



West Midlands Local Transport Plan 3

Integrated Sustainability Report

(To meet the requirements of SEA Directive 2001/42/EC)

December 2010

Co-ordinated by:

CEPOG
CEPOG
Support Team

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Section One - Introduction

Purpose of this report

- 1.1. This Environmental / Sustainability Report sets out the results of the Integrated Sustainability Appraisal (ISA) of the Third West Midlands Local Transport Plan (LTP3).
- 1.2. LTP3 Guidance states that the plan must be subjected to the following regulatory assessments:
 - Strategic Environmental Assessment (SEA)
 - Health Impact Assessment (HIA)
 - Equality Impact Assessment (EqIA)
 - Habitats Regulation Assessment (HRA)
- 1.3. SEA and HRA are required by European Directives and EqIA is an effective means of meeting the requirements of the Equality Act 2010.
- 1.4. It is considered that undertaking an Integrated Sustainability Appraisal (ISA) meets statutory requirements and also adds value by considering effects in an integrated way. Human health is identified as an SEA topic in the Directive so it has been appraised alongside other environmental and sustainability objectives within the ISA rather than prepare a standalone report.
- 1.5. This integrated approach was trailed at the scoping stage and was supported by statutory and other consultees. In addition, a separate HRA Screening Report has been prepared to accompany Draft LTP3, as has a standalone EqIA, although the key findings are also included in this report
- 1.6. This Report has been coordinated by the West Midlands Chief Engineers and Planning Officers Group (CEPOG) Support Team, using an extensive evidence base, and drawing on a range of expertise from individuals and organisations. Consultants Mott MacDonald assisted with the preparation of the Scoping Report that was published in May 2010, and have continued to advise on the EqIA, although the report was prepared in house by Centro.

Relevant Legislation and Guidance

- 1.7. European Union Directive 2001/42/EC, commonly referred to as the SEA Directive, was transposed into national law by Statutory Instrument 2004

No.1633: the Environmental Assessment of plans and programmes Regulations 2004 (otherwise known as SEA Regulations).

- 1.8. This requires that certain plans and programmes that are likely to *have a significant effect on the environment* are assessed accordingly. Government has deemed that some plans, including LTPs, automatically require SEA.
- 1.9. Further guidance is offered in the Department for Transport's (DfT) WebTag Unit 2.11 and this has been followed.
- 1.10. SEA extends the assessment of environmental effects from specific projects to wider-ranging plans. The SEA process is a structured way of examining and mitigating the effects of policies and proposals on environmental and wider objectives.
- 1.11. The purpose of this report is to:
 - Give consultees the opportunity to comment on the likely environmental (and sustainability) effects of the Draft LTP3 in accordance with the SEA Directive and Regulations
 - Advise the Integrated Authority (ITA) / Centro as to how the Final LTP3 can be improved by highlighting where there are potential environmental and sustainability effects of implementing the Draft LTP3 as currently written
- 1.12. SEA is a "policy-aiding" rather than a "policy-making" tool. It helps organisations consider the impacts of plans and programmes in a structured way to demonstrate that policy development has considered environmental and other impacts. This process benefits the plan making authority by helping to deliver supportable and well-considered policies. It also benefits the wider community by supporting Best Value decision-making, and by ensuring that the effects of policy decisions on local people, the economy and the environment are given full and thorough consideration.

Links with the New Approach to Appraisal

- 1.13. The New Approach to Appraisal (NATA) is the process that Government recommends be used by transport authorities to formulate and test options for schemes and programmes. It has five objectives, although these are currently being reviewed. Guidance on SEA makes it clear that the NATA framework and its methodologies should be utilised where possible. Every effort has been made to align sustainability objectives with NATA objectives and this was discussed in some detail at the scoping stage.

Structure of Sustainability Report

1.14. The report is divided into the following sections:

Section 1 Introduction

Section 2 West Midlands Metropolitan Area LTP3

Section 3 Stages in the SEA / ISA Process

Section 4 Setting the Scope of the SEA / ISA

Section 5 Assessing the Effects of the Draft LTP3

Section 6 Objective Alignment and Option Assessment

Section 7 Significant Affects Assessment of Draft LTP3

Section 8 Monitoring effects

Section 9 Next Steps

Section 10 Conclusions

Schedule of Appendices

1.15. The below appendices are also available separately

Appendix 1 Draft LTP3 Implementation Plan Phase 2 Long Term investment Programme

Appendix 2: Response to Scoping Report Representations

Appendix 3 sustainability Objectives Appraisal Matrices

Appendix 4: Objective Alignment Matrix

Appendix 5: Options Appraisal matrix

Appendix 6: Baseline Position and 'Without Plan' Scenario Table

Section Two - West Midlands Metropolitan Area LTP3

The LTP3 Process

- 2.1 The Transport Act 2000 introduced a statutory requirement for local transport authorities to produce a Local Transport Plan (LTP) every five years and to subsequently keep it under review. In the six metropolitan areas outside Greater London, the duty to formulate the first two LTPs was shared between the Metropolitan District Councils and the Passenger Transport Authority (PTA).
- 2.2 The 2008 Local Transport Act retained the statutory duty to have an up-to-date LTP, but passed responsibility for its preparation to the newly-formed Integrated Transport Authorities (ITAs), which replaced PTAs. Centro is the West Midlands ITA and has prepared the Draft LTP3.

The Purpose of LTP3

- 2.3 A Local Transport Plan sets out a vision for an area; it analyses travel problems and opportunities, and then sets objectives, policies and targets. It includes an Implementation Plan setting out how these objectives and targets will be delivered.
- 2.4 Transport networks cross administrative boundaries, as do travel-to-work patterns. Therefore, LTP3 has been prepared for the entire Metropolitan Area, which comprises the Metropolitan Districts of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton. There has also been liaison with surrounding Local Authorities and other transport-related providers, operators and interest groups, as well as the business community.
- 2.5 LTP3 only deals directly with investment in and management of local transport networks. Responsibility for investment in motorways, trunk roads and strategic rail schemes lies with Government bodies such as the Highways Agency and Network Rail. By means of context, and in order to provide a fuller picture, transport investment likely to come forward via partners over the LTP3 period is referred to in the plan.

West Midlands LTP3: Outline of Contents

- 2.6 The Plan comprises a suite of four documents
 - Summary
 - Strategy (2011 – 2026)

- Technical Appendices
- Implementation Plan (split into two, 2011-16 and 2011–26)

Draft LTP3 Strategy

2.7 The draft strategy comprises several components, as summarised below.

❖ A Shared Vision

A Shared vision has been prepared following consultation with stakeholders and is set out below.

“To make the West Midlands Metropolitan Area more prosperous, healthier and safer, offering a high quality and attractive environment where people will choose to live, work and visit, and where businesses thrive and attract inward investment.”

❖ Spatial Context

Draft LTP3 identifies four distinct but interrelated sub areas:

- Birmingham and Urban Solihull
- The Black Country (Dudley, Sandwell, Walsall and Wolverhampton)
- Coventry
- The Rural Area (namely the Meriden Gap which separates Coventry from the conurbation)

❖ Three Strategic Principles

- Making the best use of the transport assets and capacity we already have (**Smarter Management**)
- Encouraging people to move away from car use through providing attractive, effective and efficient alternatives which reduce our carbon footprint (**Smarter Choices**)
- Targeting scarce resources at programmes, initiatives and schemes that support either or both of the first two Strategic Principles (**Smarter Investment**)

❖ Five Key Objectives

<p>KO1 – Economy</p> <p>To underpin private sector led growth and economic regeneration in the West Midlands Metropolitan Area, including support for housing development and population growth, increased employment and low carbon technologies.</p>	<ol style="list-style-type: none"> 1. To help attract investment to development areas. 2. To increase the mobility of labour markets and help people access jobs through sustainable travel. 3. To improve access to markets for freight and business travel. 4. To improve journey time reliability in the context of forecast increases in travel demand. 5. To facilitate accelerated development of low carbon technologies in transport related fields.
<p>KO2 – Climate Change</p> <p>To contribute towards tackling climate change through achieving a reduction of greenhouse gas emissions in support of the Climate Change Act 2009, and ensure the resilience of the transport system to any unavoidable changes in the West Midlands Metropolitan Area's climate.</p>	<ol style="list-style-type: none"> 1. To reduce greenhouse gas emissions from the Area's transport system, in terms of infrastructure, vehicles and journeys. 2. To encourage greater use of the most sustainable and low carbon transport systems. 3. To future-proof the transport system to cope with any unavoidable changes to the Metropolitan Area regional climate.
<p>KO3 – Health, Personal Security & Safety</p> <p>To improve health, personal security and the safety of people traveling in the West Midlands Metropolitan Area.</p>	<ol style="list-style-type: none"> 1. To reduce local air, noise and other pollutants from the transport system. 2. To increase levels of exercise through active travel to improve health. 3. To reduce the number of criminal and anti-social incidents on the public transport network and reduce its vulnerability to terrorism and vandalism. 4. To improve perceptions of personal security on the public

	<p>transport network.</p> <ol style="list-style-type: none"> 5. To improve community and neighbourhood safety and social cohesion. 6. To reduce the number of severity of road traffic casualties.
<p>KO4 – Equality of Opportunity</p> <p>To tackle deprivation and worklessness, so enhancing equality of opportunity and social inclusion, by improved access to services and other desired destinations within and adjacent to the West Midlands Metropolitan Area.</p>	<ol style="list-style-type: none"> 1. To improve access to key services for all, including education and training opportunities. 2. To improve the accessibility to transport for all including those with mobility difficulties. 3. To remove affordability as a barrier to public transport use. 4. To align availability of public transport with changing travel demand patterns.
<p>KO5 – Quality of Life & Local Environment</p> <p>To enhance well-being and the quality of life of people in the West Midlands Metropolitan Area and the quality of the local environment.</p>	<ol style="list-style-type: none"> 1. To reduce stress by improving the journey experience of highway and public transport users. 2. To enhance the quality of the urban realm in centres. 3. To enhance the quality of streetscapes and the historic environment. 4. To protect and enhance green spaces, the natural environment and biodiversity.

❖ Ten Long Term Themes

- 1 Transport asset management – a foundation for growth
- 2 Making best use of the highway network
- 3 Modal transfer and the creation of sustainable travel patterns
- 4 Regeneration, thriving centres and gateways
- 5 A rail and rapid transit network 'backbone for development'
- 6 Improved local accessibility and connectivity
- 7 Sustainable and efficient freight transport
- 8 Effective and reliable transport integration
- 9 Improved safety and security
- 10 Reduced carbon through green technologies

❖ Technical Appendices

- 2.8 These elaborate and provide a context for each of the ten long terms themes. They give statements of intent, explaining how each will be delivered in practice, identifying specific actions and policies.

Implementation Plan One 2011 – 2016

- 2.9 Draft Implementation Plan One (IP1) builds on the Strategy and Technical Appendices and identifies specific schemes and interventions. There is inevitably some overlap with the Technical Appendices.

- 2.10 The Draft IP1 is further subdivided into two distinct delivery phases:

Phase One – covering the period 2100/12 – 2015/6

Phase Two – outlining longer term investment required to deliver the LTP3 Strategy between 2016/17 – 2026/26

Phase One

- 2.11 This has been developed in the context of financial uncertainty as the national level of resources for transport over the next four years was only announced in October 2010. It is anticipated that the final version of IP1 will include a more detailed investment programme for 2011 / 12, which will reflect the final

distribution of the local transport settlement for the Metropolitan Area. IP1-Phase One is further divided into the categories set out below.

2.12 **Section A: Committed Schemes** - During the first period of LTP3, there are a number of previously approved and committed significant schemes and programmes **which will be completed and which will make a substantial contribution to delivering the Strategy**. These commitments were confirmed in DfT's "*Investments in Local Major Transport Schemes*" in October 2010:

- **A41 Expressway** – To improve access to West Bromwich Town Centre and to support its regeneration and alleviate traffic congestion, a new road tunnel is being built under the A41 Expressway/ A4031 All Saints Way roundabout.
- **A4123 Burnt Tree Island** - The scheme will see the removal of the five arm roundabout to be replaced by a new signalised junction providing additional traffic flow capacity through the junction, leading to improved journey speeds and reliability as well as improved pedestrian safety.
- **Birmingham New Street Gateway** – a £600m new, world-class passenger and retail area will be delivered, supporting regeneration and providing a new gateway to the entire sub-region.
- **Brierley Hill Sustainable Access Network** - this scheme delivers reduced congestion and environmental enhancements along the A461 in Brierley Hill. The scheme will support regeneration of the centre.
- **Chiltern Railways "Evergreen" Phase 3** - Chiltern Railways will shortly complete investment work within the Metropolitan Area on the route between Birmingham and London Marylebone, to enable significant timetable improvements to be delivered in May 2011, including considerable speeding up of services between Birmingham and London. Further improvements to complement this investment will also be undertaken by Chiltern during the LTP3 period.
- **Red Routes Package One** – Red Routes Package One targets key highway corridors across the Metropolitan Area and aims to deliver improved journey speed and reliability for all road users, making best use of the existing highway network.
- **Selly Oak New Road** – The construction of a new road around Selly Oak centre will open up brownfield land for regeneration, as well as routing traffic away from the congested Selly Oak centre.

- **West Midlands Urban Traffic Control** – This Major Scheme enables more efficient use of highways across the Metropolitan Area by allowing Traffic Managers to use Real Time Information (RTI) and to respond to incidents on the network, through additional variable message signs and responsive traffic signal phasing.
- **Wolverhampton Interchange (Phase 1)** - providing a new bus station and interchange, together with a mixed use development, aimed at stimulating development in Wolverhampton City Centre.
- **M6/M5 Active Traffic Management (J9-11)** - these improvements provide additional capacity on the motorway network, reducing congestion and improving inter-regional connectivity.
- **Network Rail Control Period 4 (“CP4”) Programme (2009-14)** – enhancement programme for the local rail network to provide additional capacity, improved service times and reliability. To progress the Barnt Green to Bromsgrove electrification scheme by Network Rail, which will allow the extension of Cross City South services from Longbridge to serve Bromsgrove, Bromsgrove Railway Station needs to be relocated from its present position.
- **Rail Freight Gauge Enhancements** – The West Coast Main Line to Felixstowe and Southampton Deep Sea Ports schemes are enhancing freight gauge to allow movement of standard size international 9’6” (W10) shipping containers by rail, which will take more freight off the road and reduce road haulage, improving highway capacity.

2.13 **Section B: New Transport Investment** - Comprising schemes and initiatives that are a priority for driving economic growth and reducing carbon in the period 2011/12 – 2015/16, which may proceed subject to funding availability and a favourable major Scheme Business Case.

2.14 This programme is further subdivided by Delivery Sector:

- B1 – Metropolitan Area
- B2 – Rail Industry
- B3 – Highways Agency

Metropolitan Area Major Schemes

2.15 At the Metropolitan Area level the Department for Transport (DfT) has announced three categories of scheme beneath those that have already been committed. Those in the Supported Pool are more likely to proceed than those in the Pre-Qualification Pool.

- a. **The Supported Pool** – Schemes that DfT would be prepared to fund, subject to renegotiation of Local Authority funding bids
- b. **The Development Pool** – Schemes requiring further DfT analysis prior to invitation of a Local Authority funding bid. Final decisions are due at the end of 2011.
- c. **Pre-Qualification Pool** – Schemes subject to DfT preliminary approval in January 2011, for determination of suitability for inclusion in the Development Pool;

The Supported Pool

Birmingham City Centre Midland Metro Extension and Enhancement Package

- i. The extension of the Midland Metro Line One through Birmingham city centre is a keystone scheme, which will support jobs and improve access from the Black Country to employment opportunities in Birmingham City Centre. The scheme will also provide the infrastructure and additional capacity to allow further expansion of the Midland Metro network in the future

Development Pool

- 2.16 No West Midlands Metropolitan Area schemes are included in this category.

Pre-Qualification Pool

- 2.17 DfT have advised the following five Metropolitan Area Major Schemes as being identified for inclusion in the Pre Qualification Pool.

- ii. A38M Aston Expressway Tame Valley Viaduct (£40M)

The Tame Valley Viaduct carries the A38 (M) Aston Expressway over the River Tame and Cross City North railway line. The structure has been identified, by Birmingham City Council, as requiring major maintenance works to avoid the alternative potential introduction of weight restrictions on the most strategically important route into Birmingham City Centre.

- iii. A45 Corridor Enhancements: Westbound Bridge (£11M).

The A45 west bound bridge is located approximately 500 metres west of M42 J6. The bridge requires a major maintenance upgrade to replace the 19th century brick structure, which carries the west bound carriageway over the West Coast Main Line south of Birmingham International rail station.

The proposed scheme would deliver two benefits: firstly, addressing maintenance issues by providing a new structure capable of handling heavier vehicles types, which would otherwise result in weight restrictions being placed on the bridge structure and; secondly provide enhanced access to the airport site.

iv. Chester Road Access Improvements (£21M)

Chester Road is located in north-east Birmingham. The Major Scheme targets the section between M6 (J5) and the B4148 Tyburn Road. This section of Chester Road is home to internationally-known businesses including Jaguar/ Land Rover, whilst also home to employment and industrial parks such as Fort Dunlop and the Castle Bromwich Business Park.

