guide Bridge and Audenshaw. Additional on-road cycle facilities are currently being provided along A6017 Stockport Road between Ashton and Guide Bridge. It is proposed to complete the on-road cycle facilities on the remainder of the route between Ashton and Denton in 2006/07. This scheme will help to reduce the high numbers of short trips which are currently undertaken by car and to improve the poor accessibility by cycle into Ashton.
- upgraded pedestrian routes to interchanges, particularly rail stations. Many of the pedestrian
 routes which provide access from the surrounding residential areas to the public transport
 interchanges, especially the rail stations, are currently poorly used for this purpose. It is
 proposed to undertake a programme of improvements, including direction signing, lighting,
 and footways, in order to facilitate such use.
- provision of real-time public transport information for the A635 Manchester-Ashton-Stalybridge.
 QBC.
- linking Ashton and Denton SCOOT systems. Ashton town centre has an extensive SCOOT system which is currently being extended to incorporate the Ashton Northern Bypass Stage 1, and A635 Manchester Road between Ashton and Audenshaw, including the junctions accessing the M60. A SCOOT system is currently being provided along A57 Manchester Road and A6017 Ashton Road in Denton. This proposal will link these two separate SCOOT systems along the A6017 between Ashton and Denton thereby reducing congestion and journey times on this important route.
- extension of SCOOT along the A670 from Ashton town centre to Fountain Street, and from A627 Ashton town centre to Chapel St., Dukinfield. These two proposals will extend the existing Ashton SCOOT system along two of the main routes from Ashton, thereby helping to reduce congestion and improve journey times on these important routes to Mossley and Hyde. These two routes also form parts of the Rochdale - Oldham - Ashton - Hyde QBC and the Manchester - Ashton - Stalybridge QBC and the extension of the SCOOT system will additionally help buses.
- completion of Manchester-Ashton-Stalybridge QBC, including provision of traffic signals at A670 Mossley Rd / Beaufort Rd junction. This QBC forms one of the main east-west public transport corridors crossing Tameside, linking Manchester, Ashton and Stalybridge. Proposals on this QBC include schemes that will reduce delays to buses, including both bus lanes and priority at signals, in order to encourage modal shift. Proposals for the introduction of bus lanes on B6390 Audenshaw Road, Audenshaw are currently being developed and proposals for bus lanes and traffic signal improvements on A635 Stamford Street between Ashton and

- Stalybridge are under investigation. The A670 Mossley Rd / Beaufort Rd junction is a group of complex priority junctions which delay buses on this QBC. The provision of traffic signals and SCOOT at this junction will assist in alleviating these problems.
- investigation into, and subsequent improvement of, off-road cycle routes along the Peak Forest Canal to Hyde, and along the disused railway to Oldham. These proposals will form a major north - south off-road cycle route across Tameside, linking Oldham with Ashton and Hyde. The investigation and subsequent improvements will be undertaken in conjunction with Sustrans.
- improvements to cycle routes and signing to Ashton from the residential areas to the south, south-west and east. These proposals will form a safe network of cycle routes into Ashton town centre from the adjacent residential areas in order to reduce the high numbers of short trips which are currently undertaken by car, and to improve the poor accessibility by cycle into Ashton.
- secure cycle parking in the town centre. Cycle parking facilities have already been provided
 at a number of locations across Ashton town centre. It is proposed to provide additional secure
 cycle parking facilities at locations across the town centre to encourage more trips to the town
 centre to be made by cycle.

Funding Sources

Funding will come primarily from the LTP Integrated Transport Block. There is potential for joint working with GMPTE on public transport schemes, and GMUTC regarding SCOOT. Some developer contributions may be forthcoming.

Targets and Objectives Met

The schemes will directly and significantly contribute to BV102, LTP1, LTP3, LTP6, LTP9, LTP11 and LTP12b.

Case Study 4

Shawclough Primary School, Rochdale



Picture 5.2 Bike to School Day, Shawclough



Picture 5.3 Walking to Shawclough Primary School

Introduction

Shawclough Primary School is located some 2kms north west of Rochdale Town Centre. It has nearly 450 pupils, and part of its catchment covers an area of above-average car ownership.

Problems and Issues

The car-borne school run causes significant localised congestion, and reduces the amount of physical activity undertaken by children.

There are a number of problems with the pedestrian and cycle network, including a lack of continuity of off-road and urban links, and constraints imposed by the hill and valley terrain on which ribbon development took place as the town grew. Justification for further provision of off-road links is hampered by the low numbers of existing cyclists.

Further issues compounding the problem include lack of or poor facilities for walking and cycling, indiscriminate parking by parents leading to complaints from local residents, frustration of a latent desire of the pupils to use their bikes and the natural concerns from parents regarding safety issues.

Proposed approach

Techniques addressing the whole of the school journey have been used in the Shawclough scheme, involving implementation of improvements to infrastructure particularly links to off road routes, an education process with schools and pupils, and then follow up works to widen the sphere of influence of the initiative. Along with other schools, they took advantage of a cycle parking grant to create 36 cycle parking bays. Working with Sustrans, the school became a 'Bike It' pilot school -which involved cycle training incorporating promotional cycle rides, cycle maintenance classes, and a Bike on Wednesday incentive scheme. Physical works included a widened surfaced track linking into a

disused railway route being developed as NCN 92. This improved both the cycling and walking route from adjacent estates to the school and to the wider network. This is part of our network initiative for the area which has been branded as BikeEDlinks.

The intention now is to build on this work by introducing further improvements. The school travel plan will be formalised this year. Further work to sign the network is ongoing, and an old pelican crossing on Whitworth Road will be upgraded to a toucan. Follow up work from the sustainability team, including the travel coordinator, remains an essential ingredient to ensure that the long term improvements continue, using the foundations described above.

Funding Sources

Infrastructure: Sustrans £17k, LTP £22k

Council revenue funding for Walking to School training

NRF, Fairshares Lottery fund and Sustrans £5.5k, for cyclist training courses and Bike It staff time on promotion, bike maintenance classes, ride leading, surveys & curriculum links.

A crucial factor in this process has been the funding of travel planning by schools, LTP and the Council.

Targets and Objectives Met

Up to 45 children (10% of pupils) now cycle to school on Wednesdays and approximately 10 - 15 on other days of the week. This contributes in particular to the achievements of targets LTP3 Cycling, LTP4 Mode of Travel to School, and LTP11 Walking.

Following this work with Sustrans, and their recognition that the authority is delivering, it has been possible to gain additional capital funding (£100k for the NCN 92 route). This will extend NCN 92, through the addition of toucan crossings across two classified A roads, linking in with the second phase pathfinder Wardleworth Homezone and an upgrading of the river valley route for a further 3km. This puts the formal link between the Whitworth /Rochdale Route NCN 92, the Littleborough Rochdale Route NCN 80 and the Calderdale, Rochdale, Oldham, Manchester NCN 66 on a practical footing. A further boost to the network will come with the jointly funded LTP and ERDF scheme to improve this route in the area of the Kingsway business park over the next 2 years. This work will benefit six other schools, although constraints on available revenue funding may reduce the potential for such a comprehensive approach, which could limit the effectiveness of the programme.

Case Study 5

The Greater Manchester Motorway Network



Picture 5.4 M60 motorway

Introduction

The Highways Agency is responsible for the management, operation, maintenance and improvement of the motorway and trunk road network. These are roads that are of national importance.

In Greater Manchester this network comprises the M60 Manchester Outer Ring Road, the M62 Trans-Pennine Motorway and motorways which link Greater Manchester to the national network - M56 , M61, M66, M67, and M602. In addition, part of the M6 national route passes through Greater Manchester in the Wigan area. . The network also includes a Principal Road Motorway - A627(M)- and some all-purpose roads - A57(T), A628(T) and A663(T).

Current Problems and Issues

- Congestion causing journey times to be unreliable. An estimated 35% of delays on the network are due to incidents such as road traffic accidents and roadworks.
- Road safety problems
- Environmental issues such as poor air quality around the motorway network
- Need for maintenance of carriageways and structures

Proposed approach

- Works to widen the M60 between Junctions 5 and 8 are due to finish in Spring 2006
- Progress the by-pass of the villages of Mottram, Hollingworth and Tintwistle:it is anticipated
 that a Public Inquiry will be needed and will be held during Autumn 2006. If it is decided that
 the scheme should proceed, and necessary funds continue to be available, the earliest date
 the new road could open is Autumn 2009.
- Improve the planning and management of roadworks
- Highways Agency Traffic Officers have recently taken over responsibility from the police for patrolling the motorway network in Greater Manchester and dealing with incidents
- Trial of a system to manage the flow of vehicles joining at motorway junctions. The system, also known as "ramp metering", uses traffic signals located on a motorway slip road to control

the amount of traffic joining the motorway during periods of congestion on the motorway. The sites are M62 J19 and M60 J2.

- A study is to be carried out looking at issues on the M62 and M60 and along the A663(T) Broadway, Oldham.
- A study into air quality issues on the M60 motorway is also to be carried out.
- Performance of the network will be kept under review and both large and small scale works
 will be carried out where needed to tackle safety problems, deal with environmental issues,
 make journeys more reliable, and ensure that roads and structures are well maintained.

Funding Sources

Highways Agency funding

Targets and Objectives Met

These schemes will directly affect BV99 road safety, and an indirect effect on LTP2 traffic flows, LTP7 congestion, LTP8 and 9 air quality



Congestion Measures Summary

Summary of measures Greater Manchester local authority's and the GMPTE will adopt over the next 5 years to reduce congestion:

- Completing the Phase 1 and 2 Metrolink upgrade
- Establishing with Governemnt a way of delivering all the Metrolink Phase 3 lines
- Completing the Quality Bus Corridor Network
- Implementing Statutory Quality Partnerships for all completed QBC schemes
- Identifying further improvements to QBCs, including any additional routes
- Developing schemes for off-road busways, complementing rail and Metrolink
- Working with operators to establish express services on suitable corridors where this would complement the rail and Metrolink networks
- Working with operators to improve reliability including a cashless fares system
- Simplifying fares and introducing through ticketing
- Improving school transport, including the use of Yellow School Buses, to help tackle the 'school run'
- Assessing the potential of bus-based park and ride and implementing value for money proposals
- Enhancing local rail facilities, including rail based park and ride and increasing peak period capacity
- Promoting the development of school and workplace travel plans
- Implementing a coach parking strategy for the Regional Centre
- Keeping the number of taxi licences under review and further improving integration with public transport
- Providing parking for powered two-wheelers and implementing measures to improve their safety
- Increasing the price and reducing the provision, in the longer term, of long stay parking in town centres
- Using planning policies to reduce the need to travel and ensure that new development is accessible by public transport
- Work with public transport operators to improve integration between modes
- Completing the Transport Innovation Fund bid to fund the additional transport infrastructure and demand management measures necessary to tackle congestion.
- Continued development of Traffic Managementmeasures designed to improve the efficiency of the network.

These measures will help us to achieve LTP2 targets BV102a-c ,104, LTP 2, 6a, 6b, 7 and 12a-c

5.2.2 Delivering Accessibility

Action taken to improve accessibility ensures that all residents of Greater Manchester – particularly those without access to a car or with mobility problems – can access those facilities which affect their life chances. Better accessibility also leads to a stronger economy, better access to lifelong learning, a healthier lifestyle and a more inclusive society. Despite increasing trends towards working at home and accessing information and services electronically, transport remains a key factor in influencing accessibility.

For the purposes of the LTP programmes, the term 'accessibility' covers both:

- The degree to which employment and amenities such as healthcare, education and shops can be accessed by the whole of the community, particularly those who are disadvantaged.
- The physical accessibility of public transport services and infrastructure for people with mobility problems.

Measures to improve access in the first, wider sense of the word, are an important part of our Bus Strategy, and are specifically addressed by our Accessibility Strategy

The Accessibility Strategy and its implementation during the LTP2 period.

In line with Guidance on Accessibility Planning, have established Local Accessibility Partnerships and we shall be undertaking detailed local area studies throughout the LTP2 period. The studies will identify options under a value for money approach for the five-year programme. Measures identified through these studies will then be implemented by the various partners. A number of pilot studies were begun in 2005/06 to improve our understanding of the issues involved in accessibility planning, and we will be implementing measures arising from these. In order to ensure that a range of accessibility issues is tacked in all parts of Greater Manchester, we have developed a programme that involves action relating to each of the four sectors (employment, education, health and food), and the four LTP segments (NW,NE,SE,SW) across the county.

A 5-year Action Plan has been prepared, which will be reviewed annually with partners to ensure its continued relevance. The Plan includes actions for implementation and studies to analyse access issues in more depth and propose cost effective solutions.

Where bus operators cannot commercially meet needs arising from these studies, we will use subsidy to provide a network of local services (including schools services) within walking distance of as many people as possible, linking to local centres or interchanges and to specific local facilities such as education, healthcare and employment. These local services will include both conventional buses and demand responsive services, including sharedtaxis, and will in some instances be operated by Community transport organisations.

Taxis also contribute to the accessibility shared priority by reducing social exclusion for older people and people with mobility difficulties, and we want to ensure that taxi and PHV operators participate in the current GMPTE-funded Travel Voucher Scheme. GMPTE has commissioned research into the use of Travel Vouchers, aimed at improving the service to disabled people who cannot use public transport. Taxis will continue to be used to provide Demand Responsive Transport services in areas of low demand. We will encourage a higher proportion of taxis across Greater Manchester being made fully accessible to wheelchair users.

While better transport is one means of improving access, others may be more relevant depending on situation and timeframe. Examples of alternative mechanisms include:

- Better location of facilities
- Changes in the method of service delivery: e.g. changes in appointment systems or mobile delivery of services.
- Improved awareness among users of their options for access: for instance, clearer and more accessible public transport information.

GREATER MANCHESTER'S ACCESSIBILITY STRATEGY - KEY POINTS

 Analysis suggests poor accessibility to Further Education in the rural areas on the eastern and northern fringes of Greater Manchester.

A specific study on access to FE and HE in Oldham and Rochdale will examine this in Year 1

• The effects of local school re-organisation and the Schools White Paper are currently uncertain and are likely to be complex. Further work will be required to understand these issues.

To be addressed by the Education Strategic Accessibility Partnership.

 There is a major opportunity to improve access through cycling, particularly to secondary schools and FE/HE.

A pilot study will examine this in Oldham in Year 1.

• There are significant issues about integration between operators and modes – for instance, cross-city journeys to access the Universities south of Manchester City Centre.

This will be addressed in the Integrated Travel cards study identified in Year 1

There are both significant concentrations of job opportunities and job seekers within Greater Manchester. Where these overlap – for instance, Wythenshawe/Airport and central Manchester - better information and local re-organisation of bus routes may be required.

Will be addressed by the Manchester Airport Ground Transport Strategy, the Trafford Park / Salford Quays Access Study, the Skills Match Study and the Review of Information (all Year 1). Further studies have been identified for later years.

 In some cases (Central Oldham and Rochdale), there is significant unemployment that is remote from job opportunities. Much better public transport access is needed, particularly into the regional centre.

Studies to examine access to Rochdale Business Park and access to employment from Oldham are included in Year 2.

 Cross boundary collaboration is needed to examine how access to jobs outside the county be improved.

Will be addressed in a review of cross-boundary employment access issues relating to Liverpool, Omega (Warrington), Royal Ordnance (Leyland), Haydock Industrial Estate (St Helens) in Year 1.

 Further work needs to be carried out to define access to fresh food, map sources of fresh food and identify local "food deserts".

A study will examine these issues in Year 1. In Year 2, partnerships will be developed to implement actions to improve fresh food in selected "food deserts".

• There will be a need to work with PCTs to ensure good access to GP facilities, ideally by new centres being situated close to frequent bus routes.

A study to examine access to community healthcare facilities will examine this in Year 2.

 Hospital access is poor in certain parts of the county - for instance, the rural fringe of Oldham, outer East Manchester, a significant area east of Stockport and south of Ashton-under-Lyne, and parts of Bolton Bury and Wigan.

Actions from the Stepping Hill Pilot, work on the North East Sector Health Service reconfiguration and the Royal Oldham Hospital Accessibility Study (all Year 1) and further studies in subsequent years will address these issues.

Physical access to transport, and special needs transport

In order to improve physical access, we shall continue with the programmes introduced in LTP1 by investing in, for instance, ramps, tactiles, dropped kerbs, automatic doors and low-floor buses. Travel plans and other 'smarter choices' techniques will be used to increase awareness of improvements in physical accessibility and to promote the more sustainable modes of travel, with a particular emphasis on short trips.

Following completion of our Integrated Social Needs Transport Best Value review we shall take further steps to integrate local authority education and social transport services alongside the Greater Manchester Ambulance Service, and Ring and Ride as well as over 15 Community Transport and other not-for-profit organisations . This work follows completion of a Best Value review into integrated social needs transport provision.

Case Study 6

Trafford Park Access Study



Picture 5.5 Trafford Centre

Introduction

Trafford Park and Salford Quays are located to the west of the Regional Centre, the latter being only 3.5km from the Centre. Historically, this was a huge employment area, with Trafford Park laying claim to be the first industrial estate in the country, and it was based on manufacturing industry and port activities. It followed the fortunes of these two sectors into decline, but even at its lowest point, it remained a major generator and attractor of journeys. Over recent years, Trafford MBC

and Salford City Council have played a major role in the regeneration of the area, and as a result it has developed vibrant new economic activities based around retail, logistics, commercial and leisure developments

Current Problems and Issues

Public transport has not reflected these changes in regeneration and economic development. The main problem perceived is that a lack of bus services causes problems of accessibility, which leads to difficulties in the recruitment, and retention of staff, particularly for shift and evening work.

Access to Trafford Park will be improved by the proposed Metrolink extension, but there are significant areas of deprivation which will not be served, and for which other solutions need to be found.

Proposed approach

A study has been commissioned jointly by GMPTE, Trafford MBC and Salford City Council to examine accessibility to employment opportunities in Trafford Park and Salford Quays.

The objectives of the study are:

- to quantify the issues of employee recruitment and retention amongst businesses in the park and the Quays
- to identify how much poor transport provision, poor awareness of transport options, poor working conditions and poor awareness of job opportunities contribute to the recruitment and retention issue
- to identify where a lack of public transport provision is creating a barrier to people being able to access employment, retail and leisure opportunities,
- to quantify and geographically locate these access issues,
- to identify and evaluate a range of potential solutions (both transport and non-transport) in terms of costs, benefits, practicality and deliverability
- to identify potential sources of funding for accessibility solutions
- to determine a detailed action plan for addressing access to Salford Quays and Trafford Park with a timetable for implementation
- to identify other measures which could contribute to the successful implementation of a transport strategy for the area.

Approach taken

A steering group has been formed between GMPTA/E, Trafford Council, Salford City Council and Greater Manchester Chamber of Commerce to oversee the study, which is being undertaken by MVA Consultancy. The study is scheduled to report in late spring 2006.

Funding Sources

The initial study will be funded jointly by Trafford, Salford and GMPTE, using LTP mainstream funding. Future funding sources will depend on the outcome of the study.

Targets and Objectives Met

- To establish a successful bus service(s) which are workable, and well supported by businesses.
- To reduce unemployment around the periphery and in Trafford Park
- To make Trafford Park and surrounding areas more accessible to employment.

This will contribute in particular to LTP2 targets BV102 bus patronage, BV104 bus satisfaction, LTP1 accessibility, and LTP2 area wide traffic

Case Study 7

Upgrading signalised crossings: Tameside MBC



Picture 5.6 New pedestrian crossing, Tameside

Current Problems and Issues

Poor accessibility for both mobility and visually impaired people on the pedestrian routes to district and local centres, especially when using older signalised crossing installations which no longer meet the latest design standards.

Proposed approach

Systematic programme for the replacement of older crossings in order to provide signalised facilities which meet the latest BVPI 165 standards, which include dropped kerbs, tactile paving and audible and tactile signals as appropriate, in accordance with the latest design guidance. This will also be done for older crossings where other types of scheme which involve the upgrading of signal facilities, for example Quality Bus Corridor schemes, are taking place.

Funding Sources

£60k per year from the LTP Integrated Transport Block, supplemented by developer contributions where possible.

Targets and Objectives Met

This measure is reflected directly in indicator LTP10d, and is also expected to contribute to an increase in walking modal share to key centres LTP12b. This measure will help to meet BV165 targets. It is proposed that the BV165 target will increase from 87% in 2006/07 to 95.5% in 2010/11.

Accessibility Measures Summary

We intend to continue to use a toolkit of measures to improve accessibility across Greater Manchester, particularly for those who are dependent on public transport services for their mobility. To inform these solutions we have utilised the new Accession mapping software and intend to undertake further studies to identify the most effective measures in areas of identified need. Our strategy includes the following elements-:

- New public transport services to be delivered to improve connections in those areas where growth is expected, both in economic (employment) terms and at specific sites where for example, new housing and or education and health facilities will be built.
- Ensure access considerations, are given due weight in development control decisions particularly those which involve proposals which will create significant travel demand.
- Performance standards for network coverage as a whole and individual corridors will be agreed, and opportunities identified to pump-prime new services.
- Improvements to the capacity and reliability of public transport, better walking and cycling links to the public transport network, therefore providing safe and efficient alternatives for those without access to a car.
- A review of the criteria for supporting bus services, to ensure that subsidy is being used to best effect in relation to accessibility needs.
- Travel planning initiatives to raise awareness of public transport options, improve travel
 information, and publicise the benefits on offer to both the environment and the individual of
 adopting "smarter" travel choices.
- A range of initiatives to improve cross boundary accessibility in the more peripheral areas of the conurbation.
- Our Concessionary Fares scheme will continue to offer a more generous range of concessions than that required by statute. The scheme is engineered to help reduce social exclusion amongst the over 60s and the disabled.
- Following our Best Value Review, a range of actions to better integrate social needs transport
 provision are underway. This work is intended to deliver greater coordination between different
 service providers including cooperation between Ring and Ride and other social needs transport
 operators designed to improve overall efficiency.
- We will continue to subsidise bus services to meet identified social needs not met by the commercial network and provide demand responsive transport in areas where conventional services cannot be provided economically.

Access for people with mobility problems will be improved through:

- the design of new infrastructure,
- provision of dropped kerb crossings,
- provision of raised kerbs at bus stops,
- physical access improvements at railway stations
- provision of new vehicles for the Ring and Ride service
- joint working with operators to increase further the number of low floor buses.
- schemes to improve access for disabled people on walking journeys, such as at traffic signals and on footways

These measures will help us to achieve the targets LTP 1a and 1b regarding accessibility

5.2.3 Improving Transport Safety and Security

Our desired outcome is to reduce deaths and injuries, and to ensure that people feel safe on their journey. The road safety strategy has been developed in partnership with the Highways Agency and follows National Guidance.

In terms of options considered it is not an option to do nothing, therefore, we shall continue to analyse data and focus on locations where we can get the greatest returns. We will also continue to implement tried and trusted techniques which are proven to have a significant impact on safety and security.

We shall continue to identify and prioritise local safety schemes not only with the aim of maximising accident and casualty reduction in general but also with the more vulnerable road user in mind. This will encourage greater cycling and pedestrian activity, particularly for shorter distance trips, in line with the main thrust of the LTP. 'Safer Routes to School' projects, including road safety education, training and publicity initiatives are continuing to be developed by Greater Manchester authorities. Our intention to install high quality cycle infrastructure will help to maintain the safety of users.

The Walking strategy seeks to support the reduction in road traffic accidents in terms of pedestrian casualties by promoting the use of Kerbcraft and other road safety education among younger children. The improvement in pedestrian areas and increase in the number of crossing points for pedestrians both controlled and non controlled as appropriate should also help to improve the casualty rates on Greater Manchester's streets.

