West Midlands Regional Assembly – Regional Planning Body

This report has been prepared on behalf of the West Midlands Regional Assembly, the Regional Planning Body, as technical advice to inform the Regional Spatial Strategy Revision process. It is one of a suite of technical reports commissioned to inform the development of spatial policy as part of Phase Two of the Revision of the West Midlands Regional Spatial Strategy.

Every effort has been made to verify and check the contents of this report including all figures and tables. However the West Midlands Regional Assembly can not accept any responsibility for errors or inaccuracies.

Further information and details of the West Midlands Regional Strategy and the Revision process can be found on our web site www.wmra.gov.uk

A RECOMMENDED WEST MIDLANDS

REGIONAL FREIGHT STRATEGY

by

MDS Transmodal Limited

and

Mott Macdonald

FINAL

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1. INTRODUCTION

1.1 Background

Each of the Metropolitan area and the local authorities in the West Midlands region has produced its own Local Transport Plan which include freight issues. However due to the nature of Local Transport Plans (LTPs), they only produce strategies and schemes for a fairly localised area. However many freight issues need to be addressed at a regional level rather than through individual LTPs. For example key constraints on the rail network are not limited to localised effects, and they need to be examined from a regional perspective rather than at LTP level. It is for this reason that the West Midlands commissioned a study, the outcome of which would be the production of a recommended Regional Freight Strategy.

The stated objectives of the study were to:

- Develop and complete the regional freight profile
- Present objectives and relevant policies linked to Regional Transport Strategy/ Regional planning Guidance
- Highlight the key trends and issues
- Present regional (and sub-regional) data in a clear, concise and understandable manner. Source data from the strategy stakeholders including, where possible, directly from the freight industry
- Propose short, medium and long term strategic interventions
    - Identify opportunities for modal shift
    - Identify economically viable ways of making road based freight safer and less environmentally damaging
- Generate and implement a plan with defined targets and measurable outputs

A copy of the full brief to the consultants is presented in the Appendix.

This document presents the consultants recommendations for a Freight Strategy for the West Midlands region, covering policy measures and interventions, that could be endorsed by the West Midlands planning bodies and the West Midlands Regional Assembly. The strategy has been developed for the West Midlands by MDS Transmodal Ltd and Mott Macdonald.

Section 2 of this document details the results of a freight forecasting exercise undertaken to inform the strategy development. These forecasts have identified the main freight flow trends which the freight strategy will have to address. Section 3 details a strategy for road freight transport, while Section 4 presents a rail freight strategy for the West Midlands. Section 5 details other policy interventions and measures, including pipeline and airfreight strategies. Section 6 describes funding sources that may be available to support the strategy. A summary and implementation plan is presented in Section 7.

A Technical Annex document accompanying this strategy presents the baseline data and background information which has underlined and informed the development of the strategy. The strategy has attempted to address the key issues and trends identified in the Technical Annex. A short summary of the relevant Annex section(s) is presented at the start of each section of this document.

Unless otherwise stated, where the document refers to a policy or intervention to be adopted by 'the West Midlands', this is taken to mean the planning bodies of the West Midlands region/West Midlands Regional Assembly.

1.2 The West Midlands Region

Located in the centre of England, the West Midlands region covers around 13,000km^2. The region incorporates the counties of West Midlands, Warwickshire, Staffordshire, Shropshire, Herefordshire and Worcestershire. After the South East, the West Midlands region has the second largest concentration of population, being the home to some 5.3 million people. At the centre of the region is the West Midlands conurbation, made up of England's second city (Birmingham), together with the Black Country and Coventry. Other major urban areas in the region include Telford, Stafford, Burton on Trent and the potteries conurbation of Stoke on Trent. A large part of the region is also rural in nature, particularly the county of Shropshire.