The scheme proposes an upgrade to the existing dual carriageway, together with enhancement of four junctions, including those with the A47 and A38. The scheme will also provide sections of bus lane and improved pedestrian and cycling facilities.

v. Coventry to Nuneaton Rail Enhancements (NUCKLE1) (£16M)

The Coventry to Nuneaton Rail Enhancements scheme will provide additional rail services between Nuneaton and Coventry City Centre, including new stations at Ricoh Arena and Bermuda, platform lengthening at Bedworth, and service frequency and rolling stock enhancements.

vi. Darlaston Strategic Development Area (SDA) (£28M)

The Darlaston Strategic Development Area (SDA) is a regeneration scheme making use of 54 acres of brownfield land adjacent to M6 J9. The scheme aims primarily to provide freight and logistics employment development, taking advantage of the site's proximity to the M6. Transport investment will provide new and enhanced access roads to facilitate land remediation works, as well as eventually providing access from the SDA site to both M6 (J9) and A454 Black Country Route.

Other Components of Draft IP1

2.18 In addition to the Major Schemes Capital Programme set out, IP1 also considers these additional ITA /Local Authority measures.

- Metropolitan Area Non-Major Schemes (Schemes costing less than £5million)
- Metropolitan Area Asset Management (highways and public transport)
- Public Transport Plan

- 2.19 Metropolitan Area Non-Major Schemes are those that will be supported from the Integrated Transport Block (ITB). This is related to the ten Long Term Themes, and identified priorities are as follows:
- Sustainable Smart Package (Long Term Theme 2)
 - Smarter Choices (Long Term Theme 3)
 - Road safety (Long Term Theme 9)
- 2.20 Draft IP1 estimates that there will be approximately £25 million available through the ITB in 2011 -12, approximately half of the £53 million that was available in the recent past.
- 2.21 **Metropolitan Area Asset Management** concurs with Long Term Theme 1 and Draft IP1 estimates that there will be some £20million available in 2011/12. The Technical Appendices set out in detail the requirements within each asset class (carriageway, footway, structures and streetlights) to maintain 'steady state' or 'restore to new'; the cost of the latter approach being considerably greater.
- 2.22 **The Public Transport Plan** comprises largely revenue measures and includes concessionary fares, "Ring and Ride," socially necessary bus services and maintenance of bus shelters and bus stations; these issues are largely covered by Long Term Themes 6, 7 and 9. The inclusion of the Public Transport Plan in LTP3 for the first time brings together both capital and revenue funding streams, to provide an integrated and holistic approach to tackling the identified transport challenges within LTP3.

Linkages with Integrated Sustainability Appraisal

- 2.23 Elsewhere IP1 is not especially scheme specific, as the level and distribution of available funding is not yet known, although it is assumed that it will be considerably lower than in recent years. This adds uncertainty to any assessment.
- 2.24 IP1 Section 3 (Strategy priorities for action and Implementation Plan One Focus) identifies interventions that are likely to be funded through ITB, and identifies which Long Term Theme they relate to. As the policies that make up each Long Term Theme have been subjected to strategic assessment, it follows that these interventions have too.
- 2.25 Appendices 5 and 7 in IP1 also set out how projects and initiatives funded from ITB will be assessed. These methodologies were informed by the sustainability objectives, and require individual proposals to be assessed in terms of their contributions to such issues as health, carbon reduction, promoting active travel modes and public transport use, and their impacts upon the built and natural environment, as well as benefit-cost ratios.

B2 Rail Industry Schemes

2.26 Network Rail as owner of the railway infrastructure have the following commitments agreed as outputs in Control Period 4 (2009/10 – 2014/15), although these are currently under review. Control Period 5 will begin from 2015 and at the present time the programme contents are not known. Control Period 4 commitments are:

- **Resignalling Programmes (£205M).** Resignalling programmes include area-based schemes at Walsall, Water Orton and Stourbridge- Hartlebury. These will replace and enhance signalling equipment to allow for additional train paths and improve efficiency for both passenger and freight services.
- **Cross-City South Enhancements.** The Cross-City South enhancements will build on the improvements made by Network Rail in the corridor during CP4. These will include upgrades to the Barnt Green to Redditch Line to allow three trains per hour to serve the new Bromsgrove Station and Redditch.

Services

2.27 The Train Operating Companies serving the metropolitan rail networks have service and rolling stock enhancement commitments as a result of their franchise awards. These are:

- **Rolling Stock Upgrades (£90M).** Principally focused on the Snow Hill network, London-Midland will introduce new Class 172 rolling stock to provide greater passenger capacity, as well as faster, more reliable Local Rail Network services.
- **Rail Station Improvements (£9.9M).** Facility upgrades at selected stations across the Area and the Travel to Work Area, including Northfield, Selly Oak and Sutton Coldfield. This will ensure that investment in rail network infrastructure is matched by high quality rail stations, thus ensuring passengers receive high quality total journey experiences.
- **Smartcard Ticketing (£3M).** London Midland is to introduce the use of Smartcard ticketing across its network. Centro will be working with London-Midland to ensure compatibility between the London-Midland and Centro Smartcards within the Metropolitan Area.

Highways Agency Schemes

- 2.28 **M6 J5-8 Active Traffic Management (Hard Shoulder Running).** Active Traffic Management (ATM) has two distinct benefits. During peak traffic flow period, ATM allows for the use of variable speed limits optimizing the number of vehicles on the carriageway. Additionally, ATM allows the use of the hard shoulder to provide additional capacity. This has been proven to reduce congestion and improve journey reliability, which in turn reduces carbon emissions. Complementing the existing ATM network on the motorway box around the Metropolitan Area, the scheme will provide additional capacity between M6 J5-8.

Implementation Plan One Phase Two (2016/17-2025/26)

- 2.29 Longer-term transport investment is identified, highlighting those schemes and initiatives beyond 2015/16 which can be delivered once further funding sources can be identified up to 2026. Both Local Authority and other partners' investment proposals are included with details set out in Appendix 1.

Section Three – Stages in the SEA / ISA Process

- 3.1. SEA is a statutory requirement and is prescriptive in terms of what is required. Therefore, the SEA Directive, Regulations and guidance in Webtag 2.11 have been closely followed. This means that the effects of LTP3 on wider sustainability objectives are subjected to the same level of scrutiny as the environmental topics specified in the SEA directive. A summary of the key stages in the process is set out below.

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope:

- 3.2. Identifying other relevant plans and programmes and collecting baseline information in order to identify sustainability / environmental issues and problems and develop an appraisal framework. This information must then be presented in a Scoping Report and statutory bodies must be given an opportunity to comment on the scope of the assessment process.

Stage B: Developing and refining alternatives and assessing effects

- 3.3. Undertake the environmental assessment / sustainability appraisal itself. This involves testing the plan's policies and proposals against each of the sustainability objectives and identifying the significance of any effects. Where adverse effects are identified, mitigation measures should be offered. Reasonable alternatives should also be subjected to this process and measures to monitor any effects should be identified.

Stage C: Preparing the Environmental / Sustainability Report

- 3.4. This information must be presented in an Environmental / Sustainability Report

Stage D: Consultation on the draft plan and Environmental Report

- 3.5. This report must be available to statutory consultees and the general public to consider alongside the draft plan. The plan making body should take their views and the findings of the appraisal / assessment into account when finalising the plan, with this information subsequently published in a Sustainability /SEA Statement that is made available to stakeholders.

Stage E: Monitoring the implementation of the plan

- 3.6. Monitor the significant effects of the implementation of the plan in order to identify any unforeseen effects at an early stage and undertake remedial action.

Section 4 - Setting the Scope of the SEA / ISA

Scoping Report

- 4.1. A Scoping Report was issued for consultation in Spring 2010. Statutory bodies were consulted (English Heritage, Environment Agency and Natural England), and the invitation was extended to other key stakeholder such as Local Authorities, Local Strategic Partnerships and Primary Care Trusts. It was also published on the LTP3 website.
- 4.2. Nine responses were received to the Scoping Report consultation, and many constructive comments were made, particularly those which helped fine tune the sustainability objectives. Appendix 2 sets out how these comments have been addressed, and the Scoping Report and Baseline and Review of Plans Policies and Programme Appendices have also been updated.
- 4.3. Some comments received were very detailed and related to site-specific matters. It is considered that a strategic assessment of this nature needs to remain “broad brush,” and this is supported by guidance.
- 4.4. The value of some of the suggested indicators was also questioned, on the basis that it is not practical to collect data for its own sake and that fewer resources are likely to be available to do so in future. The Coalition Government has made it clear that it will seek fewer performance management data from Local Authorities in the future. Article 10 of the SEA Directive, however, is clear in its requirement that Member States shall monitor the significant environmental effects of the implementation of plans and programmes. This matter is considered further in Section 8.

Links with other Plans, Policies and Programmes

- 4.5. A thorough review has been undertaken of other relevant plans, policies and programmes which are likely to have implications for LTP3, and this was set out in a detailed schedule at the Scoping stage. The schedule has been amended in the light of responses from consultees and will be made available on the LTP3 website
- 4.6. Many plans and policies set the context for LTPs, some directly and others indirectly, and it is within transport’s remit to help to deliver some of the aspirations of these other strategies. Relevant documents range from international, national, regional and local. Some offer policy or guidance, whilst others are statutory. A summary of those with major implications for LTPs are summarised thematically below.

National Transport Policy

- 4.7. Although the Coalition Government is now in place, national transport policy is not dissimilar from the previous Government's, although proposed delivery is different given the Localism agenda and measures to tackle the budget deficit.
- 4.8. In a speech on 10 September 2010 the Secretary of State Phillip Hammond stated that Government is committed to addressing the unavoidable effects of climate change and that solutions to transport problems must be environmentally and socially sustainable (e.g. facilitating social mobility). Crucially, the speech reiterated the need to cut carbon *'in a way which supports economic growth'*.¹ It is imperative, therefore, that LTP3 delivers these two key objectives.
- 4.9. The Coalition Government published its National Infrastructure Plan² in October 2010. This reflects its approach to the hierarchy of infrastructure investment by *'prioritising the maintenance and smarter use of assets, followed by targeted action to tackle network stress points and network development and, finally delivering transformational large scale projects that are a part of a clear long term strategy'*. It also gives specific support to High Speed Two (HS2), Birmingham Gateway (New Street) and the Midland Metro Birmingham City Centre Extension.

Spatial Planning Policies

- 4.10. Local transport policies and proposals have a key role in supporting spatial planning policies. Despite the Coalition Government's commitment to abolishing Regional Spatial Strategies (RSS) through the Localism Bill, they remain the upper tier statutory plan at least for the time being.
- 4.11. The West Midlands RSS includes an Urban Renaissance strategy³. In short, this seeks to reverse previous planned decentralisation and focus on regeneration activity and population retention within the urban areas. Regardless of the future of the RSS, the Metropolitan Authorities are committed to these principles.
- 4.12. The Black Country Joint Core Strategy, which has recently been found sound by the Planning Inspectorate, advocates provision of an additional 63,500 dwellings over the LTP3 period. Solihull's emerging Core Strategy seeks to accommodate a further 10,500 dwellings with Birmingham identifying the need for a further 50,600. Coventry is yet to formally announce its position, but a substantial number of new dwellings will be proposed. Core Strategies also identify a number of centres, corridors and other key locations where

¹ <http://www.dft.gov.uk/press/speechesstatements/speeches/hammond20100910>

² http://www.hm-treasury.gov.uk/ppp_national_infrastructure_plan.htm

³ <http://www.wmra.gov.uk/documents/RSS%20Full%20Doc%20Jan%2008.pdf>

development will be focussed. There are also several more spatially-specific Area Action Plans, either adopted or emerging, which LTP3 must consider.

- 4.13. The population composition of the West Midlands Metropolitan Area will change over the LTP3 period. Whilst there will be more older people due to greater life expectancy, high fertility rates in many areas will lead to more younger people.
- 4.14. LTP3 will need to accommodate this new development and meet the transport needs of a larger population with differing mobility requirements.

Climate Change

- 4.15. The national Climate Change Act (2008) sets out binding targets to reduce carbon emissions by at least 34% by 2020 and 80% by 2050, compared to 1990 levels. The Government's 2010 Action Plan – Beyond Copenhagen sets out opportunities to delivery the strategy and identifies such initiatives as plug-in vehicles, renewable energy and low carbon infrastructure. The UK Low Carbon Transition Plan⁴ and Low Carbon Transport: A Greener Future⁵ set out how carbon reduction can be delivered
- 4.16. The UK has signed up to the EU Renewable Energy Directive⁶ which includes a UK target of 15 percent of energy from renewables by 2020. This target is equivalent to a seven-fold increase in UK renewable energy consumption from 2008 levels, the most challenging of any EU Member State. The Renewable Energy Strategy (2009)⁷ seeks 10% of transport energy from renewables, up from the current level of 2.6% of road transport consumption.
- 4.17. The Flood and Water Management Act 2010⁸ will provide better, more comprehensive management of flood risk for people, homes and businesses. Transport infrastructure is at risk from flooding which may become more prevalent, given that in future more unpredictable and extreme weather events are forecast.
- 4.18. LTP3 has a major role to play in reducing carbon emissions through behavioral change and promoting and use of low carbon technologies. It also needs to demonstrate that infrastructure is resilient to unavoidable climate change

⁴ http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/lc_trans_plan/lc_trans_plan.aspx

⁵ <http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/sustainable/carbonreduction/low-carbon.pdf>

⁶ http://ec.europa.eu/energy/climate_actions/doc/2008_res_directive_en.pdf

⁷ http://www.decc.gov.uk/assets/decc/What%20we%20do/UK%20energy%20supply/Energy%20mix/Renewable%20Energy/Renewable%20Energy%20Strategy/1_20090717120647_e_@@_TheUKRenewableEnergyStrategy2009.pdf

⁸ <http://www.legislation.gov.uk/ukpga/2010/29/contents>

Community Strategies

- 4.19. Local Strategic Partnerships have coordinated the preparation of Community Strategies for each Local Authority area. These articulate a high level vision that is shared by a wide range of stakeholders. Common themes within these strategies include access to jobs and facilities, better health, an improved local environment and enhanced community safety. Local transport policies have a key role to play in assisting the delivery of these objectives

Natural and Built Environment

- 4.20. The EU Habitats Directive⁹ seeks to protect biodiversity through the conservation of species and habitats. Nationally, this is augmented by the Natural Environment and Rural Communities Act,¹⁰ which came into force on 1st Oct 2006. Section 40 of the Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'. Locally, there are two Biodiversity Action Plans covering Birmingham and the Black Country and Coventry, Solihull and Warwickshire. There are also specific species and habitat plans. The ITA, as a public body, needs to be mindful of its biodiversity duty and this should be reflected through LTP3.
- 4.21. Air quality and noise are also the subject of EU Directives^{11,12}, leading to the preparation of local air quality action plans to reduce emissions. Transport is one of the major contributors to poor air quality in urban areas. There is also a National Air Quality Strategy¹³ as well as local air quality management plans. LTP3 needs to be mindful of its responsibility to meet the requirements of these directives.
- 4.22. The Government's statement on the Historic Environment for England 2010¹⁴ seeks to ensure that the value of the historic environment is recognised by all who have the power to shape it, that it gets proper recognition and that it is managed intelligently and in a way that fully realises its contribution to the economic, social and cultural life of the nation. This is augmented by Putting the Historic Environment to Work: A Strategy for the West Midlands (2010 – 2016)¹⁵. LTP3 should seek to minimise adverse impacts on the historic environment with respect to changing land uses, including inappropriate development, vibration/noise impacts, and visual intrusion. The Planning (Listed Buildings and Conservation Areas) Act 1990 provides a statutory basis for this.

⁹ http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

¹⁰ <http://www.legislation.gov.uk/ukxi/2007/816/contents/made>

¹¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0050:EN:NOT>

¹² <http://ec.europa.eu/environment/noise/directive.htm>

¹³ <http://www.defra.gov.uk/environment/quality/air/airquality/strategy>

¹⁴

http://webarchive.nationalarchives.gov.uk/+http://www.culture.gov.uk/reference_library/publications/6763.aspx

¹⁵ <http://www.english-heritage.org.uk/content/imported-docs/p-t/putting-historic-environment-to-work.pdf>

Health and Wellbeing

- 4.23. Several health and wellbeing strategies have been published recently, many of which focus on encouraging physical activity to combat obesity and reduce other illnesses associated with sedentary lifestyles. Be Active Be Healthy, a Plan for Getting the Nation Moving (Department for Health, 2009)¹⁶, seeks a cross governmental approach to encouraging physical activity.
- 4.24. The Coalition Government has recently published Healthy Lives, Healthy People: Our strategy for public health in England (November 2010)¹⁷. This draws on Sir Michael Marmot's recent Fair Society Healthy Lives Report and adopts a life course framework for social determinants of health.
- 4.25. There is a focus on taking better care of our children's health, and development could improve educational attainment and reduce the risks of mental illness, unhealthy lifestyles and road deaths. In adults, behavioural change is advocated to reduce premature death, illness and costs to society, avoiding a substantial proportion of cancers, vascular dementias and over 30% of circulatory diseases. It also states that a forthcoming Local transport White paper will identify further linkages with the sector and public health should be supported by the £560 million Local Sustainable Transport Fund.
- 4.26. A significant change is that subject to Parliamentary approval, local government and communities will be at the heart of improved health and wellbeing for their populations and seek to reduce health inequalities. Local transport policies, as featured in Draft LTP3, therefore, will need to engage with this localism agenda.
- 4.27. Some Local Authorities also have their own health and wellbeing strategies. Local transport policies, particularly through Smarter Choices, can have a significant impact on encouraging greater levels of physical activity

Equalities

- 4.28. The Equality Act 2010¹⁸ requires that likely impacts of a policy, strategy or project are considered on the following equality groups: - gender, age, race and ethnicity, disabled people, belief groups, sexual orientation, sexual identity and socially deprived groups. This seeks to ensure that discrimination is eliminated and any adverse effects are mitigated. Individual authorities have their own equality and diversity strategies to meet these requirements. Transport, particularly public transport, has a key role to play in ensuring equality of opportunity and social inclusion, as many equality groups are often disproportionately dependent on it.