Our Bus Strategy identifies safety as a key concern for people who are considering using public transport. We therefore aim to tackle safety at all stages of the journey: through improving the quality of pedestrian routes (including lighting and provision of crossings), and passenger-friendly design of bus stations, CCTV coverage of stops and stations and real time information (which provides reassurance to passengers about their service). The Quality Bus Corridors include improvements to the pedestrian environment,

particularly in local centres along the routes. GMPTE has developed a safety and security strategy focusing on anti-social behaviour, criminal damage and perceptions of safety and is working in partnership with operators, local authorities and eg through Crime and Disorder partnerships. A number of initiatives are in place such as Night buses in Manchester, Wigan and Bolton (which disperse revelers quickly) a mobile policing unit and increased staffing at bus stations. We will also continue to focus on the high levels of anti-social behaviour associated with school buses by introducing measures such as CCTV and codes of behaviour and by introducing more Yellow School Buses, which have proved highly successful in tackling anti-social behaviour.



Case Study 8

Casualty reduction on Leigh Road, Leigh

Introduction

Leigh is situated in the west of the conurbation, and although not a key centre, it is the next largest centre in Wigan Metropolitan Borough outside Wigan itself. It is an important retail destination, and there is also considerable other employment around the edge of the town's core. Although the centre is by-passed by the A579 Atherleigh Way, there is still much access traffic which has to co-exist safely with pedestrian movements

Current Problems and Issues

This road is part of the A572 and B5215 and forms part of the main retail area of Leigh. It is a single carriageway and has high levels of pedestrian activity both along it and crossing it. In the three year period 1st Dec 2003 to 30th Nov 2005 there were 57 reported injury accidents, resulting in 84 casualties. Of these casualties 4 were KSI and 15 were pedestrians, 8 of whom were children.

Proposed approach

As these accidents are distributed along a route of approximately 1.5km the problem will be investigated as a route action. This is a well used and researched approach to investigating accidents of this nature. Measures such as speed management, pedestrian improvements and general traffic management measures will be implemented. Given that the road penetrates the heart of Leigh a more pedestrian friendly environment will be created, where vehicular traffic is less intrusive.

Funding Sources

This scheme will be implemented in 2007/08. The possibility of supplementing LTP Integrated Transport Block funds with regeneration resources will be explored.

Targets and Objectives Met

This scheme will in particular help us achieve our BV99 road safety target.

Case Study 9

Casualty reduction in residential areas:

The Adswood & Bridgehall Community Transport Project, Stockport



Picture 5.7 Adswood / Bridgehall Home Zone

Introduction

Adswood and Bridgehall are adjoining areas of Stockport Metropolitan Borough which suffer from high levels of socio-economic deprivation. Situated relatively close to the town centre, the areas have received SRB funding which ended March 2006, and improvement work for residents and visitors has taken place over a number of years. This work will continue throughout the LTP2 period.

Current Problems and Issues

Many children of primary school age walked to school unaccompanied by adults, and then also played in the same streets in which they lived. Headteachers and parents had safety concerns particularly because of speedy traffic and an unattractive street environment, which also discouraged children from cycling to school.

Proposed approach

This will continue the emphasis of a three year, £500 000 scheme which was funded during 2002/03 – 2004/05. Residents participated in the development of a new Home Zone, road safety schemes and user training, and improvements to walking and cycling routes including safer routes to schools.

After the initial pilot Home Zone, Oban Crescent Adswood and six further roads on the Adswood Estate, were redesigned to include Home Zone style elements within the new layout, as this was seen as the primary solution to

- reducing speeding,
- tackling rat running through the area,
- reducing the use of vehicles for criminal activities,

- improving the physical environment of the area, and
- overall, encouraging people to cycle and walk more within the regeneration area by feeling more confident using the road space.

Funding Sources

LTP monies and DTER Challenge Funds.

Targets and Objectives Met

Overall results have benefited road and community safety, accessibility particularly to local facilities and services, and also quality of life with 77% of people being satisfied with living in the area in September 2005 compared with 31% in 2001.

This approach provides a model for local schemes during the second LTP.

Case Study 10

Woodhey High School, Bury



Picture 5.8 Woodhey High School, Bury

Introduction

Woodhey High School is a highly-regarded 1000-pupil comprehensive school situated close to the northern boundary of Greater Manchester, between Ramsbottom and Holcombe Brook. It is close to a main route, the A676, linking the two communities and also connecting with routes leading to the key centre of Bury.

Problems and Issues

A majority (56%) of students currently walk to the school. Consequently, car use to the school is relatively low, as is bus use. However, there are still problems around the school at peak times, including:

- Lack of safe means for pedestrians to negotiate the complex junction on Bolton Road West / Longsight Road known locally as Fourways Junction. Cycle safe markings are also needed here.
- Bolton Road West is a very busy two lane road with narrow footpaths, made dangerous by the exit of pupils, parents cars and school buses entering it at the junction of Esk Bank Road at the end of the school day.
- Lack of suitable parking and drop-off zones, outside and within the school grounds. In particular
 the turning circle within the school grounds is very congested at peak periods, leading to a
 number of safety issues in the vicinity for motorists as well as pedestrians.
- Limited cycle storage and the security issues associated with this.
- Lack of awareness on the part of both students and some parents in respect of the limited access and severe congestion.
- Limited car parking space for staff.

Proposed approach

As a result of these concerns, Bury MBC has helped the school to develop a School Travel Plan to raise awareness of both students and parents, especially car drivers, about the issues identified above. Measures from this Plan will be implemented over the LTP2 period. Safety of cyclists and pedestrians will be improved by engineering measures at Fourways junction and Bolton Road West. Links will be made to the National Cycle Route 6 which passes near the site. Pupils and vehicles will be better segregated at the turning circle, and secure cycle storage will be provided. In addition, efforts are being made to promote behavioural change through information and promotion, including the use of a new school travel noticeboard for pupils and parents. It is hoped that these measures will encourage more pupils choose to travel by these modes as a result. This approach meets the aims of a number of different Council strategies including those concerning transport, education and young people, health, safety and land-use planning.

Funding Sources

The school will receive a grant from the DfT and DfES of approximately £10,000 to be spent on Travel Plan initiatives. The School has recently been awarded Specialist Science College Status by DfES and has been awarded targeted Capital Funding of £6 million, together with a further £1.5 million from School Modernisation Grant, allocated in 2006/07 – 2008/09, to meet the cost of refurbishment, adaptation and extension. The Council has allocated approximately £120k per annum from LTP funds for walking and cycling. Some of this funding will be used to provide schemes as part of other local initiatives.

Targets and Objectives Met

The school has set itself a target of reducing the number of pupils travelling to school by car by 5% per year, with a corresponding increase in pupils walking or cycling. However, a re-drawing of the school's catchment area could have an effect on this target.

The schools annual review will take on a greater significance in the future as the premises are currently being refurbished and expanded. The Senior Management Team will review the School Travel Plan in the light of new information and will continue to monitor it on an annual basis to ensure the travel patterns from the annual influx of new children is taken into account. A 'Hands Up' survey has been undertaken and will be carried out on an annual basis as part of the ongoing LTP monitoring process.

These works will contribute in particular to the achievement of Local Transport Plan targets LTP3 cycling, LTP4 mode of travel to school and LTP11 walking.

Case Study 11

Secure Cycle Parking Programme, Salford City Council



Picture 5.9 Secure cycle parking and shelter, Irlam & Cadishead School, Salford

Introduction

Salford City Council is a major metropolitan borough in the west of Greater Manchester. Its eastern boundary is within the Regional Centre, and it has a complex pattern of circumferential and radial movements, some of which are of appropriate length for cycle use. It has an ambitious programme of installing secure cycle parking facilities at secondary schools, local centres and civic amenities.

Current Problems and Issues

Lack of secure facilities was a major factor in limiting the accessibility by bike to these key destinations. Provision of parking facilities at local centres encourages short trips to aid regeneration, and secure facilities at school gives pupils the confidence to travel by bike and reduce high car use.

Proposed approach

Safe, secure and prominent cycle parking facilities will be provided at schools, local centres and civic amenities. Cycle parking was identified in the North West Regional Cycle Benchmarking Project as being a low-cost / high impact measure to overcome one of the main barriers to cycle use.

Funding Sources

£295,000 of LTP Integrated Transport Block between 2006/07 and 2008/09. Additional funding from DfES for schools with written school travel plans.

Targets and Objectives Met

This measure will contribute mainly to LTP targets LTP3 Cycling, LTP4 modal split to school, and LTP12b modal split to key centres. Local monitoring at one school has recorded a 20% increase in cycle trips in the month following installation.

Transport Safety and Security Measures Summary

During the next five years we will take the following steps to improve safety:

- Introduce measures for speed management in line with the DfT publication 'New Directions in Speed Management'
- Improve the number and safety of pedestrian crossing points
- Target local safety scheme resources at sites which give the best rates of return, with a particular emphasis on reducing child casualties
- Continue the implementation of measures to improve security on public transport
- Introduce measures designed to reduce bridge strikes

These measures will help us to achieve the targets BV 99 x,y and z regarding Road Safety.



5.2.4 Better Air Quality

We shall continue to take action integrated with other policies to improve air quality over time. There is not a 'do nothing' option here - there are national targets which must be met. Air Quality Management Areas (AQMAs) and the main roads (which are the ones where air quality is poorest) will be targeted and a range of techniques will be assessed and tested during the course of LTP2.

The Greater Manchester Air Quality Action Plan (AQAP) which was submitted to DEFRA in 2004, includes many of the policies contained in LTP1, and the AQAP has now been revised and updated as part of its incorporation into LTP2. The full Plan is included in the LTP2 technical annex. Better source apportionment will be available later in 2006. CO₂ is now included in the strategy.

We will aim to remove emissions at source, and reduce the impact of pollution along transport corridors by promoting modal switch, fuel efficient technologies and practices – such as particulate traps, low emission fuels and driver training and awareness raising.

Our aim is that during the course of this Plan, many of the short journeys currently undertaken by car will switch to walking and cycling which will contribute to improved air quality and life generally, and reduced congestion.

Our strategy of achieving modal shift from car to public transport will reduce the amount of greenhouse gases produced per passenger mile. We are testing a diesel-electric hybrid Metroshuttle bus in central Manchester.

The Taxi strategy under development will address the issue of emissions of those vehicles, which tend to concentrate in the town centres and key locations.

Supplementary Planning Guidance on Air quality is also being prepared.

Partnerships with the Highways Agency and Manchester Airport are being set up. These will be imperative to address effectively air quality issues outside the control of the Greater Manchester Authorities. This relates to road traffic emissions associated with trunk roads, and

synergy with both the Highways Agency's M60 Route Management Strategy and Manchester Airport's revised Ground Transport Strategy.

Measures to Reduce Carbon Emissions and address Climate Change

Many of the actions necessary to tackle climate change are the same as those which we need to take to improve air quality. These are set out above and in detail in the Air Quality Local Transport Strategy and Action Plan annex.

The measures outlined in the Plan to encourage greater use of public transport and more use of cycling and walking for short trips will all have a positive impact in these terms. We will also use our influence to encourage the use of vehicles with lower levels of emissions through local authority procurement policies and encourage the greater use of alternative fuels in line with Government strategy.

Case Study 12

Greater Manchester Cleaner Vehicles Campaign

Introduction

In Chapter 4 (para 4.3.4) we set out the air quality problems which will need to be tackled over the LTP2 period. As well as investment in schemes which will contribute to a reduction in NO₂, particulates and CO₂, there is a need for awareness and enforcement measures.

Current Problems and Issues

The main aims of the Cleaner Vehicles Campaign scheme are to raise awareness of air quality issues and highlight the negative impact of poorly performing vehicles to help encourage drivers to change polluting behaviour.

Proposed approach

The Greater Manchester authorities have been conducting a successful conurbation-wide "Cleaner Vehicles Campaign" (CVC) since July 2003.

The campaign involves roadside emission testing of cars against emission standards specified in the official MOT test. Failures of the test result in fixed penalty notices being issued to motorists. Testing is supported by a promotion and information campaign.

It is important for further vehicle emission testing to be undertaken in partnership with the Vehicle and Operator Services Agency (VOSA) during the LTP2 period.

Funding Sources

The LTP1 initially provided £400,000 to establish and run the scheme.

Targets and Objectives Met

The chart shows that a lower percentage of vehicles failed tests in 2005 compared to 2003.

	Petrol Cars			Diesel Cars		
	Pass	Fail	%	Pass	Fail	%
2003	969	12	1.2	62	7	11.3
2004	380	19	5.0	69	3	4.3
2005	759	4	0.5	133	10	7.2

Table 5.1 Results of Cleaner Vehicles Tests

This helps to meet LTP targets 8 and 9

Air Quality Measures Summary

During the next five years, we will take the following steps to improve air quality and reduce carbon emissions

- Implement measures to encourage modal shift to zero/low emissions modes of transport -Metrolink, walking, cycling
- Implement measures to reduce congestion.
- Invest in low emissions technology and practices
- Development of GM air quality supplementary planning guidance
- Revise GM taxi licensing regime to increase air quality standards
- Revise contracts with bus operators to include air quality standards
- Implement measures through the Freight Quality Partnership
- Increase the attractiveness of public transport at the expense of the car.
- Develop partnerships with Highways Agency and Manchester Airport

These measures will help us to achieve the targets LTP 8 and 9 regarding air quality and climate change.



5.2.5 Public Transport Case Studies

Case Study 13

Manchester - Bury Quality Bus Corridor



Picture 5.10 low floor articulated bus used on Manchester-Bury corridor

Introduction

This is part of a comprehensive network of Quality Bus Corridors covering main arterial and orbital routes in Greater Manchester. The programme was started in LTP1, and the current phase is due to be completed in 2008. The corridor runs for 8 miles from the Regional Centre to the Bury Key Centre in the north of Greater Manchester. The main service along this QBC is already operated withew articulated single-deck buses.

Current Problems and Issues

The problems identified in Chapter 4 which the QBC programme addresses include:

- congestion on corridors into key centres, especially at peak times, leading to problems with bus journey times and reliability
- The need to improve modal split, especially to key centres, in order to tackle congestion and air quality problems in particular

Proposed approach

The QBC network is being developed along the strategic corridors of movement in the conurbation to provide benefits principally to bus users. As a result the type of measures implemented are: additional bus shelters, better information at stops (this will include Real Time Information in the future), bus priority measures including bus lanes and priority at traffic signals, more and better pedestrian crossing points and improvements to the street environment (eg residents parking bays to facilitate movement of vehicles, loading/unloading facilities for businesses, improved street lighting and improved pavements and drainage).

The schemes are a collaboration between GMPTE and the Local Highway Authorities, with operators providing new vehicles. Progress is monitored by the QBC Review Group, which includes bus operators. As they are completed, the intention is to develop a Statutory Quality partnership for each corridor. The first of these is being drawn up for the Leigh-Bolton corridor.

The treatment of individual corridors varies according to local conditions (eg road widths) and is informed by local consultation. This is a two stage process, with views on general principles influencing the development of the detailed schemes, which are then subject to further consultation.

As an example, the following improvements have been made to the Bury Manchester corridor:

- Bury New Road, Bury Old Road & Manchester sections Traffic Regulation Orders (TRO) and bus stop improvements
- Moor Lane/Singleton Road signal junction improvements
- Manchester Road bus lane
- Seymour Road and King David's school pedestrian facilities
- Bury sections SCOOT/MOVA traffic signal enhancements
- Manchester Road/Gigg Lane bus lane
- Derby Street signals
- Great Ducie St /Southall St /Sherbourne St right turn lane

During LTP2 we will complete the programme and develop QBC+, a second-generation of bus priority, which will build on what has been achieved to deliver an even higher level of bus priority.

Funding Sources

The programme is funded mainly through a Greater Manchester-wide topslice from the LTP Integrated Transport Block, with contributions from developer funding where appropriate.

There is also major schemes funding for SEMMMS, and Northern Orbital programmes . It is being sought for the JETTS programmes.

Targets and Objectives Met

The QBC programme is being monitored for its effect on journey times, including on reliability, and patronage. It will contribute mainly to LTP targets BV102 bus patronage, BV104 bus user satisfaction, LTP7 congestion, LTP10 accessible infrastructure and LTP12 key centre modal split.

Case Study 14

Rail interchange improvements



Picture 5.11 Ashton rail station

Introduction

Greater Manchester has a comprehensive local rail network. There have been considerable patronage increases recently, especially on services in the north of the area, and the time is therefore ripe for investment in facilities which can further increase patronage and contribute to congestion reduction, since the rail mode is proven as an alternative for car users.

Current Problems and Issues

The poor quality of some rail infrastructure, and lack of suitable facilities for mobility impaired people, inhibits use in some locations, preventing rail from playing a full role in reducing congestion on radial corridors, and improving modal split into key centres. The Greater Manchester Rail Plan identified the need for improvements to stations across Greater Manchester, focusing on safety and security, accessibility, information and car parking.

Proposed approach

The scope of this work is very large, and GMPTE has brought forward schemes that are value for money in a largely opportunistic way, particularly where there is an opportunity for joint funding. For example, Salford Central is in a regeneration area and a scheme was prioritised because there was the opportunity to bid for ERDF funding. Where the joint funding has a time constraint, the scheme is given a high priority. For example, at Stalybridge a scheme has been developed jointly with Trans-Pennine Express. As part of their franchise commitment, TPE are carrying out a £1.25m scheme to improve the platform buildings and passenger information. This work is being done in 2006/07, so complementary improvements by GMPTE need to be done at the same time. Similarly, we hope to 'piggyback' on the platform works that Network Rail has planned for stations on the Airport line.

Whilst opportunities for joint funding will continue to be taken, the Project Lifecycle Process now in place at GMPTE, which incorporates several ways of scheme development, will help to ensure that priority is given to the schemes that best meet the LTP objectives.

A number of improvements were made to rail stations in the lifetime of LTP1, including Manchester Piccadilly, Stockport and Ashton-under-Lyne

Funding Sources

LTP Integrated Transport Block and rail operators

Targets and Objectives Met

This work directly contributes to the achievement of LTP targets BV102 rail patronage, LTP7 congestion, LTP10b accessible infrastructure and LTP12 key centre modal split.

Case Study 15

Bus Station Improvements

Introduction

Greater Manchester has some 20 bus stations, which provide waiting, interchange, information and ticket purchase facilities for passengers. Some of these have been rebuilt to higher standards, but there is much to do to bring the remainder up to these levels.

Current Problems and Issues

Bus stations need not only to be kept in a good state of repair, but continuously upgraded to take account of, for example, DDA requirements and the need to improve their attractiveness to passengers in the face of competition from other modes especially the private car.

Proposed approach

In accordance with GMPTE's maintenance strategy, a condition survey is carried out at each bus station every 5 years. This gives an indication of when facilities are expected to reach the end of their life (which can be up to 25 years) and allows maintenance to be planned accordingly. Facilities which are time-expired receive only a basic level of maintenance until they can be replaced.

At this point the issue of betterment is considered so that the opportunity can be taken to provide a better facility for passengers and, if appropriate, a scheme developed for the capital programme. This may be for an entire replacement bus station, or for a particular facility within a bus station. In the latter case, the improvement is funded from a generic minor works budget.

Our major scheme bid for Rochdale bus station is an example of the former: a wholesale upgrade would not be cost effective due to the limited life of the existing facility and major structural repairs expected in the near future. At the same time, the existing facility is now considered to be unattractive, dark and dingy, with poor air quality, and we want to take the opportunity to provide a high quality facility for passengers to complement the regeneration of the town centre.

An example of a minor works improvement is the replacement of benches by seats. These make it easier for elderly people or those with mobility problems to get up, individual components can be replaced in the event of vandalism (so reducing maintenance costs) and they are less likely to be used overnight by vagrants. Another example is CCTV, which has been installed at some locations partly as a benefit to passengers but also to reduce the high maintenance costs associated with vandalism.

In developing large schemes, specific consultation will be undertaken with users. In the case of minor schemes, we shall draw on the general views of the public (eg as obtained through the Tracking Survey), specific research carried out when a new type of facility is introduced for the first time, and on the views of the local bus station managers, who are able to recommend particular improvements based on their day-to-day experience.

Funding Sources

Funding for small scale improvements is from the minor works budget, but major refurbishments or rebuilds require major scheme funding. Where the latter is part of a town centre regeneration scheme, funding is sought from developers / regeneration agencies as appropriate

Targets and Objectives Met

This work directly contributes to the achievement of LTP targets BV102 bus patronage, BV105 bus satisfaction, LTP7 congestion, LTP10b accessible infrastructure and LTP12 key centre modal split

Case Study 16

Community Transport

Current Problems and Issues

There are areas, and times of the day/week that are not well served by the commercial bus network. GMPTE provides tendered services, including demand responsive services where demand is low. However, this provision is constrained by the high cost of provision and the limited availability of revenue funding. In some areas, there is potential for Community Transport Organisations to provide services.

Proposed approach

We recognise the role that Community Transport can play in an integrated transport strategy and GMPTE is working with the Community Transport Association through 'Greater Manchester Communities On The Move' to provide the right resources and training for community transport operators to run their own services.

As part of the initiative a GMPTE Community Transport Trust Fund has been set up to help pay for initiatives such as extra drivers to work evenings and weekends. The scheme is one of five in the Northwest to receive Examplar Learning Status for 2006, from the government -backed regeneration best practice agency, RENEW Northwest.

The Milkstone community transport organisation, based in Rochdale's Asian community began by carrying girls to a faith school in Bolton, but did not have the correct structures in place to meet legal requirements. With a GMPTE grant of £25,000 they were able to register as a charity, improve their management and develop a business plan. Now renamed as Rochdale Community Transport, their short term focus is on school journeys, trips to mosques and on improving accessibility for pensioners living in central Rochdale where, for example, a number of post offices have closed. However, in the medium term they plan to extend their operation to the wider community, working with GMPTE to identify gaps in the bus network, and bids have been submitted for SRB and NRF funding. In the longer term, the plan is to serve Kingsway Business Park, which is one of the locations identified in our Accessibility Strategy as having access problems.

We expect further schemes of this nature to come into operation during the LTP2 period.

Funding Sources

Support for Community transport is provided through their own charitable status. However where they operate a service for GMPTE, this is funded through GMPTE's revenue budgets. Use is also made of external funding, such as developer contributions. For example the developer of Kingsway Business Park has agreed a sum of money to develop a demand responsive service to cover early shifts.

Targets and Objectives Met

This scheme will demonstrate a measurable impact among local subsidiary accessibility indicators

5.2.6 Other Quality of Life Issues

Global warming

The actions necessary to tackle climate change (in particular CO2 emissions) are the same as those contained in the Air Quality Action Plan to address nitrogen dioxide and particulate emissions. Details of our approach can be found in Section 5.2.4 and the LTP2 Annex.

Environmental Impact of Transport

Transport schemes will be designed with suitable mitigation measures for any adverse effects on biodiversity. Schemes will respect and, where possible, enhance the landscape through attention to design and provision of landscaping. This aspect has been tested through the SEA process. We intend to continue our emphasis on designing out noise from new infrastructure and reducing it through the materials and practices used in maintenance. The Greater Manchester Freight Strategy contains several actions to reduce the environmental impact of freight movement, as follows:

- encouraging modal shift from road to rail and water
- implementing schemes to deal with identified environmental "hot-spots" on the network
- reducing particulate emissions from exhaust
- maintaining highways so as to assist less intrusive vehicle running- e.g low noise surfacing, less noise from empty vehicles.

Longer term, looking towards 2020, it would be desirable to have trans-shipment based schemes to reduce freight vehicle impact arising from deliveries in urban areas.

Liveability

We shall continue investment to improve the quality of the public realm during LTP2. LTP2 funding will contribute towards a variety of measures ranging from town centre schemes through to housing areas and localised environmental problems. Some examples are shown below:

Case Study 17

Future Stockport



Picture 5.12 Future Stockport: artist's impression

Introduction

Stockport Town Centre is a major contributor to the economic success story of the southern Greater Manchester conurbation, and is

- The principal employment location in south-east Greater Manchester
- The fifth ranked shopping area in North-West England
- The key location in south-east Greater Manchester and parts of Derbyshire and Cheshire for professional services, education, health services and administrative functions
- Successfully developing its leisure and tourism potential

Current Problems and Issues

Although Stockport is a major transport hub for all modes, and an Interchange for local, regional and national movements, there are some particular problems which if not addressed could constrain its development. These include:

- Deficiencies in the physical infrastructure that make interchange unattractive, in particular the fact that bus and rail stations are separated from each other, and from the town by the A6
- The major transport corridors create barriers to access to and movement within the town. This is a problem for local people and the more distant traveller.
- The concentration of road traffic on the M60 and other roads, combined with topography, results in air quality problems and clusters of personal injury accidents. Walking and cycling can be challenging experiences.

