

Sandwell MBC  
Sandwell Council House  
Freeth Street  
Oldbury  
West Midlands  
B69 3DE

# **Black Country Joint Core Strategy**

## **Stage 2: Infrastructure and Deliverability Study**

### **Technical Note 4: Transport**

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Mott MacDonald  
Canterbury House  
85 Newhall Street  
Birmingham  
B3 1LZ  
UK  
Tel: 44 (0)121 2374000  
Fax: 44 (0)121 2374001

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### Technical Note 4: Transport

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# 1 Development Capacity Opportunities – Transport

## 1.1 The Sustainable Transport Agenda

In recent years there has been a progressive shift in transport planning priorities. The UK Government has been placing an ever-increasing emphasis on developing a transport network which is characterised by sustainability. Progress towards sustainable transport gathered particular pace following the publication of the Eddington Transport Study<sup>1</sup> and the Stern Review<sup>2</sup>, in 2006. Both of these documents challenged the perception that climate change mitigation (through Carbon Dioxide (CO<sub>2</sub>) reductions) and economic growth are mutually exclusive, illustrating instead how they are compatible and complementary.

In response to Eddington and Stern, in October 2007 the Department for Transport (DfT) issued a discussion document entitled “Towards a Sustainable Transport Strategy: Supporting Economic Growth in a Low Carbon World” (TaSTS). TaSTS provided a framework for transport planning and investment up to and beyond 2014 and set the transport industry a challenge to address climate change by cutting emissions of CO<sub>2</sub> and other greenhouse gases.

TaSTS has since been followed by “Delivering a Sustainable Transport Strategy” (DaSTS). Published in November 2008, this represents a more structured plan for delivery of the transport goals previously set out in TaSTS. DaSTS’ principle assertion is the need to reduce the emphasis on modal solutions. It suggests that long term transport planning should consider a wider range of policy options including behavioural change, better utilisation of existing infrastructure, technology and innovation, pricing signals, regulation and enforcement. Mode shift is no longer considered acceptable as a goal in its own right; it needs to contribute to achieving the five wider DaSTS goals; these being<sup>3</sup>:

- To **support national economic competitiveness and growth**, by delivering reliable and efficient transport networks
- To reduce transport’s emissions of carbon dioxide and other greenhouse gases, with the desired outcome of **tackling climate change**
- To **contribute to better safety security and health** and longer life-expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health
- To **promote greater equality of opportunity** for all citizens, with the desired outcome of achieving a fairer society
- To **improve quality of life** for transport users and non-transport users, and to promote a **healthy natural environment**

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<sup>1</sup> Eddington, R (2006) ‘The Eddington Transport Study’, DfT and HM Treasury

<sup>2</sup> Stern, R (2006) ‘Stern Review on the Economics of Climate Change’, Cabinet Office and HM Treasury

<sup>3</sup> Department for Transport website: [www.dft.gov.uk](http://www.dft.gov.uk)

The next few years will be critical in terms of transport planning for the next decade with DaSTS likely to perpetuate and accelerate the shift in planning processes. This lays down a considerable challenge to the regions; over the coming years a wider range of more sophisticated “mode-neutral” planning tools will be required.

This process has been started through improving linkages between national road and rail models. In addition, the DfT has published the refresh of ‘New Approach to Appraisal’ (NATA)<sup>4</sup> which will give more weight to sustainability considerations, whilst there is also the potential for the DfT to publish Green and White Papers addressing the DaSTS process. However, Local Authorities will need to ensure that they are well-placed to influence the development of sustainable transport planning in their districts so that it complements their goals for productivity and competitiveness.

## **1.2 Existing Network Capacity**

The main arterial routes into the strategic centres within the Black Country sub-region are already heavily congested during the peak hours. Existing trip patterns and traffic problems are related to the dispersed nature of land uses across the sub-region. If current trends remain and little is done to improve the existing situation, the growth of the sub-region and wider region will experience constraints on its growth and economic.