¹⁶ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_094358

¹⁷ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_121941

¹⁸ http://www.equalities.gov.uk/equality_act_2010.aspx

Baseline Data and Issues

- 4.29. The SEA regulations also require that an examination of the current state of the environment be undertaken in order to assist the assessment process. A largely empirical 'environmental baseline' was prepared and accompanied the Scoping Report. Once again, amendments were made following consultation and a revised version will be available on the LTP3 website. A summary of the key findings is set out thematically below.

Summary Sustainability Baseline issues

Economy

- 4.30. In the West Midlands Metropolitan Area only Solihull had an employment rate above the national average (73.3% compared with 74.3% nationally). Four areas had the lowest rates in the region, with Birmingham having the lowest rate of all at 61.5%.
- 4.31. Most people in the West Midlands Metropolitan Area travel to work by car (71%). This is similar to the UK average (70%) but below the West Midlands Region average (76%). This is despite the level of accessibility of working age people to employment by public transport being above the national average of 82% in six of the seven districts.
- 4.32. The West Midlands Metropolitan Area lies at the centre of the national road and rail networks. This may have benefits; however, it also means that large numbers of people and goods from outside the West Midlands travelling through the Area put pressure on transport infrastructure and services. The estimate cost of congestion to the freight industry in the Area is £216m per year¹⁹

Climate

- 4.33. Transport contributes some 21% of UK emissions, with road transport accounting for 92% of these. Minor roads account for the majority of road transport emissions (51.6% in 2007), although motorways and A-class roads make a significant contribution to overall emission levels, together matching emissions from minor roads (19.8% and 28.1% respectively).
- 4.34. Per capita emissions in the Metropolitan Area are lower than the national and regional averages, as would be expected from an urban area.

Equality & Accessibility

¹⁹ 'Tackling Congestion, Delivering Growth' published in March 2008

- 4.35. The gender balance in the West Midlands Metropolitan Area is almost identical to that of England as a whole, with 49.2% of the population being male and 50.8% being female. Women are more likely to be reliant on public transport and this has repercussions for labour market participation and impact on access to services such as healthcare and maintaining social networks.
- 4.36. West Midlands Metropolitan Area has a slightly younger population profile (average 36.7 years) compared with the West Midlands Region (39.5 years) and with England and Wales (39.3). Younger people are generally reliant on public transport as a mode of travel to access opportunities and socialise, and this may restrict young people when moving into the jobs market and accessing employment opportunities.
- 4.37. Many older people cannot drive due to age-related health conditions, or choose not to due to the cost of keeping a car on the road. Public transport plays a vital role in enabling participation in community life, accessing services and reducing social isolation. Older people may also suffer from mobility difficulties and other disabilities and face particular challenges concerning physical access when using public modes.
- 4.38. The West Midlands Metropolitan Area has a higher degree of racial diversity than the West Midlands region and England and Wales comparators. Both men and women from BME groups tend to make greater use of public transport, particular bus, than their white counterparts. The design and structure of the public transport network does not always best meet the economic and social needs of BME communities.
- 4.39. The proportion of people living with long term limiting illnesses within the West Midlands Metropolitan Area is generally higher than the regional and national averages with particularly high proportions in Sandwell and Wolverhampton. The highest numbers of people with long term limiting illnesses live within Birmingham. People with disabilities are more likely to be dependent on public or community transport, but often find access harder than other sections of the population. Lack of access restricts job opportunities, perpetuates health inequalities and acts as a barrier to socialising.
- 4.40. Much of the West Midlands Metropolitan Area experiences relatively high levels of overall deprivation, with Birmingham, Sandwell and Wolverhampton all falling within the most deprived 10% of districts nationally. Low income families and those from deprived communities are highly reliant on public transport. The cost and reliability of public transport can present a particular difficulty for people from deprived areas. This may be especially relevant to housing estates on the outskirts of the major cities, which risk being cut off from services and opportunities, increasing social inequality.

Safety, Security and Health

- 4.41. Women, young people and older people in particular express concern about personal security when travelling on public transport, especially at night.
- 4.42. In respect of air quality, the highest concentrations of pollutants are centred in the urbanised areas and the main arterial routes. These areas of highest pollutant concentrations are also areas in which population densities are highest, meaning that exposure is high in urbanised areas.
- 4.43. The number of people killed and seriously injured on the roads has fallen by 53% since the 1994-98 baseline (999 in 2009 compared with 1994-98 average of 2093). However, the rate of reduction has slowed in recent years and certain groups such as children, young people and motorcyclists remain the most vulnerable
- 4.44. The West Midlands Region is one of the worst performing regions in the UK in terms of the number of adults who are obese. Obesity levels are higher in many Metropolitan Authorities than the regional average.

Quality of Life and the Environment

- 4.45. The Metropolitan Area contains over 300 Listed Buildings, 31 Registered Parks and Gardens and 137 Conservation Areas. English Heritage's Risk Register suggests that 34 Grade I or Grade II Listed Buildings are 'at risk' in the West Midlands Metropolitan Area. Although transport is not a contributory factor in rendering buildings 'at risk', many lie within close proximity of the transport network.
- 4.46. There are three Landscape Character Areas within the West Midlands Metropolitan Area. Whilst the Character of Mid Severn Sandstone Plateau has been maintained, the characters of both Arden and Cannock Chase and Cank landscape character areas have been assessed as diverging from their intrinsic character.
- 4.47. The entire Metropolitan Area is within the 'Midlands Plateau Natural Area' There is a range of sites designated for their biodiversity value including:
 - 23 Sites of Special Scientific Interest (SSSI) within the West Midlands Metropolitan Area. These are fragmented and increasingly vulnerable to the effects of climate change.
 - Two sites designated of international importance within the West Midlands Metropolitan Area, Fens Pool Special Area Conservation (SAC) and Cannock Extension SAC.
 - Two National Nature Reserves (NNRs) at Sutton Park and Wrens Nest.
 - 44 Local Nature Reserves (LNRs)

The West Midlands Metropolitan Area is dominated by two river systems, the Severn and Trent and their tributaries, particularly the Tame to the West and Avon to the east. Rivers are at risk from diffuse pollution. River water quality is generally poor within the Metropolitan Area.

- 4.48. The Metropolitan Area lies at the centre of the national canal network and comprises over 250 km of canals, 160 km of which are still navigable. Canals comprise part of an urban area's 'green infrastructure' and provide a mix of terrestrial and freshwater habitats, which can be important to wildlife.
- 4.49. The Metropolitan Area is a net importer of aggregate and there are environmental issues regarding the extraction and transport of aggregates.

Developing the Appraisal Framework

- 4.50. During the Scoping stage, sustainability objectives, criteria and indicators were developed against which LTP3 policies and proposals would be assessed. These have been revised following representations from stakeholders. Considerable care has been taken to align the objectives with SEA topics, NATA objectives and the National Transport Goals.
- 4.51. Clearly, an LTP cannot deliver all of these objectives in isolation, hence the SEA Directive's requirement to consider cumulative effects. This requires, inter alia, that the likely effects of Draft LTP3, in conjunction with other relevant plans and programmes that are likely to be implemented over the same time frame, are considered. The Scoping Report undertook a detailed assessment of other relevant plans, policies and programmes and categorised them according to which sustainability objective they related.
- 4.52. The sustainability objectives represent important issues that the plan should be helping to achieve, and elements of Draft LTP3 will be measured against them. The assessment criteria provide more detailed prompts for assessors, which comprised a wide range of individuals and organisations, of issues that the appraisal needs to consider. The framework is presented in Table 1 below.

Table 1: Sustainability Appraisal Framework

<p>1. To mitigate climate change through reducing CO₂ emissions</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Change in traffic flows, change in total vehicle kilometres or a change in the nature of traffic / transport mode that would affect overall energy use /use of alternative energy sources to fuel vehicles • Affect overall energy use / use of renewable to source transport infrastructure (e.g. lighting and signage) • Overall tree and woodland coverage
<p>2. To adapt to the unavoidable consequences of climate change, including reducing the risk of flooding</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Maintenance measures which adapt / respond to the unavoidable effects of climate change • Infrastructure that could increase / decrease the potential flooding e.g. Sustainable Urban Drainage System (SUDS) schemes • Impact on localities prone to flooding e.g. flood plains • Impact on the ability for species to adapt to the unavoidable effects of climate change.
<p>3. To improve air quality, so as to reduce adverse impacts on human health, and the natural and built environment, both within and outside of the West Midlands Metropolitan Area</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Changes in traffic flows (or changes in the nature of traffic e.g. increased / decreased HGV movements) near identified air quality ‘hot spots’ and sensitive receptors e.g. hospitals, schools, houses • Changes in air quality adjacent to species and habitats known to be susceptible to deterioration in air quality • Changes to air quality carbon dioxide, sulphur dioxide, nitrogen oxides and particulates such as smoke which may affect historic buildings
<p>4. To encourage use of public transport, walking and cycling and more efficient use of private cars and reduce the need to travel</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Demand for public transport use • Demand for private car use • Capacity on the public transport / highway network • The provision of interchanges and capacity (e.g. park and ride spaces) • Conditions for cyclists and pedestrians • The overall demand for travel

	<ul style="list-style-type: none"> • The number of major trip generators with travel plans • Levels and management of parking provision that encourages access to Metropolitan Area's strategic centres and other major trip generators by public transport cycling and walking
5. To conserve and enhance biodiversity (including both habitat and species) and geodiversity at all levels, ensure no loss or damage to statutory and non statutory nature conservation sites and to maximise opportunities for achieving Biodiversity Action Plan targets	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Actions that help to reach targets OR compromise targets of BAPs • Actions that cause changes in habitat fragmentation or habitat loss OR actions that safeguard habitats (especially affecting protected species or species important in a West Midlands context) (including effects of air, noise and light pollution) • Actions that affect areas where biodiversity is already exposed to significant threat, e.g. through habitat loss or fragmentation • Actions that affect Natura 2000 sites, SSSIs or other designated sites within and outside of the Metropolitan Area • Proposals to identify, safeguard and enhance Green Infrastructure networks
6. Reduce soil contamination, safeguard and enhance soil quantity and quality and minimise the loss of high quality agricultural land and Green Belt	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Changes in existing soil erosion problems including effects of road maintenance • Changes in existing soil erosion problems or loss / pollution of soils that support valued habitats • Changes in the quantity of Green Belt and quantity / quality of agricultural land
7. Safeguard surface and groundwater quality	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Changes in traffic flows or new transport infrastructure that could affect existing poor water quality; or good quality watercourses or those known to be of a high biodiversity value • Changes to watercourses of ecological importance affected by run-off from new or existing roads
8. To use existing infrastructure wherever possible and re-use materials	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Actions that change the use of recycled materials in road construction and maintenance • Actions that cause changes in the demand for aggregate • Actions that affect the condition of transport infrastructure • Actions that make more / less efficient use of existing infrastructure e.g. increased / decreased capacity, timely maintenance •

<p>9. To conserve and enhance heritage assets of historic, archaeological, architectural and artistic interest and their settings</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Changes to infrastructure or changes in traffic flows or the nature of traffic (an increase in HGVs for example) that affects sites, monuments and features (including Conservation Areas, Historic Parks and Gardens, Listed Buildings, Scheduled Ancient Monuments and other features of local importance) valued for their cultural heritage or changes the number of sites at risk • Changes to infrastructure that affect historic landscapes • Local distinctiveness regarding the historic built environment and landscape (and townscape) • Access to and understanding of the historic environment.
<p>10. To protect and enhance the character of the landscape (both rural and urban) and townscape, improve the quality of the public realm and safeguard urban open spaces</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Changes in traffic flows or changes to the nature of the traffic mix / nature in areas that are valued for their landscape character or their tranquillity • Changes to the landscape that are at variance with the character of the area and key landscape features (such as boundary walls and vernacular and traditional buildings). This may include changes to highways signing, lighting and changes to the public realm e.g. street furniture, signage, advertising boards, guard railing • Changes in infrastructure, traffic flows or the nature of traffic (an increase in HGVs for example) that could alter the character of a town or benefit townscape • Local distinctiveness regarding the historic built environment and landscape (and townscape) • The quantum of Ancient Woodland in the Metropolitan Area
<p>11. To ensure and equality of access and opportunity for all residents and visitors regardless of race, gender, religion, belief, disability, sexuality, economic position or parental responsibility</p>	<p>How would the plan in association with other plans and programmes affect each of the specified equality groups:</p> <ul style="list-style-type: none"> • Gender (male and female) • Age (all age groups but particularly older people (over 65), younger people (17-25) and children under 16) • Race and ethnicity (including all races and ethnicity and including a focus on Black, Asian and minority ethnic (BAME) groups) • Disabled people (including those with physical, sensory, learning and mental wellbeing disabilities) • Belief Groups • Sexual orientation (all groups but focusing on lesbians, gay men and bi-sexual people)

	<ul style="list-style-type: none"> • Gender identity (trans sexual and trans gender people) • Socially deprived groups (primarily deprived communities)
<p>12. To reduce health inequalities and improve access to health facilities, fresh food, green spaces / open spaces / open countryside, work, leisure and social opportunities so as to improve the health of residents within the Metropolitan Area</p> <p>To reduce rates of obesity in adults and children</p> <p>To reduce the number of road accidents (particularly in areas witnessing high levels), and accidents on public transport and pavements</p> <p>To minimise the adverse impacts of poor air quality on human health</p> <p>To reduce peoples' exposure to high noise levels and transport induced vibration</p> <p>To minimise the adverse impacts of light pollution on human health</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Improve health inequalities and access to health facilities, fresh food, green spaces, work, leisure and social opportunities • Increase / decrease the risk of accidents on existing infrastructure / vehicles and provision of specific measures to improve safety • Affect vehicle movements (volume, nature and timing) in the vicinity of areas sensitive receptors e.g. houses, schools, hospitals • Contribute to providing sustainable communities that reduce the need to travel to access jobs, education, services and health care • Make provision and opportunities for movement using active travel modes such cycling and walking, in addition to public transport • Contribute to providing a townscape and landscape that is of high quality design (e.g. homes and open space) and limits its impact on the natural environment (e.g. air, noise, and light pollution)
<p>13. To reduce actual and perceived crime/ anti social behaviour (both personal and property)</p>	<p>Would the plan in association with other plans and programmes affect:</p> <p>Recorded and perceived levels of crime on the public transport network</p> <p>Recorded and perceived levels of crime on the highway network</p> <p>Vehicle crime at public car parks and on the highway</p>
<p>14. 14. To develop the Metropolitan area is such a</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Infrastructure provision to support the planned levels of growth and scale of regeneration

<p>way that it can increasingly meet more of its own economic and social needs in order to counter the unsustainable outward movement of people and jobs facilitated by previous spatial strategies</p>	<p>activity being planned for</p> <ul style="list-style-type: none"> • Selective out migration from the Metropolitan Area • Promoting sustainable communities and place making • Birmingham's aim to become a Global City • Changes in the rates of Greenfield / Brownfield land use
<p>15. To increase productivity and close the GVA output gap through reducing congestion, greater journey time reliability across all modes and improved access to employment areas and markets (via transport hubs such as airports, motorway junctions, rail stations)</p> <p>To reduce levels of worklessness and promote economic inclusion</p> <p>To provide sufficient parking to encourage the competitiveness of the Metropolitan area's strategic centres and other main business locations</p>	<p>Would the plan in association with other plans and programmes affect:</p> <ul style="list-style-type: none"> • Changes to congestion levels and journey times / reliability for all transport modes including freight • Changes in access to employment / business areas / markets and major transport hubs / interchanges • Levels of public and private investment the Metropolitan Area • Changes to the Metropolitan Area's GVA • Changes to the economic diversification of the Metropolitan Area • Affect barriers to job opportunities / labour markets and training / employment opportunities • Levels and management of parking provision that supports the vitality and viability of the Metropolitan Area's strategic centres • To provide sufficient parking to encourage the competitiveness of the Metropolitan area's strategic centres and other main business locations

Section 5 - Assessing the Effects of the Draft LTP3

Introduction

- 5.1. It is a requirement to assess the effects of the plan and options, and this has involved examining each strategy, measure and proposal in turn, with this being recorded in in detail the appraisal matrices (Appendix 3.) and reported in Section 7.
- 5.2. The process has included:
 - Considering the effects of the plan by identifying likely changes in the environmental baseline.
 - Estimating the significance of the effects by looking at changes in terms of magnitude and determining whether or not they are significant.
 - Cumulative effects, which looks at draft LTP3 in combination with other plans, programmes and projects.