Proposed approach

FUTURE STOCKPORT is the £500 million Masterplan to take forward the regeneration of Stockport Town Centre which was begun around five years ago. It provides a 15 year framework for development and investment. The challenge for the transport infrastructure is to support future development by catering for local movements in and to the town centre, and fulfilling the town centre's wider role as a pivotal location in the south east of the Manchester sub-region

Investment during the LTP1 period was targeted on improving conditions for travellers on foot, and by cycle, bus and rail. We will continue to prioritise these modes, and by doing so help create an attractive destination for the increasing number of visitors, workers and residents. A Town Centre Travel Plan is a priority. We plan to take action with our partners to reduce congestion on the approaches to the town centre and through routes, and this will complement other action we intend to improve air quality.

The largest capital investment, which remains an aspiration but is crucial to the regeneration of the town centre in the medium term and its development also as a sub-regional hub, is the construction of a new Transport Interchange to encourage access by rail, bus and Metrolink.

Funding Sources

Using LTP, SEMMMS and other funding

Targets and Objectives Met

Main LTP targets addressed include LTP1 accessibility, LTP2,6 and 12a traffic flows and modal split, LTP3 and 11 cycling and walking, and LTP8 and 9 air quality and climate change.

Case Study 18

Oldham Community Regeneration Programme



Picture 5.13 Before treatment: Groby Street

Introduction

Oldham is a Key Centre in the north east of Greater Manchester. It has a number of regeneration areas within the borough where LTP funding contributions are made - namely New Deal for Communities(NDC) (Hathershaw & Fittonhill), Single Regeneration Budget SRB 6 (Werneth & Coppice) and Housing Market Renewal Fund (HMRF) (Derker & Werneth).

Current Problems and Issues

- Poor accessibility to local facilities is undermining pedestrian safety
- High traffic flows causes congestion and rat running
- Heavy goods vehicle intrude in residential areas
- Pavements are over-ridden and damaged by indiscriminate parking
- Existing parking areas in shopping corridors are undefined thus depriving shoppers of their use
- Car speeds in residential areas are causing a safety hazard and have a detrimental impact on the environment and parking
- Alleyways are causing access problems and a consequent increase in crime levels.

Proposed approach

- The Council has been working in close collaboration with the NDC Board, which received £50M funding to be expended over 10 years, including tackling problems related to parking, road safety, rat running and heavy goods vehicles. Consultants have been appointed to assess the traffic impacts of proposed developments in the NDC area, particularly at major/minor road junctions along Ashton Road.
- The Consultants are working on a project entitled "Streets Modes and Places", which forms part of the Masterplan for the Werneth area. The aim of this project is to address any inadequacies within the existing highway network, and to deal with parking issues, the treatment of alleyways and reducing vehicle speeds by the introduction of Home Zones.
- In 2006/07, the first year of LTP2, the road layout around Quebec Street/Osbourne Street will be altered to keep industrial traffic out of residential areas. The need for this scheme was identified under the SRB1 regeneration initiative, but its implementation was dependent upon property demolition, which has only recently taken place.

Funding Sources

The LTP integrated transport block will contribute £10,000 a year to support wider regeneration programmes including Housing Market Renewal, Single Regeneration Budget and New Deal for Communities. The LTP schemes themselves are being initiated by these various programmes.

Targets and Objectives Met

The schemes taken forward through LTP funding are consistent with LTP targets and objectives in that they will contribute towards achieving BV99 road safety, LTP3 cycling and LTP11 walking.

Case Study 19

Standish Town Centre



Picture 5.14 St. Wilfrid's Church, Standish

Introduction

Standish is one of the smaller town centres in Wigan Metropolitan Borough, in the west of the conurbation. It is situated around the crossroads of the A49 radial route with the A5209 and B5239, which are used as routes around the north side of Wigan. In addition, the former links to Junction 27 on the M6 motorway.

Current Problems and Issues

Standish town centre offers a wide variety of local amenities to which residents could walk. However, the environment is poor for pedestrians. The footways are narrow is some places and many of the junctions have large bell mouths making it difficult for pedestrians to cross. These issues were brought up through consultation with the Townships in Wigan.

Proposed approach

There are two focal points in the town centre, the cross roads which suffers from congestion particularly at peak periods and St Wilfrid's Church which is the only Grade I listed building in the borough. Nearby, the town's ancient wooden stocks and market cross can still be found, along with an old well. At the cross roads MOVA will be introduced to ease congestion, and around the church and stocks environmental enhancements will be undertaken through Heritage Lottery Funds.

Additionally, footways will be widened, junction radii tightened, a controlled crossing facility introduced and disabled parking bays provided. Other street scene enhancements will also be provided, such as tree planting. The materials used will be of high quality to reflect the historic nature of the town centre and this scheme will complement street lighting improvements that have previously been introduced in Standish.

Funding Sources

LTP funding and Heritage Lottery Funds

Targets and Objectives Met

LTP10d, LTP11, BV99

During the next five years, we will take the following steps to improve quality of life by:

- Promoting active travel modes (walking and cycling) as part of everyday life.
- Providing suitable infrastructure and a better environment for those who wish to travel actively
 with a particular emphasis on improving road safety and pedestrian safety and security.
- Making our town centres more attractive paces to visit
- Addressing environmental problems in residential areas, especially those subject to HMRA and other regeneration initiatives
- Using land-use planning to encourage the provision of affordable local goods and services within walking distance.
- Preparing and implementing Rights of Way Improvement Plans



5.3 Regional Centre

If the Regional Centre is to continue to grow and prosper over the LTP2 period its accessibility needs to be maintained and the quality of its environment needs to continue to improve. Many of our major schemes are designed to support this continued growth. Our work to take forward the Integrated Transport strategy also focuses on the need for a complementary package of investment and demand management measures to underpin future growth. Examples include -:

- Metrolink phase 1 and 2 upgrade
- Metrolink phase 3 expansion
- Rail station facility enhancement
- Quality Bus Corridors and other measures to support modal shift to bus
- Measures to encourage more walking and cycling to the centre, especially from the growing adjacent residential communities
- Investigation of and introduction of bus based park and ride facilities where these can be shown to provide a cost effective solution to meeting travel demands in a given corridor

We are also continuing our strategy of improving the environment within the Regional Centre, focusing in particular on the needs of more vulnerable road users and maintaining good access for bus passengers and other visitors to the commercial and retail core area. Examples of proposed measures include -:

 Major enhancement of the bus facility at Parker Street, Piccadilly Gardens

- Introduction of further "all red" phases at key junctions to reduce accidents and improve conditions for pedestrians
- Improved pedestrian and cycle routes across the centre
- Improved connections between the core area and the Oxford Road corridor where major growth in employment levels are forecast
- Introduction of a city centre car club
- Improved signing to different zones and key destinations within the Centre

Over the period of LTP 2 we anticipate the Regional Centre economy continuing to grow with a consequent impact on travel demand. Tables 4.2 and 4.3 indicate the forecast level of increased demand over the LTP2 period and the impact that this is forecast to have on peak period trips. We also demonstrate how we anticipate this demand being met by different transport modes without impacting significantly on the volume of car traffic within the centre. We will monitor these changes closely in association with transport operators and aim to ensure that the accessibility of the centre remains good during the LTP2 period. We recognise however that we need to plan ahead and are currently carrying out a major piece of work to assess at what point in the future congestion is likely to begin to have an adverse impact on the ability of the centre to continue to grow, "the tipping point", and what mix of investment and demand management measures we need to put in place to allow continued growth to take place.

Case Study 20

Enhancing the Regional Centre



Picture 5.15 Shudehill interchange

Introduction

The Regional Centre of Manchester City Centre and the adjacent part of Salford is the principal focus of Greater Manchester, containing 134,000 jobs, with up to 100,000 more expected to be generated over the next ten years. It has a resident poulation of 10,000, which is still rising, and is at the centre of the conurbation's road, bus rail and tram networks

Current Problems and Issues

- Congestion on main roads into the centre
- Incoherent cycling and walking network
- Poor environment in Chapel street area
- Need to accommodate significant increase in jobs and city centre living.

Proposed approach

Traffic management schemes will rationalise traffic flows and give priority to certain vehicle types. A recent example is the restriction of traffic on Cross Street associated with the opening of the new interchange at Shudehill. Pedestrians will be given priority in the Chapel Street schemes. Selective junction improvements, use of SCOOT, and bus priority will ease congestion hotspots. Access to rail stations, especially by foot, will be improved, including the use use of better lighting. The cycling network will be extended, in particular routes to the Higher Educational Precinct, and an east-west cross-town route. Signing of these routes, and walking routes will be significantly improved. Meanwhile, demand will be controlled through the combined effect of parking charges, control of inappropriate commuter parking, and travel behavioural change campaigns. The latter include the Council's own Travel Plan, and working with Friends of the Earth in their cycling promotional campaign in 2006.

Funding Sources

The LTP will fund the majority of this work, but other funding will come from developer contributions. The Friends of the Earth's cycling promotional campaign will use a Local Strategic partnership grant.

Targets and Objectives Met

Main LTP targets addressed include LTP1 accessibility, LTP2,6 and 12a traffic flows and modal split, LTP3 and 11 cycling and walking, and LTP8 and 9 air quality and climate change.

In addition, these measures will focus upon the related Manchester City Council's Local PSA target for modal split into the city centre.

5.4 Manchester Airport

Manchester Airport is pivotal to regional growth and prosperity and is a key growth pole in the Northern Way Aviation acts as a catalyst for economic regeneration and growth in those sectors most likely to improve regional competitiveness. Surface access is one of the four key capacity drivers along with airspace, runways and terminals; passengers and staff need choice, reliability, high service standards and value for money. The airport is a key node in the regional transport network for road, rail and coach. We noted in Chapter 2 that the transport networks serving the airport will need to cater for up to 38 million passengers and 28,000 employees by 2015. This will need a programme of management and investment to ensure that non-car modes play an increasing role, as sufficient capacity cannot be provided for a solely car-based solution. The Airport's Ground Transport Strategy sets out its approach and objectives.

Case Study 21

Manchester Airport Ground Transport Strategy



Picture 5.16 The Station

Current Problems and Issues

Congestion on the major highway network will increase alongside the growth in passenger and staff numbers. Currently, over 40,000 vehicles access the airport on a busy day (resulting in 80,000 trips) and this could increase to over 50,000 vehicles (100,000 trips). The strategic road network cannot be expected to keep pace with such growth; especially given the continuing growth in non-airport road traffic.

Proposed approach

The Ground Transport Strategy addresses the surface access issues of a growing airport. It upholds the vision of an integrated public transport plan for passengers, employees and service partners. It looks forward to the challenges of reducing dependency on the private car by the development of more convenient, affordable public transport links.

Our Ground Transport objectives are:

- Providing quality, choice and reliability
- Increasing public transport use
- Managing car demand and the growing pressure on transport infrastructure

We will achieve these by:

- Increasing capacity on key transport routes
- Extending our network of public transport services both in frequency and destination
- Improving service quality and facilities
- Proactively managing road traffic demand by passengers and staff
- Developing new and innovative solutions eg further demand responsive schemes
- Reducing the number of car journeys per air trip by offering alternatives to kiss and fly and private hire

We have a costed long term plan to further increase the use of public transport:

- The Airport, GMPTE and Network Rail are developing plans for a third railway platform at the Airport's Station. This will allow longer trains, increase capacity and improve reliability. This platform is planned to open in 2008 to coincide with West Coast Main Line service improvements.
- Work is also in hand to develop our Transport Innovation Fund bid, a key component of which
 is the extension of Metrolink to the Airport. The line will provide a hugely improved access to
 the main staff catchment areas, and is expected to carry up to 8 million passengers per annum
 and remove 1.2 million car journeys, thereby relieving congestion on main and local roads into
 both the Airport and Manchester.
- Quality Bus Corridor high frequency routes, improved reliability to accommodate the Skyline services
- The Airport will continue to fund local bus services and demand responsive transport (£265,000 per annum) where the commercial market does not provide services, especially for employees working on shifts outside of normal public transport operations (the Airport being a 24 hour, 7 day a week operation).
- Employee travel planning initiatives will continue to be undertaken to encourage staff to travel by more sustainable modes. The role of cycling is pivotal for local employees; already 2% cycle to work. The Cycle Centre, located at the Station, is used not only by Airport employees but also nearby business parks, hospitals and schools. The Airport encourages cycling for inbound and outbound air passengers, providing route information, bike and equipment hire, and establishing a network of safe and convenient cycling and walking routes within the Airport site. It is working with local authorities to improve access by cycle and foot to the Airport site.
- The Airport will maintain taxi ranks outside each of the terminals for approved taxis and offer a choice of Airport approved taxis and other hired services for use on demand.
- Improved rolling stock (new Transpennine Express trains from 2006).
- Other projects including the provision of real time information, increased marketing and travel awareness campaigns, and the development of remote check in facilities

Funding Sources

The strategy will be implemented using a mixture of LTP major scheme and Integrated Transport Block funding, Transport Innovation Fund and Manchester Airport's resources.

Targets and Objectives Met

In particular implementation of the Ground Transport Strategy will help achieve targets BV102 public transport patronage, LTP2 area wide road traffic, LTP7 congestion, LTP8 air quality, LTP12c modal split to the airport.

5.5 Rural Issues

Transport solutions in such areas should maintain and preferably enhance their rural character.

Appropriate public transport in rural areas is a key objective of the accessibility strategy. We will continue to look to use Rural Bus Challenge and Rural Bus Subsidy Grant funding to provide services in isolated communities in a bid to access education, health and employment facilities. This will be done with a mixture of mainstream bus services and demand responsive schemes, including shared taxis. Particular attention will be given to informing the community and visitors to the area of public transport options.

Comparatively low patronage in rural areas makes investment in rail difficult to justify in terms of rate of return. Community railway partnerships around Greater Manchester have been initiated to explore ways that rural/semi-rural stations can be improved and maintained. GMPTE has used Rural Bus Challenge funding to improve facilities for rail-bus interchange at stations in rural areas and to provide demand responsive services linking the rural areas with the rail network and this will continue.

We will consider providing safe walking, cycling and horse riding routes in rural communities, both on the highway network and the rights of way network in line with a key objective of the draft rights of way improvement plan, "to improve accessibility by ensuring the Rights of Way Network meets the needs of all sections of the community and the rural economy, promotes social inclusion and widens choice". Rural routes will complement similar networks in adjoining boroughs. The Rights of Way Improvement Plan

will assist in identifying improvements in rural areas for leisure as well as utilitarian purposes for all users e.g. pedestrians, cyclists, horse riders.

A number of National Cycle Network (NCN) routes (eg the Trans-Pennine Trail and the Pennine Cycleway) pass through such areas in addition to more urban settings. It is proposed that NCN routes within Greater Manchester, as described in Figure 5.1, should be substantially complete by 2011.

The emphasis over the LTP1 period on rural and semi-rural roads has been largely on the safety issue, but there is still more to do. In LTP2,we shall be examining the scope for 'quiet lanes' and specific maintenance policies for rural areas.

The Greater Manchester authorities will continue to work together with neighbouring authorities in rural areas. A particular example of this is the Peak District National Park, where the Stockport, Oldham and Tameside authorities, along with a number of other authorities outside the Greater Manchester area, consider the cross-boundary implications of transport demands- especially those for recreation in the National Park.

5.6 Asset Management

Greater Manchester Maintenance Strategy (GMMS)

The GMMS, along with the Transport Asset Management Plans which are being produced by the local authorities, provide a sound base for the continued maintenance of the highway network as a whole. The GMMS identified key objectives for maintenance to be prioritised based on the needs of the local area.

The Main objectives for the GMMS are; (iii)

- Maintain a safe network of highways
- Ensure network availability
- Achieve network integrity
- Ensure reliability of network
- Maximise value to the community
- Improve accessibility across the network
- Maintain a safe network of bridges and structures
- Ensure accessibility on all LA owned bridges and structures
- Maintain a safe and comfortable waiting environment
- Influence private sector operators to maintain a safe, efficient and reliable public transport network

Over the next five years this should help to create a more reliable network for all users with improved levels of maintenance, a reduction in delays due to improved co-ordination of repairs, improved safety and an improved physical environment.

Over the long term we anticipate:

- More sustainable and long lasting effective maintenance of roads and bridges.
- Increasing consistency of quality within the network
- Added value from maintenance work due to development of integrated facilities via maintenance program.
- Increased user satisfaction.

Detailed progress in developing TAMPS is provided in the LTP Annex

Rights of Way Improvement Plans

Greater Manchester Local Authorities will be producing Rights of Way Improvement Plans (RoWiPs)^(iv) during the first part of the LTP2 period. These RoWiPs will contain detailed assessments of the potential of each authority's rights of way networks to meet present and future needs of various user groups and identify measures to improve the networks. The RoWiPs will contain a 10 year action plan for the management and

improvement of the network. Initially the work identified will be actioned within the works programme outlined in the LTP but over the period of the Plan it is intended

- to prioritise the upgrading of routes due to identified local need.
- create new routes where needs are identified, and
- ensure that the local network links with and supports other larger routes to create a more cohesive network.

The RoWiPs in Greater Manchester will be guided by the following principles:

- Improve the accessibility, environment, attractiveness and safety of the regional centre, town and district centres and employment areas.
- Improve road and community safety
- Minimise environmental damage caused by transport, thereby improving the quality of life and health of the population
- Increase the proportion of trips made by non-car modes
- Improve accessibility by ensuring the ROW network meets the needs of all sections of the community and the rural economy, promotes social inclusion and widens choice
- Improve links with the rest of the country
- Maintain, improve and make best use of existing ROW, and ensure all schemes offer long-term value for money
- Assist in improving health, the local economy and recreational opportunities

These principles and the resulting plans will support the shared priorities both through the actions in the plans and by supporting other policy areas including the cycling, walking, and accessibility strategies.

iii The Greater Manchester Maintenance Strategy can be found in the LTP2 Annex

iv The deadline for publication of RoWiPs is November 2007 Reports from individual authorities on progress towards producing them are contained in the LTP2 Annex.

RoWiPs can assist the Shared Priorities

Through:	Resulting in:
Encouraging the use of non-motorised transportation by identifying network improvements that will increase the usability of the network for different trips.	Management and reduction of congestion Improvement of air quality Improved road safety
Better integration of the RoW network with the road system offers opportunity for segregated use where appropriate	Reduced conflict between modes Improved safety for all users including horse riders
Improvements to the infrastructure will increase levels of accessibility to the RoW network. Improvements to the network to increase the facilities that are accessible through it improving opportunities for people with limited transport options.	Promotes inclusion Increases quality of life

Table 5.2 RoWIPs can assist the shared priorities

Overall, providing and promoting a network for trip making by non-motorised means will help us to achieve a more physically active society and so an improvement in the health of the population.

Highway Maintenance

In the light of the achievements of the first Greater Manchester LTP, and the proposed improvements outlined as part of the 5 year capital programme for LTP2, there have been and continue to be major changes in the way we manage maintenance of the transport infrastructure. These changes have also been driven by new codes of practice for Highways Maintenance Management, Management of Highways Structures and Street Lighting. Improvements in our approaches to maintenance will contribute to the success of LTP2 in two ways:

- By ensuring the sustainability of programmed improvements, by maintaining new infrastructure to higher standards,
- By directing maintenance operations on the network as a whole in such a way that it supports the LTP objectives, particularly with regard to the shared priorities for safety and reducing congestion.

The Greater Manchester Maintenance Strategy contained in the LTP2 Annex Volume 1 (A1.7), outlines common objectives for all of the Greater Manchester Authorities. For the first time the Greater Manchester Local Authorities and GMPTA are now considering maintenance of transport infrastructure in its entirety. This means that highway and structures maintenance considerations will be placed alongside maintenance of public transport infrastructure to enable the delivery of maintenance programmes to support improvements through the bus strategy and other component strategies for walking, cycling, road safety, freight transport.

The overall priority of the strategy is to support the delivery of a safe, reliable, accessible and sustainable transport system, which meets the requirements of a modern, regenerated, attractive and competitive conurbation. The objectives of the strategy are in line with the new Codes of Practice for Highways Maintenance Management, Management of Highway Structures and Street Lighting. These are as follows:

- To prioritise expenditure based on local needs and achieving maximum value to the community but with reference to LTP objectives concerning economic and urban regeneration, social inclusion and environmentally sustainable transport.
- To ensure network availability and facilitate reliability for all users, particularly public transport, pedestrians and cyclists
- To undertake regular reactive and cyclic maintenance to ensure the integrity of the fabric of the highway
- To ensure maximum accessibility for all users during maintenance works
- To improve the integrity of the network
- To maximise value to the community by seeking to incorporate integrated facilities (eg bus, cycle and pedestrian) as part of maintenance programmes
- To assist maximum efficiency of the network by maintaining signage for all users
- To minimise cost over time by using whole life costing, projections of network condition and economic ranking techniques
- To obtain maximum environmental benefit through specifications and methods of working
- To provide safer streets by improving lighting on the network and maintaining it
- To gradually shift more resources away from reactive works to planned and preventative maintenance
- To reduce our liability on claims which will free resources for further enhancement of the network

We will meet these objectives by pursuing the following measures:

- Maintaining bridges, structures, carriageways, footways, off road cycle routes, signage, Public Rights of Way and street lighting efficiently, effectively and to modern standards:
- Deploying a robust monitoring regime of public transport related operating standards;
- Maintaining high standards of facilities maintenance at bus stations and bus stops;
- Maintain enhanced and improved traffic management and safety measures provided

- through the LTP process to agreed standards.
- Maintain the efficient flow of traffic through the requirements of the 2004 Traffic Management Act;
- Incorporating design features within maintenance works that achieve wider LTP objectives, including the provision of roadspace reallocation, enhancements to pedestrian crossings, disabled persons access, raised kerbs at bus stops etc.
- Employing environmental best practice in respect of site management, the recycling and safe use and disposal of waste material, hours of operation, use of locally sourced materials, improvement of air quality where practicable and responsible fleet management practices.

These objectives, and the measures to support them, must be placed in the context of a significant backlog of maintenance work required on the network across Greater Manchester. This means that a balance must be struck between sustaining capital improvements through LTP2, and clearing this backlog of reactive maintenance. Individual authorities have made significant progress towards developing Transport Asset Management Plans (TAMPs) that will address this issue by identifying the options that deliver best value for money in the short, medium and long term, in relation to the mix of reactive, planned and investment in preventative maintenance. This will ensure that the gradual shift towards more preventative measures, and greater attention to new higher standards of infrastructure, does not compromise local needs for safety and network reliability in the short and medium term.

As such the TAMPs will provide a framework for robust and objective appraisal of options in terms of their contribution to local priorities and LTP objectives. The TAMPs will also aim to improve co-ordination between maintenance, network management and highway improvement programme development to ensure maximum efficiency an minimal disruption through highway infrastructure operations.

Annex A1.8 describes progress and further work towards the development of TAMPs, which should be completed by March 2007.

Case Study 22

Retaining Walls, Oldham MBC



Picture 5.17 Linfitts wall, Delph

Introduction

Oldham Metropolitan Borough is situated in the north east of the conurbation. The topography of Oldham is quite contrasted. To the west are the relatively low-lying areas of Failsworth, Chadderton and Royton, whilst to the east and north east the settlements are in much hillier areas such as - Shaw and the South Pennines Saddleworth villages. It is in this part of the Borough that a substantial number of major arterial roads were built into the hillside supported by traditional drystone walls, many of which are well over 100 years old.