The Black Country Joint Core Strategy (BCJCS) along with a number of other key documents and strategies, some of which are listed below, will aim to address the problem of congestion and its associated issues. Key components to ensuring transport infrastructure will be able to cope with the forecast growth and demand in the sub-region include:

- The West Midlands Local Transport Plan 2 (LTP2)
- The Black Country Study
- West Midlands Regional Transport Priorities

## **1.3 West Midlands Local Transport Plan 2**

All Local Transport Authorities in England, outside of London, are required to produce and maintain Local Transport Plans (LTPs) under the Transport Act 2000. The LTP is a document which sets out the Authority's local transport strategies and policies, and a five-year implementation programme.

In March 2006 the seven West Midlands Local Authorities of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton, and Centro (West Midlands Passenger Transport Authority) submitted their second LTP to the DfT. The implementation programme for LTP2 runs until 2011 after which LTP3 will set out the local transport strategies and policies, alongside other programmes such as the Regional Funding Allocation (RFA). Although not currently published, LTP3 is intended to be a more longer term planning document.

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<sup>4</sup> DfT (2009) ‘NATA Refresh: Appraisal for a Sustainable Transport System’

The Government and Local Authorities, through the Local Government Association, have agreed on four key Shared Priorities for Transport. The overall aim of these Priorities is to facilitate the delivery of improved local transport, as identified in the LTP2, as quickly as possible. The Shared Priorities focus on four themes; these have been listed below and briefly discussed in turn:

- Tackling congestion;
- Improving accessibility;
- Improving air quality; and
- Improving road safety.

### **1.3.1 Tackling Congestion**

Congestion in the West Midlands Metropolitan Area (WMMA) as a whole continues to be problematic. Saturation levels on the road network are set to increase if current trends without investment in transport continue, therefore it is imperative to introduce and enforce traffic management measures along the surrounding motorway network and main radial routes into the strategic centres. Some of the main transportation issues identified in the LTP2 are:

- Decentralisation of the population is resulting in greater pressure on the strategic centres and increased commuting into the conurbation.
- Conversely, insufficient economic activity and sustainable housing development in rural areas has led to people leaving these areas and moving to more sub-urban areas or having to travel further for access to services and jobs.
- Need to make best use of existing regional transport networks.
- Need to ensure that the West Midlands is a reliable hub to service regional, national and international connections.
- Need for targeted major investment such as additional highway capacity in the M6 Corridor; improved links between the M54, M6 and M6 Toll Motorways.

### **1.3.2 Improving Accessibility**

Greater consideration has been paid to accessibility by public transport modes in recent years, especially in light of the traffic conditions on the road network during the AM (07:00 – 09:30) and PM (15:30 – 19:00) Peak periods. The Government and Local Authorities have been campaigning to raise awareness of the availability of public transport links and increase accessibility, especially for people living in deprived and rural areas. This also links in closely with one of the DfT's objectives to promote mobility and reduce social exclusion. Some of the measures currently being introduced in order to tackle social exclusion include improving personal security; and availability, accessibility and affordability of public transport.

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### **1.3.3 Improving Air Quality**

An Air Quality Strategy has been developed as part of the LTP2 in order to tackle the affects of transport emissions on the environment. The Strategy involves:

- *“Working with the Highways Agency to deal with the substantial emissions from motorway traffic*
- *Detailed initiatives to tackle hotspots through engineering and traffic management*
- *Broader policies to encourage forms of transport that have less impact on air quality, such as alternative-fuel vehicles”*

Further details on local air quality and climate change have been provided in Technical Note 11.