Identifying the effects of the plan

- 5.3. As Draft LTP is a relatively broad strategy and is often not locationally specific, it follows that the identification of effects will be similar. Detailed site-specific assessment may be carried out to support the consent stages of the individual schemes, as required under the relevant regulations.
- 5.4. Expert judgement from a wide range of individuals and organisations has been the main means of identifying the effects, drawing on documented evidence wherever possible. Information available in the sustainability appraisals that have supported Core Strategies in the Metropolitan Area has also been drawn on in to avoid duplication and to ensure consistency. Business case or former Annex E evidence has also been drawn on to identify the effects of major schemes, where available.
- 5.5. In identifying effects, the assessment has focussed on the following:
 - Assessment of **Draft LTP3 Options (including the ‘without plan’ scenario)**
 - Draft LTP3 **Long Term Themes** and the policies contained within them. Wherever appropriate, policies have been grouped for assessment purposes. Those non-Major Scheme components of IP1 Phase One are embraced within this.
 - Major Schemes that DfT has announced are **committed**,
 - Schemes that DfT has announced are in the **Supported or Pre Qualification Pool**, as these may proceed over the LTP3 period.

- **Partners' schemes** likely to come forward over the IP1 Phase One period
- 5.6. Longer term Major Schemes included in IP1 Phase Two (Appendix 1) have not been assessed at this juncture, as there is no guarantee that they will come forward over the LTP3 period and to directly include them could skew the assessment results and make the process unwieldy. They are, however, assessed implicitly as all relate to one of the Long Term Themes.

Assessing the significance of the effects

- 5.7. Once the effects have been identified it is necessary to establish their nature and significance and how this may impact on future evolution of the baseline. As well as estimating direct effects of Draft LTP3, an assessment of their likely changes from indirect, cumulative and synergistic impacts is considered. Impacts are also investigated in terms of:
- Temporal scale – short (1-5 years), medium (5-10 years), long term 15 years +)
 - Whether reversible or irreversible
 - Their magnitude and spatial extent
 - The value and vulnerability of the area likely to be affected; and
 - Whether effects are cross boundary
- 5.8. Because of the strategic nature of Draft LTP3, other than Major Schemes identified in IP1, there is limited detail regarding the location, delivery timescale or extent to which individual measures identified within the Long Term Themes will be implemented. Matters will be clearer when the extent and distribution of DfT funding is announced.
- 5.9. This implies that it is very difficult to establish the certainty or significance of effects materialising, both of which are required by the SEA Directive. However, it is not considered helpful to identify every potential impact as being uncertain and of an unspecified magnitude, so the following approach to gauging significance has been established.

Green	Policy / Option would result in a significant positive impact on the Sustainability Objective
Blue	Policy / Option would most likely have a moderate / minor positive impact on the Sustainability Objective
White (N)	Policy / Option will have a Neutral impact on the Sustainability Objective
Orange	Policy / Option would most likely have a moderate / minor adverse impact on the Sustainability Objective

Red	Policy / Option would result in a significant negative impact on the Sustainability Objective
White (?)	Policy / Option would have an uncertain impact on the Sustainability Objective

Cumulative Effects

5.10. The SEA Directive and Regulations also request that cumulative effects are assessed. These are addressed as follows and included in the narrative provided by Section 7:

- The cumulative effects of the plan are recorded through the summaries of the assessment for each Sustainability Objective (Section 7) and via the appraisal matrices (Appendix 3)
- Consideration has been given to the demographic and land use change likely over the plan period, because planning for transport provision to support development is intrinsically linked with spatial development.
- Other partners' regional and sub regional schemes, such as those promoted by the Highways Agency and Network Rail, are considered in the appraisal matrices and referred to in the assessment by means of context

5.11. Other national infrastructure, such as High Speed Two (HS2) and the Birmingham Airport runway extension are also referred to in the assessment matrices and the summary of effects (section 7). It is not, however, considered to be the role of this assessment to formally and directly appraise these proposals, because whilst they are reflected in LTP3, they are not directly promoted by it. For completeness, however, and where LTP3 can offer any indirect mitigation or enhancement, this has been referred to.

5.12. Planning consent has already been granted for the runway extension and it is envisaged that construction may start soon, with completion potentially by 2014. HS2 is being promoted via other means; it is understood that this is likely to be through a Hybrid Bill placed before Parliament. Whilst HS2 will not be completed during the first phase of IP1 (20011-2016), it is assumed that some advance works will take place during this period. For the purpose of this exercise, reference has been made to the Appraisal of Sustainability²⁰ that has been prepared on behalf of HS2 Ltd.

²⁰ (<http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2Ltd/appraisalofsustainability/>)

Section 6 - Objective Alignment and Option Assessment

Alignment of Sustainability and Draft LTP3 Objectives

- 6.1. DfT guidance (Webtag 2.11) advises that the objectives of LTP3 need to be tested against the sustainability objectives to identify potential synergies and inconsistencies. A summary matrix is attached in Appendix 4.
- 6.2. Draft LTP3's objectives are closely aligned with the Government's Transport Goals, set within the West Midlands context, and have been refined in the light of the sustainability objectives as the plan has evolved. Inevitably, there are potential tensions between environmental objectives and any strategy that is promoting development and growth. However, what is important is to minimise any adverse environmental impacts and to develop policies or mitigation measures accordingly. The likely evolution of the baseline in the absence of the plan is also a useful exercise in testing its value and suitability.

Assessment of LTP Options

- 6.3. Article 5 of the SEA Directive specifies that *'an environmental report shall be prepared in which the likely significant effects of the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated.'*
- 6.4. Article 4 of the Directive also states that where plans and programmes comprise part of a hierarchy, assessment will be taken at different levels of the hierarchy so as to avoid duplication. As LTP3 is effectively a delivery agent for Local Authorities' spatial plans, it follows that there is limited scope for radical options at the strategic level.
- 6.5. Moreover, there has also been substantial upstream consideration of options in developing the LTP3 Strategy, including the exhaustive work funded via the previous Government's Transport Innovation Fund. More details are set out in the Scoping Report (Section 3.4) and were consulted upon with stakeholders.
- 6.6. Notwithstanding this, the Draft LTP3 Strategy identifies two broad strategic options. It does, however, concede that as they have been drawn up against the background of national and local policy, they are not radically different. The distinctions are principally in terms of the balance of policies and interventions, and the emphasis consequently placed on certain themes. Appendix 5 contains further analysis of this.
- 6.7. The two options are as follows:

- **Option A** – Roll Forward and Enhance Existing LTP2 Policies
- **Option B** – Develop a Low-Carbon Transport Strategy to Support a Low-Carbon Economy

6.8. These Options and the differences in emphasis are now discussed in detail.

Option A – Roll Forward and Enhance Existing Policies

6.9. This entails the updating and continuation of current key policies from LTP2, but with increased prioritisation due to constrained economic circumstances. The emphasis would be on limited capital investment, at least in the early years of LTP3, with a focus on:

- Dealing with congestion and addressing accessibility, air quality and road safety
- Ensuring delivery of existing commitments, including RFA2 Major Schemes
- Solutions based on single modes of travel and individual interventions such as Red Routes, Quick Wins and Urban Traffic Control Management
- Developing Smart Routes as an integrated approach to corridor-based improvements
- Increasing patronage on bus, Metro and rail

Option B – Develop a Low-Carbon Transport Strategy to Support a Low-Carbon Economy

6.10. Option B specifically responds to the Coalition Government's sustainability agenda, acknowledging the need for fiscal, economic, environmental and social sustainability, whilst at the same time cutting our carbon output and promoting the Metropolitan Area as a low carbon economy.

6.11. Whilst both options strike a balance between economic recovery and carbon reduction, Option B proposes a greater focus on carbon and climate change aspects than Option A. The balance and emphasis will inevitably change over the Plan period, with fiscal and economic imperatives at the fore in the early years, but with the low carbon approach to the Long Term Themes becoming increasingly prominent as the Plan progresses.

6.12. Option B builds on the foundations provided by Option A, but is bolder and goes further in its ambition. Fundamentally, it acknowledges the imperative of tackling climate change through developing and implementing innovative low carbon solutions to our transport challenges, focusing on how this supports a low carbon economy.

Conclusions

6.13. Draft LTP3 acknowledges that there is little major difference between these options, the principal differences being more concerned with emphasis and timeframes. Flexibility has been built into both the LTP3 Strategy and the Implementation Plan, to enable Option B to be delivered in the most practical and timely manner. In terms of their performance against the Sustainability Objectives, Option B performs better, on the basis that:

- There is a greater focus on making the best use of existing assets through maintenance and a more integrated approach to delivery as advocated through such initiatives as Smart Routes
- Greater emphasis on the role of green technologies
- Greater emphasis on the role of reducing the need to travel and the promotion of virtual travel

Assessing the future baseline or no plan scenario

6.14. The SEA Directive requires that the likely evolution of the baseline be assessed without the plan being implemented. This is referred to as the 'future baseline' or 'no plan scenario' and was briefly discussed in the Scoping Report. Guidance states that this needs to be undertaken in the context of the continuation of other plans, strategies and duties being delivered.

6.15. For the purposes of this exercise, the below duties, programmes and schemes are assumed to continue or be implemented over the plan period. Committed Local Major Transport Schemes as recently announced by DfT are assumed to proceed, as is the Birmingham City Centre Midland Metro Extension and the Enhancement Package that is currently within the Development Pool. Schemes in the Pre Qualification Pool and longer-term aspirations are not included. Some major committed and supported schemes by other agencies and promoters are assumed to proceed.

6.16. As a consequence, much of this exercise focuses on the likely medium- to long-term implications of not implementing the policies and proposals contained within LTP3.

Spatial Plans and Demographic change

6.17. Despite the Government's pledge to abolish RSS, Local Authorities will continue to accommodate development needs through their spatial plans.

Continued duties and functions

- Implementing the requirements of the Equality Act 2010
- Traffic Management Act duties including civil parking enforcement

- Continued payment of Bus Service Operators Grant, albeit possibly at a reduced rate
 - Transport Act 1985 (as amended) requirements such as concessionary fares and subsidised non commercial bus services
 - Continued reactive revenue funded maintenance on non-strategic roads
 - Continued provision of special transport services through education and social services responsibilities
 - Accident investigation responsibilities
- 6.18. Existing LTP2 strategies, whilst not necessarily time limited, will not be implemented, on the assumption that no further LTP funding will be available.
- 6.19. For the purposes of this exercise, it is assumed that both HS2 and the Birmingham Airport runway extension will be completed by 2026.

Summary Assessment

- 6.20. The analysis considers the likely environmental conditions, quality of life and economic performance against each of the sustainability objectives, in the event of the plan not being implemented. It is considered that there will be deterioration on many counts if LTP3 is not implemented, especially in respect of climate change, health, air quality, equality and economic performance. There may, however, be benefits to landscapes and the natural and historic environment if major development did not proceed, but the natural and built environment may suffer further if traffic growth continues unabated. Appendix 6 offers additional information, including an analysis of the likely shift from the environmental / sustainability baseline.

Sustainability Objective 1: To mitigate climate change through reduced CO2 emissions

- 6.21. CO2 emissions are likely to rise further in the absence of measures and major investment to support modal shift to public transport and active modes. As the population grows, so will overall vehicle mileage. Although vehicle technology may help to ameliorate this, this is only likely to be widely introduced in the longer term and by then irreversible damage will already have occurred.

Sustainability Objective 2: Climate change adaptation

- 6.22. Whilst routine reactive maintenance away from the strategic network may proceed, it will be increasingly difficult to “future-proof” transport infrastructure in response to unavoidable climate change, with increased temperatures and less predictable extreme weather events leading to greater disruption.

Sustainability Objective 3: Improve air quality

- 6.23. Air quality will also deteriorate in the absence of measures to reduce traffic growth and to encourage behavioural change, making it difficult to meet the requirements of the EU Air Quality Directive and of local air quality action plans. In the longer term, cleaner fuels and new technologies may help to offset this.

Sustainability Objective 4: To encourage the use of public transport and active travel modes

- 6.24. With a growing population and some public transport services, particularly rail, reaching capacity at peak periods, overcrowding is likely to intensify without longer-term increases in capacity. The full benefits of the redevelopment of Birmingham Gateway at New Street and the role of HS2 in accommodating additional capacity will not be fully reaped. It is acknowledged, however, that the recent announcement to extend and enhance Midland Metro Line One through Birmingham City Centre will increase capacity and accommodate some of the additional demand, but not all of it, especially as only one corridor is served.
- 6.25. Bus operators may respond through the provision of additional services, but the quality of the journey is likely to be poor with no investment to give buses priority. Some services may be reduced as a result of cuts to operator support, and with limited public funds to plug any gaps accessibility in certain areas may decline.

Sustainability Objective 5: Conserve and enhance natural environment and biodiversity

- 6.26. Many sites of biodiversity interest and natural habitats occur next to transport corridors and certain species continue to be under active management. It is assumed that some habitats and species will at least continue to decline. However, a lack of maintenance and climate change may result in changes to biodiversity, such as the type and composition of species and habitats, some of which may be beneficial to other species. Effects, therefore, are likely to be uncertain. Reductions in physical infrastructure development, however, are likely to be beneficial to biodiversity through, for example, reduced habitat disturbance and severance.

Sustainability Objective 6: To safeguard and enhance water quality

- 6.27. No new physical investment will lead to less disruption of river flows and run-off to ground water sources. Increased pressure will be placed on existing infrastructure, however, and as it deteriorates this may impact adversely on water quality.

Sustainability Objective 7: To safeguard soils including high quality agricultural land and Green Belt

- 6.28. It is assumed that there are no major planned amendments to Green Belt boundaries through Local Authorities' spatial plans. However, should urban areas not be capable of accommodating new growth due to infrastructure constraints, development pressures may then extend beyond the presently built-up area. Pressures on the Green Belt, however, may be reduced through no strategic Park and Ride sites being promoted through LTP3.

Sustainability Objective 8: Maximise use of existing infrastructure and re-use materials

- 6.29. No new development or maintenance implies that there will be no call for natural resources. A failure to maintain existing assets, however, or to maximise their capacity through the likes of Smart Routes, will put them under increasing pressure.
- 6.30. An absence of capital funding for major preventative maintenance could lead to sections of highway being closed, thus impacting adversely on accessibility and economic competitiveness.

Sustainability Objective 9: To conserve and enhance heritage assets

- 6.31. Whilst a lack of investment in physical infrastructure may have positive impacts on landscape, townscape and heritage assets through less visual intrusion and less pressure for the removal of buildings, the opportunity to take advantage of transport-led redevelopment proposals or to remove traffic or maintain transport infrastructure to the requisite standard in environmentally sensitive areas will be reduced.

Sustainability Objective 10: To protect and enhance townscape and landscape character

- 6.32. The absence of physical investment, for example strategic Park and Ride provision, would have positive effects on rural landscapes. There may also be reduced visual intrusion on urban townscapes, although an absence of transport investment may delay vacant sites being brought forward for development.

Sustainability Objective 11: To ensure equality of access for all residents and visitors

- 6.33. As the EqIA establishes, draft LTP3 through its planned investment in public transport and active travel, is likely to have positive impacts on those groups identified through the Equality Act (2010). Clearly, if this investment were not

forthcoming, then these benefits would be lost and social exclusion, particularly through reduced access to opportunities and services, will continue.

- 6.34. Equality groups are more likely to use public transport, are more likely to be involved in road accidents, feel less secure on public transport and are likely to be disproportionately exposed to environmental pollution. In the absence of LTP3, their health, wellbeing and quality of life is likely to deteriorate.

Sustainability Objective 12: To improve the health of residents within the West Midlands Metropolitan Area and reduce health inequalities

- 6.35. In terms of health, congestion and reduced attractiveness of public transport may lead to an increase in the use of active modes of travel such as cycling and walking. However, a lack of supporting investment will not enhance safety or journey ambience. Moreover, without LTP3 investment, communities are likely to be more exposed to environmental pollutants and a discontinuation of investment in road safety will lead to a greater incidence of collisions, especially in deprived areas.

Sustainability Objective 13: To reduce actual and perceived crime and anti social behaviour

- 6.36. In the absence of funding for the likes of the successful Safer Travel Partnership, crime and its perception is likely to rise. A lack of capacity on public transport will lead to overcrowding, which in turn leads to opportunities for opportunistic crime such as pick pocketing. A lack of maintenance funding is likely to lead to the quality of street lighting deteriorating, with accompanying safety and security problems.

Sustainability Objective 14: To support the Metropolitan Area's Urban Renaissance

- 6.37. Substantial transport investment and behavioural change are essential if Local Authorities' ambitious growth plans are to be realised. A failure to provide transport investment will stifle development activity and lead to a poorer quality urban environment, thus encouraging the most economically active people and jobs to relocate.

Sustainability Objective 15: To increase productivity and close the 'Output Gap'

- 6.38. Key investment will not occur to create new access to employment sites or indeed to maintain access to existing ones, for example through weight restrictions being put in place on bridges. A lack of investment in facilities to support road freight, such as lorry parking facilities and Urban Freight

Consolidation Centres, will reduce economic competitiveness and make it difficult to mitigate adverse environmental effects.

- 6.39. As development increases in the longer term, with no corresponding LTP funded infrastructure, there will be negative effects on the economy through increased congestion and reduced connectivity and accessibility. Employees will find it increasingly difficult to access employment opportunities and some people may be deterred from becoming economically active. Both have adverse implications for economic productivity.

Section 7 - Significant Affects Assessment of Draft LTP3

Summary of the Effects of LTP3

Sustainability Objective 1: To mitigate climate change through reduced CO2 emissions

Context

- 7.1. As would be expected for an urban area, transport-related carbon emissions per capita in the West Midlands Metropolitan Area are slightly lower than both the national and regional averages²¹
- 7.2. As this is against a backdrop of traffic growth increasing by 6% on 2003 levels by 2015, 16% by 2025 and 26% by 2035²², it is clear that changing behaviour is the most fundamental means by which carbon reductions will be reduced, rather than by developing technology, a view supported by DEFRA²³. LTP3 does, however, acknowledge the contribution that new technology will increasingly make to carbon reduction.

