West Midlands Local Transport Plan
Making the Connections

Local Transport Strategy
Appendices

Detailed Topic Areas Relating to the Ten Long Term Themes 2011 – 2026
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Appendices –
Detailed Topic Areas
relating to the 10
Long Term Themes

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<th>Policy</th>
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<tbody>
<tr>
<td><strong>LTT1</strong> REGENERATION, THRIVING CENTRES, CORRIDORS AND GATEWAYS</td>
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</tbody>
</table>
| **REG1** When preparing Local Development Documents, and their regeneration and investment strategies, to ensure that as far as possible, development and redevelopment proposals make the best use of existing transport infrastructure and services, improve connectivity locally and in the wider area where appropriate and provide high levels of accessibility for all with an emphasis on sustainable modes of travel. | District Councils  
Regeneration Agencies  
Homes and Communities Agency  
Development Industry |
| **REG2** To work with Government and LTP3 Partners to maximise the benefits and opportunities High Speed Rail will bring to the Metropolitan Area, including maximising the benefits of released capacity on the “classic” network | District Councils  
Department for Transport  
High Speed Two Limited  
Office for Rail Regulation  
Network Rail |
| **REG3** To promote and deliver high quality sustainable access to High Speed Rail, ensuring that the resultant benefits and opportunities can be accessed by people and businesses across the entire Metropolitan Area | District Councils  
Department for Transport  
High Speed Two Limited  
Network Rail  
Rail Operators |
| **REG4** To help overcome deficiencies in on street set-down and pick-up facilities in the vicinity of the Area’s major visitor attractions | District Councils  
Bus and coach operators |
| **REG5** To identify adequate long-stay coach parking facilities convenient to town and city centres and near major attractors during daytime and evening hours. | District Councils  
Coach operators (and/or their trade body) |
| **REG6** Recognising Birmingham Airport as a Strategic National Asset and the international gateway to the region, to ensure high quality surface access to the Airport to support existing and projected passenger growth, and to recognise the Airport as a potential solution to capacity constraints and congestion at the South East airports. | District Councils  
Birmingham Airport Limited  
Highways Agency  
Network Rail  
Public Transport Operators |
| **REG7** Recognising the important role of the National Exhibition Centre in supporting the West Midlands economy, to work with partners to ensure high quality sustainable surface access to the NEC site | District Councils  
National Exhibition Centre  
Highways Agency  
Network Rail  
Public Transport Operators |
<p>| <strong>LTT2</strong> MAKING BEST USE OF THE HIGHWAY NETWORK | |
| <strong>HN1</strong> To support wider Highways Management objectives through Urban Traffic Control and Management | District Councils |
| <strong>HN2</strong> To review the highway network. | District Councils |</p>
<table>
<thead>
<tr>
<th>Policy</th>
<th>Centro’s Implementation Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>HN3</td>
<td>To co-ordinate expeditious traffic movement within and across Metropolitan District boundaries</td>
</tr>
<tr>
<td>HN4</td>
<td>To provide dynamic travel information</td>
</tr>
<tr>
<td>HN5</td>
<td>To upgrade Legacy Urban Traffic Management and Control Systems and progress proposals for integrated management of the network</td>
</tr>
<tr>
<td>HN6</td>
<td>To co-ordinate the development and implementation of a Smart Route network, including a common assessment of problems, joint consultation, common design and procurement activities</td>
</tr>
<tr>
<td>LTT3 MODAL TRANSFER AND THE CREATION OF SUSTAINABLE TRAVEL PATTERNS</td>
<td></td>
</tr>
<tr>
<td>MT1</td>
<td>To ensure car parking policies and provision support the LTP3 aims of encouraging sustainable transport patterns across the Metropolitan Area and promote vitality of centres. Such policy interventions may include availability and car park pricing.</td>
</tr>
</tbody>
</table>
| MT2    | To seek to manage travel demand through a mix of hard and soft measures to encourage sustainable travel patterns, including:  
- Car parking policies  
- Prioritising the use of the highway network  
- Encouraging Smarter Choices  
- Land use planning policies  
- Encouraging people and business to reduce the need to travel via virtual travel and co-location of facilities through the land use planning process | District Councils Highways Agency Business and Employers |
<p>| MT3    | To promote modal shift towards sustainable travel modes for work, school and leisure journeys through the application of targeted and intensive Smarter Choices measures | District Councils Highways Agency ACT TravelWise Bus Operators Homes &amp; Communities Agency Job Centre Plus Sustrans Primary Care Trusts and Successor Bodies British Waterways |</p>
<table>
<thead>
<tr>
<th>Policy</th>
<th>Statement</th>
<th>Centro’s Implementation Partners</th>
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</thead>
<tbody>
<tr>
<td>MT4</td>
<td>To seek to increase levels of cycling to improve health, the environment, reduce car use and improve the accessibility of people without access to a car.</td>
<td>District Councils, Sustrans, Primary Care Trusts and Successor Bodies, British Waterways, Cycling England</td>
</tr>
<tr>
<td>MT5</td>
<td>To increase opportunities for cyclists to integrate and interchange with public transport</td>
<td>District Councils, Public Transport Operators</td>
</tr>
<tr>
<td>MT6</td>
<td>To seek to improve the attractiveness of walking as a travel choice by creating an environment and culture where walking is actively encouraged for short trips and through encouraging improvements to the public realm</td>
<td>District Councils, Primary Care Trusts and Successor Bodies, British Waterways</td>
</tr>
<tr>
<td>MT7</td>
<td>To work with British Waterways to ensure that bridges over canals on key routes between employment areas and the motorway junctions are, as far as possible, free of weight restrictions.</td>
<td>District Councils, British Waterways</td>
</tr>
<tr>
<td>MT8</td>
<td>To ensure that all canals are safeguarded as navigable waterways to support water-based local economic activity and existing wharf facilities are safeguarded and to maximise the potential of canal towpaths as part of a signposted network of pedestrian and cycling green infrastructure.</td>
<td>District Councils, British Waterways, Sustrans, West Midlands Canals Partnership</td>
</tr>
<tr>
<td>MT9</td>
<td>To seek to ensure that access to the canal network, particularly by pedestrians and cyclists is safeguarded and, where possible, enhanced.</td>
<td>District Councils (and Local Planning Authorities), British Waterways</td>
</tr>
<tr>
<td>LTT4</td>
<td>ASSET MANAGEMENT AND MAINTENANCE – A FOUNDATION FOR GROWTH</td>
<td></td>
</tr>
<tr>
<td>TAM1</td>
<td>To seek to ensure that the transport network is adequately managed through effective Asset Management</td>
<td>District Councils</td>
</tr>
<tr>
<td>TAM2</td>
<td>To prioritise Maintenance Block funding to improve the performance of the carriageways of the classified Highway Network</td>
<td>District Councils</td>
</tr>
<tr>
<td>TAM3</td>
<td>To seek to improve the performance of the footway and surfaced public rights of way network</td>
<td>District Councils</td>
</tr>
<tr>
<td>TAM4</td>
<td>To seek to ensure that current service levels are maintained in respect of highway structures.</td>
<td>District Councils</td>
</tr>
<tr>
<td>TAM5</td>
<td>To seek to improve the performance of the Street Lighting Network</td>
<td>District Councils</td>
</tr>
<tr>
<td>TAM6</td>
<td>To improve the performance of delivered services</td>
<td>District Councils</td>
</tr>
<tr>
<td>Policy</td>
<td>A RAIL AND RAPID TRANSIT NETWORK “BACKBONE FOR DEVELOPMENT”</td>
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<tr>
<td>LTT5</td>
<td>Centro’s Implementation Partners</td>
<td></td>
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<tr>
<td>RR1</td>
<td>To expand local rail network capacity to meet forecasted</td>
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<td></td>
<td>growth in patronage, delivering the schemes and objectives</td>
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<td>of the Regional Rail Development Plan. This will include</td>
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<tr>
<td></td>
<td>maximising capacity of the ‘classic’ rail network derived</td>
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<td></td>
<td>from High Speed Rail</td>
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<td>RR2</td>
<td>To work with DfT, ORR, Network Rail, Local Authorities,</td>
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<td></td>
<td>Train Operating Companies and Rail Freight Operators</td>
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<tr>
<td></td>
<td>to identify and develop schemes on the rail network to</td>
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<td>increase capacity and reliability for both passenger and</td>
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<td>freight services</td>
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<tr>
<td>RR3</td>
<td>To work with Local Authorities, Network Rail and Train</td>
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<td></td>
<td>Operating Companies to deliver high levels of services</td>
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<td>standards and accessibility which delivers an inclusive</td>
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<td></td>
<td>network accessible to everyone</td>
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<tr>
<td>RR4</td>
<td>To expand the rapid transit network, with an appropriate</td>
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<td>form of rapid transit for each individual corridor in the</td>
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<td></td>
<td>network</td>
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<td>RR5</td>
<td>To ensure that future rapid transit will be ultra low</td>
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<td>emission at source with an aspiration target for Zero Emission</td>
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<td>as technology permits</td>
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<tr>
<td>RR6</td>
<td>To identify rapid transit alignments and develop interim</td>
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<td>rapid transit to improve access in and around Birmingham</td>
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<td></td>
<td>City Centre</td>
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<tr>
<td>LTT6</td>
<td>IMPROVED LOCAL ACCESSIBILITY AND CONNECTIVITY</td>
<td></td>
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<tr>
<td>LA1</td>
<td>To ensure that Accessibility Planning is embedded</td>
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<td></td>
<td>within planning and strategy documents and continue</td>
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<td></td>
<td>to encourage service providers to embed accessibility</td>
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<td></td>
<td>considerations within their service delivery investment</td>
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<td></td>
<td>programmes.</td>
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<tr>
<td>LA2</td>
<td>To ensure the access needs of groups defined in the</td>
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<td></td>
<td>Equalities Act 2010 are met as far as practicable.</td>
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<td>LA3</td>
<td>To secure socially necessary local bus services to</td>
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<td></td>
<td>complement commercially provided services so that</td>
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<td></td>
<td>residents have the best possible access to local facilities.</td>
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<td>LA4</td>
<td>To keep local bus service networks and provision under</td>
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<td>review, in partnership with the main operators and the</td>
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<td>relevant District Authority, with the aim of improving</td>
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<td>service levels and accessibility for all to essential</td>
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<td></td>
<td>services and facilities.</td>
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<thead>
<tr>
<th>District Councils</th>
<th>Network Rail</th>
<th>Train operating companies</th>
<th>Passenger Focus</th>
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<tbody>
<tr>
<td>Office for Rail Regulation</td>
<td>Network Rail</td>
<td>Train operating companies</td>
<td>Rail freight operators</td>
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<tr>
<td>Network Rail</td>
<td>Train operating companies</td>
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<td>Train operating companies</td>
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<tr>
<td>Rail freight operators</td>
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<td>Birmingham City Council</td>
<td>Business Improvement Districts</td>
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<td>Business Improvement Districts</td>
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<td>Travel Midland Metro</td>
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<tr>
<td>Bus operators</td>
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<td>Interest groups</td>
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<td>Residents</td>
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<tr>
<td>Business</td>
<td></td>
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<tr>
<td>Policy</td>
<td>To ensure that cost of travel is not a barrier to accessibility to employment opportunities and services.</td>
<td>Policy’s Implementation Partners</td>
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<tr>
<td>LA5</td>
<td>Public Transport Operators</td>
<td></td>
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</tr>
<tr>
<td>LA6</td>
<td>To create a high-quality bus network serving the Metropolitan Area</td>
<td>District Councils Bus Operators Interest groups</td>
<td></td>
</tr>
<tr>
<td>LA7</td>
<td>To increase social inclusion in the Metropolitan Area, through a thriving ‘Ring and Ride’ service to help meet the needs of disabled people for clearly defined markets, as part of the overall public transport system</td>
<td>District Councils Operators Interest groups</td>
<td></td>
</tr>
<tr>
<td>LA8</td>
<td>To increase social inclusion in the Metropolitan Area, through a thriving community transport sector to help meet the needs of clearly defined markets, as part of the overall public transport system</td>
<td>District Councils Operators Interest groups</td>
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<table>
<thead>
<tr>
<th>LTT7</th>
<th>SUSTAINABLE AND EFFICIENT FREIGHT TRANSPORT</th>
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<tbody>
<tr>
<td>SF1</td>
<td>To increase the availability of HGV parking in appropriate locations across the Metropolitan Area</td>
</tr>
<tr>
<td>SF2</td>
<td>To seek to ensure effective and reliable freight deliveries can occur in all types of centres across the Metropolitan Area</td>
</tr>
<tr>
<td>SF3</td>
<td>To support national and locally led initiatives to accelerate the introduction of low carbon transport through improving the environmental performance of the freight industry</td>
</tr>
<tr>
<td>SF4</td>
<td>To develop and enhance the Area’s rail network capacity, efficiently and reliability which can meet existing and future rail freight growth demands</td>
</tr>
<tr>
<td>SF5</td>
<td>To identify and encourage the development of new rail freight terminals to meet future growth requirements, especially intermodal terminals to meet projected container traffic growth</td>
</tr>
<tr>
<td>SF6</td>
<td>To support Air Freight reflecting its role in international markets access, trading high value goods and receiving ‘Just in Time’ goods whilst taking due regard to associated impacts from air freight to local residents and the environment</td>
</tr>
<tr>
<td>SF7</td>
<td>To identify and support new concepts and initiatives in developing further opportunities for water based freight movements</td>
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<tr>
<td>Policy</td>
<td>EFFECTIVE AND RELIABLE TRANSPORT INTEGRATION</td>
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<tr>
<td>LTT8</td>
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<tr>
<td>TI1</td>
<td>To develop strategic park and ride capacity at appropriate locations to serve strategic movement demands.</td>
</tr>
<tr>
<td>TI2</td>
<td>To develop increased local park and ride capacity appropriate to meeting local demand.</td>
</tr>
<tr>
<td>TI3</td>
<td>To ensure high quality information is accessible to all about public transport services covering before, during and after a journey</td>
</tr>
<tr>
<td>TI4</td>
<td>To develop seamless integration between all types of transport modes with focus upon high quality public transport interchanges</td>
</tr>
<tr>
<td>TI5</td>
<td>To help ensure that taxis and PHVs can continue to play a role in an integrated transport offer to residents, visitors and businesses in the Metropolitan Area.</td>
</tr>
<tr>
<td>TI6</td>
<td>To develop an integrated approach to restrictions on access to bus lanes across the Metropolitan Area.</td>
</tr>
<tr>
<td>LTT9</td>
<td>IMPROVED SAFETY AND SECURITY</td>
</tr>
<tr>
<td>SS1</td>
<td>To seek to reduce further casualties resulting from road traffic collisions, including achieving a greater understanding of where and why collisions happen and to whom</td>
</tr>
<tr>
<td>SS2</td>
<td>To seek to achieve greater co-ordination between road safety partners</td>
</tr>
<tr>
<td>SS3</td>
<td>To actively take account of the needs of Powered Two-Wheelers and promote their safe use</td>
</tr>
<tr>
<td>SS4</td>
<td>To reduce actual and perceived safety concerns towards public transport use and to reduce its vulnerability to vandalism and terrorism.</td>
</tr>
<tr>
<td>Policy</td>
<td>LTT10 IMPROVED ENVIRONMENT AND REDUCED CARBON THROUGH NEW TECHNOLOGIES</td>
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<tr>
<td>GT1</td>
<td>To support the transformation to a low carbon economy and work with partners to reduce carbon emissions caused by travel and transport through smarter choices, reduced congestion, highway management and by supporting in all practical ways, the roll-out of low carbon infrastructure and the development of low and zero carbon public service and private vehicles.</td>
</tr>
<tr>
<td>GT2</td>
<td>To seek innovative ways of reducing the carbon footprint of their maintenance operations</td>
</tr>
<tr>
<td>GT3</td>
<td>To ensure that infrastructure is ‘future proofed’ in response to the unavoidable effects of climate change</td>
</tr>
<tr>
<td>GT4</td>
<td>To support the implementation of Green Infrastructure networks as a means of encouraging active travel, adapting to climate change and safeguarding natural habitats and biodiversity</td>
</tr>
<tr>
<td>GT5</td>
<td>To develop infrastructure which, wherever practicable, enhances the natural environment (biodiversity/habitats, air quality, water, landscape) or mitigates adverse effects.</td>
</tr>
<tr>
<td>GT6</td>
<td>To help mitigate any adverse effects on the natural and historic environment resulting from the implementation of HS2</td>
</tr>
<tr>
<td>GT7</td>
<td>To reduce air pollution emissions from transport</td>
</tr>
<tr>
<td>GT8</td>
<td>To improve local air quality in pursuit of UK standards and European Directive limits</td>
</tr>
<tr>
<td>GT9</td>
<td>To minimise noise nuisance from the transport network</td>
</tr>
</tbody>
</table>
LTT1: REGENERATION, THRIVING CENTRES AND GATEWAYS (REG)
The linkages between land use, spatial planning, regeneration and transport are well established, with a clear imperative to ensure an integrated and co-ordinated approach across both space and time, based on a common understanding of the issues and the evidence.

An overall Policy is required to ensure that the priorities for regeneration and land use planning within the Metropolitan Area, both inform the development of our transportation policies and, in turn, is informed by them. Transport interventions can be the catalyst to unlock investment and regeneration and in doing so make a major contribution to bridging the area’s output gap and make a positive contribution towards the creation of sustainable settlements. Sensible land use planning, integrated with the appropriate transport solutions can play a major role in reducing carbon emissions and mitigating the effects of climate change.

Reducing the need to travel, reducing the length of journeys and promoting the most sustainable modes of travel has a major beneficial effect on the quality of life and the promotion of well-being amongst communities.

B. Roles and Responsibilities

ITA

The ITA’s role is limited to that of providing influence in this area. It is a partner within the Planning & Transportation Sub-Committee, which seeks to co-ordinate strategic planning and transport matters of mutual interest across the Metropolitan Area.

Local Authorities

The seven Districts are statutory Local Planning Authorities, who have a duty to exercise plan-making and development management powers and responsibilities. The Districts prepare Development Plan Documents, including Core Strategies (jointly, in the case of the Black Country Authorities) and Area Action Plans.

Ensuring that Local Development Documents are fully aligned with LTP proposals is first and foremost the responsibility of the District Councils in drawing up their Core Strategies i.e. Birmingham, Coventry and Solihull and Joint Core Strategy for the Black Country. The preparation of Area Action Plans and other Development Plan Documents are also likely to have transportation implications.
Neighbourhoods and Communities

The Localism Bill proposes to provide Communities, Parishes and Neighbourhood Forums with a right to produce their own Neighbourhood Plans in conformity with Core Strategies and National Planning Policy. There is intended to be a duty on Local Planning Authorities to support and co-operate with communities wishing to produce Neighbourhood Plans. These Plans may well have transport implications and it will be important for Centro and the District Councils to get involved to ensure that any transport implications are properly considered.

C. Progress and Successes from LTP2

LTP2 was formulated under previous planning legislation and was not as proactive in this area as LTP3 seeks to be.

Other Agencies

Regeneration activity is primarily the responsibility of the District Councils but with other agencies such as the Homes and Communities Agency, having a crucial role to play across the Area. The partnership approach which has underpinned this LTP between Centro, the Districts, the Regeneration Agencies, transport and infrastructure providers, stakeholders and developers stands us in the very good stead to ensure the maximum integration between planning, regeneration and transport policies.
### D. LTP3 Objective Alignment

<table>
<thead>
<tr>
<th>K01 – Economy</th>
<th>• Regeneration is fundamental to successful attainment of LTP3’s economic objectives.</th>
</tr>
</thead>
<tbody>
<tr>
<td>K02 – Climate Change</td>
<td>• Integration between land use planning, regeneration and transport policies is essential if climate change and low carbon objectives are to be achieved</td>
</tr>
<tr>
<td>K03 – Health, Personal Security and Safety</td>
<td>• The creation of sustainable and connected new housing and employment areas, accessible by a variety of modes of transport, will contribute significantly towards health objectives • Safety and security are basic issues that Districts will take into account when dealing with the detailed design of such development</td>
</tr>
<tr>
<td>K04 – Equality of Opportunity</td>
<td>• Improves access to housing and employment opportunities for those without access to a car or with mobility impairments • Public transport would be accessible to all and walking and cycling are very inexpensive for individuals. • Reduction of social exclusion, which encourages the development of communities.</td>
</tr>
<tr>
<td>K05 – Quality of Life and Local Environment</td>
<td>• Development of enhanced urban environment to provide walking and cycling routes. • Delivers long term environmental benefits including reduced traffic noise, reduced pollution and improved air quality.</td>
</tr>
</tbody>
</table>
E. Major Influences on LTP3 Land Use, Transport and Regeneration Policies

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3, which includes an analysis of all relevant plans, policies and programmes from international through to local level and assesses their implications for LTP. This has included reviewing the current position in relation to the land use planning system and the changes envisaged in the Localism Bill.

As part of their localism agenda the Government has announced the intended revocation of Regional Spatial Strategies and the promotion of neighbourhood plans as the ‘building blocks’ of the new planning system. Statements have been made that there will be nothing between the national and local levels although there will be a duty on Authorities to co-operate when issues of greater than local significance need to be tackled. This is especially relevant for a highly complex metropolitan area, such as the West Midlands, where infrastructure and transportation interventions often affect several authorities, with an impact well beyond the locality. Consequently the West Midlands Authorities have co-operated in the preparation and adoption of a Position Statement on Strategic Spatial Planning in the West Midlands Metropolitan Area, which demonstrates that all partners remain committed to Urban Renaissance, confirms that all Authorities are committed to the principle of collaboration and co-operation, and provides a coherent spatial context to underpin LTP3.

The ISA acknowledges that a considerable amount of work was undertaken as part of the Regional Spatial and Economic Strategies, to produce a common and credible evidence base regarding the housing, economic and social needs of the Metropolitan Area. In the absence of any other more robust information, this has been reviewed as part of the Sustainability Appraisal and used to inform and assess our strategy, options and policies.
F. LTP3 Policies – Land Use, Transport and Regeneration

Policy REG1: When preparing Local Development Documents, and their regeneration and investment strategies, to ensure that as far as possible, development and redevelopment proposals make the best use of existing transport infrastructure and services, improve connectivity locally and in the wider area where appropriate and provide high levels of accessibility for all with an emphasis on sustainable modes of travel.

The responsibility for the implementation of this policy lies primarily within the District Councils, regeneration agencies and the private sector through Community Infrastructure Levy, (or similar arrangements) but working in close partnership with Centro to ensure that Smarter Investment maximises local and strategic planning objectives, and supports Inward Investment Locations, Growth Points and HCA interventions.
High Speed Rail

A. Role of High Speed Rail

In January 2009, DfT established the HS2 Company, tasked to develop proposals for a new high-speed railway line between London and the West Midlands and to consider the case for HS rail services linking London and the West Midlands with northern England and Scotland. The first phase of the network is focused on the link between London and the West Midlands with High Speed trains connecting onto the existing West Coast Main Line near Lichfield and running on the conventional rail network north of Birmingham to cities such as Manchester and Leeds.

The long term aspiration for the network proposed is for a Y shaped high speed rail network serving both the west and east coasts of the UK with the route split occurring north of Birmingham leading to a single spine between Birmingham and London.

The key principles of the proposed route in the Metropolitan Area are:

- A terminal station in Birmingham city centre at Fazeley Street on Eastside, adjacent to Moor Street station
- An Interchange station at Birmingham Airport / National Exhibition Centre, located to the east of M42 Junction 6
- Stabling of High Speed trains to occur in Birmingham at Washwood Heath directly providing high value jobs for the region
- HS2 accessing Birmingham city centre via the existing Water Orton corridor which will minimise land take requirements

Proposed travel times from Birmingham city centre to London Euston would be 49 minutes and 38 minutes from Birmingham Airport Interchange. Connectivity to Heathrow via the Cross Rail Interchange would bring Heathrow Airport to within an hour of the centre of Birmingham, and around 45 minutes of Birmingham Airport.

Additionally, a review is being undertaken to examine the potential for direct connectivity to High Speed One and therefore the European High Speed networks via the Channel Tunnel. Such High Speed connectivity is expected to reduce the need to use domestic and/ or short international flights reducing carbon emissions overall.

High Speed Rail has a pivotal role in supporting the policy objectives of LTP3 and will contribute more to Birmingham and the Metropolitan Area than simply improved travel times.

High Speed Rail will provide Birmingham and the Metropolitan Area with high capacity, fast and reliable connectivity across the UK. This connectivity will provide huge economic benefits to Birmingham allowing people to live and work in a greater range of places across the High Speed network within the journey to work area increasing their access to employment opportunities.
Figure ES.1 Initial core high speed rail network
At the same time, businesses will have access to a greater employment pool allowing them to recruit and grow; improve their own productivity as well as having access to national and international markets. High Speed Two is therefore expected to be highly attractive to businesses wishing to access the London economy as well as the major northern cities such as Manchester leading to inward significant investment into Birmingham and the Metropolitan Area.

High Speed Rail therefore has an important role in delivering LTP3 Strategy objectives towards supporting economic growth; reducing carbon emissions and; reducing road congestion and is strongly supported by LTP3.

B. Rail Partners: Roles and Responsibility

**Department for Transport (DfT)**

DfT sets the overall strategic policy framework and strategy for High Speed Rail and will principally provide public funding for High Speed rail development and delivery. DfT also established the High Speed Two Company (see below).

**Office for Rail Regulation (ORR)**

Created through the Railways Act 2005 (previously to which existed as an independent rail regulator), is an independent statutory body, which regulates Network Rail, secures compliance with relevant health and safety law, licenses operators of railway assets and enforces competition law in the rail sector. The ORR has a key role in the contractual framework for the rail industry, undertaking periodic reviews of access ‘charges’ and overseeing the 5-year business planning process, which determines funding levels and outputs.

**Centro**

Centro is the promoter of rail in the Metropolitan Area and works with stakeholders to identify, develop and implement rail schemes and strategies across the Metropolitan Area.

Centro funds incremental improvements to rail services and has a statutory role to work with stakeholders up to 25 miles outside the metropolitan area to promote rail schemes which can benefit or influence rail within the metropolitan area.

Centro will work with partners to maximise the benefits of high speed rail including developing high quality public transport access to the High Speed Rail stations, improvements in connectivity with the public transport network, and maximising the additional capacity generated by HS2 on the conventional rail network.

**High Speed Two Limited**

High Speed Two Limited (HS2 Ltd) is the company set up by the Government to consider the case for new high-speed rail services between London and Scotland. HS2 Ltd will identify, develop and deliver High Speed Rail across the UK.
### C. LTP3 Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Details</th>
</tr>
</thead>
</table>
| **K01 – Economy**                | • High speed connectivity to London and the UK’s principal cities will increase access to new markets and attract significant inward investment into Birmingham and the Metropolitan Area;  
                                    • Helps reduce congestion on the strategic national highway network freeing up capacity;  
                                    • Will provide at least £1.23 bn in economic benefits to the Metropolitan area and by up to £2.5 bn through direct journey time benefits;  
                                    • High Speed Rail construction is expected to create 1,600 jobs, with a further circa 2,400 jobs created to operate the London to West Midlands rail connection once established;  
                                    • As the national network is established, redistribution of employment to the region from areas of the UK that are less well served could lead to employment growth by up to 60,000 to 70,000 and Gross Value Added (GVA) leap by close to 6% in the West Midlands; |
| **K02 – Climate Change**         | • High speed connectivity will reduce the attractiveness to use air travel or the private car to access destinations which will be served by a full high speed rail network reducing transport related carbon emissions |
| **K03 – Health, Personal Security and Safety** |                                                                                                                                 |
| **K04 – Equality of Opportunity** | • High Speed Rail will allow people to access employment opportunities across the High Speed Rail network that would otherwise not be available to them; |
| **K05 – Quality of Life and Local Environment** | • Railway corridors comprise part of Local Authorities’ Green Infrastructure Networks and provide habitats for flora and fauna.  
                                    • Supports migration of species in response to climate change  
                                    • Trees in railway corridors capture carbon, improve air quality and help prevent soil erosion. |
D. Major Influences on LTP3 High Speed Rail

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3, which included an analysis of relevant plans, policies and programmes from international through to local level and their implications for LTP3, including rail. In addition to the policy framework identified for Rail by the ISA, the following have been identified as major influences to rail over the period of LTP3:

**High Speed Rail Route Review**

In June 2010, the Secretary of State for Transport announced that the High Speed Two Company had been tasked to review the proposed phase one route to re-examine options for a direct Heathrow connection and direct connection to the existing HS1 route. The route alignment in Birmingham and the West Midland is not to be reviewed and is expected to remain as proposed. However, the proposed route revisions may in turn lead to longer development times or more expensive options delaying the overall delivery of High Speed Two.

On the basis of information available on 7th December 2010, Coventry City Council objected to the existing proposal for HS2. However, during the life of the Implementation Plan, these concerns may be alleviated by improving the classic rail network, and investigating options for relocation of the Birmingham Interchange station, as part of the consultation process.

Therefore, in future, as a result of improved information which may become available through the formal consultation process to be undertaken later in 2011, and through the results of future research studies, Coventry’s concerns could be overcome.

**Regional Rail Development Plan**

Centro, in conjunction with Local Authority partners and the Regional Rail Forum, have developed the Regional Rail Development Plan (RRDP). The RRDP outlines patronage drivers along rail corridors, aspirational service provisions as well as the required network enhancements to deliver the additional capacity and/or increased service reliability. The RRDP outlines aspirational rail service provisions based upon the released rail capacity, which will be gained from High Speed Rail. The RRDP is vital for the Metropolitan Area to demonstrate how the economic and transport benefits of High Speed Rail can be maximised across the Metropolitan Area.
**E. LTP3 Policies – High Speed Rail**

Within the context of LTP3 Objectives, ISA and the major influences to LTP3 rail outlined above, the following LTP3 High Speed Rail policies have been developed. The specific interventions required to deliver each policy during LTP3 are outlined in the Implementation Plan.

**Policy REG2 – High Speed Rail:**
To work with Government and LTP3 Partners to maximise the benefits and opportunities High Speed Rail will bring to the Metropolitan Area, including maximising the benefits of released capacity on the “classic” network.

The economic, transport and environmental benefits of the proposed High Speed Rail network are well established and provide an opportunity to make a significant positive impact to Birmingham and the Metropolitan Area. High Speed Rail will boost Birmingham City Centre’s economy by at least £1.23 bn, and the wider West Midlands Metropolitan area by £2.5 bn through direct journey time benefits alone.

High Speed Rail is a transformational, once-in-a-generation project that can make a significant change and improvement to the West Midlands’ connectivity with both London and the South East, and the Northern Cities, as well as a potential fast train link direct to European cities. This additional connectivity can also release capacity on the classic rail network, which will create additional benefits for capacity and connectivity enhancements.

Centro will work with all partners to promote the West Midlands as part of a High Speed Rail network and ensure the full benefits of it are realised for the Metropolitan Area.

**Policy REG3 – High Speed Rail Sustainable Access:**
To promote and deliver high quality sustainable access to High Speed Rail, ensuring that the resultant benefits and opportunities can be accessed by people and businesses across the entire Metropolitan Area.

Maximising the benefits of High Speed Rail for the Metropolitan Area will be hindered if residents and businesses cannot easily access High Speed Rail stations and is not integrated into wider transport networks such as public transport nor is easily accessible by sustainable means principally walking.

High quality, High Speed Rail sustainable access, cannot be delivered by one rail partner individually, and many authorities and operators have a role to play. Therefore Centro will work with Local Authorities, Network Rail, High Speed Two Ltd to deliver high levels of accessibility, which allows High Speed Rail to be inclusive and which is accessible to everyone by differing modes of transport.
Coach Travel to Centres and Major Attractions

Role of Coaches

Coaches carry large numbers of passengers at low cost and statistics show that, environmentally, they are the most efficient mode of travel. They are comparable with buses as efficient users of road space and they provide both operators and passengers with flexibility in routing and in the selection of origin and destination points. Their most obvious role is the provision of scheduled inter-city and inter-urban services. Coaches also play a major role in supporting the tourism industry, partly because they are a relatively inexpensive way to travel, but also because they are a convenient way of moving groups of people and of keeping these groups together and under control (with regard to groups that require supervision or guidance, such as children or foreign visitors). Some coach operators also provide contracted home-to-school services as well as vehicles for school trips.

In fulfilling these roles, coaches either offer scheduled or private hire services. Unlike local bus services, scheduled coach services are not registered (with the Traffic Commissioner) and have no obligations to provide timetables or to operate in accordance with them. However, for obvious commercial reasons, coach operators market their services, publish timetables and operate their services as best possible in accordance with those timetables.

Coach parking is a serious issue for the private-hire sector of the coach industry and an issue across the Metropolitan Area. It is a significant issue in city centres. Birmingham, which has few formal setting-down and pick-up points in the city core despite the large number of hotels and entertainment, conference and other visitor facilities. The National Indoor Arena (NIA), International Convention Centre and Symphony Hall, in Birmingham, which often attract international and national audiences, many of whom cannot or do not wish to travel by car. Up to ninety coaches and 5,000 customers may arrive by coach, depending on the events taking place. This situation will be exacerbated by the planned new Aquatic and Leisure centre with its fifty-metre pool, located close to the NIA.

Coach stopping and parking is also an issue in Wolverhampton city centre with the redevelopment of the bus station reducing its size with no provision for any coaches.
Although scheduled services will be able to use Pipers Row for setting down and picking up passengers, this could change if the Midland Metro is extended through the city centre. The Faulkland Street coach park is not convenient for many areas of the city.

In Coventry, tourist coaches mainly visit the Cathedral and set down their passengers in front of the building before moving away to a layover area for the 45 minutes or so that is normal for the visit. There are currently two coach spaces in Priory Street and more are being sought on street in Fairfax Street. Tourist coaches can use the Pool Meadow facilities or wait on street in Fairfax Street.

It not practical to meet the all needs for coach operations within bus stations and, therefore, it is important to identify other suitable pick up / set down facilities in all major locations.

The Airport Company places great importance of coach services and it is considered one of the most effective ways of increasing the Passenger Public Transport Mode Share. The Airport’s Surface Access Strategy incorporates policies targeted to increase the use of coaches by passengers.

**Provision of Coach Facilities**

Where coach facilities are provided, they need to:

- Be within easy access for passengers to primary destinations
- Be welcoming for passengers
- Have sheltered waiting facilities
- Have adequate information
- Have excellent connections with other public transport
- Be close to short stay parking
- Have convenient access to the primary road network
- Be safe and secure for passengers
- Have driver rest facilities (where appropriate)
In providing facilities, there is a need to recognise that continental coaches bringing in tourists from Europe pick up and set down on the opposite side of the coach compared with domestic vehicles.

Greater integration between modes, in terms of organisation, information and ticketing, would enable coach services to link better with other modes and, thus, provide improved connectivity. Facilities for integrating coaches are needed at the Area’s main railway stations and airports. Facilities should also be targeted at integrating local bus and rail services with longer-distance scheduled coach services. Additionally, this could help to justify:

• New bus priority measures for key corridors, including trunk roads
• Consistency in their inclusion in bus priority measures
• Integration into wider fares and ticketing structures which could include Smart ticketing

Partners: Roles and Responsibilities

Coach operators, principally National Express for scheduled services, but also a myriad of other operators, are responsible for providing the services. Some of these also provide scheduled services, sometimes under contract to National Express, but most offer private hire services. Other scheduled service providers include Stagecoach, trading as ‘MegaBus’, and Thandi Coaches. Private hire services include ad-hoc or regular trips to leisure facilities for residents to locations within or beyond the Metropolitan Area; others are aimed at bringing people from outside the Metropolitan Area to facilities in our Area. Companies that offer private hire services that operate within the Metropolitan Area are often, therefore, based outside it – mostly in the surrounding Shire areas.

The local highway authorities are responsible for finding appropriate locations for visiting coaches to set down and pick up passengers and for coach parking, preferably with facilities for drivers waiting to pick-up their passengers. Centro manage the Bus Stations, some of which have provision for scheduled coach services. National Express own and manage Birmingham’s Coach Station, in Digbeth, whilst other scheduled services use on-street stops in Birmingham or elsewhere across the Metropolitan Area.
Progress and Success from LTP2

In December 2009, National Express opened the newly redeveloped Digbeth Coach Station, a five-minute walk from the heart of Birmingham city centre and served by a number of local bus services. There are adjacent facilities for quick ‘drop offs’ and short-stay parking, a taxi rank and a multi-storey car park for longer-stay parking nearby. The Coach Station has sixteen bays for coaches and handles 1½ million arrivals and departures annually.

Formerly an old bus garage, the £15 million new coach station is a striking building as part of the regeneration of the Digbeth Quarter, showing how transport investment can support wider objectives. It contains a spacious airport-style waiting area with a selection of major retailers separated from the coach bays by glass walls and automatic doors. Above the building are offices, bringing new employment to Digbeth.

During the development process, National Express allocated an additional £366,000 for public art to be incorporated into the overall project. A public art ‘Boundary’ is an iconic 181 linear array of 320 steel haunch sculptures forming the perimeter fence around the coach area and is designed to reflect the area’s history and heritage. Its development involved community engagement. Inside the passenger foyer is the ‘Irish Quarter Visual Art’ feature, a 10 x 7.5 metre textual installation, the first visual representation of Birmingham’s Irish Quarter. In this way, the new Coach Station contributes to quality of the urban environment.

D. Major Influences on LTP3 High Speed Rail

| K01 – Economy | • Coaches provide direct access to and between centres, interchanges and other major trip generators. |
|              | • The coach industry provides direct employment and supports employment in other sectors, for example - leisure and tourism. |
|              | • As an alternative to travel by car, coaches contribute towards congestion-reduction objectives. |
### K02 – Climate Change
- Coach travel is the greenest travel option in the UK today. It is twice as efficient as rail, nearly four times more efficient than car and six times more efficient than air travel. Most express coaches carry between 49 and 65 people and therefore move large numbers of people around in relatively little road space compared to car travel. Coaches used for private hire are usually matched with the group’s number and thus emissions per passenger are minimised. Coaches can, therefore, help reduce congestion and assist with air quality issues.

### K03 – Health, Personal Security and Safety
- National statistics show that coach travel has an excellent safety record.

### K04 – Equality of Opportunity
- Birmingham is a hub for National Express scheduled inter-city coach services with links to most major cities across the country, providing affordable travel opportunities especially for people with limited incomes.
- Most coaches are relatively modern. Since 2005, all new express service coaches have been fully accessible and over 50% now are. By 2012 nearly 100% will be accessible.

### K05 – Quality of Life and Local Environment
- Coaches provide a convenient, economical and efficient means of travel for many people.
- Group coach travel provides opportunities for visits enhancing quality of life for many people, especially those without access to a car.

### LTP3 Policies: Coaches

**Policy REG4:** To help overcome deficiencies in on street set-down and pick-up facilities in the vicinity of the Area’s major visitor attractions.

**Policy REG5:** To identify adequate long-stay coach parking facilities convenient to town and city centres and near major attractors during daytime and evening hours.
Birmingham Airport

A. Role of Birmingham Airport (BHX)

BHX is a Strategic National Asset, the region’s principal airport and plays a vital role in supporting the regional economy.

- Securing the future role and development of BHX is essential to the regional economy by way of supporting business, commerce and industry, stimulating inbound tourism, attracting inward investment, fostering international trade and enhancing cultural and educational links.
- There are a number of infrastructure issues that need to be considered to carry-forward into LTP3.
- BA generates significant traffic which impacts on local transport networks, especially in the eastern part of the conurbation.

B. Partners – Roles and Responsibilities

**Birmingham Airport**

BHX’s ownership structure is:

- 51% private
- 49% Metropolitan Authorities

The Airport Company operates the Airport and therefore has the most significant role and responsibility.

**Districts**

The Metropolitan Authorities jointly own 49% of BHX. In addition to their roles and responsibilities as a joint owner, Solihull MBC is the Highway and Local Planning Authority for the Airport area.

**Centro**

Centro has a major role to play as ITA in working with BHX and the relevant Districts to implement the Airport’s Surface Access Strategy, in respect of both public and private transport.

**Network Rail and Train Operating Companies**

A key element of the Surface Access Strategy is rail, via Birmingham International Station. Therefore, Network Rail and the TOCs have a role and responsibility in this respect.

**Bus and Coach Operators**

Bus and Coach Operators have a role and responsibility in terms of passenger access to BHX and the achievement of the Airport Surface Access Strategy.
## C. LTP3 Alignment with Objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K01 – Economy</strong></td>
<td>BA is a Strategic National Asset and the region’s principal airport. Its continued development and alignment with passenger needs is a major component for economic growth of the Metropolitan Area and the wider economy.</td>
</tr>
<tr>
<td><strong>K02 – Climate Change</strong></td>
<td>Implementation of the Airport Surface Access Strategy will contribute towards LTP3’s low carbon objectives. Under the terms of the Runway Extension planning permission Section 106 Agreement, the Airport Company will prepare a Carbon Management Plan.</td>
</tr>
<tr>
<td><strong>K03 – Health, Personal Security and Safety</strong></td>
<td>BHX provides a well-maintained safe environment for the travelling public in line with the duty of care and also maintains access for emergency services.</td>
</tr>
<tr>
<td><strong>K04 – Equality of Opportunity</strong></td>
<td>BHX supports inward investment and tourism.</td>
</tr>
<tr>
<td><strong>K05 – Quality of Life and Local Environment</strong></td>
<td>BHX provides access to air travel, which is important to the region in terms of: - Supporting regional economic development and inward investment - Providing direct employment and supporting indirect employment - Supporting regional tourism, by providing access to tourist attractions and destinations - Providing access for residents of the region to holiday destinations and to visit friends and relatives.</td>
</tr>
</tbody>
</table>
D. Progress and Successes from LTP2

Since LTP2, major improvements have been made in terms of access arrangements and the Passenger Terminal buildings, through the early stages of implementation of the Airport Master Plan and the Airport Surface Access Strategy.

E. Major Issues

Proposed Runway Extension

Solihull MBC has granted planning permission. Work has to commence on site by 2016. The S106 Agreement attached to the planning permission requires BHX to produce a Carbon Management Plan. This is currently being worked on by BHX.

A45 Improvement

There is now a £32m A45 Transport Corridor Improvement Scheme. The Economic Assessment for the A45 Scheme goes beyond BHX to include NEC, Land Rover and other economic assets and has links to, inter alia the East Birmingham/North Solihull regeneration area.

The planning permission allows for implementation in phases. The works will accommodate Metro.

ANITA

BHX and NEC have committed to provide contributions to enhance local bus services serving BA/NEC over a three-year period. 3 bus routes are being focused on:

- 97 Birmingham – Chelmsley Wood (extend to airport/NEC)
- 900 Bham City Centre – Coventry City Centre via BHX/NEC (increase frequency/hours of operation)
- 966 Solihull – Erdington via BHX/NEC (increase frequency/hours of operation)

There are strong links between ANITA and the East Birmingham North Solihull Regeneration Strategy.

BHX/Surface Access Strategy

DfT are currently in discussion with airports about DFT’s “Low Carbon Surface Access Strategy to Airports.”

HS2

HS2 creates an opportunity for BHX’s future development. There is a need for a land-use plan (Area Action Plan), which should also address surface access issues.

A45 Westbound Bridge

There is a need to improve the westbound railway bridge on the A45, to the east of BHX. A Project Board is now meeting and there is close liaison with BHX/NEC/SMBC. There is an issue of timing in respect of implementation, to avoid disruption on A45.

Policy REG6: Recognising Birmingham Airport as a Strategic National Asset and the international gateway to the region, to ensure high quality surface access to the Airport to support existing and projected passenger growth, and to recognise Birmingham Airport as a potential solution to capacity constraints and congestion at the South East airports.
National Exhibition Centre

A. Role of NEC

The NEC is a major element of Metropolitan Area regional infrastructure, and this, in turn, is also important to the national economy as a whole.

NEC is a destination in its own right, which contributes significantly to the Regional and Metropolitan Area economies.

The NEC generates significant traffic which impacts on the strategic highway network, especially in the eastern part of the conurbation.

Alignment with LTP3 Objectives

| K01 – Economy | • NEC is a major national and regional asset. Its continued development and alignment with customer and exhibitor needs is a major component for economic growth of the Metropolitan Area and the wider economy |
| K02 – Climate Change | • Implementation of BHX’s Surface Access Strategy will benefit access arrangements to the NEC and will contribute towards LTP3’s low carbon objectives |
| K03 – Health, Personal Security and Safety | |
| K04 – Equality of Opportunity | • The NEC supports inward investment and tourism |
| K05 – Quality of Life and Local Environment | |
Policy RE67: Recognising the important role of the National Exhibition Centre in supporting the West Midlands economy, to ensure high quality sustainable surface access to the NEC site
LTT2: MAKING BEST USE OF THE HIGHWAY NETWORK (HN)
Highways Network Management

A. Role of the Highway Networks

On a typical workday the Area’s highway network carries a total of circa 8 million trips. Most journeys use more than one mode of travel. This total will inevitably increase as a result of economic recovery and urban regeneration. To manage this demand, transport needs are served by complex networks that interact and are managed by a range of Authorities and organisations. However, as far the user is concerned, these networks operate irrespective of Authority boundaries.

Demand is time dependent and weekday peak periods have long been associated with congestion. Over time the length of the morning and evening peaks has grown, the area affected has increased and some locations are experiencing congestion at weekends. This affects accessibility, making journey times longer and uncertain, and our ability to achieve the wider LTP3 objectives.

Limiting congestion is essential to regeneration and economic growth. However, the implications of the growth agenda, taken together with pressures of increasing car usage, threaten this aim. The most comprehensive study yet of congestion in the Metropolitan Area is ‘Gridlock or Growth – Choices and Challenges for the Future’. This contains evidence about rising traffic levels and the threat this poses to the Area’s growth ambitions. Given continuing trends in car ownership and trip length, an extra 469,000 car journeys each day are forecast on the Area’s roads over the 20 years 2001 to 2021, increasing congestion by 22% (costing the Metropolitan Area an additional £205 million every year) and jeopardising jobs. The current economic downturn has provided a respite, which enables us to reassess the way we tackle congestion.

Public transport operators provide 450 bus routes covering 135m bus service kilometres (8% of which are subsidised by the ITA, who also manage 12 bus stations and over 13,000 bus stops). The highway network also provides access to a total of 6,091 rail based car parking spaces at 37 rail stations for park and ride.

The Highway Authorities manage some 7,600 km of highway (including associated bridges, footpaths, pedestrian area, bus lanes, cycle tracks, etc), and are responsible for 650 traffic controlled junctions, and control the use of over 100,000 publicly available parking spaces in city and town centres.
The utility and communication companies also make use of the highway footprint to carry their networks of gas, electricity, water, communications and drainage.

The disparate demands placed on the Highway Network necessitate a managed approach to ensuring best use of available capacity. Managing in a way that continues to serve the needs of the whole community by tackling journey time reliability and the whole journey experience requires a high degree of understanding and collaboration between the Metropolitan Districts and adjacent highway and planning authorities, Highways Agency, emergency services, utility companies, users and other stakeholders.

The travelling public make personal decisions on when, where and how to travel, based on their life styles, needs and their perception of the options available to them. Similarly, businesses and employers also make decisions regarding their location, hours of operation, delivery times, provision of employee parking, firm’s cars, etc., to maximise their efficiency. Collectively, these decisions create demand on networks. We can take a lead through our Sustainable Travel Promotion, TravelWise and school travel plans etc, ensuring that these decisions are as fully informed, in a clear and consistent manner, of the wider consequences and the options available.

Over the LTP3 period there will be options for the scale, location and design of development and for associated transport policies, which have implications for our transport and wider objectives. Engagement with stakeholders provides valued input and context to the development of policies and their participation through ‘Quick Wins programmes’, ‘Freight Partnerships’, ‘Travel Planning’ car parking provision, etc is encouraged.

The needs of the emergency services are crucial. These are considered through liaison arrangements in the management of the transport system, in design of projects and through experiments such as Birmingham’s ‘Blue Routes’ pilot.

Operators make commercial decisions to provide services for travel, parking and the movement of goods for the general public and organisations. They also tender for and operate passenger services deemed socially necessary by the District Councils and Concessionary travel schemes.

The maintainers of the transport system ensure that it continues to operate efficiently. These include the West Midlands Police and a range of groups acting on behalf of local authorities including Civil Enforcement Officers, the operators of the Urban Traffic Management Control (UTMC) systems, and the highway contractors of the Authorities (and Highways Agency). Utility Companies (who are also users of the highway network) also have an impact on congestion when maintaining or improving their equipment, or with new installations. Liaison arrangements are in place to ensure programme priorities are aligned.
Local Authorities also have regulatory means of influencing decisions directly. These include development control, management of the highway network and traffic signal strategies, parking provision and charging. The ITA, as well as developing this LTP3, influences the provision of public transport options through negotiating and funding concessionary fares and contracts for operators to provide socially necessary services to complement those which are commercially viable. It promotes public transport services and develops major public transport facilities such as light rapid transit routes, bus stations and park and ride.

Centro and partners will undertake appropriate engagement with stakeholders to ensure expeditious movement of traffic, including pedestrians and cyclists, and minimise congestion.

B. Progress and Successes from LTP2

The approval of the Urban Traffic Management Major Scheme (UTMC) and the associated adoption of Intelligent Transport Systems during the LTP2 period are key to managing the congestion and journey time reliability that constrains LTP3’s wider objectives. UTCM seeks to upgrade the various systems to enable strategic integration and to deliver reliable, 24/7, best practice transport network management throughout the Area. It sets the platform for integrated management as it enables the understanding of the dynamics and pressures on the network through a co-ordinated approach facilitated by active communication and Intelligent Transport Systems.

Such systems enable Traffic Managers to undertake their role more effectively, by receiving and being able to respond to real time intelligence on the performance of the network, and to enable dissemination of information to the travelling public.

Policy HN1: To support wider Highways Management objectives through Urban Traffic Management and Control

Notwithstanding the development of local systems and solutions against the background of stand alone local UTMC centres, it was recognised that more efficient management of the network, by integrating cross boundary management, could be achieved by an integrated strategic Central Database (CDB) and Command and Control System based upon the adoption of UTMC compliant systems and service.

The UTCMS sets a series of challenging actions to be delivered during the LTP3 period.
This £26.6m major scheme is being implemented over 5 years and is currently the biggest single investment of this kind in UK. A UTMC operational “Centre of Excellence” has been established at the Highways Agency Regional Control Centre in Quinton, Birmingham.

The scheme establishes a UTMC compliant system across a defined road network. It will deploy up to 40 variable message signs (VMS), support MATTISSE, develop a common ‘Command & Control’ system and pioneer innovative use of control strategies at peak demand periods (utilising SCOOT and MOVA).

The scheme builds upon existing investment made during the LTP2 period and is a major contributor towards fulfilling the requirements of the Network Management Duty imposed by the Traffic Management Act 2004.

The scheme will deliver the following:

- Region-wide replacement of life-expired equipment with UTMC compliant systems and services
- Additional traffic monitoring facilities
- Improved signalised junction efficiency utilising SCOOT and MOVA adaptive control techniques
- A common platform that incorporates existing bus priority measures
- Enhanced real time traveller information
- Improved driver information from extensive use of Variable Message Signs
- Additional environmental monitoring facilities
- More comprehensive, distributed CCTV facilities
- The potential for 24/7 UTMC control
- UTMC strategic management facility co-located with the Highways Agency Regional Control Centre (RCC) at Quinton
- Regional command and control network
- Region-wide traffic management plans utilising Decision Support Tool technology
- Performance Indicator based management philosophy

In addition to local aspirations, specific drivers are:

- The need to make the most effective use of the skills and local knowledge of a dwindling pool of UTMC operators and technical staff
- The need to integrate a set of disparate UTMC systems and achieve economies of scale
- The obsolescence of the current BT-based network communications technology.
There will be an ability to react to planned and unplanned events exploiting the use of the off-line Decision Support Tool provided by UTMC. This enables the development of Network Management strategies in an off line environment that mimics the on line systems and environment based upon VISSIM models. This allows the Network Manager to model and assess numerous network strategies or scenarios before implementation within the live system. The output will be a growing “library” of strategies and interventions that can be invoked, either manually or automatically, by UTMC operators that enable a rapid response to incidents and events on the network.

**Action UTMC 2:** Develop A Network Intervention Strategy

**Action UTMC 3:** Apply the Network Management Duty to all modes of travel

Management of signalised junctions that seek to make due allowance for pedestrian crossing phases that minimise disruption to vehicular traffic and enhance the safety of pedestrians.

**Action UTMC 4:** Develop traveller information systems

EU and UK standards and targets are being set & enforced for traveller information based on Real Time Information.
### C. LTP3 Objective Alignment

<table>
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<tr>
<th>Objective</th>
<th>Benefits</th>
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| **K01 – Economy**          | • Underpins the economic revitalisation of the West Midlands Metropolitan Area thereby encouraging regeneration.  
                              | • Helps reduce congestion on the highway network freeing up capacity for essential vehicle movements |
| **K02 – Climate Change**   | • Enables a move towards a more sustainable pattern of development and growth |
| **K03 – Health, Personal Security and Safety** | • Reduction in congestion leads to improving air quality, transport accessibility and road safety. |
| **K04 – Equality of Opportunity** | • Ensuring that transport contributes towards social inclusion by increasing accessibility for everyone  
                              | • Increasing access to travel through a range of measures including improved and affordable public transport, greater personal travel safety, and arrangements for inclusion of those with mobility and other difficulties |
| **K05 – Quality of Life and Local Environment** | • Delivers long term environmental benefits including reduced traffic noise, reduced pollution and improved air quality.  
                              | • Enabling a move towards a more sustainable pattern of development and growth |
D. Functional Network – Road Hierarchy

Policy HN 2: To review the highway network

Links within the network are classified to enable the various associated service demands to be delivered. Functional networks include national classifications, such as motorways and primary routes, which are principally related to longer distance inter city travel, and local distributors that provide connectivity to the national networks and internal local access. Typically, such classifications enable determination of winter maintenance regimes and associated gritting priority routes, which include local characteristics such as steep hills.

There are also restricted access links such as pedestrianised areas, bus lanes and cycleways, and advisory freight delivery routes that seek to better manage usage for particular categories of user.

In addition, to assist in focussing on LTP3’s wider objectives, recognition has been given to the extensive work done in defining new housing and employment sites and ‘Investment Impact Locations’ (IILs), together with work by the Districts in developing their Local Development Frameworks. This has enabled a hierarchy of routes to be defined, which reflects local needs and the characteristics of our area.

The functional network complies with an established national classification. The main strategic transport corridors accommodate a broad range of activities, including the movement of people, goods and pedestrians, parking and loading/unloading, and other demands generated by those who live, shop and work within and beyond the corridor. It is therefore vital to adopt a coherent, efficient and effective approach to route enhancements to balance competing needs and priorities.

This approach has led to the development of the Smart Routes network.