A large manufacturing sector still operates in the region, including the major auto-manufacturers Land Rover, MG Rover and Jaguar, and their associated component suppliers. Out of the 2.4 million working population in the region, nearly 600,000 (25%) are employed in manufacturing. The region accounts for 11% of UK manufacturing and 25% of manufacturing exports. As a result the region generates significant volumes of freight for transport within the West Midlands and to other locations in Britain and abroad. There is also a significant service and knowledge based economy in the region. High levels of employment in these sectors is driving greater levels of consumption. Consequently the region also attracts large volumes of inward freight flows, and as a result there is a significant logistics sector presence in the region. Distribution accounts for around 9% of all jobs in the region. Many of the major retailers and logistics providers have located large

distribution centres in the region to serve both the regional and national market, including Sainsbury's at Hams Hall, Safeway at Tamworth and TNT at Nuneaton. Express parcels operators have also established depots in the Black Country. The West Midlands is therefore a region that both generates and attracts significant volumes of freight. In 2002 approximately 160 million tonnes of freight was generated in the West Midlands for delivery in the region and to other UK and international markets. In the same year, around 173 million tonnes of goods were delivered in the West Midlands.

In addition to the large volumes of freight the region generates and attracts, a significant volume of UK freight passes through the region. Freight flows between the other large producing/consuming regions of Britain i.e. North West/Scotland to/from the South East have to pass through the West Midlands. In 2002 around 14 million tonnes of goods passed through the region by road in each direction between the North West/Scotland and the South East. Consequently Britain's most important national transport infrastructure is centred on the West Midlands region. The M6 motorway is the primary north-south trunk route for freight moved by road. The section of the motorway through Birmingham is arguably the most heavily used motorway in Europe. The 'M6 Toll Road' has recently been built to provide extra capacity at this key point in the national road infrastructure.

The West Coast Mainline is also the primary north-south trunk rail route. As well as linking locations where rail freight can provide cost competitive solutions, e.g. Port of Felixstowe to the North West, it has the most generous loading gauge available on the British network meaning it attracts large volumes of intermodal freight. However concerns have been raised about key constraints on this route in the West Midlands, particularly capacity and bottlenecks affecting reliability. On average around 107 freight trains per day pass through the West Midlands en-route between other regions, a significant proportion of which pass through the Trent Valley on the WCML.

In many respects the West Midlands region has a unique position in the UK, being an important origin/destination of freight in its own right, accommodating significant volumes of transiting freight and having the greatest concentration of Britain's key transport infrastructure. It is against this background that the freight strategy has been undertaken.

1.3 Regional Spatial Strategy for the West Midlands

Regional Spatial Strategy for the West Midlands (RSS11), previously known as Regional Planning Guidance (RPG11), was published in June 2004. The role of RSS (RPG) is to provide a spatial strategy to guide the preparation of local authority development plans and transport plans so that they can deliver to a coherent framework for Regional development. Local authorities must take account of RPG when preparing their development and transport plans. RPG can also guide individual planning applications and appeals. As a spatial

strategy, RPG will inform the development of strategies and programmes of public sector agencies, and provide the long term planning and land use framework for the Regional Economic Strategy. One of the key features of RPG is the role it plays in addressing the links that exist between economic, social and environmental issues and the importance of developing an integrated policy response.

RPG11 states that 'The overall vision for the West Midlands is one of an economically successful, outward looking and adaptable Region, which is rich in culture and environment, where all people, working together, are able to meet their aspirations and needs without prejudicing the quality of life of future generations'. Specifically in terms of transport, the vision looks forward to a region with an efficient network of integrated transport facilities and services which meets the needs of both individuals and the business community in the most sustainable way.

RPG11 has therefore provided the background and context against which the West Midlands Regional Freight Strategy has been developed. Policy T10 sets out RPG11's policy for freight transport, and consequently this has guided the development of the West Midlands Regional Freight Strategy. It stresses the importance of freight movements to the prosperity of the Region, particularly given that the Region accounts for 25% of UK manufacturing exports. It also point outs that freight movements encompass not only heavy freight movements generated by manufacturing, construction and retail sectors, but also movements of documents, office supplies etc. that are transported by other vehicles.

Policy T10: Freight

A. The reliable movement of goods and services is the lifeblood of the West Midlands economy. Development plans, local transport plans and the economic strategy should aim to improve the efficiency of freight movement and support the development of Regional Logistics Sites (PA9), by:

i) addressing problems for freight vehicles on the Primary Route Network to improve the reliability of journeys;

ii) addressing delivery and servicing problems through traffic management;

iii) encouraging the development of local and Regional Freight Quality Partnerships

iv) encouraging the use of rail and inland waterways for freight

v) safeguarding existing and disused railway lines and sidings which could be used for rail traffic in the future

vi) encouraging the development of new rail freight terminals and improving access to existing terminals

vii) encouraging developments that generate significant amounts of freight in locations that have good access to the rail network; and

viii) encouraging local sourcing

B. Local authorities and other agencies should co-operate to develop a Regional Freight Strategy covering all forms of freight transport i.e. road, rail, water and air taking into account the Regional Rail Freight Strategy.