Effects of LTP3

- 7.3. The long-term policies, strategies and interventions within LTP3 are very much geared towards public transport and active travel modes, which are far more carbon efficient than the private car (see table 2). Indeed, a target to reduce transport-related carbon emissions between 2011 and 2016 is proposed, although details of this target are not yet specified.

Table 2: Carbon emissions by mode²⁴

Mode	CO2 emissions per passenger km (grams)
Private Car	180
Bus	89
Light Rail	65
Rail	60

- 7.4. Specific positive measures proposed in LTP3 include:
- Major investment in public transport infrastructure e.g. Midland Metro Phase One extension, Birmingham Gateway and partner-backed schemes such as HS2 and other rail capacity and infrastructure improvements.

²¹ <http://www.decc.gov.uk/en/content/cms/statistics/indicators/ni186/ni186.aspx>

²² National Road Traffic Forecasts

²³ <http://www.defra.gov.uk/environment/climate/documents/climate-change-plan-2010.pdf>

²⁴ Centro Environmental Strategy

- Smart Routes development, based on Low Carbon Corridors, which seek to promote use of public transport and active travel modes, along with more carbon efficient motoring
 - Smarter Choices – encouraging behavioural change
 - Investing in public transport infrastructure
 - Street lighting procurement to consider low energy alternatives
 - Proposals to introduce a common carbon calculator for selecting maintenance methods
- 7.5. Smarter Choices, in particular, are relatively low cost interventions and evidence suggests that they are highly effective in encouraging sustainable travel behaviour; this is demonstrated by the Sustainable Travel Towns Programme²⁵.
- 7.6. There are individual highway schemes, either committed or proposed, aimed at opening up development sites, which may result in additional car journeys. Others may relieve congestion but, in the longer term, may induce traffic growth unless Smarter Choices benefits are 'locked in' from the outset
- 7.7. This, however, needs to be viewed in the context of the spatial strategy that Draft LTP3 supports. If this infrastructure was not provided or upgraded, then there may be greater pressure to provide infrastructure in areas beyond the built up area to support new development. It is difficult to decouple carbon emission from development, but the Metropolitan Area's spatial strategy is considered to be more carbon efficient than a more dispersed pattern of development.
- 7.8. Council for the Protection of Rural England (CPRE) analysis (2005)²⁶ suggests that Park and Ride sites within urban fringe / Green Belt locations may lead to increases in traffic outside the urban area that exceed the reductions achieved within it, thus leading to greater carbon emissions overall.
- 7.9. LTP3 also supports improved access to Birmingham Airport for both freight and passengers. Clearly, the proposed extension of Birmingham Airport, which it is beyond the realm of this appraisal to assess, will lead to increased carbon emissions. This, however, needs to be seen in the context of obviating the need to access Manchester or the London airports which would lead to further increases in emissions. Draft LTP3 also supports sustainable surface access to Birmingham Airport through the ANITA scheme (Airport NEC Integrated Transport Access).

²⁵ <http://www.dft.gov.uk/pgr/sustainable/smarterchoices/smarterchoiceprogrammes/>

²⁶ <http://www.cpre.org.uk/news/view/67>

7.10. Similarly, it advocates, as far as is within its remit, a 'predict and provide' approach to road freight growth, in which the absence of major new technological advances will lead to greater emissions. Rail freight is, however, supported and specific partner proposals are included in Draft LTP3. Draft LTP3 is also explicit in its support for developing and exploiting low carbon technologies.

Conclusions

7.11. Overall, the impact of LTP3 strategies and interventions is likely to **have positive effects on reducing carbon emissions**, especially when compared to the "no plan" scenario. It is difficult to estimate the magnitude of these effects with any certainty, because other than the committed Major Schemes, Phase 2 of the Implementation Plan is yet to be finalised, although supportive strategies are in place.

Proposed Mitigation / Enhancement Measures

- Benefits need to be 'locked in' so that any capacity freed up via Smart Routes does not lead to induced vehicle traffic in the longer term. Smarter Choices need to be made on a regular basis given forecast traffic growth.
- Consider elevating the profile of reducing the need to travel and 'virtual' travel
- Consider elevating the commitment to low carbon vehicle fleet (Bus section) to policy status with tangible outcomes, especially in the light of the Green Transport Charter signed by Centro and the industry.
- Evaluate strategic Park and Ride proposals on a case-by-case basis to establish likely users and determine whether this would lead to additional travel, and hence emissions, outside of the urban area compared to reductions within it.
- Consider promoting use of smaller engine PTWs which have greater fuel efficiency. Draft LTP3 takes a very cautious approach to promoting PTW use
- Promote road safety measures which protect vulnerable road users such as cyclists and pedestrians and thereby encourage active modes
- Consider addressing how the Metropolitan Area will contribute to the 10% reduction in transport borne carbon emissions as set out in the national Renewable Energy Strategy (2009)
- Consider what role there is for tree planting to absorb CO₂ as part of maintenance regimes.

Sustainability Objective 2: Climate Change Adaptation

Context

7.12. Irrespective of mitigation efforts, there will still be some degree of unavoidable climate change. Over the LTP3 period the temperature of the warmest summer days in the West Midlands Metropolitan Area is set to increase, winters will be milder and there will be increased high precipitation effects²⁷. Transport infrastructure is particularly vulnerable to the effects of weather and climate, and DfT's Local Transport Plan Guidance makes it clear that plans should consider climate change adaptation.

Effects of Draft LTP3

7.13. Essentially there are several ways in which the transport system can adapt to unavoidable climate change:

- Future-proofing new designs
- Retrofitting existing infrastructure
- Contingency planning

7.14. Although key objective 2 pledges to *'future-proof the transport system to cope with any unavoidable changes to the Metropolitan Area regional climate.'* it only appears to be mentioned in passing in the context of asset maintenance and no further details are offered particularly with regard to ensuring that new infrastructure is climate resilient.

7.15. The level of funding required to meet the maintenance backlog as set out in the maintenance policies, compared to what it is estimated will be available, suggests that it will be difficult to restore assets to new. Clearly, accelerating the rate of maintenance will enable more expedient adaptation to climate change; although it is uncertain whether even 'restoring assets to new' will be sufficient in the longer term with more unpredictable weather patterns, unless particularly innovative solutions are found.

7.16. In developing a response to unavoidable climate change the Environment Agency identifies the following that should be considered:

- Local Strategic Flood Risk - Assessments (SFRA's) complete by the West Midlands Local Authorities and neighbouring authorities. There are SFRA's for the Black Country, Coventry and Solihull (joint with Warwickshire)

²⁷ Climate change projections for the WMMA were developed utilising the UKCP09 User Interface. These outputs illustrate the projected change from the 1990 baseline, with 67% likelihood, under the medium emission scenario. Murphy, J. M et al (2009), UK Climate Projections Science Report: Climate change projections. Met Office Hadley Centre, Exeter

- Catchment Flood Management Plans (CFMP), which give an overview of the flood risk across each river catchment. They recommend ways of managing those risks now and over the next 50-100 years. CFMPs consider all types of inland flooding, from rivers, ground water and surface water.
- Any Surface Water Management Plans and Surface Flood Maps which are being prepared by the local authorities

7.17. In the light of the possible impacts on culverting water bodies and potential flooding from the sewerage systems, it is also suggested that Severn Trent is consulted with regard to measures to adapt to unavoidable climate change

Conclusions

7.18. In the light of increased development pressures over the LTP3 period, it is considered that the **omission of measures to adapt to unavoidable climate change is a significant negative effect** that the final version of LTP3 should rectify. Funding availability, however, is likely to have a bearing on the extent to which the maintenance backlog can be tackled and, by inference, the extent to which assets can be adapted to be resilient to unavoidable climate change.

Proposed Mitigation / Enhancement Measures

- Maintenance policies need to consider how effects of climate change will require different regimes to accommodate increased flood risk, the consequences of higher temperatures and vegetation management.
- Consider climate proofing / resiting the likes of existing cabling / drains when implementing route based proposals.
- Consider how new infrastructure can be designed so as to be resilient to climate change.
- Make reference to Centro's Sustainable Design Guide and the impacts that this may have for climate resilience

Sustainability Objective 3: Improve Air Quality

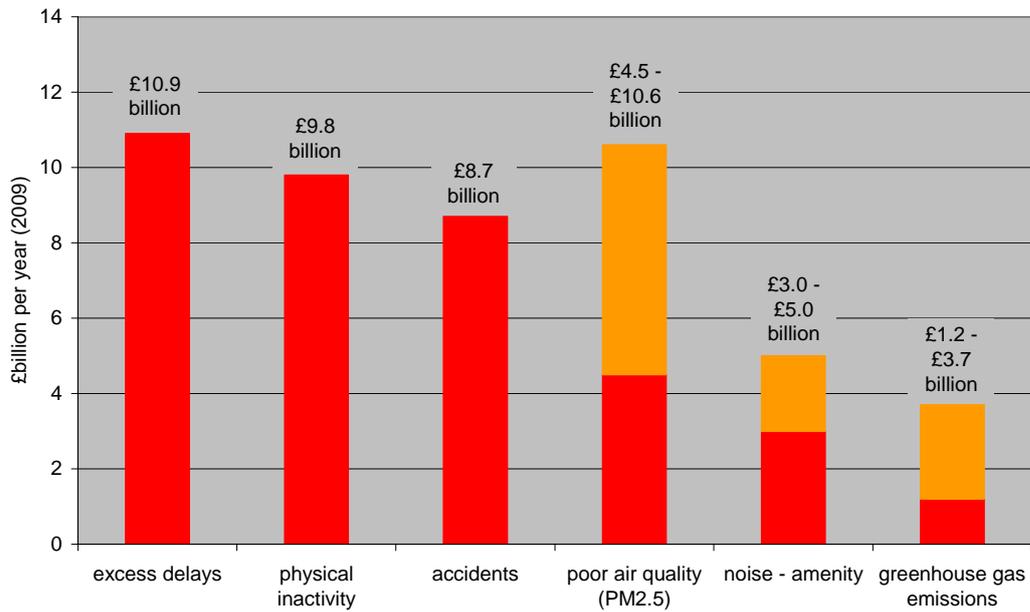
Context

- 7.19. Air quality and human health are intrinsically linked and the issue is covered further when discussing Sustainability Objective 12 Human Health. Poor air quality also has adverse impacts on some natural habits and species, and excess carbon dioxide, sulphur dioxide and nitrogen oxide emissions have adverse effects on the built environment.
- 7.20. 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. Transport and power generation are the main sources of air pollutants, consequently there is a need for Draft LTP3 to address the issue especially in the light of growing traffic forecasts.

Effects of Draft LTP3

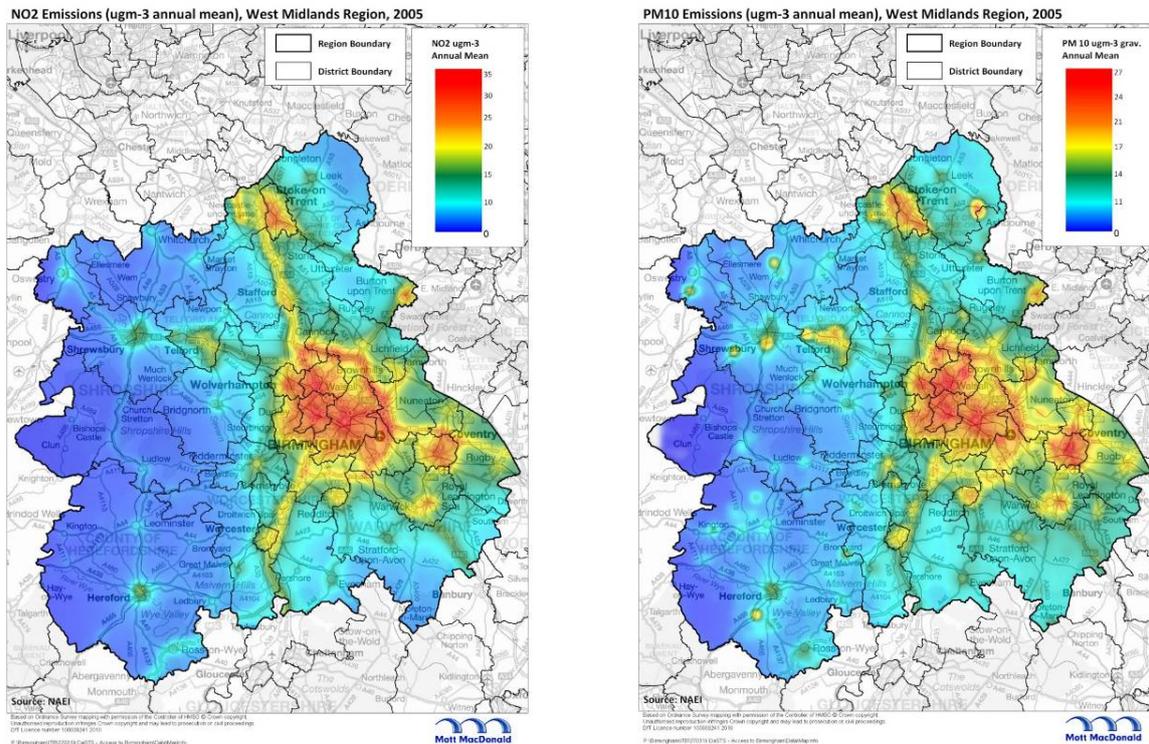
- 7.21. To meet AQMA targets and objectives, the seven Metropolitan Authorities are developing proposals for a Low Emission Town and Cities Programme (LETCP), with the following five strands:
1. Development of a Low Emission Strategy
 2. Development of a Regional Low Emission Strategy Supplementary Planning Document
 3. Regional Best Practice Guidance on Procurement
 4. Development of urban centre Low Emission Zone model
 5. Low Emission Strategy Assessment Report
- 7.22. There is also an economic incentive to improving air quality. It is estimated that the wider costs of poor air quality in terms of reduced productivity, sickness and premature death may almost be as great as those associated with travel delays. (Figure 1).

Figure 1: The wider costs of transport in English urban areas²



- 7.23. There are several strategies and measures in LTP3 that will help reduce air pollution or reduce exposure to it, particularly the promotion of active travel through Smarter Choices, and the Smart Routes initiative to improve traffic flows and encourage modal shift. The Midland Metro Phase One extension should improve air quality at the core of the City Centre, through the relocation of some buses.
- 7.24. These will be complemented by Highways Agency ATM schemes, which will improve traffic flows on the motorway network. Many of the residential areas witnessing poor air quality are within close proximity of the motorway network (Figure 2)

Figure 2: NO2 and PM10 Emissions in the West Midlands Region



7.25. Draft LTP3 also supports accelerating the introduction of low carbon technologies, which will by implication have benefits on emissions of air pollutants within the Metropolitan Area.

7.26. Draft LTP3 indicates that Heavy Goods Vehicles contribute some 45% of total road transport NO2 emissions²⁸, and movements are forecast to grow by some 10% internally in the West Midlands Region over the LTP3 period.²⁹ Draft LTP3 seeks to accommodate this growth, although clearly as much of it is carried on the motorway network this is partly beyond its remit. It does, however, also support increased rail freight capacity, Urban Freight Consolidation Centres and routing of freight away from sensitive areas, which will reduce exposure to poor air quality in the Metropolitan Area.

Conclusions

7.27. When compared to the “no plan” scenario, **Draft LTP3 is likely to have a moderately positive effect on air quality.** In the longer term, effects may be

²⁸ Draft LTP3 Appendices P292 figure 2

²⁹ West Midlands Regional Logistics Study 2009 update

more pronounced, dependent on how quickly alternative fuels and new technologies can be introduced.

Proposed Enhancement / Mitigation Measures

- Benefits need to be 'locked in' to ensure that any additional capacity created does not lead to induced traffic.
- Seek to accelerate introduction of low emission busses, especially in centres, as even efficient low occupancy buses may have higher emissions per passenger kilometre than the private car.
- Need to ensure that any reallocation of road space does not lead to congestion which could cause localised air quality deterioration
- Consider promoting use of smaller engine powered two wheelers (P2Ws) which have greater fuel efficiency
- Consider what contribution through traffic makes to poor air quality, and work with other agencies to minimise and mitigate its effects.
- Promote a range of road safety measures which give confidence to those wishing to switch to active travel modes such as cycling and walking

Sustainability Objective 4: To encourage the use of public transport and active travel modes

Context

7.28. The West Midlands Metropolitan Area has the highest per capita bus use of any Metropolitan Area outside of London³⁰. Rail patronage has doubled over the last 15 years and capacity issues are commonplace at peak periods, as they also are on Midland Metro. Cycling levels are low in the Area and there is no reliable data on walking at the local level

Effects of Draft LTP3

7.29. Draft LTP3 acknowledges that bus patronage has declined by around 25% over the last decade; in the light of this the proposed target seeks to retain bus patronage at 2010/11 levels by 2015-16. A target is also proposed to increase cycling, albeit it is starting from a very low base.