A review of the Highway Network focuses on aspects associated with:

- Prioritising Use
- Network and user hierarchies
- Freight demands
- Incidents and contingency planning
- Adoption of enforcement powers
Action HN 1: Prioritising Use of the Highway Network

Authorities will review the performance of the local highway network and in consultation with frontagers, bus operators, police etc., consider giving priority to buses, modifying traffic orders to give exemption for eco-friendly freight vehicles at particular times of day, allowing cyclists to have contra flow use of one way streets to encourage active modes, etc.

Action HN 3: Take account of Freight needs in user hierarchies

In establishing the User and Network hierarchies, we will take into account the work and outputs of our Freight Quality Partnerships (FQPs). Their principal aims are to agree and review a strategic transport network for the region for distribution purposes that addresses constraints on the network, address route signing and information, promote sustainable distribution, pursue traffic management techniques, promote industry best practice, and share information and research on the movement of freight in the Area.

Engagement with the ESDAL (Electronic Serviced Delivery for Abnormal Loads) enables more efficient routing of abnormal loads by using its innovative mapping system that takes on board the work of the West Midlands Commercial Vehicle Drivers Road Atlas promoted in 2005, in identifying important details such as weight and height restrictions. Hauliers can plot the route they need to take, get full details of all the organisations they must notify before making the movement, and also deliver fully compliant notifications. Hauliers can also perform an appraisal of the route for an indication of the suitability of their vehicle. Police, Road and Bridge authorities can manage incoming notifications using ESDAL and routes can be appraised for an indication of suitability. Additional functionality provides self-management of structures by owners.

Action HN 2: Network and User Hierarchies

The network hierarchy is the basis for an effective highway demand strategy. It also reflects the needs, practice and actual use (see HN1) of each road within the network. These may be determined by importance in terms of traffic flow or access to key facilities, environmental factors (e.g. shopping centres, residential etc), or by non-vehicular factors such as pedestrian usage. Footway priorities may sometimes conflict with carriageway priorities and it is therefore necessary to also define footway and cycle route hierarchies.

In taking forward Smart Routes and the implementation of UTMC, a strategic route plan has been developed that seeks to co-ordinate these disparate activities.
and a facility for both police and highway authorities to add constraints such as roadworks.

The FQP Forum is raising awareness of the need for parking and facilities for HGV vehicles and drivers and encouraging the development of purpose built safe and secure facilities. It has helped secure the introduction of speed limit repeater signs in the immediate vicinity of safety camera sites and continues to identify congestion hotspots and potential improvements. Such improvements, where they are low cost and can be implemented within the carriageway footprint, are implemented through a programme of Quick Wins.

E. Management of Network

Policy HN 3: To co-ordinate expeditious traffic movement within and across Metropolitan District boundaries

The Traffic Management Act 2004 (TMA) places network management duties on Highway Authorities and it requires them to secure the expeditious movement of traffic (including of cyclists and pedestrians) on the Authority’s road network and on adjacent road networks. It requires each Highway Authority to appoint a Traffic Manager who is responsible for meeting this duty.

Each of the Metropolitan Authorities has appointed a Traffic Manager to oversee the progressive implementation of network management within individual authorities and, through inter-authority working, across authority boundaries. They work in partnership, strengthening co-operation and collaboration and links with the community and other stakeholders, including the WM Police, emergency services, Highways Agency, bus operators and utility companies. Each Authority will maintain a ‘Traffic Management Plan’ that sets out how their responsibilities under the TMA are being discharged.

The powers that the TMA gives to Highway Authorities will be important in delivering LTP3, as they facilitate the maximisation of road space and keep traffic moving. It also provides tools to better manage parking policies, enforcement of moving traffic and the co-ordination of street works. Specifically, the TMA sets out a number of additional duties:

- **Development of plans for taking action deemed necessary for network management**
- **Establishing the means for actioning these plans**
• Establishment of processes to identify current causes of congestion and other forms of disruption to the movement of traffic

• Establishment of parallel processes to identify events and circumstances with potential to cause congestion and other forms of disruption to the movement of traffic, providing that the effect is likely to be significant

Network management focuses on aspects associated with:

• Regional Network Management Plans
• Network Management Plans
• Co-ordinating cross boundary streetworks
• Integration of wider travel to work area

The West Midland Traffic Managers Group have adopted a Regional Network Management Template that enables production of local Network Management Plans and the effective coordination of planned and unplanned events. This has been particularly evidenced in inter-authority coordination with the Highways Agency and the roll out of managed motorways around the Birmingham Box, where a large number of motorway night closures have and continue to be implemented to complete the motorway work with diversions onto local network. Regular stakeholder co-ordination meetings are held to co-ordinate diversions and various local authority works (Red Routes, A41 GSI etc) inevitably on the diversion routes as well as implementing measures to deal with motorway traffic on the local network.

**Action NM 2: Districts to develop Network Management Plans**

Network Management Plans are underpinned by journey time information provided by DfT. This enables changes to congestion to be monitored across the network, congestion ‘hot-spots’ to be identified and the effectiveness of schemes/policies to be analysed.

Each Authority will maintain a Network Management Plan that sets out how their responsibilities are being discharged. It is implied that, in discharging its Network Management duty, the Authority should bear in mind the need for monitoring its organisation, processes, and resources with a view to continuous improvement and achievement of best value.

Typically such a plan may consider:

• **Managing demand** – promoting ‘Smarter Choices’, park & ride, public transport, bus priority, parking restriction, privilege access e.g. freight access, setting appropriate road hierarchies
• Improving the efficiency and appropriateness of the network, through the Smart Routes programme and the enhancement of UTMC compliant systems and services
• Improving traveller information through the continued development of the MATTISSE system
• Making public transport attractive and supporting modal shift, through promoting ‘Network West Midlands’ branding, and supporting socially necessary services
• Managing congestion at rail & bus terminals
• Considering actions by Authorities’ other departments that have traffic implications, where the Authority does not have powers of direction, e.g. Civil Contingency / Emergency Plans. Internal agreements and protocols will be established
• Reviews of Traffic Regulation Orders: extent, appropriateness, duration and periods of operation.
• Reviews of directional signing and associated street clutter
• Car park charging
• Freight – routing, parking delivery arrangements
• Working with the police in incident management and traffic control
• Involving Centro and bus operators - who have a major role in improving the efficiency of network usage - in planning measures to reduce disruption to their services from events on the network
• Managing works in the street – utilities, the Authority’s own road works, disruption from impediments such as skips and scaffolding, and giving no preference to the Authority’s works (parity principle)
• Being aware at all times of activities on the network and disseminating information to those road users who are likely to be affected, where this will assist in avoiding delay to their journeys
• Performing appropriate management of planned events
**Action NM 3: Integrate Traffic Management with the Highways Agency**

A key role of Network Management is integration with the Highways Agency, reflecting the critical interaction between the Strategic and Urban road networks as identified in the Route Management Strategy of the Motorway Box. The Highways Agency support closer working on Traffic Management, the management of planned and unplanned events and the provision of information to the travelling public. Implementation of Active Traffic Management, which includes access control and revised junction strategies, cannot be done without the full cooperation of the Highway Authorities. HA support traffic control needs to be in place, with close working between the HA Regional Control Centre and the UTMC Systems.

**Action NM 4: Develop Regional template for Incidents and Contingency Planning**

The Network Management Plan template enables a regional approach, setting framework arrangements to meet local needs in terms of incident management and contingency planning. Multi-agency groups already exist to consider and respond to planned events, in accordance with the ‘safety first’ policy adopted by ACPO and recognised by the West Midlands Joint Committee. These groups meet on a regular basis as Safety Advisory Groups and include emergency service representatives. Additionally the Authorities have in place detailed contingency plans that encompass emergency planning, highway maintenance, winter maintenance and asset management plans.

**Action NM 5: Consider the adoption of Enforcement Powers**

We are increasing our powers of enforcement based upon civil parking enforcement. This is a primary element in providing enforcement measures for the Bus Showcase, Red Route network and other powers assumed under the Traffic Management Act. Currently all Districts operate civil parking enforcement and Coventry have secured powers to administer moving traffic offences.
The sharing of dynamic traffic and travel information between the highway authorities, UTMC Centres, Police Control Rooms, public transport operators, the media, and the travelling public is made through the MATISSE platform. Provision of dynamic travel information focuses on aspects associated with MATTISSE.

**F. Travel Information**

**Policy HN 4:** The LTP3 Partners will provide dynamic travel information

The sharing of dynamic traffic and travel information between the highway authorities, UTMC Centres, Police Control Rooms, public transport operators, the media, and the travelling public is made through the MATISSE platform. Provision of dynamic travel information focuses on aspects associated with MATTISSE.

**Action NM 6:** Metropolitan Highway Authorities will co-ordinate cross-boundary streetworks working with neighbouring Highway Authorities and develop cross-boundary working to integrate the wide Travel to Work Area

Systems to record and co-ordinate both planned utilities works and planned road works have been established that have the capability to display events such as street works, and provide a valuable aid to both the operators of the network and to the public. The wider travel to work area also has a significant impact on the dynamics of the conurbation strategic network.

**Action TI 1:** Review the MATTISSE system

MATTISSE is a unique system that allows instantaneous access to travel information. The system is UTMC compliant, based on the latest technologies and standards, and represents a significant investment and ongoing development since 1996, with an original focus on the provision of coordinated online information between our UTMC centres and subsequently for the travelling public via web-based services. The Metropolitan Authorities have, together with Leicestershire County Council, Leicester City Council and Telent, through a unique partnering agreement, developed it as partners and technical consultants in a joint venture.

The diagram below illustrates the way in which data from a number of sources is taken into the system and output in two formats:

- A web based format on the public “facing” travel information web site “help2travel.co.uk”
- A data repository of traffic and travel information for analysis, network monitoring and decision support
MATTISSE Data Flow Diagram

Real-Time Inputs
- Urban Traffic Control Centres
- City and Metropolitan Councils
- Streetworks
- National Traffic Control Centre
- West Midlands Police
- Leicester ATC
- Trafficlink
- SCOOT Systems
- Car Parks
- Rail (ATO)
- Bus (ACIS)

MATTISSE (managed by telent)

Processed traffic and travel information flow via...
- Public Internet
- Secure Internet
- Hand-held Devices
- Public Display Screens

Manually Processed

Automatic

Receivers
- Urban Traffic Control Centres
- City and Metropolitan Councils
- Media Companies
- National Traffic Control Centre
- Police Control Centres
- Neighbouring Local Authorities
- The Public
MATTISSE draws data from existing urban traffic and public transport systems, supplemented by data on traffic events sent from the Highways Agency and police command and control systems. It processes this raw information so that real-time traffic and travel information may be delivered to the travelling public via a range of channels (including Internet, kiosks, mobiles) to provide an informed picture of traffic and travel conditions. One of the many benefits is to enable local authorities to manage the road network better through use and delivery of information that is timely and relevant. By providing real-time regional traffic monitoring and traveller information covering motorways, urban routes and public transport, MATTISSE operates as a one-stop information point for all forms of travel information.

The system is designed for simplicity of information exchange between the partners and contributors and this remains a primary requirement for the technical specification. As a common platform across the Authorities, MATTISSE will continue to be developed to manage or display the impact of planned events and link to the Network Management Plans to identify the road types and hierarchies that are established e.g. by the Red Route network, freight and existing network hierarchies. This will allow easy identification of the different networks by the Traffic Managers and wide range of operators and stakeholders. MATTISSE will also form part of the evidence gathering procedure for the network by providing a data capture and reporting facility for planned and unplanned incidents and events on the network.

MATTISSE currently provides a common map based platform and will continue to be developed to manage and display: Streetworks UTMC / Traffic Signals fault / status data Strategy Integrator - impact analysis & response. Congestion and disruption can be caused by planned events such as sporting events, demonstrations, carnivals, parades and street markets. Dedicated plans are already in use for effective event planning and management processes that involve specific traffic signal strategies and take into account known road works.

**Action TI 2: Develop Indicators that enable measurement of Journey time monitoring, response times, Incident & event management, Streetworks disruption**

To meet Traffic Management requirements and to provide accurate estimations of journey time reliability for reactive travel information, indicators of performance are required.
G. Supporting Actions

Actions and policies to support demand management and tackle congestion are a thread that runs through LTP3. Centro are planning to invest in:

- Provision of additional Park and Ride spaces at rail stations
- Roll out of improved on-street bus information
- Redevelopment of bus stations / interchanges
- Partnership working with Bus Operators to improve services and increase patronage on selected routes
- Partnership working within Smart Routes
- On-going programmes of bus shelter renewal, bus and rail real time information provision and improvements to security on the public transport system
- Patronage Management of concessionary fares
- Supporting the West Midlands Travel Information service
- Projects such as TravelWise and Work Wise which endeavour to change attitudes to travel
- Marketing of PT services as an alternative to private transport
- Provide funding to enhance local rail services in the Metropolitan Area over and above that specified by DfT
- Station Travel Plans
- SMART Routes as a holistic approach to corridor based improvements
Urban Traffic Management and Control

A. Role of Urban Traffic Control

Management of the Highway Network is reliant on Urban Traffic Management and Control (UTMC) Systems that support the Traffic Manager in the Network Management Duty.

UTMC systems enable the coordination of traffic signal timings across an Authority’s area, as determined by experience of the dynamics of the network and the need to respond to planned events and incidents. Current systems rely on hardwired communication networks from individual signals to a local control centre. By coordinating traffic signals across an area, the total delay to vehicles can be managed.

In the Metropolitan Area, Traffic Managers use Urban Traffic Management and Control (UTMC) to better manage their road networks, and currently these centres are managed at a District level through local stand alone UTMC Centres. Whilst these support the local movement of traffic, enabling information to be disseminated to the local road user through variable message signs and other systems, they do not facilitate movement in other areas – this process relying on liaison between the appropriate Traffic Managers.

The rising level of demand and the constraints on network capacity mean that efficient management of the strategic network, particularly integration of the strategic junctions, is vital to reduce delays, and a more reactive, integrated, approach through enhanced system connectivity is necessary.

In undertaking the Network Management Duty, the Districts operate a number of legacy Intelligent Transport Systems (ITS) - all currently utilise UTMC systems, and a number also operate car park guidance, Variable Message Signs, Route Management Strategies, MATTISSE, CCTV and associated systems. In addition, Centro operates an area-wide AVL / RTPI system.

A further role of the local centres is to manage UTMC operations, typically maintenance of UTMC equipment (chiefly traffic signals and signalled pedestrian and cycle facilities). Operators manage operations from the Traffic Control Centre, typically using CCTV cameras and data from the UTMC systems themselves. These operators also direct maintenance using, in the first instance, in-house maintenance personnel and then, if necessary, a number of specialist maintenance contractors.
B. Asset Valuation

The need for identification of assets for UTMC purposes means that generally good inventory data has been maintained that has enabled asset valuation in line with Whole of Government Accounts and depreciated accounting methods.

The following table shows the key accounting figures that will be required as part of Whole Government Accounts when audited reporting starts in financial year 2012/2013. The detailed explanation of the calculation and methodology behind the cost columns can be found in the asset management section of this document.

For LTP3 purposes, the following figures have been extracted from the individual District AMPs and amalgamated to give a Metropolitan Area view. (Birmingham figures have been separated in terms of costing due to ongoing PFI investment programmes).

<table>
<thead>
<tr>
<th>Urban Traffic Control</th>
<th>Class</th>
<th>Inventory No.</th>
<th>Gross Replacement Cost (£)</th>
<th>Annual Depreciated Costs (£)</th>
<th>Depreciated Value</th>
<th>Depreciated Replacement Cost (£)</th>
<th>Restore to New Cost (£)</th>
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For ADC, it has been assumed 90% finite life components, with life cycle of 40 years.
Asset Summary

The Metropolitan Area network, excluding Birmingham (under PFI arrangements), consists of UTMC apparatus with a gross replacement asset value of over £99 million.

Maintaining the asset for its target life

Maintaining UTMC assets over their target life requires a maintenance regime and life cycle plan that addresses the timely treatment of those component parts of the asset group that have a finite life – being followed by the replacement of the asset at the end of its target life. Being heavily reliant on communication technology, the asset life is more based on continuing availability of supporting systems that may necessitate a change in approach, unrelated to asset life, but nevertheless important in securing operation – this is not taken into account.

Annual Depreciated Cost

The Annual Depreciated Cost of the UTMC assets, a costing element required under the new CIPFA code, indicates what is required to enable the asset to achieve its target life, whilst maintaining full service potential, notwithstanding the technology issues indicated above.

The level of investment required (cost per annum) to maintain a full service potential (non PFI) over the life cycle of the assets amounts to circa £2.2 million per annum for the six Districts (Birmingham excluded, due to their PFI investment programmes).

Restore to New

The restore to new costs (at present technology) for the West Midlands UTMC stock, excluding Birmingham, is over £40 million, which equates to approximately £6.6 million per District.

C. Progress and Successes from LTP2

Opportunity has been taken during the LTP2 period to upgrade street and associated equipment as opportunities have arisen.

A substantial base of expertise had been developed through the implementation of systems to improve the performance and management of the network, such as MATTISSE.
### D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Key Objective</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>K01 – Economy</strong></td>
<td>Efficient management of the network is vital to delivering the Metropolitan Area aspirations for economic growth</td>
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<tr>
<td><strong>K02 – Climate Change</strong></td>
<td>Efficient management of the network that reduces congestion has a positive benefit on exhaust emissions.</td>
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<tr>
<td><strong>K03 – Health, Personal Security and Safety</strong></td>
<td>Management of signalised junctions that seek to make due allowance for pedestrian crossing phases that minimise disruption to vehicular traffic enhance the safety of pedestrians</td>
</tr>
<tr>
<td><strong>K04 – Equality of Opportunity</strong></td>
<td>Management of signalised junctions that make due allowance in pedestrian timings for the physically impaired enables unrestricted access to services.</td>
</tr>
<tr>
<td><strong>K05 – Quality of Life and Local Environment</strong></td>
<td>Reduced congestion improves the quality of the local environment.</td>
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</table>
E. Major Influences on Network management

Communications

The on street UTMC Networks have developed incrementally over a long period and extensively utilise BT fixed wire circuits that use outdated technology. These networks now face the threat of withdrawal due to legacy issues with the transmission equipment. This is allied to a high level of maintenance skills required from BT, which are no longer relevant to modern communications systems. In light of this there is a need to consider the eventual withdrawal of this system and plan for the future, recognising that BT platforms are changing to Internet Protocol (IP) based digital networks.

The next generation of UTMC relies on IP communication to enable integration of new digital equipment on street and in control centres, enabling better information collection and dissemination. Services need to be manageable and configurable in line with emerging and future “smart city” needs, to accommodate future system demands.

Policy TAM6: To upgrade Legacy Urban Traffic Management and Control Systems and progress proposals for integrated management of the network

The UTMC Major Scheme sets the actions through individual work streams

Actions

Action UTMC 1: To ensure that strategic UTMC assets are fit for purpose

Action UTMC 2: In undertaking routine maintenance opportunity to be taken to adopt current standards and methodologies
To allow for the potential redundancy of legacy systems and enhanced management control required from on street equipment, the opportunity to be taken through maintenance regimes to upgrade equipment to current/future standards.

Action UTMC 3: Migrate to low energy devices for signals

The introduction of low voltage devices such as LED signals and ELV controllers will reduce energy consumption and associated carbon footprint. This will also impact upon maintenance measures as use of LED signal heads, where 6-year warranty periods are typical, removes the requirement for bulk lamp changes and failure will be gradual degradation of light output.

Action UTMC 4: Review existing urban communication platforms and build a solution to deliver an IP-ready, flexible and scalable communications solution for present and future needs

Communication networks are vitally important to the management of the network and the delivery of relevant, timely and accurate information. Effective and sustainable communication platforms are increasingly important to deliver our aspirations for greater traveller engagement and enhanced network management.
Smart Routes – Developing a Strategic Network

A. Role of Smart Routes

Most main transport corridors across the Metropolitan Area accommodate a broad range of activities, including the movement of people, goods and pedestrians, parking and loading/unloading, and other demands generated by those who live, shop and work within and beyond the corridor. The strategy must therefore provide a coherent, efficient and effective approach to route enhancements in a way that balances competing needs of users and differing priorities. Historically, a mode-focused approach has been adopted whereby schemes were identified to meet a single specific modal objective. This lack of a holistic approach has meant that competing needs and demands within a given corridor are not always best addressed. Moreover, schemes have often been implemented piecemeal, as and when funding has been available.

Following on from the Transport Innovation Fund Studies, the ‘3 Point Plan’ was developed. One of its elements is tackling congestion and, as part of this, the Smart Routes concept was developed as a holistic approach to corridor-based improvements. Under the tackling congestion element of the 3 Point Plan, initiatives include:

- **Bus Showcase** - a high quality bus journey experience, transforming key bus routes with comprehensive improvements to vehicles, bus priority measures and at-stop infrastructure enhancements
- **Red Routes** – a comprehensive package of traffic management measures on strategic routes aimed at making journeys for everyone quicker, more reliable and safer
- **Congestion Target Delivery Routes** – a co-ordinated and wide ranging set of measures on an agreed network of routes focused on achieving delivery of the congestion target
• Urban Traffic Management and Control Major Scheme
• Bus Partnership Initiatives – Transforming Bus Travel/Local Area Agreements/Network Reviews
• The TravelWise campaign and promoting cycling and walking for short journeys
• Quick Wins – a joint initiative with the Metropolitan Area business community to deliver small scale highway improvements which complement other programmes and improve overall highway efficiency

Smart Routes aim to build on the successes of these individual programmes and focus on coordination, to ensure maximum benefits from increasingly limited resources. The opportunity to create a consistent branding and communications strategy for network initiatives, similar to the Network West Midlands brand, is also an important element.

Smart Routes represent an innovative approach, putting the Metropolitan Area at the forefront of best practice. It has been developed to provide an attractive transport network that tackles congestion, at the same time making the most efficient use of the existing highway, to benefit all users. This is fully in accord with both the Smarter Management and the Smarter Choices Strategic Principles that underlie LTP3.

The definition of Strategic Transport Corridors underpins the strategic network and performs a dual function, both as key transport links and as places where people live and work (the ‘Link and Place’ principle). Smart Routes represent the cornerstone of this new strategy.

Objectives for the Smart Routes network are:
• An integrated package of improvements combining the best of existing programmes into a single route strategy/implementation plan, making best use of available highway space
• An equitable allocation of road space between users (the ‘Link and Place’ principle)
• To provide vibrant safe and attractive centres and secure improvements to the public realm
• That all modes of transport are actively considered during route strategy development and the subsequent implementation
• Sustainable travel solutions are integral (Smarter Choices & Active Travel)
• Effective integration with stakeholders throughout
Furthermore, a number of guiding principles have been identified:

- A corridor approach to development and delivery with clearly defined corridor strategies
- Improved governance and ownership
- Collaborative working between partners and stakeholders
- Integrated communication
- Improved utilisation of resources (financial and staff)

These are based on the principles of “Link and Place.” This assumes that streets are two-dimensional, having a link-dimension based on through-movement, and a place-dimension based on the street as a destination in its own right. Different parts of the network have a different balance between Link and Place status, which then defines priorities and reflects the users.

English Heritage’s “Streets for All – West Midlands” provides some useful examples and identifies best practice in terms of improving the public realm and built environment. http://www.english-heritage.org.uk/publications/streets-for-all-west-midlands/

By adopting the Smart Routes approach, the following benefits are expected, compared to the single-mode focused approach:

- Balanced and coordinated corridor solutions that address the identified issues and opportunities and consider the needs of all street users at the same time
- Better opportunities to engage with the public and key stakeholders
- A performance-led approach and a monitoring regime to assess the impact of measures that are implemented against the agreed strategy
- Transparency in establishing the sometimes difficult balance for competing demands on frequently limited road space
- Improved visibility of larger programmes and policies (National, Regional and Local Level) and associated opportunities for advance planning and co-ordination of street works, resulting in less disruption
- Improved prospects for incorporating sustainability and environmental objectives
- Efficiencies in the administration and implementation of schemes through the increased use of collaborative working practices
- The most effective and efficient use of the finite resources applied to any particular corridor
B. Partners: Roles and Responsibility

Centro

Centro works in partnership with Local Authorities on the development of the Smart Routes programme and to implement improvements across the entire Area. Centro also coordinates the other initiatives that support Smart Routes, i.e. Quick Wins.

Bus Operators

Most bus services in the Area are operated on a commercial basis by private bus companies. The remainder of these services, those deemed to be socially necessary and affordable, is operated under contract to Centro by private bus companies. The commercial network carries over 90% of bus passenger journeys. Commercial and contracted services are operated by over 60 operators with National Express West Midlands/Coventry being the dominant operator, with approximately 80% of the market, and Diamond Buses carrying approximately 10% of total passenger numbers.

Local Authorities

Local Authorities, as Highway Authorities, support and help improve bus services by delivering highway priority measures, through a variety of tools including bus lanes, Red Routes and junction improvements using Smart Route principles. As Planning Authorities, improvements to passenger facilities including bus stations and bus stops must also be supported and approved. Local Authorities are also responsible for future highway enhancements, which aim to improve overall highway efficiency, improving bus reliability where this aligns with overall corridor strategies and undertake improvements that benefit walking and cycling. Local Authorities also have a vital role to play through the development of Smarter Choices initiatives, including Company TravelWise.

Traffic Commissioner

The West Midlands Traffic Commissioner is responsible for regulating bus and heavy goods vehicles operations. In relation to bus operations, the Traffic Commissioner grants Operating ('O') Licenses to people or companies that are competent, financially sound and of ‘good repute.’ Anyone with an ‘O’ license who wishes to operate a local bus service must register the details of the service with the Traffic Commissioner. Thereafter, the Traffic Commissioner can take action against
an operator that fails to run the bus service as registered or if they fail to meet the competency, financial or ‘good repute’ requirements of their ‘O’ license. This may happen if an operator uses un-roadworthy buses.

**Passenger Focus**

Passenger Focus is an independent public body set up by the Government to protect the interests of Britain’s rail passengers and England’s bus passengers outside London, coach passengers on scheduled domestic services and tram passengers. Although funded by DfT, their independence is guaranteed by Act of Parliament. Their mission is to get the best deal for passengers, with a strong emphasis on evidence-based campaigning and research. They use their knowledge to influence decisions on behalf of passengers and work with the public transport providers, passenger groups and Government to secure journey improvements. They are responsible for the National Rail Passenger Survey.

**Rail Industry**

Smart Routes is not just about improvements to the highway network, and in recognition of this the rail industry will play an important role in their development, through an integrated package of improvements along those key corridors where rail contributes significantly to passenger movements.

C. Progress and Successes from LTP2

The Smart Routes concept is relatively new. However, the individual programmes that are included within it have demonstrated significant successes over the LTP2 period.

**Bus Showcase**

As a result of the various Bus Showcase initiatives, customers have expressed high levels of satisfaction with the ease and comfort of using Showcase buses, the convenient location of stops and the frequency and speed of services.

Bus Showcase has also made significant contributions towards achieving key LTP2 bus-based targets, which include:

- **Passenger increases of up to 30% on several Bus Showcase routes against a target of 9%**
- **Journey time reductions of up to 17%**
- **Increased punctuality by as much as 40%, outperforming other bus routes**
- **Service satisfaction amongst Showcase passengers of 86%, well above the 60% LTP2 target.**
- **78% of Bus Showcase passengers are satisfied with on-bus security and 71% felt safe in their waiting environment, higher than for the general bus network.**
Red Routes

Red Routes were first introduced in the Metropolitan Area in 2003 to make journeys quicker, more reliable and safer for everyone. Since then, a total of 14 Red Routes (66 km of the highway network) have been fully implemented. The results are encouraging and clearly demonstrate that Red Routes make a positive contribution to the achievement of LTP Objectives. In particular, the following outcomes have been recorded:

- Reduced journey times for overall traffic of over 8%
- Reliability improvements on key routes of up to 40%
- Bus journey time reductions and reliability improvements of up to 21% and 30% respectively
- Illegal parking reduced by over 60%
- Evidence of increases in pedestrian footfall
- Initial analysis indicates a reduction in accidents of around 8%

Quick Wins

The Quick Wins programme was developed in 2008 in partnership with the West Midlands Chambers of Commerce. These have been small-scale schemes within existing road-space to improve capacity and efficiency of the network for all traffic. Quick Wins complement other network-wide schemes (e.g. Bus Showcase/Red Routes/Congestion Target Routes) and are implemented by individual district councils as part of wider Integrated Transport programmes.

Congestion Target Routes

In accordance with the LTP2 Congestion Target Delivery Plan, significant improvements have been delivered on 19 key corridors. The impact of these schemes ensured that we remained on track to achieve the LTP2 target of:

“On target routes in the AM Peak (07:00-10:00) accommodate an expected increase in travel of 4% with a 5% increase in journey times between 2005 and 2011”

As a result, we were successful in securing further tranches of reward funding from DfT. Further schemes have subsequently been identified to further improve performance. The table below provides details of the number of schemes to be implemented and the level of funding required:
<table>
<thead>
<tr>
<th>Original Delivery Plan</th>
<th>Number of schemes delivered</th>
<th>Value £,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Schemes</td>
<td>14</td>
<td>£275.5</td>
</tr>
<tr>
<td>Revenue Scheme</td>
<td>14</td>
<td>£291.5</td>
</tr>
<tr>
<td>Tranche 1 &amp; 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Schemes</td>
<td>13</td>
<td>£1,384.6</td>
</tr>
<tr>
<td>Revenue schemes</td>
<td>19</td>
<td>£584.0</td>
</tr>
<tr>
<td>Tranche 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Schemes</td>
<td>11</td>
<td>£1,887</td>
</tr>
<tr>
<td>Revenue Schemes</td>
<td>19</td>
<td>£538.0</td>
</tr>
</tbody>
</table>

The majority of additional schemes identified as part of the tranches 1 & 2 of this reward funding are now well advanced. The remaining schemes, including those to be undertaken as a result of the latest £2,339,880 (Tranche 3) reward funding, have commenced.

**Smart Route Pilot Scheme**

Smart Routes require a change to the way in which network wide initiatives are developed and funded. As a result, a pilot Smart Route has been progressed to develop a set of guidelines that can be adopted for the future development of the network.

The A41 Warwick Road, between Birmingham and Solihull, was selected as the pilot route, jointly developed by Birmingham and Solihull Councils and Centro. The scheme uses a formal three-stage development process, involving route strategy formulation, the identification of measures in support of route objectives and subsequent scheme implementation, with consultation and engagement with all stakeholders being fundamental to the process.
## D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Key Objectives</th>
</tr>
</thead>
</table>
| **K01 – Economy** | • Supports efficient movement of people to areas where economic activity taking place especially commuters to centres during peak periods.  
• Helps reduce congestion on the highway network freeing up capacity for essential vehicle movements  
• Supports accessibility by a range of modes to local centres.  
• Cost of collisions reduced through modal shift, which brings fewer collisions and less severity. |
| **K02 – Climate Change** | • Modal shift encourages reduced reliance on the private car thus reducing carbon emissions  
• Reduce traffic growth and the need to travel by car for short and intermediate journeys (when combined with public transport) |
| **K03 – Health, Personal Security and Safety** | • Improved health through Smarter Choice interventions such as walking and cycling.  
• Improved air quality through reduced car trips will have a positive impact on health, particularly on congested corridors.  
• Reduces the risk of death or injury on the roads through the removal of private vehicles from the network; which will also result in lower road maintenance costs and in the longer term, make the need for additional road building less likely  
• Enables people to make safer journeys, regardless of their mode choice  
• Creates safer streets – more people using public transport, walking and cycling makes streets and places more welcoming and secure to others.  
• Improvements to the public realm including specific safety measures to reduce crime and the fear of crime.  
• Specific improvements at key locations will reduce the level of road traffic and pedestrian accidents |
K04 – Equality of Opportunity

- Provides a high quality and easily accessible network for all sustainable travel modes, including rail, bus, walking and cycling
- Improves access to goods, services and opportunities for those without access to a car or with mobility impairments
- Provides access to education and employment opportunities to improve social mobility
- Reduction of social exclusion, which encourages the development of communities.

K05 – Quality of Life and Local Environment

- Promotes modal shift
- Development of enhanced local urban environment through ‘link and place’ principles
- Delivers long term environmental benefits including reduced traffic noise, reduced pollution and improved air quality.

E. Major Influences on Smart Routes

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3. This includes an analysis of relevant plans, policies and programmes, from international through to local level, and assesses their implications for LTP3. This includes Smart Routes, as this aligns with all three LTP3 Strategic Principles.

Local Transport Act (2008)

The Act created Integrated Transport Authorities and granted them a suite of powers and options for improving bus services. These include strengthened voluntary partnerships, statutory quality partnerships and quality contracts, which could all, influence the LTP3 period.
**Strengthened Voluntary Partnerships**

The Act gives bus operators and Local Transport Authorities more scope to negotiate non-statutory agreements, with less risk of falling foul of competition law. The Act also gives Traffic Commissioners greater power to protect voluntary arrangements from predatory or low quality competition and to enforce performance standards.

**Statutory Quality Partnerships**

Statutory Quality Partnerships (SQPs) allow for binding agreements to be voluntarily entered into between ITAs and bus operators. Under an SQP, an ITA can provide improved infrastructure (such as bus priority measures) on a corridor, and negotiate the arrangements for the use of that infrastructure by bus operators. SQPs can cover vehicle standards, maximum fares, frequencies and timings.

**Quality contracts**

Under Quality Contracts, private bus operators would be invited to bid to operate a specified network. Once an operator was appointed, it would face no on-road competition and would be free to concentrate on developing the local market for bus travel, in partnership with the ITA.

**Integrated Public Transport Prospectus & Transforming Bus Travel**

Centro, in conjunction with partners, has developed the Integrated Public Transport Prospectus (IPTP) which outlines the long term vision for public transport across the Metropolitan Area which takes into account housing growth areas, regeneration zones in addition to existing and future major developments. The principles underlying the development of the IPTP are supported by Smart Routes

The LTP3 period will bring significant quality improvements to local bus services using the TBT principles to address the needs and expectations of current and future passengers. Building on existing high levels of use for local journeys, the aim is to achieve a local and international reputation for innovative, forward-looking provision, which is popular with customers. This means that bus industry advances in vehicles, planning, operation and customer service will have a natural home in our Area.
F. LTP3 Policies – Smart Routes

Within the context of LTP3 Objectives, the ISA and the major influences to Smart Routes as outlined above, the following Smart Routes policy has been developed. A Sustainable Smart Package bid will be made for funding from the new Local Sustainable Transport Fund, incorporating Smart Route and Smarter Choices development.

**Policy HN6 – Smart Routes Network:** To co-ordinate the development and implementation of a Smart Route network, including a common assessment of problems, joint consultation, common design and procurement activities

The criteria for determining the routes which form the Smart Routes Strategic Network have been developed using LTP3 guidance (DfT) which states: “identifying the key local hubs (e.g. local town centres, major employment and industrial areas, retail centres, large housing developments), strategic corridors (local main roads and main bus routes) and any significant gateways”

The resulting Smart Routes Strategic Network comprises approximately 5% of the total road network in the Metropolitan Area, but carries a significant proportion of all traffic. The draft Smart Routes Strategic Network is shown below:
A prioritisation process is being developed to identify which routes should be taken forward, building on techniques developed for the Pilot. This will consider criteria such as regeneration/jobs, journey time, congestion relief, impact on carbon emissions and increasing public transport use.

Districts and Centro will develop a common approach, as a framework for developing specific proposals for individual corridors, with an emphasis on gaining information on issues and challenges in the proposed corridors, through effective local engagement.

The delivery of a Smart Route will follow a three-stage process:
- **Stage 1 – Developing a Smart Route Strategy**;
- **Stage 2 – Developing Route Measures**; and
- **Stage 3 – Implementation and Monitoring**.

This key stages of this process are detailed below:

**Stage 1 - Developing the Smarter Route Strategy**

- **Confirmation from members**
  - Route and ‘impact area’ definition
  - Selection of stakeholder group
  - Setting of vision

- **Take part in identifying ‘Issues and Opportunities’**
  - Segmentation of the route using Link/Place methodology
  - Route inspections
  - Gathering existing performance data
  - Producing ‘Issues and Opportunities’ drawings

- **Revise ‘Issues and Opportunities’ drawings to incorporate feedback**
  - ‘Before’ monitoring - SMART* + User Perception Surveys
  - Data analysis

- **Confirm and finalise Route Strategy**
  - Identify route/segment priorities
  - Potential projects
  - Delivery Framework

**Work by the Project team**

- **Review and Approve**

**Stakeholder / Public Engagement**

- **Feedback from Stakeholders**
  - Public / Stakeholder engagement in gathering ‘Issues and opportunities’ information
Future Smart Routes will follow this approach, with a level of detail bespoke to the individual nature of the route being considered.
LTT3: MODAL TRANSFER AND THE CREATION OF SUSTAINABLE TRAVEL PATTERNS (MT)
Car Parking

A. Role of Car Parking

The availability of car parking is a significant factor in influencing peoples’ choice of travel mode. Therefore its provision, control and management is fundamental to the development of a balanced transport strategy, both in ensuring economic centres remain vibrant, and also, through resident parking initiatives, promoting residential areas as attractive places to live. Parking policy can also support Smarter Choices initiatives, through providing dedicated car parking spaces for Car Club members. Car park design, location and access arrangements, alongside their provision, charging regimes and general management, are an important factor in delivering LTP3. The ITA will seek to work with the District Councils to ensure a balanced parking policy is established within the Metropolitan Area, to promote the vitality of centres, support modal shift and act as an appropriate form of demand management. Increased on-street parking can have adverse impacts on road safety, especially for pedestrians and cyclists, with social inclusion and equality implications. Inappropriate and obstructive car parking can also increase general traffic congestion as well as creating difficult access conditions for emergency and refuse collection vehicles and bus services. Residential parking policies need to address these issues at the local level.

B. Car Parking: Roles and Responsibilities

Local Authorities

The District Councils, as Local Planning Authorities, have a major role in determining how new car parks and new development with parking facilities contribute to these Objectives.

Centro

Centro operate a number of public transport-related car parks and therefore also has a major role to play.
C. LTP3 Key Objective Alignment

| K01 – Economy                  | • Local Authorities to develop parking policies which support the economic vitality of centres  
|                               | • Develop appropriate car parking policies which promote modal shift to public transport to reduce congestion on the highway network freeing up capacity for essential vehicle movements |
| K02 – Climate Change          | • Parking policies which promote modal shift encourages reduced reliance on the private car thus reducing carbon emissions |
| K03 – Health, Personal        | • Good personal security in public car parks through improved security systems  
| Security and Safety           | • Parking policies which lead to lower levels of congestion, pollution and road accidents will improve the health of local communities |
| K04 – Equality of Opportunity | • Provides access to education and employment opportunities to improve social mobility  
|                               | • Develop design standards in car parking which develops a pleasant environment for all to operate within |
| K05 – Quality of Life and     | • Provides access to education and employment opportunities to improve social mobility  
| Local Environment             | • Develop design standards in car parking which develops a pleasant environment for all to operate within |
D. Major Influences On LTP3 Car Parking

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3. This includes an analysis of relevant plans, policies and programmes and their implications for LTP3, including parking. Building on the policy framework identified for parking by the ISA, the following have been identified as major influences on parking over the LTP3 period.

Planning Policy Guidance PPG13 remains the main focal point for parking policy in LTP3, along with PPS3. This outlines the following:

- Ensure that, as part of a package of planning and transport measures, levels of parking provided in association with development will promote sustainable transport choices

- Not require developers to provide more spaces than they themselves wish, other than in exceptional circumstances which might include for example where there are significant implications for road safety which cannot be resolved through the introduction or enforcement of on-street parking controls

- Encourage the shared use of parking, particularly in town centres and as part of major proposals - for example offices and leisure uses (such as cinemas) might share parking because the peak levels of use do not coincide, provided adequate attention is given at the design stage

- Take care not to create perverse incentives for development to locate away from town centres or threaten future levels of investment in town centres. While greater opportunities exist to reduce levels of parking for developments in locations with good access by non-car modes, Local Authorities should be cautious in prescribing different levels of parking between town centres and peripheral locations, unless they are confident that the town centre will remain a favoured location for developers. Advice in PPG6 makes clear that good quality secure parking is important to maintain the vitality and viability of town centres and to enable retail and leisure uses to flourish

- Require developers to provide designated parking spaces for disabled people in accordance with current good practice
E. LTP3 Policies – Car Parking

Policy MT1 – Car Parking: To ensure car parking policies and provision support the LTP3 aims of encouraging sustainable transport patterns across the Metropolitan Area and promote vitality of centres. Such policy interventions may include availability and car park pricing.

The ITA has primarily an influencing role in the implementation of this policy. It will ensure that its own car parking policies and provision in respect of its own facilities support the development of sustainable travel patterns. Furthermore, it will encourage its District Council Partners to ensure that their car parking policies meet the same objectives.

• Where appropriate, introduce on-street parking controls in areas adjacent to major travel generating development to minimise the potential displacement of parking where on-site parking is being limited
• Generate development to minimise the potential displacement of parking where on-site parking is being limited
• Require convenient safe and secure cycle parking in development at least at levels consistent with the cycle strategy in the local transport plan
• Consider appropriate provision for motorcycle parking
Demand Management and Reducing the Need to Travel

A. Role of Demand Management

Travel patterns reflect the different journeys people make in their daily lives. With the majority of services and businesses being located in large centres, travel demand (both private and public transport) tends to be focused on key corridors. Where demand for highway and junction capacity exceeds supply, this leads to congestion, meaning longer and less reliable journeys whilst slow, regularly stopping traffic reduces air quality. The impact on the local economy alone is estimated at between £1.5-2.5 billion per annum. To reduce pressures on the network, demand management measures are used to influence travel behaviours: to encourage people to travel at different times, by different modes or to travel shorter distances or, indeed, to evaluate their need to travel at all.

B. Demand Management: Roles and Responsibility

Centro

Centro works with stakeholders to identify, develop, implement and review bus and rail schemes and strategies, including concessionary travel and supported services, across the Metropolitan Area. Centro, together with Local Authority partners, encourages more sustainable travel to be considered rather than car use.

Local Authorities

Local Authorities have powers to develop and implement most demand management measures, such as those based around Local Authority owned assets, for example policies regulating the use of the highway network (traffic regulation orders), pricing of local/strategic centre car parks, duration of on-street parking, and longer term measures associated with land use planning.
Highways Agency

The Highways Agency (HA) manages motorway traffic to reduce congestion and address air quality issues. Their ‘Influencing Travel Behaviour’ programme seeks to promote sustainable travel and reduce congestion on England’s strategic road network. Through this, the HA aims to cut congestion by influencing travel behaviour, providing access to information to help people make smarter travel choices and introducing demand management measures in congestion-prone areas, such as access controls (ramp metering). The HA is a statutory consultee in the planning process, both in the formulation of development plans and in the consideration of planning applications, with respect of impacts on the strategic road network. The HA also work with developers and employers on Travel Planning.

Businesses and Employers

Businesses, especially those with large numbers of employees, have a role in that they can adopt Workplace Travel Plans to encourage staff to travel by more sustainable means, or at times outside the peak periods or to reduce overall travel demand. This can involve establishing car-share arrangements, providing facilities for cyclists, helping with the cost of public transport season tickets, being flexible over working hours and allowing home-working. Reviewing business travel arrangements, for example to encourage more use of public transport instead of the car, is another form of demand management.

C. Progress and Successes from LTP2

West Midlands Transport Innovation Fund (TIF)

LTP2’s approach to demand management focused on TIF. Centro, in partnership with the Local Authorities, developed proposals centred upon using central TIF resources to help fund a package of transport initiatives, including high quality public transport provision and highway improvements. Under the terms of TIF, some of the resources required would be paid for using road pricing based demand management measures.

The report concluded that road pricing was not the right solution to tackle traffic congestion in the Metropolitan Area at that time. It demonstrated that whilst the road pricing designs tested would produce reductions in congestion, they would not meet the conditions laid down by the Metropolitan Area authorities. In particular, the work showed that:
• Road pricing would deliver very mixed results in terms of reducing congestion. There would be either no, or a negligible benefit, to Coventry, Wolverhampton and the Black Country. In Birmingham, although some benefits would be realised, future ‘vehicle hours’ would be reduced only to current levels;

• There would be only a marginal gain for business as the costs to companies would almost equal the benefits they would attain through increased journey times;

• The most suitable pricing scheme would be based on time, distance and place, although currently the technology is not yet available, and may not be until 2021;

• Both business and residents acknowledged that whilst congestion must be tackled, they expressed doubts that road pricing was the best solution;

• The Government had not set a national road pricing strategy

The extensive research undertaken by the TIF study has informed LTP3 development towards demand management as outlined below.

**Smarter Choices**

There have been a number of successes within the broader Smarter Choices programme, including TravelWise initiatives such as Company TravelWise and the regional TravelWise campaign.
D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Key Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KO1 – Economy</td>
<td>Helps reduce congestion on the highway network during peak times by encouraging differing travel patterns and by differing modes;</td>
</tr>
<tr>
<td>KO2 – Climate Change</td>
<td>Where demand management encourages modal shift away from low capacity modes to more high capacity modes of travel this leads to lower carbon emissions;</td>
</tr>
<tr>
<td>KO3 – Health, Personal Security and Safety</td>
<td>Where demand management encourages modal shift away from motorised modes to active travel modes this contributes towards improved personal health;</td>
</tr>
<tr>
<td>KO4 – Equality of Opportunity</td>
<td></td>
</tr>
<tr>
<td>KO5 – Quality of Life and Local Environment</td>
<td>Land use planning measures which reduce the need to travel as well as distances required; this leads to lower level of road traffic and thus improves local air quality, reduces noises and social exclusion;</td>
</tr>
</tbody>
</table>

E. Major Influences On LTP3 Demand Management

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3. This included an analysis of relevant plans, policies and programmes and their implications for LTP3, including demand management. In addition to the policy framework identified for demand management by the ISA, the following have been identified as major influences on demand management over the period of LTP3:
Low Emission Towns and Cities Programme

European Directives on air quality have been translated into Part IV of the Environmental Act 1995. This introduced a national framework for air quality management. The framework required Local Authorities to assess air quality, identify concerns, designate Air Quality Management Areas (AQMA) and develop an action plan to improve air quality.

To meet AQMA targets and objectives, the seven Metropolitan Authorities are developing proposals for a Low Emission Town and Cities Programme (LETCP), with the following five strands:

1. Development of a Low Emission Strategy
2. Development of a Regional Low Emission Strategy Supplementary Planning Document
3. Regional Best Practice Guidance on Procurement
4. Development of urban centre Low Emission Zone model
5. Low Emission Strategy Assessment Report

Of relevance to LTP3 is the development of the Low Emission Strategy and Low Emission Zone(s). These will be drawn up and implemented to meet environmental objectives, whilst ensuring high quality public transport access and appropriate freight access.

E. LTP3 Policies – Demand Management

Within the context of LTP3 Objectives, the ISA and the major influences on LTP3 outlined above, the following LTP3 Demand Management policy has been developed. The specific interventions will be detailed in the Implementation Plan.

Policy MT2 – Managing Travel Demand:
To seek to manage travel demand through a mix of hard and soft measures to encourage sustainable travel patterns, including:

- Car parking policies
- Prioritising the use of the highway network
- Encouraging Smarter Choices
- Land use planning policies
- Encouraging people and business to reduce the need to travel via virtual travel and co-location of facilities through the land use planning process

To reduce congestion on the highway network, LTP3 focuses on the development of high quality public transport and encourages sustainable travel patterns. However, such an approach also needs to be appropriately balanced with demand management. In the short term, Districts and Centro will continue on-going measures balanced around localised needs and priorities such as car park charging, road space reallocation and land use planning.
In the longer term, the Metropolitan Area is forecast to generate significant additional trips, due to economic and housing growth. Forecasts from DfT, Metropolitan Area authorities and the RAC all point to long-term growth in car kilometres (DfT 28% by 2025 from 2003, Metropolitan Area Authorities 33% by 2021 from 2001 and RAC 32% increase for the region by 2041 from 2005). With spatial planning policies focusing development on centres, additional trips will subsequently be focused on major transport corridors, adding to existing pressures on these networks.

Therefore, the District Authorities and Centro will ensure appropriate demand management measures are delivered across the Metropolitan Area which help meet LTP3 Objectives but do not adversely impact on the economy of the Area nor reduce people’s ability to make their journeys, but rather encourage sustainable travel patterns overall.

Such measures include:

Parking Policies

- Parking policies regarding the availability and pricing of spaces related to duration and different times of day, including provision for secure overnight parking of freight vehicles and rest period parking will be kept under review and co-ordinated by the metropolitan authorities.

Prioritising Use of the Highway Network

- Authorities will review the performance of the local highway network and, in consultation with frontagers, bus operators, police and others, consider giving priority to buses as a high capacity mode; modifying traffic orders to give exemption for eco-friendly freight vehicles at particular times of day to improve the local environment; cyclists having contra flow use of one way streets to encourage active modes; etc

Encouraging Smarter Choices

- A principal aim of Smarter Choices is to discourage use of the car for those journeys that can be undertaken by a more sustainable mode. This would reduce congestion, improve reliability of journey times, reduce air pollution and support reallocation of capacity to more active modes such as providing additional cycle lanes and pedestrian crossings.

Planning Policies

- The formulation of appropriate spatial planning policies by the Local Planning Authorities, and their subsequent application through the Development Management process, can have a significant positive impact, both upon demand management and upon the adoption of Smarter Choices initiatives. Such policies will be appropriate to future Development Plan Documents, including Core Strategies and Area Action Plans relating to specific areas such as city, town and district centres, and to future employment and housing sites. Furthermore, it is acknowledged that some existing documents, such as the Black Country Joint Core Strategy already have policies relating to demand management and Smarter Choices.
A. Role of Smarter Choices (Including Active Travel – walking and cycling)

As part of the TIF work and the West Midlands Sustainable Travel Cities bid, a package of Smarter Choice measures was researched and developed. This consists of a range of initiatives to change individuals’ travel behaviour in favour of the more sustainable modes and also to question the need to travel in the first place. It is one of the three Strategic Principles of LTP3. These include:

- Providing better information about travel options
- Actively marketing sustainable travel options
- Improving transport services to better meet people’s needs
- Providing options that reduce the need to travel at all.

These are implemented through measures such as:

- Workplace travel plans
- Travel awareness campaigns such as TravelWise
- School travel plans (for addressing the ‘School Run’)
- Personalised travel planning
- Public transport marketing
- Travel awareness campaign
- Smarter working techniques such as teleworking and home working
- Introducing cycling and walking schemes and initiatives
- Establishing car clubs and car sharing schemes
- Cycle training in schools and the Integrated Training Programme for Cycling and Cycle Training West Midlands

The evidence base shows that they can deliver the following important benefits:

- Reduce modal share of single occupancy cars and increase the modal share of public transport, walking, cycling and car sharing;
• Play a role in addressing the ‘School Run’
• School Travel Planning can influence the travel attitudes of future generations
• Improve health and safety
• Reduce the overall number of car trips; and
• Change the timing of travel, in particular reduce car travel during peak periods

Alongside these transport benefits, Smarter Choices play a significant role in delivering wider environmental, economic and societal benefits including:

• Physical health and fitness benefits from an increase in active travel modes (walking and cycling);
• Improved accessibility to workplaces, schools and community services and hence reduce social exclusion;
• Reduce staff absenteeism and improve staff retention;
• Reduce land take for car parking provision;
• Improve safety and security; and
• Improve local environmental quality.

In July 2004, DfT published a major research report, ‘Smarter Choices – Changing the Way We Travel’ based on 24 UK case studies and a worldwide literature review into the effects of such measures. It suggested that a combination of behavioral measures alone could reduce peak period urban traffic by up to 21%.

Recent results from the DfT initiative, ‘Sustainable Travel Towns’ Projects (Darlington, Peterborough and Worcester) indicate reductions in traffic of over 10% and similar increases in public transport, walking and cycling over 2 years.

The work conducted as part of ‘Gridlock or Growth – Choices and Challenges for the Future’ estimated that widespread use of such initiatives here in the Metropolitan Area could reduce daily car trips by 4% and increase public transport use and cycling by 10%.

Transport for London (TfL) has completed extensive work, developing and implementing workplace and school travel plans across London. Results for workplace travel plans show an average 13% mode shift away from car journeys. The monitoring of school travel plans is showing a 6% mode shift away from car and towards more sustainable modes of travel.

Smarter Choice initiatives are not only about getting people out of their cars and onto public transport – they also encourage active travel such as walking and cycling. These active modes play a vital role in a sustainable transport strategy and can make a positive contribution towards the achievement of the LTP3 Objectives.

Walking and cycling are a simple way for people to incorporate more physical activity into their lives and are also important for increasing access to jobs, education and services for many people. However, in England we have some of the lowest rates of walking and particularly cycling in
Europe. Cycling also provides benefits for physical fitness and health, which can be significant against the current background of rising obesity levels, particularly among children. A recent study has estimated that by 2050, 60% of the UK population could be obese, with the economic cost of obesity reaching £49.9 billion at today’s prices.

Over recent decades, increasing prosperity, car ownership and demand (in particular for longer trips) has seen overall car mileage grow and demand for rail travel increase. However at a national level, trips by walking and cycling have been in long-term decline, to the point where only 2% of trips are cycled. The number of walking trips has also been in decline, although overall distance travelled is largely unchanged, suggesting that when walking, people are taking fewer but longer trips.

At a time when public finances are coming under increased pressure, focus must be placed on the potential of low-cost, sustainable measures like walking and cycling to contribute to tackling these challenges. In particular, as we are in the grip of an obesity epidemic, we cannot afford to miss the opportunity to get more people walking and cycling. The evidence is clear: integrated walking and cycling strategies can get more people active and deliver significant benefits, offering high value for money.

More active travel can also bring business benefits – a healthier, more active workforce means reduced absenteeism and increased productivity, and reduced congestion means better journey time reliability. This also benefits the environment – journeys made on foot or by bike rather than car reduce emissions and contribute to a better local environment.

Walking and cycling are not viable options for all journeys, but are appropriate for many journeys under 5 miles that are currently made by car.

- **66% of all trips are of less than 5 miles (a distance which can many people could cycle in half an hour); more than half of these are made by car.**

- **22% of trips are of less than 1 mile (about 20 minutes’ walk), 20% of which are made by car.**

There is also potential for walking and cycling to be integrated into longer journeys e.g. integration with sustainable modes such as public transport would support mode shift from the private car.

Regular physical activity of moderate intensity, such as walking or cycling, can bring about major health benefits and an improved quality of life. People who are physically active can significantly reduce their risk of developing major chronic diseases – such as coronary heart disease, stroke and type 2 diabetes – by up to 50%, and the risk of premature death by about 20–30%. 

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Much work has been undertaken by Centro and the District Councils, to develop and deliver Smarter Choices solutions. Through the Network West Midlands and TravelWise brands, sustainable travel teams have been delivering travel plans to schools, workplaces, residential areas and rail stations to encourage modal shift away from the private car.