Paragraph 9.83 of RPG11 states that the implementation of this policy will be based around the development of the Regional Freight Strategy, local freight strategies in Local Transport Plans and Freight Quality Partnerships.

1.4 Regional Logistics Study

In parallel to the production of this Regional Freight Strategy, Advantage West Midlands are in the process of undertaking a two phase study examining the relationship between the logistics sector in the West Midlands and its economy and land use issues. The first phase of the study, recently completed by King Sturge, expected the study consultants to:

- Provide a clear picture of the logistics sector in the short, medium and long term
- Identify robust criteria for assessing and choosing Regional Logistics Locations and sites

The study included a review of the logistics sector in the West Midlands, planning policy, employment and skills, demand for warehousing and the potential supply of suitable sites. It also included a postal questionnaire consultation with manufacturing companies in the region together with a more limited consultation exercise with logistics operators and other associated agencies.

The main conclusion in terms of specific site assessment criteria for regional logistics sites recommended that sites should be a minimum of 10 Hectares, have good motorway access, be capable of offering high bay warehousing and be located away from incompatible neighbours.

Phase two of the study is expected to be commissioned shortly. This will review the phase one outputs together with providing advice on the number, size and preferred broad locations of sites, taking into account the recommendations of this strategy.

1.5 Acknowledgements

The consultants would like to extend their thanks to the following contributing bodies in the West Midlands for the valuable views and information provided during the development of the strategy:

Advantage West Midlands
Birmingham City Council
Coventry City Council
Dudley MBC
Sandwell MBC
Shropshire CC
Solihull MBC
Staffordshire CC
Stoke on Trent Council
Telford and Wrekin Council
Walsall MBC
Warwickshire CC
West Midlands Local Government Association
West Midlands Regional Assembly
Wolverhampton MBC
Worcestershire CC

The consultants would also like to thank the following organisations who provided valuable views and information during the development of the strategy:

EWS Railway Ltd
Freight Transport Association
Freightliner Ltd
Highways Agency
Network Rail
Regional Freight Quality Partnerships
Road Haulage Association
Strategic Rail Authority

2. STRATEGY FORECASTS

This section presents the results of freight forecasts undertaken for both rail freight and road transport in the West Midlands. The purpose of the forecasting exercise was to identify the main freight flow trends to, from and via the West Midlands region up to 2021 which the freight strategy will have to address.

2.1 The Modelling Technique

The forecasting tool used has been the **MDS Transmodal GB Freight Model**, a comprehensive transportation model developed by MDS Transmodal for analysing GB - domestic and GB - international freight flows.

The model was also specifically designed to produce forecasts, including unitised trade between the UK and the Continent (by mode), and road and rail freight volumes domestically. The model uses regression analysis of historic trade data since 1988, together with projections into the future using both linear and exponential extrapolation. Freight is then assigned to mode/route in a similar way to current cargo movements. It is therefore able to forecast future freight traffics by route and mode under different operating and policy scenarios. The model can therefore 'test' likely market variations, such as changes to supply/capacity, transport costs, the size/capacity of rail freight terminals (including warehouse floor space that is rail connected) and new EU/Government policies to ascertain their impact in terms of route and mode.

The forecasts undertaken are 'baseline' or 'committed policy and infrastructure' forecasts. This is because they incorporate and effectively test the impact of committed EU and UK Government policy initiatives and committed new/enhanced infrastructure. The forecasts therefore include:

- The Working Time Directive. This assumes that labour costs per hour for goods vehicle drivers increases over time by 50%
- Distance-based taxation for road haulage is introduced by the UK Government, so that UK fuel duty on diesel is reduced to Continental levels and the same amount of tax is levied on all haulage (GB and continental) on a distance-based system; this results in road haulage cost increases for non UK hauliers
- The Company Neutral Revenue Grant Scheme (CNRS) is implemented fully, providing an operating subsidy to unit load services both domestically and through the Channel Tunnel
- Rail infrastructure improvements. These include improving line speeds, loading gauge enhancements and longer train lengths. These improvements are consistent

with forecasting work undertaken for the Strategic Rail Authority by MDS Transmodal.