7.30. There is substantial public transport investment committed in the Metropolitan Area including:

- Midland Metro Phase one upgrade and extensions which will increase capacity and accessibility
- Birmingham New Street Gateway which will increase passenger capacity and give access to longer trains
- Wolverhampton Interchange major scheme
- Network Rail enhancements during Control Period 4 (2009-14)
- Ongoing commitment to community transport
- Further Park and Ride provision to encourage modal shift
- Investment in Smarter Choices and Smart Routes

7.31. Elsewhere, there are several strategies to improve existing public transport services, as well as improved ticketing, information and interchanges, including the roll out of Smartcard ticketing. The major infrastructure investment identified, however, is in rail and Metro, whereas bus travel accounts for some 85% of current public transport trips annually.

7.32. Bus services are also dependent on Bus Service Operators Grant and concessionary fares, both of which may not be around in their current form over the entire LTP3 period and the level of bus service can depend on the financial position of bus operators; this leads to uncertainty.

³⁰ West midlands local transport Plan delivery Report 2006-8

- 7.33. Strategies are in place, particularly through Smart Routes and Smarter Choices to support walking and cycling (as well as public transport) but as yet no specific schemes are identified.
- 7.34. Walking will be enhanced through major development schemes in City and District centres which envisage further pedestrianisation.

Conclusions

- 7.35. Buses account for the vast majority of public transport journeys and the target seeks to retain current levels of patronage, whilst a target is proposed to increase cycling albeit from a very low base. Consequently, the effects of Draft LTP3 are considered to be **moderately positive over the first five years**. The position should improve in the longer term, subject to further major investment coming forward and successful strategies to encourage behavioural change.

Mitigation / Enhancement Measures

- Consider more challenging targets for bus use and cycling in the longer term, and be more explicit in terms of what is proposed.
- Emphasise that locations not on the HS2 network will also benefit, either directly, via access to HS2, or through enhanced classic rail services using the additional capacity released by HS2
- LTP3 notes that individual authorities are preparing local cycling strategies. LTP3 potentially offers an opportunity to coordinate these, as the needs of cyclists transcend administrative boundaries.
- Work with Local Authorities to ensure that all major development schemes include high quality provision for cycling and walking.

Sustainability Objective 5: Conserve and enhance natural environment and biodiversity

Context

7.36. Despite the Metropolitan Area being heavily urbanised, it contains two Special Areas for Conservation, two National Nature Reserves and many Local Nature Reserves, Sites of Special Scientific Interest (SSSIs), and Sites of Importance for Nature Conservation (SINC). It also contains extensive areas of rural countryside, primarily focussed on the Meriden Gap in Solihull. It is also covered by two Biodiversity Action Plans, incorporating Birmingham and the Black Country, and Coventry and Solihull together with Warwickshire.

Effects of Draft LTP3

7.37. Key Objective 5 pledges *to protect and enhance green spaces, the natural environment and biodiversity*. Although there are no measures that will directly enhance biodiversity, several of the strategies in LTP3 will have indirect positive effects. For example,

- Making the best use of existing infrastructure and assets through Smart Routes and Smarter Choices strategies obviates the need for new infrastructure which minimises damages to biodiversity and habitats
- Measures that improve air quality will have minor indirect benefits on biodiversity
- Reduced light pollution via more energy efficient luminaires has positive effects on wildlife
- Railway corridors provide excellent habitats and provide corridors allowing the migration of species in response to climate change.

7.38. Most major schemes follow existing corridor alignments and as such are unlikely to have adverse impacts on internationally designated sites, although further work undertaken at the NATA / EIA stage will need to confirm this. Also, a separate Habitats Regulations Assessment Screening Report has been produced to accompany LTP3. The location of proposed major schemes relative to sites with nature and biodiversity designations is shown in figure 3.

7.39. Major schemes may have a negative impact on biodiversity, particularly during the construction phase, through the removal of trees, hedges etc. Many, however, can be mitigated through sensitive planning / timing, and in the long run through the creation of new habitats. Areas of scrub land, whilst often not visually attractive, may have a high biodiversity value and should be taken into account during design and restoration

7.40. Infrastructure developments such as Park and Ride, however, which involve land take whether brownfield or greenfield, may have adverse impacts on

biodiversity through habitat loss and severance, although planning policies should be in place to deal with this.

- 7.41. Increased use of waterways for leisure and commercial purposes may lead to loss of biodiversity and damage to habitats, although their management is the responsibility of British Waterways.
- 7.42. Draft LTP3 maintenance policies make little reference to habitat management e.g. verges and trees. However, as these set the strategic context, Local Authorities' asset management plans and Biodiversity Action Plans may be the most appropriate place to deal with such matters
- 7.43. Major infrastructure development that is supported by LTP3, such as High Speed 2 and the Birmingham Airport runway extension, albeit not directly implemented by it, may have significantly negative impacts on biodiversity and habitats but it is not appropriate for these to be assessed here.

Conclusions

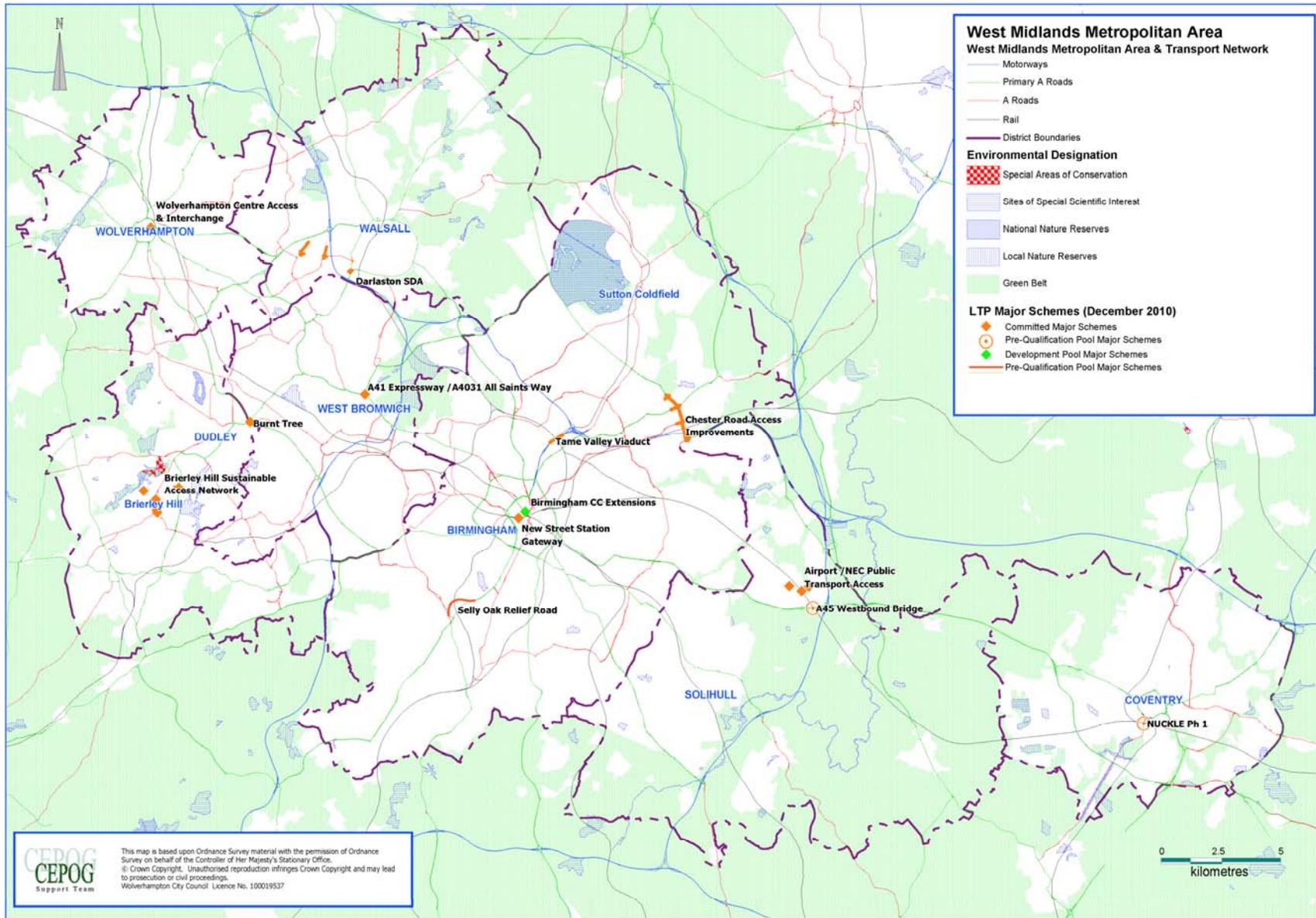
- 7.44. When compared to the "no plan" scenario, new infrastructure that will be introduced through LTP3 is likely to have **a minor negative or neutral effect on biodiversity**. Opportunities to mitigate adverse effects should be taken at every opportunity.

Proposed mitigation and enhancement measures

- LTP3 could consider a statement / policy pledging that the ITA will work with local authorities and the promoters of HS2 to mitigate any adverse environmental effects resulting from its implementation
- Ensure that Local Authorities' Asset Management Plans consider horticultural and arboricultural maintenance matters.
- In line with key Objective 5, consider a policy to mitigate any adverse effects on biodiversity and natural habitats and seek to enhance wherever practical e.g. through planting / landscaping.
- Explore the linkages between cycling, walking and waterways policies and the Green Infrastructure Networks that Local Authorities are identifying
- Consider Biodiversity Action Plans (habitats and species) when undertaking maintenance / designing schemes
- Refer to British Waterways' statutory role and draw attention to its guide for development³¹

³¹http://www.britishwaterways.co.uk/marinadevelopment/scheme/ds_biodiversity.php

Figure 3 – Draft LTP3 major Schemes and Environmental Designations



Sustainability Objective 6: To safeguard and enhance water quality

Context

7.45. The Metropolitan Area is dominated by two river systems – the Severn and the Avon and their tributaries, particularly the Tame. The area has an extensive canal network primarily focussed on Birmingham and the Black Country. Inappropriate construction and maintenance regimes together with traffic growth can have a damaging effect on water resources unless effectively managed and mitigated.

Effects of Draft LTP3

7.46. New roads and other transport infrastructure can interrupt natural water flows and exacerbate problems in flood plains. Run-off from roads and car parks can include pollutants such as fuel oils and seasonal road treatments that can pollute watercourses. Draft LTP3 makes no direct reference to safeguarding groundwater quality.

7.47. Despite the fact that draft LTP3 proposes making better use of existing infrastructure, the spatial development pattern will result in more hard-surfaced areas leading to potentially greater run-off, although some contaminated sites will be brought back into use with accompanying reductions in water course pollution. In the longer term, however, cleaner fuels will lead to less oil based run-off. Individual major schemes may identify adverse effects on water courses (see appendix 3) and subsequently identify measures to mitigate these.

7.48. Strategic Flood Risk Assessments, local planning policies in PPS25 (Planning and Flood Risk) should help mitigate flood risk as far as new development is concerned. Flood risk is discussed further in the context of Sustainability Objective 2: Climate Change Adaptation.

7.49. There is no obvious reference to the impact of seasonal road treatments, namely gritting and the impact that this has on watercourses.

Conclusions

7.50. On balance, it is considered that the **Draft LTP3's impacts on groundwater quality will be neutral** on the basis that major new infrastructure will include mitigation measures. In the longer term, cleaner fuels are likely to reduce oil based fuel run off into groundwater sources.

Proposed Mitigation and Enhancement Measures

- The maintenance section could consider making reference to minimising pollution caused by winter maintenance regimes, for example the use of

molasses rather than salt based treatments, unless this is a matter more appropriately dealt with at TAMP level.

- Liaise with the Environment Agency to ensure that new infrastructure schemes do not divert natural water flows so as not to exacerbate flood risks
- Employ Sustainable Urban Drainage systems (SUDS) for new road and major infrastructure schemes with any discharges being well managed.
- Seek to locate Park and Ride sites away from water bodies or provide adequate oil interceptors, ponds and ditches as part of any new provision to prevent local pollution.

Sustainability Objective 7: To safeguard soils including high quality agricultural land and Green Belt

Context

7.51. The West Midlands Metropolitan Area is one of the most heavily urbanised and densely populated in the country, and therefore high quality agricultural land and soil is at a premium. The Meriden Gap, which spans some 15 miles and separates Coventry from the conurbation, is the main exception. The Metropolitan Area, particularly the Black Country, contains a significant quantity of contaminated land.

Effects of Draft LTP3

7.52. The urban renaissance strategy that LTP3 supports will limit loss of greenfield and Green Belt sites which will safeguard the best quality soils and help facilitate the redevelopment of contaminated and other brownfield sites. A direct example of this is the Darlaston Special Development Area Major Scheme which will help reclaim and open up some 22 hectares of contaminated land for employment use.

7.53. LTP3 measures to mitigate climate change will indirectly impact positively on soil quality. It is estimated that wind and rainfall lead to the loss of 2.2 million tonnes of topsoil annually.³² Climate science suggests that a failure to tackle climate change will lead to extreme weather conditions becoming more commonplace. Similarly, measures to improve air quality could have an indirect positive effect on soil quality.

7.54. Making the best use of existing infrastructure through the likes of Smart Routes and Urban Traffic Management and Control (UTMC), and generally seeking modal transfer to public transport and active travel modes, will reduce the need for land take associated for new highways, which would potentially be required if these schemes were not implemented. However, the provision of other infrastructure and maintenance may lead to compaction, which increases flood risk through higher levels of run-off.

7.55. Strategic Park and Ride may well lead to the loss of Green Belt and greenfield land, although this is permitted in exceptional circumstances by Government policy, as set out in PPG2 (Green Belts) and PPG13 (Transport). Similarly, HS2, which is supported by LTP3, will lead to the loss of some high quality agricultural land in the Meriden Gap, whilst the Birmingham Airport runway extension will lead to an incursion into Green Belt. As mentioned, however, it is not the direct responsibility of LTP3 to mitigate the effects of nationally significant schemes promoted by other parties.

³² (DEFRA, Safeguarding our Soils, 2009).

Conclusions

- 7.56. On balance, Draft LTP3 is considered to have a **neutral effect on soil quality**. Whilst development of infrastructure will lead to some loss of land, other investment should help remediate contaminated sites. Measures to mitigate climate change and improve air quality will also have indirect positive impacts on soil quality.

Proposed mitigation / enhancement measures

- LTP3 could consider a statement / policy pledging that the ITA will work with local authorities and the promoters of HS2 to mitigate any adverse environmental effects resulting from HS2
- Location of any proposed Urban Freight Consolidation Centres to be dealt with through the planning system, but previously developed land opportunities should be considered first
- National policy as reflected in PPG13 (Transport) and PPG2 (Green Belts) permits strategic Park and Ride in the Green Belt subject to certain criteria being met. Final LTP3 should state that non-Green belt locations will be examined first and that mitigation measures will be identified.

Sustainability Objective 8: Maximise use of existing infrastructure and re-use materials

Context

7.57. The level of new development and associated infrastructure required over the LTP3 period will place significant demands on mineral resources and, as the Metropolitan Area is a net importer of materials, there will be further transport and environmental implications.

Effects of Draft LTP3

7.58. Draft LTP3 Strategy, through the 'Smarter Management' principle, advocates making the better use of existing infrastructure and increasing capacity through the likes of Urban Traffic Management and Control (UTMC) improvements, Red Routes, Smart Routes and Smarter Choices. This is complemented by the Highways Agency's proposals for Active Travel Management (ATM) on the motorway network. Making better use of existing capacity reduces requirements for natural resources in the longer term.

7.59. Highway maintenance is also a significant user of natural materials and its timing of influences the amount of resources required. Proactive maintenance, whereby a highway is completely reconstructed makes more efficient use of resources in the longer term than reactive maintenance, for example, repairing potholes, as eventually highway reconstruction will be required.

7.60. Draft LTP3 acknowledges the benefits of recycling materials in situ so as to obviate the need for the use of new materials. However, it also notes that if materials have to be transferred off site, then there may be associated carbon emissions in transport and reclamation; Draft LTP3 advocates the development of a carbon calculator to assist decision-making.

Conclusions

7.61. Compared to the "no plan" scenario, where there is no new infrastructure or reconstructive maintenance, **implementing Draft LTP3 has negative effects** as considerably more natural resources will be used for maintenance

7.62. In practice, however, **the timely maintenance of assets is essential and a failure to tackle the backlog is likely to lead to less efficient use of resources in the long term.**

Mitigation and Enhancement Measures

- Ensure that the benefits of Smart Routes are locked in, rather than leading to induced traffic which will ultimately incur the use of new materials.

- Continue to explore innovative maintenance solutions, which reduce carbon emissions and share best practise through the maintenance officers' Technology Group.

Sustainability Objective 9: To conserve and enhance heritage assets

Context

7.63. Transport can impact on the historic environment in two ways: through existing traffic and the construction of new infrastructure. The Scoping Report identified that there are some 3000 Listed Buildings in the Metropolitan Area, 32 Registered Parks and Gardens and 137 Conservation Areas. English Heritage's Buildings at Risk Register³³ states that 34 Grade I or 11* buildings are at risk, although transport is not deemed to be a contributory factor. A further 13 Conservation Areas are also considered to be at risk.

Effects of the Draft LTP3

7.64. Despite a Key Objective *to enhance the historic environment* LTP3 provides little reference or recognition of the impact that traffic and infrastructure have on historic and cultural heritage.