### **1.3.4 Improving Road Safety**

The Road Safety Strategy as part of the LTP2 seeks to:

- *“Educate and train road users to travel as safely as possible*
- *Ensure all who live, work and travel in the West Midlands have access to road safety advice*
- *Target safety training at vulnerable users such as cyclists and pedestrians*
- *Subject new infrastructure to safety audits*
- *Implement a programme of safety schemes aimed at accident cluster sites*
- *Use safety cameras to enforce speed limits and traffic signals, backed by educational campaigns”*

Casualty rates in deprived areas are double those of the least deprived area. As a lot of the Black Country area is considered to be deprived, as measured by the Index of Multiple Deprivation (IMD), it is essential that the Road Safety Strategy is put into action to reduced casualty rates on the sub-region’s road network.

### **1.3.5 Local Transport Plan Schemes for the Black Country**

Table 1 lists the schemes identified in the LTP2 that are relevant to the Black Country (with amendments provided by the Black Country Local Authorities and Consortium).

**Table 1: Black Country Local Transport Plan Schemes<sup>5</sup>**

Scheme Category	Scheme Name	Scheme Promoter
<b>Completed Schemes</b>	Brierley Hill Sustainable Access Network	Dudley Metropolitan Borough Council
	Cradley Heath Town Centre Strategy	Sandwell Metropolitan Borough Council
	Walsall Town Centre Transport Package	Walsall Metropolitan Borough Council
<b>Current Schemes</b>	Burnt Tree Junction Improvement	Dudley Metropolitan Borough Council
	Darlaston Strategic Development Area Access Project	Walsall Metropolitan Borough Council
	Owen Street Level Crossing Relief Road	Sandwell Metropolitan Borough Council
	Red Route Package 1 (traffic management)	Wolverhampton City Council
	West Midlands Urban Traffic Control	Wolverhampton City Council
	Wolverhampton Centre Accesses, Change and Integration	Wolverhampton City Council
<b>Provisionally Accepted</b>	Wolverhampton Public Transport Interchange	Wolverhampton City Council
	A41 Expressway A4031 All Saints	Sandwell Metropolitan Borough Council
<b>Programme Commitments Only</b>	Bus Rapid Transit III	Centro
	M54 Junction 1 Wobaston Road	Wolverhampton City Council
	Midland Metro Extension 11A	Centro
	Quality Bus Network III	Centro
	Red Routes Network 2	CEPOG Support Team

#### 1.4 Black Country Study – Transport Strategy

An Integrated Transport Strategy for the Black Country is needed to increase accessibility between the four strategic centres and unlock economic growth between the Black Country and key markets. Providing people and businesses with easy trips between home, education, work and leisure are vital for attracting inward investment into the sub-region and reducing outward migration.

The Black Country Transport Strategy will build on the outcomes of the Black Country Study’s investment priorities and the Local Transport Plan Package by:

- *“Connecting up the four strategic centres by public transport (notably through the completion of the Metro network) to create a polycentric network of centres where there is a real alternative to the motorcar;*

<sup>5</sup> Source: Black Country Authorities/Consortium (2009)



- *Providing communities with access to employment, leisure, education and health opportunities, again focusing on public transport improvements;*
- *Facilitating access to quality employment land with reliable access to the national motorway network, especially for freight (within 5-10 minutes);*
- *Focusing investment in public transport and road network improvements within identified corridors to improve accessibility for knowledge workers;*
- *Improving access for more of the Black Country to Birmingham International Airport; and*
- *Considering the role of demand management as an ongoing priority in the development of the Phase II Revision of the Regional Spatial Strategy.”*

## **1.5 West Midlands Regional Transport Priorities**

In August 2007, the Regional Transport Partnership, Advantage West Midlands (AWM) and the West Midlands Regional Assembly (WMRA) were tasked by the then Minister for the West Midlands Region, Liam Byrne, MP, to liaise with partners to agree and set out transport priorities for the Region. Nine Transport Priorities were identified in the context of the West Midlands Regional Spatial Strategy (RSS) and Regional Economic Strategy (RES); these would assist with the delivery of jobs and homes across the region and identify the opportunities arising from the Local Transport Bill.