It is recognised that continued growth in car traffic will create air and noise pollution which discourages active travel and detracts from the quality of urban space. Through Smarter Choices, reduced road traffic and increased use of active travel increases levels of social interaction, social networks and quality of urban life thereby attracting and retaining investment and supporting regeneration.

Smarter Choices also have a role to play in land use planning by providing locational policies to ensure that developments are put in the right place, with the right sustainable transport links to maximise use of public transport and active travel.

Both Smarter Choices and active travel are often cheaper and easier to deliver than infrastructure-based transport schemes. Emerging work shows very high value for money from Smarter Choices solutions. They also are more easily scaleable and have shorter delivery times, meaning they can be quickly adapted to suit changing circumstances or uncertain levels of funding.

B. Partners: Roles and Responsibility

Centro

Centro and the Metropolitan Authorities work together on developing and implementing Smarter Choices. This is primarily through providing public transport information, promoting public transport and supporting the public transport aspects of businesses and schools that have set up travel plans. Centro works in partnership with operators (under the Network West Midlands brand) to develop integrated ticketing that meets customer needs. Centro also provides a range of concessionary fares for children, the elderly and disabled travellers. Alongside this, it negotiates discounts on public transport season tickets for sale through the Company TravelWise scheme and is also responsible for developing www.letzgogreen.org, an educational resource for schools and pupils to learn about sustainable travel.

Local Authorities

The Metropolitan Authorities have Sustainable Travel Teams, working with schools, businesses and communities to develop and implement travel plans. They are also responsible for the delivery of walking and cycling infrastructure improvements. The Districts are also responsible for development control and can stipulate the inclusion of travel plans and other sustainable travel measures through planning conditions. They provide

training and promotion of walking and cycling and work closely on the Regional TravelWise campaign and support initiatives such as Company TravelWise. A number of Metropolitan Authorities are working in partnership with Living Streets and CTC on walking and cycling initiatives. They are also responsible for Rights of Way Improvements Plans.

**Highways Agency (HA)**

The Highways Agency works in partnership with Centro and the Districts to develop their Influencing Travel Behaviour programme, which includes Area Travel Plans around business/industrial parks in close proximity to the motorway network.

**ACT TravelWise**

ACT TravelWise is the UK’s premier network for all organisations working to promote sustainable travel. It promotes a society in which people and organisations can meet their travel needs in ways that protect and enhance the environment, improve public health and support community well being. It provides support to members, by means of a regional structure, through learning opportunities, partnership working, marketing support and networking events, all with a specific focus on building expertise and experience in travel planning and other cost-effective demand management measures.

**Bus Operators**

Most bus services in the Area are operated on a commercial basis, by private bus companies. The remainder of these services, those deemed to be socially necessary and affordable, is operated under contract to Centro by private bus companies. The commercial network carries over 90% of bus passenger journeys. Commercial and contracted services are operated by over 60 operators with National Express West Midlands/Coventry being the dominant operator, with approximately 80% of the market, and Diamond Buses carrying approximately 10% of total passenger numbers.

**Homes and Communities Agency (HCA)**

The Homes and Communities Agency is the national housing and regeneration delivery agency for England. Their role is to create thriving communities and affordable homes. Through the HCA, housing development sites are developed near public transport services and include provision of walking and cycling routes.

**Job Centre Plus**

Centro in partnership with Job Centre Plus and other partners deliver the WorkWise scheme in Birmingham, Dudley, Sandwell, North Solihull, Walsall and Wolverhampton. This initiative helps jobseekers overcome travel barriers to employment by offering free travel together with advice on sustainable transport options for getting to job interviews.
If successful in those interviews they can then obtain free travel to their new job for the first three months of employment.

**Sustrans**

Sustrans provides creative, innovative and practical solutions to the transport challenges affecting us all. By working with communities, Local Authorities and many other organisations, Sustrans creates change by putting people at the heart of activities, enabling many to travel in ways that benefit their health and the environment.

**Primary Care Trusts (PCTs) and successor bodies**

Centro works in partnership with PCTs on the common objective of improving the health and wellbeing of the people they serve. PCTs can encourage sustainable and healthy ways of travelling to their sites, such as by cycling or walking.

**British Waterways**

Canal towpaths are becoming more popular as ‘green’ routes for walking and cycling. British Waterways are responsible for access points to the canal network and for towpath maintenance.

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**C. Progress and Successes from LTP2**

The targets set as part of LTP2 for the number of school and workplace travel plans are on track to be met. These were defined as:

- **100% of schools to have travel plans by 2011.**
- **30% of all employees to work in organisations committed to work place travel plans by 2011.**

The Metropolitan Area is on track to meeting these targets due to the success of its school and workplace travel planning. For 2010, the school census figures for the Metropolitan Authorities show a car-use percentage figure which is 1.5% lower than the figure for 2009. Alongside this, there have been successes in establishing car sharing schemes. In 2008, the West Midlands won the ACT TravelWise region of the year in recognition of the work done on sustainable travel. In addition, the Regional TravelWise portal has been set up (www.travelwisewestmids.org.uk), as well as associated individual websites such as School TravelWise, Company TravelWise, Residential TravelWise, and Community TravelWise.
The LTP2 target for cycle use was “a 1% increase in the cycling index between 2003/4 and 2010/11”. At the end of 2009/10, an increase of 23% had been achieved over the baseline figure. The profile of Smarter Choices has continued to rise over the LTP2 period, are recognised as an integral element of the LTP3 strategy, and remain a high priority.

A corridor based Smarter Choices strategy has been developed. The principles of this were used to develop the West Midlands Sustainable Travel Cities bid. Alongside this, the Network West Midlands (NWM) brand has been developed and positioned as a strong unified consumer and campaign vehicle for all forms of sustainable travel and Smarter Choices work across the region. Centro and the Metropolitan Authorities have worked together to develop an integrated communications strategy, which defines the relationship between NWM and TravelWise, and seeks to influence travel behaviour, both through broad awareness campaigns, using mass media, and through targeted corridor initiatives supported by the advisory and travel planning services provided by the Sustainable Travel teams.

In terms of active travel, much more emphasis has been placed on the importance of this, particularly through the health sector. Department for Health and local PCTs have been involved in establishing the health benefits of active travel. The West Midlands Physical Activity Network (PAN – WM) was established in 2006 and supports the development of active lifestyles.

The introduction of the WorkWise initiative has seen significant success. This helps to overcome very real transport barriers experienced by people seeking employment. Achievements have been recognised both locally and nationally e.g. the 2007 Guardian Public Services award for Service Delivery (Transport category) and the National Transport Award (Accessibility Category). Monitoring has shown that 89% employees have continued to use public transport after 6 months. These achievements are a result of the successful partnership approach favoured by Centro and the commitment of our partners. WorkWise is seen as a valuable asset, not only to the individuals assisted by the scheme, but also to local communities and employers.
## D. LTP3 Key Objective Alignment

### K01 – Economy

- Supports efficient movement of people to areas where economic activity taking place especially commuters to centres during peak periods.
- Helps reduce congestion on the highway network freeing up capacity for essential vehicle movements.
- Active modes make the best use of space and are unaffected by motor vehicle congestion.
- Business journeys made by active travel are more reliable and consistent because origin to final destination times are more dependable.
- Walking and cycling are resilient to disruption of travel networks through (e.g.) vehicle collisions/crashes, transport worker strikes and road repairs.
- Lower traffic levels and associated noise and air pollution and physical dominance of urban space create a higher quality urban environment, which promotes regeneration and the attraction and retention of investment.
- Increased oil prices and supply fluctuations have no impact on active travel modes.
- Small scale walking and cycling schemes, training and promotion can have high cost benefit analysis and offer greater value for money.
- Active employees are healthier, more productive and less likely to take time off sick.

### K02 – Climate Change

- Modal shift encourages reduced reliance on the private car thus reducing carbon emissions.
- Reduce traffic growth and the need to travel by car for short and intermediate journeys (when combined with public transport).
| K03 – Health, Personal Security and Safety | • Improved health through active travel modes e.g. walking and cycling.  
• Improved air quality through reduced car trips will have a positive impact on health, particularly on congested corridors.  
• Potential to reduce the risk of death or injury on the roads where the promotion of active travel is supported by safety measures such as 20mph zones, additional crossing points and safe cycling infrastructure  
• Creates safer streets – more people using public transport, walking and cycling makes streets and places more welcoming and secure to others.  
• Travel plans which encourage use of active modes, including station travel plans which encourage the use of such modes to access stations.  
• Better cycling facilities and training will lessen the risk of personal injury. |
| K04 – Equality of Opportunity | • Improves access to goods, services and opportunities for those without access to a car or with mobility impairments.  
• Public transport is accessible to all and walking and cycling are very inexpensive for individuals.  
• Reduction of social exclusion, in line with the principles of Accessibility Planning, which encourages the development of communities.  
• Smarter Working can improve equality of opportunity. |
| K05 – Quality of Life and Local Environment | • Promotes modal shift.  
• Development of enhanced urban environment to provide walking and cycling routes.  
• Smarter Working helps improve quality of life.  
• Delivers long term environmental benefits including reduced traffic noise, reduced pollution and improved air quality. |
E. Major Influences on Smarter Choices & Active Travel

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3, which includes an analysis of relevant plans, policies and programmes and their implications for LTP3. This includes Smarter Choices as this is identified as one of the three Strategic Principles that form the basis for the LTP3 Strategy.

Integrated Public Transport Prospectus

Centro, in conjunction with partners, has developed the Integrated Public Transport Prospectus (IPTP). This outlines the long-term vision for public transport across the Area, taking into account existing and future major development. The principles underlying the IPTP are supported by Smarter Choices.

West Midlands Sustainable Travel Cities Bid

Centro, on behalf of the Metropolitan Authorities, co-ordinated the West Midlands Sustainable Travel Cities (WMSTC) bid to DfT, setting out a package of targeted corridor-based Smarter Choice measures, which would be developed in conjunction with infrastructure improvements (e.g. Showcase, Red Routes etc). The bid evolved from the Smarter Choices Strategy that was developed as part of the 3 Point Plan following the Transport Innovation Fund work.

F. LTP3 Policies – Smarter Choices (Including Active Travel)

Within the context of LTP3 Objectives, the Sustainability Appraisal and the major influences on Smarter Choices outlined above, the following policies have been developed. The specific interventions required to deliver each policy during LTP3 are outlined in the Implementation Plan. LTP3’s approach builds on existing activities and work undertaken in developing the 3-Point Plan Smarter Choices Strategy and Sustainable Travel Cities bid. A Sustainable Smart Package bid will be made for funding from the new Local Sustainable Transport Fund. This will incorporate Smart Route and Smarter Choices development.

The features of the Smarter Choices approach are:

- A targeted best value approach on our Smarter Choices programme through our radical programme of Smart Routes, Bus Showcase and Red Route corridors as well as other planned infrastructure improvements to lock in the benefits of Smarter Choices.

- A clear and consistent Smarter Choices programme with six workstreams: marketing and information, personalised travel planning, education, business & employment, residential & community and supporting measures.
• A programme that invests in and promotes the integration of walking, cycling and public transport to enable a seamless journey experience for passengers

• Promotion of Smarter Choices through use of S106/S278 agreements through the spatial planning process and through promotion of these alongside more specific accessibility principles, when considering future housing and employment development

• An innovative marketing campaign based on extensive survey data and building on strong branding and high public awareness to encourage people to change to sustainable modes of travel

• A focus on young people to build a generation for whom the use of public transport, walking and cycling is as instinctive as driving was for their parents

• A package which will be rigorously monitored and outcome focused

The Smarter Choices workstreams are integrated thus:

**Marketing and Information**

- Corridors
- Education
- Business & Employment
- Community & Residential

**Supporting Measures**

**Capital Programme**

**Policy MT3 – Encouraging Sustainable Travel Patterns through Smarter Choices:**
To promote modal shift towards sustainable travel modes for work, school and leisure journeys through the application of targeted and intensive Smarter Choices measures

This policy is will be achieved through:

**Marketing and Communications**
A dynamic and sustained marketing and communications strategy is central to the successful delivery of the strategy. The strength is that it builds on the overarching Network West Midlands (NWM) brand, already developed with Metropolitan Authority partners.
Personalised Travel Planning

To increase journeys by bus, rail, cycling, walking and car sharing, and to promote the use of local services, Personalised Travel Planning will be provided to households along key corridors. Each person within the targeted area is encouraged to think about how they currently travel for each trip they make and how they might make those trips in more sustainable ways. Nationally, PTP has been reported to reduce car driver trips typically by 11% (amongst the targeted population) and the distance travelled by car by 12%.

Education Focus

Influencing the travel behaviour of young people, including those over 16, now will impact on their future travel decisions. To do this, we also need to work with parents. The education focus builds on work already undertaken by School Travel Advisors and links with the health agenda through encouraging active and safe lifestyles which will combat childhood obesity. The initiatives that will be developed include enhanced school travel planning, school bus brokerage, bus monitors, school travel plan grants and the ‘Bike It’ officers. Robust monitoring is an integral element so outcomes can be identified and will build on the existing established data sources such as the Schools Census. Benefits of changes to public transport and active modes will be locked in through supporting infrastructure improvements.

Business and Employment Focus

The journey to work is one of the hardest to tackle. Time pressures make it difficult for people to switch from the car to more sustainable modes. On average, 35% of all trips made into the 9 Metropolitan Centres during the AM peak are made by public transport. There is significant scope to increase this percentage further.

Providing sustainable travel options for employees and customers makes good business sense. Implementing Smarter Choices for businesses can be a valuable part of an organisation’s ‘Corporate Social Responsibility Policy’ (CSR) and also improve staff efficiency and productivity. Robust monitoring will be an integral element to enable outcomes to be identified. The initiatives include enhanced workplace travel plans, on-line audit tools, employer travel plan grants, Company TravelWise, WorkWise and Smarter Working. Benefits of modal switch to public transport and active travel will be locked in through supporting infrastructure improvements.

Community and Residential Focus

A Residential Travel Plan is a package of measures designed to reduce car use originating from new housing by supporting alternative forms of transport and reducing the need to travel in the first place. They are an important tool to help deliver accessible, sustainable communities and offer clear benefits to all parties involved – public, private and the community. They require meeting the access needs of residents in a new
way and entail partnership between developers, Local Authorities, communities and new residents. Community TravelWise will continue to be developed to support this focus area.

Supporting Measures

The strategy includes supporting measures that will strengthen each of the workstreams above. These initiatives facilitate modal shift through:

- On line and on-the-move journey planning
- Public transport information centres
- Car clubs and car sharing

It is also acknowledged that hard infrastructure can also have a role to play within Smarter Choices, through enhancing walking and cycling facilities and improving bus and Metro stops.

Policy MT4 – Increasing Levels of Cycling

To seek to increase levels of cycling in the West Midlands to improve health, the environment, reduce car use and improve the accessibility of people without access to a car

The Metropolitan Area offers a wide range of cycling opportunities for leisure, commuting and the club cyclist. Besides the road network, there is a variety of off-road paths, some shared with pedestrians, and others specifically for cyclists.

The Metropolitan Area also has a number of canals where towpaths offer cycling opportunities on largely level routes. Cycling provides the following benefits:

- Direct, door-to-door journeys
- Cheap, sustainable transport and free parking
- Health benefits whilst travelling to work, school or to local facilities
- Cycling can be the quickest mode of transport for urban journeys under 5 miles in length

Cycling is an important element of the LTP3 Strategy. The Metropolitan Authorities and Centro are working towards this through:

- Cycle infrastructure and urban/highway design (including Smart Routes)
- Training (including maintenance)
- Marketing and Communications

These areas of activity aim to raise levels of cycling to help tackle road congestion and air quality problems (via mode shift from cars), enhance accessibility and social inclusion (cycling is quick over relatively short distances and affordable) and to increase personal health.

All Metropolitan Authorities have, or are developing, local cycling strategies with the involvement of local communities and other interested parties.
Cycle Infrastructure

The focus will be on improving networks of routes of up to five miles linking residential areas to centres, employment areas, schools, railway stations, Metro stops, leisure facilities and other destinations.

Improvements can be achieved through highway schemes and opportunities arising from new development. Ongoing improvements will be complemented by providing dedicated cycle infrastructure, such as cycle lanes, cycle tracks, crossings, advance stop lines, and other measures that give cyclists advantages over vehicle traffic. Other schemes will contribute towards improved cycling conditions, including traffic calming, junction treatment, 20 mph zones, shared space initiatives and exemptions for cyclists at road closures. Focus will be on removing barriers to cycle use.

Training

Cycle training can provide the skills and confidence to cycle for leisure and commuting trips. Centro and the Metropolitan Authorities are working with local organisations such as Sustrans and Primary Care Trusts to provide and promote cycle training to adults and children.

In March 2007, Cycling England launched ‘Bikeability’, the new national cycle training standards for children and adults, viewed as the new Cycling Proficiency for the 21st century. By 2012 Cycling England would like to see all children have the chance to achieve Bikeability to Level II. We will work towards this aspiration in the Metropolitan Area, and offer cycle training to adults. In the long term, Level II will be sufficient for all journeys, but in the meantime training to Level III skills will enable more people to use the existing highway network. Centro and the Metropolitan Authorities will continue to build on the work already undertaken on Bike It, Bikeability and Cycle Training West Midlands.

We will also seek to improve training on cycle maintenance. We will work with local cycle groups and local authorities to provide cycle maintenance training across a range of groups.

Marketing and Communications

More people are likely to consider cycling to public transport points if they are aware of the options and it is easy to do. Providing clear, relevant information, promotion and marketing of the benefits of walking and cycling are key to this. Centro and the Metropolitan Authorities currently:

- Produce a range of printed leaflets and online information to help people walk, cycle and use public transport
- Provide incentives such as free cycling packs (including maps, guides and accessories such as bike saddle covers)
- Provide cycle planners
- Hold regular events and competitions to encourage people to try cycling as a mode.
Research indicates that cycling levels are lower among women and ethnic minority communities and people on lower incomes. We will develop targeted campaigns and promotions to encourage increased activity among these groups. We will work with cycling organisations and Metropolitan Authorities to provide cycle journey planning information.

**Rights of Way Improvement Plans**

Enhancing facilities and routes for active travel can be achieved through the development of Rights of Way Improvement Plans, which are the responsibility of the Metropolitan Authorities.

**Policy MT5 – Increasing Cycle Integration with Public Transport**

To increase opportunities for cyclists to integrate and interchange with public transport

Combining cycling with public transport provides a viable alternative to the private car for many medium and long distance journeys. Public transport operators are increasingly recognising the potential of encouraging cycling to and from their stations.

Centro and the Metropolitan Authorities are working together to provide cycle racks and lockers at town and city centres, local centres, train stations, Metro stops and bus stations across the Network West Midlands area. In conjunction with rail companies, we will promote the existing cycle storage facilities and consider where additional storage is required so people can safely park their bikes before continuing with their journeys. We will ensure that public transport interchanges are easily accessible via cycle routes and that new and existing cycle parking is well signposted so people are aware of its location at public transport facilities.

We will promote train operator policies to cyclists, so they know the best times to travel on the train with their bikes. Centro will monitor international experience of carriage of bikes on buses and rail and rapid transit vehicles to see if there are potential applications in the Metropolitan Area.

We want to encourage more people to travel by rail – over 70% of people in the Metropolitan Area live within one mile of a rail station. However, lack of awareness on how to reach the station, poor cycling routes or facilities, as well as overcrowding at car parks can discourage many potential passengers. Centro is therefore piloting a ‘Rail Station Travel Plan’ at Kings Norton to encourage more local residents to use the station and increase the number of passengers travelling to the station by foot, bike, bus or even car sharing.

Once the pilot at Kings Norton rail station is completed in 2011, Centro will identify other potential stations that could benefit from such Travel Plans. We will then introduce schemes to help people travelling to these rail stations.
Policy MT6 – Increasing Levels of Walking
To seek to improve the attractiveness of walking as a travel choice by creating an environment and culture where walking is actively encouraged for short trips.

All of the Metropolitan Authorities encourage walking to work through improved pedestrian routes to employment destinations and by working in partnership with employers, schools, communities and health professionals to develop walk to work initiatives as part of company, school and community travel plans. Walking is also an integral part of highway and infrastructure improvements under Smart Routes principles.

All Authorities have, or are developing, local walking strategies with the involvement of local communities and other interested parties. These build on:

- Promotion of health and environmental benefits of walking, the Safer Routes to School and Walk to School initiatives, Travel Plans and work with Primary Care Trusts and other stakeholders.
- Undertaking Walking Audits to provide a focus for future investment in pedestrian facilities.
- Improving conditions for pedestrians in residential areas by managing traffic volumes and speeds, for example through traffic calming and 20 mph zones.
- Considering issues of clear pedestrian areas, quality of materials, and maintenance.
- Improving facilities for pedestrians in town and city centres to reduce accidents and to create a cleaner, more pleasant environment that can act as a stimulus for investment and economic regeneration.
- Improving street lighting. The street lighting maintenance and replacement programme will seek to provide upgraded lamps with better colour rendition to provide better illumination of the footway for pedestrians.
- Enhancing pedestrian crossing facilities that consider existing pedestrian desire lines, proximity to schools and reducing potential conflict between pedestrians and motor vehicles.
- Safe, secure and direct pedestrian access to public transport stops / stations and car parks and to other locations of high pedestrian demand, for example through the Safe Routes to Stations programme.
• Targeting particular neighbourhoods and known problem sites where barriers to walking can be removed. The focus will be on Smart Routes and improving pedestrian routes of up to two miles linking residential areas to centres, employment areas, schools, railway stations, Metro stops, leisure facilities and other destinations.

• Addressing security issues and the partnership work with Centro and operators will address problems on public transport vehicles.

• Implementing traffic signal improvements to provide full pedestrian crossing provision at new and upgraded installations, including appropriate facilities for disabled persons.

• Removing unattractive pedestrian subways where safe at-grade alternatives can be provided.

• Ensuring a regular footway maintenance regime is in place that minimises disruption to pedestrians during the street works and addresses the problems of tripping, ‘ponding’ and controls the growth of vegetation that may hinder walking.

• Reducing footway obstructions by acting against inappropriate shop displays, removing extraneous street furniture and enforcing against illegal parking on the pavement.

• Wayfinding – providing direction and information signing for pedestrians in town and city centres, to local shops, public transport nodes and leisure routes, for example via street name plates, street maps, information boards, fingerpost signs, and audio wayfinding for blind users.

• Providing new pedestrian routes and footways where need is identified.

• On going development of the urban walking route planner www.walkit.com

• Supporting promotional initiatives such as Fitter Walking with partners such as Living Streets across the Metropolitan Area.
Waterways

A. Role of Waterways

The Metropolitan Area has a significant network of canals, a legacy of the Industrial Revolution period and important today not only as a reminder of our past and its important heritage value but also for leisure, environmental, transportation and surface water drainage purposes. Whilst their original purpose has declined, it is important that their transport role continues to be recognised. LTP3 seeks to optimise the use of canals for walking, cycling, boating and recreational use and as green corridors in support of its objectives for improved prosperity, health and environment.

B. Partners: Roles and Responsibilities

British Waterways own, maintain, manage and, where possible, enhance the canals within the Area. They own the bridges over canals, as well as aqueducts over other watercourses and roads. Most of their bridges are historic structures and some are protected. This can lead to capacity issues if the structures do not comply with current weight requirements for vehicles passing over a canal. They monitor use of the network, both by boats and pedestrians. The following British Waterways statistics illustrate use of specific locks and towpaths within the Area.

Use of Locks, 2009

<table>
<thead>
<tr>
<th>Canal</th>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffs &amp; Worcestershire</td>
<td>Lock 31, Compton, Wolverhampton</td>
<td>4,661</td>
</tr>
<tr>
<td>Birmingham &amp; Fazeley</td>
<td>Lock 1, Minworth</td>
<td>2,166</td>
</tr>
<tr>
<td>Birmingham &amp; Fazeley</td>
<td>Farmers Bridge, Birmingham</td>
<td>1,944</td>
</tr>
<tr>
<td>Birmingham</td>
<td>Lock 17, Wolverhampton</td>
<td>1,797</td>
</tr>
<tr>
<td>Grand Union</td>
<td>Lock 3, Camp Hill, Birmingham</td>
<td>1,469</td>
</tr>
<tr>
<td>Rushall</td>
<td>Lock 2, Rushall, Walsall</td>
<td>270</td>
</tr>
</tbody>
</table>
Pedestrian Use of Towpaths, July 2009 – July 2010

<table>
<thead>
<tr>
<th>Canal</th>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worcester &amp; Birmingham</td>
<td>Mailbox, Birmingham</td>
<td>967,098</td>
</tr>
<tr>
<td>Birmingham &amp; Fazeley</td>
<td>Farmers Bridge, Birmingham</td>
<td>303,179</td>
</tr>
<tr>
<td>Dudley</td>
<td>Merry Hill, Dudley</td>
<td>227,243</td>
</tr>
<tr>
<td>Birmingham</td>
<td>Top Lock, Wolverhampton</td>
<td>103,517</td>
</tr>
<tr>
<td>Netherton Tunnel Branch</td>
<td>Bumble Hole, Netherton, Dudley</td>
<td>100,395</td>
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<tr>
<td>Walsall</td>
<td>Walsall</td>
<td>84,334</td>
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<tr>
<td>Wyrley &amp; Essington</td>
<td>Foot Bridge, Brownhills, Walsall</td>
<td>72,359</td>
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<tr>
<td>Staffs &amp; Worcestershire</td>
<td>Compton, Wolverhampton</td>
<td>66,555</td>
</tr>
<tr>
<td>Wyrley &amp; Essington</td>
<td>Anchor Bridge, Brownhills, Walsall</td>
<td>54,215</td>
</tr>
<tr>
<td>Birmingham &amp; Warwick</td>
<td>Warwick Bar, Digbeth, Birmingham</td>
<td>33,570</td>
</tr>
<tr>
<td>Wyrley &amp; Essington</td>
<td>Goscote, Walsall</td>
<td>33,081</td>
</tr>
</tbody>
</table>

The Local Highway Authorities are responsible for local roads, many of which have bridges over and, sometimes under, the Metropolitan Area’s canals.

Trusts and other voluntary groups are involved in the restoration of redundant branches and canalside buildings. They organise many of the activities that make the canal network attractive to boaters and other visitors.

Support is given in principle to waterway restoration, including limited enhancement and safeguarding measures undertaken as elements of much longer-term projects to re-open canals to full navigation. An example of such a scheme is the restoration of the Lichfield and Hatherton Canals which, when completed, will provide a northern gateway to the Metropolitan Area, as well as creating a new circular canal ring immediately to its north.
C: Waterways Policy Context for LTP3

There is no over-riding policy context for waterways. Most recently, Defra issued a consultation paper, ‘Waterways for Everyone’, December 2009. The 2010 change of Government and increased focus on fiscal matters appears to have put back publication of their response to the consultation responses until after the autumn Comprehensive Spending Review.

Roads crossing over canal bridges are a crucial part of the local highway network and there are many instances where bridges are on the approaches to employment areas. Also, some canal aqueducts over roads are an accessibility constraint, having been built in an era of less traffic and smaller vehicles. These are important factors in maintaining and improving access to employment areas, examples of which are associated with the regeneration of the designated Strategic Development Area in Darlaston, Walsall.

There are no nationally formatted agreements between Highway Authorities and British Waterways on restrictions for the use of canals (unlike those in place with Network Rail for road bridges over the railway) and this is can cause problems in agreeing reasonable terms for many authorities that are attempting to upgrade bridges to carry 44 tonne vehicles. Many canal bridges and other structures are listed or of heritage interest and there are considerable cost implications arising from the need to bring them up to standards that require an increased loading capacity. There is also a need to recognise the role of canals both as drainage conduits and as potential flooding risks, especially where they are on raised embankments.

Canal towpaths often provide valuable links in the pedestrian network. There is potential for joint working between the Local Highway Authorities and British Waterways to explore how towpaths might be assimilated into each Authority’s Rights of Way Improvement Plans. Irrespective of this, regard must be had to how to make towpaths accessible for all, including people with mobility difficulties, without adversely affecting the heritage features that are important to the continued attraction of canals.
## D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Key Objective</th>
<th>Details</th>
</tr>
</thead>
</table>
| **K01 – Economy** | *Existing and potential visitor and local community use of canals contribute to leisure, heritage and tourism industries*  
*Canals enhance the setting of visitor attractions.*  
*Potential for carriage of bulky materials.* |
| **K02 – Climate Change** | *Towpaths provide off-road routes that could attract more walking and cycling and thus, indirectly, address this Objective.*  
*Emissions arising from a boat-based holiday are very much lower than a car-based touring holiday and significantly less than air travel for a foreign-based holiday.*  
*Lock-free lengths of canals within and into the Metropolitan Area provide opportunities for sustainable movement of bulky freight.* |
| **K03 – Health, Personal Security and Safety** | *Walking and cycling along towpaths contributes towards improved personal health.*  
*Active use of towpaths and canals and the provision of new canal-side built development, and temporary and residential moorings, improve natural surveillance and, thus, personal security.*  
*A canal holiday provides active and healthy outdoor physical recreation. The slow pace and friendly atmosphere helps people unwind and promotes good mental health.* |
| **K04 – Equality of Opportunity** | *Towpaths are open to all providing opportunities for walking and cycling for either specific journeys or for leisure purposes.*  
*Many charity-operated boats offer trips and longer holidays to the disabled, elderly, infirm and disadvantaged youngsters.* |
| **K05 – Quality of Life and Local Environment** | *The canal network is an integral part of the Area’s cultural heritage.*  
*Canals provide ‘green’ corridors through densely built-up areas giving the opportunity for local communities to access the natural environment as well as ‘habitats’ for fauna and flora.*  
*Some sections of the canal network could provide opportunities for use as an alternative to lorry movements, especially in sensitive locations, for building, demolition and excavation materials.* |
E: LTP3 Policies

**Policy MT7:** To work with British Waterways to ensure that bridges over canals on key routes between employment areas and the motorway junctions are, as far as possible, free of weight restrictions.

**Policy MT8:** To ensure that all canals are safeguarded as navigable waterways to support water-based local economic activity and existing wharf facilities are safeguarded and to maximise the potential of canal towpaths as part of a signposted network of pedestrian and cycling green infrastructure.

**Policy MT9:** To seek to ensure that access to the canal network, particularly by pedestrians and cyclists is safeguarded and, where possible, enhanced.
LTT 4: TRANSPORT ASSET MANAGEMENT – A FOUNDATION FOR GROWTH (TAM)
Good Asset Management is a vital factor in building sustainable local communities and we have recently adopted an ‘Asset Management Planning’ (AMP) approach to support the effective management of infrastructure assets. This will achieve two things: firstly, it will set out the strategic approach, which can be closely integrated with local transportation management; and secondly, it will enable the true costs of holding and maintaining those assets to be understood. This includes promoting long-term financial planning, budgeting and the robust articulation of the maintenance demands to be made to deliver service improvements and efficiency savings. Historically, the maintenance of the transport network and associated structures that we rely on has suffered relative to other policy priorities.

The seven Highways Asset Management Plans define how the Metropolitan District Councils will manage their transportation and highway assets along well-disciplined principles, essential for high quality service delivery to meet the needs of current and future customers. The plans are based on a generic model developed for the Metropolitan Area to provide a uniform approach:

**Introduction** - Sets the scene and introduces the concept of asset management

**Business Processes** - Identifies and reviews the processes currently used to manage highway assets

**Levels of Service** - Defines current and target levels of service

**Service Options** - Outlines how the options available for dealing with the ongoing demands placed on the network are identified and evaluated

**Life Cycle Planning** - Documents how all assets are managed and identifies current and future needs in terms of works and funding

**Financial Management & Valuation** – Describes how financial projections related to the service options are determined and where funding comes from, it also holds detailed asset valuation information

**Risk Management** – Describes the risk associated with the management and ownership of the road network asset and the process that is used to manage those risks

**Forward Work Programme** – Describes how the forward works programme is constructed and updated and the level of confidence held in its predictions
Performance Monitoring - Describes how performance will be monitored and measured

Improvement Action Plan – Outlines improvements planned for this AMP in the future

Appendices – Contain supporting detail and will be updated annually or more frequently

The District Councils have developed their service provision in support of LTP3 and are further revising these provisions to meet the strategic aims and deliver on the five Objectives.

B. Asset Valuation and the CIPFA Assets Infrastructure Code

The recently CIPFA code introduced a requirement for Highway Authorities to gain a comprehensive knowledge of their highway assets. Districts have therefore included within their AMPs, comprehensive inventory and condition data, which has enabled them to prepare for asset valuation in line with Whole of Government Accounts and depreciated accounting methods. This measures the cost of economic benefits embodied in an asset and quantifies the level of asset consumption during an accounting period. The asset valuation figures appertaining to the asset groups can be found in the Appendices relevant to each asset group.

The seven District Councils have been collecting inventory and condition data, preparing for asset valuation, assessing depreciated costs and developing long-term maintenance plans. The individual asset group valuation tables detailed in the relevant appendices show the accumulative position in the Metropolitan Area with regard to the requirements of the new code, where each column in the tables are explained below. The following section details an asset valuation glossary, for Carriageways, Footways & Cycleways, Structures, Highway Lighting, Traffic Management, Street Furniture and Land asset groups.

Inventory
Is measured according to the appropriate unit and separated out by road class

Gross Replacement Cost (GRC)
The gross replacement cost is the total admissible cost of replacing the existing highway asset with a new equivalent.

Annual Depreciated Costs (ADC)
This is the aggregate cost of all the capital replacements / treatments needed to maintain / restore its service potential over the life cycle, spread over the estimated number of years in the cycle.
The core objective of asset management is to maintain the assets in a good, safe condition, whilst preventing deterioration, i.e. to maintain a steady state. Historically the level of investment in the network has generally been below that required to maintain a steady state, which has resulted in deterioration. The net effect has been to stifle transportation and safety improvements, be less able to withstand the vagaries of utility workings & extremes of weather and require much higher levels of reactive expenditure to ward off insurance claims for trips and potholes.

To maintain a steady state we need to:

1) evaluate both the condition of our highways assets and the cost of maintaining them to a standard that will prevent deterioration.

2) ensure the correct level funding to meet the requirements of the annual depreciation costs.

Condition
An accepted measure of the condition of the asset, which indicates the amount or percentage of deterioration and hence the level of replacement required (depreciated value).

Depreciated Replacement Cost (DRC)
A method of valuation, which provides the current cost of replacing an asset with its modern equivalent, less deductions for all physical deterioration and all relevant forms of obsolescence and optimisation.

Restore to New Cost
This is cost to restore the asset to new, i.e. to replace the deteriorated sections and is calculated by subtracting the DRC from the GRC.

The result of under funding asset maintenance costs over many years has resulted in a varying level of depreciation across the Metropolitan Area. Prioritisation methods have generally meant that principal roads have been better maintained, but at the expense of lower category roads, with all hierarchies of footways also suffering. The individual authorities transport asset management plans and the appendices in this document specific to the asset groups, show the levels of deterioration, equated to restore to new costs for all groups and hierarchies. A deteriorated network will stifle economic growth, provide access difficulties and result in public dissatisfaction. Careful assessment needs to be given to the restore to new indications to ensure that Authorities embark on a programme of restoring to new, to enable steady state to be maintained and to set the network up for the longer term.

Asset Summary
The District AMPs contain all of the above data relevant to the transport assets, and also the lifecycle plans for each group and its associated features. All relevant aspects of each Authority’s strategy are encompassed within either the main body of the plan or the associated life cycle plans. The AMPs define how the assets will be managed over the long term, where the list of assets to be managed is as follows:
Carriageways, incorporating:
- Infrastructure
- Line marking
- Traffic Improvement Features
- High Friction Surfacing
- Highway Drainage

Footways and Cycleways
- Infrastructure
- Street Cleansing
- Cycle ways

Structures, incorporating:
- Bridges
- Subways
- Sign gantries
- Retaining walls
- Embankments
- Highway steps

Street Lighting, incorporating:
- Infrastructure
- Illuminated Signs
- Keep Left Bollards

Traffic Management
- Traffic Signals
- UTMC Infrastructure

Street Furniture, incorporating:
- Pedestrian guard rails
- Non-illuminated signs
- Street name plates

Horticultural Maintenance, incorporating:
- Grass verges
- Planted areas
- Fencing

Arboricultural Maintenance, incorporating:
- Trees
- Hedges

Winter Service, incorporating:
- Gritting routes
- Grit bins
- Gritting plant

**Invest to Save**

Under investment creates a critical cycle of a deteriorating network, which needs a high level of reactive maintenance. This, in turn, results in less funds being available for planned maintenance, which then causes the network to further deteriorate. LTP3 seeks to ensure a sufficient level of funding in the early part of the Plan period to facilitate a core investment programme on the network, which will enable steady state maintenance and a reduction in reactive expenditure.
C. Progresses and Successes from LTP2

Asset Management Approach

LTP2 supported the development of an asset management approach, both through promoting the need for districts to adopt a strategic approach and in providing funding for data collection, to compliment that provided by DfT for asset management. All Districts now have a working asset management plan and have adopted an asset management approach to maintaining the network. Data collection has progressed: carriageway assets inventories are complete and good condition data is available, which will enable us to plan for the long term. Further development of the management tools and systems required are currently in progress.

Sustainable Materials

To support the life cycle plan approach, consideration has to be given to ensuring that materials and processes used are both sustainable and have been designed to provide maximum life span. This will result in reduced costs in the long term and a contribution towards LTP3’s low carbon objective.

Asset Condition

The AMPs detail the condition of assets. Knowledge of condition is key to good asset management and it is evident that there are varying degrees of deterioration across the asset groups. For example, principal roads have the least deterioration at an average of 5.3% (National Indicator 168), whilst unclassified roads have an average 17.5% (NI 169), indicating that a larger percentage of unclassified roads need structural attention. As the size of the unclassified network is four times that of the principal network, the resulting deteriorated element of the unclassified network is some 15 times that of the principal network.

Other assets such as footways and street lighting are also suffering due to lack of long term planned maintenance, with the exception of those Authorities that have undergone street lighting PFIs in recent years. However, it can be established through the annual depreciated costs and restore to new costs, that the Area can achieve similar goals through correct levels of funding as indicated, without resorting to PFIs.
D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Key Objective</th>
<th>Description</th>
</tr>
</thead>
</table>
| K01 – Economy | • An ‘Asset Management Planning’ (AMP) approach to deliver effective maintenance of highways assets, will achieve a level of service to meet the needs of current and future customers.  
• A well maintained network will ensure confidence in the local area, better access for all and stimulate economic growth. |
| K02 – Climate Change | • Develop life cycle planning to extend the life of highways assets and build increased recycling into all processes in order to reduce carbon emissions and combat climate change. |
| K03 – Health, Personal Security and Safety | • Enhanced customer focused street care service that addresses the needs of stakeholders, whilst ensuring enforcement of statutory obligations. |
| K04 – Equality of Opportunity | • Promote accessibility and ensure that people are not disadvantaged by where they live. |
| K05 – Quality of Life and Local Environment | • An asset management approach will ensure that all transport assets are well maintained, which will lead to an enhanced street scene, improved local environment and better quality of life. |

E. Major Influences on Asset Management

Under Investment

Historical under investment has resulted in a deteriorating network. However, only recently through asset management have we started to appreciate the scale of funding required to hold and maintain transport assets. The cost of this is an under performing network, which cannot cope with current demand and, in particular, will not be able to respond to future growth and transport and travel demands.

Stakeholder Engagement

Transport asset management takes into account the perception and aspirations of stakeholders. Authorities now have in place measures to bring about good communication between those who manage the asset and those who use it. Typically, Authorities follow a model which makes it easier to access local services, where authorities work with citizens, partners, local organisations and community groups to provide citizens with choice in the way council services are delivered.
F. LTP3 Policies

Policy TAM1: To seek to ensure that the transport network is adequately managed through effective Asset Management

Over the LTP3 period, it is envisaged that there will be an increase in population, development and activity. Given the emphasis on maximising the use of existing transport infrastructure, it is imperative that the transport network is adequately maintained through effective asset management planning.

To deliver the full asset management approach in line with CIPFA and Government requirements, the Metropolitan Districts will continue to develop their asset management plans and accounting processes in line with the Transport Infrastructure Code. Through funding secured through this plan the metropolitan authorities will continue to develop asset management processes as follows in line with Whole of Government Accounting:

- Collect a complete set of inventory and condition data for all transport assets.
- Develop annual depreciation regimes for all transport assets.
- Prepare cost effective long term maintenance and renewal programmes
- Deliver efficiency savings and service improvements
- Produce financial information that is compliant with IFRS and meet the need of Whole of Government Accounts

Data capture has been prioritised for those assets that have been identified as critical from a risk management perspective. Whilst datasets are substantially complete, there is an ongoing need to collect/update data, through detailed surveys as and when funding becomes available.

Action 1: To undertake Asset Management in accordance with the profile established by the CIPFA Infrastructure Asset Management Code and Whole of Government Accounts

Action 2a: Data capture using local knowledge and recently implemented asset maintenance or new scheme installation information.
Inventory and condition data will be collected in association with other duties and works, for example where there is reliable local knowledge, where maintenance works or improvement schemes have been recently carried out and there are “as-built” drawings available.

**Action 2b:** Financial Data to be collected in line with providing information for Whole of Government Accounts.

The recently introduced Transport Asset Infrastructure Code, the principles of which are supported and have been adopted, has been developed to enable the compilation of consistent asset management data to meet the requirements of Whole of Government Accounts.

**Action 2c:** Data capture from renewals programmes.

Where non-critical areas and assets have been identified, inventory and condition data will be collected over future years as and when maintenance or improvement works are carried out.
Carriageway Infrastructure

A. Role of Carriageway Infrastructure

The carriageway infrastructure network plays a pivotal role in connectivity and is also the most valuable asset that each Highway Authority owns. The local network distributes all traffic to and from the national network and provides local access for employment, commercial and leisure needs.

An effective, well maintained carriageway contributes significantly to the character and environment of the area that it serves. There is growing awareness, reflected by public satisfaction surveys, of how well maintained highways can improve the living environment, as everyone has some contact with the highway network on a daily basis. Knowledge and expectation about carriageway condition and performance is high on the public agenda and is increasingly becoming an area of concern, when those expectations are not met.

Whilst the Code of Practice ‘Well Maintained Highways’ now fully embraces the wider issues involved in maintaining carriageways, expectations remain largely unmet and the Highway Authorities have a duty to ensure the safety of the travelling public and therefore have a significant management role to play. Through the Transport Asset Management Plans the Highway Authorities have generated in-depth information on the condition and rate of deterioration of their carriageway assets. A strategic approach that involves infrastructure management driven by levels of service and life cycle planning sets out the most economic way of delivering an acceptable level of service over the long term.

The strategic aims of LTP3 in relation to carriageway maintenance are to ensure that the network is maintained in a safe and serviceable condition and provide a sound infrastructure for long-term growth. This will create an attractive, well-maintained highway environment, which in turn will contribute to an efficient local economy. Key to the success of this is to have life cycle planned programmes that maximise the return on a given level of investment to reduce the amount of unplanned, reactive maintenance.

The attractiveness of bus transport will increase if passenger comfort can be enhanced by more predictable ride quality. The effects of poorly maintained highways are greatly accentuated for bus passengers and the extensive use by buses of minor routes clearly requires quality infrastructure across much more than just the principal road network. Similarly reallocating highway space to cyclists must necessarily be accompanied by a surface that is of a consistently high quality, if increased use is to be accompanied by reduced accident levels.
B. Asset Valuation and the CIPFA Assets Infrastructure Code

The CIPFA code has introduced a formal requirement for Highway Authorities to gain a comprehensive knowledge of their highway assets. Districts have developed comprehensive inventory and condition data, which has enabled them to prepare for asset valuation in line with Whole of Government Accounts and depreciated accounting methods. This data measures the cost of the economic benefits embodied in an asset and quantifies the level of asset consumption during an accounting period.

The following table shows the accounting figures that will be required as part of Whole of Government Accounts when audited reporting starts in financial year 2012/2013. The detailed explanation of the calculation and methodology behind the cost columns can be found in the asset management section of this document.

The Asset Valuation Policy is to produce asset valuation in line with Whole of Government Accounts. As this work is ongoing, the valuation figures shown have been calculated using a “broad brush” approach adopting the principles in the proposed code. Accordingly, the calculation of depreciation costs has been undertaken manually using the indicative formulae and tables available from CIPFA.

The figures have been developed from the individual district asset management plans and amalgamated to show a Metropolitan Area wide view. (Birmingham has been separated in terms of costing due to the ongoing PFI investment programme).
## Carriageway Asset Group

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Inventory</th>
<th>Gross Replacement Cost (£)</th>
<th>Annual Depreciated Costs (£)</th>
<th>Condition Indices (WM Ave NI 168)</th>
<th>Depreciated Replacement Cost (£)</th>
<th>Restore to New Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Midlands Districts (excluding Birmingham)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A Roads</strong></td>
<td>472 km</td>
<td>£781,501,986</td>
<td>£5,831,288</td>
<td>4.8%</td>
<td>£730,566,101</td>
<td>£50,935,885</td>
</tr>
<tr>
<td><strong>B Roads</strong></td>
<td>265 km</td>
<td>£354,588,854</td>
<td>£2,687,250</td>
<td>5.3%</td>
<td>£329,602,954</td>
<td>£24,985,900</td>
</tr>
<tr>
<td><strong>C Roads</strong></td>
<td>302 km</td>
<td>£322,865,265</td>
<td>£2,981,300</td>
<td>5.3%</td>
<td>£293,271,945</td>
<td>£29,593,320</td>
</tr>
<tr>
<td><strong>U Roads</strong></td>
<td>4119 km</td>
<td>£3,760,255,866</td>
<td>£17,262,000</td>
<td>17.5%</td>
<td>£3,510,412,746</td>
<td>£249,843,120</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>5158 km</td>
<td>£5,219,211,971</td>
<td>£28,761,838</td>
<td></td>
<td>£4,863,853,746</td>
<td>£355,358,225</td>
</tr>
<tr>
<td>West Midlands Districts (including Birmingham)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A Roads</strong></td>
<td>662km</td>
<td>£1,102,128,660</td>
<td>£8,182,850</td>
<td>5.1%</td>
<td>£1,028,110,080</td>
<td>£74,018,580</td>
</tr>
<tr>
<td><strong>B Roads</strong></td>
<td>388km</td>
<td>£522,870,396</td>
<td>£3,949,950</td>
<td>5.4%</td>
<td>£486,152,216</td>
<td>£36,718,180</td>
</tr>
<tr>
<td><strong>C Roads</strong></td>
<td>445km</td>
<td>£491,540,154</td>
<td>£4,468,500</td>
<td>5.4%</td>
<td>£449,968,754</td>
<td>£41,571,400</td>
</tr>
<tr>
<td><strong>U Roads</strong></td>
<td>6,165km</td>
<td>£5,642,627,334</td>
<td>£27,432,500</td>
<td>15.8%</td>
<td>£5,218,012,134</td>
<td>£424,615,200</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>7,660km</td>
<td>£7,759,166,544</td>
<td>£44,033,800</td>
<td></td>
<td>£7,182,243,184</td>
<td>£576,923,360</td>
</tr>
</tbody>
</table>

### Asset Summary

The region’s network (excluding Birmingham) consists of some 5,000 plus kilometres of carriageway, with a gross replacement asset value of over £5 billion. Using CIPFA guidelines and depreciation measurement techniques, the depreciated replacement cost and subsequent restore to new costs of over £350 million give a clear indication of the scale of deterioration that has to be addressed.

### Classified Network

In recognising the scale of deterioration, it is the intention to primarily focus resources on the “Classified Network” as this supports the wider everyday needs of people, businesses and organisations. The Classified Network is defined as A, B and C Classified Roads.
LTP3 recognises that unclassified roads within the network, have more local requirements and are to be addressed at a local level. Key bus routes account for approximately 25% of the unclassified road network and carriageway condition has an influence on the quality of public transport. Accordingly, the potential to make additional funding available to improve surface quality is to be examined as part of the approach to enhancing Bus Partnerships.

**Restore to New Costs**

To fulfil optimum service potential and good economic asset management, the sections of the network at the end of their useful life need to be replaced. Using broad calculations, based on national condition indicators and interpreting data available, there are depreciated values of an average of 49% on the classified network and 58% on unclassified roads.

The “restore to new” costs as defined in the new CIPFA code show the estimated costs of removing the backlog of deteriorated network, which will allow a return to maintaining a “steady state” thus arresting further deterioration. Achieving this is subject to the correct level of capital investment being made in the first 6 years of LTP3 to embark on a programme of replacement of life expired components. The **restore to new costs** for the entire carriageway, again excluding Birmingham, amounts to **£355m** - **approximately £59 million per annum** over a 6-year investment period (the optimum core investment period). The restore to new costs for the classified network equates to approximately **£105m - £17.5 million per annum** over a 6-year period.

Restore to new costs have been calculated using the table for converting condition to a depreciated value from Technical Note 46 Financial Information to Support Asset Management and based on the average condition of that road class across the Metropolitan Area.
Maintaining a steady state requires a maintenance regime and life cycle plan that addresses timely treatment, to ensure that those component parts of a carriageway with a finite life reach that life target, and are planned to be replaced at the end of that life. It also relies on those component parts being in an “as-new” condition prior to the commencement of that life cycle plan. The Annual Depreciated Cost of the carriageway asset, a costing element required under the new CIPFA code, indicates what is required to achieve a steady state maintenance regime for all road classes. This cost has been determined based on the guidelines in the code, where the treatment deemed to be required is an absolute minimum in terms of type, frequency and estimated cost in order to maintain the service potential of the asset over the course of a forty year lifespan.
The following table shows a breakdown of the treatment and frequency needed:

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Treatment Type</th>
<th>Treatment Frequency</th>
<th>No of treatments over lifespan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classified Roads</td>
<td>Replace Surface and Binder Layer Replace Base Layer</td>
<td>20 yrs 40 yrs</td>
<td>2 1</td>
</tr>
<tr>
<td>Unclassified Roads</td>
<td>Surface Treatment (Microasphalt etc) Replace Surface and Binder Layer</td>
<td>20 yrs 40 yrs</td>
<td>2 1</td>
</tr>
</tbody>
</table>

The level of investment required (cost per annum) to maintain a steady state over the lifetime of the carriageway asset for the “classified network” for the whole of the Metropolitan Area amounts to £11.5 million per annum (Birmingham has been excluded, due to their PFI investment programme). The unclassified section of the network requires a much higher level of investment to the value of over **£17 million per annum**, typically approximately **£3m per annum** per district.

**Invest to Save**

The sooner the backlog of deteriorated network is replaced, the sooner steady state maintenance regimes can be applied to keep the network in a desirable condition for the long term and reduce the need for high reactive expenditure. This is both an uneconomic way of maintaining the highway and a situation that reduces business and public confidence in the region.

There is a need to look closely at creating efficiency savings, the availability of additional funding (Bus Partnership Agreements, winter damage etc.), reducing reactive expenditure and other strategic options to bridge the funding gaps.

**Bus Partnership Agreements, opportunities for funding**

Improved carriageway infrastructure enabling improved quality of public transport is one element that can contribute to the success of delivering Bus Partnership Agreements.

New initiatives are to be examined whereby an asset management approach to carriageway condition - that focuses on key bus routes on unclassified roads - is introduced. This would seek to identify opportunities for funding as part of Bus Partnerships.

This can be introduced on a structured basis to ensure that there is an ongoing programme of structural improvement, which will in turn enable bus operators to enhance service provision.
C. Progress and Successes from LTP2

Funding

Funding for carriageways in recent years has been significantly lower than that suggested by Whole of Government Accounting principles. This has resulted in deteriorated networks that have been unable to survive harsh, wet winters without suffering further degradation. Whilst LTP2 provided funding for capital repair programmes, this only enabled management of deterioration rather than taking an asset management approach to restore the network to new and maintain a steady state. These constraints on capital resources are increasingly impacting on reactive/routine maintenance budgets.

Asset Management Approach

LTP2 supported the development of an asset management approach, both through promoting the need for Districts to adopt a strategic approach and in providing funding for data collection, to complement that provided by the DfT. All Districts now have a working asset management plan and have adopted an asset management approach. Data collection has progressed such that carriageway assets inventories are complete and condition data is available, which will enable us to plan for the long term. Further development of management tools and systems is currently underway, which will ensure that we can continue to apply a strategic, whole life costed approach.

Sustainable Materials

Recycling technology is developing rapidly and a number of materials development initiatives have been promoted associated with reusing existing materials or alternative methodologies for maintenance activities. Most recycling, unless done in-situ, involves substantial use of fuel for transporting, storing, processing (crushing, cleaning, grading, mixing, etc.) and re-transporting, before the product can be incorporated into highway works, and a system of assessing CO2 balance has been established.

Carriageway Condition

Throughout LTP2, the key measure for carriageway condition has been the relevant BVPI scores by road class. These have shown a fluctuating position, with no clear trend and it has not been possible to assess with any confidence the change in condition over the life of LTP2. This is due to:

- Lack of uniformity of BVPI parameters and measures from one year to the next
- Fragile infrastructure that is prone to severe impairment, resulting from severe winter conditions and extremes of weather
- Over reliance on reactive / potholing treatments to ward off insurance claims at the expense of well planned and correctly financed asset management.
## D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Key Objective</th>
<th>Description</th>
</tr>
</thead>
</table>
| **K01 – Economy** | • Provides critical links between industrial, commercial and retail centres. Providing access to and enabling flourishing and diverse economies.  
• Well-maintained infrastructures reduce network stress through the provision of convenient and desirable routes and support the Transport Vision associated with aspirations for economic growth.  
• Maximise efficiency in highway maintenance operations to maintain or improve reliability and predictability of journey times  
• Ensuring local transport networks are able to cope with adverse weather and other incidents on the network |
| **K02 – Climate Change** | • Developing carbon emissions reduction strategy across all asset groups, using innovative materials and processes where applicable.  
• The timing of maintenance and the methods and materials used has implications for carbon emissions. |
| **K03 – Health, Personal Security and Safety** | • Well-maintained infrastructures secure safety of the travelling public in line with the duty of care and also maintain access for emergency services  
• Appropriate use of materials can prevent skidding and excessive noise pollution. |
| **K04 – Equality of Opportunity** | • Enhancing asset management operations and ensuring the delivery of a safer and more inviting environment for vulnerable transport users. |
| **K05 – Quality of Life and Local Environment** | • Carriageway infrastructure provides an essential connection to education, health, commercial and recreational areas. Improving access to jobs and essentials for day-to-day life. |
E. Major Influences on Carriageway Maintenance

The highway network must meet the needs of its users including cars and vans, heavy goods vehicles, public transport vehicles, motorcyclists, cyclists. In summary these requirements are for networks which:

- Are free of defects such as potholes, uneven surfaces, ponding water and
- Minimise skidding and slipping
- Are free of ice and snow
- Are adequately illuminated to ensure safety and prevent fear of crime
- Are not obstructed by vegetation which causes obstruction and has safety implications

It is not only highway users who are affected by the way the transport network is maintained. It impacts on other areas as listed below.