7.65. Although not made explicit, several of the policies and strategies in Draft LTP3 potentially impact positively on historic and cultural heritage, although these are not spatially specific. Examples include:

- Smart Routes, which adopt a 'link and place' approach, take an holistic approach to improving routes, offering the opportunity to improve the historic environment through the removal of unnecessary street clutter
- Modal transfer from private car to public transport and active travel modes should impact positively on the historic environment through reduced visual impacts, vibration and air pollutants
- Improved accessibility should enable more people to access and appreciate the historic environment

7.66. Individual Major Schemes, for example, rapid transit routes, may have adverse impacts on the historic environment, but these will be dealt with via the NATA and Environmental Impact assessment (EIA) processes. Smaller infrastructure proposals, for example the decking of Park and Ride sites, may impact on Conservation Areas, but this is a matter to be addressed by local planning policies.

7.67. There are also potential issues with listed structures placing pressures on maintenance budgets and this situation may worsen if sufficient resources are not available.

³³ <http://www.english-heritage.org.uk/publications/HAR-2010-regional-registers/wm-HAR-register-2010.pdf>

7.68. It is understood that the proposed northern section of HS2 will encroach on some settlements of historic interest. Although Draft LTP3 supports HS2, the proposal will be formally considered via a hybrid bill.

7.69. Conclusions

7.70. Overall, it is considered that Draft LTP3 will have a **minor positive impact on the historic environment**, through reducing growth in traffic that may otherwise have occurred without the plan. Smart Routes, in particular, offer an opportunity to improve the historic environment through practical implementation of 'link and place' principles.

Mitigation / Enhancement Measures

- Holistic approach gives opportunity to take account of the character of the townscape and to create a sense of place in streets through, for example, sensitive use, design and location of street furniture. LTP3 could reflect this further.
- Make explicit reference to English Heritage's 'Streets for All – West Midlands' document³⁴
- Stress opportunity to coordinate investment of all parties / agencies to improve public realm, heritage / cultural assets and their setting through close working with English Heritage and amenity groups
- It is not the role of LTP3 to directly mitigate any adverse environmental impacts of HS2. Local Authorities will work with scheme promoters to help identify suitable mitigation measures. A statement to this approach could be included in LTP3
- Include a statement to the effect that detailed design, type of infrastructure and use of materials will have a strong influence on the setting of the historic and cultural environment and will be considered in more detail as proposals are developed

³⁴ <http://www.english-heritage.org.uk/publications/streets-for-all-west-midlands/>

Sustainability Objective 10: To protect and enhance townscape and landscape character

Context

7.71. This objective is closely allied with those related to the historic and natural environment, although it is more generic in its scope. New development can significantly improve the urban townscape and transport investment has an important role in supporting and facilitating this.

Effects of Draft LTP3

7.72. Key Objective 5 pledges to *enhance the quality of the urban realm in centres and to enhance the quality of streetscapes and the historic environment.*

7.73. Although further mention beyond the Key Objective 5 is minimal, strategies and proposals in Draft LTP3 support the urban renaissance spatial strategy. This seeks to focus regeneration within the built up area and help bring underused or derelict sites back into active use thus improving townscape.

7.74. Specific examples include:

- Smart Routes, which link the principal centres in the Metropolitan Area, offer the opportunity to improve the public realm and streetscape through making better use of street space and removing obstructions
- The proposed rapid transit networks which will improve accessibility of underused sites thus encouraging development
- Specific schemes such as Darlaston SDA and Chester Road will help bring development sites forward for regeneration
- The Birmingham Gateway will replace New Street station and will make a positive contribution to Birmingham's townscape.

7.75. The design of infrastructure and type of materials used is a matter more appropriately considered at project level and will be guided by Local Authorities' policies.

7.76. Although not spatially specific, strategic Park and Ride sites may be identified in Green Belt urban fringe locations, and are likely to be detrimental to landscapes unless appropriate mitigation is made; one of the stated functions of Green Belts is to retain openness (PPG2 Green Belts)

7.77. Although the final route is yet to be finalised, HS2 is likely to have significant adverse effects on rural landscapes, which will need to be mitigated. As stated at the outset, however, although Draft LTP3 supports LTP3, it is not its direct

responsibility to mitigate its adverse effects. This is also apparent with proposals associated with the Birmingham runway extension.

- 7.78. Other individual major proposals may identify adverse impacts on townscape / landscape through NATA, for example the A41 Expressway elevated section and the removal of scrubland to accommodate the Selly Oak New Road. The NATA process and project level EIA (if necessary), however, should identify appropriate mitigation.

Conclusions

- 7.79. Draft LTP3 is likely to have **moderately positive impacts on urban townscapes** in that it supports the development of derelict and underused urban sites and promotes improvements to the urban realm. However, the possibility of strategic Park and Ride sites in the urban fringe is likely to have a **minor negative impact on rural landscapes**, especially in Green Belt locations.

Mitigation / Enhancement Measures

- LTP3 could consider a statement / policy pledging that the ITA will work with local authorities and the promoters of HS2 to mitigate any adverse environmental effects resulting from its implementation
- LTP3 could consider making greater reference to the scope for improving the public realm and creating a sense of space or an 'outdoor room' and commit to working with urban design professionals too
- Need to ensure that new infrastructure does not 'clutter' existing busy areas, given predicted future growth requirements
- Ensure that any proposals for infrastructure, for example Park and Ride, in the Green Belt is mindful of the Green Belt's role in maintaining openness

Sustainability Objective 11: To ensure equality of access and opportunity for all residents and visitors

Context

- 7.80. The West Midlands Metropolitan Area has one of the most ethnically diverse population structures nationally. In Birmingham 34% and Wolverhampton 24% of residents are of Black and Minority Ethnic origin (BAME). In terms of disability, only Solihull has fewer people with limiting long-term illness than the national average. The gender balance across all Authority areas is similar to the national picture, with marginally more women and whilst there is a trend towards higher numbers of older people, the Metropolitan Area has a particularly young population profile, which is particularly apparent in parts of Birmingham, Sandwell, Walsall and North Solihull³⁵
- 7.81. The Equality Act 2010 requires that the impacts of policies and services is considered via a Single Equality duty which covers race, age, gender disability, sexual orientation, gender reassignment and faith. These impacts are considered in far more detail in the separate Equality Impact Assessment (EqIA) that accompanies Draft LTP3, but summary material is considered in this report for reasons of completeness.

Effects of Draft LTP3

- 7.82. Generally speaking, the recognised equality groups are less likely to have access to a private car and so are more reliant on public transport and active travel modes. Age and disability can also lead to physical impairments which hamper mobility and accessibility. Equality Groups are also disproportionately represented in the more deprived communities, where road traffic collisions and environmental pollution is at its highest.
- 7.83. Draft LTP3 proposes many measures which will have positive benefits for Equality Groups, including:
- Improved public transport and pedestrian accessibility through such initiatives as Smart Routes
 - A commitment to improving road safety and reducing crime and the perceptions of crime
 - Continued support for Community transport initiatives, such as Ring and Ride

³⁵ (WMLTP3 Equality Impact Assessment).

- Measures to reduce air and noise pollution, which disproportionately affect deprived communities.

7.84. The maintenance section of Draft LTP3 also notes that well-maintained footways are important to vulnerable persons. Clearly, the sooner footways are 'restored to new', the greater the benefits reaped, particularly for vulnerable users. Financial constraints, however, suggest that this will be difficult to achieve in practice.

Conclusions

7.85. It is considered that the measures in Draft LTP3 are likely to have **positive effects on the well-being of equality groups**, although their significance is difficult to gauge. Draft LTP3 contains the requisite policies and strategies but the magnitude of their impact is dependent on how expeditiously they can be delivered. In the context of fewer resources, particularly revenue funding which supports many equality-based initiatives, there is uncertainty. A more thorough examination of the impact of Draft LTP3 on Equality Groups can be found in the separate EqIA that accompanies the draft plan.

Proposed Mitigation / Enhancement Measures

- Ensuring that consultation and engagement is undertaken with Equality Groups when conducting service reviews
- Providing service information in alternative formats to benefit disabled and BME people
- Prioritising safety and security measures during the implementation of schemes to encourage use of sustainable travel modes by Equality Groups
- Taking action to ensure fare structures are reviewed with the most vulnerable users in mind, and introducing concessionary schemes accordingly
- Ensuring that walking infrastructure is well maintained, to make it a reliable travel option for disabled people
- Increasing the promotion of community transport schemes and flexible alternatives.

Sustainability Objective 12: To improve the health of residents within the West Midlands Metropolitan Area and reduce health inequalities

Context

- 7.86. The Regional Health Profile³⁶ suggests that Birmingham, Coventry, Sandwell, Walsall and Wolverhampton are all within the lowest regional quartile in terms of the health (based on a basket of measures) of their residents. In many instances, they also perform worse than the national average in terms of childhood obesity, cardio-vascular related illness and deaths, and poor eating habits.
- 7.87. The Department of Health recommends 30 minutes of medium / moderate exercise five times a week to help ensure a healthy lifestyle, and regular walking and cycling can contribute towards this. Regular exercise has positive effects on cardiovascular fitness, obesity and mental health. It is estimated that approximately 70% of journeys in the Metropolitan Area are of 5 miles or less and are ideally suited to travel by active modes, and yet the car remains the dominant mode in terms of journeys to work.
- 7.88. Road traffic collisions are perhaps the most direct way that transport affects human health, with children, pedestrians, motorcyclists and cyclists and deprived communities being the most vulnerable. Through focussed investment in road safety, the West Midlands Metropolitan Area has performed better than the national average and when compared to similar urban areas. Routine footway and carriageway maintenance also directly impacts on health through preventing falls and trips.
- 7.89. 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, PM_{2.5} particles become more widely documented, for example a 10µg/m³ increase in long-term average concentration of PM_{2.5} 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.
- 7.90. Transport can also indirectly influence health in terms of accessibility to fresh food, health facilities and employment opportunities. Analysis in Draft LTP3 shows that much of the Metropolitan Area has good access to primary health care and fresh food.

Effects of Draft LTP3

³⁶ <http://www.apho.org.uk/resource/view.aspx?RID=95272>

- 7.91. Key Objective 3 seeks *to improve health, personal security and the safety of people traveling in the West Midlands Metropolitan Area*. The commitment to Smarter Choices in Draft LTP3, which embraces active travel (cycling and walking), will improve health of residents through:
- Investment in cycling and walking facilities and their infrastructure
 - School, workplace and personalised travel planning which promotes active travel
 - Improved interchange, such as rail station travel plans to encourage access by active modes
 - Safer streets, for example 20mph zones to encourage cycling and walking
 - Traffic growth below forecast projections leading to less congestion, better air quality and reduced driver stress.
- 7.92. The results of the Sustainable Travel Demonstration Towns initiative³⁷ undertaken by DfT shows that Smarter Choices which seek to change travel behaviour proved very effective in encouraging a shift to active modes between 2004 – 2009 (10% - 13% increase in walking trips and a 26% - 30% increase in cycling trips).
- 7.93. Draft LTP3 proposes an as yet unspecified target to increase cycling and, although it is not possible to monitor walking trips accurately, it does pledge to promote walking. LTP2 included a modest target to increase cycling (1% increase in the cycling index between 2003/4 and 2011/11). Investment in off-road routes proved the most effective (LTP2 Delivery Report). The final LTP3 could consider a more ambitious target, dependent upon local circumstances.
- 7.94. The 40% reduction on the 1994-98 average killed and seriously injured (KSI) by 2010 was achieved by 2003. This led to a more stretching target being set in LTP2 and progress towards meeting this has, however, become more challenging. Draft LTP3 remains committed to reducing collisions, injuries and deaths, although the target has yet to be specified. Specific attention is also given to Powered Two-Wheeler (P2W) safety, given the relatively large proportion of incidents that it accounts for.
- 7.95. There is, however, uncertainty regarding the future funding of road safety, as Road Safety Grant has ceased. Revenue funding for road safety will be absorbed into each Authority's Formula Grant. Capital funding can continue to be allocated from the Integrated Transport Block settlement.
- 7.96. The maintenance strategy (footway infrastructure) identifies the fact that defect-free footways can prevent personal injury incurred from trips, slips and

³⁷ <http://www.dft.gov.uk/pgt/sustainable/ltp3planning/travelguide/sttresults/>

falls. As the maintenance allocation is not yet known, the extent to which the maintenance backlog can be dealt with remains uncertain at this time.

- 7.97. Breaches of the 40µg/m³ standard for nitrogen dioxide (NO₂) typically 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 emissions. Borough-wide declarations for average NO₂ levels have been made in all the Metropolitan Districts except Solihull. The policies followed by local Primary Care Trusts to tackle poor air quality mirror those of the Local Authorities.
- 7.98. It is no longer a mandatory requirement to include a target on air quality in the LTP, but given the impact transport has, LTP3 includes one. The proposed revised target covers more of the Metropolitan Area in line with the now wider coverage of AQMAs (see Implementation Plan).
- 7.99. As the appraisal matrices (Appendix 3) set out, several of the strategies will have positive impacts in air quality, as will the emerging proposals for the development of proposals for a Low Emission Town and Cities Programme bid.
- 7.100. Although the Metropolitan Area has relatively good access to key facilities such as primary health care and fresh food, Draft LTP3 includes measures intended to maintain or enhance this. For example, Smart Routes, better pedestrian crossings facilities through Urban Traffic Management and Control (UTMC), and removal of subways or safety enhancements to prevent severance.
- 7.101. Improved safety is also a key theme amongst many of the committed Major Scheme proposals. This is set out in more detail in Appendix 3.

Conclusions

- 7.102. LTP3 sets out strategies and interventions which will **have positive effects on health**, especially when compared to the “no plan” scenario. The extent of this, however, depends on the level of funding made available through both the Integrated Transport Block (for the likes of capital investment in road safety and Smarter Choices) and the maintenance settlement for footway maintenance. Revenue spending on road safety will be made available through the Formula Grant, and its allocation will be dependent on local priorities.

Proposed Mitigation / Enhancement Measures

- Car parks should be designed to minimise adverse impacts (e.g. noise and light pollution) on nearby residents.
- LTP3 could consider a more explicit statement as to how access to key facilities /services could be improved, particularly in the light of the Coalition Government's Localism agenda.
- Community severance could also be discussed further
- LTP3 could include a statement pledging to ensure that the impact on the amenity of local residents is considered when the type of traffic calming measure is selected
- Ensure that maintenance policies reflect the needs of powered two wheelers (P2W) users and also include a clear statement that any new highway infrastructure will also consider their needs
- Promote road safety measures which reduce the vulnerability of cyclists and pedestrians and positively encourage active modes.
- Enforcement regarding noise pollution is not an LTP issue, but LTP3 could support responsible motorcycling
- Further details as to how noise pollution will be reduced could be considered, possibly with reference to the maintenance and freight sections of LTP3

Sustainability Objective 13: To reduce actual and perceived crime and anti-social behaviour

Context

7.103. All Local Authorities' Community Strategies highlight personal security as a major issue. Recorded crime statistics show that crime towards the person and to property, including theft and damage to vehicles, has been falling steadily since 2005/6, although the perception of crime remains high. Bus-related crime incidents are actually falling, yet passengers are feeling less secure. There is often an equalities-based dimension to personal security, with certain groups feeling less secure.³⁸

Effects of LTP3

7.104. In consulting on the Draft LTP Vision Statement, crime and its perception was the second most significant issue cited by respondents. Draft LTP3 continues to have a policy and target to reduce crime on public transport.

7.105. The Safer Travel Partnership was launched five years ago to improve bus travel for passengers by deterring crime and anti-social behaviour. Using a number of tactics, including targeted patrols based on intelligence and random checks, the Safer Travel Partnership has succeeded in cutting offences by 54% over the last three years.

7.106. LTP3 proposes continuing these partnership arrangements. There may, however, be funding issues amongst partner agencies, given the financial situation, which may inhibit their ability to contribute. This may lead to uncertainty as to whether previous results can be replicated.

7.107. Increased capacity on rail and Metro should also help reduce opportunities for crimes such as pick pocketing.

7.108. Draft LTP3 states that Local Authorities and Centro will seek to improve the standard of car park security through the 'Park Mark' programme, and this includes secure cycle parking facilities.

7.109. There is considerable evidence from Licensing Authorities that unlicensed private hire vehicles, and taxis without the correct insurance, continue to be a major enforcement issue.

Conclusions

7.110. The reduction in criminal activity on public transport in recent years has been impressive. This factor, along with possible funding constraints, however, may

³⁸ West Midlands LTP3 Equality Impact Assessment

make it difficult to replicate. Perceived crime continues to be an issue despite the reality, and this can have negative impacts on people's quality of life. Draft LTP3, however, should have a **moderately positive impact on reducing crime and perceptions of it**, especially when compared to the 'no plan' scenario.

Proposed mitigation / enhancement measures

- The final LTP3 could be more explicit as to how it will tackle perceptions of crime, as this can have a debilitating impact on quality of life.
- The final LTP3 could consider making a commitment to tackling the issue of unlicensed private hire operators

Sustainability Objective 14: To support the Metropolitan Area's Urban Renaissance

Context

- 7.111. In previous decades, population in the Metropolitan Area was declining, with the most economically active residents migrating to the adjoining Shires. Over time, this led to the 'hollowing out' of urban areas, unsustainable travel patterns and environmental pressures. The West Midlands RSS, initially adopted in 2004 and subsequently revised, set out an 'urban renaissance' strategy to rectify this. Much of this revolves around identifying and bringing brownfield land back into active use. Monitoring suggests that the strategy is beginning to take effect³⁹, although clearly it is a long-term process.
- 7.112. The Coalition Government has pledged to abolish RSSs through the emerging Localism Bill. Metropolitan Authorities, however, continue to support the broad urban renaissance principles and are reflecting these in their own development plans.