A Transport Challenge conference was held in March 2008 at Worcester Rugby Club which was attended by more than 85 senior representatives from a broad range of partner and stakeholder organisations. Liam Byrne (MP), Cllr Roger Phillips, Nick Paul (Chair of AWM) and Olwen Dutton (Chief Executive of the WMRA) presented at the conference and announced the Regional Transport Priorities. Support for the Priorities was conveyed by the stakeholders and an agreement to produce a Regional Transport Priorities Action Plan (RTPAP) was made.<sup>6</sup>

The nine Transport Priorities for the West Midlands have been presented in Table 2.

The RTPAP, which was launched by the new Regional Minister, Ian Austin, MP, on Monday 15<sup>th</sup> December 2008, seeks to identify the contribution each of the Priorities will make to deliver the Region's objectives.

The economic challenge facing the Black Country and West Midlands Region as a whole is great. A £14.8 billion output gap in the region of which the Black Country accounts for £4.2 billion has been highlighted and needs to be tackled in order for growth and prosperity to thrive. The Regional Transport Priorities in part will help to alleviate some of the economic challenges facing the Black Country through improvements to transport infrastructure and services. The schemes categorised under each of these Priorities are currently undergoing further investigative work in order to establish the scheme promoters, costs and funding agencies. Of particular interest to the Black Country is the delivery of the schemes within the Black Country 'Strategic Transport Spine' Priority and the NGPs/SSDs Priority as the Black Country has also been identified as a NGP. The schemes of relevance to the Black Country identified within each of these Priorities are listed in Table 3.

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<sup>6</sup> Source: Advantage West Midlands website: [www.advantagewm.co.uk](http://www.advantagewm.co.uk)

**Table 2: West Midlands Regional Transport Priorities**

Regional Transport Priority	Lead Organisation	Lead Organisation Representative
Birmingham New Street Station	Birmingham City Council	David Bull
Birmingham International Airport – Runway Extension and Surface Access	Birmingham International Airport	Joe Kelly
M6/M5 Capacity Improvements and Motorway Box Active Traffic Management	Highways Agency	Tim Harbot/ Anne Jones
Rail Freight Upgrades – Peterborough and Southampton to Nuneaton	Network Rail	Graham Botham
Regional Rail Capacity – both for Passengers and Freight	Centro – WMPTA	Geoff Inskip
Black Country 'Strategic Transport Spine'	Centro – WMPTA	Geoff Inskip
North Staffordshire Integrated Transport Package	Stoke-on-Trent City Council	Peter Bradbury
New Growth Points (NGPs)/ Settlements of Significant Development (SSDs)	Centro – WMPTA and Shires	Geoff Inskip/ Peter Davenport
Smarter Choices	Centro – WMPTA and Shires	Geoff Inskip/ Peter Davenport

**Table 3: Black Country Specific Regional Transport Priorities and Schemes**

Regional Transport Priority	Scheme Name	Scheme Name
<b>Black Country Strategic Transport Spine</b>	A41/A4031 West Bromwich	Rapid Transit: Wednesbury to Stourbridge via Brierley Hill
	A4123/A461 Burnt Tree	Wolverhampton Centre Access Interchange
	A449/Wobaston Road Corridor Improvements	Wolverhampton to I54 Rapid Transit
	Midland Metro Wolverhampton City Centre Loop	
<b>New Growth Points/Settlements of Significant Development</b>	Dudley Bus Improvements	Walsall Town Centre Interchange
	M5 Pensnett	West Bromwich Regeneration
	M6 J10	WM Red Routes Network
	Sandwell Bus Improvements	Wolverhampton Bus Improvements
	Walsall Bus Improvements	Wolverhampton Highways Improvements

Note: these schemes are subject to change following the introduction of DaSTS and a review of the current schemes within the RTPAP.