Current Problems and Issues

General weathering and the relentless increase in traffic had been posing increasing maintenance problems, particularly from 1990 onwards. The development of a GIS retaining wall database and a comprehensive condition assessment of retaining walls throughout the Borough in the late 1990's identified over 21km of retaining wall in either a failed or failing condition. It became obvious that in order to tackle the problem a substantial increase in funding was required and resulted in the submission of a Supplementary Major Maintenance Bid in 2001.

Approach Taken

The prospect of continued funding over a number of years, specifically for retaining wall strengthening and reconstruction, provide an opportunity to review design, procurement and delivery strategies and to adopt "Rethinking Construction" and "Partnership" principles to the whole process. The objectives we want to achieve can be distilled into: -

- reduce lead-in times from design to construction
- apply a "system build" approach to retaining wall design and construction
- maximise the benefits of economies of scale by providing continuity of work for contractors
- a high degree of price certainty
- maintain and improve on the high level of workmanship achieved in previous years

- flexibility of contract to be applicable throughout the Borough and for a number of retaining wall solutions without re-tendering
- improve safety and consideration for the public and reduce disruption.

With retaining walls in the Saddleworth area being predominantly of natural drystone construction, the Council's engineers were keen to maintain the built heritage and promote sustainability in construction. As a consequence the specification for wall reconstruction stipulates the reuse of recovered materials, particularly existing walling stone, as much as possible. Reclaimed stone is used as a facing to mass and reinforced concrete walls and together with the stipulation for recessed pointing, helps to replicate the drystone appearance.

Funding Sources

Owing to the scale of the retaining wall problem in Oldham and the limited funding available through the LTP Structural Maintenance Allocation, funding has had to rely on major funding via a Supplementary Major Maintenance Bid in 2001. A five year major scheme is being completed in 2005/06, and a further bid has been submitted for an extension of this project

Targets and Objectives Met

Overall the scheme has contributed significantly at a local level to Government objectives. The Bid was assessed with reference to the Government's NATA appraisal framework and showed positive impacts against the stated policy objectives of Environment, Safety, Economy, Accessibility and Integration. In addition an economic evaluation of the bid showed a significant cost benefit ratio in favour of the proposed Works.

The objectives set at implementation stage (see Approach Taken above) have been met with an innovative retaining wall framework contract that delivers high quality work in sympathy with its environment. The system build approach to retaining wall reconstruction has enabled speedier delivery of schemes through a reduction in lead in times for design, tendering and contractor mobilisation. Value for money considerations were addressed through the competitive tendering process in line with European legislation and a rigorous tender appraisal based on a quality and price submission. This has helped to ensure a high degree of price certainty and to build in measures to minimise disruption and consideration for the public.

5.7 Corridor Partnerships

Our corridor partnership initiative is a key mechanism for taking forward the delivery of the proposals set out in the ITS. The objectives of the partnerships are to:

- Engage all key stakeholders in the development of integrated transport and regeneration plans for the corridors.
- Agree a series of outcome based targets for the corridor which members of the partnership are individually and jointly responsible for delivering and which are linked to the availability of future TIF funding
- Ensure that different transport modes in the corridor work together to deliver the outcomes that we want to see in the most effective way.
- Ensure that locally determined transport spend in the corridor is allocated in a way which demonstrably meets transport objectives.

The fundamental focus would be upon gearing investment and measures to directly support Manchester's Greater broader economic competitiveness and social inclusion agenda. This proposal offers a highly innovative approach that could not only strengthen local governance and accountability arrangements but also facilitate access to the TIF designed to deliver the bold and transport solutions required creative Government.

The partnerships will have a core membership of GMPTA/E, the local authorities and transport operators. The other invited partners will vary according to local circumstances but include regeneration agencies, representatives of the health and education sectors, major employers and other key stakeholders who will be responsible for helping to deliver the detailed transport strategies and targets and an agreed programme of policy measures and infrastructure investment.

In the first instance partnerships are being established in the corridors in which the three Metrolink extensions are planned together with the Leigh-Salford-Manchester Corridor where the bus-way proposal is a priority future public transport scheme. Thereafter the intention is to

roll the initiative out across Greater Manchester. We will include monitoring reports along with plans for the further corridors in our progress reports.

There are, of course, also strong patterns of orbital movement in parts of Greater Manchester and, although there will be a need to consider orbital movements between town centres in radial corridors in the development of each corridor's transport plan. Consideration is being given to the inclusion of an orbital corridor within one of the early phases. Fig. 5.2 shows the corridors envisaged, as follows:

Phase 1

- Manchester Droylsden Ashton Stalybridge/Greenfield
- Manchester Failsworth Oldham Shaw
 Rochdale
- Manchester Swinton Leigh
- Manchester Chorlton/Didsbury Wythenshawe – Airport

Phase 2

- Manchester Stockport Hazel Grove/Cheadle Hulme
- Manchester Prestwich Whitefield Bury
- Manchester Farnworth Bolton Lostock/Bromley Cross (Blackburn) (see note
 1)
- Manchester Salford Eccles Irlam
- Manchester Sale Altrincham Hale
- Manchester Reddish Romiley Marple (New Mills)
- Manchester Audenshaw Hyde Hattersley (Glossop)
- Manchester Middleton Rochdale
- Manchester Atherton- Hindley- Wigan
- Manchester Trafford Park Urmston Flixton (see note 2)
- Manchester Didsbury Stockport/Airport/Heald Green
- It is proposed to invite Blackburn with Darwen Council to be members of this partnership and to use it as a potential pilot for cross boundary working. We would seek to extend

- the concept of cross border working more generally as the process develops.
- 2. Work on this partnership could be accelerated if private sector funding becomes available

The rationale for identifying the above corridors is that they all have strong public transport routes at their core. A key objective of each partnership would be to develop an integrated transport plan for the corridor. This would set out the complementary roles of different public transport modes in the corridor and explain how appropriate complementary policy measures (including the whole range of soft measures) can help to support the achievement of targets and maximise the benefit of the public transport investment. The partnerships would also have a key role to play in ensuring that future transport, land use planning and regeneration policies and initiatives were effectively aligned and that intelligence about future development timescales and other factors influencing travel demand is effectively shared with public transport operators.

Each corridor transport plan will contain a route map for the management of traffic movements aligned to land use planning and regeneration strategies over the next 5 to 10 years. Key components of each corridor plan will be:

- Behavioural change and smarter travel strategies for the corridor
- Demand and congestion management measures for the corridor based on identified thresholds
- Public transport patronage targets and related targets concerning congestion and accessibility
- Public transport improvements for the corridor
- Road safety and personal security plans for the corridor
- Sustainable development and air quality standards for the corridor
- A social needs transport strategy
- Investigation of the role of strategically-located park and ride sites in support of corridor strategies

The plans will also need to contribute to -:

- Employment based targets
- Regeneration and competitiveness targets

The partnerships will engage all the key players in ensuring that transport planning is effectively integrated with the delivery of a much wider set of outcomes than has historically been the case. Although this still needs to be the subject of further discussion, the intention is that delivery would be driven by a form of Local Area Agreement (LAA). The first partnerships are being established on a pilot basis and will be developed prior to the wider extension of LAAs to all Local Authorities. The corridor partnerships could therefore potentially become a sub-set of a wider LAA in the authorities concerned and prove an invaluable mechanism for fully integrating transport activity into the wider regeneration agenda.

The intention is to roll out the corridor partnership approach across all of the identified corridors plus an orbital corridor (to be determined) during the lifetime of LTP2.

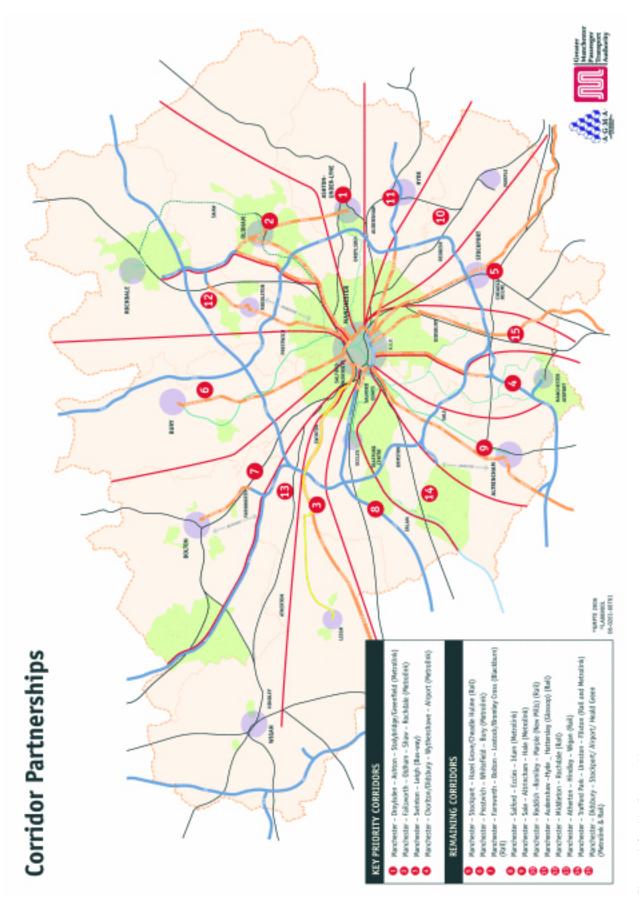


Figure 5.2 Corridor Partnerships

5.8 The SEMMMS Programme

The South East Manchester Multi-Modal Strategy contains a package of measures, which, over a 20 year period of delivery, will provide a balanced set of travel alternatives needed for the area. The main elements of the strategy are:

- Better use of road space
- Transport change
- Freight
- Urban regeneration
- Improvements in network maintenance and safety
- Improvements to public transport
- Better interchange
- Rail service improvements
- Light rail extensions

Throughout the LTP2 period, the authorities in the SEMMMS area (Cheshire C.C, Derbyshire C.C, Manchester C.C, Stockport M.B.C, Tameside M.B.C, and the Greater Manchester Passenger Transport Authority and Executive) will be focusing on the development and implementation of both major and minor elements of the strategy. This time will also be used to develop proposals for the Metrolink development through Stockport and the larger rail proposals.

The integrated transport package and the travel change elements will be continuing themes throughout the process. Early wins are possible within the existing conditions but major changes (for example the New Relief Road Scheme, completion of the QBC package and the Rail and Metrolink schemes) will all provide further opportunities for travel change and reallocation of road space to more sustainable modes.

Part of the work planned will be the continuation of improvements to the A6 corridor from Manchester to the edge of the Derbyshire SEMMMS area. This work includes improvements to bus stops including higher kerb levels for low-level buses and Real Time Information for bus routes between Derbyshire and Manchester, via co-operative working between the GMTPE, Cheshire County Council and Derbyshire County Council.

Changes such as these will help not only to take forward the targets set within the SEMMMS Plan but also many of the targets set at local and government level within LTP2.

The SEMMMS implementation plan 2006/7 – 2010/11 describes the work program in more detail and identifies the funding amounts allocated for each area in line with the identified funding made available for SEMMMS. A copy of this plan can be found in the LTP2 Annex.

Case Study 23

Improving Travel on the A6 Through Stockport



Picture 5.18 Access improvements for disabled people, A6 corridor

Introduction

A comprehensive set of improvements will make it easier to travel along the A6, which links Derbyshire, Cheshire and Greater Manchester.

Current Problems and Issues

- Congestion, especially in peak periods, giving rise to unreliable journey times, especially by bus.
- Road safety problems, especially pedestrian casualties due to the retail and service outlets either side of the road in built up areas.

Proposed approach

All traffic signal junctions have been upgraded, which has helped reduce congestion for the benefit of all road users. More pedestrian crossings have been installed to improve safety and make crossing the road easier and thus tackling the problem of severance of communities.. Cycling facilities are being enhanced, particularly to improve priority and safety. More lay-bys for servicing and residents parking will be provided which also assist traffic flow.

All bus stops are being provided with raised kerbs, where physically possible, to make getting on and off the bus easier particularly for those with buggies or having impaired mobility.

In many areas bus shelters have been installed, again where physically possible, to provide passengers with a safe, dry and well-lit place to wait for their bus. Work is under way to extend the installation of real-time passenger information along the length of the A6 south of Hazel Grove into Cheshire and Derbyshire.

Bus operators have also been improving their services by introducing higher-capacity vehicles, which are also less polluting, and introducing buses which have low floors specially designed to work with raised kerbs. The average age of vehicles using this Corridorwill continue to reduce as older vehicles are phased out.

Overall, the expected result is a more attractive, easily accessible and reliable bus service.

Bus routes that are benefiting from these new improvements include local services between Manchester City Centre and Hazel Grove and also those that run through Disley in Cheshire and Buxton in Derbyshire. These routes include the Trans-Peak service between Manchester and Nottingham and the frequent Buxton-Disley-Stockport-Manchester Airport service.

Funding Sources

Councils in Cheshire, Stockport, and Derbyshire have been working alongside Greater Manchester Passenger Transport Executive, using a mixture of SEMMMS and LTP Integrated Transport Block resources and other funds. Investment that started during LTP1 will continue in LTP2.

Targets and Objectives Met

These works will contribute in particular to meeting our targets on BV99 road safety, BV102 bus patronage, BV104 bus satisfaction, LTP2 cycling, LTP5 bus reliability, LTP6 peak traffic to town centres, LTP7 congestion, LTP8 air quality, LTP10 accessible infrastructure, LTP11 walking and LTP12b modal split to key centres.

5.9 Transport Infrastructure Fund

The Transport Infrastructure Fund (tif) was established in 2001/02 as part of an agreed funding package between GMPTA and the Government made up of £3.5M PTA resources and £3.5M SCE per year for 10 years to complement the construction of Metrolink Phase 3. The agreement was a partnership arrangement between GMPTA and Government to work together to enhance transport facilities and accessibility in the western areas of Greater Manchester that will not benefit from Metrolink.

Progress to date overall has been good with key achievements in Bolton in 2005/06 including the completion of the Ticket Office at Horwich Parkway Rail Station, completion of the upgrade to the overbridge and lifts at Bolton Interchange Rail Station and completion of the re-modelled bus station and taxi rank at Bolton Interchange Bus Station. Advance works have commenced for

improvements at Manchester Road/Lower Bridgeman Street and at Tonge Rd/Thicketford Rd including pedestrian facilities. The access road, drop off and car parking facilities are now complete at Kearsley Rail Station. This builds on improvements made in 2004/05 including completion of works at A58 Beaumont Rd/Wigan Rd providing upgraded pedestrian facilities, improved access to bus stops and more efficient junction operation, reducing bus journey times. Improved pedestrian facilities linking bus routes to the university have been completed on College way. Phase 1 of the Bolton – Middlebrook cycle track comprising 3.5km is complete with Phase 2 now underway. The A6 Station Rd, Blackrod junction is now complete providing pedestrian facilities and improved pedestrian linkages between the village and rail station. A programme of joint funded Disability Discrimination Act upgrades at traffic signals has been carried out. A bus turn round has been completed providing better access to buses for pupils at Mount St Joseph Secondary School. The Bridgeman St/High

St junction has had pedestrian facilities upgraded, access to bus stops improved and bus journey times reduced across the junction. Parking spaces have been increased at Bromley Cross Rail Station Park and Ride in Bolton. De Havilland way has been widened allowing buses to gain access to the business park. Extensive accessibility works to improve street lighting, upgrade bus stops and provide better pedestrian links has been carried out along a number of bus corridors.

Key achievements in Wigan in 2005/06 include the completion of the new 50 space car park at Hindley Rail Station, completion of works on the Wigan to Chorley QBC, upgrades to bus stops on the Easylink route and completion of the junction improvements and pedestrian enhancements at Atherton Town Centre on the Leigh to Bolton QBC and at the Bird I'th Hand junction on the Wigan to Leigh QBC. A further three new yellow school buses have also been purchased and brought into operation. This builds on progress in 2004/05 including completion of Phase 1 of the Standish Township improvements and final works to the Market St, Wigan pedestrianisation scheme. Advance works have been carried out for the bus turn round at St Mary's High School, Astley. New canopies have been provided to improve pedestrian accessibility to Wigan Bus Station as part of a joint funded scheme. Three new yellow school buses have been purchased and are in operation increasing bus use and reducing anti-social behaviour. In Hindley Town centre, junction improvements have been implemented which will ease bus manoeuvres through the junction. Real Time Passenger Information equipment for installation in bus shelter s and on buses has been funded. On the Leigh – Bolton Quality Bus Corridor junction improvement work has been completed in Atherton at Mealhouse Lane/Flapper Fold Lane providing improved pedestrian crossing facilities and better access to bus stops. Market Street, Atherton, has been made a bus only street during the day and bus stop waiting facilities have been improved. Extensive accessibility works to improve street lighting, upgrade bus stops and provide better pedestrian links has been carried out along the Wigan – Chorley, Wigan – Ashton and Easylink bus corridors.

An extensive programme of transport infrastructure fund schemes has now been developed for the life of the programme with aspirations having been raised through public consultation on proposals. It is therefore essential that tif funding is secured beyond 06/07 to ensure that the objective of producing a public transport system in the west of Greater Manchester that provides a realistic alternative to the private car is achieved. The schemes are similar types to Integrated Transport Block schemes and are designed to address identified problems and issues and support LTP2 Objectives. The schemes include:

Bolton

- Bus corridor works to support objectives 2,3,6 and 8
- Rail station improvements to support objectives 3,4,6 and 8
- Town centre public transport improvements to support objectives 2,3,5 & 6
- Bus stop environment improvements to support objectives 2 and 5
- Route lighting improvements to support objectives 2 and 5
- Public transport interchange footpath improvements to support objective 5

Wigan

- Design and preparatory work for A5225/Wigan Inner Relief Road to support objectives 1,2,5,6 and 7
- Bus stop waiting environments to support objectives 2 and 5
- Street lighting improvements to support objectives 2 and 5
- Rail station improvements to support objectives 3,4,6,8
- Bus corridor works to support objectives 2,3,6,8
- Real time passenger information to support objective 5
- Disability discrimination act improvements to support objective 5

5.10 Major Schemes

5.10.1 Metrolink

The GMITS identifies the expansion of the Metrolink network and renewal of the existing system as a priority. Metrolink has been proven to be very effective in achieving modal shift, which will become increasingly important as the sub-regional economy expands.

Metrolink Phase 1-2 Renewals

A key element of the Metrolink Phase 3 scheme was a programme of upgrades to the existing Metrolink lines. In July 2005, the Secretary of State conditionally approved proposals which had been submitted in January 2005 for the allocation of £58m of the agreed £520m to fund 8 additional trams, improvements to stops (including lighting, information and accessibility, along with new ticket machines) and major infrastructure works including the upgrade and renewal of the sections of former railway lines and other works in Manchester city centre. The approval of this spend is subject to a number of conditions being met, in particular that there will be no increases in cost. The £44M balance of the programme will be funded by GMPTE. The total funding package will deliver the following improvements to the existing network:

- capacity improvements/system reliability works – primarily 8 additional trams together with the associated facilities/upgrades
- Infrastructure works including Disability
 Discrimination Act/personal safety works,
 track improvements, new ticket vending
 machines, together with associated project
 management, design and contingency costs.

A shortlist of four bidders has been drawn up for the supply of trams, and another five companies have been invited to bid to renew the track. The timescale envisaged for the project is:

- Track renewal completed Autumn 2007
- New vehicles in service Autumn 2008
- existing vehicle modifications, stop and equipment improvements delivered under a new concession from January 2007 onwards.

Metrolink Phase 3

In July 2004 the Secretary of State withdrew funding for the Phase 3 Metrolink extensions owing to the rise in cost of the project. A ministerial working group was set up with DfT to find a way forward and met between September and December 2004. The Government subsequently confirmed that the original offer of £520m was still available for Metrolink expansion in Greater Manchester.

In April 2005, the countywide Integrated Transport Strategy, developed by GMPTA and AGMA, was submitted to DfT. This reaffirmed Metrolink as the solution for the most appropriate Oldham/Rochdale. Ashton Manchester/Manchester Airport corridors and set the light rail proposals in a multi-modal context, with supporting behavioural change strategies. It also included a revised procurement strategy for Metrolink. Following more detailed appraisal, the South Manchester/Manchester Airport scheme was modified and only the eastern section of the loop which travels through Wythenshawe to Manchester Airport is now included in the current scheme. The revised scheme is £40M cheaper than the original, and makes the line the best performing of the proposed extensions in terms of costs and benefits. The powers that would enable the western part of the loop to be built will , however , be retained, in order to improve transport links to Wythenshawe Hospital further, and to serve proposed developments in the Davenport Green area. (see Fig 5.3)

Metrolink Phase 3 has now been identified as a priority for regional funding allocation in the regional prioritisation process. We are now exploring other funding sources, including the Transport Innovation Fund, and prudential borrowing. Dialogue with DfT is continuing.

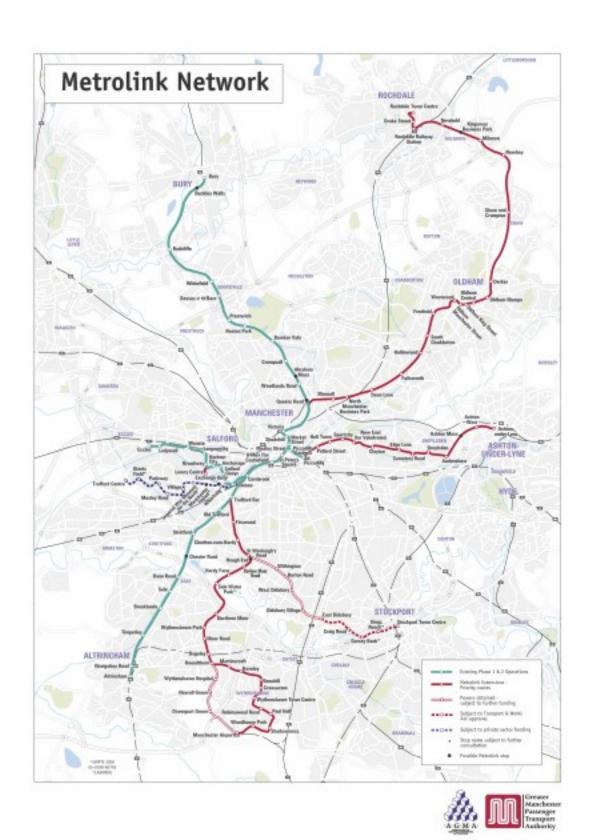


Figure 5.3 Metrolink Network

Metrolink Extensions to Stockport and Trafford Park

The Metrolink extension to Stockport was submitted in 2001 as a priority major scheme for Greater Manchester. Since then discussions have concentrated on the funding of the Airport, Oldham and Rochdale, and Ashton Lines, but DfT did not reach a conclusion on the Stockport extension. Once an agreed way forward is reached on the Phase 3 lines, further consideration will be given to this scheme, which we are committed to implementing. The proposed extension to Trafford Park remains as a scheme for which future Metrolink tenderers would also be asked to submit quotations. This scheme would be financed by the private sector.

5.10.2 Progress on Fully Approved Schemes

Manchester -Salford Inner Relief Route - Final Stage

This scheme completes the Inner Relief route round the Regional Centre. Construction of the third and final section (Irwell Street/Gore Street) started in January 2004 and all works were completed in November 2004.

Urban Traffic Control Block Replacement Scheme

This is an essential part of making best use of the transport system.