**Local residents:** Require minimum disturbance from noise, vibration and light pollution, which are influenced by surfaces, materials and equipment used.

**Carbon emissions:** The timing of maintenance measures and methods used have an impact on carbon emissions. The network also needs to be maintained in such a way as to be adaptive to inevitable climate change.

**Statutory Undertakers**

Highways provide corridors for statutory undertakers’ plant, necessitated by the difficulty of access to equipment in private land.

The condition of carriageway infrastructure is prejudiced by the Statutory Undertakers’ need to respond to both the condition of their apparatus within the highway, and the need to provide new and improved services to industry and commerce. This is exacerbated by significant renewals programmes currently ongoing to address deterioration of time expired cast iron mains which contribute to weakening the network, particularly where multiple mains are replaced at a single location.

**Under Investment**

The impact of the statutory undertakers is compounded by, due to under investment, an inability to carry out preventative maintenance treatments on all sections of the network, which would ensure that carriageways can successfully achieve their life cycle targets. Under investment in the network means a policy of the “treating the worst” and ignoring the rest of the network. Asset management is giving us a clear steer that we cannot continue to ignore that percentage of the network that sits in the “amber and green” categories, because they are rapidly becoming the next “red alerts”.


Stakeholder Engagement

Carriageway maintenance needs to take into account the perception and aspirations of stakeholders, and Authorities now have in place measures in place to bring about good communication between those who manage the asset and those who use the asset.

F. LTP3 Policies – Carriageway Asset Maintenance

Each district Highways Asset Management Plan will clearly establish its overall strategy for carriageway infrastructure in line with the Policies set out below and as circumstances and funding permit.

Policy TAM2: To prioritise Maintenance Block funding to improve the performance of the carriageways of the classified highways network

Highway maintenance policies set the value of the street scene and are high on people’s agenda as it is a major influence on the quality of their local environment. Over the LTP3 period, it is envisaged that there will be an increase in population, development and economic activity. Given the emphasis on maximising the use of existing transport infrastructure, it is imperative that the transport network is adequately maintained. As such we should be moving towards restoring the network to new and following up with preventative maintenance and investing to save.

Actions

Action 1 is a proactive policy for carriageways asset maintenance:
To undertake carriageway asset maintenance in accordance with the principles established by the CIPFA Infrastructure Asset Management Code, local prioritisation processes and subject to the limitations of the levels of funding indicated for years 1 & 2 of the LTP3 Implementation Plan.
Service Level Options for Carriageway Asset Maintenance

Investment needs to be planned, effectively managed and supported by technical and management systems facilitated by an asset management approach. The service level option for the classified network will be a policy whereby funding is spread across the classified network as required, thus enabling priorities to be determined locally to suit network condition and strategic importance. There are a number of techniques for establishing this such as:

- Condition Surveys
- Safety Inspections and complaints history
- Enquiries and complaints from elected members, the general public and other stakeholders
- Third party insurance claims

Priorities can then be allocated at three different sub-levels such as:

- Strategic level
- Transport level
- Maintenance level

Through life cycle planning undertaken on Dudley MBC’s network (a typical Metropolitan Area authority in terms of size and condition), where deterioration profiling has been carried out, it can be demonstrated that the indicated level of funding could start to address the backlog on the classified network, which is demonstrated on the graph below. The graph assumes that future funding levels will be at least equal to that of years 1 & 2 of the implementation plan. Obviously any increases in funding will see further improvement in the B & C class roads, whereas lower levels would see the condition worsen over time.
A, B & C Roads Deterioration Model based on the following funding plan:

*Restore to new, years 1-6 @ £1.90 million per annum*

*Annual Depreciation Repairs Programme: Years 7-47 @ £1.84 million per annum*

The objective is to fund the “restore to new” components of the classified network that have deteriorated beyond their design life and are significantly impaired and susceptible to the vagaries of the weather and statutory undertakings and pro-actively renew those sections of carriageway. This is anticipated to be over a six to ten year plan with the LTP3 implementation plan identifying the first two years of this. The developed life cycle plans will identify all capital works and their projected timings to ensure that those selected carriageways are maintained for their full life cycle and be able to withstand the influence of external damaging factors such as weather extremes and statutory undertaker excavations.

**Action 1a:** Work with Integrated Transport Authority and Bus Partners to seek new initiatives for funding unclassified key bus route infrastructure carriageway treatments to enhance the bus travel experience and further deliver on Bus Partnership Agreements.

Investigate the use of Integrated Transport Authority funds to carry out “restore to new” treatments to unclassified key bus routes to support the delivery of Bus Partnership Agreements, where these show a ride quality benefit to the operator. Priorities are to be determined locally, based on need, priority and ability to enhance key bus routes. Sections of the network treated under this initiative will be generated from an asset management approach to this category of road and offset the impact of budget shortfalls elsewhere on the network.
Actions 2a – 2c, set out further policies that seek to improve the network or maintain safety, where there are insufficient planned renewal/annual maintenance funds to carry out a full asset management approach.

**Action 2a:** To integrate planned maintenance with Strategic Corridor Investment

Prioritising maintenance where it can be combined with schemes to improve strategic corridors. This will ensure that investment in improving the corridors can be delivered by ensuring that carriageway infrastructure is capable of accommodating the improvements. Extend this approach to upgrade the carriageway, when carrying out other LTP3 schemes such as safety improvements or public transport improvement schemes. This will be dependent on sufficient funds being built into strategic corridor investment schemes to facilitate associated carriageway maintenance.

**Action 2b:** Analyse highway inspections to establish where repeat reactive maintenance is highlighting a structural problem

**Action 2c:** Carry out an increased level of low cost maintenance treatments to temporarily hold off the onset of structural failure

Embank on a programme of treating more roads with low cost treatments, which with pre-patching will stave off structural failure in the short term.

**Action 3:** A common carbon calculator will be developed to assist authorities in sourcing and using the most carbon efficient materials and methods.

Dudley has worked in conjunction with the industry to develop a Carbon Calculator to enable emission levels to be calculated on the basis of materials used. For routine maintenance, new techniques have been trialled, which reduce carbon emissions, for example using infra red patching and warm and half warm asphalts.
Footway Infrastructure

A. Role of Footway Infrastructure

As a highly visible community asset, the network of footway infrastructure plays an important role in providing an alternative transport option to the car and is a vital link to public transport. The local network provides pedestrian access for employment, commercial, shopping and leisure requirements. It also provides a link to all multi-modal transport options that the local community rely on heavily for their daily movements.

An effective, well maintained footway contributes significantly to the character and environment of the area that it serves, particularly so in supporting multi-modal travel. Footways that are defect free, well lit and safe become an attractive and healthy alternative transportation option for all age groups, but especially for elderly people who will continue to form an ever-increasing proportion of the population. This strategy seeks to encourage modal change particularly to healthier walking, which will only increase if they are enjoyable experiences, and that means footways free from potholes and with good facilities at crossing points.

There is growing awareness, reflected by public satisfaction surveys, of how well maintained footways can improve the environment, as everyone has contact with the footway network on a daily basis. Through Transport Asset Management Plans, the Districts have generated in-depth information on the condition and rate of deterioration of footway assets.

Footways comprise a variety of surface types, hierarchy and status depending on pedestrian traffic and the surrounding environment.

B. Asset Valuation and the CIPFA Assets Infrastructure Code

The CIPFA code has introduced a formal requirement for local highway authorities to have a comprehensive knowledge of their footway assets. There is comprehensive inventory data contained in the TAMPS, with varying levels of condition data across the Metropolitan Area. All authorities are embarking on collecting more robust condition data, which includes some authorities carrying out more DVI (detailed visual inspection) surveys of footways and others carrying out the new FNS (footway network survey) across their areas.
The following table shows the accounting figures required as part of Whole of Government Accounts when audited reporting starts in the financial year 2012/2013. The detailed explanation of the calculation and methodology behind the cost columns can be found in the asset management section of this document.

The Asset Valuation Policy is to produce asset valuation in line with Whole of Government Accounts. As this work is ongoing, the valuation figures shown have been calculated using a “broad brush” approach, adopting the principles in the proposed code. Accordingly the calculation of depreciation costs has been undertaken manually using the indicative formulae and tables available from CIPFA. The figures have been developed from the individual district asset management plans and amalgamated to show a Metropolitan Area wide view. (Birmingham has been separated in terms of costing due to the ongoing PFI investment programme).

<table>
<thead>
<tr>
<th>Footway Asset Group</th>
<th>Footway Hierarchy</th>
<th>Inventory</th>
<th>Gross Replacement Cost (£)</th>
<th>Annual Depreciated Costs (£)</th>
<th>Condition Indices</th>
<th>Depreciated Replacement Cost (£)</th>
<th>Restore to New Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Midlands Districts (excluding Birmingham)</td>
<td>1A</td>
<td>24 km</td>
<td>£10,381,494</td>
<td>£32,427</td>
<td>20.8%</td>
<td>£10,111,701</td>
<td>£269,793</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>422 km</td>
<td>£59,445,472</td>
<td>£721,820</td>
<td>20.8%</td>
<td>£54,707,949</td>
<td>£4,737,523</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>776 km</td>
<td>£100,711,733</td>
<td>£1,394,443</td>
<td>20.8%</td>
<td>£92,013,811</td>
<td>£8,697,922</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2,128 km</td>
<td>£245,942,065</td>
<td>£2,873,193</td>
<td>20.8%</td>
<td>£230,005,422</td>
<td>£15,936,643</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5,780 km</td>
<td>£637,304,988</td>
<td>£7,752,301</td>
<td>20.8%</td>
<td>£594,305,556</td>
<td>£42,999,432</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>9,130 km</strong></td>
<td><strong>1,053,785,752</strong></td>
<td><strong>£12,774,184</strong></td>
<td><strong>£981,144,439</strong></td>
<td><strong>£72,641,313</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Midlands Districts (including Birmingham)</td>
<td>1A</td>
<td>49 km</td>
<td>£21,069,851</td>
<td>£65,813</td>
<td>23%</td>
<td>£20,464,376</td>
<td>£605,475</td>
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<tr>
<td></td>
<td>1</td>
<td>545 km</td>
<td>£76,790,147</td>
<td>£931,824</td>
<td>23%</td>
<td>£70,025,221</td>
<td>£6,764,926</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1,196 km</td>
<td>£155,378,852</td>
<td>£2,151,919</td>
<td>23%</td>
<td>£140,534,373</td>
<td>£14,844,479</td>
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<tr>
<td></td>
<td>3</td>
<td>4,741 km</td>
<td>£548,556,392</td>
<td>£6,400,837</td>
<td>23%</td>
<td>£509,297,923</td>
<td>£39,258,469</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>7,525 km</td>
<td>£831,362,626</td>
<td>£10,108,456</td>
<td>23%</td>
<td>£769,364,093</td>
<td>£61,998,533</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>14,056 km</strong></td>
<td><strong>£1,633,157,868</strong></td>
<td><strong>£19,658,849</strong></td>
<td><strong>£1,509,685,986</strong></td>
<td><strong>£123,471,882</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Depreciated replacement costs based on condition indices have been adjusted upwards by a factor of 25% to allow for amber sections and higher condition indices expected for hierarchy 3 & 4 footways.
Asset Summary

The Metropolitan Area network, excluding Birmingham, consists of some 9,000 plus kilometres of footway network, with a gross replacement asset value of over £1 billion.

Restore to New Costs

To fulfil their potential and arrive at good economic asset management, the deteriorated section of the footway network needs to be replaced. To plan and programme for this is a requirement of the new CIPFA code, where authorities need to transparently show the true costs of removing the backlog. Hence there is a need to embark on a programme of replacement of those finite life components of the footway network that are already life expired.

The restore to new costs for the Metropolitan Area footway network, again excluding Birmingham, is over £72 million, which equates to approximately £12 million per district before being able to revert to steady state levels. Once restored to new, investment levels can be maintained at Annual Depreciated Cost, with a significantly reduced reactive and pothole maintenance regime.

Restore to new costs are based on depreciated replacement cost, which have been calculated using the Red, Amber, Yellow and Green condition criteria, where those footways within the red band require reconstruction as they are now at the end of their finite life. Varying treatments and frequencies are then programmed for the amber and yellow bands, with the green band not requiring any treatment, but requiring to be programmed in the long term on the basis of Annual Depreciated Cost.

Funding for footways in recent years has been significantly lower than that required for a full asset management approach, which has resulted in deteriorated networks that have not encouraged people to switch to walking as an alternative to car travel.

Maintaining a steady state

The following table shows a summary level breakdown of a life cycle plan for typical footways including expected life of the component parts, and the subsequent frequency of the treatments needed to maintain the service potential of the component over its useful life.
<table>
<thead>
<tr>
<th>Footway Hierarchy</th>
<th>Treatment Type</th>
<th>Treatment Frequency</th>
<th>Treatments over lifespan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 1a &amp; 2</td>
<td>Apply Surface Treatment</td>
<td>10 yrs</td>
<td>3</td>
</tr>
<tr>
<td>Bituminous</td>
<td>Replace Surface and Binder Layer</td>
<td>40 yrs</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Replace Base Layer</td>
<td>40 yrs</td>
<td>1</td>
</tr>
<tr>
<td>1, 1a &amp; 2</td>
<td>Replace Concrete modular units</td>
<td>40 yrs</td>
<td>1</td>
</tr>
<tr>
<td>Concrete Modular</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>Apply Surface Treatment</td>
<td>10 yrs</td>
<td>3</td>
</tr>
<tr>
<td>Bituminous</td>
<td>Replace Surface and Binder Layer</td>
<td>40 yrs</td>
<td>1</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>Repair uneven paving</td>
<td>10 yrs</td>
<td>3</td>
</tr>
<tr>
<td>Concrete Modular</td>
<td>Replace concrete modular units</td>
<td>40 yrs</td>
<td>1</td>
</tr>
</tbody>
</table>

The level of investment required (cost per annum) to maintain a steady state over the lifetime of the footway asset within the whole of the Metropolitan Area amounts to **£12.8 million per annum for the six districts**. This equates to approximately **£2.1 million per annum** per district, dependent on network length and road type. In general terms the districts are currently operating on a level well below that required, which means that the Metropolitan Area footway network will continue to deteriorate beyond the existing condition levels, which are also shown in the Asset Group Table.

**Invest to Save**

The sooner the replacement of those footways at the end of their finite life, i.e. the backlog, is carried out, the sooner steady state maintenance principles can be applied and the network kept in a desirable condition for the long term, thus reducing the need for high reactive expenditure. A poor network will reduce business confidence in the region and foster poor public opinion of their environment.

Whilst funding for footway maintenance is provided locally, opportunity is taken where walking can be encouraged to develop walking schemes and PROW improvements funded from LTP3 resources.
C. Progress and Successes from LTP2

Funding

LTP2 has provided the capability for funding for limited footway resurfacing on principal roads in conjunction with major carriageway works, which has helped in those areas. The wider approach of funding to other footway hierarchies, i.e. estate and link footways, has not been funded through LTP2, hence the management of deterioration by treating the worst footways has been employed, rather than taking a full asset management approach.

Asset Management Approach

LTP2 supported the development of an asset management approach, both through promoting the need for districts to adopt a strategic approach and in providing funding for data collection, to complement that provided by DfT. Data collection has progressed such that footway asset inventories are complete. Good condition data is available, particularly on the hierarchy 1, 1a and 2 footways, knowledge of the condition of footways 3 and 4 is becoming increasingly important, so that we can apply an asset management approach and enable us to plan for the long term. Further development of the management tools and systems required is underway, which will ensure that we can continue to apply a strategic, whole life costed approach.

Sustainable Materials

Re-use of footway surface materials has largely been restricted to concrete modular paving, where paving slabs or block pavers can be re-laid as long as they have not suffered vehicle damage. Some work has been done on recycling technology and a number of materials development initiatives have been promoted associated with reusing existing materials or alternative methodologies for maintenance activities.

Footway Condition

Throughout the course of LTP2, the measure of footway condition has been the relevant BVPI scores on hierarchy 1, 1a & 2 footways. These have shown a fluctuating position, with no clear trend and it has not been possible to assess with any confidence the change in condition over the life of LTP2. This is due to a number of reasons including:

- Lack of uniformity of BVPI parameters and measures from one year to the next
- Fragile infrastructure that is prone to severe impairment, resulting from severe winter conditions and extremes of weather
- Over reliance on reactive / patholing treatments to ward off insurance claims at the expense of well planned and correctly financed asset management.
It is, however, apparent that in percentage terms the hierarchy 1, 1a & 2 footways within the Metropolitan Area are showing much higher levels of deterioration than that of the carriageways.

### D. LTP3 Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
</table>
| **K01 – Economy** | • Provides critical pedestrian links between industrial, commercial and retail centres.  
• The provision of convenient and desirable routes to public transport and amenities to support the Transport Vision associated with aspirations for economic growth. |
| **K02 – Climate Change** | • Life cycle planning to extend the life of footway assets and build increased recycling into all processes.  
• Providing access to and enabling multi modal transport and less reliance on the car as a mode of travel. |
| **K03 – Health, Personal Security and Safety** | • Well-maintained infrastructures secure safety of the travelling public. |
| **K04 – Equality of Opportunity** | • Asset management seeks to ensure a safe footway surface making pedestrian usage a more inviting environment for vulnerable transport users.  
• Promote accessibility and ensure that people are not disadvantaged by where they live. |
| **K05 – Quality of Life and Local Environment** | • Footway infrastructure provides an essential connection to education, health, commercial and recreational areas. Improving access to jobs and essentials for day-to-day life. |
E. Major Influences on Footway Maintenance

Statutory Undertakers

Footway excavations are constantly taking place that contribute to weakening the footway infrastructure. Footways are particularly vulnerable due to the average width of 1.8 metres, which means that linear utility excavations can account for a high percentage of the area of the footway, thus affecting structural stability, even with a good reinstatement process.

Under Investment

Under investment in the network means a policy of the “treating the worst” and ignoring the rest of the network. Asset management is giving us a clear steer that we cannot continue to ignore that percentage of the network that sits in the “amber and green” categories, because they are rapidly becoming the next “red alerts”.

Stakeholder Engagement

Footway maintenance needs to take into account the perception and aspirations of stakeholders, and authorities now have in place measures in place to bring about good communication between those who manage the asset and those who use the asset. Footways are of particular importance, as virtually every member of the community will use a footway on a daily basis for either access to other modes of transport or for a complete journey. Whilst footways have different hierarchical value or volumes of traffic, which may make them of greater importance to the strategic network, even the lower category and trafficked footways will be important to some one in the community.
F. LTP3 Policies – Footway Maintenance

Policy TAM3: To seek to improve the performance of the Footway and surfaced Public Rights of Way Network

Each District’s Asset Management Plan will clearly establish its overall strategy for footway infrastructure management in line with the actions set out below with complementary funding sought through this Plan.

Action 1 is a proactive policy based on an asset management approach to footway maintenance.

Action 1: To undertake footway maintenance in accordance with the principles established by the CIPFA Infrastructure Asset Management Code and Whole Government Accounts, but subject to the limitations of local resources, albeit complemented where possible by walking schemes developed as part of LTP3 delivery.

The objective is to fund annual depreciated costs (maintain steady state) as identified, in order to carry out a strategic maintenance approach.

The locally developed life cycle plans will identify capital works and their projected timings to endeavour to maintain footways for their full life cycle and be able to provide a sound basis for multi modal travel in future years. However to pro-actively treat all sections of the network at the time and level designed to maximise efficiency over the life cycle will not be possible due to limited funding.

Local prioritisation enables identification of those footways that are of a higher priority in terms of securing an integral surface, ensuring that high priority footways are maintained for users and that the asset value of a proportion of the network is sustained.

The prioritisation process to be carried out will be based on the following:

- Condition surveys
- Walked safety inspections and complaints history
- Enquiries and complaints from elected members, the general public and other stakeholders.
- Third part insurance claims

Footways provide a significant contribution to the local environment and, allied to the costs of personal injury arising from slips, trips and falls, prompt the need for a high standard of surface condition. It is important that the footway network is well maintained through an asset management approach, as investment needs to be planned, effectively managed and supported by technical and management systems.
Priorities can then be allocated at three different levels:

• **Strategic Level**
• **Accessibility to local services and public transport.**
• **Maintenance Level**

Actions 2a – 2c, set out further policies that seek to improve the network or maintain safety where there are insufficient planned renewal/annual maintenance funds to carry out a full asset management approach.

**Action 2a:** To integrate planned footway maintenance with Strategic Corridor Investment and major carriageway works.

Supporting one of the objectives of LTP3 by prioritising footway maintenance where it can be combined with other schemes to provide a co-ordinated development of strategic corridors. This will ensure that investment in improving the corridors can be delivered by ensuring that the footway infrastructure is capable of facilitating the improvements and providing an environment that will deliver significant economic growth. This action can be further extended to major carriageway works, where funds are available and it would be detrimental to carry out only carriageway works.

**Action 2b:** Carry out planned footway maintenance and improvement schemes in association with Walking and Public Rights of Way schemes identified in LTP3 under Long Term Theme 6 – Improved Local Accessibility and Connectivity.

Supporting another of the objectives of LTP3 by carrying out footway maintenance and improvements where they are implemented as part of other schemes to improve walking and accessibility. This will ensure that investment in improving footways can be delivered by ensuring that the improvement of the footway infrastructure is incorporated into the improvements, thus providing an environment that promotes walking.

**Action 2c:** Carry out an increased level of low cost maintenance treatments to temporarily hold off the onset of structural failure.

Embark on a programme of treating more footways with low cost treatments, which with pre-patching will stave off structural failure in the short term.
Highway Structures

A. Role of Highway Structures

The highway network is dependent on a broad range of structures, which are owned by Highway Authorities and Third Parties. Within the Metropolitan Area there are over 1,500 highway bridges, including subways and culverts, larger than 1.5m span, with the type and age of the bridges varying enormously. They range from 500-year-old masonry arches to modern complex steel and reinforced concrete structures. A third of the structures are on primary roads. Many are impressive features of the urban landscape that are of heritage interest and support the character of an area. However, many are more discreet and easily overlooked by the road user; in particular those that serve industrial areas. These structures may be taken for granted and potentially could isolate an area because of loading constraints. Lastly there are culverts, tunnels, footbridges, safety fences and signal gantries and other miscellaneous structures that nevertheless fulfil a vital role in enabling pedestrian access (footbridges), land drainage (culverts) or informing/protecting the travelling public.

Bridges form a key link between local communities and economies, and therefore it is essential these routes remain unrestricted in terms of width or weight limits. However, it is sometimes necessary to implement such measures, as a last resort, where no viable or affordable alternative can be delivered. Where this occurs it is often to the detriment of economic growth, reducing carbon emissions and improving the quality of life.

Over the past 30 years there have been a number of changes to the maximum lorry and axle weights permitted on UK roads, with an increase from 32.5 tonnes in 1982 to 44 tonnes in 2001. Since 1982, the maximum weight limit has been amended five times, providing a significant challenge to bridge management strategies, as each structure is designed to the standards of the day and therefore has varying load carrying capacities. This, in turn, has necessitated weight limits as an interim measure on a number of structures, pending eventual strengthening works.

Equally important are highway-supporting features such as reinforced earth embankments and retaining walls. For those that are owned by a third party, the highway authority under Section 167 of the Highways Act 1980 is required to take action where a structure is liable to endanger persons using the highway.
Circular Roads 2/91 set out the methodology by which Local Authorities were to assess bridge load capacities and identify the need for strengthening works against the new limits. Where strengthening works were identified and could be afforded these were progressed; however there is a legacy of bridgeworks still outstanding. There remain a number of bridges that serve ‘Impact Investment Locations’ and provide access to industrial areas that have not been strengthened and are a major concern.

Whilst the main role of a road bridge is to span a valley, road, body of water, or other physical obstacle, for the purpose of providing safe passage over that obstacle, this can be a challenge for the management of the obstacle crossed and its impact on the bridge.

The development of Smart Routes has not only focused on surface route enhancements to balance the needs of users, but also provided a strategic context for investment. A number of bridges situated on the Smart Route corridors are increasingly not fit for purpose insofar as loading criteria are concerned: if assessed loading criteria were applied there would be significant and unsustainable disruption to the strategic network. This would have a long-term adverse impact on economic sustainability through restricting accessibility to freight and public transport.

B. Third Party Structures

Within the Area there are over 400 road bridges owned by Third Parties such as Network Rail and British Waterways. The statutory obligations on these owners are far less onerous than those of the highway authority, particularly with respect to their load carrying capacity.

Notwithstanding the legacy loading liability, there is much concern with the Government’s proposal to reposition British Waterways with charitable status in the third sector (a sector between state and private sectors) which may result in a transfer of undertakings to Local Highway Authorities in accordance with section 116(3) of the Transport Act 1968 (as modified in 2002), increasing the demand on already limited resources. In the Metropolitan Area, Highway Authorities are not in a position to take on the liability without the provision of a significant and ongoing increase in resources.

Whilst the Metropolitan Councils will work with British Waterways to ensure that bridges on key routes are free of weight restrictions (as set out in policy MT7) this can only be sustained if funding is made available to British Waterways for the necessary work. Many British Waterways structures are of historic interest and attract a premium when works are undertaken.

There is also concern over Network Rail’s “Asset Management Policy – March 2010” and the implications of a potential policy option of “allowing assets to deteriorate until intervention is essential to maintain safety standards” as
an alternative to steady state maintenance. The expected outcome for a policy of this type is to increase the likelihood of strengthening or mitigation works which the local highway authorities will be liable to contribute to, increasing the strain on available funds. Currently, there are no opportunities for highway authorities to be involved in the decision process and this reduces the opportunity for planning and predicting expenditure of this type.

C. Asset Valuation

The asset value of the highway structures (bridges, subways, culverts, tunnels, viaducts, retaining walls, gantries etc) is as set out below. These DO NOT include consequential costs arising from the need to divert/adjust Statutory Undertakers plant when undertaking works. Such costs can be significant and in many cases far exceed the structural elements.

### Highway Structures (excluding Birmingham)

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Inventory (Deck Area or Linear Measure)</th>
<th>Gross Replacement Cost (£)</th>
<th>Annual Depreciated Costs (£)</th>
<th>Ave Cond’tn Indices</th>
<th>Depreciated Replacement Cost (£)</th>
<th>Restore to New Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H/way Bridges (All Types)</td>
<td>150,221 sq.m.</td>
<td>£802,815,449</td>
<td>£913,326</td>
<td>0.91</td>
<td>£733,798,841</td>
<td>£69,016,607</td>
</tr>
<tr>
<td>Ped/Cycle Bridges (All Types)</td>
<td>7,585 sq.m.</td>
<td>£27,364,699</td>
<td>£45,510</td>
<td>0.92</td>
<td>£25,273,006</td>
<td>£2,091,693</td>
</tr>
<tr>
<td>Subways</td>
<td>14,591 sq.m.</td>
<td>£49,298,183</td>
<td>£87,546</td>
<td>0.92</td>
<td>£45,351,840</td>
<td>£3,946,344</td>
</tr>
<tr>
<td>Culverts</td>
<td>20,150 sq.m.</td>
<td>£48,969,212</td>
<td>£30,225</td>
<td>0.92</td>
<td>£45,257,474</td>
<td>£3,711,738</td>
</tr>
<tr>
<td>Retaining Walls</td>
<td>51,805 lin.m.</td>
<td>£64,268,475</td>
<td>£77,700</td>
<td>0.94</td>
<td>£60,132,936</td>
<td>£4,135,539</td>
</tr>
<tr>
<td>Total</td>
<td><strong>£992,716,018</strong></td>
<td><strong>£1,154,307</strong></td>
<td><strong>£909,814,097</strong></td>
<td><strong>£82,901,921</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Highway Structures (including Birmingham)

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Inventory (Deck Area or Linear Measure)</th>
<th>Gross Replacement Cost (£)</th>
<th>Annual Depreciated Costs (£)</th>
<th>Ave Cond’In Indices</th>
<th>Depreciated Replacement Cost (£)</th>
<th>Restore to New Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H/way Bridges (All Types)</td>
<td>437,135 sq.m.</td>
<td>£2,308,159,497</td>
<td>£2,622,810</td>
<td>0.91</td>
<td>£2,099,122,040</td>
<td>£209,037,457</td>
</tr>
<tr>
<td>Ped/Cycle Bridges (All Types)</td>
<td>11,304 sq.m.</td>
<td>£44,205,019</td>
<td>£67,824</td>
<td>0.92</td>
<td>£40,553,161</td>
<td>£3,651,858</td>
</tr>
<tr>
<td>Subways</td>
<td>21,947 sq.m.</td>
<td>£83,577,563</td>
<td>£131,682</td>
<td>0.92</td>
<td>£77,180,888</td>
<td>£6,396,675</td>
</tr>
<tr>
<td>Culverts</td>
<td>33,551 sq.m.</td>
<td>£74,751,961</td>
<td>£50,326</td>
<td>0.92</td>
<td>£69,040,453</td>
<td>£5,711,508</td>
</tr>
<tr>
<td>Retaining Walls</td>
<td>52,014 lin.m.</td>
<td>£67,209,303</td>
<td>£78,021</td>
<td>0.93</td>
<td>£62,690,124</td>
<td>£4,339,178</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£2,577,723,343</strong></td>
<td><strong>£2,950,663</strong></td>
<td><strong>£2,348,586,666</strong></td>
<td></td>
<td></td>
<td><strong>£229,136,677</strong></td>
</tr>
</tbody>
</table>

### Restore to New Cost

The restore to new costs for the Metropolitan Area Structures, again excluding Birmingham, is over £82 million, which equates to approximately £14 million per district over the period of LTP3. Restore to new costs have been calculated using typical replacement costs of structural elements.

An analysis of bridge replacements undertaken over the last 20 years indicate, based on the ageing bridge stock, that it will be 60 years before a structure can be considered for replacement. This is a particular concern for the structures constructed during the post war building boom that are now 50 years old, were not designed for, nor built to, current standards and have inherent maintenance liabilities associated with the mode of construction.
Annual Depreciated Cost

Referring to the report ‘Funding for Bridge Maintenance’, produced by the County Surveyors Society now the Association of Directors of Environment, Economy, Planning and Transportation in February 2000, and also CIPFA Guidance on annual replacement costs (that take account of component replacement costs) structural assets in the Area (excluding Birmingham) would require funding at a level of around £1,154,307 a year in order to maintain them in a serviceable condition. This figure does not include the extraordinary costs required for assessments, strengthening, upgrading, and any contributions for work to bridges owned by others.

Adopting the principles of Asset Management is fundamental to the effective long-term management and preservation of these assets, and the need to develop tools and procedures to support effective Asset Management of highway structures is widely recognised. The CSS “Guidance Documents for Bridge Inspection Reporting and Evaluation of the Bridge Condition” has been adopted by the Metropolitan Authorities. However, a Condition Indicator alone will not be sufficient to measure the overall performance, or fitness for purpose, of a stock of highway structures, as this does not take account of loading criteria.

The dynamic associated with Asset Management of Structures is complex given the range of disparate components. Whilst the annual depreciated cost is the cost to maintain in serviceable condition (from new condition), this will combine with the restore to new cost as components reach their life expectancy.

D. Progress and Successes from LTP2

Section 31 Grant was made available in LTP2 to complete the strengthening of structures on the Primary Route Network. However, reductions in 2010/11 Grant mean that not all bridges/structures on the Primary Route Network have been upgraded to current standards.

Funding for bridges for the Metropolitan Area in recent years has been lower than that suggested by the Whole of Government Accounts. This situation has been exacerbated by the need also to carry out extraordinary works in connection with the assessment and strengthening programme. Spending on bridge maintenance seeks only to manage deterioration, rather than undertake renewal work. Opportunities for intervention reduce with the passage of time.
All bridges, with the exception of a few not owned by the highway authorities, have now been assessed, and the strengthening programme is now stalled because of limited funding availability. Further pressure on funds comes from Third Parties whose policies allow for controlled deterioration, with a view to long-term replacement, and thus increase the likelihood of contributions from Local Authorities.

Resource constraints are not only limiting Districts’ ability to address renewal work requirements, but also increasingly impacting on both routine and reactive maintenance elements.

The experience gained from works already carried out in strengthening bridges owned by Network Rail (NR) has shown that in some cases the costs to the highway authorities were initially underestimated with the result that planned work and funding needs identified in LTP2 were prejudiced. This has resulted in work to a number of bridges that require strengthening being deferred.

The information regarding retaining walls is variable. Some maintenance has been carried out on major structures on strategic routes, but little or no maintenance has been carried out on many others. The quality of records is being improved, as inspections and assessments of these structures proceed.

Many Third Party structures impact on the public highway and, with passage of time, structures that were considered to be marginal are becoming inadequate to support the loadings placed on them. Such matters are often beyond the capability of many Third Parties to fund. This may arise, for example, from developers who have retained ownership ceasing to trade, or residential property owners who have an unaffordable liability. In this circumstance, liability may pass by default to the Highway Authority and, whilst efforts are made to recover costs, this is both time consuming and costly and, in the case where a charge is put on a property, costs may not be recovered for many years.
## E. LTP3 Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KO1 – Economy</strong></td>
<td>Provides critical links between industrial, commercial and retail centres. Providing access to and enabling flourishing and diverse economies. Well-maintained, unrestricted structures reduce network stress through the provision of convenient and desirable routes. By securing structural integrity of the Highway Network supports the Transport Vision associated with aspirations for economic growth. More particularly enables movement of Freight to industrial and commercial areas</td>
</tr>
<tr>
<td><strong>KO2 – Climate Change</strong></td>
<td>Where bridges meet loading criteria avoiding excess carbon emissions arising from diversion routes Unrestricted structures enable shorter journeys and enable free flow conditions reducing vehicle emissions</td>
</tr>
<tr>
<td><strong>KO3 – Health, Personal Security and Safety</strong></td>
<td>Well-maintained structures secure safety of the travelling public in line with the duty of care and also maintain access for emergency services Risks to construction operatives and the travelling public can be reduced through pro-active asset management and lifecycle planning with reduced intervention frequencies</td>
</tr>
<tr>
<td><strong>KO4 – Equality of Opportunity</strong></td>
<td>Bridges provide access to all to local facilities Footways associated with structures need where appropriate to be DDA compliant.</td>
</tr>
<tr>
<td><strong>KO5 – Quality of Life and Local Environment</strong></td>
<td>Bridges provide an essential link to education, health services, commercial and recreational areas. Improving access to jobs and essentials for day-to-day life. Bridge aesthetics influence local residential areas and the sense of prosperity if not maintained. Diversions associated with loading restrictions can have an adverse affect on local community</td>
</tr>
</tbody>
</table>
F. Major Challenges to Highway Structures

- Changes to European standards and traffic growth on network
- Flooding arising from rising river levels
- Changing needs of local communities such as prioritised bus routes.
- Inability of third parties to maintain structures

G. LTP3 Policies – Highway Structures

Each Council’s Highways Asset Management Plan will clearly establish its overall strategy for bridge maintenance, in line with the Policies set out below, as circumstances and funding permit.

Policy TAM4: To seek to ensure that current service levels are maintained in respect of highway structures

In a fiscally challenging environment, bridges and ancillary highway structures will be maintained to provide the required service level by the most cost effective means possible.

Whilst the funding methodology also needs to take account of historic structures and the demands placed on renewal by the historic significance of the structure to the surrounding environs, it is the case that where this imposes a significant premium, temporary works may be necessary.

Whereas the following criteria are considered in drawing up programmes and priorities for the maintenance and strengthening of highway structures, structural integrity and safety considerations will take precedence:

- The overall policies and objectives of this LTP
- The strategic importance of the highway taking into account:
  - Whether on the Primary Route Network
  - Links to and between local industrial, commercial and retail centre
  - Existing traffic flows and future requirements especially with respect to lorries and public transport
  - Availability of suitable alternative routes
  - Community linkages
  - The integrity of the structure and associated risks to the highway user

Cost effectiveness and value for money especially where funding fails to meet requirements and consideration needs to be given to:

- The benefits of carrying out several low cost schemes as opposed to one high cost scheme strategy low cost strengthened RFA
• Economic and environmental benefits from maximising the number of weight restrictions and associated diversions that can be removed

The feasibility of imposing permanent weight restrictions or other measures taking into account:
• Impact on the highway network as a whole
• Effects on the local community and economy
• Problems of enforcement and consequential effectiveness
• Disruption to the highway network whilst carrying out the work and the need for co-ordination with works being carried out by others such as the Highways Agency, neighbouring authorities, statutory undertakers and developers

Environmental issues such as:
• Local congestion
• Land drainage flooding Surface Water Management Plans maintain flood risk assessment

The requirements of other outside parties:
• Statutory Transport bodies (railways and waterways)
• Neighbouring authorities
• Abnormal load routing

The continuity of funding, as works to structures may extend over more than one financial year.

Action 1: Return and maintain the asset to steady state by the use of maintenance activities that will retain performance levels and extend the remaining life of existing assets

To fulfil optimum service potential and arrive at good economic asset management, the backlog of current outstanding deterioration needs to be addressed.

Maintaining serviceability over the life cycle requires a maintenance regime and life cycle plan that addresses timely treatment to ensure that those component parts of a structure with a finite life reach that life target.

Where possible when carrying out maintenance work, the opportunity is taken to upgrade various elements of a structure where funding permits. An example of this would be the replacement of a sub-standard parapet that has become severely corroded with one that complies with current requirements.

It must be recognised that an incremental approach through maintenance regimes, whilst securing the integrity of the component being replaced, does not offer best value in terms of maintaining the whole structure, as revisits may be necessary.
**Action 2: Maintenance Programmes to be inspection based to ensure structural integrity**

Maintenance programmes are drawn up based on the findings of the inspections. The main objectives are to ensure structural integrity and preserve the bridge’s load carrying capacity for the prescribed design life. To ensure best value, maintenance work should include the repair of any damage (caused through ageing or more increasingly through accident or vandalism) plus measures to remove the causes of the damage, such as re-waterproofing. In many cases, due to insufficient resources, this is not possible and the scope of the work has had to be limited to address more immediate issues such as safety.

**Action 3: Inspections to be based on national standards**

Allied to this is the need to address sub standard Third Party structures as, ideally, the assessment and strengthening of privately owned bridges and structures requires close liaison and co-ordination. However, degenerated structures can necessitate urgent attention that precludes the consultation process and incurs an unfunded cost liability on behalf of the highway authority, to be recharged where possible to the owner of the structure.

**Action 4: Where Bridge works will affect operation of the carriageway consultation with bus operators, emergency services, public utilities, businesses, and residents to be undertaken**

Where it is judged that an existing assessment is unrealistically pessimistic, additional work is likely to improve significantly the theoretical load carrying capacity of a bridge and, where there are likely to be overall cost savings, further assessment work is carried out.

When considering the need to strengthen a bridge this can have a major impact on the carriageway as such Bridge works may necessitate a road closure. Accordingly, works of this nature are subject to particular consideration as the economic argument associated with a full closure, and the economic disbenefits that may accrue associated with commercial activity, have to be weighed against the additional costs of construction by lane closure.

Where it is not affordable to strengthen a bridge, or where service conditions suggest that a weight restriction is sustainable, appropriate local consultation with bus operators, businesses, residents and others affected by the proposals is carried out (eg the Freight Quality Partnership).
This often influences the measures taken, especially where a weight restriction is being considered and it is found that local businesses would be adversely affected. One-way working or restricted width, to restrict deck loading, may impact less on commercial activity than a weight restriction.

Risk assessments have been carried out at all such sites in accordance with the document ‘Road Vehicle Incursion Risk Ranking (Version 9)’. The results of the scoring associated with risk assessments are used as a basis for determining the scope and priority of work considered necessary. However, highway authority priority may differ from that of NR, arising from the incompatibility between transport bodies.

**Action 5:** Where funding permits, Vehicle Incursion measures to be undertaken where deemed appropriate by risk assessment and as identified by maintenance prioritisations

**Action 6:** The Bridge Group and the West Midland Area Bridge conference to be supported to enable dissemination and adoption of, best practice.

Liaison amongst the Metropolitan Authorities takes place on a regular basis through ADEPT - West Midlands Area Bridge Conference, in order to share experience and learn from each other. Dialogue with the statutory transport undertakers, DfT and the Highways Agency is continuing and being developed.

**Action 7:** Maintenance programmes for subways to enhance the environment and include vandal and fire resistant treatments

Safety issues have been identified in connection with subways. Many suffer from vandalism and are used for anti-social behaviour. They are often perceived by the public as being unsafe, generally due to their secluded nature, poor lighting and lack of maintenance. Many subways are being infilled and replaced with alternative facilities, as part of other programmes. However, subways often provide the safest routes for pedestrians to cross roads, and a number of Authorities have a programme of works to improve them, to encourage their use and reduce vandalism.
Although the assessment of the load carrying capacity of road bridges is substantially complete, there are a number of bridges in the Black Country that serve industrial areas that have failed their initial assessment and, as a result, are considered sub-standard. Case studies have been undertaken that indicate the bridges in question and the associated economic impacts.

Bridges that do not meet their loading criteria have to be proactively managed in accordance with national guidelines until they have been strengthened, permanently restricted, propped or proven by further more rigorous assessment to be adequate to carry the increased loads required. In a number of instances, the safety factors associated with the assessment process may be prejudiced, and in this circumstance more rigorous inspection regimes are implemented. This position is unsustainable in the longer term.

When considering the final measures to be carried out on a sub-standard bridge, the imposition of a permanent weight restriction is usually found to be unacceptable because of the resultant detrimental economic affects that would occur, but may be unavoidable where factors of safety are severely prejudiced. In almost all cases within the Area, strengthening is the only option if local and national objectives are to be achieved. The measures being carried out associated with accidental wheel loadings, namely prevention of access to edge of decks or temporary barriers, are a short-term solution, which does not resolve the Highway Authority’s liabilities.

**Action 8:** A Major Scheme comprising a number of bridges in the Black Country to be developed that seeks to address the accessibility constraints imposed by bridges that require loading restrictions that impact on commercial activity

**Action 9:** Where required loadings do not meet current standards implement interim measures to secure the safety of the travelling public until such time as strengthening works are affordable and are considered to be good value for money

**Action 10:** Bridge Condition Indicator to be used as performance measure

Whilst implementation of the Asset Management methodology and practises based on bridge condition indicators are to be used to determine the needs and priorities for resources, the nature of the bridge stock in terms of overall condition, availability for works (rail possession), limitations imposed by statutory undertakers, plant access requirements and safety considerations restrict the ability to rely on this indicator as a determinant of performance.
Street Lighting

A. Role of Street Lighting

Good street lighting helps create a better, safer environment to support the movement of vehicular and pedestrian traffic. The increased safety, security and enhancement afforded by modern street lighting are widely acknowledged. Accordingly, the role of street lighting is to:

• Provide a safe highway network for all road users during the hours of darkness
• Minimise the environmental impact of street lighting whilst enhancing the night time ambience
• Ensure that public lighting is in keeping with and properly integrated into the highway infrastructure
• Help reduce crime and the fear of crime

In providing the street lighting service, opportunities will be taken to adopt best practice and deliver in a cost effective manner.

Commercial, industrial and residential growth will be assisted if street lighting and signage is effective and provides a positive visible impact on the quality of the local street scene. Numbers and severity of road accidents can be reduced through smart and efficiently managed lighting and signing. Improvements in street lighting have been seen as a key instrument in reducing both the fear of crime and crime itself.

Also included within this asset group are illuminated signs, ‘Keep Left’ bollards and other associated assets. Illuminated signs for both traffic purposes and advance direction play a part in accessibility and supporting economic wellbeing.
B. Asset Valuation and the CIPFA Asset Infrastructure Code

The need for identification of street lighting assets for power consumption purposes means that good inventory data has historically been kept on street lighting assets. The CIPFA code has introduced a formal requirement for Highway Authorities to gain a more comprehensive knowledge of their highway assets insofar as street lighting is concerned. Districts have developed comprehensive inventory and condition data, to prepare for asset valuation in line with Whole of Government Accounts and depreciated accounting methods.

The following table shows the accounting figures that will be required as part of Whole of Government Accounts when audited reporting starts in the financial year 2012/2013. The detailed explanation of the calculation and methodology behind the cost columns can be found in the asset management section of this document.

For LTP3 purposes, the following figures have been developed from the individual District AMPs and amalgamated to give a regional total. (Birmingham, Walsall and Coventry figures have been separated in terms of costing due to ongoing PFI investment programmes).

### Street Lighting (excluding Birmingham, Coventry and Walsall)

<table>
<thead>
<tr>
<th></th>
<th>Inventory (Number of Units)</th>
<th>Gross Replacement Cost (£)</th>
<th>Annual Depreciated Costs (£)</th>
<th>Depreciated Replacement Cost (£)</th>
<th>Restore to New Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Street Lighting Columns</strong></td>
<td>110,585</td>
<td>£123,529,700</td>
<td>£4,117,656</td>
<td>£65,882,516</td>
<td>£57,647,184</td>
</tr>
<tr>
<td><strong>Illuminated Bollards</strong></td>
<td>4,484</td>
<td>£4,737,307</td>
<td>£157,909</td>
<td>£2,526,576</td>
<td>£2,210,731</td>
</tr>
<tr>
<td><strong>Illuminated Signs</strong></td>
<td>12,975</td>
<td>£14,694,267</td>
<td>£489,808</td>
<td>£7,836,954</td>
<td>£6,857,316</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>128,044</td>
<td>£142,961,274</td>
<td>£4,765,373</td>
<td>£76,246,046</td>
<td>£66,715,231</td>
</tr>
</tbody>
</table>
Street Lighting  (including Birmingham, Coventry and Walsall)

<table>
<thead>
<tr>
<th>Inventory (Number of Units)</th>
<th>Gross Replacement Cost (£)</th>
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<th>Depreciated Replacement Cost (£)</th>
<th>Restore to New Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Street Lighting Columns</strong></td>
<td>260,972</td>
<td>£277,344,650</td>
<td>£9,244,821</td>
<td>£147,917,176</td>
</tr>
<tr>
<td><strong>Illuminated Bollards</strong></td>
<td>11,935</td>
<td>£12,366,257</td>
<td>£412,208</td>
<td>£6,595,346</td>
</tr>
<tr>
<td><strong>Illuminated Signs</strong></td>
<td>38,637</td>
<td>£47,998,379</td>
<td>£1,608,945</td>
<td>£25,599,148</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>310,199</td>
<td>£337,709,286</td>
<td>£11,265,974</td>
<td>£180,111,670</td>
</tr>
</tbody>
</table>

Depreciated value based on age profile is an average of 14 years useful life consumed

**Asset Summary**

The Metropolitan Area network excluding Birmingham, Coventry and Walsall (under PFI arrangements) consists of circa 110,000 street lighting columns, 4,400 illuminated bollards and 13,000 illuminated signs with a gross replacement asset value of over £142 million.

**Restore to New**

In 2004 Walsall were the first to address the deteriorated lighting stock through a street lighting PFI. This enabled the replacement all of the lighting stock within the five year core replacement programme and established a methodology to maintain street lighting. Birmingham and Coventry have followed suit with a PFI and are embarking on similar replacement programmes over the coming years.

The remaining Authorities still have backlog issues with regard to column replacement and to achieve good economic asset management this needs to be addressed. The restore to new costs are a requirement of the new CIPFA code, where the true costs of removing the backlog of the deteriorated columns needs to be expressed. There needs to be a programme of replacement of those lighting columns that are life expired and are deemed to be high risk.

The **restore to new costs** for the Metropolitan Area street lighting, signing and illuminated bollards stock, excluding Birmingham, Walsall and Coventry, is over **£66 million**, which equates to approximately **£16 million per district**.
Maintaining a steady state

The following table shows a summary level breakdown of a life cycle plan for typical street lighting maintenance including expected life of the component parts and the subsequent frequency of the treatments needed to maintain the service potential of the component over its useful life, and has been used to evaluate the annual depreciated costs.

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Treatment Type</th>
<th>Treatment Frequency</th>
<th>No of treatments over lifespan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Lighting Columns</td>
<td>Replace control gear</td>
<td>7.5 yrs</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Replace Lantern</td>
<td>15 yrs</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Replace Column</td>
<td>30 yrs</td>
<td>1</td>
</tr>
<tr>
<td>High Masts</td>
<td>Replace Lantern</td>
<td>20 yrs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Replace Column</td>
<td>60 yrs</td>
<td>1</td>
</tr>
<tr>
<td>Subway Units</td>
<td>Replace Lantern</td>
<td>10 yrs</td>
<td>1</td>
</tr>
<tr>
<td>Feeder Pillars</td>
<td>Replace unit</td>
<td>40 yrs</td>
<td>1</td>
</tr>
<tr>
<td>Illuminated Bollards</td>
<td>Replace unit</td>
<td>30 yrs</td>
<td>1</td>
</tr>
<tr>
<td>Illuminated Signs</td>
<td>Replace unit</td>
<td>30 yrs</td>
<td>1</td>
</tr>
</tbody>
</table>

The level of investment required (cost per annum) to maintain the full service potential for a typical Metropolitan District (non PFI) over the life cycle of the assets, amounts to circa **£1.2million per annum**. (Birmingham Walsall and Coventry have been excluded, due to their PFI investment programmes).

In general terms, the four non PFI Districts are currently operating at a level that is containing, but not addressing, the structural issues and is below that required, which means that their street lighting stock has deteriorated. Historically funds have been insufficient to enable annual maintenance and significant column replacement, which has resulted in a higher number of columns beyond their target life.
D. Progress and Successes from LTP2

With the onset of asset management improvements over recent years, we have collected good inventory data and a number of processes for determining condition and deterioration, and are now in a better position to establish what is needed and to carry out future life cycle planning.

Funding

Funding from Government for the replacement of street lighting stock has been made primarily through the PFI funding stream. Although in recent years, funding has been made through the LTP Maintenance Block, which has enabled replacement of columns deemed to be at high risk. This funding has been matched by some Districts through prudential borrowing, enabling some backlog issues to be addressed.

Asset Management Approach

Inventory and visual condition data for the street lighting stock is fairly comprehensive across the Area. Further development of the management tools and systems required is underway, which will ensure that we can continue to apply a strategic, whole life costed approach.

Sustainable Street Lighting

As a major consumer of electricity, more efficient lighting operations, enabling carbon reduction at the source of power generation, is probably the most significant aspect of sustainability. A number of initiatives are currently being examined:

- Reducing street lighting CO2 emissions, by the use of energy saving technology kits installed on streetlights.
- Dimming Trials have been carried out, whereby LED street lights are mounted on new or existing columns, which automatically dim by 40% between midnight and 6.00am.
- Investigation and use of Central Management Systems to make associated resource savings
- Switching from illuminated bollards to their non-illuminated equivalents, dependant on future legislation.
E. LTP3 Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>K01 – Economy</td>
<td>Enhances amenity value of an area.</td>
</tr>
<tr>
<td>K02 – Climate Change</td>
<td>Developing carbon emissions reduction strategy contributes to climate change agenda.</td>
</tr>
<tr>
<td>K03 – Health, Personal Security and Safety</td>
<td>Reduces the number of criminal and anti-social incidents. Improve community and neighbourhood safety &amp; social cohesion.</td>
</tr>
<tr>
<td>K04 – Equality of Opportunity</td>
<td>Improves general travel opportunities for all, particularly by ensuring good street lighting at accesses and routes to multi-modal exchange points.</td>
</tr>
<tr>
<td>K05 – Quality of Life and Local Environment</td>
<td>Contributes to amenity value of an area.</td>
</tr>
</tbody>
</table>

F. Major Influences on Street Lighting

The arguments regarding structural deterioration have been rehearsed having been addressed by three of the seven Metropolitan Districts using the PFI approach to replace their lighting stock.

Safety

For many years it has been acknowledged that the reduction of nighttime accidents and the subsequent increase in safety of road users is a major benefit to be gained by the provision of street lighting. It is well documented that good street lighting can reduce nighttime road accidents by 30%.

Road safety is not the only benefit to the community from the provision of street lighting. Over the past decade over 16 lighting and crime evaluations have been carried out in major towns and cities in the UK. One of the most sophisticated evaluations was carried out in the Metropolitan Area. This provided clear and reliable evidence showing that targeted, improved street lighting can reduce all types of crime and disorder, depending on the context into which it is introduced. A cost benefit analysis revealed that street lighting improvements paid for themselves in one year, in relation to savings in crime reduction.
The Crime and Disorder Act places an obligation on Local Authorities to develop and implement Safer Community Strategies. The provision of modern street lighting, designed to the correct standard, is a very tangible way to demonstrate our commitment to the provision of a safer and more attractive community.

**Obtrusive Light**

Obtrusive light (also referred to as light pollution) has the potential to impact on human mental and physical health, including disturbed sleep patterns, resulting in fatigue, increased anxiety, and stress. Obtrusive light is extremely costly in terms of energy wastage, particularly with regard to the non-beneficial upward direction of some lighting. With some estimates suggesting that lighting consumes one quarter of all energy expended worldwide, consumption and associated wastage also has significant consequences in terms of carbon emissions.

Obtrusive light is an avoidable consequence of poor interior and exterior lighting design, often exacerbated by poor installation and maintenance. Careful design to ensure appropriate light levels, where and when it is needed, can yield benefits which include environmental and ecological restoration, improved human well being, reduced energy wastage and financial cost, and reduced interference with astronomy.

**Climate Change Act**

The Climate Change Act of 2008 was introduced as the main United Kingdom response to the Kyoto Protocol. The main provisions of the Act are to enforce the reduction of carbon emissions, caused by power generation or other sources, by 80% of their 1990 levels by 2050, and, with an intermediate reduction by 34% by 2020. Further the Government also announced the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEE). (See Appendix for procurement strategy).
G. LTP3 Policies – Street Lighting

The objective is to fund the restore to new element of the street lighting stock in order to carry out a strategic maintenance approach. The life cycle plans identify all columns and illuminated signs that are beyond their design life, or at risk in line with ILP Technical Report TR22. This means to pro-actively renew street lighting equipment through a prioritised asset management approach, enabling a targeted replacement programme to be funded in line with available resources.

The objective is to fund the annual depreciated costs to maintain a steady state, to carry out a strategic maintenance approach. The developed life cycle plans will identify all capital works and their projected timings, to ensure that street lighting equipment is maintained for the full life cycle, and able to withstand the influence of damaging factors such as weather extremes and other external influences.

**G. LTP3 Policies – Street Lighting**

The Districts’ Highways Asset Management Plans will clearly establish overall strategy for street lighting infrastructure maintenance in line with the policies set out below and as circumstances and funding permit.

**Policy TAM5:** To seek to improve the performance of the Street Lighting Network

**Actions**

Actions 1a and 1b are policies based on investment needs for street lighting.

**Action 1a:** To undertake street lighting renewals in accordance with the profile established by the CIPFA Infrastructure Asset Management Code, but limited to the funds identified in both LTP3 and locally available funding through prudential borrowing.