The RTPAP launch document provides further details of the aims of the Transport Priorities. In brief, it summarises the Black Country and NGPs/SSDs priorities as follows:

### **Black Country ‘Strategic Transport Spine’:**

*“This Regional Network Priority is a package of 8 potential projects which provide public transport improvements along with a supporting programme of highway improvements, to underpin economic regeneration and employment growth in the Black Country. The package will improve the accessibility of the strategic centres in the Black Country and provide better connectivity and integration with the wider regional and national networks.”*

### **New Growth Points/Settlements of Significant Development (NGP/SSD):**

*“This Regional Network Priority provides a wide variety of public transport and highway schemes (currently around 28 potential projects), which when integrated with other regional transport priorities will support sustainable growth in the new areas of regeneration and development, known as NGPs/SSD (Birmingham and Solihull, Coventry, East Staffordshire, the Black Country/Sandwell, Burton upon trent, Stafford, Telford, Shrewsbury, Hereford, Worcester, Redditch, Warwick/Leamington, Rugby and Nuneaton/Bedworth).”*

Smarter Choice initiatives are also playing an increasingly important role in meeting future transport and environmental objectives in the Black Country. Work on developing Area Wide/Corridor-based Travel Plan Strategies has already begun in the Black Country for Junctions 9 and 10 of the M6<sup>7</sup>.

## **1.6 Black Country Rail**

Connecting the four Black Country strategic centres with one another and improving external connections is key to the success of the Black Country in attracting business and inward migration. UK, European and Global markets will be accessible if only connections to key locations such as Birmingham City Centre and Birmingham International Airport are established and offer frequent, reliable services.<sup>8</sup>

Several radial routes into Birmingham are operating at or close to capacity, including the routes from Coventry, Wolverhampton, Leamington (via Solihull), Bromsgrove and Water Orton.<sup>9</sup>

Economic growth nationally is leading to increasing demands on the rail network. Development of rail capacity and capability to meet the growing demand is a central element of the Government's transport policy, which aims to provide a well performing network that accommodates the aspirations of both freight and passenger operators.

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<sup>7</sup> For further details please refer to the report Amey (2008) ‘Developing an Area Wide Travel Plan Solution: Proposals for Area 9 Corridor Travel Plan Strategy Junctions 9 and 10 (M6)’, Highways Agency, Birmingham

<sup>8</sup> Source: Black Country Consortium (2006) ‘The Black Country Study: The Future of the Black Country’

<sup>9</sup> Source: ‘Network Rail Route Plans 2006: Route 17 West Midlands’

Most of the West Midlands network is reported by Network Rail to already be operating at, or very close to capacity. Network Rail believes that the solution to passenger growth and future capacity requirements will be best met by a combination of initiatives, including:

- Measures to spread the peak and smooth the high peak requirements.
- Train lengthening, often supported by platform lengthening.
- Incremental enhancements, delivered on the back of planned track and signalling renewals, and certain limited stand alone enhancements. These have the potential to improve performance, enable specific increases in train paths and facilitate timetable restructuring. This is also vital for freight growth.
- Changes to the timetable structure to reduce the mix of different train types and the number of conflicting moves.

## 1.7 Highways

### 1.7.1 Existing Issues

The majority of the highway network is locally managed, but motorways and trunk roads are managed by the Highways Agency. As parts of the motorway network in the West Midlands run through the heart of the Black Country (i.e. the M5 and M6), capacity constraints at junctions and along these major routes need to be addressed to increase accessibility to all parts of the Black Country. For example, Junction 10 of the M6 is a major bottleneck hindering access between the M6 and northern parts of the Black Country; traffic between Walsall and Wolverhampton on the A454 is also affected by the bottleneck<sup>10</sup>. Although the promoting authority for this scheme is Walsall Metropolitan Borough Council, a joined up approach between the Local Authority and the Highways Agency is required for the successful management and implementation of the scheme.