Effects of LTP3

- 7.113. Draft LTP3 has been prepared in the context of Local Authorities' spatial planning policies, in particular their focus on improved access to centres, regeneration and major employment sites. A high quality transport system is necessary to accommodate the longer-term development opportunities and population growth. The latest trend-based household population projections, for example, suggest that there could be up to a further 163,000 households in the Metropolitan Area by 2026. Specific proposed interventions include:
- Midland Metro Phase One Extension and capacity enhancements, Darlaston SDA and A41 West Bromwich Expressway, all of which will improve access to centres and / or employment opportunities
 - A network of Smart Routes based on strategic and local centres, corridors and major employment opportunities
 - A greater role for Smarter Choices to encourage alternatives to car use, especially at peak periods
 - Supports additional heavy rail capacity provided by partners
- 7.114. RSS also seeks to promote Birmingham as a Global City and the City Council has prepared its own 'Big City Plan'⁴⁰ to help achieve this. Schemes within Draft LTP3, and partner schemes, such as HS2, Birmingham Airport runway

³⁹ http://www.wmra.gov.uk/documents/AMR_2009.pdf

⁴⁰ <http://bigcityplan.birmingham.gov.uk/download-the-plan/>

extension, Birmingham Gateway and the Midland Metro Line 1 enhancements will all help achieve this

Conclusions

7.115. The Urban Renaissance strategy is considered to be a sustainable option for future spatial planning, in that it seeks to bring previously developed sites back into use, make best use of existing infrastructure and minimise the loss of greenfield sites. **It follows, therefore, that a transport plan that supports this strategy will have positive effects.** The availability of funding, however, will determine the extent to which the Urban Renaissance can be supported, because substantial infrastructure is required to accommodate population growth and development activity over the LTP3 period.

7.116. A great deal of flexibility has been built into LTP3, both in terms of the strategy and particularly in respect of the Implementation Plan. This will assist in dealing with any significant changes that come about through the local planning process, in the light of changes to be introduced through the Localism Bill

Mitigation / Enhancement Measures

- Ensure that any major infrastructure beyond the Metropolitan Area (e.g. strategic Park and Ride and rail investment) deals with existing capacity issues rather than providing investment to encourage selective out migration.
- Considers funding streams to support the Urban Renaissance, such as Tax Increment Financing (TIF), Community Infrastructure Levy (CIL).
- Take account of the Coalition Government's emerging Localism Bill

Sustainability Objective 15: To increase Productivity and close the ‘Output Gap’

Context

7.117. The West Midlands Metropolitan Area, with Birmingham at its heart, was once known as the workshop of the world. Economic restructuring and globalisation has eroded that position such that the region is now estimated to have an annual output gap with the UK average of about £15bn⁴¹, although there are considerable differences in economic performance between the sub-regions. It is a fundamental plank of Draft LTP3 to ensure that transport supports increased productivity in order to close this gap.

Effects of Draft LTP3

7.118. The Coalition Government has made it clear that it sees transport playing a key role in supporting economic recovery and in meeting low carbon objectives. Draft LTP3 is geared towards this. Key Objective One is explicit in its support by pledging to ‘underpin private sector led growth and economic regeneration in the West Midlands Metropolitan Area, including support for housing development and population growth, increased employment and low carbon technologies.’ There are also provisional targets which seek to improve peak journey times and to improve freight accessibility.

7.119. Transport investment also has indirect economic benefits through the attribution of monetary values to the likes of accidents, emissions and poor health. As figure 1 shows, these collectively dwarf the costs to the economy caused by delays.

7.120. There are myriad policies and proposals in Draft LTP3 that support economic growth, for example:

- Red Routes, Smart Routes, Urban Traffic Management and Control (UTMC) and public transport improvements to relieve congestion and improve journey time reliability.
- Support for major infrastructure projects which will improve connectivity and economic competitiveness, such as. HS2 and the Birmingham Airport runway and the Metro Phase One extensions
- Focussing investment in centres and regeneration areas
- Supporting growth in rail freight capacity and supporting the road freight industry.
- Exploiting low carbon technologies

⁴¹ State of the Region – West Midlands Regional Observatory (2009)

- 7.121. Whilst HS2 is not promoted directly through Draft LTP3, it includes proposals to ensure access from beyond Birmingham and note the potential for capacity to be freed on the classic network, thus providing some much-needed additional capacity. Helping to facilitate the Birmingham Airport runway extension will improve access to emerging global markets for the region as a whole.
- 7.122. Committed major schemes make a positive contribution to economic growth with the A41 West Bromwich Expressway and Brierley Hill Sustainable Access Network improving access to strategic centres. The Chester Road and Darlaston proposals in the Pre-Qualification Pool also seek to open up employment creating development opportunities.
- 7.123. A well maintained highway network and structures is essential to underpin economic growth. The Maintenance section of Draft LTP3 identifies the backlog although it is not yet clear how much funding will be available to tackle this. Clearly the quicker that the backlog is dealt with, the sooner financial and economic benefits will be felt.
- 7.124. Maintenance of structures is identified as a particular issue, and two major proposals on for the A45 and A38 (M) Aston Expressway are identified in the Pre Qualification Pool. These proposals need to be brought forward in order to prevent the imposition of weight restrictions, which would hamper economic performance. Draft LTP3 also identifies the need to strengthen sub-standard local bridges that serve industrial estates.

Conclusions

- 7.125. **Draft LTP3 will clearly have positive effects on economic growth** and competitiveness through its support for nationally significant major infrastructure, and the implementation of locally significant infrastructure such as the Metro Phase One extension. The extent of these positive effects depends on early implementation of draft LTP3 measures and proposals.
- 7.126. Account, however, should be taken of forecast traffic growth, which indicates the scale of the challenge and to fail to tackle this will lead to severe congestion and reduced economic productivity. It is considered that strategies and proposals are in place to tackle this, but a long-term financial commitment is required to bring them forward.

Proposed Mitigation / Enhancement Measures

- Need to ensure that benefits are 'locked in' and that any short-term reductions in congestion do not lead to induced traffic, which subsequently nullifies any benefits accrued

- The description of freight movements within the Smart Routes definition is not explicit, although reference is made to 'Quick Wins' funding, which it is understood has been used to assist the delivery of goods
- Need to ensure that sufficient short term parking is available in local centres to enhance their vitality and viability
- A common approach to parking provision and management is suggested as a means of preventing destructive competition
- Ensure that any localised schemes to tackle congestion do not simply displace traffic and problems elsewhere
- Bus accessibility is often significantly reduced during the evening and at weekends, whilst the economy is increasingly operating beyond 'traditional' peak periods. This is particularly relevant in terms of access to Birmingham Airport and the NEC, especially for employees
- Water freight policies should ensure compatibility with Local Authorities' LDF policies, as there are competing uses for canal side locations

Section 8 - Monitoring the Implementation of the Plan

- 8.1. The SEA Regulations (Section 17(1)) state that *'authorities should monitor the significant environmental impact of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action'*. In addition the *Environmental / Sustainability Report should provide information on a description of the measures envisaged concerning monitoring'* (Annex I (i)).
- 8.2. The Draft LTP3 (IP1) includes indicators that the LTP may monitor and suggests the direction of travel for likely targets. Guidance suggests that the monitoring which is required to comply with the SEA directive can be incorporated into existing monitoring arrangements. Table 3 considers the proposed targets and the contribution that their achievement is likely to have towards meeting sustainability objectives.

Table 3: Draft LTP3 and Sustainability Objectives

Draft LTP3 Target	Direct contribution to Sustainability Objective	Indirect contribution to Sustainability Objective
<p>Road congestion On key routes limit any change in average AM peak journey times to no more than X% above the change in vehicle flow between 2010/11 and 2015/16</p>	<p>S014 Urban Renaissance S015 Increase productivity</p>	<p>S01 Climate change mitigation S03 Improve air quality</p>
<p>Freight accessibility Reduce the number of weight-limited bridges on key routes by X% between April 2011 and March 2016</p>	<p>S015 Increase productivity</p>	<p>S03 Improve air quality</p>
<p>Total Road Traffic Growth Annual road traffic to grow less in % terms than the local economy between 2010/11 and 2015/16</p>	<p>S015 Increase productivity</p>	<p>S01 Climate change adaptation S03 Improve air quality</p>
<p>Principal Road Maintenance Maintain the current condition of the Principal Road Network until 2015/16</p>	<p>S08 Maximising use of existing infrastructure</p>	<p>S02 Climate change adaptation S0 Water quality</p>
<p>CO2 Emissions from Transport Reduce CO₂ emissions from transport by X% between 2008/9 and 2015/16</p>	<p>S01 Climate change mitigation</p>	<p>S03 Air quality</p>
<p>Road Accident casualties Reduce annual Killed and Seriously Injured (KSI) casualties by X% between the baseline 2004-08</p>	<p>S012 Improve health</p>	<p>S011 Equalities S015 Increase productivity</p>

average and the 2011-15 average		
Travel to School Increase the proportion of children (aged 5 to 15) traveling to school by non-car modes (which includes car share) by X% between 2010/11 and 2015/16	S04 Public transport and active travel	S012 Improve health
Air Quality A proportional reduction in those areas where the annual average NO ₂ values are predicted to exceed 40ug/m ³ and 60ug/m ³ between 2008 (baseline) and 2015	S03 Air quality S012 Improve health	S09 Conserve heritage assets S07 Safeguard soils S05 Conserve natural environment and biodiversity
Safety and Security on public transport Reduce incidents of crime around buses by X% between 2010/11 to 2015/16	S013 Reduce crime and fear of crime	S012 Improve health
Accessibility Improve access to the 13 Metropolitan Area Impact Investment Locations as a whole by X% between 2010/11 and 2015/16	S014 Urban Renaissance S015 Increase productivity	S014 Urban Renaissance
Bus patronage Retain bus patronage at 2010/11 baseline levels by 2015/16	S04 Public transport and active travel	S011 Equalities S01 Climate change mitigation
Bus Reliability X% increase in key bus services operating between “1 minute early and 5 minutes late” between 2010/11	S04 Public transport and active travel	S011 Equalities

and 2015/16		
Cycling Increase the West Midlands cycling index by X% from the 2010/11 baseline of 100 by 2015/16	S04 Public transport and active travel	S01 Climate change mitigation
Public Transport trips to centres Increase the proportion of trips by public transport into the 9 strategic LTP centres as a whole during the AM peak by X% between 2010/11 and 2015/16	S04 Public transport and active travel S015 Increase productivity	S01 Climate change mitigation S011 Equalities

- 8.3. Draft LTP3 does not include measures which directly measure the impact of the plan's implementation on biodiversity, water quality, natural heritage or landscape. The plan, however, is not predicted to have significantly adverse effects on these receptors. Monitoring data on these topics is held and published by statutory consultees (English Heritage, Environment Agency, Natural England), by Government Departments such as DEFRA, or locally by Wildlife Trusts and Local Authorities. Published data often makes it difficult to establish whether any changes in baseline conditions are attributable to transport. As transport and spatial planning are closely related, it is suggested that the ITA and Local Authorities consider some joint LTP3 and spatial plan monitoring as this may help identify what has caused any worsening of conditions and enable remedial measures to be more readily identified. For example, spatial plans may monitor loss of Green Belt land or sites with environmental designations; it would be useful to know whether this was attributable to LTP3 related investment.
- 8.4. Monitoring can be a resource-intensive requirement for Local Authorities and the Coalition Government has stated they will not be required collect as much information in future, and the future of the National Indicators dataset is uncertain. More specifically, it is uncertain what monitoring data will formally be required to report progress on LTPs and whether there will be a requirement to identify measures to ensure that targets get 'back on track,' as has been the case previously. These issues will need to be considered further when more information comes to light and as LTP3 is finalised. The SEA / Sustainability Statement may also need to address this matter further.

Section 9 - Next Steps

- 9.1. This principal purpose of this Sustainability Report is to identify the likely effects of implementing Draft LTP3 as it currently stands, and to facilitate consultation on this with statutory consultees (English Heritage, Environment Agency and Natural England). This consultation is undertaken at the Draft LTP3 stage so that any views can be taken into account when finalising the plan.
- 9.2. Once the LTP has been adopted, then the SEA Directive requires that a statement is prepared which requires Centro to report on how the findings of the environmental / sustainability assessment have been taken into account. Webtag 2.11 advises that this should cover the following:
 - Any changes to or deletions from the plan in response to the information in the Environmental Report.
 - Ways in which responses to consultation have been taken into account. The summary should be sufficiently detailed to show how the plan was changed to take account of issues raised, or why no changes were made.
 - Reasons for choosing the plan as adopted, and why other reasonable alternatives were rejected.
 - Monitoring measures. The Environmental Report will already have documented proposed measures concerning monitoring; these can now be confirmed or modified in the light of consultation responses.
- 9.3. Centro should then ensure that statutory and other consultees are advised of this and given access to the plan once it has been adopted.

Section 10 - Conclusions

- 10.1. Draft LTP3 has been subjected to various statutory regulatory assessments as required by legal statute and reiterated in DfT guidance. It has been determined in conjunction with statutory and other consultees that the most appropriate way to do this was by an Integrated Sustainability Appraisal (ISA). Crucially, this meets the requirements of the SEA Directive and associated regulations, but also enables impacts such as health, equalities and economic impacts to be considered in a holistic manner.
- 10.2. Following consultation and the analysis of a broad empirical and policy evidence base, a series of sustainability objectives were drawn up, against which the policies and proposals of the draft plan and reasonable alternatives were assessed.
- 10.3. In general terms, Draft LTP3 fares well in terms of its likely impacts on environmental receptors and sustainability objectives, particularly when compared with the 'no plan scenario'. It also supports a sustainable spatial strategy of Urban Renaissance, which seeks to maximise brownfield development opportunities and improve the urban environment, to retain and encourage investment and population growth. This is considered to be more sustainable than a more dispersed settlement pattern.
- 10.4. Draft LTP3 performs well in terms of its likely contribution towards reducing carbon emissions, improving air quality, maximising the use of existing infrastructure (minimising the need for natural resources), equality and the economy. Its effects are likely to be more benign or slightly negative on built and natural environmental topics such as biodiversity, heritage assets, water and landscapes. As required by the SEA Directive, however, mitigation measures are proposed with a view to minimising adverse effects.
- 10.5. Effects on the built and natural environment, however, are largely minimised, as major and other transport schemes are largely focused on existing corridors, thus minimising the need for land take which may have adverse impacts on biodiversity, natural habitats, landscapes and the historic environment. It is, however, suggested that Centro makes greater reference to its Environmental Strategy and also its Sustainable Design Guide in order to emphasise its commitment to the environment in terms of policy and delivery.
- 10.6. The only significant negative effect identified is that the Draft Plan does not fully explore the need to adapt to the impacts of unavoidable climate change. Whilst this is mentioned in the Key Objectives at the outset, the plan does not subsequently explore the issue. This, however, is considered to be an omission rather than a direct conflict. It is understood that Centro has recently published a Sustainable Design Guide, which could help address this deficit, although it is considered that it warrants more consideration in terms of the

maintenance of existing assets. LTP3 Guidance is explicit in the need to consider climate change adaptation and the incumbent Secretary of State has reiterated this.

- 10.7. As the plan is strategic in nature, there has been some uncertainty in its assessment. It is not meant to be a detailed assessment and individual schemes are more appropriately assessed as they are developed. Committed Major Schemes are reflected and in most instances actively being constructed, and assessment material is readily available via other means. Elsewhere, however, the plan is not spatially specific and the 'mix' of lower cost interventions likely to be funded through the Integrated Transport Block has yet to be determined.
- 10.8. The extent of any positive effects, therefore, depends on how quickly the various components of the Draft Plan can be implemented and this is likely to be challenging in the current financial climate. It is considered that the requisite strategies are in place.
- 10.9. Regardless of this uncertainty, each of the interventions likely to come forward through the Implementation Plan are consistent with one of the LTP3 strategy's ten Long Term Themes. These Themes, and the policies that accompany them, have been assessed against the sustainability objectives; as such it is considered that this obviates the need for further assessment when the Implementation Plan is finalised. Guidance states that if the final plan deviates significantly from the draft that has been assessed, further assessment may be required. Centro, however, is advised to satisfy itself that it meets this aspect of the guidance.
- 10.10. Furthermore, it is considered that the plan needs to be flexible in terms of its implementation so as to be responsive to unforeseen circumstances and opportunities through the likes of the proposed Sustainable Local Transport Fund and also to adapt to the consequences of the proposed Decentralisation and Localism Bill.
- 10.11. In terms of cumulative effects, the assessment has taken account of other plans, policies and programmes that are likely to be implemented over the plan period, with particular attention paid to Local Authorities' spatial strategies, because transport investment and development activity are intrinsically linked.
- 10.12. Draft LTP3 also takes account of other partners' (Highways Agency and Network Rail) proposals and these have been considered in the assessment as appropriate. Draft LTP3 is also supportive of High Speed 2 (HS2) and the Birmingham Airport runway extension. Although the latter has full planning approval, HS2 is likely to have significantly adverse impacts on the environment, largely beyond the Metropolitan Area. It is not, however, within the remit of this assessment to fully appraise the impacts of HS2, as this is the

responsibility of its promoters. On the other hand, it would be inappropriate for this assessment to ignore HS2 completely, especially as Draft LTP3 supports its alleged economic benefits. Consequently, HS2 is referred to and where LTP3 can offer indirect mitigation, this is suggested.