**Action 1b:** To undertake annual street lighting maintenance in accordance with the Well Lit Highways Code of Practice and to deliver the strategies as set out in this document.

In order to fulfil its potential, it is crucial that the street lighting stock is well maintained and there is a clear need to achieve an asset management approach. Investment needs to be planned, effectively managed and supported by technical and management systems.
Actions 2a – 2b set out reactive policies.

The following reactive actions will follow an approach that will manage a limited number of column replacements, by identifying additional funds that may be available through LTP3 and assessing where the stock can be expected to safely outlive its design life.

**Action 2a:** To integrate street lighting column renewal in conjunction with Strategic Corridor Investment or other major scheme works

**Action 2b:** Carry out a structural testing regime and other condition inspections to isolate individual columns that need to be targeted for replacement and to establish the stock, which can be safely extended beyond its design life.

Supporting LTP3 by prioritising maintenance where it can be combined with schemes to improve strategic corridors. This will ensure that investment in improving the corridors can be delivered by ensuring that street lighting infrastructure is capable of facilitating the improvements, and provide an environment that will deliver significant economic growth.

This approach will be extended to upgrading street lighting when carrying out other LTP3 schemes, such as holistic carriageway and footway schemes, safety improvements or public transport improvements.
A. Role of Procurement/Commissioning

The pursuit of better, more efficient transportation services is a driver in how the Area intends to drive forward procurement efficiencies, as procurement of professional and contracted work underpins delivery of LTP3.

Construction is the biggest single area of Local Authority capital expenditure and LTP3 provides the resources to fund a significant proportion of that expenditure through work on, and associated with, highway infrastructure.

The benefit of getting it right first time, delivering defect and dispute free contracts, not only adds value but also enhances public recognition of service delivery. The Area is committed to excellence in service delivery.

Procurement ranges from small, low value, but highly specialised work, to major construction schemes, together with associated professional services. Each has its own procurement approach, from spot pricing to term contract arrangements and scheme specific arrangements. Increasingly, however, the benefits of long-term frameworks are being recognised in delivering the commissioning of services, in particular where the contractor is engaged as part of the design process.

In the current economic climate, where Authorities are seeking to achieve more with less resource, there is a strong focus on how procurement can deliver savings through more efficient back office processes, support commissioning and assist local businesses.

Against the background of the above, the Authorities have established the Procurement Group to review and take forward approaches that reduce the administrative burden of procurement, whilst at the same time achieving more effective service delivery, typically through the development frameworks of collaborative or joint working.

The Government, in its publication National Procurement Strategy – Final Report published in April 2008, sets out a number of procurement priorities, which it expects Local Authorities to consider. Whilst these matters fall specifically to Authorities through their Standing Orders and Financial Management Regimes, the support the development of areas of mutual benefit, to identify where collaborative Districts procurement arrangements could add value and efficiencies.
B. Procured Services

LTP3 will be delivered by a combination of in house provision and contracted services. Even allowing for the current fiscal constraints, a considerable value of procurement activity is undertaken associated with delivering the LTP, that offers potential efficiencies with smarter procurement techniques and collaborative working.

C. Progress and Successes from LTP2

Highway Maintenance

Substantial benefits are gained by working together to develop a consistent approach to the management of the highway network in the Area, in particular through the joint procurement of specialist services. The Highway Infrastructure Management Group (HIMG) have established specialist groups, to allow officers to share knowledge and experience, identify and promote good practice, benchmark services, identify opportunities for joint procurement, and co-ordinate programmes of work.

To support joint working, a number of specialist groups reporting to HIMG have been established, including:

- Pavement Management
- Winter Service
- Technology
- Highway Structures
- Street Lighting
- Asset Management

Working together and identifying a lead role for integration with national initiatives has allowed the Districts to share knowledge, expertise and costs, and to ensure that consistent data is produced across the Area for use in the development of this LTP.

Joint working is actively encouraged, and a wide range of services have been jointly procured. Initially this was done to ensure cost effective access to a number of shared services, such as the provision and maintenance of transport statistics through the long standing Joint Data Team, based in Solihull.

Discussions with local businesses through Think Local initiatives identified that in respect of small value specialist services, individual contracts by each Authority did not provide an economic package (notwithstanding the duplication of procurement). Accordingly, provision of services has been aggregated across Authorities, to form a package that offers economies of scale, for example:
• Skid resistance measuring procured by Dudley.
• Carriageway Scanner surveys procured by Solihull.
• Coarse visual inspections and detailed visual inspections procured by Walsall.
• Weather forecasting procured by Dudley.
• ICELERT weather display information procured by Sandwell.
• Salt procured by The Black Country Purchasing Consortium.
• The Metropolitan Area Traffic model PRISM and other data support procured by CEPOG’S Core Support Team.
• The Project Management System procured by Dudley.

Implementation of the above has demonstrated the benefits of undertaking joint procurement, giving much greater ‘buying power’ through packaging contracts to make them more attractive to suppliers, thereby achieving more competitive prices. In addition, significant savings are made in administrative costs and staff time by having one Authority manage each contract, rather than each Authority going through the same process of contract preparation, tendering, tender assessment, award and contract management.

By combining contract mechanisms into a single integrated service delivery process, we have rationalised demands on public sector resources by eliminating wastage and creating efficiency savings through economies of scale. This demonstrates commitment to the collaborative working approach in line with Sir John Egan’s principles “Rethinking Construction” and Sir Peter Gershon’s review of public sector efficiency.

In respect of Transport Asset Management, joint working has ensured a consistent approach across the Area. This has secured consistency of data collection, improved reliability of data coverage, increased accuracy and confidence in our digitised networks and the exploration of deterioration modelling techniques.

Collaborative working has fostered improved flexibility for responding to local data collection priorities, particularly when meeting specific project driven targets, such as Birmingham’s Highway Maintenance Public Finance Initiative (PFI). It has also created a framework for delivering bespoke staff training programmes and developing survey formats which target the parts of the network previously neglected by BVPI’s.
In financial terms alone it is estimated that the joint procurement arrangements associated with Highway Maintenance, presently in place, save the Area’s Authorities circa £150,000 each year, with the prospect of much greater savings in the future from the new initiatives that are being developed.

**Highway Improvements**

The initiatives set out above offered efficiencies for provision of specialist, but nevertheless straightforward (insofar as contractual matters are concerned) services. A more difficult area for joint working is in the area of construction associated with improvements to the highway, where complex contractual issues and conflicts between local practices can arise.

Analysis demonstrates that there was considerable duplication of procurement processes associated with minor improvements in each of the 4 Black Country Authorities - a potential workload of circa £20m that could be accommodated in a singly procured framework arrangement. Against this background, a Black Country Contract Group was established to work collaboratively to agree a common format for Standard Details, Specification, Method of Measurement and Conditions of Contract. The contractual provisions were modelled on a Framework Arrangement developed over many years by Dudley and recognised as good practice by the Audit Commission in their report Modernising Construction. This enabled a single host to have oversight of the Framework, with individual components of work being managed and controlled locally.

Sandwell were in a position to extend their current term contract by 12 months and host the establishment of the Black Country Minor Works Framework Contract through a full OJEU process for work in the Black Country – including Centro activities.

**Black Country Minor Works Framework**

This seeks to achieve back office savings in the procurement of works (typically Smart Routes, Local Safety Schemes, and Minor Improvements etc) by development of a collaborative working contract both for works to circa £500k, and in delivery of cross boundary schemes. The contract also seeks to deliver a greater level of confidence in programme delivery by avoiding delays in procurement occasioned when projects are tendered on an individual basis.

The framework contract that comprises a basket of rates that underpin local instructions has 2 categories of work: -

1. From £0 to £50,000 based on a simplified Conditions of Contract with a simple call off order.
2. From £50,000 to £500,000 based on the ICE Minor Works Contract.
The contract is between Sandwell Council and each individual contractor with the remaining three councils and Centro having rights under the Contracts (Rights of Third Parties) Act 1999 to require the Contractor to carry out works orders under the terms of the overarching framework.

The new contract commenced on 21st January 2010 and is now fully operational. The framework of 6 contractors is administered by a management board with representatives from each authority, which seeks to drive up performance, ensure a consistency of approach, ensure equitable use of contractors between authorities and improve programme delivery by regular dialogue with contractors on potential future workload and ensuring no contractor becomes overstretched.

Cross Boundary Working

Administrative boundaries can be artificial when considering schemes that cross authority boundaries and a joint working approach can deliver efficiencies.

Programme Management

During the LTP2 period a Capital Programme Monitoring system, IMPREST, recognised by DfT as good practice, has been procured and developed to provide Members of the P&T Monitoring Group with contemporaneous information for Major Schemes. In addition, the system has been used to monitor in detail the UTC Major Scheme and some Authorities are using it as their sole source of information for project and programme management system.

D. LTP3 Objective Alignment

<table>
<thead>
<tr>
<th>K01 – Economy</th>
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<tbody>
<tr>
<td>• Understanding, and actively engaging with, local markets enables stimulation of the local economy.</td>
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<tr>
<td>• Rationalised demands on public sector resources by use of combined contracts across the Metropolitan Area assists local business.</td>
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<tr>
<td>• Use of local contractors supports local economy.</td>
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<tr>
<td>• Authorities have signed up to a concordat for small and medium enterprises in the community</td>
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<tr>
<td>Section</td>
<td>Details</td>
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<tr>
<td><strong>KO2 – Climate Change</strong></td>
<td>• Sustainable procurement seeks to take on board climate change typically through recycling of aggregates to reduce the use of natural resources.</td>
</tr>
<tr>
<td></td>
<td>• Retread processes for Highway Surfacing reduce the use of bitumen products, virgin aggregates and energy</td>
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<tr>
<td></td>
<td>• Through Asset Management Planning, where resources permit, whole life costs to be taken account of in construction techniques.</td>
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<td></td>
<td>• Monitoring progress with development/ implementation of cool asphalts</td>
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<tr>
<td><strong>KO3 – Health, Personal Security and Safety</strong></td>
<td>• The procurement of contractors through a quality appraisal process that takes on board their approach to dealing with the travelling public whilst undertaking works on the public highway has a beneficial impact on the safety of the travelling public.</td>
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<tr>
<td></td>
<td>• Health &amp; Safety Records are assessed through RIDDOR and performance compared to stated policies.</td>
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<td></td>
<td>• Proactive management of works on the highway secures safety of the visually and physically impaired.</td>
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<tr>
<td><strong>KO4 – Equality of Opportunity</strong></td>
<td>• Embedded in procurement processes is the requirement for contractors to have equal opportunity policies and demonstrable practices.</td>
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<td></td>
<td>• A number of major contracts have implemented training schemes to assist the unemployed youth and integration of offenders.</td>
</tr>
<tr>
<td><strong>KO5 – Quality of Life and Local Environment</strong></td>
<td>• Works on the highway can have a significant impact on the local environment through creation of dust noise and restricted access a number of contracts engage with the Considerate Contractor Scheme that monitors the working methods and recommends improvement.</td>
</tr>
<tr>
<td></td>
<td>• Positive encouragement by the contractor of interactive with pollution control colleagues.</td>
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<tr>
<td></td>
<td>• Works undertaken to avoid peak traffic to reduce congestion.</td>
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</tbody>
</table>
E. Major Influences on Procurement

Understanding the market for construction contracts enables effective packaging of work. By developing larger collaborative contracts, there is opportunity to smooth workflow and achieve economies of scale by avoiding peaks and troughs of demand.

F. LTP3 Policies – Procurement

The WMs through the WM Procurement Group is developing a Procurement Strategy to identify how:

- Performance can be improved
- Partnership working can be delivered
- Modern procurement techniques can be developed
- Capacity can be built to deliver the policy objectives
- Working with local businesses can be developed.
- Sustainable procurement can be supported
- Colleagues and service users can be consulted and trained

Policy TAM6: To improve the performance of delivered services

Actions

Action 1: Proactively monitor and manage delivery

In the current economic climate, whilst funding may be reduced, there is an even greater need to ensure delivery on time and to budget and to make the best use of scarce resources.

Delivery, performance and making best use of resources is a matter that is high on the Members’ Agenda, and the LTP3 Monitoring Committee (LTP3MC) has been established to monitor and scrutinise delivery performance, receiving reports from IMPREST – the Capital Programme Monitoring System. This identifies financial and project progress, together with an alert on risk status. By this means opportunities for re-profiling the delivery of projects can be considered and measures put in place to ensure best use of resources.

The suitability for purpose of IMPREST is being kept under review to ensure that the most appropriate programme management techniques and systems are being utilised.

The Procurement Group is a catalyst for the sharing of best practice. Typically, contract formats are considered such as the Minor Works Framework, drawing on experience with the successful Dudley Framework and LEAN review currently underway in Walsall.
The LEAN review is an approach that seeks to eliminate waste in the process under consideration. In the case of the Walsall, the review challenged existing processes associated with reactive maintenance, seeking to drive out non value-added activity.

The Minor Works Framework developed during the LTP2 period has enabled savings from joint procurement and, as local contracts expire, the Minor Works Framework is being adopted for work in the Black Country Authorities’ area.

The Major Works Framework (MWF) is intended to facilitate the design, construction and delivery of local transport schemes comprising highway improvements in excess of £500k, together with works on bridges and structures. The contractual model is that individual schemes utilising the Major Works Framework will be procured under the NEC Option C Contract, namely Target Price with an incentivised Pain/Gain shared between the contractor and employer. The contracting authorities will be all of the Metropolitan Authorities, together with Telford and Wrekin Council and Centro.

The contract is seen as key to achieving efficiency savings in delivering the Implementation Plan and specialist Cost Consultancy Support from a practice that holds extensive local cost data is essential to taking the contract forward. An essential component in managing the MWF is the proactive management, control and structured approach to risk.

The benefits that could be achieved by operating a single framework include:

- Consistency of approach and process for the delivery of the projects that deliver the objectives of the LTP.
- Sharing of technical knowledge and cost intelligence for development of a Major Works Frameworks Estimating database
- Increased awareness of risk and opportunity
- Stimulation of innovation and continuous improvement through the Framework Community Group consisting of participating authorities and Panel Contractors (more than one to be awarded)
- Potential to share risk of cost overrun utilising a risk reserve administered by the Project Board (whilst this applies initially to cross boundary Smart Route implementation there is potential upon greater devolvement of transport funding to apply this to disparate Major Schemes)

Action 2: Continue to develop the Black Country Minor Works Framework

Action 3: Implement the Major Works Framework
It is considered that the above approach takes forward the benefits of partnership working to the next level recognising the issues that have emerged over 12 years of using this approach.

The Major Works Framework seeks to modernise the contracting approach, however, it is recognised that the commercial environment can be volatile with opportunities presented and potentially lost as market conditions change.

In managing programmes of work it is essential, therefore, that a mixed economy is promoted to ensure on going value for money it is proposed that award of contracts will be monitored typically:

• Analysing a mix of arrangements to demonstrate value for money.
• Develop details of spend analysis.
• Identify current and potential commodity Contracts (i.e. salt)
• Assess the impact of Birmingham PFI on Market conditions not only on availability of contracting resource but also on potential draw down of arrangements.

Action 4: Take into consideration market conditions
A number of national and regional commodity contracts are in place and these are to be supported where economically advantageous.

Transportation services are delivered under a mix of in house resource and external consultants. In the current climate there is a need to maximise available resource, and establishment of the Implementation Plan will enable a resource alignment exercise to be undertaken to explore the in house resource capacity that is available to deliver programmes. It is anticipated that this will enable retention of skills vital not only to support authority’s intelligent client role but also to deliver services across authority boundaries.

The Metropolitan Authorities are working together to review the use of consultancy services with the objective of determining those that could potentially be resourced through the use of spare capacity (where this offers best value against consultancy provision).

Shared services are therefore being explored adopting the guiding principles that:

- Service change should be underpinned by an appropriate business case, with a realistic assessment of all associated costs and benefits, infrastructure requirements, timescales and risks.
- Irrespective of any service delivery change, participating Councils should retain an appropriate level of control and oversight.
- The exercise should recognise the need for transparency and fairness in relation to shared costs and benefits.
- Shared service proposals should take account of each Council’s strategic direction, policy initiatives and improvement plans.
- All Councils should be required to play an important role in championing identified proposals
- All activities should be supported by effective engagement with staff, elected members, trade unions, customers and the general public.

Action 5: Support involvement in national and regional commodity contracts

Action 6: Explore the opportunities to build capacity through joint working and exploring better utilisation of existing internal resources across the Metropolitan Authorities
It is recognised that there will be a need for a range of specialist consultancy services and Centro is leading on engaging with the Highway Agency’s Framework Consultancy arrangements.

In terms of professional services procured from external resources, a number of arrangements are currently in place:

- The Joint Data Team Contract includes provision for commissioned services
- The Highway Agency Project Support Framework Contractual arrangements have been used for employment of consultants.
- Authorities have a number of local arrangements in place.
- The Major Works Framework includes provision for design services to support delivery of schemes.

The adoption of a collaborative procurement framework agreement should result in best value procurement both in terms of:

- Establishing best practice specifications and services provision.
- Benefiting from collective economies of scale through large volume procurement requirements.

These services (framework agreements) would be accessed where services cannot be provided by other Local Authorities, or where they do not offer best value over and above framework estimates.

A number of initiatives are in place to support local business:

- ‘Find It in Sandwell’
- The Black Country Procurement Portal,
- ‘Think Walsall’.
- Birmingham working with local business linked to regeneration.

The contribution of LTP funded works to the local economy is valued and assistance is made available to main contractors to find local supply chain partners ensuring healthy competition, value for money and a potential to reduce the carbon footprint. The use of local businesses and appointment and development of local labour is monitored within contracts.

This will be further developed in particular through the supply chain of the Major Works Framework.
Sustainability is built into local procurement strategies, processes and contracts to ensure that the most appropriate approach is adopted.

The way in which authorities purchase goods and services can influence the CO2 balance resulting from its highway maintenance activities.

The introduction of price/quality tendering is one way in which contractors can be encouraged to innovate in service design. For example, if a tender evaluation model were to show a significant proportion of the assessment being directly attributable to the volume of CO2 that would be emitted from the contractor’s proposed service, then contractors would be more likely to readily invest in the development of low carbon technology.

Although barriers exist in the form of European trading laws, encouragement of local purchasing and local employment could have a major impact on the volume of fuel burnt in getting labour, plant and materials to the location of works in this vein such an approach supports PROC5 – Support local Businesses.

New materials that require less energy in their manufacture use may not necessarily be the cheapest, especially during early years of their development. Ways of encouraging the development and testing of such materials will be explored.
LTT5: A RAIL AND RAPID TRANSIT NETWORK AS A “BACKBONE FOR DEVELOPMENT” (RR)
Passenger Rail  
(Network Rail and Centro Schemes)

A. Role of Rail

The rail network has a pivotal role in supporting the policy objectives of LTP3. The Metropolitan Area lies at the heart of the UK rail network, which supports both passenger and freight, and this provides both challenges and opportunities for LTP3.

Passenger rail provides high capacity, fast and reliable connectivity across local, regional and national networks. This allows people to live and work in a greater range of places within the Travel to Work Area, increasing their access to employment opportunities. At the same time, businesses have access to a greater employment pool allowing them to recruit and grow, improve their own productivity and have wider access to markets.

The fast, reliable and accessible attributes of passenger rail are highly attractive and encourage more sustainable travel patterns, whilst rail travel carbon emissions per kilometre are lower than private car travel. Passenger rail therefore has an important role in delivering LTP3 Strategy objectives towards supporting economic growth, reducing carbon emissions and reducing road congestion.

B. Rail Partners: Roles and Responsibility

Department for Transport (DfT)

DfT sets the overall framework and strategy for railways and provides public funding in England and Wales. It procures and oversees private Train Operating Companies’ delivery of the 16 rail franchises in England and Wales and also defines outputs and funding for the rail industry on a five-year cycle, known as Control Periods.

Office for Rail Regulation (ORR)

Created through the Railways Act 2005 (previously to which existed as an independent rail regulator), this is an independent statutory body, which regulates Network Rail, secures compliance with relevant health and safety law, licenses operators of railway assets and enforces competition law in the rail sector. It has a key role in the contractual framework for the rail industry, undertaking periodic reviews of access ‘charges’ and overseeing the 5-year business planning process, which determines funding levels and outputs.
Centro

Centro is the promoter of rail in the Area and works with stakeholders to identify, develop and implement rail schemes and strategies. It funds incremental improvements to rail services and has a statutory role to work with stakeholders up to 25 miles outside the Metropolitan Area to promote rail schemes which can benefit or influence rail within the Area. Centro has developed the Integrated Public Transport Prospectus, which outlines an aspirational rail network, which has been used to inform LTP3. It also develops, implements and operates local rail Park & Ride across the Area, as well as promoting strategic Park & Ride.

Network Rail (NR)

Network Rail, a company limited by guarantee, owns and operates Britain’s fixed rail infrastructure, including rail stations, which it leases to train operators with the exception of Birmingham New Street, which Network Rail operates directly. It also has responsible for the reliability of the network and leads on performance and industry planning. DfT provides grant funding, and Train Operating Companies pay Network Rail track access charges.

Train Operating Companies (TOCs)

Train Operating Companies operates franchises as tendered by the DfT, typically for 7 years although longer franchises are being proposed. London Midland is the principal TOC in the Area, initially until 2015, operating all suburban rail services. Additional TOCs cover other regional services, the Cross Country network and the West Coast Main Line network.

Rolling Stock Leasing Companies

Rolling Stock Leasing Companies (ROSCOs) own the majority of rolling stock which is then leased by the TOCs.

Passenger Focus

Passenger Focus is a statutory body funded by DfT to protect passengers’ interests by ensuring that passengers’ views are represented whenever decisions are taken that affect the rail network. It is responsible for the National Passenger Survey.

C. Progress and Successes from LTP2

Rail Patronage in the Metropolitan Area

During LTP2, rail patronage across the Area has continued a long-term growth trend reaching 37.6M in 2008/09, up from 19.7M in 1994/95. This equates to 1.4M passenger journeys per 100,000 of population, the second highest figure of the major urban areas outside London, after Merseyside.
Rail Successes

Rail patronage growth during LTP2 can be directly attributed to the policies and schemes delivered by Centro, Local Authorities and the rail industry, which include the following:

i Park & Ride Expansion

Centro delivered over 600 additional Park & Ride up spaces across the Area during the LTP2 period, from 5587 at the start of LTP2 to 6200 at the end of LTP2. Park & Ride occupancy was at 95% during 2008/09 compared to 80% in 2005/06.
ii New West Midlands Rail Franchise

In 2008, London Midland was awarded the new rail franchise covering the local rail network. Enhancements resulting from the new franchise include new trains (inc. the Parry People Mover), additional passenger capacity from new services, longer trains and increasing reliability. Such factors have increased the attractiveness of rail.

iii West Coast Main Line Upgrades

During LTP2, Network Rail completed the upgrade of the West Coast Main Line which provided a significant step forward for rail, including increased rail capacity, reduced journey times, additional rail services, improved reliability and increased access to the network during off-peak times.

iv Real Time Information

Centro, in partnership with London Midland, has now installed Real Time Information at all local rail stations across the Metropolitan network, ensuring passengers have accurate information about their services and this contributes towards increasing levels of rail passenger satisfaction with services.

v Resignalling and Network Enhancements

Network Rail have undertaken a series of resignalling programmes and wider rail network enhancements to increase the capacity and reliability of the Metropolitan Area rail network. Schemes included:

- Coventry Area resignalling;
- Gibbet Hill line doubling;
- Tyseley Junction remodelling;
- Stratford Line resignalling and enhancements

Committed Rail Schemes

Given the longer term nature of rail scheme development processes, the following major rail schemes developed during LTP2 will begin implementation during Control Period 4 (2009-14) and therefore during the timeframe of LTP3:

i New Street Station Gateway

In 2010, following preparation works, full works began on the redevelopment of Birmingham New Street. This is one of Europe’s busiest rail stations, handling 140,000 people per day, over twice its original design capacity, and is being redeveloped to provide a world-class gateway to Birmingham city centre and the Metropolitan Area.

Network Rail, Birmingham City Council and Centro are working together to deliver the £600M redevelopment. Birmingham New Street Gateway will deliver the following benefits:
• A new concourse that is three and a half times bigger than at present
• Increased passenger handling capacity to meet forecasted demand over the next 30-40 years;
• Increased accessibility for all users to and within the station;
• £2bn of economic benefits including 10,000 jobs across the Metropolitan Area;
• Catalyst for regeneration of the south side of Birmingham city centre

ii Cross City South Extension & Bromsgrove Rail Station Redevelopment

Cross City South is the busiest local rail corridor in the Metropolitan Area and is served by 10 min frequency service patterns. Between 2005 and 2008 there was a 26.9% increase in AM peak loadings. The route runs between Longbridge to Birmingham city centre, with 2 trains per hour running from Redditch.

Bromsgrove and Redditch are two major towns within the Travel to Work Area and thus have significant flows into Birmingham and the Area as a whole. Just two trains per hour serve Redditch, resulting in an unattractive service pattern, as well as overcrowding on existing services. Bromsgrove only has an hourly off-peak service and no direct link to Longbridge.

Providing additional rail capacity at Bromsgrove Station is limited by the length of platforms, notably the northbound platform, which is constrained by road crossings and the base of the Lickey incline. Trains with more than 3 coaches cannot serve the existing station. Additionally, there is limited car parking provision, again limiting rail access, as well as contributing to high levels of on street parking in the adjacent area.

NR, Centro and Worcestershire County Council are working together to promote a new station at Bromsgrove, located to the south of the existing one, which will include a 300 space Park & Ride facility. The new station would be served by Cross City South services resulting from electrification of the route between Barnt Green and Bromsgrove. Upon completion, both Redditch and Bromsgrove will be served by 3 trains per hour and have platforms able to handle 6 coach trains.


### D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Key Benefits</th>
</tr>
</thead>
</table>
| **K01 Economy** | • Supports efficient movement of people to areas where economic activity taking place especially commuters to centres during peak periods.  
• Helps reduce congestion on the highway network freeing up capacity for essential vehicle movements  
• Supports the economic regeneration of Longbridge; |
| **K02 Climate Change** | • Modal shift encourages reduced reliance on the private car thus reducing carbon emissions |
| **K03 Health, Personal Security and Safety** | • Complementary station travel plans to encourage use of active modes to access stations.  
• Continued investment in security measures, including increasing passenger capacity to reduce overcrowding, to reduce crime and fear of crime.  
• Likelihood of personal accident lower amongst rail users. |
| **K04 Equality of Opportunity** | • Improves access to goods, services and opportunities for those without access to a car or with mobility impairments. |
| **K05 Quality of Life and Local Environment** | • Railway corridors comprise part of local authorities’ Green Infrastructure Networks and provide habitats for flora and fauna.  
• Supports migration of species in response to climate change (K02 also)  
• Trees in railway corridors capture carbon, improve air quality and help prevent soil erosion. (K02 and K03 also) |
E. Major Influences on LTP3 Rail

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3. This includes an analysis of relevant plans, policies and programmes from international through to local level and their implications for LTP3, including rail. In addition to the policy framework identified for Rail by the ISA, the following have been identified as major influences on passenger rail over the LTP3 period:

**Integrated Public Transport Prospectus**

Centro, in conjunction with partners, has developed the Integrated Public Transport Prospectus (IPTP), which outlines the long-term vision for public transport across the Area, taking into account existing and future major development. It includes a rail and Rapid Transit network, which provides a “backbone” for rapid, high capacity public transport which provides access across the Metropolitan Area, as well as providing connectivity to the wider Travel to Work Area. The rail network outlines new passenger rail corridors and new stations to help meet the growing demand for rail travel. The rail and rapid transit map is outlined below and informs the development of LTP3 Rail.

**Regional Rail Development Plan**

Local Authorities of the West Midlands Region and Centro, in conjunction with the Regional Rail Forum, have developed the Regional Rail Development Plan (RRDP). This outlines patronage drivers along rail corridors, aspirational service provision, and the required network enhancements to deliver additional capacity and/ or increased service reliability. Aspirational rail service provision takes into account the released rail capacity which will be gained from High Speed Rail.

**Making the Right Connections**

In 2010, Centro investigated the opportunities to deliver world-class rail services across the Area through enhancing rail travel through a ‘whole journey’ approach. Whilst the RRDP outlines enhancement of rail services and network requirements, Making the Right Connections focuses on the requirements and aspirations of passengers and how Centro could enhance station facilities and infrastructure to deliver world class services.
West Midlands Long Term Rail and Rapid Transit Network
Rail Industry Value for Money Study

Sir Roy McNulty was appointed by the previous Government to undertake a fundamental review of the costs and value for money of rail in the UK. This was in response to the very high costs that exist in the industry, which affect the affordability of rail services. The review is likely to lead to significant changes in some areas of the industry and this will inevitably impact on the delivery of LTP3. It is hoped that the fundamental outcome will be increased affordability. Government is also reviewing other aspects of rail policy, such as franchise policy, and this could also lead to changes in how rail services are delivered over the LTP3 period.

Route Utilisation Strategies (RUS) and CP5 Business Plan

The rail industry is currently developing its business plan for Control Period 5 (2014-19), and this will take the outputs and recommendations of the various Route Utilisation Strategies as a key input. The West Midlands and Chilterns RUS is the main document for the Area, and it outlines the interventions the industry considers necessary to deliver predicted growth. The five-yearly business planning cycle is the main process through which Government funds the rail industry, and therefore ensuring that the business plan properly reflects the requirements of the Area is essential. Centro is working closely with NR and other industry partners to ensure that there is close alignment between the LTP3 strategy and the RUS.

E. LTP3 Policies – Rail

Within the context of LTP3 Objectives, ISA and the major influences outlined above, the following LTP3 rail policies have been developed.

Policy RR1: Expanding Rail Network Capacity:
To expand local rail network capacity to meet forecasted growth in patronage, delivering the schemes and objectives of the Regional Rail Development Plan. This will include maximising capacity of the ‘classic’ rail network derived from High Speed Rail.

The West Midlands Regional Planning Assessment assesses long-term patronage, opportunities and challenges for the Metropolitan Area rail network over the next twenty years in the context of forecast changes in population, the economy and travel behaviour, and associated spatial policy and strategy. It has forecasted a long-term patronage growth range of 30%-60% (individual rail corridors vary) between 2011 and 2026, reflecting different rates of employment and varying levels of economic growth.
DfT’s policy response for rail patronage growth up to 2014 is for the industry to provide longer platforms to cater for longer trains, along with supporting infrastructure such as additional depot capacity as required. Longer trains will be provided through 1300 additional carriages, which will provide for an additional 20% increase in seating capacity across the network, forecast to cater for demand up to 2014. Therefore, whilst patronage growth can be accommodated by train lengthening of existing services, long term additional demand generated primarily by population growth areas and economic regeneration, can only be delivered through additional rail services along existing corridors or from new rail corridors.

Similar attention needs to be focused on rail stations themselves, if we are to deliver world-class rail services across the Area. To this end, Centro is working with DfT, Network Rail and London Midland to transfer ownership of Metropolitan rail stations to Centro. This will complement Centro’s existing role within rail infrastructure ownership and development, allowing Centro to deliver world-class rail services.

High Speed Two (HS2) presents a major opportunity to deliver an expanded and enhanced rail network across the Area through the transfer of existing rail services off the existing network and onto High Speed services. This presents a significant opportunity for Centro and rail partners to deliver a step change in local rail services in terms of new services, reduced journey times and improved reliability. This released capacity will help meet forecasted long term demand up to 2026 and beyond. Centro will therefore work with rail industry partners to develop and implement schemes within the RRP, including maximising released capacity derived from the opening of HS2.

**Policy RR2: Making the Most of the Existing Network:** To work with DfT, ORR, Network Rail, Local Authorities, Train Operating Companies and Rail Freight Operators to identify and develop schemes on the rail network to increase capacity and reliability for both passenger and freight services.

In the longer term, additional train services and new rail lines will be required to meet patronage demands. New rail lines require long term planning and development which means the bulk of future patronage growth will need to be handled by the existing network. To deliver additional rail services in existing rail corridors, the rail network must operate as effectively as possible, maximising capacity and services to meet growth. Ensuring this network efficiency is even more important given that many of the rail corridors in the Area are mixed traffic between fast, slow, passenger and freight services.
Therefore, Centro will work with rail industry partners to identify and develop schemes on the rail network to increase capacity and reliability for both passenger and freight services. This is in alignment with the LTP3 principle of Smarter Management through making the best use of existing infrastructure.

**Policy RR3: Passenger Rail Standards and Network Accessibility:** To work with Local Authorities, Network Rail and Train Operating Companies to deliver high levels of services standards and accessibility which delivers an inclusive network accessible to everyone.

To deliver a world class rail network, it is vital that enhancement to service provision, stations and rolling stock are complemented by high quality rail standards and network accessibility covering the time before, during and after a rail journey. Rail accessibility includes both physical access to rail stations, by all modes, as well as delivering inclusive access to rail use such as tackling barriers to use such as fare levels or off-peak service availability.

Customer Satisfaction surveys undertaken by Centro as well as rail passenger champion Passenger Focus demonstrates a high level of satisfaction with the overall rail product available across the Metropolitan Area.

High quality rail standards and network accessibility cannot be delivered by one rail partner individually and many Authorities and operators have a role to play. Therefore, Centro will work with Local Authorities, Network Rail and Train Operating Companies to deliver high levels of services standards and accessibility, which delivers an inclusive network which is accessible to all.
A. Role of Rapid Transit

Rapid Transit is a key component of the Integrated Public Transport Prospectus, which includes outlined aspirations for a rail and rapid transit network. This outlines new Rapid Transit stops and routes to provide a “backbone” for rapid, high capacity public transport, which provides high quality connectivity across the Metropolitan Area. Rapid Transit corridors have been identified as high volume corridors which cannot be served by rail and, subsequently, provide an integrated rail and Rapid Transit network.

The fast, reliable and highly accessible attributes of Rapid Transit encourage more sustainable travel patterns, whilst Rapid Transit carbon emissions per kilometre are lower than private car travel and, in the case of Light Rail, are zero emission at point of use. Rapid Transit, as part of the rail and Rapid Transit network has an important role in delivering LTP3 Objectives towards supporting economic growth, reducing carbon emissions, reducing social exclusion and reducing road congestion.

Rapid Transit can be delivered using three different mode types:

- **Light Rail**: Delivered using trams and currently operating in the Metropolitan Area as Midland Metro
- **Bus Rapid Transit**: bus based rapid transit mode, proposed to be branded in the Metropolitan Area as Sprint
- **Tram Train**: vehicles which can operate on both the classic rail network and on light rail routes;

The principal attributes of Rapid Transit are:

- **Speed**: forms of public transport that are faster than local bus services, to enable longer journeys to be made within acceptable times, often taken as 45 minutes journey time.
- **Capacity**: forms of public transport which have a higher capacity than local bus services for key flows of movement, typically for corridors of over 12,000 public transport passengers per day
- **Permanence**: fixed permanent links, to shape land use plans and provide security on which to invest in sustainable developments
- **Integration**: to enable journeys to be easily made easily through use of more than one mode or service, with convenient availability of local bus services to make the initial or final connections on a journey.
• **Accessibility:** the provision of accessible infrastructure, information and services, supported by staff with disability awareness training

These attributes are supported by operational aspects to deliver quality through:

• **Frequency:** “turn up and go” frequencies of at least every 8 to 10 minutes which, market research shows, remove the constraint of organising personal time around the timetables of public transport services

• **Reliability:** reliability, through effective operational management and significant segregation from general traffic flow, lends itself to people having confidence in, and so selecting, public transport as a mode of choice

• **Operating hours:** as employment and leisure patterns change, so an 18-hour operating day should be a minimum standard for the rapid transit. This is alongside an aspiration for 24-hour service where demand warrants it.

• **Image:** quality features and strong positive image help rapid transit modes in their impressive performance for modal shift in the corridors where they operate.

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**B. Rapid Transit Partners: Roles and Responsibility**

**Centro**

Centro is the promoter of rapid transit and owns the existing Metro Line One route between Wolverhampton and Birmingham city centres.

**Travel Midland Metro**

Travel Midland Metro currently operates Metro Line One as a concession contract on behalf of Centro.

**Local Authorities**

Local Authorities are partners in the development of Rapid Transit across the Metropolitan Area. Firstly, Local Authorities are responsible for spatial planning which provides the protection of rapid transit routes and alignments, which is critical to allow future Rapid Transit to be delivered, along with providing a foundation for wider sustainable land use planning. Secondly, as Highway Authorities, Local Authorities work with Centro to develop and deliver schemes and supporting measures on the highway network.
C. Progress from LTP2

The only Rapid Transit route currently operating in the Area is Metro Line One. Patronage during the period of LTP2 has remained constant at 5M journeys per annum. Reliability of Metro Line One remains consistently high with overall reliability (measured as a percentage of actual mileage run compared to scheduled mileage) of 99.7% during 2008/09. There are 538 Park & Ride spaces associated with Metro Line One, which during 2008/09 had an occupancy rate of 94% in the AM peak compared to 74% in 2006/07. Metro takes an estimated 1.2 million car journeys off the roads per annum whilst 14% of passengers using Metro formerly used cars for the same journey and 30% of passengers have a car available for their journey.

Rapid Transit Progress

During LTP2, Centro, Local Authorities and partners have developed and delivered the following schemes and initiatives:

i Real Time Information

Centro, in partnership with Travel Metro, has now installed RTI at all Metro stops, ensuring passengers have accurate information about their services which contributes towards increasing levels of passenger satisfaction.

Committed Rapid Transit Schemes

The following major schemes developed during LTP2 will begin delivery during LTP3:

i Birmingham City Centre Extension

Midland Metro has demonstrated its contribution to encouraging sustainable travel patterns, supporting redevelopment, reducing carbon emissions and increasing accessibility, particularly within the Black Country. Therefore, extending the Midland Metro network has been recognised as Regional Transport Priority. At the same time, the existing Midland Metro trams are constraining patronage growth and the scheme will see the introduction of a larger fleet or larger trams to provide capacity to meet existing and future demand.

In February 2011, DfT confirmed funding to extend Metro Line One from Snow Hill Station to redeveloped New Street Gateway station, connecting economic growth points within Birmingham city centre as well as improving access to Birmingham. The £127M scheme will provide significant benefits to Birmingham and Black Country residents as well providing infrastructure to extend Metro further across Birmingham and the Metropolitan Area. Key benefits include:

• Increased access to employment, particularly from the Black Country, whilst linking major employment points across Birmingham city centre
• Supporting or creating 1,300 jobs
• Increasing GDP by £50m per annum, contributing to reducing the GVA output gap
• Releasing rail capacity at Snow Hill by allowing Platform 4 to be returned to rail use
• Increasing Metro passenger handling capacity and attracting new patronage
### D. LTP3 Key Objective Alignment

| K01 Economy | • Supports efficient movement of people to areas where economic activity taking place, especially commuters, to centres during peak periods;  
• Helps reduce congestion on the highway network increasing reliability of traffic flows to the benefit of all road users;  
• Rapid Transit provides permanent public transport infrastructure which helps attracts inwards investment;  
• Links businesses to a larger employment pool and improved access to business markets; |
|---|---|
| K02 Climate Change | • Rapid Transit (regardless of mode) produces lower carbon emissions per passenger km than private car; thus modal shift to Rapid Transit reduces carbon emissions;  
• Metro Line One is zero emissions at point of use and is currently supplied by green derived energy sources; |
| K03 Health, Personal Security and Safety | • Smarter Choices and travel plans to encourage use of active modes to access rapid transit stops.  
• Continued investment in security measures, to reduce crime and fear of crime.  
• New trams will increase passenger capacity to reduce overcrowding;  
• All existing Metro vehicles are fitted with CCTV and have on board conductors;  
• Metro stops are well lit and have contact help points and CCTV;  
• Metro produces zero emissions at point of use which helps improve air quality; |
K04 Equality of Opportunity

• All existing Metro trams and tram stops comply with the latest disability discrimination regulations to ensure high quality accessibility to Metro;
• Rapid transit expands peoples access to employment and education opportunities
• Future rapid transit extensions will include easy access vehicles and stops to ensure an inclusive and easy to use network;

K05 Quality of Life and Local Environment

• Railway corridors comprise part of Local Authorities’ Green Infrastructure Networks and provide habitats for flora and fauna.
• Supports migration of species in response to climate change (K02 also)
• Rapid Transit proposals within major centres such as Birmingham city centre are extrinsically linked to public realm enhancements such as pedestrianisation;

E. Major Influences on LTP3 Rapid Transit

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3. This includes an analysis of relevant plans, policies and programmes from international through to local level and their implications for LTP3, including rapid transit. In addition to the policy framework identified for Rapid Transit by the ISA, the following have been identified as major influences on Rapid Transit over the period of LTP3:

Integrated Public Transport Prospectus

The IPTP outlines a Rail and Rapid Transit network, including new Rapid Transit corridors and new stops across the Metropolitan Area. The Rail and Rapid Transit map is outlined on page 176.
F. LTP3 Policies – Rapid Transit

Within the context of LTP3 Objectives, ISA and the major influences on LTP3 rail outlined above, the following LTP3 rail policies have been developed. The specific interventions required to deliver each policy during LTP3 are outlined in the Implementation Plan.

Policy RR4 – Expanding the Rapid Transit Network:

To expand the rapid transit network with an appropriate form of rapid transit for each individual corridor in the network

The Rail and Rapid Transit network outlines new rapid transit stops and routes to provide a “backbone” for rapid, high capacity public transport, which provides high quality connectivity across the Area. Whilst the Area can demonstrate a comprehensive local bus network, the ability for the local bus network to deliver connectivity for a “live anywhere, work anywhere” economy is limited. Additionally, the ability to deliver additional rail corridors is limited by cost and land availability. This impacts on businesses’ ability to attract the calibre of workforce it needs and limits people’s ability to access employment and education opportunities.

Rapid Transit therefore provides the missing strategic connectivity required to support economic, population and housing growth across the metropolitan area. The Rapid Transit corridors identified in the Rail & Rapid Transit Network are all high volume corridors, which cannot otherwise be served by rail services. Rapid Transit schemes require long term planning to identify, develop, fund and deliver schemes as well as ensuring that Rapid Transit routes are embedded into the land use planning process.

As the Rail and Rapid Transit network represents a long term aspirational network, it is realistic to assume that over the lifetime of LTP3 the entire rapid transit network will not be fully delivered and scheme delivery will need to be focused upon priority corridors linked to future growth and regeneration. Centro and Local Authority partners will work with partners to identify priorities and expand the Rapid Transit network reflecting funding availability and wider LTP3 Objectives and principles.

Policy RR5 – ‘Ultra Low Carbon’ Rapid Transit:

To ensure that future rapid transit will be ultra low emission at source with an aspiration target for Zero Emission as technology permits.
Rapid Transit is important to support travel demand derived from economic, population and housing growth as well as encouraging modal shift away private transport. Increased levels of Rapid Transit patronage would also lead to a reduction in carbon emissions as demonstrated in the table below:

<table>
<thead>
<tr>
<th>Mode</th>
<th>Carbon (grams) Emission Per Passenger KM³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Car Petrol 2L</td>
<td>140</td>
</tr>
<tr>
<td>Private Car Diesel 2L</td>
<td>120</td>
</tr>
<tr>
<td>Bus Rapid Transit</td>
<td>90</td>
</tr>
<tr>
<td>Light Rail</td>
<td>63</td>
</tr>
</tbody>
</table>

In order to meet national and local climate change objectives, Centro will aspire to ensure that future Rapid Transit - regardless of mode - will be ultra low emission at source whilst electricity used to supply Light Rail routes will be green energy sources. Over the period of LTP3 and beyond, where Bus Rapid Transit schemes are developed, Centro will aspire for BRT vehicles that are ultra low emission vehicles or zero emission vehicles (such as hydrogen fuel cell vehicles).

**Policy RR6 -**  
**Birmingham City Centre Accessibility:**  
To identify rapid transit alignments and develop interim rapid transit to improve access in and around Birmingham City Centre

The Rail and Rapid Transit Network map shows Birmingham city centre as the focal point of the majority of rapid transit corridors, reflecting Birmingham’s role as world city for employment, leisure, retail and educational related journeys along high volume corridors. This provides two challenges that need to be addressed during LTP3:

**i City Centre Alignments**

Birmingham City Centre is a relatively compact centre, which needs to provide appropriate access for private, public and freight related journeys as well as for walking and cycling. As highway space is limited, it important to develop a coherent approach to identifying priority measures or highway allocation for Rapid Transit which is complementary to other highway user requirements.

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3 Source: Centro “Integrated Public Transport Prospectus” (2010)

4 Based upon Diesel powered vehicles
ii Cross City Rapid Transit

Rapid Transit development and delivery is a longer-term process. During this period there is growing demand, especially from the business community, for interim cross city rapid transit to provide the level of accessibility across Birmingham City Centre that would be derived as a consequence of a expanded rapid transit network. However, in order to ensure value for money, proposals should provide infrastructure that can be adapted for use by the proposed rapid transit network routes.

Therefore, in order to meet these complementary challenges, the ITA, Birmingham City Council and the Business Improvement Districts will work together to identify rapid transit alignments and develop interim rapid transit to improve access in and around Birmingham City Centre, which will provide infrastructure that will act as a first phase towards wider rapid transit network routes.
LTT6: IMPROVED LOCAL ACCESSIBILITY AND CONNECTIVITY (LA)
Accessibility Planning

What is ‘Accessibility Planning’?

Accessibility is a concept concerned with people’s ability to get to facilities and services that they need. It is something that is often taken for granted unless, of course, it is difficult to get somewhere. Such difficulties are usually greater for people without access to a car. However, whilst the car is seen as giving universal accessibility, this is not always true with issues relating to congestion, stressful driving conditions and parking at the destination affecting the ease of using a car.

Any aim for maximising accessibility by car needs to take into account safety, congestion and environmental issues relating to increasing car use and social factors, including the needs of those who cannot use a car. There is a need to take account of active modes of travel such as walking and cycling. Also, there is growing awareness of the negative health and environmental effects of car use, which means that some people who have a car want to minimise its use.

Ideally everything that anyone needs access to would be ‘just around the corner’. Obviously, this is never likely to be achieved and has been exacerbated, in recent years, by the ‘centralisation’ or rationalisation of services, creating larger supply centres or ‘centres of excellence’. This has resulted in fewer locations and/or de-centralised locations. Both can increase the need to travel and thus the possibility of accessibility problems.

Accessibility Planning addresses issues concerned with the location of facilities and services, which can be influenced by spatial land-use planning decisions, and by the availability of suitable transport services to link people with facilities and services. It is clearly closely linked with national and local social inclusion, road safety and equalities objectives.
National statistics show that households in the lower income quintiles have the lowest car availability, as might be expected. The following table shows the variations above and below the average (100 on the graph) for the five income quintiles (1 = the lowest and 5 = the highest income quintile).

It is no surprise, therefore, that people in households with the lower incomes walk more or make greater use of public transport, and especially buses and other public transport which includes taxis, private hire vehicles and community transport, than people with greater incomes. The following table shows the variations above and below the average (100 on the graph) for the five income quintiles.
Research into Indices of Deprivation shows that households with the lowest incomes are prevalent in many areas of the Metropolitan Area, notably across the Black Country, inner city Birmingham, north Solihull and parts of Coventry. This reinforces the need to consider accessibility, both in terms of walking distances and bus journey travel times, for these areas in particular.

Good accessibility not only helps people and families without a car, but also helps those who have a car but who would prefer to travel in a more sustainable way. Improving accessibility for everyone supports the ‘Smarter Choices’ agenda and works in harmony with TravelWise and Sustainable Travel initiatives.

**Partners: Roles and Responsibilities**

The issue of accessibility is so multi-faceted that the range of ‘partners’ is immense. It includes all service providers, firstly those offering educational opportunities, health services and food shops. All employers are, technically, ‘partners’ because most working-age people need access to a job. Providers of personal banking services, post offices and of leisure services, including libraries, should be included. All these should be encouraged to consider accessibility when making service delivery decisions that affect how people can access their services.

The Metropolitan District Councils play an important role, both as the local planning authority for their area, and as providers of many of the services that people want or need to use. The Councils also have Accessibility Planning Officers who can help assess accessibility issues. Each Council has ‘Accession’ software that can plot travel times to specified facilities or locations. ‘Accession’ can use public transport and population data, including subsets of various social factors, to produce maps to illustrate the statistics.

Centro also uses ‘Accession’ in work that takes a strategic overview of accessibility issues and works with partners to improve accessibility. Centro’s ‘flagship’ project is ‘WorkWise’, developed in partnership with the relevant Authority and JobCentre Plus, to help unemployed people get to job interviews and for the first few weeks of their employment in a new job.

**Progress and Successes from LTP2**

Progress has been based on two broad areas – raising awareness of Accessibility Planning as ‘good practice’ and working towards tackling the various accessibility barriers.

The ‘raising awareness’ aspect has included getting Accessibility Planning into the heart of each local planning authority’s development plan process. This will lead on to decisions on new development having to take greater account of accessibility issues, particularly with regard to access by people who do not have a car.
As an example of the above, the Black Country Joint Core Strategy identifies Strategic Centres and Regeneration Corridors as the areas of growth where there is greatest access to employment, services and other facilities by walking, cycling and public transport in order to make employment and services accessible to all. Work was undertaken to map out accessible areas and to resist development in inaccessible areas unless it can be shown that the level of public transport services can be brought up to acceptable standards. Policy HOU2 seeks to locate residential development in accessible locations, building on the work on residential accessibility carried out on behalf of the Metropolitan Authorities’ Accessibility Planning Working Group. Birmingham City Council’s emerging Core Strategy has a similar emphasis.

Tackling the various accessibility barriers has included identifying them as well as taking actions to reduce their impact. There are a number of barriers to travel that are frequently quoted in market research reports. These affect perceptions of ease of travel and, thus, accessibility. However, they are often difficult to quantify or evaluate within modelling work. They include:

(a) Ability to use public transport: factors such as disability, travelling with luggage or small children reduce people’s ability to board vehicles and/or interchange between services.

(b) Affordability: the cost of bus, tram or rail fares can be a barrier, especially if the journey is multi-modal or involves more than one operator.

(c) Anti-social behaviour: some people are discouraged from using public transport because of fear of crime. Indeed, this is a high priority in public opinion and is a clear barrier to increasing patronage.

(d) Availability: local bus, Metro and rail services are not available throughout the night and there are often reduced service levels on Sundays; also many services do not start early enough or operate late enough for people who need to travel outside ‘normal’ hours, for example shift workers.

(e) Certainty: local bus services can be changed, by the operator, without notifying the public and with just 56 days’ notice to the Area Traffic Commissioner (the industry ‘regulator’) which can leave people unsure of if, when and where a bus goes.

(f) Information: vital for infrequent public transport users or for regular passengers using a different route or service and includes information about routes, location of bus stops or stations, frequency, fares and ticketing availability.
(g) Language: important for some foreign visitors but also for some residents for whom English is not their first language.

(h) Ticketing: the normal seven day (or longer) season tickets do not help regular part-time public transport users, who may only need to travel two or three days a week, for example people with part-time or job-share employment.

(i) Unreliability: this undermines people’s confidence, especially for bus use at stops without real-time information displays and particularly for time-critical journeys such as to work or college or for health or other appointments.

A great deal of progress has been made during the last five years in tackling these ‘barriers’ and the following paragraphs illustrate some examples.

The national requirement that all new buses be low-floor and the gradual phasing out of stepped-access buses is making using buses easier for people with mobility difficulties, including people in wheelchairs and carers with children in pushchairs or buggies. Approximately 85% of all buses operating in the Metropolitan Area are low floor and wheelchair accessible, the highest proportion of a bus fleet in the metropolitan areas outside London. Measures to reduce barriers on ordinary local bus services benefit not only people with mobility difficulties but most other passengers as well.

For those who cannot use conventional public transport services, Centro supports ‘Ring & Ride’ which provides bookable ‘door-to-door’ travel.

Affordability is not an issue for senior citizens and people with specific disabilities who qualify for a national concessionary travel pass, although the concessionary passes are not valid for travel before 09.30 Mondays to Fridays. Additionally, Centro has maintained the extra benefits for Metropolitan Area (Centro) concessionary pass holders of being able to travel on Metro and local rail services and after the national 23:00 end of weekday free travel.

Access at railway stations has been improved with lifts or ramps at three-quarters of the stations within the Metropolitan Area and almost all are staffed. There are still issues for people in wheelchairs having to book assistance for boarding the train and there are stations in the travel-to-work area surrounding the Metropolitan Area that do not yet have step-free access.

Centro’s ‘getting around access guide’ explains what services are available across the Metropolitan Area and how to use them. Although aimed primarily at those who need ‘accessible public transport’, it is a useful guide for anyone who is not familiar with using public transport or with the Area.

The ‘Safer Travel Team’ of police and community support officers have had a major impact on reducing anti-social behaviour on buses and at bus stops.
Crime levels on public transport are generally low and reducing but, unfortunately, surveys show that the perception of crime has risen.

Centro has carried out a number of area reviews of local bus service provision, in partnership with the main operators, the relevant District Authority and stakeholders such as major trip attractors. Each area review has involved discussions with the operators about the findings and how these fit with the companies’ business plans, resulting in operators choosing to change their services where the review has shown advantages in terms of increased patronage and/or more efficient use of their bus fleet. The ‘headline’ outcome has been an increased focus on a simpler network with consolidation of some lower frequency routes into turn-up-and-go frequency services, operating along a consistent route. Whilst simpler networks help with people’s understanding, the loss of some off-main road services has highlighted the potential tension between profitability and accessibility. Where services have been lost, Centro has looked to persuading other companies to provide services when required to maintain access to bus services, or as a last resort to provide a subsidised service.

Centro spends some £8½ million annually (excluding support for ‘Ring & Ride’) providing ‘socially-necessary’ local bus services at times and to places that are not served commercially by the local bus operators. Within financial constraints, this expenditure endeavours to ensure that residents have a bus service to their nearest centre at all reasonable hours.

However, the last departure times from Birmingham city centre are generally a few minutes after midnight with some being as early as eleven o’clock. Elsewhere, ‘last’ buses can be earlier, with few departures much after eleven o’clock. Experiments have been undertaken regarding the provision of night buses in Birmingham, but these services have not attracted enough patronage to become financially sustainable. The situation is similar with our local rail services; for example - the last weekday train from Birmingham city centre to some stations within the Metropolitan Area is shortly after eleven o’clock with no train departures at all after midnight.

Centro has worked with the local bus service operators to minimise the number of changes to timetables and routes so that the public can have greater confidence in their local bus services. When changes do take place, Centro works closely with operators to ensure appropriate information is provided to customers.