During the LTP1 UTC major scheme period the following outputs have been achieved:

- Connection of all traffic signal controlled junctions and crossing installations to central computers for either control or monitoring purposes.
- A UTC main system has been installed and commissioned with the capability to operate up to 1200 sites on SCOOT. Currently 1100 sites are connected to this system with 200 operating under SCOOT control and 900 on fixed time plans. Of the sites currently operating fixed time a further 50 sites are in progress of being modified to allow the operation of SCOOT with the infrastructure cost of the SCOOT facilities being met

- through the QBC top slice, Northern Orbital and SEMMMS programmes.
- A new control room has been constructed and commissioned with all control, operation and fault management facilities fully integrated onto a common platform. This local network platform is then connected to a UTMC common data management facility with the facility to communicate to the GPRS network of 'T' mobile and to UTMC compliant communications networks.
- The 30 UTC CCTV cameras in operation in the regional centre are currently being converted onto the BT optical fibre network to give improved picture quality and reduced communications revenue costs. Connections to camera systems in Stockport and Bury are in progress, these further facilities will allow the UTC control room to monitor 8 cameras round Bury Town Centre and up to 30 cameras around Stockport Town Centre.
- The installation of a UTMC compliant communications network is in progress in Bury Town Centre. This will provide for the connection of some 70 on- street devices in and around the Centre. 28 traffic signal junctions and pedestrian crossing installations will be connected via UTMC OTU's with 26 sites operating under SCOOT and 2 sites operating fixed time. 9 traffic flow count sites are being installed and an evaluation is in progress of the potential for the provision of a car park guidance and information system. This project shows how it is possible to increase the capacity of the network to provide for the introduction of Intelligent Transport Systems whilst containing communication costs. UTMC communications provide a cost effective and flexible platform for connectivity of multiple transport control and information devices.
- At the commencement of the major scheme project there were over 250 traffic signal controlled junctions with equipment which was over 20 years old. This number has now been reduced to some 40 sites and of these 15 sites are in progress of being modernised. This has been achieved through a combination of funding from the UTC major scheme, district schemes, new development projects and the QBC programme. Additional benefits have been achieved during the

- course of this modernisation programme in that the majority of sites modernised have been provided with pedestrian crossing facilities.
- A parking guidance and information system comprising 14 car parks and 21 VMS signs is now operational in Stockport town centre using UTMC compliant GPRS communications and operated from the UTC control room CDMF (common data management facility). The revenue communication costs of this scheme is less than £12,000p.a. as a result of the use of UTMC compliant equipment compared to the original proposed system which was forecast to have a communications cost of £35,000 p.a.

Cadishead Way Stage 2

This scheme has provided a 2.4km bypass of the existing A57 through Cadishead. Construction started in February 2004, and completion and opening to traffic was achieved during 2005, within the budgeted scheme cost of £18.2 million. It has won a national construction award.

Central Park Transport Gateway

Central Park, a major employment site within Greater Manchester, is the UK's first urban business park, and is comparable in terms of physical area to Manchester city centre. Working with key investment and development partners, the Phase 1 site has already been assembled and prepared and is now home to Fujitsu's new Manchester offices.

One Central Park opened its doors to the first intake of students on 3rd October 2005. Designed to be a one-stop shop for training and employment opportunities in new technology, and led by the Manchester College of Arts and Technology (MANCAT), in association with the three Manchester Universities, this state-of -the -art £20M building is an adult learning campus, which caters for up to 900 students.

The £36m Transport Gateway scheme celebrated its opening on 10 November 2005. Funded jointly from the successful LTP bid, Manchester City Council, GMPTE and ERDF, the Gateway comprises the Gateway road, the new Metrolink

station and the bridge which is proposed to carry the Oldham/Rochdale Metrolink extension. Tendered bus services have been diverted into the site, which is also in the area served by the East Manchester demand rsponsive transport scheme. Since development is still in its early stages, there should be later opportunities for commercial bus operations on the road infrastructure. The private sector will invest £217m in the ongoing development of Central Park, of which £48m has already been achieved.

Oldham Retaining Walls

The Oldham Retaining Walls Framework contract commenced in August 2002, and is to be completed by 31 March 2006. £11M of the £14M programme has now been spent. The current contract has achieved the reconstruction of approximately 5km of retaining walls. Other significant lengths of retaining walls will still require reconstruction. A new major maintenance bid has therefore emerged from the prioritisation process on the short-list of major schemes for inclusion in final LTP2. This future retaining wall scheme is likely to require a sum of around £20M over five years to complete the programme of works identified in the original Framework bid document.

Northern Orbital QBC

Work is on target to deliver the full package of measures associated with the £9.47M scheme programme of work by March 2007. Public consultations on key corridor schemes have been carried out in Bolton, Bury, Manchester and SCOOT schemes have been Rochdale. completed on both the A58 in Bolton and Bury Town Centre. Similarly, work has commenced on the implementation of SCOOT on the A58 at Smithybridge in Rochdale. In Bury, work has commenced on the construction of a large scheme on the A58, including carriageway widening to allow for the provision of new lengths of bus lane and the construction of a new junction at Bolton Rd/Ainsworth Road. A city-bound bus lane in Middleton, Rochdale, has also been implemented, providing journey time savings and reliability improvements. Work is to commence on the A664 in Manchester, providing inbound and outbound bus lanes close to the City Centre. To date, approximately 70% of the bus stops have been

upgraded on Northern Orbital corridors, with the remaining programmed for completion by March 2007.

SEMMMS QBC

Good progress is being made on this £23M scheme, with a number of completed schemes providing benefits for buses and other road users. Examples of completed schemes include, in Manchester, a £2M safety and regeneration scheme in Rusholme (part funded through ERDF) and a package of improvements for Chorlton District Centre Parrs Wood Kingsway/Moseley Road/Birchfields Road. In Stockport, investment in Bridgefield Street has significantly addressed problems of traffic congestion around car parks; delays to the bus services; poor pedestrian vehicular and cycle access and the run down and unattractive appearance of the area. Junction improvements have also been delivered in Shaw Heath; and Lancashire Hill. Work has started on Reddish Road/Gorton Road (Stockport)and Hyde Road (Tameside). Consultation has been carried out on schemes in Didsbury village and Stretford District Centre, and is currently under way for a scheme at Denton (Tameside). Design work is at an advanced stage for a busway through the Portwood Roundabout (M60 J27), and a study has been completed for a busway at M60 J1. A programme of bus stop improvements across the whole SEMMMS network is also underway.

5.10.3 Schemes with Programme Entry or Conditional Approval Status

The following major schemes have been "provisionally accepted" under the previous approval system by DfT and were remitted to the region for advice on priorities in the December 2004 settlement:

Leigh-Salford-Manchester QBC

Following the Public Inquiry into Leigh Guided Busway, the Secretary of State requested more work on some of the environmental aspects of the scheme. This further work was undertaken during Summer 2004 and the evidence was re-submitted to the DfT in October 2004. In February 2005 the DfT confirmed that it did not intend to re-open the

Inquiry. On 30 June 2005, the Secretary of State announced that the Transport and Works Act Powers would be granted.

Both stages of the environmental mitigation measures for the guided section of the busway have been carried out. These included a course of spraying for the eradication of Japanese Knotweed and the creation of new ponds for the Great Crested Newts. The design work for the on-highway, A580 section of the busway, is complete.

The cost of this scheme is still estimated at £42.3m including vehicles. Subject to Full Approval being granted during 2006, we would anticipate the busway becoming operational in 3 - 4 years' time.

A57/A628 Glossop Spur to Mottram-Tintwistle Bypass

The development of this scheme continues to be co-ordinated with the Mottram to Tintwistle Bypass, which is being progressed by the Highways Agency. The schemes have been programmed to enable the statutory procedures to run in parallel such that subject to final approval they can be constructed as a single scheme, through a single contract.

Planning permission for the Spur was obtained in December 2005. The Compulsory Purchase Orders and Side Roads Orders are to be made in the spring of 2006 with a view to holding a Public Inquiry in the autumn of 2006, subject to the receipt of objections.

Tameside MBC anticipates submitting the scheme for 'full approval' to the DfT in the summer of 2007. The total scheme cost is now estimated at £8.01m, an increase of £0.901m to take account of inflation.

Ashton-under-Lyne Northern Bypass Stage 2

Planning permission for this scheme was obtained in September 2003. In December 2004, planning permission was also granted for the relocation of the affected Markazi Jamia mosque to a nearby location. Following extensive and complex negotiations, agreement has been reached with the Trustees of the mosque relating to this relocation. Compulsory purchase and side roads

orders (CPO and SRO) for the scheme have been prepared. Negotiations continue to purchase land by agreement where possible. Subject to the above, orders could be published in July 2006, with submission to DfT for full approval in October 2007 subject to public inquiry timescales. A start on construction could be made in February 2008. The total scheme cost is estimated at £8.68M, an increase of £0.39M to take account of inflation.

Wigan Inner Relief Route

Planning permission was granted in September 2003. This followed delays because of the need to undertake additional ecological surveys to resolve an English Nature objection. During this period, further design work was undertaken to see if the scheme's cost-effectiveness could be improved, but subsequent traffic modelling proved that other possible solutions were not appropriate. The compulsory purchase and side road orders (CPO and SRO) were made in October 2004. However, following the Government's decision that the scheme did not represent an immediate priority for funding and would now be referred to the Regions, the CPO and SRO's were withdrawn. Negotiations continue to purchase land by agreement. It is now anticipated that the scheme will cost £20.8M, because of inflation and changes to the type of structure required at the crossing of the Wigan to Southport railway. The latter results from the change in construction requirement from a jacked concrete box to a more expensive jacked portal bridge, as a result of detailed ground investigations revealing new rock levels.

The scheme has now been identified by the regional prioritisation process as a contingency within the RFA.

JETTS QBC

The £26.3m scheme was included in the 2002/03 APR as a result of the M60 JETTS (junctions 18 to 12) Multi Modal Study and provisionally approved in the December 2003 settlement letter.

Following the completion of a Scoping Study, consultants were commissioned to undertake Whole Route Implementation Plans for all of the nine corridors and these were completed in June 2005. A first stage of public consultation was undertaken for all of the corridors in late 2004 / early 2005. The Whole Route Implementation Plan

for the Bolton to Irlams o' th' Height QBC, bus service 8, identified that this corridor might be suitable for the operation of First Group's new Streetcar vehicle. Further design work is now being undertaken to identify what additional measures could be implemented along this corridor and for the section of the route between Irlams o' th' Height and Manchester City Centre. The completion date for the scheme will depend on the Secretary of State's response to the regional advice provided as part of the regional prioritisation process.

5.10.4 Schemes where Further Information has been Requested

SEMMMS New Relief Road Scheme

An Annex E was submitted in July 2004 for this scheme and in the December 2004 Settlement letter the response was:

'Ministers have considered the South East Manchester Relief Road major scheme bid and, whilst they accept this scheme recommendation of the South East Manchester Multi-Modal Study and a priority for approval, they are unable to reach a final decision until the appraisal case has been completed. In particular, there are still some outstanding modelling issues to be resolved. An initial assessment of the value for money of procuring the scheme through PFI would also assist our consideration of this scheme. The Department for Transport and Government Office will continue to work closely with you to complete this work so that Ministers will be able to take a view on whether the scheme provides sufficient value for money to be granted provisional approval.'

Stockport, Manchester and Cheshire Councils undertook work to answer the questions identified in the letter and submitted revised modelling and appraisal information with an Expression of Interest for PFI funding which has been supported by AGMA. The decision of the Secretary of State is awaited.

Carrington - Irlam/Cadishead Link Phase 1

An Annex E was submitted in July 2004 for this scheme and in the December 2004 Settlement letter the response was that the information

provided in the major scheme bid was not sufficient for the Department to be able to form a view on the scheme at that time.

Subsequent to the settlement letter, Trafford MBC have reviewed their Unitary Development Plan and are reconsidering the land-use that would link to and impact upon the scheme. Work will continue on scheme design and potential developer contributions will be investigated.

5.10.5 Major Schemes Bids

As part of the development of the GMITS and the preparation process for Provisional LTP2, work was undertaken to identify transport problems and opportunities across Greater Manchester on a segment basis, with a particular emphasis in this work on how transport can help the conurbation achieve its regeneration and social inclusion objectives. The outcome of this work identified a number of major schemes that would help to deliver our objectives.

The scale of the identified investment that is needed reflects the scale of the challenge faced by the transport system in responding to rapid economic change in Greater Manchester and ensuring that economic growth is environmentally sustainable. Major public transport investment is a strong theme in the GMITS. Greater Manchester's public transport system is dominated

by ordinary stopping bus services. Bus is an attractive option for many shorter trips. However, for longer trips, an ordinary stopping bus service does not provide an attractive alternative to the car, and limits the horizons of non car-owning households and the potential for demand management.

Public transport can be made attractive for middle and longer-distance trips through investment in segregated systems. Potential major schemes include low-cost segregated busways, improved public transport interchanges, highway schemes and proposals to make better use of parts of the rail network. The public transport proposals complement existing plans for future phases of Metrolink, covering corridors that are not served by the proposed Metrolink extensions.

Public transport schemes are balanced by selected highway schemes with an emphasis on providing road access to key regeneration areas.

While the Greater Manchester local authorities strongly believe that major investment must form a part of the transport strategy for Greater Manchester, it is acknowledged that the funding for major schemes via the LTP process is limited. We have therefore assessed each scheme against sub-regional and regional objectives as well as value-for-money and deliverability. The results are described in para 5.12.

In addition to undertaking our own sub-regional assessment, we have also actively participated with the process for producing regional advice on transport priorities for the Regional Funding Allocation. The following Greater Manchester schemes have been identified as sub-regional priorities and by the region as priorities for LTP Regional Funding Allocation:

- Ashton Northern Bypass Stage 2
- Bolton Town Centre Public Transport Scheme
- Glossop Spur
- Highway Retaining Walls Strengthening Scheme
- Greater Manchester Urban Traffic Control (GMUTC)
- Leigh-Salford-Manchester QBC
- M60 JETTS QBC
- Metrolink Extensions
- Rochdale Interchange
- SEMMMS Relief Road Scheme (RFA contribution to PFI)
- Yellow School Buses

The following Greater Manchester sub-regional priority schemes have been identified as contingency schemes for LTP Regional Funding Allocation:

- Altrincham Interchange
- Wigan Inner Relief Road

Two sub-regional priority schemes are currently investigating Private Finance Initiative as the funding mechanism. These are:

- A5225 Access Wigan
- SEMMMS Relief Road Scheme

The following schemes were also identified as sub-regional priorities; these will be considered as part of the early package being developed for the substantive Transport Innovation Fund bid:

- Rail Rolling Stock
- Stockport Interchange

In line with LTP guidance, the targets set out in Chapter 9 do not take account of the potential impacts of the major schemes set out above. The major schemes business cases will identify how each scheme enables either the relevant targets to be stretched or delivered more quickly. GMPTE are working closely with DfT on the submission of the Metrolink Phase 3 business case. The timings of the submission of the remaining major scheme business cases have not yet been finalised and, to some extent, will depend upon the Secretary of State's response to the regional funding allocation advice. The schemes set out within this LTP reflect the regional advice, however it is important to stress the need for flexibility in interpreting the submitted RFA profile RFA to reflect the practicalities and timings of major scheme business case approvals by DfT, which is particularly relevant for Metrolink. More details of all of the schemes are set out in the LTP Annex.

5.11 Transport Innovation Fund

TIF funding will be a critical component of the resources needed to deliver the GMITS, and we are currently working to develop a compelling, additionality based case for a substantial contribution towards its total funding costs. Although further work is required, and there is a need for further information (eg on regional budgeting) we would expect the case to focus on:

- The significant productivity benefits of our strategy, particularly in terms of its potential to deliver employment growth in the most productive parts of the North West region, time savings to business users and a beneficial impact on the breadth and depth of the city region's labour market. The strategy will play a key role in supporting the Manchester CRDP and hence the Northern Way Growth Strategy. We would anticipate therefore a high GDP return for the TIF funding deployed.
- The potential role of a toolkit of hard edged demand management measures as part of a package of supporting public transport improvements, in tackling congestion and promoting employment and GVA growth across the city region
- The potential use of new local funding sources linked to the current review of local government finance and exploration of the contribution of new local funding sources such as workplace parking levies.
- Our innovative approach to transport planning and delivery including improved integration between transport and land use/regeneration strategy development and delivery through our Corridor Partnership model, which will focus on the delivery of agreed outcome based targets.
- Ensuring that key stakeholders have financial incentives to meet their targets and in particular to support public transport modal share and congestion management. The

Corridor Partnership model will allow Greater Manchester to see revenue risk managed by those most able to influence demand.

- Providing targeted support of additional Greater Manchester travel planning resources to those Corridor Partnerships best placed to deploy those resources effectively.
- Highlighting the interaction of planning decisions and their implications for transport usage at the corridor level and implementing integrated strategies in these terms.
- An innovative approach to integrating public transport modes in individual corridors through the development of joint working arrangements designed to deliver agreed modal share and accessibility targets.

In the meantime we will continue to work closely with the Department on the programme of spend of the TIF pump priming money. The key elements of the work include:

- research work to identify the point at which congestion can significantly harm economic growth and the environment (the "tipping point"). This is the point when significant investment in public transport capacity will, therefore, be needed alongside the development of a toolkit of demand management measures which, when coupled with investment in public transport, will achieve the behavioural change necessary to continue to support sustainable economic growth.
- The development of Corridor Plans and Partnerships in key corridors across the city region
- The development of travel behavioural change strategy and modal strategies both at a city region and corridor level
- A review of transport governance structures within the city region
- Identification of the key transport infrastructure components of the bid,

The full TIF bid will be submitted in July 2007. Further details are set out in a separate statement which is submitted alongside this LTP in line with the Department's TIF guidance.

5.12 Achieving Value for Money

The Greater Manchester Local Transport Plan has been drawn up in the context of the financial guidelines from Central Government, and we have therefore started from a position of having to prioritise the problems which will be dealt with, and the minor works schemes.

In terms of options considered, we examined a highway-based strategy as a basis for the future, but concluded that a public transport-based approach represented the best way forward in terms of meeting Greater Manchester's objectives supporting a growing economy regeneration in a sustainable way with measures to increase cycling and walking for shorter trips. Analysis of options has shown that Metrolink provides a better solution than buses on the corridors proposed for Phase 3, in terms of capacity and attractiveness compared with the car mode. This means, however, that buses will be the major transport mode on other corridors not served by rail or Metrolink - hence our proposals for enhanced bus priority, including busways to secure major journey time improvements. Moving down to the level of ITB programmes, problem analysis may show that there is only one practicable solution in the case of a specific local issue, and option generation will not therefore be appropriate. In other instances, a range of potential solutions may be revealed by studies (see the Trafford Park Study in para 5.2.2 and the options considered in the SEMMMS studies, leading to the programme in para 5.8)

As stated in Chapter 2 the key strands of GMITS are to focus on greater use of public transport for trips to centres, enhancing facilities to encourage short journeys to be made by foot or by cycle and using and use planning and regeneration strategies to minimise trips to out of centre locations. Within this context, analysis of the problems and opportunities resulted in the establishment of what we want to achieve by the end of the LTP2 period, under each of the shared priorities, and in addition for other important issues such as the Regional Centre and transport system maintenance. This then guided the development of our overall programme and hence concentrated our resources into areas where they can have the greatest effect.

Engagement between each Authority, stakeholders and the public has played an important role in shaping the programme locally. Often Township or Neighbourhood Groups have helped to influence the types of measures selected, especially in regeneration or residential areas. Some examples are indicated in the detailed work programme appendices.

Authorities have considered the cost of schemes against outcomes - for example potential casualty reduction rates - and chosen those which offer good value for money and are deliverable within an acceptable timescale. This is demonstrated by the instance quoted in para 5.1, where area wide traffic calming in Manchester did not prove to represent optimum value for money in terms of number of accidents saved, and instead there was a switch to site-specific local safety schemes. Another example which has demonstrated the value for money approach is the decision noted in the same section to target cycling improvements on routes which link key origins and destinations, rather than piecemeal provision of facilities.

Case Study 24

Bolton MBC's Scheme Prioritisation Process

Bolton MBC develop their highways capital programme using a prioritisation and selection system which has 3 inputs:

- The availability of joint funding
- Policy objectives
- The type and purpose of the scheme

Each scheme is then scored as follows:

- In relation to the availability of joint funding (eg contributions from developers, ERDF, TIF) - between 10 and 15 points.
- In relation to policy objectives, ranging from national through to regional and local – the local ones including Bolton's Council and Departmental objectives.
- According to the type of scheme on a scale of 4 to 10, with those aimed at speed management and safety at the top and for car access at the bottom.

These scores are summated to give an initial priority ranking. Deliverability is then considered. If there are no apparent problems, the points remain the same. Deductions are made for factors impeding delivery, such as land acquisition, and delays with statutory undertakers, design and public consultation, on a scale from 4 to 10 points

This results in an adjusted priority which then governs the actual order of schemes in the programme

Rail investment schemes need particular scrutiny for cost-effectiveness, given the number of players involved, which makes schemes expensive, and the problem of allocating any increased costs to any of the partners. This may mean that we shall have difficulty in putting forward a sizeable improvement programme, even though the need is clear.

LTP2 also seeks to deliver a number of major public transport and highway schemes as set out later in the chapter. 36 schemes were assessed against regional and sub-regional objectives, as well as against value for money and deliverability. 16 of these were identified as Greater Manchester priorities, and were put through the regional prioritisation process. 11 of these have been identified as priorities for the Regional Funding Allocation, with a further 2 as contingencies. The Plan will continue to explore alternative potential funding sources to enable other schemes to be delivered.

Greater Manchester's major schemes have been subjected to a prioritisation process incorporating value for money considerations and deliverability as well as consistency with regional and sub-regional objectives. A do-nothing situation has always been considered, along with routing options where they exist. An example is the Glossop Spur from the A628 Mottram-Tintwistle by-pass, where 'do nothing' would still mean much traffic intrusion in Mottram village; a shorter scheme simply connecting the existing A57 to Woolley Bridge would only relieve Woolley Lane and not Mottram Village, whereas the full scheme removes through traffic from both locations, with consequent maximisation of benefits.

OBJECTIVE	SUB-OBJECTIVE	OUALITATIVE IMPACTS	OUANTITATIVE MEASURE	OVERALL ASSESSMENT
(2)		التابيد المليمية من فيسمل سميرا الميد 0 سميال من كم فمم 10 من التابيد 0 سميال من التابيد 10 من التابيد 10 من ا		اجتوبة والمحال
Environment	Local air quality	Minor positive impact of bus measures, Positive effect of cycling & walking dependent on modal shift, Significant positive effect of travel plans, Local positive effects of traffic calming.	LTP8: 39% reduction in NOx emissions from traffic on local roads from 2004-2011	Beneficial
	Greenhouse gases	Positive effect of cycling & walking dependent on modal shift,	LTP9: Limit increase to +4.5% between 2004-2011	Slightly beneficial
	Landscape	No significant impact	N/a	Neutral
	Townscape	No significant impact	N/a	Neutral
	Heritage of historic resources	No significant impact	N/a	Neutral
	Biodiversity	No significant impact	N/a	Neutral
	Water environment	No significant impact	N/a	Neutral
	Physical fitness	Positive effect of cycling & walking dependent on modal shift,	N/a	Beneficial
	Journey ambience	Positive effect for cycling & walking routes, and public transport corridors / interchanges	N/a	Beneficial
Safety	Accidents	Many programme areas will help improve actual and perceived road safety, but main benefits come from Local Safety Scheme programme.	BV99: 50% reduction in KSI, 30% reduction in slight casualties. LSS programme to deliver 150%-200% rate of return. Expected value of casualty savings = £302mCost of LSS programme likely to be approx. £38m	Strongly beneficial
	Security	Positive effect from public transport, walking and cycling programmes.	N/a	Beneficial
Economy	Public accounts	Supporting council revenue expenditure, plus other council funding and council administered grants (especially for regeneration works)	£192.496m for LTP2 ITB£33.,551m for SEMIMMS	£226.047m ITB
	Business users & providers	No further increase in congestion: beneficial.	N/a	Beneficial
	Consumer users	No further increase in congestion: beneficial.	N/a	Beneficial
	Reliability	No further increase in congestion: beneficial.Substantial benefits for bus passengers on improved routes, in particular QBCs	LTP5: 85% buses on time by 2010/11LTP7: no increase in congestion on monitored routes, given 2% increase in area wide traffic flows	Beneficial
	Wider economic impacts	Essential to support CRDP growth aspirations	N/a	Strongly beneficial
Accessibility	Severance	Walking and cycling routes in particular will help overcome some severance problems	N/a	Slightly beneficial
	Access to the transport system	Maintenance of accessibility to public transport network, especially for education, health, and employment trips. Improved	LTP1: No further deterioration in am peak access by public transport to a main interchange for all	Beneficial

See also GMLTP2 Environmental Report

OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE MEASURE	OVERALL ASSESSMENT
		physical accessibility to buses, railway stations, road crossings and unemployed people.LTP10: various physical and rights of way. Possible adverse impacts during construction.	and unemployed people.LTP10: various physical accessibility targets	
Integration	Transport interchange	Positive impacts especially for public transport users	N/a	Beneficial
	Land-use policy	Strengthened links to land use policy and its implementation N/a	N/a	Beneficial
	Other government policy	Closely linked to economic, social and environmental objectives N/a	N/a	Beneficial

Table 5.3 Appraisal Summary Table for LTP2 Integrated Transport Block compared to reference case

5.13 Risk Management

Risks to the delivery of the capital programme are being minimised by Boroughs using a range of measures from the following:

- the use of a rigorous project management approach for all significant projects
- use of consultants to provide additional support as required for scheme development.
- area and specialist studies to identify suitable schemes.
- scheme development over an 18-month period to allow time for consultation and change.
- integrated schemes developed with a number of facets that appeal to a wider range of stakeholders.
- development of reserve schemes to ensure that if there are problems other schemes can replace them.
- regular reviews of the development of schemes.
- road safety audits as part of scheme design
- COPECAT cycle audits as part of scheme design.
- appropriate consultation and information processes used to ensure all stakeholders, the public, businesses, and specific interest groups, are involved.
- close working between scheme development, design and implementation with written briefs and use of change control procedures.
- close co-operation and communication with private sector companies, such as ECI (Early Contractor Involvement), to give greater certainty and accuracy to forecasts; and partnering arrangements to ensure that there is sufficient capacity to deliver schemes to programmes.