### 1.7.2 Hard Shoulder Running/Active Traffic Management

The DfT report submitted to the Secretary of State for Transport in March 2008 entitled '*Advanced Motorway Signalling and Traffic Management Feasibility Study*' concluded that Hard Shoulder Running (HSR) with Active Traffic Management (ATM) could provide a large proportion of the benefits of widening at a significantly lower cost than conventional motorway widening schemes. Consultants Mouchel were requested to undertake Stage 1 economic appraisals of many potential locations on the motorway network for the adoption of HSR or other forms of managed motorway improvements in order to increase capacity during periods of traffic congestion.

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<sup>10</sup> Source: '*West Midlands Local Transport Plan 2006*'

The Birmingham Box Active Traffic Management scheme is currently being rolled out within the West Midlands. The scheme has been divided into three phases for delivery of which Phases 1 (M40 J16 to M42 J3a, M42 J7 to J9 and M6 J4 to J5) and 2 (M6 J8 to J10a) are currently under construction. Phase 3 of the scheme will operate between M6 Junction 5 and Junction 8. As part of the Highways Agency's Managed Motorway projects, Phase 3 of the scheme is proposed to contribute towards:

- Reliable journeys;
- Reduced congestion;
- Enhanced information to drivers; and
- Quicker response times to incidents.

Table 4 provides a high level programme for the roll out HSR in the West Midlands up to 2015 as set out in the Highways Agency's Business Plan for 2009-2010.

**Table 4: Highways Agency's Hard Should Running Programme**

Timescale	Work Planned
Major Road Schemes planned to start work during 2009/10	<ul style="list-style-type: none"> <li>• HSR on the M6 J8-J10a north of Birmingham</li> </ul>
Major Road Schemes planned to start work during 2010/11 and 2011/12	<ul style="list-style-type: none"> <li>• HSR on the M6 J5-J8 around Birmingham</li> </ul>
Major Road Schemes planned to start work by 2015	<ul style="list-style-type: none"> <li>• HSR on the M6 J10a-J13 north of Birmingham</li> </ul>

## 1.8 Transport Schemes and Key Delivery Agencies

There are a number of planned schemes for the Black Country within the RFA and RSS Policy T12: Priorities for Investment. Not all of these schemes currently have committed funding and there is a relatively high risk that these schemes will be delayed further given affordability and environmental concerns. Further details of all the RFA and RSS Policy T12 schemes for the Black Country are provided in Table 5.

The DfT has previously been considering the concept of a National Road User Charge, however, the focus has now changed to more local scale schemes, especially in light of the recent recession the UK has been experiencing. The implementation of a road pricing scheme may offer the potential to achieve further reductions on congestion. However, at this point in time, planned trials are yet to be commissioned; there are numerous legal, technical and other barriers to be overcome before such a scheme becomes a firm commitment.

In the meantime, numerous technology solutions being pursued by the Highways Agency will help to reduce congestion in hotspots, not least through roll-out of the ATM trial around the Birmingham Motorway Box.

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## 1.9 PRISM Modelling – PRISM: Black Country Study

### 1.9.1 Introduction

In 2008, the Black Country Consortium commissioned Mott MacDonald to assess the transport impacts of the various land use options being considered as part of the Black Country Study. Subsequently, the transport infrastructure investments required to deliver the strategy for Black Country were also assessed; the findings of which are presented in the report *'PRISM: Black Country Study: Transport Technical Document – Report'* (Mott MacDonald, July 2009). The transport options tested were developed to support the overall emerging RSS.

The modelling tool PRISM (Policy Responsive Integrated Strategic Model) was used for this assessment). PRISM is the strategic transport model for the West Midlands. It is based on state-of-the-art disaggregate modelling techniques which derive the travel behaviour from individual characteristics of people such as household income, marital status, age, gender and employment status. PRISM has detailed highway and public transport networks, for which trip matrices have been estimated and validated using 2001 West Midlands Transport Surveys. More details about PRISM can be obtained from [www.prism-wm.com](http://www.prism-wm.com).