To help people who have difficulty communicating in English, ‘Language Line’ which is a telephone interpreting service for people, is available at New Street Station to provide assistance with timetables, public transport routes and ticket sales. This service enables access to telephone interpreters in over 150 languages, 24 hours a day, seven days a week. ‘Language Line’ is also available to help access Centro’s services.
Recently, three major studies have been commissioned to improve our understanding of accessibility issues, as listed below:

- **Residential Accessibility across the Metropolitan Area**
- **Commercial Accessibility across the Metropolitan Area**
- **Food Access in the West Midlands Region**

The first two of these were commissioned by CEPOG and led by a Wolverhampton City Council Officer on behalf of the Metropolitan Authorities’ Accessibility Planning Working Group (APWG). The third was commissioned by Government Office for the Metropolitan Area with a Steering Group of health and local authority officers, including representatives of the APWG.

**Residential Accessibility across the Metropolitan Area Studies**

This work was commissioned in order to provide ‘evidence’ to help guide the development of accessibility standards that can inform planning policy concerning the location of developments. It was intended that the research outcomes should be available to the individual local planning authorities to assist with the formulation of Strategic Housing Land Availability Assessments and Development Plan Documents.

In the Literature Review part of this work, the focus was on walking and public transport access comparing different distances to facilities – principally to local centres/shops, schools and work. This led to the adoption of an assessment of ‘high’ ‘medium’ and ‘low’ accessibility, in terms of journey times (in minutes), as shown below:

<table>
<thead>
<tr>
<th></th>
<th>‘High’</th>
<th>‘Medium’</th>
<th>‘Low’</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP facility</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Shopping centres</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Shopping centres</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Secondary school</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

Using the above standards, overall accessibility was calculated as follows:

- ‘High’ to all facilities = ‘High’
- At least ‘Medium’ to all facilities = ‘Medium’
- At least ‘Low’ to all facilities = ‘Low’
- Beyond ‘Low’ to any facility is not included.

The outcome of this research is not only a recommended ‘accessibility’ standard but also a set of ‘Accession’ plots that illustrate and rank accessibility to key facilities for families and households without children. These plots are designed either to help guide residential development to the most appropriate locations in terms of accessibility or to identify what facilities would be needed to make a proposed residential development meet appropriate accessibility standards.
Commercial Accessibility across the Metropolitan Area Study

This study involved mapping how many jobs were within thirty minutes’ travel time using public transport between 08:00 and 09:00 of locations in the Metropolitan Area.

The figure below shows public transport accessibility to identified employment sites:
Early findings of the residential study fed into development of the Black Country Joint Core Strategy.

**Food Access in the West Midlands Region Study**

The Government Office for the West Midlands commissioned the development of a physical accessibility standard for healthy food across the West Midlands region in 2008 with the work concluded in 2009. This standard was developed for use primarily in the development of LTP3s but the research has policy implications for spatial planning, transport and public health agencies and seeks to promote a shift in thinking about the future of ‘healthy’ transport and food. A Steering Group of health and transport professionals oversaw the research, which had a spin-off benefit of bringing two disparate groups of professionals together and thus a better understanding of each other’s positions and priorities in line with the Study’s aim “to create a more joined-up way of tackling public health and access issues”.

Access to shops and supermarkets selling healthy food was mapped to identify gaps in provision and to help formulate a minimum access standard for the region. As well as suggesting a standard, the research revealed attitudes towards shopping for healthy food and identified factors influencing people’s choice, some of which related to other aspects of the shopping journey rather than accessibility factors. Accessibility maps and the original data sources have been provided to each local authority to assist them in their plans and strategies for the future.

The Study recommends a standard of:— “___ percentage of households within 20 minutes, by walking, cycling or using public transport, of a place where fruit and vegetables are sold” (fruit and vegetables were used as a proxy for the potentially wider shopping basket of ‘healthy foods’). The percentage is left blank deliberately for different authorities to determine their target to match local circumstances, rural or urban, etc. The Study also recommends that:— “Issues of access need to be addressed jointly by transport, spatial planning and public health professionals; by adopting a more holistic view of food provision and access to services numerous health and social benefits can be achieved”.

**‘Eatwell in Sandwell’ Project**

In Sandwell, a partnership between the Primary Care Trust (PCT) and the Borough Council has used ‘Accession’ to identify the occurrence and extent of poor accessibility to fresh food shops with the aim of increasing the economic and physical availability of fresh food. Links to census data, through the software package ‘Spectrum’, has also been used to provide information about population characteristics within walking isochrones around shops.
Planning easy access to fresh food within a reasonable walking distance contributes to sustainable communities. This supports Regional Spatial Strategy policies regarding the social infrastructure, inequalities in health and the provision of services.

Using ‘Accession’, walking distance isochrones for over forty local shops were superimposed onto the ten minutes public transport isochrones for supermarkets in and around Sandwell. This has helped the PCT to prioritise which local shops will be contacted about taking part in the ‘Eatwell’ programme. The work has been documented in Sandwell’s LDF Annual Monitoring Report for the past four years.

The above figure shows walking distances of up to 600 metres around ‘Eatwell’ stores and public transport distances for journey times of up to ten minutes duration around major supermarkets. Approximately fifty neighbourhood shops have signed up to the Neighbourhood Renewal Fund ‘Eatwell in Sandwell’ (October 2008). These shops have committed to work in partnership with the PCT to improve access to, and the demand for, healthier food in Sandwell.

**Policy Context for LTP3**

The concept of Accessibility Planning was formalised by the Government’s Social Exclusion Unit (SEU) in their report ‘Making the Connections’, published in 2003. The SEU were asked to explore, and make recommendations to overcome, the problems experienced by people facing social exclusion in reaching work and services.
The report sets out the relationship between transport, accessibility and social exclusion and presents a cross-Government strategy for improving access to jobs and services. The key issue is that for services to be accessible, people must be able to get to them in reasonable time, at reasonable cost and with reasonable ease.

Accessibility Planning focuses on promoting social inclusion by tackling the accessibility problems experienced by those in disadvantaged groups and areas. However, it is also about improving accessibility for all and is a requirement in the creation of sustainable communities. It concentrates on access to those opportunities that are likely to have the most impact on life chances: employment, education, health care and fresh food shops. The premise of Accessibility Planning is that the accessibility needs of local communities can be better met by policy development and service delivery that is more evidence-based and which is implemented through coordinated action across a variety of agencies.

The LTP3 Strategy is linked to the Government’s five transport goals, one of which relates to the promotion of equality of opportunity. The formal LTP3 Guidance defines this goal in terms of two types of ‘Challenge’: -

**Cross Network Challenge**

(a) Enhance social inclusion by enabling disadvantaged people to connect with employment opportunities, services, social networks and goods through improving accessibility, availability, affordability and acceptability.

**Cities and Regional Networks Challenges**

(b) Enhance social inclusion and the regeneration of deprived or remote areas by enabling disadvantaged people to connect with employment opportunities, local services, social networks and goods through improving accessibility, availability, affordability and acceptability.

(c) Contribute to the reduction in the gap between economic growth rates for different regions.

Whilst Challenges (a) and (b) are similar, the first relates to national issues whilst the second more directly relates to our LTP3. Challenge (c) is about the equality of opportunity of our Area in terms of economic prosperity compared with other areas and national average economic indicators. The outcomes of Accessibility Planning can help employment investment decisions and highlight barriers to providing access to the local labour market.
LTP3 Accessibility Policies

Policy LA1: To ensure that Accessibility Planning is embedded within planning and strategy documents and continue to encourage service providers to embed accessibility considerations within their service delivery investment programmes.

Centro will also review and share accessibility data with people and groups who may have an interest in them and publicise any results that are of wider interest.

Policy LA2: To ensure the access needs of groups defined in the Equalities Act 2010 are met as far as practicable.

The ‘Age Proofing Toolkit’ provides an invaluable reference document in ensuring these needs are met.

Policy LA3: To secure socially necessary local bus services to complement commercially provided services so that residents have the best possible access to local facilities.

Policy LA4: To keep local bus service networks and provision under review, in partnership with the main operators and the relevant District Authority, with the aim of improving service levels and accessibility for all to essential services and facilities.

Policy LA5: To ensure that cost of travel is not a barrier to accessibility to employment opportunities and services.
Bus

A. Role of Bus

The bus network has a major role to play in delivering the objectives of LTP3. An important transport objective is to bring about a significant modal shift away from the car towards more sustainable forms of transport. For the vast majority of residents, the main alternative will be the bus. LTP3 recognises the importance that increased mobility has for a modern and prosperous society. Growing levels of travel, however, have also generated significant environmental impacts. Delivering a modern bus network that transforms the quality of travel will bring significant environmental benefits and greatly contribute to tackling climate change, reducing congestion, sustaining economic growth and increasing social inclusion.

Our aim is to bring about significant quality improvements through a customer-focused transformation that addresses the concerns, needs and expectations of current and future passengers. Research shows that passengers no longer want just a bus trip but an end-to-end travel experience that provides perceived value. Passengers will assess this perceived value through simple signals, such as the quality of the vehicle and the professionalism of the driver. Achieving sustained growth in bus patronage is possible if perceived value is delivered to the customer through improvements in quality. This should ensure that the bus product attracts new passengers and builds long-lasting loyalty from existing ones.

B. Bus Partners: Roles and Responsibilities

Bus Operators

Most bus services in the Area are operated on a commercial basis by private bus companies. The remaining services, those deemed to be socially necessary and affordable, are operated under contract to Centro by private bus companies. The commercial network carries over 90% of bus passenger journeys. Commercial and contracted services are operated by over sixty operators with National Express West Midlands/Coventry being the dominant operator, with approximately 80% of the market, and Diamond Buses carrying approximately 10% of total passenger numbers.

Centro

Centro subsidises bus services to operate at times when operators have decided that they are not commercially viable, and this equates to approximately 8% of the bus network. Centro issues tenders to bus operators to cover ‘socially necessary’ services, many of which run early in the morning, late evening or on Sundays.
These provide essential access to employment, shops, health and leisure. Centro manages all the 12 bus stations across the Area and over 13,000 passenger stops and shelters, whilst ensuring passenger information provision, including Real Time Information, is kept up to date and provided at all facilities.

**Local Authorities**

Local Authorities, as the Highway and Planning Authorities, support and help improve bus services by delivering highway priority measures. This is done through a variety of tools including bus lanes, Red Routes and junction improvements using Smart Route principles. As Local Planning Authorities, improvements to passenger facilities, including bus stations and bus stops, must also be supported and approved for delivery.

**Traffic Commissioner**

The West Midlands Traffic Commissioner is responsible for regulating bus and heavy goods vehicles operations. In relation to bus operations, the Traffic Commissioner grants Operating (‘O’) Licenses to people or companies that are competent, financially sound and of ‘good repute.’ Anyone with an ‘O’ license who wishes to operate a local bus service must register the details of the service with the Traffic Commissioner. Thereafter, the Traffic Commissioner can take action against an operator that fails to run the bus service as registered or if they fail to meet the competency, financial or ‘good repute’ requirements of their ‘O’ license. This may happen, for example, if an operator uses un-roadworthy buses.

**Passenger Focus**

Passenger Focus is an independent public body set up by the Government to protect the interests of Britain’s rail passengers and England’s bus passengers outside London, coach passengers on scheduled domestic services and tram passengers. Although funded by DfT, Act of Parliament guarantees their independence. Their mission is to get the best deal for passengers, with a strong emphasis on evidence-based campaigning and research. They use their knowledge to influence decisions on behalf of passengers and work with the public transport providers, passenger groups and Government to secure journey improvements. They are responsible for the National Rail Passenger Survey.

**C. Progress and Successes from LTP2**

The objectives for bus in LTP2 were to achieve modal shift to public transport in order to reduce congestion and enable people without access to a car to reach services including work, training, education, leisure and food and health provision. Significant progress has been made against these objectives, including a reversal of the year-on-year decline in bus usage in 2008/09 and one of the highest usage rates of bus of all the Metropolitan Areas in England outside London. Some of the successes are detailed below:
Bus Showcase Programme Review and Implementation

The Bus Showcase initiative has improved a number of bus corridors to ensure passengers receive a high quality bus journey experience by transforming key routes with comprehensive improvements to vehicles, roads and infrastructure. The features are:

- Highway improvements: consistent and more reliable journey times
- Safe and well lit walking routes to bus stops/routes
- Upgraded waiting environments, with easy access and better information including Real Time Information (RTI) at key stops
- High quality low floor buses with on vehicle CCTV and RTI
- High standards of customer care

Following a review of the Bus Showcase delivery programme in 2006, a new approach to implementing schemes was recommended. This provided a focus for investment and has helped deliver the outcomes set out below:

- Patronage increases of up to 30% on several Showcase routes (eg. Route 51 Walsall Road)
- Journey time reductions of up to 17% on Showcase corridors (eg. Route 51 Walsall Road)
- Punctuality increases of up to 40%

- Passenger satisfaction levels of up to 86%, well above the 60% LTP target
- Levels of satisfaction with on-bus security significantly higher than general bus network

Development of Smart Route Principles

‘Smart Routes’ corridor strategies aim to improve journey reliability for all road users by identifying traffic issues and developing solutions for corridors in a comprehensive manner. A Pilot ‘Smart Route’, on the A41 Warwick Road between Birmingham and Solihull is currently underway with the intention of developing a series of route improvements on the A41 to help make travelling, living, working and shopping along the Warwick Road route easier and more enjoyable. Future Smart Routes will be developed as part of a Sustainable Smart Package.

Transforming Bus Travel

In December 2008, Centro published a strategy document entitled ‘Transforming Bus Travel’ (TBT), which sets out a vision on how to improve bus, services to better meet current and future needs of passengers. TBT was developed in partnership between Centro and bus operators to ensure a shared understanding of arrangements is in place between all stakeholders to encourage more people to travel by bus through providing passengers with a total quality journey experience that make buses the mode of choice and a realistic alternative to the private car.
TBT supports LTP3 and recognises the importance that increased mobility has for a modern and prosperous society whilst addressing environmental impacts.

As part of ‘Transforming Bus Travel’, a comprehensive review led to the proposed reorganisation of local bus services to the following six groups:

- **Birmingham centred** - These are generally high frequency routes running throughout the day and week.
- **Inter-urban** - These are also high frequency routes running throughout the day and week that link towns and communities.
- **Orbital** - These services are moderate to high frequency. They link suburban local centres with estates off the radial routes. Good interchange with radial and local services is particularly important.
- **Urban** - These generally high frequency routes link the main towns and cities (particularly Walsall, West Bromwich, Wolverhampton and Coventry) with their nearby housing estates.
- **Local** - Local routes provide the links not met by the above and relate generally to smaller towns and secondary attractors.
- **Customised low frequency** - These routes are limited in number and provide links not covered by the groups above.

This segmentation of services has formed the basis of a series of Bus Network Reviews, outlined below.

**Bus Network Reviews and Voluntary Partnership Agreements**

Following the publication of TBT, National Express West Midlands (NXWM – formerly known as Travel West Midlands), as the main operator of commercial bus services in the Metropolitan Area, and others signed up to the principles of TBT and are working in partnership with Centro to deliver a series of bus network reviews on an area-by-area basis. The aim is to provide a better network of high quality services to the benefit of existing and prospective users, leading to increased bus patronage.

One of the weaknesses of the current bus network is its complexity and relatively density, with a large number of low frequency routes. Therefore, one of the focuses is to provide a more modern, less complicated network of services that makes travelling by bus easier and more attractive.

Research has identified that key elements for better bus services include an easy to understand network and improvements in quality. Centro is leading a review of the commercial and subsidised bus networks in each defined area, alongside Local Authorities and bus operators, as directed within the Local Transport Act 2008, to ensure that passenger benefits are maximised within each network.

This process has so far been undertaken in Dudley, South Solihull, North Walsall and South and West Birmingham. In each area it has been accompanied by a series of improvements in...
passenger information and some simplification of services, such as ensuring that evening and Sunday service numbers match those of the daytime services. The review has already led to increased bus patronage in Dudley and in South Birmingham it has resulted in a much easier to understand network of services. Reviews are currently being rolled out, including a revised network for East Birmingham / North Solihull and the country’s first Multi-Operator Bus Partnership Agreement has now been delivered in North Walsall.

**Infrastructure improvements**

In order to meet the aspirations of the passenger, waiting and interchange facilities need to be maintained and upgraded. Through the LTP2 period, Halesowen Bus Station, Chelmsley Wood Interchange and Wolverhampton Bus Station have or are being improved or rebuilt to create first class passenger facilities.

**Increased RTI rollout**

Real Time Information (RTI) has proved extremely popular with passengers providing certainty of when their next bus will be arriving. Studies in the Metropolitan Area show that 85% of passengers feel Real Time Information to be beneficial to their journey. RTI is now accessible from approximately 5,000 bus stops and approximately 800 (16%) of these bus stops are equipped with Real Time Displays. Nearly half of these have been installed within the last two years. Since 2003, National Express West Midlands has equipped approximately 44% of its bus fleet with RTI tracking devices as part of the approach developed by Centro. In delivering TBT, Centro are now expanding and updating RTI within a rolling programme of works.

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**D. LTP3 Key Objective Alignment**

| **K01 Economy** | • Supports efficient movement of people to areas where economic activity takes place including commuters to centres in peak periods  
• Helps reduce congestion on the highway network freeing up capacity for essential vehicle movements |
| **K02 Climate Change** | • Modal shift encourages reduced reliance on the private car thus reducing carbon emissions |
| **K03 Health, Personal Security and Safety** | • Improving the environmental performance of the bus sector will lead to improved air quality  
• Continued investment in security measures to reduce crime and fear of crime |
E. Major Influences On LTP3 Bus Strategy

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3. This includes an analysis of relevant plans, policies and programmes from international through to local level and their implications for LTP3, including bus. In addition to the policy framework identified for bus by the ISA, the following have been identified as major influences on bus strategy over the period of LTP3:

**Local Transport Act, 2008**

This gave transport authorities a new suite of powers and options for improving bus services. These include strengthened voluntary partnerships, statutory quality partnerships and quality contracts, which could all influence LTP3.

**Statutory Quality Partnerships**

Statutory Quality Partnerships (SQPs) allow for binding agreements to be voluntarily entered into between LTAs and bus operators. Under SQP, improved infrastructure (such as bus priority measures) can be provided on a corridor with arrangements for the use of that infrastructure by bus operators that provide improved services. SQPs can cover vehicle standards, maximum fares, frequencies and timings.

**Strengthened Voluntary Partnerships**

The Act gives bus operators and Local Transport Authorities (LTAs) more scope to negotiate non-statutory agreements between themselves with less risk of falling foul of competition law. It also gives the Traffic Commissioners more power to protect voluntary arrangements from predatory or low quality competition and to enforce performance standards.

**Quality Contracts**

Under Quality Contracts, private sector bus companies would be invited to bid to operate a specified network and, once appointed, it would face no on-road competition, being free to concentrate on developing the local market for bus travel in partnership with the LTA.

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**KO4 Equality of Opportunity**

- Improves access to goods, services and opportunities for those without access to a car or with mobility impairments

**KO5 Quality of Life and Local Environment**

- Provides access to education and employment opportunities to improve social mobility
- Reduction of social exclusion which encourages the development of society
‘Integrated Public Transport Prospectus’ & ‘Transforming Bus Travel’

Centro, in conjunction with partners, has developed the ‘Integrated Public Transport Prospectus’ (IPTP) which outlines the long term vision for public transport across the Metropolitan Area, taking into account existing and future major developments. In respect of buses, the IPTP includes

- **Principal Bus Corridors** – direct high frequency bus services connecting centres, as shown overleaf
- **Local Bus Networks** – ensure local communities have good access to jobs, shops and services

The LTP3 period will bring about significant quality improvements to local bus services using the principles of TBT to address the needs and expectations of current and future passengers. Building on existing high levels of use for local journeys, it seeks to achieve a local and international reputation for innovative, forward-looking provision, which is popular with customers. This will mean that bus industry advances in vehicles, planning, operation and customer service will have a natural home in the Metropolitan Area.

**Smart Routes**

Smart Routes corridor strategies aim to improve journey reliability for all road users by identifying traffic issues and developing solutions for corridors in a comprehensive manner. The successful implementation of this initiative will have a significant role in delivering the objectives of LTP in relation to bus.

**Smartcard**

The LTP3 period will see the implementation of Smartcard on the Area’s public transport network. Centro have installed more than 2,300 machines for bus operators and provide administrative and technical support for the equipment. The project, roll-out of which commenced in Spring 2010, will enable passengers to make seamless and convenient interchange between any bus operator and other mode of public transport.

**Cross-Boundary Services**

In addition to the six groups of services outlined in TBT within the Metropolitan Area, there are also significant local and medium distance bus links to surrounding urban areas. These include links from Walsall to the South Staffordshire/Cannock area and Coventry to Warwickshire. Important sub-regional corridors in this category include:

- **Birmingham – Redditch**
- **Birmingham – Tamworth**
- **Birmingham – Stratford-upon-Avon**
- **Birmingham – Kidderminster**
- **Birmingham Airport/NEC local bus network**
- **Coventry- Nuneaton**
Particular issues for these corridors are the need to ensure common customer information and ticketing provision across administrative boundaries.

The proposed new networks will reflect modern travel demands, arising from such issues as changes to hospital provision and employment locations. They will not only enhance existing core routes by better serving the vast majority of current travel needs, but also attract a wide range of new users by creating networks that are:

- More frequent
- More efficient
- Of a higher quality (with focused investment in modern facilities)
- Simpler to understand
- Easier to promote
- More Customer-Oriented

F. LTP3 Policies – Bus

Policy LA6: To create a high-quality bus network serving the Metropolitan Area

A high-quality bus network will help deliver the five objectives of LTP3. A number of opportunities to deliver this network will evolve throughout the plan period. The principles of TBT and the IPTP will be applied through partnership with operators to deliver modal shift, an improved environment and an integrated public transport network.

Attractive and Induces modal shift

For the vast majority of residents, the main alternative to the car will be bus. Ensuring buses are readily accepted as the mode of choice lies at the heart of TBT. Strong partnership with bus operators is fundamental to the successful delivery of the quality end-to-end services and experience that passengers expect.

Environmental performance

The aim for local bus services is to have fleet with very low carbon emissions. Centro will work with commercial operators to evolve current bus vehicle fleets so that hybrid technology and sustainably produced bio-fuels are phased in a manner that is financially viable for commercial operators.
Integration with rail and rapid transit networks

Access to the rail and rapid transit network is enhanced by bus interchange. Key interchanges between rapid transit and main bus routes have been identified, of which many currently exist as bus stations. Further measures to promote seamless travel at quality interchanges will be programmed with rapid transit development. Some principal bus corridors are particularly important because they serve areas that will not have rail or rapid transit provision. Many of these have had Bus Showcase quality corridor investment over the last ten years.

Within rapid transit corridors, local bus provision will be adapted to complement the Metro or ‘SPRINT’ BRT service, in partnership with operators. Depending on local conditions in individual corridors, this means either a reconfiguration of bus services to rapid transit interchanges, less frequent bus services or a similar level of service, with rapid transit seen as an additional layer of provision.
Complementary Travel Services

A. Role of Complementary Travel Services

Complementary travel services are services provided to ensure a comprehensive public transport system meets the needs of people with mobility difficulties, and areas and markets of low demand. These services are defined as ‘Ring and Ride’, community transport and travel training. Bespoke school transport measures are considered under the ‘Smarter Choices’ topic area.

Improved local accessibility for socially excluded communities is a high priority. Complementary travel services have an important role to play in realising these improvements.

The role of ‘Ring and Ride’ is:

• Door-to-door service for people who find it difficult or impossible to use public transport, with a booking system operates on a first come first served basis
• Provision of access to fresh food, health, leisure activities

Complementary Travel Services

• Improved mobility for users, reducing dependence on local authorities and health providers

The role of community transport is:

• Provision of demand responsive services as part of an integrated public transport system in appropriate areas of low demand
• Group transport and private hire for groups and clubs
• Statutory travel (special education, schools, adult social services)
• Some DRT transport and voluntary car schemes; prison visiting transport
• Provision of access to fresh food, health, leisure activities
• Improved mobility for users, reducing dependence on local authorities and health providers

B. Partners: Roles and Responsibilities

‘Ring and Ride’

Centro’s role is as a service commissioner, setting out a specification in a contract for the provision of ‘Ring and Ride’ door-to-door services for people who find it difficult or impossible to use conventional public transport services.
The role of West Midlands Special Needs Transport (WMSNT) is as a contractor: a non-commercial operator contracted to provide the ‘Ring and Ride’ service for Centro.

Centro and Ring and Ride work in partnership to develop a strategic approach to provision.

Community Transport

Centro’s role in community transport provision is as:

- A service commissioner, for example commissioning the 360 service in Walsall, operated by Walsall Community Transport
- A facilitator of the development of the sector, leading the establishment of a new West Midlands Community Transport Forum.

The role of District Authorities is to procure the transport services required for journeys for Education and Adult and Social Care purposes.

The role of community transport operators is to provide for some transport demands not met by other forms of public transport.

C. Progress and Successes from LTP2

‘Ring and Ride’

The ‘Ring and Ride’ service has been operating in the Metropolitan Area for over 25 years. It is operated by West Midlands Special Needs Transport, a registered charity, which receives grant funding from Centro. The service has expanded to provide over 1.8 million journeys per annum, making it the largest service of its type in the UK, utilising over 130 vehicles. WMSNT have successfully diversified into operating contracted services for other Local Authorities, operating services for Education Departments.

A review by Centro and WMSNT in 2007 concluded that the grant paid to WMSNT was used in an efficient and effective manner and methods of operation compare well with similar operators. Benefits are calculated across a wide range of services and were valued at £28 million per annum (2006/07). ‘Ring and Ride’ increases personal mobility, independence and quality of life, reducing the reliance on Local Authorities and on the reducing resources available for domiciliary care, provision of council transport, residential care and for health treatment.

Following the work carried out in 2009, a three year Business Plan was put in place, which set out how Centro and WMSNT will work together to develop the service to meet some of the issues raised above. As well as providing WMSNT with longer-term financial security, it set developments to ensure the service is maximising the use of
resources, operating efficiently and providing more trip opportunities for registered users.

In summary they are –

• **Improved fleet utilisation.** Developing and implementing innovative new ‘Smarter Scheduling’ technology linked to on-vehicle navigation/information systems to maximise use of resources, increasing trip opportunities and quality of service and reducing operational costs such as fuel and driver training.

• **Improving links for users to public transport network,** piloting services enabling ‘Ring and Ride’ users to make longer distance trips via high quality and frequent services on Smart Routes.

• **Some schools contracts operated on behalf of local authorities enable use of vehicles in downtime to provide more ‘Ring and Ride’ trips and daytime transport opportunities for schools.**

• **Growing use of service by younger disabled people for access to education, training or work.** Tailored marketing developed to cater for the requirements of this market.

**Community Transport**

There are a number of operators providing community transport; the main one being the Community Transport National Charity, which has projects based in six of the seven Metropolitan District Council areas. In total across all operators, around 116 vehicles are utilised which collectively provide 500,000 passenger trips per annum. Many operators provide services under contract to local authorities to operate journeys for Education and Adult and Social Care purposes. Operators are under increasing pressure to reduce contract costs and, with the gradual withdrawal of many grants provided by Local Authorities, the sector is under pressure to maintain both turnover levels and fleet quality.

Centro works with operators to provide some local shoppers’ services to older people and younger parents with children, typically operating two or three days a week. Additionally, ‘Community Transport Birmingham’ operates the Prison Visiting Service for Metropolitan Area families of inmates at prisons outside the Area in order to maintain family links and help reduce re-offending rates. ‘Shencare’ in southwest Birmingham has successfully operated the ‘Community Insiders’ project with support from Centro and Birmingham City Council. This enables access to fresh food shopping, leisure activities and other services offering increased health and wellbeing.

Grant funding has been in decline over recent years as Local Authorities move towards provision on a service level agreement or contract basis. It is likely that grant funding will continue to decline; coupled with a competitive local market for schools and social care contracts, this provides considerable financial uncertainty for the operation of traditional community transport services.
**West Midlands Community Transport Forum**

The Forum has recently been formed, which comprises membership from Centro and community transport operators. Its role includes developing closer working relationships, links to statutory organisations with an interest in community transport, responding to consultations, identifying best practice and developing quality standards in service provision.

### D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Alignment</th>
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<tbody>
<tr>
<td><strong>K01 Economy</strong></td>
<td>* Complementary travel services help increase the mobility of labour markets when assisting with trips to employment or training</td>
</tr>
<tr>
<td><strong>K02 Climate Change</strong></td>
<td>* Use of greener fuel vehicles will help reduce carbon emissions</td>
</tr>
<tr>
<td><strong>K03 Health, Personal Security and Safety</strong></td>
<td></td>
</tr>
<tr>
<td><strong>K04 Equality of Opportunity</strong></td>
<td>* Complementary travel services enhance access to services and other desired destinations thus improving equality of opportunity for all and social inclusion</td>
</tr>
<tr>
<td><strong>K05 Quality of Life and Local Environment</strong></td>
<td>* Improved access improves people’s wellbeing</td>
</tr>
</tbody>
</table>
E. Major Influences for LTP3

Integrated Public Transport Prospectus

This sets out the long-term vision for public transport serving the Metropolitan Area. Complementary travel services are one of four integrated tiers of public transport.

Demographic changes

Demand for community transport and ‘Ring and Ride’ services is expected to grow significantly due to demographic changes. Population ageing will see the number of people aged 60 and over rise from 1.2 million in 2006 to 1.4 million by 2018, and to 1.7 million by 2029. Unless the ‘Ring and Ride’ service is tailored to meet this forecast change, it is likely that the average number of trips currently enjoyed by each passenger will reduce.

Percentage of the Population aged 65 and over by Metropolitan Authority 1992 – 2031

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UK Average</td>
<td>15.8</td>
<td>15.9</td>
<td>15.9</td>
<td>16.0</td>
<td>17.2</td>
<td>18.4</td>
<td>19.4</td>
<td>20.8</td>
<td>22.2</td>
</tr>
<tr>
<td>Birmingham</td>
<td>15.1</td>
<td>14.8</td>
<td>14.3</td>
<td>13.5</td>
<td>13.2</td>
<td>13.2</td>
<td>13.4</td>
<td>14.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Coventry</td>
<td>15.8</td>
<td>15.5</td>
<td>15.2</td>
<td>14.9</td>
<td>15.0</td>
<td>15.3</td>
<td>15.7</td>
<td>16.3</td>
<td>17.0</td>
</tr>
<tr>
<td>Dudley</td>
<td>15.3</td>
<td>16.3</td>
<td>16.9</td>
<td>17.7</td>
<td>19.2</td>
<td>20.5</td>
<td>21.4</td>
<td>22.4</td>
<td>23.6</td>
</tr>
<tr>
<td>Sandwell</td>
<td>16.6</td>
<td>16.5</td>
<td>16.3</td>
<td>15.9</td>
<td>16.0</td>
<td>16.3</td>
<td>16.6</td>
<td>17.5</td>
<td>18.6</td>
</tr>
<tr>
<td>Solihull</td>
<td>14.8</td>
<td>16.1</td>
<td>17.0</td>
<td>17.5</td>
<td>18.9</td>
<td>19.9</td>
<td>20.3</td>
<td>21.4</td>
<td>22.5</td>
</tr>
<tr>
<td>Walsall</td>
<td>14.6</td>
<td>15.6</td>
<td>16.4</td>
<td>17.1</td>
<td>18.1</td>
<td>18.9</td>
<td>19.5</td>
<td>20.5</td>
<td>21.5</td>
</tr>
<tr>
<td>Wolverhampton</td>
<td>15.7</td>
<td>16.4</td>
<td>16.9</td>
<td>16.9</td>
<td>17.4</td>
<td>18.3</td>
<td>19.1</td>
<td>20.3</td>
<td>21.4</td>
</tr>
<tr>
<td>West Midlands Average</td>
<td>15.4</td>
<td>15.9</td>
<td>16.1</td>
<td>16.2</td>
<td>16.8</td>
<td>17.5</td>
<td>18.0</td>
<td>18.9</td>
<td>19.9</td>
</tr>
</tbody>
</table>
The Personalisation Agenda

The Government’s Personalisation agenda is changing the way that services are provided by adult and social care departments. Focus is moving away from the state provision of services towards the recipient having greater control over their own care and services – ‘Person-Centred Support’. Personal budgets are now allocated to users dependent on their personal circumstances and requirements for care and services. The private and third sector will have more opportunity to provide services rather than directly state operated.

Transport will be key to people being able to access services that are likely to be provided in the majority away from traditional day-centres to locations more widespread in the community. It is unclear at present as to what impact this will have on existing door-to-door services but it is likely that users of services will make more use of public transport, putting additional pressure onto transport services. Local Authorities that will set social care policy and strategy will need to consider and consult on transport provision that will be required in their areas.
F. LTP3 Policies

Complementary Travel Services: Ring and Ride

Policy LA7: To increase social inclusion in the Metropolitan Area, through a thriving ‘Ring and Ride’ service to help meet the needs of disabled people for clearly defined markets, as part of the overall public transport system

Complementary Travel Services: Community Transport

Policy LA8: To increase social inclusion in the Metropolitan Area, through a thriving community transport sector to help meet the needs of clearly defined markets, as part of the overall public transport system

To achieve these policies there will be a need for more effective brokerage of commissioned accessible transport services in the West Midlands Metropolitan Area. Commissioning bodies will need to embrace the principles behind Greater Manchester Passenger Transport Executive’s “Integrated Social Needs Transport Project”. This seeks to match underused transport capacity to unmet demand for transport, particularly by those unable to use conventional public transport services. This is through work with the operators of accessible transport, including local authorities, the third sector, and the ambulance service to develop mechanisms that can make these assets more readily available to people who have limited transport alternatives.

How fleet vehicle standards can be improved as part of the commissioning process also needs to be considered.

Centro will also need to consider the role of demand responsive services serving low demand areas, as part of an integrated public transport system, when reviewing its bus access standards for the provision of subsidised socially necessary bus services.
LTT7: SUSTAINABLE AND EFFICIENT FREIGHT TRANSPORT (SF)
Sustainable Freight: Road and Rail Freight

Movement of freight is a natural reflection on the strength of a regional economy reflecting the demand for manufactured goods, commerce as well as retail and commercial demands.

The Sustainable Freight Strategy for Road and Rail Freight defines freight as the movement of finished goods, raw materials, deliveries and freight logistics. It covers all aspects of freight movements from the start of a journey, along transport networks and end point loading/unloading by road and rail, reflecting their primary roles in freight movements. Water and airfreight are covered within the LTP3 Water and Air Freight Strategy.

A. Role of Freight

Within the West Midlands region, nearly 600,000 (25%) people are employed in manufacturing out of a working population of 2.4M. The West Midlands region accounts for 11% of all UK manufacturing and 25% of manufacturing exports.

The Metropolitan Area, as the economic driver of the regional economy, is the originator of many of these exports and imports. There is also a significant service and knowledge based economy and this, combined with the presence of a large logistics sector present within the wider region - due to its strategic location at the centre of the UK transport networks – results in significant levels of freight in and out as well as through the Area. Freight therefore has a significant impact on national, regional and local transport networks.

LTP3 provides the policy framework to support the freight industry by providing reliable, efficient transport networks, whilst developing schemes and initiatives to help support freight deliveries across the Metropolitan Area in support of the wider region. With these in place, the West Midlands as a whole will benefit from a reliable and efficient freight industry that supports existing businesses and generates further inward investment whilst supporting wider policy objectives of LTP3.

Road Freight

Road freight is the dominant form of freight transport both nationally and locally and this is reflected by its high profile in LTP3. Road freight movements in the Area are primarily focused on regional and national road networks which are heavily congested at peak times and which also come under further pressure through our position at the centre of the national road network.

Supporting the road freight sector is a high priority for LTP3 and, by providing reliable journeys in and around the Metropolitan Area and providing efficient reliable access to the national road network, this will allow businesses to trade more effectively and reach new markets, both at home and abroad.
This will create and support economic growth, thus meeting the wider policy objectives of LTP3.

**Present Situation**

Road freight accounts for approximately 90% of the tonnage moved in, out and around the Metropolitan Area. Between 2001 and 2008, road freight originating in the Area rose from 58M tonnes to 67M tonnes moved per annum.5

The importance of, and subsequently reliable access to, the national road networks is demonstrated by the table below which outlines the movement of road freight to the West Midlands region from other regions in the UK in 2008.

<table>
<thead>
<tr>
<th>Origin Region (2008)6</th>
<th>Tonnes (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>6,421</td>
</tr>
<tr>
<td>East of England</td>
<td>4,396</td>
</tr>
<tr>
<td>Greater London</td>
<td>1,929</td>
</tr>
<tr>
<td>North East</td>
<td>1,079</td>
</tr>
<tr>
<td>North West</td>
<td>7,980</td>
</tr>
<tr>
<td>Scotland</td>
<td>788</td>
</tr>
<tr>
<td>South East</td>
<td>4,350</td>
</tr>
<tr>
<td>South West</td>
<td>3,375</td>
</tr>
<tr>
<td>Wales</td>
<td>2,682</td>
</tr>
<tr>
<td>West Midlands (internal)</td>
<td>47,442</td>
</tr>
<tr>
<td>Yorkshire + Humberside</td>
<td>3,414</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83,856</strong></td>
</tr>
</tbody>
</table>

Replicating the location of the UK’s largest ports, the table above outlines that the 3 most important regions for freight deliveries into the West Midlands are from the East of England for the Harwich and Felixstowe ports; the South East for Southampton and Dover and; East Midlands for Immingham. The strong trade between the North West and the West Midlands is also demonstrated by the table above.

In terms of road freight vehicle type there has been a significant increase in the number of Light Good Vehicles (LGVs) being used to make freight movements. Nationally in 2008, vans represented 9.5 per cent of all licensed vehicles in Great Britain and accounted for 13.4 per cent of road traffic. In the West Midlands, since 2003 the number of LGVs registered in the metropolitan area has risen from 178,000 vehicles registered per annum to 192,000 per annum, an increase of over 10%.7

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5 Source: Department for Transport Road Statistics (2008)
6 Source: West Midlands Regional Logistics Study - 2009 Update
7 Source: Department for Transport Road Statistics (2008)
8 Source: West Midlands Regional Logistics Study - 2009 Update
The long term trend for road freight is outlined in the table below and demonstrates growth up to 2026:

<table>
<thead>
<tr>
<th>Origin Region</th>
<th>Tonnage (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>7,518</td>
</tr>
<tr>
<td>East of England</td>
<td>5,274</td>
</tr>
<tr>
<td>Greater London</td>
<td>2,426</td>
</tr>
<tr>
<td>North East</td>
<td>1,261</td>
</tr>
<tr>
<td>North West</td>
<td>9,366</td>
</tr>
<tr>
<td>Scotland</td>
<td>339</td>
</tr>
<tr>
<td>South East</td>
<td>6,496</td>
</tr>
<tr>
<td>South West</td>
<td>3,978</td>
</tr>
<tr>
<td>Wales</td>
<td>3,205</td>
</tr>
<tr>
<td>West Midlands (internal)</td>
<td>52,397</td>
</tr>
<tr>
<td>Yorkshire + Humberside</td>
<td>4,135</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83,856</strong></td>
</tr>
<tr>
<td><strong>Growth 2008-2026</strong></td>
<td><strong>12,538</strong></td>
</tr>
</tbody>
</table>

**Rail Freight**

The rail network in the Metropolitan Area is a heavily used mixture of passenger and freight services. Network capacity is at a premium and there is insufficient capacity to meet the future requirements of local, regional and inter-city passenger and freight services. The Area’s position at the centre of the national rail network adds further pressure through the need to also accommodate significant through freight and passenger trains as well as those originating inside the Area. Developing and enhancing the freight network between the West Midlands and Felixstowe/ Southampton ports are recognised as a Regional Transport Priority and therefore developing and enhancing the rail freight network within the West Midlands complements this objective.

Rail freight train movements, terminals and infrastructure issues and opportunities are not limited to the Metropolitan Area. As with passenger rail, it is appropriate that the LTP3 uses the ITA’s statutory ability to influence rail policy 25 miles beyond the Metropolitan boundary and to work with neighbouring Local Authorities to ensure synergy between LTP3 policies and strategies related to rail freight. LTP3 therefore covers the following broad geographic area:

The rail freight strategy is intended to become a focal point to inform future High Level Output Specification (HLOS) developments and subsequent Control Period funding as well as informing future LTP3 Implementation Plans.

**Current Situation**

Nationally, rail’s market share has increased by 60% since 1994 and now accounts for a 12% share of the UK surface freight market (which covers both road and rail) compared with 8% in 1994/5. In 2008, the following tonnes of freight were delivered in the West Midlands region from the other regions of the UK.
The major focus of rail freight movements are between the West Midlands and the East of England and the South principally reflecting freight movements as a result of the ports at Harwich, Felixstowe and Southampton. Freight trains generally enter/leave the West Midlands rail network via the following corridors:

- **Southampton ports: (3 main routes) 1)**
  - Leamington Spa - Tyseley, 2) Leamington Spa - Coventry - Nuneaton - Water Orton, 3) Leamington Spa - Coventry - Stechford - Bescot - Sutton Park Line

- **Harwich/ Felixstowe via North London:**
  - (2 main routes) 1) Rugby - Coventry - Nuneaton - Water Orton, 2) Rugby - Coventry - Stechford - Bescot - Sutton Park Line

- **North East: (2 main routes) 1)**
  - Leicester - Nuneaton - Water Orton, 2) Burton - Tamworth - Water Orton

- **North West: (2 main routes) 1)**
  - Stafford - Wolverhampton, 2) Rugeley - Cannock – Walsall

- **South West: (2 main routes) 1)**
  - Barnt Green - Kings Norton - Landor Street, 2) Droitwich - Stourbridge

Long term, DfT predict a 30% increase on goods lifted by rail nationally between 2007-15, whilst Network Rail has predicted long term growth of 75% in container traffic by 2030, although national projections for coal rail freight sees a 20% reduction by 2030 as the UK moves away from coal powered power stations. The West Midlands region saw a 420% increase in inbound trains from UK deep-sea ports between 1997 and 2006 and this growth in expected to continue into the long term. Rail freight growth projected on the West Midlands rail network is focused on movements between the West Midlands and the deep-sea ports at Southampton, Felixstowe, Harwich and Thames Gateway (when built).

Network Rail’s long term projections currently exclude the additional rail freight, which would be generated from the proposed Deep Sea Port at Portishead near Bristol.

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9 Source: West Midlands Regional Logistics Study - 2009 Update
In the West Midlands, the following rail freight movements from the other UK regions into the West Midlands are predicted by 2026:

<table>
<thead>
<tr>
<th>Origin Region (2026)</th>
<th>Tonnage (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>0</td>
</tr>
<tr>
<td>East of England</td>
<td>2,454</td>
</tr>
<tr>
<td>Greater London</td>
<td>5</td>
</tr>
<tr>
<td>North East</td>
<td>27</td>
</tr>
<tr>
<td>North West</td>
<td>33</td>
</tr>
<tr>
<td>Scotland</td>
<td>665</td>
</tr>
<tr>
<td>South East</td>
<td>1,439</td>
</tr>
<tr>
<td>South West</td>
<td>42</td>
</tr>
<tr>
<td>Wales</td>
<td>15</td>
</tr>
<tr>
<td>West Midlands (internal)</td>
<td>0</td>
</tr>
<tr>
<td>Yorkshire + Humberside</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>4,682</td>
</tr>
<tr>
<td>Growth 2008-2026</td>
<td>2,521</td>
</tr>
</tbody>
</table>

10 Source: West Midlands Regional Logistics Study - 2009 Update

B. LTP3 Road and Rail Freight: Roles and Responsibilities

West Midlands Freight Quality Partnership

The West Midlands Freight Quality Partnership (FQP) was formed following the publication of the DfT’s Sustainable Distribution Strategy and subsequent Good Practice Guide 335. It provides a forum for freight companies, the seven Local Authorities, ITA, Network Rail and the Highways Agency to identify problems and develop solutions to enhance transport networks for the freight industry. Freight operator’s views are represented by organisations such as the Road Hauliers Association and Freight Transport Association, as well as by individual operators. The FQP is therefore suitably placed to support and lead on specific schemes and initiatives delivery outlined in LTP3 Long Term Theme 7 “Sustainable and Efficient Freight” as well as monitoring the Action Plan.
Since the West Midlands FQP was formed, it has championed the following freight successes:

2003 – 2005
- Resigning of main radial routes, Birmingham and Coventry reviews commenced;
- Supported production of Regional Freight Strategy

2004
- Ensured that the introduction of red routes had specific facilities for loading and unloading;
- Agreed revised primary route network for West Midlands – published in Regional Planning Guidance;
- Identified quick wins to reduce congestion

2005
- Published The West Midlands Commercial Vehicle Driver’s Road Atlas, in collaboration with Birmingham City Council;
- Led a Lorry Parking Study for the West Midlands;
- Led the development of Regional Freight Strategy

2008
- Online version of the 2005 West Midlands Commercial Vehicle Driver’s Road Atlas;

**Integrated Transport Authority (ITA)**

The Local Transport Act (2008) placed responsibility for strategic freight policy with the ITA. The ITA is also responsible for promoting freight schemes, in partnership with stakeholders, which have rail network implications or require a Metropolitan wide perspective. Local Authorities will also implement schemes on the highway network, as Highway Authority.

**Local Authorities**

Local Authorities are responsible for the promotion and implementation of freight schemes and initiatives outlined in LTP3 that impact on local transport networks. Local Authorities will also implement any strategic schemes on the highway network, as Highway Authority.

**Network Rail**

Network Rail owns and operates the UK’s rail infrastructure and is a key stakeholder. Rail freight schemes will be promoted in partnership between the ITA, Local Authorities and Network Rail, whilst the latter will lead on subsequent delivery of rail freight schemes.

**Freight Operators**

Freight operators, both road and rail, are key stakeholders as they undertake freight movements on the transport networks. It is crucial to the success of LTP3’s Freight Strategy that operators are stakeholders in identifying problems and developing solutions.
**C. Progress and Successes from LTP2**

**Brewery Street Lorry and Coach Park**

During 2010, Birmingham City Council delivered a new Lorry and Coach Park in Birmingham city centre, holding up to 50 HGVs or coaches in a secure environment with facilities available for drivers.

**West Coast Main Line to Felixstowe (via Peterborough) Gauge Upgrade**

Network Rail is upgrading the gauge capability of the rail route from the West Coast Main Line at Nuneaton to Felixstowe (via Peterborough). The £68M scheme will enable the route to accommodate 9’6” high shipping containers (the international norm) on standard platform height wagons. The scheme will be completed in 2011 and will increase the Area’s economic competitiveness by allowing businesses to more easily send and receive standard size international shipping containers via rail, improving access to commercial markets outside the UK.

**Nuneaton North Chord**

Network Rail is currently developing the Nuneaton North Chord scheme which aims to allow freight trains travelling between the North West and Felixstowe to pass over the West Coast Main Line in a segregated manner rather having to enter Nuneaton station. This will improve freight journey times and reliability.

**West Coast Main Line to Southampton**

Network Rail is upgrading the gauge capability of the rail route from the West Midlands to Southampton to enable the route to accommodate 9’6” high shipping containers on standard platform height wagons. The £70M scheme will be completed in 2011 and will increase the Area’s economic competitiveness by allowing businesses to more easily send and receive standard size international shipping containers via rail, improving access to commercial markets outside the UK.

**West Coast Main Line to Felixstowe (via Peterborough) Capacity Upgrade**

Following on from the W10 gauge clearance project, it is anticipated that demand for train paths on the route via Peterborough will grow significantly. A scheme is being developed in response to this requirement, which will seek to tackle the principal capacity pinch-points along the corridor with new infrastructure solutions where appropriate. Development work is also underway for a scheme to enable the operation of longer trains on the corridor, which will enable more efficient asset and train-path utilisation.

**West Coast Main Line to Southampton Capacity Upgrade**

As for the West Coast Main Line to Felixstowe (via Peterborough), schemes are being developed to improve capacity on the route from Southampton to the West Midlands / West Coast Main Line and to enable the operation of longer trains.
Birch Coppice Rail Freight Terminal

Birch Coppice Business Park was opened in 2000 on the site of the former Birch Coppice colliery and is occupied by significant logistics companies. In 2006 the Birmingham International Freight Terminal (BIFT) opened on the site acting as an inland container terminal and received freight trains from Felixstowe, Southampton and Ipswich and will benefit from the West Coast Main Line to Felixstowe and Southampton gauge and capacity upgrade schemes.

D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>K01 Economy</th>
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<tbody>
<tr>
<td>• Efficient and reliable freight movements will support the economy through improved delivery times between businesses thus attracting inward investment and maximising the West Midlands strategic position at the centre of the national transport networks</td>
</tr>
<tr>
<td>• Efficient and reliable traffic flows will help reduce the estimated £2.3bn lost by business per annum as a result of road congestion across the metropolitan area</td>
</tr>
<tr>
<td>• Efficient and reliable road and rail freight networks will allow businesses to reach new markets locally, regionally, nationally and internationally allowing businesses to expand whilst attracting inward investment creating more high value employment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>K02 Climate Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Efficient and reliable road freight movements reduce carbon emissions when compared to road freight caught in congestion</td>
</tr>
<tr>
<td>• Increased levels of freight moved by rail emit less carbon emissions than the equivalent movements by road;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>K03 Health, Personal Security and Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improving the environmental performance of the freight sector will lead to improved air quality;</td>
</tr>
</tbody>
</table>
K04 Equality of Opportunity

- Road and Rail freight allows access to goods and markets which might not otherwise be accessible to businesses of the Metropolitan Area supporting economic diversity

K05 Quality of Life and Local Environment

- Railway corridors comprise part of Local Authorities’ Green Infrastructure Networks and provide habitats for flora and fauna.
- Supports migration of species in response to climate change.
- Trees in railway corridors capture carbon, improve air quality and help prevent soil erosion.

E. Major Influences on Road and Rail Freight

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3, including an analysis of relevant plans, policies and programmes from international through to local level and their implications for LTP3 Road and Rail Freight.

F. LTP3 Policies – Road and Rail Freight

Policy SF1 – Lorry Parking: To increase the availability of HGV parking in appropriate locations across the Metropolitan Area

The Area currently suffers a chronic lack of safe and secure HGV parking. This is a concern of the road freight industry including the Freight Hauliers Association (FHA) and was identified as an issue for road freight in the West Midlands Regional Freight Strategy. This has major impacts on freight logistics both regionally and nationally and is amplified by the central location of the Area. This also affects the ability of our businesses to expand or to attract inward investment.

Currently parking occurs in three ways: in lay-bys, on industrial parks or in specialist HGV facilities. HGV facilities are provided by the private sector, although in recent years a number of HGV parks in or around the Metropolitan Area have closed. Whilst Birmingham City Council opened facilities in Brewery Street in the city centre during 2010, a chronic shortage remains, with no further new off-street overnight lorry parking facilities currently proposed. Therefore, LTP3 seeks to increase the availability of HGV parking across the Metropolitan Area and to deliver the following specific interventions:
1. Deliver New Lorry Parking Facilities

LTP3 proposes that the ITA will work with Local Authority partners, commercial Lorry Park providers and the Freight Quality Partnership to build upon the West Midlands Lorry Parking Study (2005) findings, which identified new and expandable lorry parking provision across the Metropolitan Area.

2. Selective Use of Park & Ride Sites for Lorry Parking

To provide additional overnight lorry parking capacity, in alignment with the principle of Smarter Management, the ITA will work with partners to explore the potential use of selected Park & Ride (P&R) sites close to motorway junctions or national highway networks for overnight lorry parking.

The majority of Centro’s P&R sites are generally empty once the evening travel peak has ended and, subject to modifications, could offer HGVs secure overnight parking as all Centro P&R sites hold the Police’s “Safer Parking” accreditation. A trial will ascertain the demand for such sites as well as the practicalities in terms of site access requirements and car park surface maintenance. Selected sites would not be close to residential areas to minimise impacts to resident’s quality of life.

Policy SF2 – Effective Delivery Access: To seek to ensure effective and reliable freight deliveries can occur in all types of centres across the Metropolitan Area

The Metropolitan Area is home to many different types of centres, each with their own characteristics and therefore different delivery challenges.

For example, busy vibrant strategic centres have residential, retail and commercial buildings with competing demands for kerb space. Delivery vehicles such as HGVs or Light Good Vehicles also compete with each other and other types of vehicles when making deliveries using kerb side loading bays, meaning adequate delivery space may not be available. This creates air pollution, congestion and is inefficient for both the delivery companies and for customers.

This leads to problems in making deliveries to customers. Delivery challenges occur to some degree in all types of centre. The RFS outlined the need to improve delivery access which is a priority also identified by the FTA.

Additionally, Local Centres are a fundamental element of the economy and their vitality is underpinned by an ability to make and receive deliveries. However, many Local Centres are located on or adjacent to the strategic highway network, causing conflicts between strategic traffic movements and local delivery requirements, which become most acute during peak travel hours. This can lead to:
• Impacts on the reliability of deliveries and to the businesses they serve
• Inappropriate on-street deliveries that cause local congestion which then affects the reliability of other road users’ journeys
• Conflicts between delivery companies and Local Authority Parking Enforcement obligations

LTP3 seeks to ensure effective and reliable freight deliveries can occur in all types of centre across the Area and aims to deliver the following specific interventions:

i Strategic Centres

1. Loading Facilities
Local Authorities will ensure appropriate loading facilities are available in centres which are available when deliveries are required and located close to delivery points where practicable, recognising the requirements of other road users. Where appropriate, programmes will be developed through Smart Routes.

2. Intelligence Transport Systems
Local Authorities and the ITA will explore the use of Intelligent Transport Systems (ITS) to support efficient and reliable deliveries in major centres, for example to reserve loading bays for a specific time window.

3. Review of Traffic Regulation Orders
The FQP will work with freight operators to identify problems with undertaking deliveries in strategic centres such as restrictive Traffic Regulation Orders, noise abatement orders or overnight delivery restrictions, to determine if modifications to orders can be made to improve delivery access without negative impacts to neighbouring buildings or road traffic. This will occur as part of the Quick Wins approach.

4. Quiet Deliveries
Local Authorities and the ITA will examine the findings and outcomes of the DfT’s Quiet Deliveries Demonstration Scheme.

ii Local Centres

1. Smart Routes
Developing solutions requires a holistic and integrated approach, which takes into account the needs of strategic and local traffic movements. Smart Routes aim to provide reliable journeys for all road users through a toolbox of different schemes and initiatives on strategic corridors. In relation to road freight, Smart Routes will ensure that appropriately located loading facilities are incorporated into corridor designs which provide a balance between the needs of local centres and strategic traffic movements.

2. Local Centre Delivery Access
Local Authorities will continue to work with stakeholders to ensure that appropriate unloading areas are provided which are supported by TROs that reflect existing local centre opening hours and traffic flows, and take into account the impacts from noise during unsocial hours.
3. Adoption of Loading/ Unloading Good Practice

The Local Authorities will adopt principles of the Loading/ Unloading Good Practice guide published by the FTA. This aims to bring together stakeholders to work collectively to improve the competitiveness of local businesses and to promote best practice amongst business, traffic authorities and parking enforcement contractors to find positive and effective solutions where loading and unloading is a problem.