5.14 Linkages with Other Strategies

How our Plan contributes towards delivering National Policy

Our strategy takes account of the Government's policy approach set out in the Transport White Paper and LTP2 Guidance. Although we recognise we cannot build our way out of congestion, some capital investment in new infrastructure is essential to ensure sustainable

economic development. Since the submission of Provisional LTP2, independent consultants have appraised the major scheme elements against regional and sub-regional objectives, and assessed their value-for-money and deliverability. They conclude that all of the proposed schemes will contribute towards the delivery of GMITS, and their work has also informed the prioritisation of the investment. Metrolink remains at the heart of our strategy as the most effective way of achieving significant modal shift although all modes of transport have a role to play and there is scope for greater integration and better utilisation of capacity.

LTP2 specifically addresses the key elements identified in the White Paper relevant to local transport:

- improving network management through investment in urban traffic control systems and intelligent transport systems.
- investing in additional public transport capacity and improving reliability to provide attractive alternatives to the car and making best use of new capacity through network and demand management measures.
- developing an accessibility strategy to give people a real choice about when and how they travel and introducing demand responsive services in areas that cannot support conventional bus services;
- promoting the use of school and workplace travel plans and personalised journey planning to encourage people to consider alternatives to using their cars;
- creating an environment so that cycling and walking are seen as an attractive alternative to car travel for short journeys, particularly for children:
- improving access to Manchester Airport, through the ground transport strategy, to facilitate the growth envisaged in the Aviation White Paper.
- identifying new highway capacity where it is needed taking account of environmental and social costs.
- maintaining and improving the quality of existing infrastructure to improve safety (particularly reducing the risk of road traffic

- accidents) and contribute to regenerating centres
- minimising the environmental impacts of new and existing transport infrastructure with mitigation measures implemented to a high standard.

How our Plan contributes towards delivering the NWGS, RES and CRDP

Improved physical connectivity is vital in improving economic competitiveness, as it is a key issue affecting the supply and movement of labour, the investment decisions of business and the success and sustainability of communities. The Northern Way Growth Strategy (NWGS), the Regional Economic Strategy (RES) and the City Region Development Programme (CRDP) all cite connectivity as a key issue.

Critical issues in the Manchester City region are capacity, efficiency, affordability and accessibility, and the creation of significant modal shift from private to public transport to reduce congestion and contribute to economic growth.

Manchester Airport is identified by the RES as a key driver for the regional economy and hence is a key asset for the Manchester City region. Supporting the growth identified in the Aviation White Paper is critical. A key component of our strategy is to improve ground transport access to maximise the benefit to residents and businesses across the North and Midlands.

Maintaining good connectivity for freight to seaports (particularly Liverpool, East Coast ports and the south coast) by rail and road is also important, particularly in terms of linkage to the EU Accession countries and their emerging markets. The motorway and rail networks have a key role to play in facilitating this and in providing high quality transport links to surrounding city regions and major cities beyond including London, Birmingham and Glasgow. However, congestion on large parts of the motorway network, together with reliability and capacity problems on the rail network already present significant challenges. Therefore in developing and implementing our Strategy we will continue to work closely with the Highways Agency and the rail industry.

The importance of good links within the Manchester City region to enable businesses, residents and visitors to take full advantage of the myriad of opportunities available, promote social inclusion as well as support economic performance, is also highlighted within the NWGS, RES and CRDP. In particular the RES identifies the need to reduce levels of congestion by increasing the use of public transport (with specific reference to the development of Metrolink) and reducing peak traffic volumes.

Our Strategy involves a multi-faceted approach to enhance connectivity in a sustainable way, with a focus on improving public transport, walking and cycling networks, reinforced by network improvements appropriate demand and management measures. It aims to support the regeneration of the most deprived areas by expansion of the Metrolink network, the continued QBC programme and future measures to improve accessibility to and from such areas, including the use of demand responsive public transport services where appropriate.

How our Plan contributes towards delivering the Regional Spatial Strategy

Regional Planning Guidance for the North West (RPG13) was published in March 2003. This guidance includes the Regional Transport Strategy (RTS). In September 2004 RPG13 became the Regional Spatial Strategy (RSS) for the North West and the statutory development plan for the region. The RSS was published in January 2006. As part of this review a sub regional spatial strategy is being prepared for the Manchester City Region which has influenced and been influenced by the development of the GMITS and Provisional LTP2. This area also embraces Warrington and parts of North Cheshire as well as Greater Manchester, and hence working groups have been established to ensure coordination of strategies across the administrative boundaries.

The current and draft Regional Spatial Strategy focuses a significant proportion of new development in the North West Metropolitan Area, which includes the Greater Manchester Conurbation, especially the conurbation core of Manchester and Salford. This is justified because reductions in journey distances and promotion of more sustainable modes of transport are more

readily achievable in metropolitan areas given the density of population and the relative proximity of housing, employment, retail and recreational facilities. Our strategy therefore seeks to develop an integrated approach to public transport that makes it a realistic alternative to the car for a wide range of trip purposes, especially for commuting and journeys to education establishments. The strategy also seeks to encourage further modal shift by targeting shorter distance journeys by the development of walking and cycling networks that are safe and convenient to use.

LTP2 is also consistent with the emerging framework set out in the Regional Transport Strategy contained within the draft Regional Spatial Strategy (RSS) with its particular emphasis on developing high quality public transport, better management of the highway network, improved access to Manchester Airport and developing integrated networks for walking and cycling. The implementation programme is also consistent with the transport investment and management priorities set out in draft RSS.

Examples of interventions being undertaken during LTP2 which support the RES and RSS:

- Manchester Airport Ground Transport Strategy, aiming to provide good surface transport access to the Airport as passenger numbers expand (see para 5.4 for more detail)
- Metrolink Phase 1/2 Renewals, which includes additional trams for increased capacity for commuters. This will particularly help commuters travelling in from the Altrincham and Bury corridors, and will further increase the attractiveness of Metrolink in these areas and help to reduce congestion arising from car travel in these corridors. Metrolink has proved to be very effective in achieving modal shift, which will become increasingly important as the sub-regional economy expands.
- Corridor Partnerships will optimise spend and integration of public transport and make the radial movements to the Regional Centre operate more efficiently. This will be done in close partnership with public transport operators, the Highways Agency and other key stakeholders.
- The implementation of the bus strategy will aid the North West Regional Economic Strategy, resulting in progress towards a comprehensive integrated network, improved performance, high quality and accessible information, and improved safety and security.
- Implementation of revised cycling and walking strategies, which focus resources where they
 can have most impact, in terms of addressing both particular groups of people and locations
 where there is the greatest potential to increase the use of these modes. For example, improving
 accessibility and security on paths to rail stations will be important in securing modal shift for
 commuter trips.
- More efficient traffic control strategies at traffic signals, especially the SCOOT Urban Traffic Management & Control major scheme bid are vital to the relieving on congestion around Greater Manchester, in particular the radial routes into the regional centre.
- Implementation of SEMMMS, JETTS and MIDMAN

5.15 Use of Revenue Funding to Meet LTP2 Objectives

Revenue funding is used in Greater Manchester to help address the shared priorities. In the year 2004/5, the GMPTA/E spent over £170 million on public transport revenue costs and the 10 local authorities spent a further £117.5 million on a number of areas including maintenance and contributing to Urban Traffic Control.

GMPTA/E and the 10 Local Authorities will continue to use revenue funding to improve accessibility, by supporting socially necessary bus services, helping to fund demand responsive transport, contributing to the expanding nightbus services, working to integrate social needs transport and funding the concessionary fares scheme.

There have been, and will continue to be, improvements in school travel, via supported services and through proactive work with schools to improve behaviour - for example the introduction of yellow school buses and our award winning dingding.org.uk website.

The bus strategy gives further details on use of revenue funding to provide safety and security measures in the form of bus station rapid response, and bus 'safer travel officers'. Performance Improvement Plans (working with specific operators to improve reliability) will use revenue funding and these are detailed. The strategy also gives information on other improvements that use revenue funding, such as increasing the number of stops with timetables, improving the journey planner, and improving public transport for hospitals.

Travel Coordinator posts around Greater Manchester are funded in a range of ways: Department for Transport Funding; directly funded through their respective councils; and by use of other sources.

Revenue funding is used to help meet the shared priority of road safety, such as the training young cyclists. Salford Council have a Kerb Craft Coordinator, training volunteers to help teach road crossing skills to children. Revenue funding from the DfT supports the Neighbourhood Road Safety Initiative central team, together with a small

amount from the ODPM's Neighbourhood Regeneration Unit. In some districts Neighbourhood Renewal Funding, made available to the Local Strategic Partnerships, has supplemented mainstream resources to bring about targeted improvements linked to LTP objectives.

Local Authorities in the Greater Manchester area remain committed to improving the condition of its highway network in support of the LTP targets and objectives. The capital allocation has been and will continue to be supplemented by revenue funding to make real progress in halting deterioration and removing the backlog of highway maintenance work.

Under the Traffic Management Act 2000 there is a responsibility on all authorities to work towards relieving congestion. Greater Manchester's Urban Traffic Control work closely with the ten authorities to identify areas of congestion and investigate ways of alleviating this. This work is revenue funded and will work towards LTP Targets and Objectives, together with addressing the shared priority of congestion reduction. Both our capital programme and the traffic revenue programmes will complement one another in working towards addressing known congestion points on the strategic network.

5.16 Spending Programme Summary

Our expected net spend for each of the LTP2 programme years is summarised in the following Tables 5.1 and 5.2. For more details on problem areas, our response and justification for it, and how the work programme is related to objectives and targets, please see the Detailed Work Programme Appendix.

5.16.1 Internal Distribution of Integrated Transport Block Funding

We have adopted a different method of apportioning LTP Integrated Transport Block funding among the Greater Manchester authorities. The new formula is based closely on the new DfT national formula, but uses local weightings and data to reflect Greater Manchester's characteristics.

The new method provides:

- a focus on central / local government shared priorities
- resource allocation linked to achievement of LTP objectives
- a more up to date basis for the distribution of funds relating to casualty reduction
- better guidance on the relative importance of the different priority areas
- a way of maintaining the overall shape of the work programme, which might otherwise have been skewed by large topslices

Priority	DfT formula weightings	G M formula weightings
Public transport	30%	45%
Road Safety	20%	20%
Congestion	25%	25%
Pollution	5%	4%
Accessibility (deprivation)	15%	6%
Accessibility (rural)	5%	1%

Table 5.4 Relative weightings of national and local funding distribution mechanisms



5.16.2 Complementary Funding Sources

There are many instances where we hope to take advantage of a wide range of complementary, non-LTP sources of funding in order to further our progress towards our objectives. Non-LTP investment may be channelled through Local Authorities or be in the form of complementary investment by third parties. Examples are given in table 5.2, although these have not necessarily all been confirmed as yet. More information is given in the detailed work programme appendices.

Funding Source	Authority	Example Scheme / Measures
Developer contributions	Bury	Town centre redevelopment works and traffic management improvements
	Manchester inclusion and enables economic growth to	Manchester Cycleway
	Oldham	Workplace travel plans
	Rochdale	Pedestrian and cycle accessibility improvements to Rochdale, Middleton and Heywood centres
	Stockport	Public transport, cycle and pedestrian priority measures
		Bus and rail Park & Ride sites
	Tameside	Cycle parking and pedestrian routes in local centres
		Droylesden and Stalybridge town centre renewal
		Public rights of way improvements
		Provision of facilities for disabled people at traffic signals
	Trafford	Implementation ofworkplace travel plans
	Wigan	Further education college and Health Service travel plan implementation
		Leigh centre junction improvements
	GMPTA	Improvements to Old Trafford Metrolink stop
Economic	Bolton	Cycle routes to Middlebrook
Development Zone	Wigan	Off-road cycle routes to employment sites
European Regional	Oldham	Town centre pedestrian and cycle routes
Development Fund	Rochdale	Pedestrian and cycle routes to major employment centres
		Schools rebuilding programme
Housing Market	Manchester	Residential traffic calming schemes
Renewal Fund	Oldham	Transport elements to area regeneration programmes
	Rochdale	Accessibility improvements for deprived areas
Neighbourhood Renewal Fund	Manchester	School travel plans
New Deal for	Oldham	Road safety training and school safety zones
Communities and Single Regeneration Budget		Transport elements to area regeneration programmes
Neighbourhood Road Safety	All except Stockport and Trafford	Local safety initiatives in deprived areas

Funding Source	Authority	Example Scheme / Measures
Initiative		
Lottery funding	Oldham	Public Rights of Way Improvements
North West	Rochdale	Accessibility improvements in deprived areas
Development Agency	Wigan	Hindley town centre regeneration
Heritage Lottery Fund	Wigan	Standish and Hindley town centre regeneration
English Heritage	Wigan	Ashton-in-Makerfield town centre regeneration
Department for Education & Skills	All	Employment of School Travel plan Coordinators
Other miscellaneous Local Authority	Wigan	Education Dept., for works associated with new school at Montrose Avenue
Funds	Salford	Regeneration funds for bus stop improvements in central Salford
	Manchester	Leisure Services, for cycle parking
	Stockport	Parish Council contributions to Community Transport schemes
		Townscape Heritage Initiative, for repaving and accessibility improvements around the Markets area
Other	Manchester	Friends of the Earth LSP grant for cycle publicity

Table 5.5 Examples of complementary funding sources

5.16.3 LTP2 Spending Programme Summary

	2006/07	2007/08	2008/09	2009/10	2010/11
Maintenance block expenditure (up to planning guidelines)	£28,706	£23,664	£24,847	£26,089	£27,391
Primary route bridges and emergency works.	£5,508	£16,750	£11,915	n/a	n/a
Individual major schemes each costing more than £5 million ^(vii)	£19,746	£35,400	£28,900	£28,600	£30,500
Continuation of accepted LTP1 supplementary funding(viii)	£5,063	£3,500	£3,500	£3,500	£3,500
Integrated transport block expenditure (up to planning guidelines)	£33,508	£34,860	£37,709	£40,738	£43,960
SEMMMS integrated transport (up to planning guidelines)	£6,407	£6,786	£6,786	£6,786	£6,786
Total	£98,938	£120,960	£113,657	£105,713	£112,137

Table 5.6 Summary of support sought from LTP capital settlement (£k)

vi Preliminary figures based on draft bid; to be confirmed and submitted formally alongside LTP1 Delivery Report in July 2006

vii Major schemes profile on the basis of the Regional Funding Allocation exercise. Though we have fully and actively engaged with the regional prioritisation process we do not agree with the proposed profiles, which cause us problems with the delivery of a number of schemes, particularly Metrolink

viii All years include £3.5M Transport Infrastructure Fund. 2006/07 figure also includes spend against Stockport's approved 2004 Supplementary Bid spend.

6 Performance Indicators and Targets

6.1 Introduction

In this chapter we set out our performance management framework for the LTP2 period. We deal first with the context of the wider vision within which the LTP targets have been developed. We then explain the process by which we have produced our targets, demonstrating that they and the plan programme are mutually reinforcing. The targets themselves are tabulated. There is a description of how the monitoring results will be used to improve subsequent performance, and a description of the mechanisms involved.

6.2 Targets for the Wider Vision

As outlined in Chapter 2, this second Greater Manchester Local Transport Plan is set within a wider vision of support for Greater Manchester's broader economic competitiveness and social inclusion agenda.

We have now assessed realistic outcomes in jobs and housing that will result from the developing regional strategies, both based on the DfT's TEMPRO economic growth factors, and the City Region Development Plan case, which represents a more optimistic assessment of economic development we might expect. The effect of this on travel patterns has been tested with the Strategy Planning Model, and is reflected in the final targets.

Specific targets are also being prepared for each of the four priority corridor partnerships. These will be related to delivery of the overall targets throughout LTP2, and reflect outcomes and the additionality of the corridor approach. Similar targets for the remaining eleven corridors will be developed as work on these corridors progresses in the early LTP2 period.

New forecasts for Manchester Airport have been prepared in line with national DfT airport policy. We have a target for growth to 30million passengers per annum (ppa) by the end of the LTP2 period as part of long term growth to 54 million ppa by 2030.

We have also taken account of National PSA and other targets where these relate to our chosen set of LTP2 targets.

6.3 Choice of Indicators

We have chosen our performance indicators on the basis of the following factors:

- the mandatory indicators and targets. In some cases we have come to an agreement with DfT and GONW on the nature of some indicators, primarily where they vary slightly from the mandatory DfT guidance. This is mostly to enable us to accommodate established monitoring techniques which would otherwise have caused a discontinuity in the data series, or involved substantial unnecessary additional or modified data collection systems. This has been the case with LTP1 Accessibility, LTP6 peak traffic to key centres and LTP7 congestion.
- The shared priorities of congestion, air quality, accessibility and road safety
- Other Best Value indicators
- Placing higher emphasis on 'outcomes' rather than 'outputs'
- Revised LTP2 objectives and more detailed sub-strategies
- The existing LTP1 monitoring regime, continuing with useful indicators to establish trends over a longer period.
- The emergence of new monitoring techniques, such as using ITIS congestion monitoring data, and the use of Accession accessibility modelling software
- Issues considered to be of local importance, following consultation with stakeholders
- The need to have a practical and cost-effective monitoring programme

We shall be reporting progress against all the mandatory indicators specified by DfT. In addition we are including some additional Headline Indicators that relate closely to our LTP objectives. These are:

Performance Indicators and Targets 6

LT9	Climate change: CO ₂ emissions from road traffic
LTP10a	Accessible infrastructure (wheelchair accessible buses)
LTP10b	Accessible infrastructure (raised bus stops)
LTP10c	Accessible infrastructure (rail stations)
LTP10d	Accessible infrastructure (BV165 pedestrian crossings)
LTP10e	Accessible Infrastructure (BV178 ease of use of Public Rights of Way)
LTP11	Walking: no. individual trips / year
LTP12a	Modal share to Regional Centre
LTP12b	Modal share to Key Centres
LTP12c	Vehicle trips / passenger to Manchester Airport

Table 6.1 Local LTP Performance Indicators

6.4 The Basis for the Development of Targets

As described in Chapter 4, considerable data analysis has been undertaken in the five segments of Greater Manchester to provide as full an understanding as possible of current and future transport conditions. The results of these analyses were initially made available to topic-based groups to suggest provisional targets for most of the chosen indicators. These groups were briefed to undertake their target setting within the spirit of the LTP guidance and the desire to make clear progress within the five-year plan period. The provisional targets were to be 'challenging yet realistic' and set the scene for the subsequent development of work programmes.

In setting their respective provisional targets, the groups considered a wide range of information, including:

- National, regional, sub-regional and local equivalent targets
- DfT guidance on the definition of satisfactory and stretching targets

- Previous target setting work, including those arising from the DfT engagement exercise and Public Service Agreements
- Recent national and local trends
- Segment analysis results
- Strategy Planning Model predictions, based on assumptions on land use, demography, transport and the economy consistent with the Greater Manchester Strategy, Government figures and the Greater Manchester City Region Development Plan.
- Objectives of wider development strategies
- Resource availability as per final Planning Guideline figures
- Performance of available techniques
- Comments from stakeholders and consultees
- Comparisons with other Metropolitan Authorities

In order to justify the provisional target they suggested, each topic group outlined the types and quantity of work necessary to achieve the target, and the risks associated with it. The information was then passed to Local Authorities and PTE in order to help them develop more detailed work programmes to meet these aspirations.

In addition, partners' contributory actions to the achievement of the targets were examined, such as the actions required of major public transport operators to improve and develop their services.

The overall target setting process is summarised in Figure 6.1 'The Target Setting Loop'.



6.5 Target Setting and Programme Development

The provisional indicators and targets were then reconsidered, following drafting of initial work programmes aimed at meeting these provisional targets. This reconsideration took into account:

- The effect of the better developed and more detailed work programmes
- The greater level of detail about the anticipated future economic scenario
- The availability of resources for integrated transport, maintenance and SEMMMS, confirmed in the December 2005 LTP settlement letter from DfT
- Tests of the effects of the specified programmes, including further refinement and use of the Strategy Planning Model.
- Modelled interaction between targets where possible, rather than considering their effects individually
- Benchmarking our targets against the provisional LTP2 targets of other Metropolitan areas
- The latest guidance from DfT, in particular for the congestion, accessibility and air quality indicators
- The availability of suitably robust data, in particular for journey to work and physical accessibility indicators
- Results from our congestion study, which influenced the selection of routes to be monitored
- Results from continuing work on accessibility planning, which informed the choice of indicators
- Comments made by stakeholders on the provisional targets
- The effect of phased work programmes on target trajectories

- The recommendations of the Strategic Environmental Assessment
- Local area agreements and PSAs, such as those concerning Manchester City Centre modal split, and road safety.

The impact of the Transport Innovation Fund was not assessed, because the details and final funding levels are not yet known; targets may be revised mid-Plan in order to better reflect this. Similarly the full set of Corridor Partnerships work was not assessed, as work programmes are still being developed.

We have agreed with GONW and DfT that a target will be assessed as 'on-track' if it falls within a predefined range around the trajectory. This is necessary because fluctuations around the trajectory can be expected due to the limitations of survey methodologies and natural variation in results. We have examined the previous variation in historical indicator values to determine a suitable range within which we can be confident that it is unlikely that we are 'off-track'. More detail is given in the Monitoring Technical Appendix.

The end product is a set of final targets that are at the high end of what we can realistically expect to achieve, but which also show the real improvements that are within reach during the Plan period.

LTP2 guidance suggests that second LTPs should contain between 20 and 40 targets depending on the area. The Greater Manchester LTP contains targets for 32 separate indicators, 22 of which are mandatory and 10 local. There is a single Greater Manchester target for 26 of these indicators, but separate targets for each constituent District in the other six (BVPIs 223, 224a, 224b, 187, 165 and 178). In these cases, and others where it is legitimate to aggregate District level data (LTP6, LTP8), we have agreed with GONW and DfT that while we shall report the performance of individual Districts, the average position for Greater Manchester should be used to judge whether we are on or off track.