### 1.9.2 Outcomes of the Study

The concluding remarks made from the study were as follows:

Implications of Transport Investment:

- The Black Country preferred network options enable an increase in overall trip-making, especially for public transport, indicating an increased level of activity.
- The delay on the network reduces with the introduction of Black Country preferred network options.
- There are local adverse impacts on the network noted due to the housing and network interventions. On the whole however, there are no major strategic concerns due to the proposed development scenarios. However, with the Black Country preferred network option there are less negative impacts of higher housing allocation.

### 1.10 Conclusions

Having considered the current capacity issues on the Black Country's transport network, the evidence suggested that an integrated approach to managing transport demand and supply is required. The current network is not likely to be able to cope with the extra pressure that will be exerted on the network from the increase in households forecast for the sub-region. However, if an integrated transport approach is adopted and planned transport schemes are delivered as per the Strategy, the delivery of additional housing within the sub-region is likely to have little impact on the current transport network situation.

The schemes identified for the Black Country within the LTP2, Regional Transport Priorities, RFA and RSS are important for the growth of the sub-region and delivering an integrated transport system.

**Table 5: Regional Funding Allocation and T12 Transport Schemes for the Black Country<sup>11</sup>**

Scheme name	Scheme sponsor	Project Funders	Relationship to RSS	Scheme completion	Costs	Risks
<b>Regional Funding Allocation</b>						
Red Routes	CEPOG	LA/LTP	PA2, T5, T8, T9	March 2012 (end of construction works)	£30.65m	Budget undero Equality impact assessments Resource constraints Programme delay
Wolverhampton Centre Access & Regeneration	Wolverhampton City Council (WCC)	LTP, LA, AWM, Private Developer	PA2, T5, T8, T9	2013	£176m (total cost)	Completion of development agreement with private sector partner Completion of agreements with stakeholder partners (Network Rail, Virgin Trains, Centro, British Waterways Board) Approval to public sector financial contributions
Metro Extension from Wednesbury to Brierley Hill	Centro	LTP /Private Sector/LAs	T5, UR1	(Business Case submitted to DfT July 2006)	Outturn cost - £292m	Affordability by central Government
Owen Street Level Crossing Relief Road	Sandwell MBC	LA/LTP/ Network Rail	PA2, T5, T9	February 2010 (end of construction works)	£27.17m	DfT do not approve new increased cost estimate
Walsall Town Centre Transport Package	Walsall MBC	LA/LTP	PA2, T5, T8, T9, PA11	Spring 2009 (end of construction works)	£18.71m	S.U. works take longer than programmed Delays to completion of S.U. diversion works
Brierley Hill Sustainable Access Network	Dudley MBC	LTP/Private	UR3, PA2, T3, T5	September 2008 (end of construction works)	£28.60m	Prevented from accessing land Unable to accommodate excess material on site Unforeseen private services and Statutory Undertakers apparatus Waste classification under new disposal regulations Interface with construction of LIFT development Adoption of Waterfront Way within available budgets

<sup>11</sup> Source: derived from WMRA Transport Delivery Plan, Spring 2007 (Appendices) and the Black Country Consortium