Congestion currently costs Metropolitan businesses £2.3bn per annum. Efficient freight movements ensure that deliveries occur on time and that customers receive goods at a time to suit their business. This can be achieved through reliable road journeys in and around the Area, as well as by reliable access to the National Highway Networks. In line with the principals of Smarter Management, the ITA and Local Authorities will work to ensure the existing highway network operates as reliably as possible to support road freight movements across the Area and will seek to deliver the following specific interventions:

1. Quick Wins

Quick Win programme aims to identify small scale interventions which improve freight movements and deliveries, including network and junction reliability as well as interventions such as updated Traffic Regulation Orders as a result of land use change. The West Midlands FQP is suitably placed to identify Quick Win schemes, which will be implemented either through Smart Routes or directly by the Local Authorities.

2. Route Signage

Local Authorities will undertake, where necessary, Route Signage Revisions to ensure it provides appropriate freight access and routings. The revisions will take into account land use change and any major new development.

Policy SF3 - Improving Environmental Performance: To support national and locally led initiatives to accelerate the introduction of low carbon transport through improving the environmental performance of the freight industry

Road freight accounts for 31%\(^{11}\) of total carbon emissions related to the transport sector nationally. Improving the environmental performance of the road freight sector provides an opportunity to contribute towards LTP3’s low carbon Outcome. In addition, LTP3’s Long Term Theme 10 supports the role of new technologies in this. Therefore, supporting the freight industry’s adoption of ultra low emission freight vehicles is an important element of developing sustainable freight.

Environmental performance of road freight is not constrained solely to actual freight movements. The types of vehicle engine, driver training, wider logistics planning, and the actual day-to-day operations of freight business all impact on the environmental performance of the road freight

\(^{11}\) Source: Department for Transport (2009) “Low Carbon Transport: A Greener Future”
industry. Therefore, LTP3 supports national initiatives towards moving towards low carbon transport and improving the environmental performance of the freight sector. LTP3 aims to deliver the following specific interventions:

1. Urban Freight Consolidation Centres

Urban Freight Consolidation Centres (UFCC) are used in some major cities in Europe and provide a facility for delivery vehicles to be unloaded away from a major centre, with the use of smaller and therefore lower emission vehicles. The centres look to reduce the impacts of deliveries in city centres such as kerb space delivery conflicts, air quality, noise and road congestion. The DfT has recently begun examining the potential benefits of Urban Freight Consolidation Centres. In addition to delivery focused UFCC’s, some cities such as London have developed consolidation centres for major construction works, with materials delivered to a remote consolidation centre and thence to the construction site by smaller vehicles. The environmental benefits of such centres are strengthened by the use of low/ zero emission delivery vehicles, complemented by appropriate traffic regulation orders. The attractiveness of UFCCs could be strengthened by delivery vehicles using bus priority measures such as bus lanes or bus gates, thus ensuring quicker and more reliable access to major centres compared to conventional delivery access means. By developing a package of measures to support UFCCs, it will be quicker, more reliable and potentially more time and cost effective for delivery companies, whilst helping Local Authorities meet carbon emission and road congestion objectives.

Birmingham City Council has outlined aspirations for a consolidation centre serving Birmingham city centre and commissioned a study to identify the benefits, potential sites and how the centre would be operated. It concluded that an Urban Freight Consolidation Centre would have significant benefits for Birmingham.

LTP3 therefore proposes the following in relation to Urban Freight Consolidation Centres:

- To build on the strong benefits identified by the Birmingham Urban Freight Consolidation Centre study and further develop the Birmingham Consolidation Centre scheme;
- Building on the Birmingham Urban Freight Consolidation Centre study to implement a Metropolitan-wide study with the objective of identifying and developing multiple consolidation centres serving major centres, business or retail parks across the Area;

2. Environmental Fleet Assessments Schemes

Poor environmental performance affects the freight industry directly through higher fuel bills, increased maintenance costs and lost revenue through inefficient freight movements. At the same time, it can result in higher carbon emissions, increased noise levels and worsening air quality. It is therefore widely beneficially to improve the environmental performance of road freight.
To encourage improved environmental performance across the freight sector, the ITA and Local Authorities will work with freight and logistics companies to encourage sign up to an “environmental fleet assessment”. This will assess companies and provide advice and solutions to improve their environmental performance. Companies are often then awarded a grade to reflect their current performance. Such schemes have proved successful in other parts of the UK and membership is voluntary. The West Midlands Quality Freight Partnership will lead on the development of “environmental fleet assessment.”

3. Supporting Use of Electric Vehicles

Increased use of electric vehicles in the road freight industry has many benefits and contributes towards LTP3 Objectives through reducing carbon emissions and improving air quality. Similarly, electric vehicles are significantly cheaper to run providing cost benefits to the companies that use them.

Primarily, it is the role of national government to implement policies, incentives and initiatives to encourage the use of electric vehicles and for the freight industry to adopt them. As a result, it is the role of the Metropolitan Local Authorities to put in place infrastructure to support this usage. Therefore, Local Authorities and the ITA will work with Government and the freight industry to provide supporting policies and infrastructure, such as charging points.

Rail Freight

Policy SF4 – Enhanced Rail Freight Network Capacity: To develop and enhance the Area’s rail network capacity, efficiently and reliability which can meet existing and future rail freight growth demands

The Rail Freight Network is a crucial element of the national and local economy. Across the Area’s rail network, freight train routings are affected by train path availability and conflicts, route gauging and by limitations on access to freight terminals. This can result in freight trains being required to undertake inefficient freight movements across the network which impact on passenger services. Tackling these issues are priorities within the DfT’s Strategic Rail Freight Network document and Network Rails Freight Route Utilisation Strategy.

The long-term trends of rail freight see an increase of up to 80 additional trains per day within the Area, which would need to be accommodated on a primarily mixed-use network.

To ensure our rail network can meet existing demand and future rail freight growth, Centro will work with partners to identify and tackle inefficient rail freight routings across the Area, as well as identifying interventions to increase rail capacity and reliability.

As owners of the rail network infrastructure, providing additional rail freight capacity is primarily the responsibility of Network Rail.
However, Centro and partners have an important role in promoting rail freight schemes and providing support, as well as protecting proposed schemes through the planning system. To this end, the following interventions are proposed:

1. Walsall – Stourbridge Freight Line

Freight train movements across the regional rail network are focused on passing through central Birmingham, adding pressure to the congested mixed-use network. Additionally, freight trains heading to or from the Metropolitan Area from the southwest need to operate on the 1 in 37 Lickey Incline between Bromsgrove and Barnt Green or via Old Hill Bank (1 in 51) between Old Hill and Rowley Regis. Many freight services that use these routes require the use of a banking locomotive to provide assistance. This is both expensive and time consuming making this less attractive to existing and potential rail freight users.

The ITA and Network Rail aspire to reopen the Walsall – Stourbridge freight line to increase freight capacity on the regional rail network. Key benefits include:

- Through running freight trains will be able to by-pass the congested central Birmingham area network which will shorten journey times and provide increased route flexibility;
- Freight trains will be able to by-pass the Lickey Incline / Old Hill providing improved freight train operations;
- Providing additional train paths provide capacity to cater for long term rail freight growth projections;
- Providing improved access to Bescot Yard improving freight train access to the site and allowing the freight industry to maximise Bescot’s strategic potential;
- Providing additional capacity to cater for generated rail freight traffic from the proposed Avonmouth deep-sea port proposal in Bristol. Rail freight movements north from the proposed deep sea port at Portishead would use the Bristol – West Midlands corridor which otherwise see rail freight traffic entering the Metropolitan Area at either Stourbridge or Barnt Green;

In addition to rail freight benefits, the ITA has additional aspirations to develop an infrastructure-sharing rapid transit scheme on the corridor between Stourbridge and Walsall, which further strengthens the proposal to reopen the freight route.

A critical element of the Walsall-Stourbridge freight route is ensuring that the alignment is protected, along with identifying and protecting suitable rail freight terminal sites within the corridor. Local Authorities will safeguard the route alignment and potential rail freight sites within their Local Development Frameworks. The freight route is outlined within the Joint Black Country Core Strategy.
Whilst beyond the scope of LTP3, the predicted growth in rail freight by 2030 may also lead to the need to reopen the Walsall – Lichfield rail freight route. To this end, Walsall MBC has protected the alignment within the Local Development Framework process.

The ITA, Network Rail and rail freight operators are developing the business case for Walsall-Stourbridge scheme.

2. Network Resignalling

Enhanced Rail Freight Network capacity and reliability can also be delivered through effective use of the existing network. Network Rail has a long term resignalling programme for the Area, which will reduce headways, provide faster and more reliable journeys. Network Rail is proposing the following area network resignalling programmes (which will include the outlined minor schemes) during LTP3:

**SALTLEY RESIGNALLING**

- Doubling at Park Lane Junction to create capacity
- Closer signal spacing on Sutton Park Line and 3-aspect vice 2
- Ground Frame to become powered points at Daw Mill to encourage east-bound departures
- 4-aspect signalling Nuneaton - Birmingham

**WALSALL RESIGNALLING**

- Pleck run-round for Rugeley PS Coal traffics to keep traffic from the congested Bescot area (scheme also provides the north-end connections at Pleck Junction which will be required to facilitate reinstatement of the Walsall - Stourbridge Line).
- Reconnecting Down Fast (through line) at Walsall to create capacity
- Crossover at Mid-Cannock to be reversed to provide a facing connection to Pentalver’s intermodal terminal (not currently a rail user but interested in developing a rail service).

**NEW STREET RESIGNALLING**

- Albion direct route into terminal proposed subject to EMR funding some complementary works

**STOURBRIDGE RESIGNALLING**

- New ability to run-round using loop at Kidderminster
- Recontrol Round Oak permitting greater access to freight to the terminal and also a moderate Line speed increase.

3. Long Term Network Enhancements

Within the lifetime of the time span of LTP3 (up to 2026), there will be a continuing need to further enhance the Metropolitan Area rail...
network to accommodate passenger and freight growth. In addition to those schemes listed above, the following schemes have been identified to improve freight movements on the broader Metropolitan Area rail network. The ITA will work with Network Rail and Local Authorities to develop these and other potential schemes:

- **Whitacre Chord**

  Current freight train movements into Birch Coppice/ Kingsbury terminals from Harwich/ Felixstowe and the West Coast Main Line require freight trains either to run round on the network in the Saltley area or to route into the central Birmingham area on to Walsall and back towards Water Orton via the Sutton Park Line.

  These ‘run-round’ procedures have significant impacts to the local rail network and will need to be addressed in order to provide additional rail freight capacity at the terminals and also provide the capacity to implement the ITA’s proposed new local passenger rail service and stations between Birmingham and Tamworth.

  Network Rail has identified a potential solution which would be the development of a rail chord to the west of Whitacre Junction, to allow freight trains to directly run into Kingsbury/ Birch Coppice rather than needing to enter the Water Orton corridor or central Birmingham. This scheme is not developed or funded. It is located in Warwickshire and would need the support of Warwickshire County Council to develop further.

- **Improved Access to Kingsbury Oil Depot and Birch Coppice**

  Kingsbury Oil Terminal and Birch Coppice (both accessed via the same connection at Kingsbury Branch Junction) have the potential to cater for a significant amount of the predicted future rail freight growth. To facilitate this, there will be a need to provide additional rail infrastructure to achieve access to the terminals.

  Currently, due to the absence of a facing connection at Kingsbury, freight trains accessing the sites from the north are required to propel off the main line into Kingsbury Branch Sidings. This is time consuming and limits capacity along the Tamworth corridor. This issue will need to be addressed in order to provide capacity for predicted rail freight capacity growth at the terminals and also provide network capacity to implement the ITA’s proposed new local passenger rail service and stations between Birmingham and Tamworth.

  A potential solution identified by Network Rail, currently not developed or funded, would be a new reception siding with a north facing connection to take freight trains off the Tamworth line before needing to reverse into the freight terminal sites.
Policy SF5 - Expanding Rail Freight Terminal Capacity: To identify and encourage the development of new rail freight terminals to meet future growth requirements, especially intermodal terminals to meet projected container traffic growth

The Regional Logistics Study 2009 Update report outlined that the Metropolitan Area Region would require a forecasted 811 ha of additional Regional Logistics Site (RLS). This equates to between six and eight new rail served Regional Logistics Sites. Rail freight terminal growth pressures are projected to be focused on providing rail freight terminal capacity to handle shipping containers, maximising the opportunities of the Walsall-Stourbridge freight route and; providing the RSS recommended Regional Logistics Centre in Cannock.

Currently there are 4 major intermodal freight terminals which handle shipping containers located within the geographic area of LTP3, they are:

- **Birch Coppice (BIFT) near Nuneaton** – operated by Roadways Container Logistics
- **Lawley Street Freightliner Terminal in central Birmingham** – operated by Freightliner
- **Daventry International Railfreight Terminal (DIRFT), near Crick, Northants** – operated by Malcolm Group
- **Hams Hall National Distribution Park near Water Orton** – operated by ABP

The Metropolitan Area Regional Logistics Study forecasts that between 7 and 9 new intermodal terminals will be required across the Metropolitan Area region by 2026. Given that there are currently 4 active intermodal terminals in the region (Hams Hall, Lawley Street, Daventry and Birch Coppice), this suggests a need for 3 to 5 new intermodal terminals by 2026. Lawley Street and Birch Coppice currently operate at near capacity whilst the others listed have recorded significant growth and will be operating at or near capacity within the LTP3 period.

The proposed deep-sea port at Portishead in Bristol, will add additional pressure for intermodal freight terminal capacity to be developed in the Metropolitan Area, which will also allow it to take advantage of the economic and logistics benefits the Portishead terminal will bring. As rail freight traffic from Portishead would enter the Metropolitan Area through the southeast corridor at Stourbridge there is logic to investigate potential rail freight terminals options along the corridor in the Black Country. Such a site would be suitably located to industrial areas, the national road networks and also be able to receive container traffic from Felixstowe, Harwich and Southampton through the existing rail freight network.
In addition to any potential Intermodal Rail Freight Terminal along the corridor, there is the opportunity to identify and protect land adjacent to the corridor, which could be used by businesses that require rail freight access. This would attract inward investment and create new employment opportunities. LTP3 seeks to deliver the following specific interventions:

1. **Intermodal Rail Freight Terminals**

To provide the future required intermodal rail freight terminal capacity LTP3 proposes that Local Authorities, the ITA, Network Rail and rail freight operators work together to identify how long term container capacity can be handle in the longer term. Solutions include expanding existing sites or identifying new sites and these will subsequently need protecting through Local Development Frameworks.

2. **Rail Freight Terminal Opportunities:**
   - **Walsall – Stourbridge Corridor**

The proposed Walsall – Stourbridge rail freight route scheme outlined above provides the opportunity for the Black Country to capitalise on the attractiveness of the corridor for industrial development and to optimise the economic benefits of the scheme. The corridor offers potential for a new intermodal rail freight terminal/ Regional Logistics Site. Local Authorities, the ITA and Network Rail will work together to identify potential rail freight terminal sites and protect them through Local Development Frameworks.

The sites can be promoted to potential companies who would have the security to invest and expand in the Black Country.

3. **Regional Logistics Sites**

The Regional Spatial Strategy Phase 2 Revision outlined that the West Midlands region needs to identify 345 hectares of rail served warehousing to meet future demands. Five Regional Logistics Sites were subsequently identified of which the site at Cannock is within the geographic area of LTP3. Local Authorities, the ITA and Network Rail will identify the rail freight requirements, rail network impact and road access requirements of the site to optimise the economic benefits the Pentalver’s Cannock site and to mitigate any impacts.
Air and Water Freight

A. Role of Air and Water Freight

The overwhelming majority of freight movements are by road or rail. However, specialist and niche freight movements also occur by Air and Water and make an important contribution to logistics.

In the case of air freight such freight movements support highly valuable, long distance or just in time logistic movements providing access to goods and markers which could not otherwise be accessible, noticeably long haul destinations.

Despite the West Midlands being at the core of inland waterways and be well connected via a comprehensive canal network, Water based freight is an underused mode of freight which has the potential to make a significant contributions to the freight sector, especially for non time limited bulk material movements such as waste, whilst potentially delivering lower carbon emissions for movements compared to other modes.

Air and Water freight movements therefore both have an important role in the freight sector and have an important role in delivering LTP3 Strategy objectives especially towards supporting economic growth.

B. Air and Water Freight Partners: Roles and Responsibility

West Midlands Freight Quality Partnership

The mix of stakeholders and previous successes of the FQP means that the FQP is suitably placed to support and lead on specific schemes and initiatives delivery outlined in LTP3.

Integrated Transport Authority

The Local Transport Act (2008) placed responsibility for strategic freight policy with the ITA. The ITA is also responsible for promoting freight schemes, in partnership with stakeholders, which have Metropolitan wide network implications or require a Metropolitan perspective.

Local Authorities

Local Authorities, as Highway Authority, are responsible for the promotion and delivery of schemes that occur on the public highways as well as working with air and water freight stakeholders to develop and deliver local schemes and initiatives.

British Waterways

British Waterways own and maintain the majority of waterways and associated towpaths or bridges across the UK including the canal network across the metropolitan area.
Airports

Birmingham Airport is the regional gateway to and from international destinations. There are long term aspirations to expand airfreight capacity via either freight only flights or haulage on passenger flights. Future growth of freight activity at Birmingham Airport will largely be dependent upon the runway extension and the additional long haul traffic flown in passenger belly-holds that it will permit, although the use of just in time manufacturing techniques and export growth is also likely to encourage continued growth in pure freight operations.

Freight Operators

Air and Water Freight operators are partners and are crucial in identifying related problems and developing solutions. Freight operators are invited to attend the Freight Quality Partnership (FQP).

C. Progress and Successes from LTP2

West Midlands Canal Freight Studies

In 2006, the FQP led the development of two studies into the potential application of canal based freight movements in i) Birmingham and the Black Country and ii) Coventry and Warwickshire. The broad objectives of both studies were:

- The identification of general factors and constraints that will influence the viability of the carriage of freight on the West Midland Waterways;
- Investigation of businesses and sites which may make use of canal freight potential, together with origins and destinations of such traffic; and
- Identifying canal-side locations suitable for economic development and new freight facilities.

The two studies identified multiple locations within the studies areas that could be developed into canal wharfs for freight transfer (noting they are not protected). However, canal freight relies on the desire of businesses to locate near canals and wish to take advantage of them over other forms of freight movement.
## D. LTP3 Key Objective Alignment

| **K01 Economy** | - Air freight allows businesses to make or receive high value goods;  
- Air freight helps support the ‘just in time’ logistics delivery principle for certain types of goods;  
- Air freight allows businesses to access new and long distance markets to trade with;  
- As the centre of national water networks, increased levels of water freight in the Metropolitan Area offers opportunities to attract new economic investment; |
| **K02 Climate Change** | - Air freight carried by long haul flights direct to Birmingham Airport will remove the need to transport goods from airports such as Manchester or from the South East reducing Carbon emissions;  
- Water freight is extremely carbon efficient and thus freight movements transferred to water would be more carbon efficient than other principal modes; |
| **K03 Health, Personal Security and Safety** | - Transfer from road freight to water freight would contribute towards improved air quality; |
| **K04 Equality of Opportunity** | - Air freight allows access to goods and markets which might not otherwise be accessible to businesses of the Metropolitan Area supporting economic diversity; |
| **K05 Quality of Life and Local Environment** | - Enhancements to waterways/ canals would also benefit leisure trips as well as benefiting active travel trips such as walking and cycling |
E. Major Influences on Water and Air Freight

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3. This includes an analysis of relevant plans, policies and programmes from international through to local level and their implications for LTP3 Air and Water Freight.

F. LTP3 Policies – Water and Air Freight

Policy SF6 - Supporting Air Freight: To support Air Freight reflecting its role in international markets access, trading high value goods and receiving ‘Just in Time’ goods whilst taking due regard to associated impacts from air freight to local residents and the environment.

Air Freight plays an important role in the wider movement of freight to and from the Metropolitan Area and is important to the Area by providing the ability for businesses to trade with international destinations especially for high value goods or time expired goods required via for ‘just in time’ logistics.

However, currently air freight contributes only a small amount of the total amount of freight moved in the Metropolitan Area, in 2009 just 15,000 tonnes of freight moved through Metropolitan Area airports\(^\text{12}\) compared to 47.4M tonnes carried via road or 2.1M tonnes by rail.

The limited ability for the Metropolitan Area to handle long haul services, which is restricted by runway and airport capacity constrains, means that currently the majority of air based freight that starts or is received in the Metropolitan Area is transferred from airports such as Manchester International Airport via road. The vast majority of airfreight that does arrive in the Metropolitan Area is ‘belly hold’ freight from passenger services.

Air travel currently accounts for 1.9% of transport sourced carbon emissions\(^\text{13}\). Whilst a relatively small amount, airfreight is a carbon intensive form of freight transport compared to other modes. However mitigating against airfreight carbon emissions is not the role of LTP3 and must be led by national or international guidance. Instead environmental mitigation of airfreight will focus upon noise, road traffic impacts and impacts from night flights.

\(^{12}\) Source: Department for Transport “Regional Transport Statistics” (2009)

\(^{13}\) Source: Department for Transport “Low Carbon Transport - A Greener Future” (2009)
Therefore, recognising the important role of airfreight and the constraints to existing long haul flights, Local Authorities will work with freight operators and Airport owners to support Air Freight during LTP3 taking due regard of associated impacts from airfreight on local residents and the environment. In order to support the Air & Water Freight Strategy, and in addition to schemes and initiatives developed during the course of LTP3, the following specific intervention is proposed:

1. **Birmingham Airport Runway Extension**

   Birmingham Airport has planning permission from Solihull MBC for a runway extension. Future growth of freight activity at Birmingham Airport will be largely dependent upon the runway extension and the additional long haul traffic flown in passenger aircraft belly-holds that it will permit, although the use of just in time manufacturing techniques and export growth is also likely to encourage continued growth in pure freight operations. The extension of the runway is a Regional Transport Priority.

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**Policy SF7 - Supporting Water Freight: To identify and support new concepts and initiatives in developing further opportunities for water based freight movements**

Water freight has the potential to contribute to the objectives and is currently an underused resource across the Metropolitan Area. The principal benefit of water freight is the low carbon emissions compared to road or rail freight, which are 63% lower than for road freight and 25% lower than for rail freight\(^{14}\). At the same time, development of water freight, especially on canals, is constrained by canal locks and the wider quality of canals as well as practical issues such as the low availability of canal wharfs or the attractiveness to businesses and organisation to use water freight in terms of cost or journey speed.

Funding and statutory limitations placed on British Waterways restrict their ability to finance canal upgrades. However, as a principle British Waterways’ policy is to promote the canal network as a sustainable transport route and encourage ‘access for all’ which is expected to continue.

The Metropolitan Area two Freight Canals Studies identified practical applications for water freight, notably for the use of low value non time restricted freight movements such as domestic waste or construction aggregates, as well as multiple locations within each study area that could be developed into canal wharfs for freight transfer.

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\(^{14}\) Source: Select Committee on Environmental Audit in April 2006
Solutions to the practical issues would therefore require private sector partnership to deliver schemes. Therefore, Local Authorities will work with freight operators and public/private organisations in identifying and delivering innovative concepts and initiatives to develop and increase water freight movements. In order to support the Water Freight Strategy, and in addition to schemes and initiatives developed during the course of LTP3, the following principal intervention is proposed:

1. Protecting Canal Wharfs

The two Metropolitan Area Canal Freight strategies highlighted that whilst the majority of canals routes themselves were available for freight movements, it was the lack of existing or potential waterside wharves which was hindering water freight. The two studies identified 49 sites in Birmingham and 27 sites in Coventry that offered potential for wharf locations. However, the majority are not protected for freight related activity in land use plans.

This lack of land use planning protection is a major inhibitor for businesses and organisations from developing water freight proposals. Additionally, waterside locations are desirable for residential and commercial development meaning costs for industrial development can be prohibitively high.

Local Authorities, through the Local Development Framework process, will identify and protect water wharf sites that offer potential to be used for water freight purposes.
LTT8: EFFECTIVE AND RELIABLE TRANSPORT INTEGRATION (TI)
Park & Ride

A. Role of Park and Ride

The role of Park and Ride is to encourage transport users to take public transport for a significant part of their journey. We recognise that the car is essential for a portion of the population in order to start and finish their journey – but it need not be necessary for the whole journey, especially if they want to access central areas where congestion exists. Park and Ride is attractive where it offers seamless journey integration for the customer from their car onto public transport (see below – modal integration). Park and Ride in LTP3 includes both rail- and bus-based initiatives.

Park and Ride can be split into two offerings:

1. Local Park and Ride – where customers can use a relatively local car park to make their onward journey, via their local rail or metro station or bus network

2. Strategic Park and Ride – this will usually be a larger car park with a more frequent public transport service. These are usually easily accessible to commuters travelling from outside of the Metropolitan Area into its centres.

Park and Ride supports many LTP3 Objectives, including modal transfer, reducing congestion and improving air quality.

B. Partners: Roles and Responsibilities

Centro has a key role in Park and Ride:

• Centro promotes an integrated public transport network, providing safe, secure, generally free car parking at stations and using Network West Midlands branding – 6500 spaces at 37 rail stations and 3 Metro stops, with only 2 of these charging customers;

• Centro develops and operates park and ride sites and promotes cycling to rail stations through station travel plans and secure cycle parking provision.

The role of operators is to co-ordinate their services to best promote integration where this has benefits for customers.
The role of Local Authorities is to provide good highway access to Park and Ride facilities, to protect local inhabitants from inappropriate on-street parking around stations, to promote safe conditions for walking and cycling to rail and metro stations and public transport interchanges, and to provide traffic engineering measures which promote the safe interaction of cycling, motorcycles, general traffic and buses.

The District Councils in the Journey to Work area and/or train operators provide parking at train stations for a charge, compared to Centro’s current policy of free parking. Coordinating our long-term strategies will be vital to ensure equity and sufficient appropriate parking for customers.

C. Progress and Successes from LTP2

Incremental park and ride expansion has continued across the Metropolitan Area with 600 new spaces being built since 2005. A further 569 spaces are programmed to be delivered in the next 2-3 years.

D. LTP3 Key Objective Alignment

| KO1 Economy | • Supports modal transfer, increasing the journey time reliability of the strategic highway network; easier/more reliable access into employment areas |
| KO2 Climate Change | • Supports modal transfer, reducing greenhouse gas emissions and improving air quality (particularly in centres) |
| KO3 Health, Personal Security and Safety | • Supports modal transfer, reducing local air pollutant emissions |
| KO4 Equality of Opportunity | • Improves access to services and other desired destinations |
| KO5 Quality of Life and Local Environment | • Reduces stress by reducing traffic levels so road user improvements and equivalent benefits for those transferred onto public transport |
E. Major Influences on LTP3

Centro Integrated Public Transport Prospectus

The Integrated Public Transport Prospectus sets out the long-term vision for public transport serving the Metropolitan Area. This vision is of a 4-tier network supported by integration measures, including Park and Ride.

Park and ride development will take into account:

- Congestion benefits
- Frequency, capacity, and quality of the public transport offer
- Environmental, design and traffic impact
- Potential for interchange with other public transport services
- Implications for the wider public transport network

Potential locations for park and ride sites serving a strategic movement demand are identified in the Prospectus. These potential locations are:

- Brinsford, north of Wolverhampton
- Worcester Parkway
- Bromsgrove
- Vicinity of M42, junction 3
- East of Shrewsbury
- Longbridge
- Vicinity of M5 junction 3
- North of Stratford-upon-Avon
- Telford
- Vicinity of Lichfield Trent Valley
- Vicinity of Kidderminster
- North Redditch
- Tamworth
- Castle Bromwich

Local Park and Ride also has a role to play for short movements to local rail stations, Metro/BRT stops and potentially some principal bus corridors. Incremental expansion of local Park and Ride facilities will continue where demand exists and expansion is feasible – as above, 569 park and ride spaces are in the current capital programme and due to be delivered within the next 2-3 years. Further park and ride spaces will continue to be added to build capacity and encourage drivers to switch to rail and metro to undertake their journeys.

Proposals for Strategic Park and Ride will be considered against guidance in PPG2: Green Belts if necessary and measures will be taken to ensure that residents in the vicinity of Park and Ride are not adversely affected by light and noise pollution; planting and landscaping will also be incorporated as necessary so as to reduce adverse visual impacts and enhance biodiversity.

F. LTP3 Policies

Policy TI1 – Strategic Park and Ride: To develop strategic Park and Ride capacity at appropriate locations to serve strategic movement demands

Policy TI2 – Local Park and Ride: To develop increased local Park and Ride capacity appropriate to meeting local demand
Public Transport Information and Modal Integration

A. Role of Public Transport Information and Modal Integration

i Public Transport Information

The role of public transport information is to improve the experience of existing users and help generate increased public transport use. This is to help achieve wider LTP3 Objectives associated with social inclusion and modal transfer. Public transport information is an important tool for improving integration of public transport, delivered through the “Network West Midlands” brand. A more integrated public transport system allows wider journey possibilities and thus helps increase public transport use.

ii. Modal Integration

Modal integration is defined as

- Integration of public transport services and modes: bus, BRT, Metro, rail (interchanges, integrated ticketing)
- Integration of car use and public transport modes (Park and Ride)
- Integration of walking and public transport modes
- Integration of cycling and public transport modes (cycle and ride)
- Integration of taxis and public transport modes
- Integration of motorcycles and public transport modes

The role of modal integration is to increase public transport use for people without access to a car and to reduce some car mileage at congested times without reducing people’s accessibility. This is through journeys being comprised of suitable services or modes for different legs of the journeys. Modal integration will thus help achieve wider LTP3 Objectives associated with modal transfer.

B. Partners: Roles and Responsibilities

i Public Transport Information

Public transport information in the Metropolitan Area is provided through the “Network West Midlands” brand. This is delivered through partnership working between bus, rail and metro operators and Centro.
Supporting information sources are Traveline and operators’ own websites and printed materials.

The role of Centro is to co-ordinate Network West Midlands information provision. Centro is responsible for the Network West Midlands website and information provision at all 13,000 bus stops in the Metropolitan Area. This covers printed information and real time information.

The role of bus operators is to supply Centro with up-to-date information and fund provision. Rail and Metro operators provide printed and real time information for rail and metro services at stations and stops.

**ii. Modal Integration**

Centro performs several modal integration roles:

- Promotes the presentation of an integrated public transport network through Network West Midlands branding.
- Develops and maintains small on-street interchanges, bus-rail interchanges and bus stations.
- Provides multi-modal and multi-operator ticketing through the Network West Midlands brand and is developing smartcard in partnership with operators.
- Develops and operates park and ride sites and promotes cycling to rail stations through station travel plans and secure cycle parking provision.

The role of operators is to co-ordinate their services to best promote integration where this has benefits for customers.

The role of Districts is to promote safe conditions for walking and cycling to rail stations and public transport interchanges and to provide traffic engineering measures which promote the safe interaction of cycling, motorcycles, general traffic and buses. Districts also have an important role to play with taxi stand provision at public transport facilities and taxi/private hire vehicle licensing.

**C. Progress and Successes from LTP2**

**Successes**

**i Public Transport Information**

**Network West Midlands (NWM)**

Public transport information has been transformed over the last few years. Prior to this had been fragmented information provision, which had been a deterrent to using public transport. NWM was launched in 2006 as the unified, customer-facing brand for the public transport system across the conurbation. Its introduction represented a clear response to providing what customers required from their public transport network, an integrated approach to providing all public transport information. In 2009, the NWM concept was extended to represent all forms of sustainable travel, including walking, cycling and car sharing.
In partnership with the regional TravelWise group it now includes our Smarter Choices work. This development represents our commitment to an integrated approach to transport in the region. NWM has delivered major improvements in passenger information including:

- A cohesive multi-modal brand identity across all infrastructure, ticketing, signage, Travel Shops, passenger information and campaign publicity.
- Comprehensive passenger information at more than 13,000 bus stops, shelters and interchanges.
- New bus poles, shelters, information points, refurbished bus stations and improved signage.
- New computer systems to enable bus services to be translated into customer friendly on-street information.
- The significant roll out of Real Time Information at all rail stations, Metro stops and key bus stops.
- Interactive multi-modal mapping, real time information and journey planning tools on the web.
- Journey planning tools and real time information via digital TV and mobile devices.
- Simple multi-operator printed timetables.
- Broadcast brand awareness campaigns including TV, and door drops to 1.2 million households.

### ii. Modal Integration

LTP2 has seen implementation of a new bus station at Halesowen and current construction of a new Wolverhampton interchange.

Smartcard is currently being rolled out across the Metropolitan Area, with initial use being for OAPs concessionary passes.

Incremental Park and Ride expansion has continued across the Metropolitan Area with 600 new spaces being built since 2005.

The Kings Norton Station travel plan pilot has been implemented, with wider roll out of the initiative planned.

Birmingham City Council has trialled the use of bus lanes by Powered Two Wheelers and, in light of the trials results, made the arrangements permanent.

### Committed Schemes

#### i Public Transport Information

Information improvements programmed include increased use of real time digital information, new media technology and website development.

#### ii. Modal Integration

Smartcard is currently being rolled out across the Metropolitan Area and is a committed Centro capital scheme.

Park and ride expansion at selected rail stations is also committed within Centro’s budgets, including expansion at Tile Hill.

A new bus interchange at Stourbridge is a committed scheme in Centro’s capital programme.
### D. LTP3 Key Objective Alignment

#### i Public Transport Information

<table>
<thead>
<tr>
<th>Objective Area</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| **K01 Economy** |  * Supports modal transfer, increasing the journey time reliability of the strategic highway network*  
  * Increases awareness of travel opportunities so increases the mobility of labour markets* |
| **K02 Climate Change** |  * Supports modal transfer, reducing greenhouse gas emissions* |
| **K03 Health, Personal Security and Safety** |  * Supports modal transfer, reducing local air pollutant emissions* |
| **K04 Equality of Opportunity** |  * Increases awareness of travel opportunities so increases general travel opportunities and access for all* |
| **K05 Quality of Life and Local Environment** |  * Reduces stress by improving the journey experience of public transport users* |
## ii. Modal Integration

| KO1 Economy | • Supports modal transfer, increasing the journey time reliability of the strategic highway network  
|            | • Increases awareness of travel opportunities so increases the mobility of labour markets |
| KO2 Climate Change | • Supports modal transfer, reducing greenhouse gas emissions |
| KO3 Health, Personal Security and Safety | • Supports modal transfer, reducing local air pollutant emissions |
| KO4 Equality of Opportunity | • Improves access to services and other desired destinations |
| KO5 Quality of Life and Local Environment | • Enhances the quality of the urban realm in centres |

### E. Major Influences on LTP3

#### i Public Transport Information

**Integrated Public Transport Prospectus**

The Integrated Public Transport Prospectus sets out the long-term vision for public transport serving the Metropolitan Area. The role of high quality integrated information is recognised as a part of integration measures supporting the 4-tier network vision.
**Integrated Passenger Information Strategy**

Centro is currently developing its latest Integrated Passenger Information Strategy. This will be a key driver of further information improvements, based on 10 principles:

1. Providing integrated, comprehensive and accurate information
2. Delivering digital information “pre-trip”
3. Delivering digital information “on the move”
4. Offering personalised travel information
5. Providing on vehicle information
6. Delivering information in person
7. Delivering help yourself services
8. Improved signage and way finding
9. Enhancing information at interchanges, visitor attractions and businesses
10. Information for all

**ii. Modal Integration**

**Integrated Public Transport Prospectus**

The Integrated Public Transport Prospectus sets out the long-term vision for public transport serving the Metropolitan Area.

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**F. LTP3 Policies**

**i Public Transport Information**

**Policy TI3 – Public Transport Information:** To ensure high quality information is accessible to all about public transport services covering before, during and after a journey

**ii. Modal Integration**

**Policy TI4 – Modal Integration:** To develop seamless integration between all types of transport modes with focus upon high quality public transport interchanges
Taxis & Private Hire Vehicles

A. The Role of Taxis (Hackney Carriages) and Private Hire Vehicles (PHVs)

Taxis (Hackney Carriages) and Private Hire Vehicles (PHVs) perform an important role within an integrated transport policy, by providing personalised public transport for individuals or small groups who arrive by air, rail or coach and need to travel on to their ultimate destination. This is particularly significant in relation to travel to local businesses or to conferences and other major events. Taxis and PHVs can seat no more than eight passengers. Stretched limousines and other speciality vehicles may, subject to their seating capacity, be licensed as PHVs.

There are clear differences between the way taxis and PHVs can offer their services to the public. Taxis can be hailed on street and can wait for customers at designated taxi ranks, and can also carry customers who have pre-booked, usually by telephone. PHVs can only carry customers who have pre-booked, usually by telephone but customers may also go to the PHV company’s office. The advent of mobile telephones enables customers to pre-book a taxi or a PHV from anywhere and there can be instances of PHVs allegedly plying for hire on street and then asking the customer to telephone to make the booking. This and other illegal practices can cause tension between taxi and PHV drivers and can also affect the customer’s safety since the PHV’s insurance may be invalid or the vehicle or driver may not be properly licensed.

The provision of taxi ranks, and availability of taxis at all reasonable times, at railway stations, main coach stopping places, major event venues and in town and city centres is an important factor in the way taxis serve the public. This is a particularly difficult issue in busy locations where there is competition with other vehicles for kerb-side access. This is exacerbated by the increased number of taxis following the removal of restrictions on the number of licences issued by the Authorities.

Taxis and PHVs provide publically available transport services at times when it is not economic for conventional public transport to operate frequently or to or from locations too remote for adequate bus or rail services. This helps improve personal accessibility and/or supports the nighttime economy both for employers and customers.
People who do not have access to a car often make use of taxis and PHVs; it is not unusual to take a bus to a town or shopping centre and then use a taxi or PHV for the return trip with the shopping. A report by the Office for Fair Trading (November 2003) found that; “on average, people in the lowest 20 per cent of incomes use taxis and PHVs 40 per cent more often than those in the highest 20 per cent.”

Additionally, taxis and PHVs are used by vulnerable travellers (for example, unaccompanied children) for a range of daily trips, including home-to-school journeys. By accommodating people in wheelchairs, taxis can help contribute towards the personal accessibility of people with mobility difficulties. The same OFT report also found that: “Taxis and PHVs are used more frequently by disabled people (67 per cent more) than non disabled people.”

Taxis and PHVs may have negative effects on congestion and local and global emissions as their journeys can often be twice the length of the actual passenger trip, by having to go empty to collect the customer or return empty. This is especially so for journeys that cross Metropolitan District (licensing area) boundaries since taxis are not permitted to ply for hire outside their licensing area. This may not be always the case with PHVs or taxis that are using a central control booking system that enables them to move from one job to another with less ‘dead’ mileage. The following tables show the numbers of licensed Taxis & PHVs and the number of taxi ranks and the principal locations within each Metropolitan District.

<table>
<thead>
<tr>
<th>Licensing Authority</th>
<th>Hackney Carriages</th>
<th>Private Hire Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vehicles</td>
<td>Drivers</td>
</tr>
<tr>
<td>Birmingham</td>
<td>1,465</td>
<td>5,562</td>
</tr>
<tr>
<td>Coventry</td>
<td>741</td>
<td>1,024</td>
</tr>
<tr>
<td>Dudley</td>
<td>252</td>
<td>473</td>
</tr>
<tr>
<td>Sandwell (*)</td>
<td>114</td>
<td>219</td>
</tr>
<tr>
<td>Solihull</td>
<td>234</td>
<td>218</td>
</tr>
<tr>
<td>Walsall (**)</td>
<td>128</td>
<td>382</td>
</tr>
<tr>
<td>Wolverhampton</td>
<td>144</td>
<td>270</td>
</tr>
</tbody>
</table>

Note: * Driver numbers include 187 who hold both licences (counted in both totals)
** Driver numbers include 343 who hold both licences (counted in both totals)
There is a general consensus that there are not enough ranks in the most popular locations and evidence that the taxi trade is reluctant to use ranks that are not already popular. There are suggestions that bus stops, delivery bays and other ‘protected’ lengths of kerb could be used as night-time taxi ranks to ease the pressure in the most popular entertainment areas.

Taxis and PHVs are vital to the late evening / night-time entertainment economy as many pubs and clubs now close after bus and rail services have ceased operating. The issue of illegal plying for hire by PHVs and unauthorised ranking by taxis waiting to help disperse crowds of people has led to the employment of Taxi Marshalls by Birmingham, Coventry, Dudley (for Stourbridge town centre) and Solihull Councils.

### B. Partners: Roles and Responsibilities

The Metropolitan Councils are responsible both as licensing and local highway authorities for most matters that affect the way that taxis and PHVs serve the public. One example is the issue of vehicle accessibility and each of the District Authorities require Hackney Carriages to be wheelchair accessible. Each Authority has policies relating to the age and/or the condition of the vehicle to be licensed as a taxi or PHV and have regular testing requirements. The Authorities

<table>
<thead>
<tr>
<th>Taxi Ranks</th>
<th>Spaces</th>
<th>Main Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birmingham</td>
<td>23055555</td>
<td>Colmore Row, Broad Street (evening), Hurst Street (evening), Sutton Coldfield Parade, Summer Row, Dale End and of course New Street Station (not a BCC rank).</td>
</tr>
<tr>
<td>Coventry</td>
<td>223</td>
<td>Broadgate, Trinity Street and railway station.</td>
</tr>
<tr>
<td>Dudley</td>
<td>21 ranks</td>
<td>Town centres, bus and railway stations.</td>
</tr>
<tr>
<td>Sandwell</td>
<td>20</td>
<td>Eleven ranks, main ones at West Bromwich town centre and Sandwell &amp; Dudley railway station.</td>
</tr>
<tr>
<td>Solihull</td>
<td></td>
<td>Birmingham Airport</td>
</tr>
<tr>
<td>Walsall</td>
<td>15</td>
<td>Two ranks at Bridge Street &amp; Cenotaph in Walsall town centre, also rarely used ranks in Aldridge, Bloxwich, Brownhills and Willenhall.</td>
</tr>
<tr>
<td>Wolverhampton</td>
<td>48</td>
<td>Ten ranks, all within Ring Road.</td>
</tr>
</tbody>
</table>
also have strict policies concerning the issue of licences to taxi and PHV drivers with checks relating to driving and criminal records. However, many precise requirements for drivers and vehicles vary between the Districts.

As local highway authority, Local Authorities have to balance demand for kerb-space in trying to accommodate the taxi trade’s continuing demand for more ranks or more space at existing ones. Another issue is access to bus lanes by PHVs. Generally, taxis are allowed in bus lanes across the seven District areas but PHVs are excluded, primarily for enforcement and recognition reasons. There is strong pressure from PHV operators to be allowed to use bus lanes, but this can lead to opposition by taxi and bus operators. From a wider perspective, in some areas the concentration of taxis and PHVs is such that their use of bus lanes has the potential to disrupt bus services, whilst in others there is spare capacity. Whilst this might suggest a site-specific approach to the issue, this has the potential to cause confusion both amongst drivers and enforcement officers.

Centro, as the integrated transport authority, has a minor role through the contracting of socially necessary local bus and associated services. One example of the latter is the ‘Heart of England Taxibus’ that operates in the rural part of the Metropolitan Area between the M42 and A45 (the Meriden Gap) during daytime hours, Mondays to Saturdays. It links residents of this area with Berkswell, Dorridge and Hampton-in-Arden Stations and other locations within its operating area and with Birmingham International, Coventry, Marston Green, Solihull and Tile Hill Stations just beyond.

The Metropolitan District Councils, as local education and personal social services authorities, have a significant interest in both taxis and PHVs – frequently using then for client transport purposes, including the transport of vulnerable people.

Centro also has a role at railway stations and public transport interchanges to ensure that there are adequate facilities for taxis to wait on ranks and for PHVs to pick up pre-booked customers.

C. Progress and Successes from LTP2

The establishment of the West Midlands Neighbouring Authorities Working Group (subsequently re-named the Regional Taxi Licensing Forum) gives licensing officers opportunities to meet regularly and share best practice with speakers inviting to discuss specific issues.

The licensing authorities have responded to the Government’s wish to see restrictions on taxi numbers relaxed or abandoned. It may be easier now to find a taxi, especially at popular town and city centre ranks, but the increased numbers (which sometimes has been just a transfer from a PHV to taxi licence) has led to severe over-crowding at the most popular ranks, sometimes causing congestion to other traffic. Birmingham City Council is re-introducing a restriction on the number of Hackney Carriage licences that it will issue.
## D. Alignment with LTP3 Key Objectives

<table>
<thead>
<tr>
<th>Key Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K01 Economy</strong></td>
<td>• Taxis and PHVs provide personalised travel for business-people and for journeys to conferences, events, etc., to or from main railway stations and airports.</td>
</tr>
<tr>
<td></td>
<td>• They also support the late evening / night-time economy of many areas by providing transport after bus and rail services have ceased operating.</td>
</tr>
<tr>
<td><strong>K02 Climate Change</strong></td>
<td>• Generally taxis and PHVs are no better than a journey by own car for local trips. However, by providing essential link in journeys that use sustainable modes and if this is as an alternative to travel by car, they help minimise total emissions.</td>
</tr>
<tr>
<td></td>
<td>• Empty running, going to or from the rank or base before or after carrying the passenger, can lead to more emissions than a local journey by private car.</td>
</tr>
<tr>
<td><strong>K03 Health, Personal Security and Safety</strong></td>
<td>• Strict vetting of drivers ensures that this should be a safe form of door-to-door travel. However, there are some issues regarding unlicensed operations, by PHVs or special vehicles.</td>
</tr>
<tr>
<td><strong>K04 Equality of Opportunity</strong></td>
<td>• Subject to affordability, taxis and PHVs (the latter normally with lower charges) offer personalised journeys to anyone. All taxis can carry people in wheelchairs.</td>
</tr>
<tr>
<td><strong>K05 Quality of Life and Local Environment</strong></td>
<td>• Generally neutral, although unauthorised ranking and excessive queuing at popular ranks can be detrimental to the streetscape.</td>
</tr>
</tbody>
</table>
E. Policy Context for LTP3

The licensed taxi and PHV market is highly regulated. The regulations fall into four broad categories: quantity, quality, fares and drivers. The licensing authorities have the ability to limit the supply of taxis by imposing a cap on the number of licences for taxi vehicles, but not for PHVs. They also have powers relating to the quality and safety of taxi and PHV vehicles with regular inspection and testing regimes. Drivers are assessed as to their suitability, including Criminal Record Bureau checks. The authority determines Hackney Carriage fares. The District Councils, as local highway authority, are responsible for the provision of taxi ranks for Hackney Carriages.

The Transport Act, 1985, required licensing authorities not to restrict the issue of Hackney Carriage ‘plates’ unless there was evidence that there was no unmet demand in the relevant area. This was a first step towards freeing the previously restricted taxi market. In November 2003, the Office for Fair Trading published a report ‘The regulation of licensed taxi and PHV services in the UK’ recommending that the quality restrictions be lifted and that the quality and fares regulations be reviewed in order to stimulate competition and, thus, provide a better service to the public.

The Parliamentary Transport Select Committee considered the OFT’s report and recommendations and published their report ‘The Regulation of Taxis and Private Hire Vehicle Services in the UK’ in February 2004. On the main matter of whether or not taxi numbers should be controlled by the Local Authority, the Committee stated that; “we would expect far more compelling evidence of market failure than that produced by the OFT before local discretion was removed. Our investigation has convinced us that the Office of Fair Trading study is partial, doctrinaire, sloppily conducted and does not provide sufficient evidence to support any change in the law which reduces local discretion”. The Committee decided that the recommendations on quantity control should be rejected.

The Government responded to the Select Committee’s report in March 2004, setting out what was described as an action plan, as follows:

- The removal of restrictions on the number of taxi licenses that can be issued by a licensing authority (except where removal of such restrictions would lead to a significant consumer detriment as a result of local conditions);
• The need to maintain quality in taxi and private hire vehicle service provision, particularly in relation to securing the safety of the general public;

• The identification of maximum rather than minimum fare levels, in order to protect vulnerable consumers and allow users to negotiate lower fares in certain circumstances; and

• The need to establish single licensing areas, in order to bring greater clarity to areas where multiple zones exist.

In LTP2 Guidance, the Department for Transport asked that LTPs “should be prepared in a way that incorporates and explains local policies relating to taxi and private hire vehicle services and should specifically include explanations or justifications of any restrictions imposed on the number of licences by authorities in the LTP area”. The latter part of this guidance actually relates to Hackney Carriages, inasmuch that authorities have never had the power to restrict the number of PHV licences. This advice was taken to indicate Government’s wish that authorities stop restricting the issue of Hackney Carriage licences and the Metropolitan Districts reacted accordingly.

F. LTP3 Policies for Hackney Carriages and Private Hire Vehicles

Policy TI5: To help ensure that taxis and PHVs can continue to play a role in an integrated transport offer to residents, visitors and businesses in the Metropolitan Area

Policy TI6: To develop an integrated approach to restrictions on access to bus lanes across the Metropolitan Area
LTT9:
IMPROVED SAFETY AND SECURITY (SS)
A. Role of Road Safety

The scale of death and injury on our roads is a huge public welfare issue, causing physical and emotional pain to the victims and their families and friends. In Great Britain as whole the total value of prevention of all road traffic collisions involving injury in 2008 was estimated to be £12.8 billion, rising to £17.9 billion when the cost of damage only collisions is added. In the Metropolitan Area alone the total value of prevention of all road traffic collisions involving injury in 2008 is estimated at £450.5m.

Cost of Collisions in 2008:

<table>
<thead>
<tr>
<th>Severity</th>
<th>Cost per collision</th>
<th>Number of Collisions</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal</td>
<td>£1,906,200</td>
<td>56</td>
<td>£106,747,200</td>
</tr>
<tr>
<td>Serious</td>
<td>£218,100</td>
<td>856</td>
<td>£186,693,600</td>
</tr>
<tr>
<td>Slight</td>
<td>£22,600</td>
<td>6951</td>
<td>£157,092,600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>£450,533,400</strong></td>
</tr>
</tbody>
</table>

For every fatality prevented there is a cost benefit of £1.9 million.

Road safety is concerned with reducing the numbers and consequences of road traffic collisions by developing and implementing multidisciplinary and holistic and interrelated interventions across a number of fields.

B. Road Safety Partners Roles and Responsibilities

Local Authorities

Road Safety is a statutory responsibility for Local Authorities as set out in Section 39 of the Road Traffic Act 1988. The Act requires each highway authority to “prepare and carry out a programme of measures designed to promote road safety, and shall have the power to make contributions to the cost of measures for promoting road safety taken by other authorities or bodies.”
Police
The Roads Policing Strategy issued jointly by the Association of Chief Police Officers, Home Office and Department for Transport forms part of the delivery of the National Policing Plan and establishes as one of the actions ‘reducing road casualties’.

Fire and Rescue Service
The Fires and Rescue Services Act 2004 recognised the broader role of the Fire and Rescue Service and gave legal basis for partnership arrangements to assist an authority in discharging its responsibilities for dealing with road traffic collisions and other emergencies.

Highways Agency
The Highways Agency is responsible for operating, maintaining and improving the strategic road network (motorways and major A roads) in England.

Ambulance Service and hospital emergency departments.

Effective treatment of casualties at the site of road traffic collisions and in hospital emergency departments.

Voluntary Sector and Campaign groups
Organisations such as RoSPA and Institute of Advanced Motorists have a role in engaging with all road users and promoting safer road use for all.

West Midlands Road Safety Partnership
In April 2007 the Government introduced Road Safety Grant, and integrated funding for safety cameras into the LTP system alongside other road safety measures. This gave Local Authorities, the police and other agencies greater flexibility to pursue a locally agreed mix of road safety measures. As a consequence, the West Midlands Safety Camera Partnership was dissolved and the West Midlands Road Safety Partnership was formed with a much wider remit.

Membership of the West Midlands Road Safety Partnership Board is predominately elected Councillors from the seven Local Authorities along with representatives of the police authority and fire and rescue authority. Representation from the Highways Agency, Her Majesty’s Courts Service and strategic health authority is also invited. The elected members ensure there is a democratic mandate for The Board’s activities.

The Board is supported and advised by a Technical Officers Group, made up of responsible officers from the partner organisations who advise on policy, and implementation. The tasks of the Partnership Board are to:
• Co-ordinate road safety measures within the Metropolitan Area
• Respond to Government consultation and other matters affecting road safety
• Monitor progress towards the traffic collision casualty reduction targets as set out in the LTP
• Monitor performance under the National Indicators for road safety
• Monitor traffic collision trends to develop an understanding of the road safety issues facing the Metropolitan Area

C. Progress and Success from LTP2

Over the last ten years, we have made good progress in reducing the number of road casualties. In 2009 the number of people killed or seriously injured on roads had fallen to 999 compared with the 1998 total of 2,062.

Since the inception of the LTP process in 2001 the Area has led other English Metropolitan Areas in reducing casualties as a result of road traffic collisions. This continued through LTP2, which covers the period 2006 to 2011. The table below shows the position in relation to the other Metropolitan Areas.

**KSI Casualty Rate per 100 Million Vehicle Kilometres**

<table>
<thead>
<tr>
<th></th>
<th>1994-98 Average Baseline</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2008 % Change on Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Midlands</td>
<td>13</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>-55</td>
</tr>
<tr>
<td>Greater London</td>
<td>21</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>-48</td>
</tr>
<tr>
<td>Tyne and Wear</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-45</td>
</tr>
<tr>
<td>Merseyside</td>
<td>12</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>-43</td>
</tr>
<tr>
<td>Greater Manchester</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-42</td>
</tr>
<tr>
<td>West Yorkshire</td>
<td>11</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>-35</td>
</tr>
<tr>
<td>South Yorkshire</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>-32</td>
</tr>
</tbody>
</table>
Killed and Seriously Injured

The 40% reduction on 1994-98 average by 2010 was achieved in 2003. A more stretching target of a further 30% reduction on the 2002-2004 average compared with the 2008-10 average was set in 2006. Progress against the stretching target has been more challenging. The number of KSI in 2009 was 999 compared with the 2002-04 baseline of 1,149. The number of fatalities in 2009 was 73 which compared with the 1994-98 average 101 indicates that fatalities have fallen by less rapidly. This represents a 30% reduction in fatalities compared with a 52% fall in KSI since the 1994-98 baseline.

Child Killed and Seriously Injured

The 50% reduction on 1994-98 average by 2010 was achieved by 2005. A more stretching target of a further 35% reduction on the 2002-2004 average compared with the 2008-10 average was set in 2006.

In 2009 the number of Child KSI was 165, a reduction of 61% from the 1994-98 baseline and 24% reduction on the 2002-04 baseline.

Slight Casualties

A 10% reduction between 2004 and 2010 was achieved in 2008 and continued to show a downward trend.

However despite this progress, 73 people died on our roads in 2009.