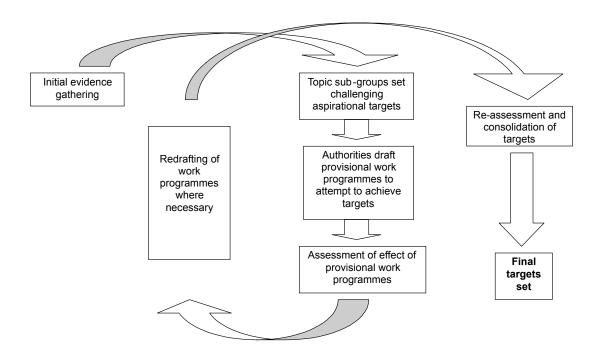


Figure 6.1 The Target Setting Loop

6.6 Monitoring Framework

Mandatory and headline indicators will be reported to the DfT in the LTP2 Progress Reports, and used to assess our performance in delivering the desired outcomes. We have defined a range around each indicator's trajectory to recognise statistical variability and within which we can reasonably regard an indicator to be on track.

A full annual monitoring report will be produced internally, which will include the following, as well as headline indicators. We will also make use of the following indicators in evaluating our performance:

 Subsidiary indicators. We will make use of these to examine the trends in headline indicators in more detail, so that we understand the reasons behind both successful and unsuccessful outcomes.
 Subsidiary indicators will consist of a mix of

- output and outcome indicators. We will produce an annual performance report presenting the indicators and appraising our performance.
- Local indicators. Individual authorities or partners will use these indicators to provide a more focused assessment of local performance. Typically they will be a subset of headline or subsidiary indicator data.
- Scheme indicators. We will use these to measure the performance of specific schemes or projects, to assess their local impact, and the feasibility for extending any new technique to other areas. The results of scheme monitoring will be fed back into work programme development, and shared between authorities. Major scheme proposals contain details of such indicators.
- Contextual indicators. In many cases, especially regarding public transport patronage and traffic related outcome indicators, we expect the performance of the economy to have a major influence. We will

therefore need to monitor the context surrounding our LTP outcomes in order to understand them properly, and differentiate between the effect of our interventions and wider factors. Local productivity and employment levels will be monitored.

6.7 Improving Performance

6.7.1 Annual Review of Targets and Programmes

The annual internal monitoring report will indicate where our progress is unsatisfactory. This will inform an annual review process described in Picture 6.2. The purpose of this review is twofold:

first to ensure that targets remain challenging and achievable, and second to inform the content and structure of future work programmes. Where we are achieving challenging targets in line with trajectories, the work programme will continue as planned. In the event that we are failing to meet suitable targets, the work programme will be amended, with either a switch in resources, improvements to delivery, or the use of different techniques. Our reaction will depend on rigorous analysis of the problem, using the subsidiary and local indicators in the annual monitoring report in particular. Where the targets are found to be no longer appropriate, they will be amended, taking into account a similar set of factors as those used in the original target setting process.

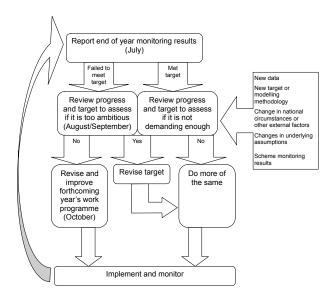


Figure 6.2 Target Review Process

There are a number of targets which we expect to have to review in the near future. These are:

 BV 102a bus patronage. Our Strategy Planning Model forecasts between 5 and 12% growth from 2001 to 2011, taking account of increasing economic activity and the LTP1 and 2 investment programme. However, to date the level of growth has not matched this forecast. · After a period of decline, adult patronage increased sharply from the beginning of 2000 until the end of 2002, but since then adult patronage has

been level. Concessionary patronage (children, elderly and disabled) has been in long-term decline. These patterns are consistent with those found elsewhere outside London. The reasons for these trends are not fully understood, though it is considered that reliability problems that operators have been facing (particularly in terms of difficulties recruiting staff) and the slippage in delivery of the QBC programme have contributed to them. The future remains uncertain - operators have been introducing performance improvement plans but it is still too early to determine their impact; the QBC programme is now being implemented more quickly, but it can take some time before reliability improvements persuade passengers to return to the bus; and it is not possible to accurately predict the impact the impact of free concessionary fares for the elderly after 9:30 am, which comes into force in April 2006 (forecasts range between 20 and 30% increase). For LTP2 we have, therefore, initially adopted a modest growth target (which given the current trends we feel is challenging, yet given the potential operator improvements, free concessionary fares and QBC implementation is achievable). However we will closely monitor this target and review it after 12 months once circumstances become clearer.

- BV 223 principal roads in need of maintenance. This is because the current targets are estimates based on insufficient data and understanding of it, due to the introduction of the new Scanner measuring technique. Additional new data is due shortly.
- BV 224a non-principal classified roads in need of maintenance. This is because the Scanner technique is currently replacing coarse visual surveys, and will be the basis for future targets.
- LTP4 modal share of journeys to school.
 More information on the local effectiveness of plans will help us refine this target. We will also look to use new PLASC data when it becomes available.
- LTP6 peak traffic into the Regional Centre.
 PSA baseline surveys are due to be completed in March 2006. This information, together with a better estimate of future job

- predictions, will inform the review of this target.
- LTP7 congestion. A final target will be set in the LTP1 Delivery Report in July 2006, following receipt of ITIS data from DfT and analysis and interpretation of it.
- LTP8 air quality. A review and assessment of air quality is due in 2006/07. This will involve improvements to the air quality forecasting model, not least to improve the way in which the relationship of NOx emissions and NO2 concentrations is modelled.
- LTP10 b number of raised stops. A data collection mechanism is being established for this indicator.
- LTP12a mode split to Regional Centre. As LTP6.

6.7.2 Strengthening the Relationship Between Performance and Actions

We found, from our experience of implementing LTP1, that we needed to strengthen the relationship between observed performance and subsequent remedial actions. We will attempt this by making sure there is a dynamic link between monitoring results and the selection, and efficiency of delivery of, subsequent schemes.

We intend to strengthen the links between the existing expert groups who influence the performance of the LTP, in particular:

LTP topic sub-groups

If we identify weak performance in a particular area, such as walking, cycling or road safety, this will be referred to the appropriate LTP topic sub-group. These groups contain local experts who will be able to give advice to segment working groups and other practitioners in order to redress the situation.

• Annual segment working groups These will be a continuation of the methodology used in the preparation of LTP2 work programmes, whereby authorities in each segment will jointly assess the latest monitoring data, and LTP topic sub-group advice, relating to problems in each segment, in order to prepare future work programmes

which address any new emerging problems or weak performance.

Greater Manchester Association of District Engineers

This body represents the delivery end of the process, and therefore has a key role to play in ensuring schemes are well selected, designed and delivered in a cost-effective manner. Links between GMADE and the LTP process will be strengthened, with better communication between groups and further investigation of ways of improving delivery performance and effectiveness.

Greater Manchester Planning Officers' Group

The Planning Officers' Group has influence over land use issues in the conurbation, and thus a key role to play in controlling and managing demand for transport. A separate Transport Sub-group also exists to look at this issue in particular. Links between POG and the LTP process will be strengthened, with better communication between groups and ensuring that the transport implications of land use are considered as a central part of the planning process. The group will be able to assist with matters where a wider range of factors than just transport may be influencing performance, such as with trips to key and local centres.

Greater Manchester Economic Development Officers' Group

A representative from the Economic Development Officer's Group attends LTP Steering Group meetings in order to ensure that the transport infrastructure can play its role in underpinning our economic aspirations.

We will maximise our performance through a number of measures, including:

Managing LTP delivery

We are investigating ways of further improving the quality of information relating to spend and outcomes, both during and at the end of the financial year. This would facilitate any necessary corrective action being taken at the earliest opportunity

Improving scheme selection and prioritisation

Examples of best practice will be identified and shared more easily through the above

groups, and using the AGMA Virtual Working Group facility, which makes it easier for a group of authorities to share information. A number of Greater Manchester Authorities have already participated in the CTC Regional Cycle Benchmarking scheme, which has influenced our approach and work programmes with regard to cycling, and we will look to take advantage of similar opportunities as they arise. The role of scheme monitoring will be highlighted, in order that we can investigate which techniques are the most successful so that they can be replicated on a wider scale. Our scheme selection procedures appraise potential schemes to ensure they will help us achieve our desired outcomes and offer good value for money. For example, Bolton MBC have a scheme assessment framework which helps prioritise different schemes according to their contribution to local, national objectives and targets, their cost-effectiveness and deliverability. GMPTE have introduced a multi-stage assessment process to consider proposals as they arise, to ensure that staff and financial resources are concentrated on developing the best

6.8 Working with the DfT

schemes.

We are currently working closely with the DfT in developing and providing advice on indicators for congestion, accessibility and bus punctuality to ensure that we have effective monitoring indicators. We are also looking at cost-effective household interview surveys for monitoring indicators. We have found this collaboration to be most helpful and are keen for it to continue. We would intend to discuss with the DfT at the earliest opportunity any technical problems and potential arising out of the remedies monitoring programmes. Further, we would wish to seek DfT approval for any remedial action necessary to modify our LTP work programmes to ensure that we achieve our targets

ester 32.9% 40.0% 32.0% 32.0% 32.0% 32.0% 32.0% 32.0% 32.0% 32.0% 32.0% 45.9% 32.0% 45.9% 32.0% 45.9% 32.0% 45.9% 32.0% 45.9% 32.0% 46.0%	Ref	Type	Indicator	Area	Baseline value ⁽ⁱ⁾	Target value ⁽ⁱⁱ⁾	Headline change / notes
Proportion of a structural maintenance should Mandatory Maintenance should Mandatory Maintenance should Mandatory Maintenance should Mandatory Maintenance should Mandatory Maintenance should Mandatory Maintenance should Mandatory Maintenance should Maintenan	BV 223	Mandatory	Maintenance :		2004/05 base		Each District has set a best estimate target based on 2004/05
Mandatory Maintenance should be considered Ar. 19%	(EX BV96)		Proportion of principal roads where structural maintenance should	Bolton Bury Manchester	32.9% 38.8% 37.5%	40.0% 33.0% 32.0%	scanner data. I nese targets snould be treated as interim pending receipt of further years' scanner data.
Mandatory Safford 39.5% 25.0%			be considered	Oldham Rochdale	38.9% 47.9%	22.0% 45.9%	
Stockbort 25.1% 25.0%				Salford	39.5%	33.0%	
Mandatory Maintenance : non-principal classified roads Trafford atom be considered by the considered be considered be considered by the				Stockport Tameside	29.1% 38.5%	25.0% 26.2%	
Mandatory Maintenance structural maintenance structural maintenance structural maintenance should be considered Bolton be considered roads 2005/06 base 54.5% Mandatory Bolton classified roads where structural maintenance should unclassified roads where structural maintenance should be considered considered be considered be considered Bolton be considered be				Trafford Wigan	42.7% 40.8%	42.7% 30.0%	
Proportion of case Bolton C65.0% C12.0%	BV 224a	Mandatory	Maintenance :		2005/06 base		Each District has set an interim target based on predicted cvi
Mandatory Maintenance should where structural maintenance should be considered 12.0% 1	(EX BV 9/a)		Proportion of	Bolton	65.0%	54.5%	results, pending receipt of 2005/06 scanner data. Comparison with a 2004/05 BV97 baseline is not possible due to
Mandatory Maintenance should be considered 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 13.0% 13.0% 13.0% 13.0% 14.3% 13.0% 14.3% 14.3% 12.0% 12.0% 12.0% 13.0% 14.3% 14.3% 12.0% 12.0% 14.3%			classified roads	Bury	22.4	12.0%	methodology changes. Comparison of BV97 / BV224 between
Mandatory Maintenance should Contain 14.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 12.0% 14.1% 14.1% 13.3% 14.1% 1			where structural	Manchester	12.0%	9.0%	authorities and between years is made difficult due to
Deconsidered Considered C			maintenance should	Bochdale	19.0%	32.0% 12.0%	differences in survey methodology and proportion of the
Stockport 15.0% 10.0% Tameside 9.1% 5.5% 5.5% Trafford 5.5% 5.5% 5.5% Wigan 13.0% 10.5% Wigan 13.0% 10.0% Wigan 13.0% 10.0% Wigan 13.0% 10.0% Wigan 13.0% 12.0% Wigan 13.0% 12.0% Wigan 13.0% 13.0% Wigan 14.1% 13.0% Wigan 14.1% 13.0% Wigan 14.1% 13.0% Wigan 14.1% 14.1% Wigan 14.1% 14.1% Wigan Wigan Wi			pe considered	Salford	70.0%	55.0%	network assessed: contact individual authorities for details
Trafford 5.5% 8.4%				Stockport	15.0%	10.0%	
Mandatory Maintenance :				Tameside	9.1%	8.4%	
Mandatory Maintenance :				Trafford	5.5%	5.5%	
Mandatory Maintenance : 2004/05 base Proportion of unclassified roads where structural maintenance should be considered be considered Safford Bolton 18.2% 31.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5				vvigan	13.0%	0.5%	
unclassified roads where structural maintenance should be considered be considered Salford Stockport Tameside Who an include to the structural be considered Salford Stockport Tameside Whitan Stockport Tameside Widan Stockport Tameside	BV 224b	Mandatory	Maintenance :		2004/05 base		Each District has set an interim target based on predicted cvi
Bury 14.3% Manchester 11.1% Oldham 62.9% Rochdale 13.3% Salford 27.8% Stockport 15.0% Tameside 17.1% Trafford 17.1% Wildan 6.1% 8.0%	(EX BV 9/10)		unclassified roads	Bolton	18.2%	31.0%	results, performing receipt of 2003/00 scarniel data. Comparison with a 2004/05 BV97 baseline is not possible due to
Maloricasca (1.1%) (2.3%) (5.3%) (5.3%) (5.3%) (5.0			where structural	Bury	14.3%	5.0%	methodology changes. Comparison between authorities and
Salford 13.3% 10.0% 15.0% 15.0% 15.0% 15.0% 12.0% 11.1% 13.8% 13.8% 13.8% 13.8% Wigan 6.1% 18.1%			maintenance should	Oldham	%1.1.% 62.9%	55.0%	between years is made difficult due to differences in survey
ort 15.8% 12.0% 17.1% 8.1% 17.1% 8.1% 13.8% 6.1% 8.0%			be considered	Rochdale	13.3%	10.0%	methodology and proportion of the network assessed: contact individual authorities for details
ort 15.8% de 11.1% 17.1% 6.1%				Salford	27.8%	15.0%	וומולומממן ממוויסווונס וסן מפומויס
de 11.1% 17.1% 6.1%				Stockport	15.8%	12.0%	
6.1%				Trafford	11.1%	8.1% 4.2 0%	
0				Wigan	6.1%	8.0%	

6.9 Headline Targets

(2010/11 unless otherwise stated) (2003/04 unless otherwise stated)

Ref	Type	Indicator	Area	Baseline value ⁽ⁱ⁾	Target value ⁽ⁱⁱ⁾	Headline change / notes
BV 99 ×	Mandatory	Road safety :total KSI	Greater Manchester	1994-98 avge 1281 (index 100)	641 (50)	50% reduction on 1994 -1998 baseline by 2010
ВV 99 у	Mandatory	Road safety :child KSI	Greater Manchester	1994-98 avge 304 (index 100)	2009-11 avge 137 (45)	55% reduction on 1994 -1998 baseline by 2010
BV 99 z	Mandatory	Road safety :slight casualties	Greater Manchester	1994-98 avge 15426 (index 100)	2010 10798 (70)	30% reduction on 1994-1998 baseline
BV 102 a	Mandatory	Bus patronage	Greater Manchester	225m journeys (index 100)	230m journeys (102.1)	2.1% increase between 2003/04 and 2010/11ie a 4.5% increase between end of LTP1 and LTP2
BV 102 b		Rail patronage		17.5m journeys (index 100)	19.6 m (112)	12% increase between 2003/04 and 2010/11ie. 5.2% increase between end of LTP1 and LTP2
BV 102 c		Metrolink patronage		18.6m (index 100)	20.7m (111)	11% increase between 2003/04 and 2010/11le. 6% increase between end of LTP1 and LTP2
BV 104	Mandatory	Bus satisfaction (residents)	Greater Manchester	55%	2009/10: 60%	5 percentage point increase
BV 187	Mandatory	Maintenance: Footway condition	Bolton Bury Manchester Oldham Rochdale Salford Stockport Tameside Trafford	52.0% 22.7% 38.0% 22.0% 58.0% 20.0% 37.4%	20.0% 11.0% 12.0% 49.0% 17.0% 8.0% 4.5%	Each District has set target based on cvi

Ref	Type	Indicator	Area	Baseline value ⁽ⁱ⁾	Target value ⁽ⁱⁱ⁾	Headline change / notes
LTP 1 a	Mandatory	Accessibility: Percentage of households within 30 minutes access by public transport to a Category A interchange or Manchester City Centre by 08:45	Greater Manchester	2005 85%	Maintain 85%	Maintain current levels
LTP 1 b	Mandatory	Percentage of people in receipt of Jobseekers Allowance within 30 minutes access by public transport to a Category A interchange or Manchester City Centre by 08:00		2005 90%	Maintain 90%	Maintain current levels
LΤР 2	Mandatory	Road Traffic: Area wide road traffic kilometres on local roads	Greater Manchester	7302m veh-km	7386m	Limit to 2% increase
LTР 3	Mandatory	Cycling :Index of recorded cycle counts	Greater Manchester	2005/06 ACC Index 100	ACC Index 106	10% increase in the number of cycle trips from 2003/04 base, which is estimated to equate to a 6% increase in cycle flows recorded at the 60 core Automatic Cycle Counter sites from a 2005/06 base
LTP 4 а	Mandatory	Mode share journeys to primary school	Greater Manchester	56% by non-car modes	28%	2 percentage points increase in use of non-car modes
LTP 4 b	Mandatory	Mode share journeys to secondary school		80% by non-car modes	80%	No further reduction in use of non-car modes

i (2010/11 unless otherwise stated) (2003/04 unless otherwise stated) i (2010/11 unless otherwise stated) (2003/04 unless otherwise stated)

Ref	Туре	Indicator	Area	Baseline value ⁽ⁱ⁾	Target value ⁽ⁱⁱ⁾	Headline change / notes
LTP 5	Mandatory	Bus punctuality	Greater Manchester	2004/05 73%	85%	12 percentage point increase
LTP 6 a	Mandatory	Peak traffic flow to Regional Centre	Regional centre	2005 30779 vehs	2011 30779	No increase in peak period vehicle trips into the Regional centre
LTP 6 b	Mandatory	Peak traffic flow to other key centres	Other key Centres	2002-05 57243 vehs	57750	Limit peak period vehicle trips into other key centres to no more than a 1% increase by 2010-11.
стр 7	Mandatory	Congestion :Average journey time per person mile on target routes	Greater Manchester	Index 100	Index 100	Interim target of no worsening of congestion with 2% increase in area-wide traffic flows on local roads.
LTP 8	Mandatory	Air quality: NO ₂		2005 modelled)	2010 modelled	Reduction of 39% in NOx emissions from traffic on local main
		(ug/m²) at worst case receptor points within AQMAs* 1 hour average NO₂ conc Intermediate proxy of tonnes NOx emissions from traffic on local main roads	Bolton Bury Manchester Oldham Rochdale Salford Stockport Trafford Wigan Bury Manchester Oldham Rochdale Salford Stockport Trafford Wigan Wigan Rochdale Salford Stockport Tameside Trafford Wigan Extri	42.26 47.08 36.71 40.93 553.18 48.09 40.71 40.00 51.59 51.59 51.59 2001 898 2156 264 1441 1085 1094	36.39 50.09 29.00 35.32 46.72 46.72 29.01 20.01 31.51 45.06 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 687 687 688 689 11.41 639	
LTP 9	Local	Climate change :CO ₂ emissions from road traffic on local roads	Greater Manchester	20053.76m tonnes	20103. 93m tonnes	Limit increase in CO2 emissions to 4.5%.

			Area	Baseline value "	larget value '''	
LTP 10 a	Local	Accessible infrastructure (wheelchair accessible buses)	Greater Manchester	42% in 2004/05	66% by 2008/09	37.5% increase (i.e. 24 percentage points) in wheelchair accessible buses
LTP 10 b	Local	Accessible infrastructure (raised bus stops)	Greater Manchester			To be reported in future APRs when data collection mechanism established
LTP 10 c	Local	Accessible infrastructure (rail)	Greater Manchester	50.5% in 2004/05	57% in 2008/09	5 more accessible stations by 2008/09
LTP 10 d	Local	Accessible		2004/05		Targets set by each District
		infrastructure	7.7	200	10 00′	
		(pedestrian crossings	Bolton	41.0%	%0.62	
		RV165)	Bury	75.7%	83.0%	
			Manchester	81.5%	86.5%	
			Oldham	%9'22	91.0%	
			Rochdala	54.0%	%U 92	
			Salford	94:0% 80.4%	70.0 % 96.0%	
			Sallolu	00.4%	95.0%	
			Stockport	93.1%	98.0%	
			lameside	79.2%	95.5%	
			Trafford	35.0% 88 0%	98.0%	
					2000	
LTP 10 e	Local	Public Rights of		2004/05		Targets set by each District
		way Ease or use or	- H- C	01	11	
		PRoW by the public	Bolton	%). 	%0.77	
		(BV 178)	Bury	81.9%	87.0%	
		() ::	Manchester	%8:99	%0'26	
			Oldham	46.5%	80.0%	
			Rochdale	42 0%	%C:50	
			Solford	7,0,7	26.3%	
			Sallold	90.0%	75.5%	
			Stockport	79.1%	%0:08	
			Tameside	88.8%	95.5%	
			Trafford	37.0%	95.0%	
			Wigan	%0.89	73.0%	
LTP 4	Local	Walking: No. trips/year/person where walking is the	Greater Manchester	249 trips / person in 2004	237 trips / person	To stop the decline in walking trips after an initial 5% decrease.

(2010/11 unless otherwise stated) (2003/04 unless otherwise stated)

Ref	Type	Indicator	Area	Baseline value ⁽ⁱ⁾	Target value ⁽ⁱⁱ⁾	Headline change / notes
LTP 12 a	Local	Mode share to Regional Centre	Regional Centre	61% in 2005	65%	Increase in use of non-car modes limited to 4 percentage points.
LTP 12 b	Local	Mode share to Key Other Key Centres Centres	Other Key Centres	2003-0540% non-car modes	40%	Maintain current modal split at 40% for non-car Modes
LTP 12 c	Local	Vehicle Trips / Passenger to Manchester Airport	Manchester Airport	2005 1.44 veh trips/pass (21.5m pass)	2011 1.38 veh trips/pass (est 30m pass)	4% reduction in the ratio of vehicle trips:passengers between 2005 and 2011.