Scheme name	Scheme sponsor	Project Funders	Relationship to RSS	Scheme completion	Costs	Risks
Darlaston SDA	Walsall MBC	LA/LTP	PA2, T3, T9, T10	April 2010 (end of construction works)	£22.0m	Changes to development proposals and land remediation proposals Statutory Order and Planning procedures failing DfT funding dependant upon land remediation funding Serious ground contamination Resistance from heritage groups to proposals affecting the Bentley Mill Way aqueduct Environment Agency and British Waterways concerns regarding contamination and design issues
West Midlands UTC	WCC	LA/LTP	T3, T5, T9, T10	August 2012 (end of construction works)	£28.0m	Scheme has been granted conditional approval Scheme at risk until full DfT approval is given, however, full approval is anticipated in June 2008
A41 Expressway/A4031 All Saints Way Junction Improvement	Sandwell MBC	LA/LTP/ Developer	PA2, T3, T5, T9	October 2010 (end of construction works)	£23.857m	Scheme at risk until full DfT approval is given
A4123/A461 Junction Improvement, Burnt Tree	Sandwell MBC/ Dudley MBC	LTP	PA2, T5, T9	October 2010 (end of construction works)	£10.94m	Project cost escalating above DfTs valuation
M54 Junction 2 – Wobaston Road (i54)	WCC	LTP/ LA/ Private	PA2, T5, T6, T9	(Programme Entry)	£7.67m	Objections from stakeholders and public consultations
Cradley Heath Town Centre Strategy	Sandwell MBC			(Committed scheme)	£0.23m	
West Bromwich Regeneration Infrastructure, Phase 1	Sandwell MBC	LA/LTP/ Developer	UR1A, UR1C, UR1D, PA2, PA4, QE3, T3, T5, T9	March 2014 (end of construction works)	£13.30m	Objections during public consultation Unsuccessful Major Scheme Business Case Objections to CPO/SRO
<b>T12: Priorities for Investment (to 2011)</b>						
West Coast Main Line Strategy	DfT	DfT	T5, T9	(2009 onwards – Stafford re-modelling)	£8.125bn	Costs exceed budget for elements of the project. Further pressures on rail industry funding requires savings to be made Delivery timescale slips because of supply pressures within the industry
M54 to M6 / M6 (Toll) Link Road	HA	Macquarie Infrastructure	T9, T12, PA3	2012 (provisional)	Not yet available	Delay potential as scheme passes through statutory processes



Scheme name	Scheme sponsor	Project Funders	Relationship to RSS	Scheme completion	Costs	Risks
		Group / HA		forecast)		Interaction with M6 widening scheme could have a knock-on effect on delivery
Active Traffic Management for M5/M6/M42 (Birmingham Motorway Box)	HA	HA	T9	March 2011: Phase 2 implemented (provisional forecast)	£725m (indicative cost only)	<ul style="list-style-type: none"> <li>The present bid for funding only covers Phases 1 and 2. This funding has not been agreed – bid is with DfT</li> <li>Short timescales for delivery of phases 1 &amp; 2 to meet Productivity TIF deadlines</li> <li>Coordination of maintenance works that are a prerequisite for delivery</li> </ul> <i>Phases 3 – 6 would possibly be subjects of future bidding rounds</i>
WM short and medium term capacity and performance enhancement schemes	Network Rail/DfT	Network Rail/DfT	T5	2015 (completion of Stafford scheme)	Costs for each scheme will be developed in order to inform the business case	Funding shortfall at the time when decisions have to be made to ensure that any infrastructure enhancement schemes are aligned with signalling renewal schemes Cost increases making any enhancements unaffordable or worsening the business case
Bus Showcase/Quality Bus Networks	LAs/Centro	LTP/Bus Operators	T5	Unknown	Approximately £22.5m in total	Unsuccessful major scheme bids to fund the NS PT Project Political acceptance of bus priority measures that may disadvantage other motorised traffic

**Key:**

Policy Number	Policy Description	Policy Number	Policy description
T1	Developing accessibility and mobility in the region to support the RSS	PA2	Urban Regeneration Zones
		PA3	High-technology corridors
T3	Walking and cycling	PA10	Tourism and culture
T5	Public transport	PA 11	The network of town and city centres
T6	Strategic Park and Ride policy	PA12	Birmingham's role as a 'World City'
T9	The management and development of national and regional transport networks	UR1	Implementing urban renaissance
		UR2	Towns and cities outside major urban areas
		UR3	Enhancing the role of city, town and district centres
T10	Freight		
T11	Airports	CF2	Housing beyond the major urban areas
PA1	Prosperity for All	RR1	Rural renaissance