In 2000 the Department for Transports road safety strategy ‘Tomorrow’s Roads – Safer for Everyone’ set three national casualty reduction targets to be achieved by 2010 based on the 1994-1998 average. They were:

- A 40% reduction in the number of people killed or seriously injured (KSI)
- A 50% reduction in the number of children killed or seriously injured
- A 10% reduction in the number of people slightly injured
### D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
</table>
| **KO1 – Economy** | - The cost of road traffic collisions has a significant impact on loss of output due to injury, hospital treatment, policing, insurance, damage to property and the human costs of grief and suffering.  
- Road traffic collisions impact on congestion and journey time reliability. |
| **KO2 – Climate Change** | - Creating the environment where people feel safe walking and cycling impacts on emissions. |
| **KO3 – Health, Personal Security and Safety** | - Making pedestrians and cyclists feel safer is crucial to promoting walking and cycling. |
| **KO4 – Equality of Opportunity** | - Disadvantaged communities are disproportionately represented in road traffic collision statistics.  
- Targeted interventions protect the most vulnerable road users. |
| **KO5 – Quality of Life and Local Environment** | - The consequence of death and injury from road traffic collisions has a devastating effect of individuals, their families and friends.  
- Excess speed particularly in residential areas can impose restrictions on peoples daily lives particularly children and older people and those wishing to walk and cycle. |
E. Major Influences on LTP3 Road Safety

The influences on road safety in respect of LTP3 will result from analysis of road traffic collision data and an understanding of the reasons for collisions and identification of the most vulnerable road users.

In the last decade vehicle manufacturers have made considerable progress in making vehicles safer for all road users. This has helped reduce the number and severity of injury from road traffic collisions. Further technological advances are expected in future years, including the continued improvements to safer braking systems, suspension and tyres along with Intelligent Speed Adaption and Collision Avoidance systems.

A move towards a low carbon economy could lead to the rise in vulnerable road users that result from increases in walking, cycling and powered two-wheeler users.

Changes in social demographics will also have implications, as for example the number of older drivers increase. Older drivers have lower bone density and therefore slower recovery times and could suffer more serious and more debilitating injuries as a result of a collision.

Human error is the biggest cause of road traffic collisions. In 2009 the contributory factors to injury RTCs were ‘failed to look properly’ ‘poor turn or manoeuvre’, ‘loss of control’.

Top ten contributory factors to all KSI RTCs in the Metropolitan Area 2009:

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Contributory Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Failed to look properly</td>
</tr>
<tr>
<td>2</td>
<td>Failed to look properly (pedestrian only)</td>
</tr>
<tr>
<td>3</td>
<td>Poor turn or manoeuvre</td>
</tr>
<tr>
<td>4</td>
<td>Loss of control</td>
</tr>
<tr>
<td>5</td>
<td>Careless, reckless or in a hurry</td>
</tr>
<tr>
<td>6</td>
<td>Failed to judge other persons path or speed</td>
</tr>
<tr>
<td>7</td>
<td>Crossing road masked by stationery or parked vehicles (pedestrian only)</td>
</tr>
<tr>
<td>8</td>
<td>Exceeding speed limit</td>
</tr>
<tr>
<td>9</td>
<td>Careless, reckless or in a hurry (pedestrian only)</td>
</tr>
<tr>
<td>10</td>
<td>Slippery road (due to weather)</td>
</tr>
</tbody>
</table>

The vulnerability to the following road user groups and behaviours also influence policies.
Pedestrians & Cyclists – particularly in deprived communities

A significant barrier to encouraging walking and cycling is poor or inconsistent facilities for walking and cycling. Research suggests that pedestrians struck at 30 mph have about a 1 in 5 chance of being killed. At 20 mph the chance of a pedestrian dying is 1 in 40. We will therefore, consider introducing 20 mph limits or zones around schools, shops, markets, playgrounds and other areas where pedestrian and cyclist movements are high.

Such zones and limits will need to be largely self-enforcing through an established toolkit of engineering measures that moderate vehicle speeds. These zones also have potential to reduce pollution and improve public health by encouraging walking and cycling. The limited evidence gathered to date suggests that people walk and cycle more in areas subject to 20 mph zones.

Research shows a link between deprivation and road safety risk. The most deprived areas remain slightly over-represented in the casualty population. In fact the link between casualties and deprivation is largely due to pedestrian casualties, particularly children. For example children from Social Class V are five times more likely to die as pedestrians in a road accident than children from Social Class I. There are many associated causes, which may include: poor environment dominated by roads; lack of play facilities; truancy; lack of understanding or appreciation of road safety issues; lack of community facilities easily accessible on foot; excess levels of through traffic.

There is an established range of measures to assist in protecting pedestrians. This includes infrastructure such as pedestrian crossings and refuges. These kinds of interventions continue to be made by highway authorities.

One area of success has been cyclist training. Bikeability is cycling proficiency for the 21st century, with levels one (off-road training), two (basic in-road training) and three (more advanced on-road training) designed for children of different age groups, but also available for adults. Cycle Training West Midlands (CTWM) was formed to manage the organisation and delivery of nationally accredited instructor-training courses. CTWM is an informal partnership between the seven Local Authorities, the fire service and the police. It is run by local government road safety professionals, specifically to provide cycle instructor training for Local Authorities and other government organisations across the UK. Training is designed to meet and exceed the Bikeability National Standards for cycle training.
Children & Young People

Children and young people are amongst our most vulnerable road users particularly as pedestrians and in the age group 10-15 years in the transition from primary to secondary school when they become more independent travellers.

There is a morning peak in reported child KSI casualties between 8am and 9am coinciding with children travelling to school. There is a peak again from 3pm. At weekends the majority of child KSI casualties happen in the afternoon. There is an increased number of reported child KSI casualties in between June and September, during the school summer holidays. In 2009 there were 165 children and young people under the age of 15 years killed or seriously injured in the Metropolitan Area. A further 972 were slightly injured. This is a significant improvement from 1994-1998 baseline of 415 killed or seriously injured and represents a reduction of 60%. A breakdown of the child casualties for 2009 shows that child pedestrians and particularly pedestrians aged 10-15 years of age.

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>2009</th>
<th>% of total child casualties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>0-4</td>
<td>85</td>
<td>7.4%</td>
</tr>
<tr>
<td></td>
<td>5-9</td>
<td>158</td>
<td>13.8%</td>
</tr>
<tr>
<td></td>
<td>10-15</td>
<td>305</td>
<td>26.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>548</td>
<td>48.1%</td>
</tr>
<tr>
<td>Pedal Cyclist</td>
<td>0-4</td>
<td>1</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td>5-9</td>
<td>27</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td>10-15</td>
<td>111</td>
<td>9.7%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>139</td>
<td>12.2%</td>
</tr>
<tr>
<td>Car Occupants</td>
<td>0-4</td>
<td>95</td>
<td>8.3%</td>
</tr>
<tr>
<td></td>
<td>5-9</td>
<td>124</td>
<td>10.9%</td>
</tr>
<tr>
<td></td>
<td>10-15</td>
<td>192</td>
<td>16.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>411</td>
<td>36.1%</td>
</tr>
<tr>
<td>Other</td>
<td>0-4</td>
<td>4</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td>5-9</td>
<td>7</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>10-15</td>
<td>28</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>39</td>
<td>3.4%</td>
</tr>
<tr>
<td>All</td>
<td>0-4</td>
<td>185</td>
<td>16.3%</td>
</tr>
<tr>
<td></td>
<td>5-9</td>
<td>316</td>
<td>27.7%</td>
</tr>
<tr>
<td></td>
<td>10-15</td>
<td>636</td>
<td>55.9%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,137</td>
<td>100%</td>
</tr>
</tbody>
</table>
Initiatives will include on-street training for children, to improve their pedestrian and cycling skills. Each Local Authority currently maintains its own team of road safety officers who work with schools. Support is provided through a range of curriculum subjects in the form resources and lesson plans, practical training, special events and class visits.

School Crossing Patrols provided by the Local Authorities ensure the safety of children, especially on their journeys to and from school, with the aim of reducing road traffic casualties whilst encouraging active travel to school.

Across the Metropolitan Area pupils are offered the opportunity to undertake cycle training in order to encourage more pupils to cycle to school safely. In the vast majority of schools training takes place within the school timetable although some schools refer training in school holidays and at weekends.

All cycle training courses follow the guidelines set out in Cycling England’s Bikeability scheme. All instructors are qualified at, or are working towards qualification at the Government approved National Standard for cycle training. Cycle training usually starts in primary school with years 5 and 6 pupils.

In recent years schools have developed and implemented School Travel Plans and Safer Routes to School programmes. Together these plans can make a difference to the journey children make to get to and from school by making it safer, healthier, sustainable and more interesting.

**Powered Two Wheelers**

Nationally Powered Two Wheelers are estimated to make up 1% of the road traffic but suffer around 20% of KSIs numbers. In 2009 in the Metropolitan Area there were 166 KSIs involving P2W riders or their passengers. This represented nearly 17% of all KSIs. Powered Two Wheelers are considered in more detail on page 276.

**Rural Roads**

Although predominantly urban in character the Metropolitan Area does have some rural roads. There are established measures, such as road markings, junction treatments and barriers that have improved the safety of rural roads, and these will continue to be deployed with success by highway authorities.

**Promoting Better Understanding of the Consequences of Poor or Inappropriate Road User Behaviour**

Education, training and publicity are central to promoting positive messages tackling the problems of poor road users such as failing to wear a seat belt, mobile phone use, drink and drug driving and are most effective when linked to enforcement activity. Targeting has concentrated on road users who persist in unacceptable behaviour that causes death and serious injury:
Drink-driving - the number of positively tested drivers involved in collisions has fallen from 317 in 2000 to 196 in 2009. This is due to high profile campaigning over many years that has made drinking and driving socially unacceptable. However, there remains a minority who put themselves and others at risk. The age group 20-29 consistently form the largest group of drivers involved in collisions and who test positive for alcohol. In 2009 this age group accounted for 50% of the total.

Drug driving presents a significant danger. Nationally around 18% of people killed in road accidents have traces of illegal drugs in their blood. This represents a six-fold increase since the mid 1980’s. New tests are being developed to ensure there is greater detection of drivers who drive while under the influence of illegal drugs.

Seat Belts - Failure to wear a seat belt increases the chance of death or serious injury. Recent surveys by DfT suggest car driver wearing rates for younger drivers were lower than for middle aged or older drivers. Male drivers are likely to have lower rates than female drivers.

Careless or dangerous driving

Driver improvement schemes can offer a more constructive alternative to prosecution for some drivers who commit relatively minor offences or cause minor crashes. If it is clear that education or further training would help the driver to avoid a recurrence of the incident, then a place on an improvement scheme can be offered (at the discretion of the police) as an alternative to prosecution. It should be emphasised that this is not an easy option. The driver will have to pay for the course and should the driver fail to participate properly in it, then the prosecution could still be pursued.

Unlicensed and Uninsured Driving

There is a clear link between driving without a licence, tax or insurance, and involvement in collisions. The total cost of uninsured motoring in the UK is estimated to be around £500 million, which puts around £30 per year on each policy of law-abiding drivers. Metropolitan areas like the West Midlands are home to the most uninsured drivers. The West Midlands Metropolitan Area as a whole contains six out of the ten worst offending postcodes with an estimated 127,000 uninsured drivers. Half of the uninsured drivers are under the age of 29.

Operation Velociraptor is a targeted roads policing initiative by West Midlands Police which has proved highly successful in clamping down on fail to wear seat belts, mobile phone use, driving with out a licence, tax or insurance.
Illegal and Inappropriate Speed

Research shows a strong link between speed and road casualties. Reducing the average speed of traffic by 1 mph leads to an expected reduction of 5 per cent in the number of collisions. Reducing the speed of the fastest drivers has the largest effect on collisions. Speed limits are set at a level to maintain public safety and there is a need to improve compliance with limits if there is to be an improvement in casualty reduction. A number of traffic calming measures can be deployed to reduce speed:

- **Central Islands** can make wide roads seem narrower, prevent overtaking and make it easier for pedestrians to cross.
- **Road humps** are used on roads with a speed limit of 30mph or less. These can be unpopular and cause problems for emergency services and buses, especially where there is inappropriate on-street parking.
- **Kerb build outs** reduce roads to a single lane so that drivers have to be prepared to give way to oncoming traffic.
- **Gateways** warn drivers that the character of a road is about to change, for example entering a 20 mph zone.

The purpose of safety cameras is to change driver behaviour. They are only used at sites where there is a history of personal injury collisions and where there is a history of drivers breaking the speed limited. The Metropolitan Area currently has a network of nearly 300 fixed safety camera sites. This is supplemented by mobile enforcement from a number of designated sites. Advances in technology will necessitate a review of the current network both in terms of size and a move to digital cameras with are more efficient.

Interactive ‘SLOW’ signs which are blank until activated by a vehicle travelling at or above a particular threshold speed are also used in a number of locations, to reduce speed often in proximity to schools, playgrounds and other locations where there may be issue with speeding vehicles that present a hazard to vulnerable road users.

In some parts of the Metropolitan Area, vehicle activated signs have been placed immediately before a safety camera site to reinforce the message and give advance warnings of the approach to a camera.

Mobile speed indicator display signs (SIDS) tend to me smaller vehicle activated signs that flash up the speed limit. Because they are smaller they can be rotated between sites and can be used to respond to community concerns. Evidence suggests that such deployment is effective in reducing speed for about four weeks before the deterrent effect reduces. Nevertheless they can be very effective at reducing speed by 1 or 2 mph over a period of time.

Successful road safety delivery requires lots of different people and organisations, working in a range of different areas, to sign up to a common vision or goal that we can all towards.
F. LTP3 Road Safety Policies

Road Safety policies are set in the context of the five LTP3 Objectives. They therefore consider potential impacts on all of these. This means that there is a balance between the need for the mobility essential to communities and economy, with an obligation to maintain public safety.

Policies continue to require effective partnership between Local Authorities, police, fire service, the voluntary sector and communities to ensure that measures and initiatives are properly targeted to achieve maximum road safety benefit.

Policy SS1: To seek to reduce further casualties resulting from road traffic collisions, including achieving a greater understanding of where and why collisions happen and to whom

The overriding aim of our road safety strategy is to ensure further reductions in road casualties in order to make our roads the safest in Britain. We aspire to reducing the overall numbers killed and seriously injured and in particular the numbers of children killed and seriously injured. We focus on vulnerable road users, which account for the largest number of casualties. These include:

- Pedestrian and cyclist casualties in our towns and cities – particularly in deprived communities.
- Children, particularly in deprived areas, and young people, who are greatly over-represented in the casualty statistics
- Motorcyclists, who are represent 16% of road fatalities but just 1% of traffic

In achieving this we will target

- Poor road user behaviour amongst a minority, where drink-driving and a failure to wear a seatbelt remain a problem;
- Illegal and inappropriate speed; excessive speed was recorded as a contributory factor in 26% of road fatalities in 2007.

We will provide support to individuals within partner organisations and within communities to develop the local road safety expertise they require in order to understand where and why collisions happen, who is involved, what they are doing, and which types of vehicles are involved. This will enable more effective targeting of resources. We will provide better information to the public about road safety to inform, educate and gain their support for community led initiatives. We will need to better understand the motivations behind the most dangerous behaviours and characteristics of road users who put themselves and others at risk.
Policy SS2: To seek to achieve greater co-ordination between road safety partners

Recognising that human beings make mistakes, we will deliver a safe, holistic road safety system where road design, vehicles and education work in combination to reduce the chances of mistakes on the roads having serious or fatal consequences. We will move away from a ‘silo-based’ approach that looks at engineering, enforcement and education separately, to considering the needs of an integrated road safety system.

We will make better use of data, rigorous evaluation, supporting information, and the knowledge and skills of our partners, in order to make informed decisions about those actions which will deliver the greatest impact on reducing casualties. We will enable Local Authorities working together, to consider future priorities, in the context of their contribution to casualty reduction in the Metropolitan Area as a whole.
A. The Role of Powered Two Wheelers

Powered Two Wheelers (P2Ws) range from mopeds and scooters to large powerful motorbikes. They offer a number of benefits to local communities and individuals by:

• Helping reduce congestion, generally taking less space on roads than cars
• Taking less space when parked
• Generally being a cheaper alternative to travel by car
• Improving personal accessibility and social inclusion

They are increasingly used by delivery businesses as a faster way of delivering small packages and documents in busy urban areas.

B. Partners: Roles and Responsibilities

Local Authorities

As the highway authority there is an important role to play in ensuring that road design, road surfaces and road maintenance creates a safe environment for P2Ws. In addition, Local Planning Authorities should ensure adequate secure parking provision in new developments, including retail centres, employment and residential areas and community facilities.

Centro

Adequate secure parking should be a feature for P2Ws at transport interchanges to encourage the use of P2Ws for short journeys that link to train, tram or bus networks.

West Midlands Road Safety Partnership

The Partnership, through its Local Authority, police fire service and Highways Agency members, promotes safer riding behaviour.

Voluntary sector and campaign organisations

Organisations such as RoSPA, Institute of Advanced Motorists, and West Midlands Police BikeSafe scheme provides assessment and paths to advanced riding skills for P2W riders.
C. Progress and Success from LTP2

In LTP2, the number of P2W road traffic casualties was identified as a concern. They rose steadily from the 1994-98 average from 2000 to 2007, but have fallen back in recent years although they are still higher than the 1994-98 average baseline.

<table>
<thead>
<tr>
<th>94-98 Average</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>624</td>
<td>645</td>
<td>764</td>
<td>726</td>
<td>773</td>
<td>819</td>
<td>749</td>
<td>788</td>
<td>761</td>
<td>779</td>
<td>679</td>
<td>655</td>
</tr>
</tbody>
</table>

The most vulnerable group are those aged 16-19 who represent around 28% of all P2W casualties.

D. LTP3 Key Objective Alignment

| KO1 – Economy                              | • P2W can be an economical mode of travel to work and college particularly for those on low income. Also, if an alternative to travel by car, P2Ws can help reduce congestion by using less road space. |
| KO2 – Climate Change                       | • Smaller-engined P2Ws can have an advantage over cars in terms of greater fuel economy and less CO2 emissions. However larger-engined P2Ws may not have the same advantages. |
| KO3 – Health, Personal Security and Safety | • P2W riders and passengers particularly vulnerability to road traffic collisions is an issue to be addressed. |
| KO4 – Equality of Opportunity              | • P2Ws can improve personal accessibility to employment opportunities, education and other facilities and for leisure trips as an alternative to the car. |
| KO5 – Quality of Life and Local Environment| • P2W require less space for parking and thus can have less impact on streetscapes. |
E. Major Influence on LTP3 Powered Two Wheelers


On reducing congestion, the Strategy notes research that found: “that this is a complex issue. If the switch of mode was simply between a single occupant car and motorcycle, then there clearly would be congestion benefits. By contrast, a switch simply from public transport to motorcycling would add to the vehicles on the road and so add to congestion. However, where there are large numbers of motorcycles – principally large urban areas – there is often also better public transport and more choice between modes, especially in peak hours when congestion is most prevalent. In these circumstances a switch from single occupancy cars to mass transport could, overall, have a more significant impact on addressing congestion whilst promoting accessibility”.

On emissions, the Strategy notes that: “Motorcycles have a clear advantage over cars in terms of carbon dioxide (CO2) emissions and, the smaller machines (e.g. engine capacity less than 400 cm3) that dominate the urban/commuter sector, tend to have CO2 emissions per kilometre travelled of less than half of those of the average car due to their far greater fuel economy. However, larger motorcycles can emit more CO2 than some cars kilometre by kilometre because they offer far poorer fuel economy.”

With regard to issues affecting P2W users, the Strategy notes that: “there are some characteristics of motorcycles that do warrant attention in the design of roads for particular situations. These are principally related to the susceptibility of two wheeled vehicles to the nature of the road surface and the vulnerability of riders if accidents do occur. Concerns include, for example – manhole covers with inadequate skid resistance or located in the carriageway where motorcyclists could be leaning into a bend; poor or infrequent maintenance; inadequate reinstatement after works in the road, that leave potholes or uneven surfaces which can destabilise two wheeled vehicles; and safety barrier posts or other street furniture located where there is a risk of motorcyclists hitting them if they come off their machines”.

On the vulnerability of users, the Strategy notes that: “They make up only around 1% of road traffic but suffer around 20% of deaths and serious injuries. The statistic that one in five deaths on the road is now a motorcyclist is sobering”. Subsequently, national statistics for 2008 show that the casualty rates for motorcycles (measured as casualties per billion passenger-kilometres) in 2008 are very much higher than for any other mode.

<table>
<thead>
<tr>
<th>Casualty Rates</th>
<th>Killed</th>
<th>KSI</th>
<th>All Casualties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcycles</td>
<td>89</td>
<td>1,089</td>
<td>3,881</td>
</tr>
<tr>
<td>Pedal Cycles</td>
<td>24</td>
<td>541</td>
<td>3,435</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>31</td>
<td>358</td>
<td>1,537</td>
</tr>
<tr>
<td>Cars</td>
<td>2</td>
<td>18</td>
<td>227</td>
</tr>
</tbody>
</table>

(Transport Statistics, Great Britain, 2009)

In the Metropolitan Area, there were 674 reported P2W collisions in 2009, a fall of 5% on the previous year’s figure but the collision numbers are still a major concern. These 674 P2W collisions equate to 9.2% of all reported collisions and are distributed across the Metropolitan Area as follows:

<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Casualties</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birmingham</td>
<td>262</td>
<td>38.8%</td>
</tr>
<tr>
<td>Coventry</td>
<td>72</td>
<td>10.7%</td>
</tr>
<tr>
<td>Dudley</td>
<td>91</td>
<td>13.5%</td>
</tr>
<tr>
<td>Sandwell</td>
<td>84</td>
<td>12.5%</td>
</tr>
<tr>
<td>Solihull</td>
<td>45</td>
<td>6.7%</td>
</tr>
<tr>
<td>Walsall</td>
<td>61</td>
<td>9.1%</td>
</tr>
<tr>
<td>Wolverhampton</td>
<td>59</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

Nationally, the number of ‘motorcycles’ (defined as including mopeds and other types of two-wheeled motor vehicles) on our roads has varied markedly over the past five decades, falling from ‘peaks’ of 1,583,000 (1960) and 1,372,000 (1980) to 1,160,000 in 2008 (the most recent national statistic). In the intervening years, there have been ‘lows’ of 866,000 (1972) and 594,000 (1995). There is no way of knowing if the current trend since 1995 will be continued during the period of the LTP3 Strategy (up to 2026) or if it is part of a longer-term cyclical ‘peak and trough’ decline, as illustrated below.
New registration numbers show a similar, although less clear long-term pattern, again falling from a ‘peak’ of 332,000 (1959) to 138,000 in 2008 with an intermediate ‘peaks’ of 313,000 (1980) and 183,000 (2000). However, this decade has seen new registrations drop by a quarter since 2000 although numbers of newly registered ‘motorcycles’ has been relatively stable in the most recent five years, 2004 – 2008, as shown below.
The breakdown of ‘motorcycle’ numbers nationally shows that those with engines over 500cc dominate, currently being 58% of all ‘motorcycles’ and having more than doubled in numbers between 1998 and 2008. The next highest growth, over this period, has been those with engines between 50cc and 125cc, with growth of 57% over the same period and accounting for 19% of all ‘motorcycles’ in 2008. Over one third of ‘motorcycles’, in 2008, had engines of less than 50cc but numbers have actually been declining since 2004.
that riders of smaller-engined P2Ws are more likely to be involved in a collision irrespective of background reasons which could include greater ownership of smaller P2Ws or greater use of them in the Metropolitan Area or their riders being less experienced and/or less safe than riders of larger P2Ws. Safety is the prime issue for P2W riders, with more than two-thirds of urban collisions involving another vehicle, usually where the P2W had priority.

On street parking for P2Ws is free across the Area. However, better provision of secure on- and off-street facilities, beyond local city and town centres, is needed, in well-lit places on firm, flat and level surfaces. Blacktop is not always suitable as in hot weather it may become soft, causing the parked P2W to fall over. Bays are best located away from trees, to avoid bird droppings, and from drain gratings into which keys could be dropped and lost.

These national statistics have a bearing on the fuel efficiency and, thus, the carbon footprint of ‘motorcycles’ in comparison with cars in absolute terms, although the average ‘occupancy’ of cars compared with ‘motorcycles’ must be taken into account when trying to calculate comparisons in terms of one being more environmentally-friendly than the other. The potential and encouragement of cars to be used for car sharing for peak-period journeys is another complicating factor.

Analysis of accident data in the Metropolitan Area shows that over half (53%) of collisions with a P2W involve those with engine sizes up to 125 cc, whilst 38% involve those with engines over 500 cc in size. When compared with the national (2008) statistics set out above, these Metropolitan Area collision statistics could suggest a larger than average number of P2Ws with engines up to 125 cc in size and a lower than average number of P2Ws with engines over 500 cc in size in the Metropolitan Area. The statistics do clearly show that riders of smaller-engined P2Ws are more likely to be involved in a collision irrespective of background reasons which could include greater ownership of smaller P2Ws or greater use of them in the Metropolitan Area or their riders being less experienced and/or less safe than riders of larger P2Ws. Safety is the prime issue for P2W riders, with more than two-thirds of urban collisions involving another vehicle, usually where the P2W had priority.

<table>
<thead>
<tr>
<th>Engine size</th>
<th>Numbers</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1998</td>
<td>2008</td>
</tr>
<tr>
<td>not over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>over</td>
<td>50 cc</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>125 cc</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>150 cc</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>200 cc</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>250 cc</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>300 cc</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>400 cc</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>500 cc</td>
<td>317</td>
</tr>
</tbody>
</table>

(Transport Statistics, Great Britain, 2009)
P2Ws are vulnerable to greater levels of theft than cars since they are more portable and easier to hide. The risk of theft is much higher for mopeds and bikes with small engines than for heavier, larger-engine machines. Anchor posts or hitching rails need to be provided to which to chain the motorcycle. Ideally the bays should be in locations where there is public activity and natural surveillance and / or be covered by CCTV cameras.

The condition of the road surface can be critical to P2W use. Poorly maintained surfaces, smooth utility covers, poorly designed traffic calming and excessive use of road markings can contribute to loss of control and potential personal injury.

Access to bus and other priority lanes, on radial routes and/or in town and city centres, can aid P2W accessibility. However, there is often resistance to this, on the basis of potential conflict between modes. The evidence is, at best, inconclusive. A recent independent (TRL) study of motorcycle safety when using specific bus lanes in London compared with motorcycle collisions along comparable (control) routes found more collisions in the former compared with the latter situations – this appeared to involve collisions with cars that were turning into or emerging from side roads.

The latter two of the following conclusions from this study also provide concern with regard to safety:

- “Bus speeds were unaffected by permitting motorcycles access to the bus lanes.
- Non-priority traffic speeds remained reasonably constant on the Main and Control sites.
- Motorcycle speeds increased after they were permitted access to the bus lanes.
- There was an increase in the percentage of motorcycles exceeding the speed limit.”

(Assessment of TfL’s experimental scheme to allow motorcycles onto with-flow bus lanes on the TLRN, TRL, June 2010)

In September 2009 Birmingham City Council approved the use of bus lanes across the city by P2Ws. As a result of a trial on the A435 Alcester Road from November 2007 the Council concluded that the use of the bus lane by P2Ws had a broadly neutral impact on existing bus lane users and a positive impact on P2W riders. There was no change in bus or taxi journey times and reliability, there was no change in the levels of road traffic collisions in the vicinity of the bus lane and no increase in the number of P2W collisions connected with the use of bus lanes.

The report did conclude however that certain bus lanes were unsuitable for P2W use due to the number of buses and taxis manoeuvring from the kerb and from heavily trafficked side roads.
Speed is an issue, both in terms of road safety for riders and other road users and due to the intimidation of pedestrians and cyclists. National statistics of speeds by different modes on roads in built-up areas show more than a quarter of all observed ‘motorcycles’ travelling at over 35 mph in 30 mph zones (the next highest being 18% of cars) and almost one fifth travelling at over 45 mph in 40 mph zones (twice the percentage of cars). For the purposes of this research ‘motorcycles’ include mopeds and other types of two-wheeled motor vehicles. Similar, albeit less dramatic, results are show for ‘motorcycle’ speeds on motorways, dual carriageways and single carriageway roads, subject only to the national speed limit.

(Transport Statistics, Great Britain, 2009)

F. LTP3 Powered Two Wheeler Policy

Policy SS3: To actively take account of the needs of Powered Two-Wheelers and promote their safe use

(a) The Highway Authorities will continue to consider measures that facilitate motorcycling whilst not compromising road safety. They will be encouraged to take account of the needs of P2Ws to implement the recommendations on policy, travel planning, maintenance, traffic engineering, road design and road safety activity found in ‘Guidelines for Motorcycling’, published by the Institute of Highway Engineers.

(b) Centro will provide secure and appropriate parking facilities at its public transport interchanges and local railway stations and will encourage Train Operating Companies and Network Rail to adopt a similar policy at their stations.

(c) The Highway Authorities will continue to take account of the on-street parking needs of P2Ws

(d) The Local Planning Authorities will encourage the provision of secure and appropriate parking for P2Ws in new development proposals.

(e) The Highway Authorities will be encouraged to produce a P2W strategy, either of their own design or based on the template being produced by the West Midlands Motorcycle Advisory Panel.

The West Midlands Road Safety Partnership will continue to find ways of promoting safer use of P2Ws, including the six-facet framework covering: educating drivers; P2W-friendly wider policies; training & publicity; P2W-friendly road infrastructure; giving a voice to riders and enforcement.
Public Transport Safety

A. Role of Public Transport Safety

Actual and perceived safety and security is an important factor in peoples’ choice of mode of transport, particularly their use of public transport or the decision to walk or cycle or indeed whether to travel at all. Local Authorities and Centro recognise the need to work in partnership with other agencies to ensure a multidisciplinary approach to maximise use of resources, and to add value to each agency’s work. Safety and security is essential to regeneration and LTP3 links with related strategies and funding regimes, including national regeneration programmes and Community Safety Plans.

Research by Centro conducted in 2008 confirms that fears for personal security can be a real barrier to the use of public transport and walking, especially after dark. Concern is often greatest when walking to and from the stop or station at either end of the journey. The actual on board element of the journey is perceived to be the safest. Identifying improvements to the physical and social environment at a neighbourhood level is therefore crucial. In addition to this there is a need to ensure safe walking routes, using the principals of situational crime prevention through environmental design, tackling issues such as the effects of poor lighting and landscaping.

There is a need to work with young people, particularly those in school year 6 and 7 as they are on the brink of independent travel. Initiatives need to address the concerns of young people themselves as well as those of adult passengers and staff. As well as direct action to reduce crime there is a need to address anti-social behaviour and environmental issues. While these are not necessarily defined as crimes they will improve the environment, feelings of wellbeing and can lessen people’s fear of crime. Encouraging more people onto the streets reinforces confidence and can break the cycle of fear.

Making our towns attractive and safe contributes to the local quality of life, the local economy and urban regeneration. Much has already been done to make our town centres more attractive, which combine the use of technology, design and commercial vision but much more needs to be done to ensure urban regeneration and the economic health of our town centres.
B. Public Transport Safety: Roles and Responsibilities

West Midlands Police & Safer Travel Police Team

West Midlands Police is the second largest force in the country. The Safer Travel Police team are a group of officers and police community support officers (PCSOs) who work on the bus network and associated corridors of the Metropolitan Area, focusing on crime reduction and community safety. They are part funded by and work in partnership with Centro.

British Transport Police

British Transport Police is the national police force for the railways providing a policing service to rail operators, their staff and passengers throughout England, Scotland and Wales.

West Midlands Crime and Disorder Partnerships

Responsible authorities have a statutory duty to work with other agencies and organisations to develop and deliver strategies to reduce crime and disorder including anti social behaviour that affects the local environment, as well as the misuse of drugs. These partnerships bring together the Police, Local Authorities and Primary Care Trusts to enable delivery.

Centro

Centro work in partnership with the West Midlands Crime and Disorder Partnerships, West Midlands Police, British Transport Police and operators to deliver a safer public transport network. Centro provide CCTV at bus and rail stations and rail and Metro Park and Ride car parks. The images are monitored at the Network Safety & Security Centre.

Local Authorities

Local Authorities, as Planning and Highway authorities support and improve safety and security through urban design principles, which discourage anti-social behaviour and encourage people to feel safe in their local environment through provision of good street lighting.
C. Progress and Successes from LTP2

The objective for safety and security in LTP2 was to achieve improvements in perceived and actual safety and security. Centro, West Midlands Police, National Express and the Safer Birmingham Partnership are all members of Safer Travel, which was launched five years ago to make bus travel even safer for passengers by deterring crime and nuisance behaviour. Using a number of tactics including targeted patrols based on intelligence, random checks such as Gateway operations and undercover patrols, the Safer Travel Partnership has succeeded in cutting offences by 54 per cent over the last three years. This success has culminated in the Metropolitan Area hosting an International Conference in 2010 highlighting the interest the international community have shown in initiatives such as the “See Something Say Something” campaign, the use of CCTV in bus shelters to curb vandalism and remote access of on-board CCTV cameras.

D. LTP3 Key Objective Alignment

<table>
<thead>
<tr>
<th>KO1 – Economy</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>KO2 – Climate Change</td>
<td></td>
</tr>
</tbody>
</table>
| KO3 – Health, Personal Security and Safety | • Continued investment in security measures to reduce crime and fear of crime  
• Reducing the perceived and actual fear of crime on public transport |
| KO4 – Equality of Opportunity |  |
| KO5 – Quality of Life and Local Environment | • Reducing stress of the journey experience for public transport users  
• Establishing the Metropolitan Area as a safe and secure environment in which to live |
E. Major Influences on LTP3 Public Transport Safety

An Integrated Sustainability Appraisal (ISA) has been undertaken to support the preparation of LTP3 and includes an analysis of relevant plans, policies and programmes from international through to local level and their implications for LTP3, including safety and security. In addition to the policy framework identified by the ISA, the following have been identified as further major influences on safety and security over the period of LTP3.

The Local Authorities and Centro wish to see a safe and secure environment for people to live and travel in, whichever mode of travel they choose. Fears for personal safety and security can be a barrier to people travelling, especially by public transport, walking and cycling. The LTP will remove these barriers and encourage the use of more sustainable modes of travel.

The Crime and Disorder Act requires the various agencies to reduce crime and promote community safety. Each Local Authority has a Community Safety Plan. Centro’s Integrated Public Transport Prospectus seeks to develop safe public transport and measures have been developed to combat vehicle crime, anti-social behaviour, and to reduce the number of young people who become involved in crime, as victims as well as offenders. The bus, rail and Metro operators are also committed to resolving problems of crime, safety and security.

The priority of the West Midlands Police is to increase public trust and confidence through various front line services which includes the Safer Travel initiatives. A major initiative within LTP3 is the continuation of the Safer Travel Police Team. The British Transport Police West Midlands Area policing plan identifies a safe railway environment as a priority. This includes the reduction of violence against the person, both travellers and rail/metro staff and reduction in robberies and car crime. With their partners they also aim to achieve a railway environment free from disruption caused by vandalism and other route crime offences, efficient management of fatalities, maintaining order of travelling football supporters and reducing the number of level crossing offences.

LTP3 seeks to target particular neighbourhoods and known problem sites and areas. The focus will be on the enhancement of street lighting, particularly in residential areas and on the approaches to public transport routes, which feature in each Authority’s programme. Focus will also be on strategic bus corridors, major public transport hubs such as bus and rail stations (including taxi ranks), and main pedestrian thoroughfares to attractions such as town centres, leisure and shopping facilities.
The ‘whole journey’ approach has been adopted in guidance documents. Similar principles are being applied to the design of Metro, upgrading of rail stations and Park & Ride sites. Public transport and taxi policies are particularly relevant.

Local Authorities and Centro will seek to improve the standard of car park security through the ‘Park Mark’ programme. Particular attention will continue to be given to the Park and Ride sites and car parks serving the Metro, bus and railway stations to ensure the confidence of the motorist and maximise the modal shift benefits of Park and Ride. The cycling and walking strategies adopted will address security issues and the partnership work with Centro and operators will address problems on public transport vehicles. Vehicle and bicycle theft has a direct impact on people’s travel decisions. Secure cycle parking facilities will be given a priority as an integral part of the cycle strategy.

Consideration for personal security along the whole journey will be an integral element of future plans to extend the Metro system in the Metropolitan Area, particularly paying regard to safety whilst walking to and from the Metro by conducting both crime analysis and situational crime prevention audits of stop locations.

F. LTP3 Policies – Public Transport Safety

As outlined above Safety and Security will play an important role in achieving a number of LTP3 objectives. A number of opportunities to deliver this will evolve throughout the plan period. To support this LTP3 will adopt the following policy:

Policy SS4: To reduce actual and perceived safety concerns towards public transport use and to reduce its vulnerability to vandalism and terrorism
LTT10: IMPROVED ENVIRONMENT AND REDUCED CARBON THROUGH NEW TECHNOLOGIES (GT)
Supporting the Accelerated Development of Low Carbon Technologies

A. Role of Supporting the Accelerated Development of Low Carbon Technologies

There is a shared commitment amongst authorities and organisations across the Metropolitan Area and the Region that a low carbon strategy is the only practical way forward if we are to contribute to tackling climate change and meeting national targets, creating a stable economy, increasing prosperity and providing a quality environment for all.

LTP3 reflects this shared commitment and is overtly a low carbon strategy, encouraging the most sustainable land use patterns and modes of travel and transport. Support for low carbon technologies both within the business and manufacturing sectors and in its application in the transport field, is a part of our long-term commitments.

B. Development of Low Carbon Technologies: Roles and Responsibilities

The development of low carbon technologies and their subsequent implementation on our networks brings together many organisations including academic and research organisations, specialist businesses, manufacturers, government organisations, funding bodies, transport operators and network providers and Local Authorities.

The Metropolitan Area has already shown a significant lead in the transition to a low carbon and greener economy through the work of many businesses, organisations and authorities with particular support through European and Government funding and via the work of Advantage West Midlands and Sustainability West Midlands. Advantage West Midlands focussed their work on a number of activities:

- Low carbon market opportunities
- Low carbon innovation, research and development
- Infrastructure
- Business support, and
- Skills
The CABLED project is a further excellent example of collaborative cross sector working which involves a consortium of partners including Arup, EoN, Aston University, Cenex and Birmingham Chamber of Commerce, with funding from Advantage West Midlands and the Technology Strategy Board, providing the largest trial in the UK based in Birmingham and Coventry with over 100 electric vehicles and a network of public charging points.

Centro is one of 3 core funders of Sustainability West Midlands (SWM), which brings together various public and private organisations to promote all aspects of sustainability across the region through a series of initiatives and projects including:

- Low Carbon Economy Leadership Programme
- Energy programme
- Green jobs and skills
- Climate adaptation
- Roadmap for a sustainable region by 2020

Centro will continue to work with and through SWM to ensure that travel issues are looked at in a holistic way and that transport plays its part in supporting a low carbon and greener economy.
The West Midlands Metropolitan Area benefitted from Round One of the Governments’ Green Bus Fund with funding to West Midlands Travel Ltd for 20 buses. Bids for Round Two have been invited by October 2010 and this offers a further opportunity to help ‘green’ the area’s bus fleet.

Due to the nature of developing low carbon solutions for the economy and the transport sector funding packages from many sources including the Government, the European Union and the business and academic sectors will continue to be the norm. The resources that LTP3 can bring to the table are likely to be more in the areas of support for initiatives, infrastructure to support businesses and possibly providing areas for pilots, tests and trials.

C. Progress and Successes from LTP2
This is a new area of intervention, developed since LTP2 was formulated.

D. LTP3 Key Objective alignment

| K01 – Economy                      | • Can reduce fuel costs born by business in a broader context, beyond transport costs  
|                                  | • By reducing noxious emissions and improving air quality, sickness costs may be reduced               |
| K02 – Climate Change              | • The development of low-carbon technologies can have a significant positive impact upon LTP3’s climate change objectives |
| K03 – Health, Personal Security and Safety | • The improvement of air quality can have a positive impact upon health                           |
| K04 – Equality of Opportunity     | • Alternative fuel technology may reduce the cost of transport, thus improving accessibility to opportunity for all |
| K05 – Quality of Life and Local Environment | • Successful implementation of this policy was have a major positive impact upon quality and life and improvement of the natural and built environment |
E. Major Influences on Low Carbon Technology Development

The Coalitions’ Programme for Government indicates that ‘The Government believes that climate change is one of the gravest threats we face and that urgent action at home and abroad is required. We need to use a wide range of levers to cut carbon emissions, decarbonise the economy and support the creation of new green jobs and technologies. We will implement a full programme of measures to fulfil our joint ambitions for a low carbon and eco-friendly economy.’ More particularly, in the Transport section of the Programme for Government, the Coalition indicates that ‘We need to make the transport sector greener and more sustainable, with tougher emission standards and support for new transport technologies.’

Transport is a major contributor to CO2 emissions and consequently has a major role to play in the reductions needed to meet our carbon targets. Whilst we cannot rely on technological solutions alone, particularly in the short term, they clearly have a very significant part to play and need to be seen alongside and complimentary to other LTP policies aimed at modal shift, smarter choices and managing our current networks to get the absolute most out of them. It is therefore vital that, LTP3 supports the national and regional agenda for low carbon transport with appropriate infrastructure to support a low carbon economy if our Outcomes are to be fully realised.
Carbon Reduction, Climate Change Adaptation, Safeguarding the Natural Environment, Air Quality and Noise

Air quality issues and carbon generation are closely related. Local air pollution and global climate change share common sources, transport related emissions being a major one. Black carbon (particles resulting from the inefficient burning of, amongst other things, diesel fuel) and ozone are key contributors. The real difference is that “Greenhouse Gases” causing climate change are most active high up in the atmosphere, whereas pollutants nearer the earth’s surface impinge on air quality.

It is vital that the approach to low carbon transport in the Metropolitan Area is compatible with its wider strategy for carbon reduction. Sustainability West Midlands’ Low Carbon Vision 2020 sets out what is possible now in terms of energy, transport, construction and demographic change to reach 2020 in a framework that reduces current levels of carbon use.

Reduced Carbon

Policy GT1 – Accelerated Low Carbon Technology: To support the transformation to a low carbon economy and work with partners to reduce carbon emissions caused by travel and transport through smarter choices, reduced congestion, highway management and by supporting in all practical ways, the roll-out of low carbon infrastructure and the development of low and zero carbon public service and private vehicles.

LTP3 has a major role to play in reducing carbon emissions through behavioural change and the promotion and use of low carbon technologies. It also needs to demonstrate that infrastructure is resilient to unavoidable climate change. The national policy framework is set by the Climate Change Act (2008) and the Government’s 2010 Action Plan – Beyond Copenhagen. The UK Low Carbon Transition Plan and Low Carbon Transport: A Greener Future set out how carbon reduction can be delivered.

To help reduce carbon emissions travel of the future is likely to encompass:
• Virtual travel
• Electric cars
• Smart logistics
• Improved coach and bus travel
• Bike and car sharing
• Increased home working and internet shopping to reduce the demand for travel
• Up to date information and journey planning facilities for public transport

The Metropolitan Area has Low Carbon Economic Area status. 70% of all UK low carbon vehicle research and development occurs in the region, which includes the CABLED project between Birmingham and Coventry to trial 100 electric cars (the largest such trial in the UK). The recent regional growth into low carbon economy study has confirmed the green job opportunities for the transport sector.

A key area will be to develop practical cross-sector solutions through the Business Futures network, sharing good practice between large companies and business networks such as Chambers of Commerce, including sustainable business travel. Centro’s recently launched Green Transport Charter for the West Midlands: Moving Ahead will share good practice with operators.

Measures such as a charging point strategy for electric vehicles will be needed to translate national initiatives into local action in the Metropolitan Area.

Maintenance operations, both in terms of their timing and materials and methods used can impact on carbon emissions. This is discussed further in under the Long Term Theme: Transport Asset Management – A Foundation for Growth.

Policy GT 2: To seek innovative ways of reducing the carbon footprint of maintenance operations

Adapting to unavoidable climate change

Irrespective of the success of mitigation efforts, there will still be some degree of unavoidable climate change that needs to be accommodated.

The 2009 UK Climate Projections, which use the Met Office Hadley centre’s modelling tools, suggest an increase in temperature on the warmest summer days of between 2.26 and 2.48 degrees centigrade. Changes in temperature may have adverse implications for transport infrastructure for example, deformation of asphalt, hardcore underpinning and rail tracks buckling. This can lead to delays and have adverse effects on passenger and worker safety.

There is also an increased risk of flooding as the number of high precipitation events is projected to increase by the 2020s, as seasonal extreme rainfall increases and the combination of culverted watercourses and hard standing areas represents a relatively high susceptibility to surface water flooding during intense rainfall. Again this has the potential to damage infrastructure and cause delays and poses safety issues.
New transport infrastructure, especially hard standing areas such as roads and car parks needs to be constructed in a manner that is resilient to climate change in terms of their design and use of materials and features, such as Sustainable urban Drainage Systems (SUDS); maintenance activities also need to take this into account.

**Policy GT3:** To ensure that infrastructure is ‘future proofed’ in response to the unavoidable effects of climate change

Active Travel, namely walking and cycling, are encouraged through policies for modal transfer. Green Infrastructure Networks include parks, open spaces, playing fields, woodlands, allotments and private gardens and also Green Corridors (rivers and canals including their banks, road and rail corridors, cycling routes, pedestrian paths, and rights of way) and are being implemented through local authorities’ development plans. The benefits of Green Infrastructure networks include:

- **Places for outdoor relaxation and play**
- **Space and habitat for wildlife with access to nature for people**
- **Climate change adaptation - for example flood alleviation, cooling urban heat islands and species migration.**
- **Improved health and well-being – lowering stress levels and providing opportunities for exercise**

Transport proposals and investment offer the opportunity to contribute towards Green Infrastructure Networks and to provide additional Green Infrastructure.

**Policy GT4:** To support the implementation of Green Infrastructure networks as a means of encouraging active travel, adapting to climate change and safeguarding natural habitats and biodiversity

**Safeguarding the Natural Environment**

The development of transport infrastructure and travel behaviour can have adverse impacts on the natural environment through habitat loss, disruption and severance, loss of visual amenity and pollution. There are, safeguards in the form of local authorities’ planning polices that must be adhered to and project scheme level regulatory assessments such as Environmental Impact Assessment. A statutory Habitats Regulations assessment has been undertaken to accompany this plan.

Careful design at the scheme development stage can help mitigate adverse effects and indeed enhance the environment. Centro has recently published a ‘Sustainable Design Guide’, which identifies the types of measures that can be incorporated as schemes develop. This includes measures to safeguard and enhance biodiversity and habitats, sustainable drainage and water conservation measures and sensitive design and mitigation measures such as planting to safeguard landscapes and townscapes.
In terms of water quality, the European Water Framework Directive requires the production of River Basin Management Plans that set out actions to ensure that all water bodies (rivers, canals, lakes, and groundwater) do not deteriorate from a baseline position and indeed move towards good ecological quality. Plans are being prepared for the Severn and Humber that cover the Metropolitan Area. Transport infrastructure can potentially cause water quality deterioration through the likes of run off and also during construction. Conversely, new infrastructure and maintenance measures can help rectify existing problems and issues need to be considered on a scheme-by-scheme basis.

**Policy GT5:** To develop infrastructure which, wherever practicable, enhances the natural environment (biodiversity/habitats, air quality, water, landscape) or mitigates adverse effects

The Regeneration, Thriving centres and Gateways Long Term Theme supports the principle of the High Speed 2 rail link. The proposal is a national priority and is being led by High Speed Two Limited, a limited company set up by Government to consider the proposals further and advice is being provided by statutory environmental bodies as appropriate. It is acknowledged that there will be adverse impacts on the natural and historic environment as a result of its implementation and that these need to be mitigated wherever practicable.

**Policy GT6:** To help mitigate any adverse effects on the natural and historic environment resulting from the implementation of HS2
Air Quality

**Policy GT7 - Human Health: To reduce air pollution emissions from transport**

Exposure to air pollution can have short and long-term effects on human health, especially for people who are more vulnerable to changes in levels of emissions, having been linked to lung disease, asthma, chronic bronchitis, heart and circulatory disease and cancer1. The financial cost of poor air quality, in terms of lost productivity, sickness, and premature death, is compared below:

**Figure 1: The wider costs of transport in English urban areas**

Orange in Figure 1 represents the uncertainty of the estimates, i.e. the varying annual cost is in the range of £4.5-£10.6 billion in the case of air quality.

Transport and power generation are the two dominant sources of air pollutants. Carbon Monoxide (CO) and Nitrogen Oxides (including NO2) are the biggest emissions in volume terms, transport contributing around 40% of total UK output of each. Particulate matter is also an increasingly important pollutant as the health implications of PM10 and, especially, PM2.5 particles become more widely documented, for example a 10µg/m3 increase in long-term average concentration of PM2.5 is associated with a
6% increase in risk of death from cardiovascular disease. Reducing the levels of these pollutants in the atmosphere will have a beneficial impact on the general health of the population.

High levels of NOX can have an adverse effect on vegetation, including leaf or needle damage and reduced growth. Deposition of pollutants derived from NOX emissions contribute to acidification and/or eutrophication of sensitive habitats leading to loss of biodiversity, often at locations far removed from the original emissions.

Atmospheric pollution can also adversely affect the historic environment. Some major pollutants that effect stonework include Carbon Dioxide (CO2), Sulphur Dioxide (SO2), Nitrogen Oxides (NOx) and particulates such as smoke.

Figure 2: pollutant emissions from transport in the United Kingdom (by United Nations Economic Commission for Europe source category): 2007

<table>
<thead>
<tr>
<th>UK emissions (000 tonnes) 2007</th>
<th>Carbon Monoxide</th>
<th>Nitrogen Oxides</th>
<th>Particulates (PM10)</th>
<th>Sulphur Dioxide</th>
<th>Benzene</th>
<th>Lead</th>
<th>1,3-butadiene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road transport</td>
<td>785.7</td>
<td>441.3</td>
<td>24.7</td>
<td>2.3</td>
<td>2.2</td>
<td>1.7</td>
<td>1.3</td>
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<tr>
<td>Passenger cars</td>
<td>639.4</td>
<td>137.0</td>
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<td>1.8</td>
<td>1.8</td>
<td>1.0</td>
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<tr>
<td>Light duty vehicles</td>
<td>44.7</td>
<td>54.7</td>
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<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Buses</td>
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<td>-</td>
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<td>HGVs</td>
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<td>0.6</td>
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<tr>
<td>Mopeds &amp; motorcycles</td>
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<td>1.3</td>
<td>0.1</td>
<td>-</td>
<td>0.2</td>
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<tr>
<td>Automobile tyre &amp; brake wear</td>
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<td>9.6</td>
<td>-</td>
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<td>Gasoline evaporation</td>
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<td>Other transport, inc</td>
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<td>Railways</td>
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<td>National navigation</td>
<td>11.2</td>
<td>109.3</td>
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<tr>
<td>Other mobile sources</td>
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<tr>
<td>All domestic transport</td>
<td>850.6</td>
<td>607.0</td>
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<td>54.3</td>
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<tr>
<td>Total UK emissions</td>
<td>2,113.7</td>
<td>1,485.9</td>
<td>135.5</td>
<td>590.7</td>
<td>16.8</td>
<td>70.1</td>
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</table>
Policy GT8 - Emissions Standards: To improve local air quality in pursuit of UK standards and European Directive limits

The standards that aim to identify “safe” levels of pollutants are passed down to us from Europe and Central Government. Breaches of the 40µg/m³ standard for Nitrogen Dioxide (NO2) are the most common trigger for declaring an Air Quality Management Area (AQMA), within which an Air Quality Action Plan will detail the measures to be taken to reduce NO2. Borough-wide declarations for average NO2 levels have been made in all the Metropolitan Districts except Solihull, while Birmingham has also declared an AQMA for levels of PM10 particulates. The policies followed by local Primary Care Trusts to tackle poor air quality mirror those of the Local Authorities.

In August 2010 the seven West Midlands districts were awarded a grant of £100,000 by Defra to help implement a Low Emission Strategy for the Met Area. It is intended that a 15-month programme will start in April 2011 covering:

- The development of an overarching regional Low Emissions Strategy including transport and land use planning, procurement and economic development and bus and freight quality partnerships.

- The development of a regional LES Supplementary Planning Document

- Regional best practice guidance on procurement

- An investigation into the feasibility of Low Emission Zones to restrict or deter the most polluting vehicles.

These projects are aimed at reducing local NO2 levels from road transport with the ultimate goal of achieving the National Air Quality Objective Level, with the additional benefit of reducing greenhouse gas emissions.
Noise Pollution

Policy GT9 - Noise Nuisance: To minimise noise nuisance from the transport network

The Noise Policy Statement for England (NPSE, published March 2010) sets out the long-term vision of Government noise policy, which is “to promote good health and a good quality of life through the management of noise within the context of Government policy on sustainable development.” The EU Environmental Noise Directive (END), now transposed into UK law, requires member states to undertake strategic noise mapping to inform Action Plans to manage noise from transport and industry. The Plans encompass noise reduction and preservation where it is already low. They set out a “direction of travel” for managing noise, but do not yet propose any mitigation measures. Responsibility for implementing the plans falls on those bodies that manage the infrastructure on which the noise is generated (highway, rail and airport authorities).

The local traffic-related noise problem is quite serious. The Noise Action Plan for the West Midlands states that over 2 million people within the “agglomeration” are subject to some level of traffic noise in a typical day. 9,000 are subject to an average traffic noise level of a ringing telephone for 18 hours a day. Equivalent figures for Coventry are 313,000 and 1,000 respectively.

The EU 6th Action Programme “Environment 2010: Our Future, Our Choice” sets out an aim for the noise climate of Europe: “to achieve reduction of the number of people regularly affected by long-term high noise levels from an estimated 100 million people in the year 2000, by around 10% in 2010 and by 20% in 2020.”

Priorities for Action:

• Clarifying the Metropolitan Area role in the national policy context of electric vehicle and other low carbon technology roll out

• Working with public transport operators to ensure that carbon emissions are minimised

• Centro and metropolitan districts will work to ensure that infrastructure is ‘future proofed’ in response to the unavoidable effects of climate change

• Highways Authorities will continue to seek innovative ways of reducing the carbon footprint of their maintenance operations

• LTP partners will work to implement Green Infrastructure networks as a means of encouraging walking and cycling, adapting to climate change and safeguarding natural habitats and biodiversity
• Centro will work with stakeholders to help mitigate any adverse effects on the natural and historic environment resulting from the implementation of HS2

• Centro and LTP3 partners will work to develop low carbon infrastructure which, wherever practicable, enhances the natural environment (biodiversity/habitats, water, landscape) or mitigates adverse effects

• LTP3 supports the development of a Low Emission Strategy for the Metropolitan Area

Sources of information:
1 House of Commons Environmental Audit Committee – Air Quality, 2010
2 The wider costs of transport in English urban areas in 2009, Cabinet Office
3 AEA Energy
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