Table 6.2 Summary of LTP2 Headline Indicators and Targets

More details of the indicators, targets and trajectories and associated information can be found in the LTP2 Monitoring Technical Appendix.

ii (2010/11 unless otherwise stated)

(2003/04 unless otherwise stated)

(2003/04 unless otherwise stated)

Coi	ntext	LTP Chapter / Paragraph number
•	Long term strategy and local transport strategy (5.1)	Chapter 2
•	LTS and LTP to show co-operation with other LA functions, and commitment of those functions to objectives and targets (2.7)	Chapter 1, 2.1
•	Local transport strategy and delivery programme to relate to all aspects of LA's long term vision for area. (Annex C)	2.1, 2.2
•	Join transport up with wider planning and policy framework (2.3)	Chapter 1, Chapter 2, 5.14
•	Plans, targets, policies and objectives of other LA functions to be broadly consistent with LTP (2.7)	2.1
•	Evidence of close working between met. districts and PTA/Es (2.8)	3.1, 3.5.1, 4.1, 4.3.4, 4.8.1, 5.2.1, 5.2.2, 5.2.5
•	Local transport strategy to co-ordinate with those of neighbouring authorities, in partnership, especially in city region area (2.5/17/19/20)	4.8
•	Local transport strategy to relate to RSS and RTS policies, priorities, timescales and wider objectives, with endorsement from NWDA/NWRA (2.5/11/12/3)	5.14
•	Include proposals for achieving outcomes for RTS and RES (existing documents if reviews not finalised) (2.15)	5.14
•	Consistency with relevant national-level policies (Annex C)	5.14
•	Consider Aviation White Paper implications for local transport. (2.23)	2.1, 5.1.4
•	Indicate how GMPTA will use new powers over rail (4.50)	4.3.5

Analysis		LTP Chapter / Paragraph number
•	cal transport problems and opportunities across the of modes and set out policy response, tackling root 44), (5.1)	•

Ana	alysis	LTP Chapter / Paragraph number
•	Analysis of problems and opportunities to be fully informed by existing evidence base (Annex C)	Chapter 4
•	Consider full range of people, communities, public services and businesses affected by the Plan (Annex C0	Chapter 4
•	Use full range of up to date techniques for analysis and implementation, so that Plan is well-founded (2.47,4.8)	4.1,4.2
•	Road safety policies and programmes to be guided by casualty data analysis and dialogue with Highways Agency (3.62/3)	4.3.3, 5.2.3
•	Use evidence base from other sources to develop innovative solutions fitting local situation (2.35)	Chapter 3 and Technical Annexe
•	Consider environmental impact (SEA) of Plan schemes and policies, and show opportunities taken to improve the environment (Annex C)	3.3
•	Integrate AQ assessment with SEA (3.71)	3.3
•	Present in plain English, with economy of presentation, and inclusion of technical or supporting information in Annexe. (5.2)	Throughout

Ма	ximising value from resources	LTP Chapter / Paragraph number
•	5-year programme of schemes and policy measures (5.1)	Chapter 5
•	Prioritise schemes according to VFM (2.32,4.5)	5.1.2
•	Make better use of existing infrastructure (2.37,3.10)	5.6, 4.7
•	Set out approach to implementing duty under Traffic Management Act, and show how this will contribute to target delivery – especially congestion (2.38, 3.16)	5.2.1
•	Maintain assets in a cost effective way and develop Transport asset management Plans in support of LTP (2.39)	4.7
•	Consider range of options for managing demand for road travel and influencing travel behaviour (Annex C)	1.2, 2.2, 5.2.1

Ma	ximising value from resources	LTP Chapter / Paragraph number
•	Show how Network Management duty will be implemented in a way that will maximise the value of existing transport networks (Annex C)	5.1, 5.1.4
•	Demonstrate effective use of revenue budgets to improve transport outcomes (Annex C)	5.11
•	Frame Plan with realistic view of funding from all sources (Annex C)	Chapter 5
•	Effective budgeting, cost control, and partnership funding from non-LTP sources.(Annex C)	5.1.2, 5.1.6
•	Light rail proposals to be integrated with local buses and supported by traffic management (4.55)	5.2.1, 4.3.5, 5.10.1
•	Show how effective maintenance will contribute to the achievement of other targets / objectives. (4.57)	4.7, 5.6
•	Plan to carry out maintenance in good time, and consider future maintenance requirements of capital schemes (4.58)	5.6
•	Evidence of maximising efficiency in highway maintenance through methods listed in 4.59	5.6
•	Develop innovative and cross-service revenue funding approaches (4.70)	5.15

Inv	olvement	LTP Chapter / Paragraph number
•	Brief description of arrangements for involving local people and wide range of stakeholders, including LSPs (2.9, 3.71), including genuine opportunities to influence and improve the Plan (5.16)	3.4
•	Use of existing consultative and planning bodies (Annex C)	3.4
•	Evidence of strategic leadership to secure support for controversial measures. (2.9)	Chapter 1
•	Involvement of all relevant tiers of local government and departments (Annex C)	Chapter 1, Chapter 2

		LTP Chapter / Paragraph number
•	Consideration of transport needs and opportunities across administrative boundaries (Annex C)	4.8, 4.8.1
•	Evidence of joint working with Highways Agency, SRA and coach operators to meet needs of longer distance travellers.(2.21)	4.1, 4.8, 5.2.1
•	Ensure LTP available to all groups and allow sufficient time to produce documents in suitable formats and languages (5.44/6)	see cover
•	Consult in advance on document access needs (5.46)	see Consultation Report
•	Targets to make clear connections with targets for sustainable economic growth, housing and social inclusion (2.25)	Chapter 6
•	Evidence that plans and targets for these other areas have responded to LTP strategy (2.26)	6.2
•	Make provision for disabled and ethnic minority group people to comment on/ask questions about the LTP.(5.47)	Consultation Report
•	Involve the community transport sector in accessibility policy development (3.27)	Consultation Report

Per	formance management	LTP Chapter / Paragraph number
•	Set targets for 20-40 key outcome indicators, including most transport BVPIs, and intermediate outcomes(2.51/5/9/60/1, 3.71/2, 5.1)	Chapter 6
•	Set targets for contributory output indicators (2.51)	6.5
•	Targets to reflect the transport aims and objectives, the 4 shared priorities and the wider context plus contribution to health and liveability (2.27)	Chapter 6
•	Evidence of ambitious, challenging and realistic targets, key actions needed to achieve, and risks of non-achievement (2.28/54, 3.73)	6.4, 6.5, 6.6, 6.7
•	System for reviewing targets (Annex C)	6.7.1

Per	formance management	LTP Chapter / Paragraph number
•	Targets to relate to outcomes (2.27)	Chapter 6
•	Include relevant mandatory targets and indicators (Annex C)	6.2, 6.7
•	Set trajectories and annual milestones for all LTP and AQ targets (2.58, 3.71/2)	Monitoring Report
•	Identify how targets to be achieved, risks to achievement, and risk management (Annex C)	Monitoring Report
•	Compare draft targets against those of equivalent authorities (2.28)	Monitoring Report
•	Adopt additional indicators that could be used for improved regional monitoring (2.57)	Monitoring Report
•	Programme of local transport schemes and policies to achieve the targets (2.32)	Chapter 5
•	Evidence that national road safety strategy has informed local strategies and targets (3.50)	5.2.3
•	Build on past or current successes and avoid repeating mistakes or missing opportunities (2.36)	3.1
•	Avoid over-programming (5.12)	Chapter 5

		LTP Chapter / Paragraph number
•	Include objectives for 2010/11 (5.1)	Chapter 5
•	Evidence that delivering the shared priorities is at the heart of the LTP (3.3)	5.2
•	Show that developing accessibility strategy will deliver accessibility objectives, and that these are supported by the wider local policy and planning agenda, including consideration of social exclusion (3.26/7)	5.2.2 Accessibility Strategy
•	Develop partnerships with relevant bodies and neighbouring authorities regarding accessibility(3.32)	5.2.2

1		LTP Chapter / Paragraph number
		Accessibility Strategy
•	Incorporate bus strategy, but identify the elements separately (4.47-9)	5.2-5.5,
	(4.47-3)	Bus Strategy
•	Include schemes to integrate railways with other local transport modes, with support of rail industry partners(4.51)	5.2.1, 5.3, 5.4
•	Address current and emerging congestion problems, as 64 above, including use of innovation through Transport Innovation Fund (3.18-21)	5.11
•	Address air quality problems, as 65 above (Annex C)	5.2.4,
		Air Quality Strategy
•	Quantify source of contributions to air quality exceedence (3.71)	4.34,
		Air Quality Strategy
•	Integrate air quality Action Plan with LTP (3.67)	Air Quality Strategy
•	Report on AQ options considered (3.71)	Air Quality Strategy
•	Indicate how LTP measures will help meet AQ objectives and quantify wider impacts (3.71)	Air Quality Strategy
•	Set out 2004/5 baseline on AQ, and 2010/1 target, along with annual trajectories (3.71)	Air Quality Strategy
•	Where motorway and trunk roads emissions responsible for AQMAs,, include joint remedial work with Highways Agency (3.69)	Air Quality Strategy
•	Include annexe on non-transport AQMA sources (3.70)	Air Quality Strategy
•	Road safety policies and programmes to be guided by casualty data analysis and dialogue with Highways Agency (3.62/3)	5.2.3
•	Link road safety strategies to other areas of work (3.60)	5.2.3

Pri	orities	LTP Chapter / Paragraph number
•	Identify the most important road safety issues, especially in relation to the issues in 3.53-9.	4.3.3
•	Deliver better road safety outcomes, as 66 above (Annex C)	Road Safety Strategy
•	Consider implementing innovative transport technologies in preference to large scale infrastructure works (2.40)	5.10.2, 5.1.4, 5.10.5
		Technical annexe
•	Include travel behaviour change and demand management policies (2.41, 3.14)	5.10.2, 5.1.4
•	Consider demand management measures in association with major infrastructure projects (2.43)	5.10
•	Identify proposals helping to deliver sustainable housing/employment growth and housing market renewal (2.29/30)	1.1, 2.1, 5.2.6
•	Take opportunities to deliver on wider quality of life issues – i.e. sustainable and prosperous communities, enhanced public spaces, landscape and biodiversity protection and enhancement, enhanced personal security, healthier communities, fewer transport-related noise problems, and progress towards climate change objectives (3.75-95)	4.5, 5.2.6
•	Consider the services and facilities provided for <u>all</u> transport network users (2.45)	Chapter 5
•	Work closely with local communities through existing structures (2.46,3.32)	3.4 and Consultation Report,
•	Recognise rights of way as a key ingredient in the development of an integrated transport network (5.29)	5.5, 5.6
•	Incorporate prioritised rights of way improvements that would help to meet LTP objectives and identify the funding source (5.30)	5.6
•	Include and explain local policies on taxis and private hire services, and explain any restrictions imposed on licences by LTP area authorities (5.34)	5.2.1

Priorities	LTP Chapter / Paragraph number
Deliver better transport for semi-rural/rural areas, supporting tourism (2.48-50)	including 4.6
Consider contribution of cycling and walking to plant achievement (2.62)	an 4.3, 5.2
 Include broad details of priority major schemes to b for appraisal during LTP2 period, as a separate ele provisionally approved (4.25/8) 	
 Quantify benefits, costs and impacts (including di impacts) of LTP proposals, and identify arrangem post-implementation evaluation of major schemes 	ents for
New major schemes to show additionally delivered LTP targets and objectives (4.30)	d against 5.10

Glossary 8

AGMA	Association of Greater Manchester Authorities
APR	Annual Progress Report
AQMA	Air Quality Management Area
AQAP	Air Quality Action Plan
BV	Best Value
BVPI	Best Value Performance Indicators
СС	City Council
CCTV	Closed Circuit Television
CDMF	Common Data Management Facility
CO2	Carbon Dioxide
COPECAT	Concise Pedestrian and Cycle Audit
СРО	Compulsory Purchase Order
СТС	Cycling Tourists Club
CRDP	City Region Development Programme
CVI	Culmative Volume Index
DDA	Disability Discrimination Act
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DRT	Demand Responsive Transport
ECI	Early Contractor Involvement
ER	Environmental Report
ERDF	European Regional Development Fund
EU	European Union
FE	Further Education
GDP	Gross Domestic Product
GM	Greater Manchester
GMADE	Greater Manchester Association of District Engineers
GMITS	Greater Manchester Integrated Transport Strategy
GMJTT	Greater Manchester Joint Transport Team
GMLTP	Greater Manchester Local Transport Plan
GMPTA	Greater Manchester Passenger Transport Authority
GMPTE	Greater Manchester Passenger Transport Executive
GPRS	General Packet Radio Service
GVA	Gross Value Added
HEP	Higher Education Precinct

8 Glossary

HGV	Heavy Goods Vehicles
HOV	High Occupancy Vehicle
ITB	Integrated Transport Block
ITIS	Integrated Transport Information System
ITS	Intelligent Transport Systems
JETTS	M60 Junction Eighteen to Twelve Multi-Modal Study
KSI	Killed or Seriously injured
LDF	Local Development Framework
LEA	Local Education Authority
LGA	Local Government Association
LRT	Light Rapid Transit
LSP	Local Strategic Partnership
LSS	Local Safety Schemes
LTP	Local Transport Plan
МВС	Metropolitan Borough Council
MCC	Manchester City Council
MMU	Manchester Metropolitan University
MOVA	Microprocessor Optimised Vehicle Actuation
MPPA	Million Passengers Per Annum
NOX	Oxides of Nitrogen
NWDA	North West Development Agency
NWGS	Northern Way Growth Strategy
ODPM	Office of the Deputy Prime Minister
OUT	Outstation Transmission Unit
PFI	Private Finance Intiative
PHV	Private Hire Vehicle
POG	Planning Officers Group
PPA	Passengers Per Annum
PSA	Public Service Agreement
PTA	Passenger Transport Authority
PTE	Passenger Transport Executive
PTW	Powered Two Wheelers
QBC	Quality Bus Corridor
RES	Regional Economic Strategy
ROWIP	Rights of Way Improvement Plans

Glossary 8

RPA	Regional Planning Assessment
RPG	Regional Planning Guidance
RSS	Regional Spatial Strategy
RTS	Regional Transport Strategy
RUS	Route Utilisation Strategy
SCOOT	Split cycle offset optimisation technique
SEA	Strategic Environmental Assessment
SEMMMS	South East Manchester Multi Modal Study
SPITS	South Pennine Integrated Transport Strategy
SPM	Strategy Planning Model
SR	Safer Roads
SRA	Strategic Rail Authority
SRF	Strategic Regeneration Framework
SRO	Side Road Order
TEMPRO	Trip End Model Projections
TIF	Transport Innovation Fund
TRL	Transport Research Laboratory
UDP	Unitary Development Plan
UKPMS	United Kingdom Pavement Management System
UMIST	University of Manchester Institute of Science and Technology
URC	Urban Regeneration Company
UTC	Urban Traffic Control
UTMC	Urban Traffic Management and Control
VMS	Variable Message Signing

Accessibility	5. 7–8.		125, 136,
,	10–11,		139, 149–
	15, 17–		150, 152–
	18, 20,		153
	23–26,	Bus network	
	28, 41–	Bus operator	· ·
	42, 55–	Bus operator	78, 93,
	57, 78,		95, 120
	82–83,	Bus priority	•
	•	Bus priority	
	87, 89,		95, 106,
	96, 98–	Due aboltor	130
	99, 102,	Bus shelter	
	105, 107,	Bus shelters	
	109–111,	Bus stations	· ·
	120–121,	Bus stops	
	134–137,		118–121,
	139–140,		125, 143,
	142, 148,		153
	158–159	Bus strategy	9, 11, 24,
- Accessibility			29, 50-
Air quality	7, 11, 15,		51, 61,
	25–27,		84, 136–
	47, 75–		137, 160
	76, 91–	Cadishead Way	125
	94, 97,	Car ownership	24, 33
	99, 147,	Car parking	
	160		54, 61–
Asset management	11, 64,		62, 70, 88
3	109, 112,	CCTV	
	156		124
Aviation White Paper		Central Park	
	135, 155	Cheshire	· · · · · · · · · · · · · · · · · · ·
Best practice	•		118–120,
			135
Best value		Climate change	
Bolton	•	Omnate onango	70, 91,
Dollori	56, 60,		93, 101,
	84, 120–		107, 143,
	121, 125,		152
	127, 123,	Communities	
	139, 148–	Communities	109, 119,
	150, 152–		135
	•	Community cofety	
Rridges	153 110 112	Community safety	24, o7, 110
Bridges		Community transport	
Pun/	141	Community transport	
Bury			86, 98,
	87–88,	Concocioner force	140
	94–95,	Concessionary fares	13/, 14/
	115, 124–		

Congestion	15 17	Economic growth	13 15
Congestion	15, 17, 19, 24–	Economic growth	17, 19–
	26, 28,		20, 23,
	33–34,		25, 37,
	38, 42–		54, 128,
	43, 50–		135, 142
	51, 60,	Education	7, 15, 17,
	88, 91,		136
	94, 98,	Employment	41, 53,
	101–103,		78, 81,
	105–109,		105, 110,
	111, 116,		116, 125,
	119, 135–		136, 146
	137, 142,	Environmental Report	
	147–148,	Freight	
0 " "	152		66–67,
Consultation	· ·		93, 99,
	24, 27,	Combon advantion	135
	67, 95,	Further education	
	103, 121, 125–127,	GM Passenger Transport Authority	41, 139
	131, 134,	GMPTAGMPTA	
	142	OWI 1A	81, 111,
COPECAT			115, 120,
Crime	•		122, 137,
G	102		139
Crime and Disorder		GMPTE	
Cycling	19–20,		29–30,
	24–25,		33, 47,
	28, 34,		50, 56,
	37, 62,		63, 66–
	64, 70,		67, 77–
	73, 84,		78, 81,
	86, 91,		84, 95–
	93, 101–		96, 98,
	102, 104–		108–109,
	105, 108–		122, 125,
	111, 119,	CMTDE	148
	130, 132,	GMTPE	
	134–136, 148, 151	Government	
DDA	•	Greater Manchester Casualty Reduction Partnership	
Demand management		Greater Manchester Integrated	
Demand management	26, 60,	Transport Strategy	
	77, 105,	Greater Manchester Passenger	
	134–135	Transport Authority	5
Derbyshire		Health	
	118		47, 54,
DfT guidance			88, 100
Disability Discrimination Act		Higher Education	
Disabled people	25, 78,	Highway Authorities	95
	139	Highway authority	68
District centres	110		

Highways Agency	9, 26–27,	Manchester-Salford Inner Relief	
	30, 33,	Route	
	68–69,	Metrolink	28, 49,
	75, 84,		60, 63,
	91, 93,		77, 81,
	135–136		93, 105,
Housing	9, 17, 20,		108, 115,
	28, 31,		122, 124–
	33, 83,		125, 128,
	136		130
Housing Market Renewal	13, 18,	Monitoring	145–147
	20, 54,	Motorways	15, 34,
	102, 139		38, 43, 75
Indicator	154	Neighbourhood Road Safety Initiative.	137, 139–
Infrastructure	23, 51,		140
	96, 100,	Neighbouring authorities	.27, 109
	141, 153	Nightbus	.63, 137
Inner relief route	53	Noise	26, 28,
Intelligent Transport Systems	124		55, 99,
JETTS	61, 95,		132
	127-128,	Northern Orbital	95
	136	Northern Orbital QBC	125
Lancashire	15, 57	North West Development Agency	140
Land use planning	8–9, 26,	NWDA	56
	38, 41,	Oldham	13, 20,
	116		41, 44,
Leigh Guided Busway	126		61, 71–
Light rail	118, 122		72, 74,
Local safety schemes	24, 84,		76, 101,
	131		109, 113,
LTP2 guidance	134, 144		115, 122,
LTP guidance	129, 143		124-125,
Maintenance	8, 21, 26,		139, 149
	60, 75,	Park and ride	9, 21, 26,
	99, 109–		29, 56,
	114, 137,		61–62,
	147, 149		77, 105,
Major schemes	25, 60,		121
	128	Parking standards	11, 66
Making best use	20, 124	Partnership working	9, 18, 24
Making best use	134	Passenger information	96
Manchester	13, 30,	Peak District National Park	58, 109
	51, 63,	Pedestrian	23, 43,
	66, 71,		62, 64,
	74, 115,		68–69,
	122, 124–		71, 73,
	125, 139,		82, 84-
	149		85, 88,
Manchester Airport	17, 20,		90, 94–
	107, 122		95, 102–
Manchester and Salford Inner Relief Route			103, 105,
Manchester City region			
	,,		

	109, 112,	Real-time passenger information	120
	120, 124,	Regeneration	
	153	1 (0901101010101111111111111111111111111	13, 18–
Performance indicators			19, 21,
Personal security			28, 38,
PHV			69–70,
Planning guidelines			81, 85,
Policy framework			87, 89,
Powered Two Wheelers			96–98,
Private Finance Initiative			101–102,
Public transport			101–102,
QBC			112, 115–
QBC	23, 29, 38, 51,		116, 118,
	57, 60 <u></u>		126, 128–
	61, 70–		132, 135,
	72, 77,		137, 139–
	94–95,	Danianal Farmania Otratama	140
	118, 121,	Regional Economic Strategy	
	124, 126–		13, 20,
	128, 132,	5	135–136
0 111 5 0 11	135, 147	Regional Planning Guidance	
Quality Bus Corridors		Regional spatial strategy	
	38, 50,		13, 15,
	60, 84,		26, 31,
	94, 105		66, 135–
Quality of life			136
	87, 104,	Regional Transport Strategy	
	110–111		136
Rail		RES	•
	17–18,		136
	21, 23,	Residential travel plans	
	27, 34,	Retaining walls	
	37, 42–		125, 128
	43, 49–	Revenue	8, 58, 74,
	51, 53–		98–99,
	54, 56–		124–125,
	58, 62–		130, 132,
	63, 70–		137
	71, 77,	Rights of way	11, 18,
	96–97,		55, 104,
	99–101,		109–110,
	106–109,		112, 133,
	118, 121,		139–140,
	128–131,		143, 153
	135–136,	Ring and Ride	80, 83
	139, 143,	Road safety	8, 23–25,
	150, 153		43–44,
Rail infrastructure			51, 67,
Rail station	10, 43,		75–76,
	97, 105–		84–86,
	106, 120-		90, 102,
	121		104, 111,
Real time passenger information	121		116, 119–
. •			

	100 100	Characters and	40.00
	120, 132,	Stockport	
	134, 137,		44, 61,
	139, 142,		86, 97,
Doobdolo	147, 150		100, 109,
Rochdale	13, 20, 41, 44,		115, 118,
	97, 115,		124, 126–
	97, 113, 122, 124–		127, 139, 149
	•	Stratagia Aggagibility Bartnarahina	
	125, 128, 139, 149	Strategic Accessibility Partnerships Strategic Environmental Assessment	4 1
RSS	•	(SEA)	25
N33	10, 135– 136	Strategy Planning Model	
RTS		Strategy Flaming Model	24, 54, 37, 53,
Rural areas			142–143,
Safer Routes to School			142–143,
Salford		Street lighting	-
Salloru	13, 20, 41, 52,	Street lighting	94, 103, 111–112,
	62–63,		121
	80–81,	Structure	
	89, 96,	Structures	
	106, 115,	Tameside	
	124, 128,	rairieside	13, 71– 72, 82,
	135, 137,		109, 118,
	140, 149		126, 139,
Schools	•		149
3010015	20, 41– 42, 44,	Target	
	42, 44, 63–64,	•	
	•	Targets	
	66, 73,	Taxi	•
	78, 86,		78, 91,
School traval plan	89, 137		93, 108– 109
School travel plan		Taxis	
School travel plans			
SEMMMS		Tipping point	
Charad priorities	127, 141		130
Shared priorities		Town centres	
Cigning	137, 142		26, 66,
Signing			77, 91,
	72, 105–	Traffic calming	115, 120
Consertor obsises	106	Traffic calming	
Smarter choices	,		131–132,
Social inclusion		Traffic management	139
	25, 50,	Traffic management	
Consideration of the contract	135		67–68,
Speed management			77, 85,
CDITC	131		106, 112,
SPITS			136–137,
SRA		Traffard	139
Stakeholder		Trafford	
	19, 27–		80, 128,
	30, 115,	Trafford Dayle	139, 149
	129, 136,	Trafford Park	
Stakahaldara	143		80, 115,
Stakeholders	24, 21		124, 130

Train operatorsTrans-Pennine	
Trans-Pennine Trail Transport infrastructure fund	109
Transport Innovation Fund	5, 8, 60,
Transport White Paper Travel choices Travel plans	.83
Trunk roads	· ·
Unitary Development Plan	.66, 128
Urban traffic control	124, 134,
Urban Traffic Control Block Replacement	137
UTC	
Value for money	
	61, 63, 77–78, 96, 110, 114, 127, 131, 148
Walking	
Walking strategy	
Wigan	56–57, 60, 63, 75, 84– 85, 103, 115, 127, 129, 139, 149
Working in partnership	
Workplace parking	
Workplace travel plans	.66, 139













STOCKPORT METROPOLITAN BOROUGH COUNCIL