- An increase in the amount of distribution warehousing which is located on rail linked sites. The model assumes 3 million m^2 nationally and 365,000m^2 in the West Midlands region.

2.2 Road Freight Forecasts

The road freight forecasts are for 2011 and 2021. They take into account all committed policy and infrastructure initiatives, as described above.

Table 1: Summary Road Freight Forecasts 2011 and 2021 v 2002

	000s Tonnes		
	2002	**2011**	**2021**
Goods Delivered in West Midlands - from Other Regions	62,278	70,213	82,389
Goods Collected in West Midlands - to Other Regions	54,768	64,067	76,509
Goods Collected/Delivered Intra West Midlands	101,650	94,646	86,324
TOTAL	**218,697**	**228,926**	**245,222**

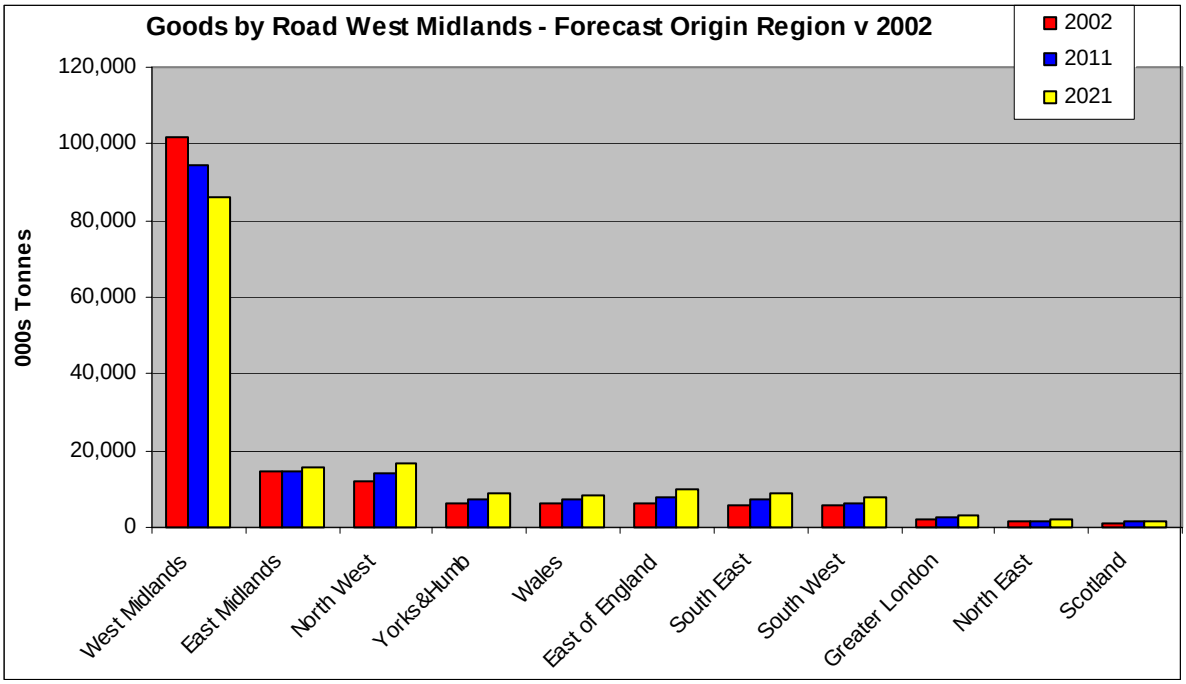
Source: MDS Transmodal GBFM

Table 2: Forecast Road Freight West Midlands by Region 2011 and 2021 v 2002

	000s Tonnes				000s Tonnes		
Origin Region	**2002**	**2011**	**2021**	**Destination Region**	**2002**	**2011**	**2021**
West Midlands	101,650	94,646	86,324	West Midlands	101,650	94,646	86,324
East Midlands	14,831	14,727	15,604	East Midlands	11,314	12,288	13,756
North West	12,174	14,053	16,464	North West	10,362	12,034	14,103
Yorks&Humb	6,405	7,271	8,702	South East	6,977	8,522	10,520
Wales	6,403	7,071	8,233	East of England	5,490	6,703	8,348
East of England	6,279	7,763	9,779	Wales	5,344	6,278	7,540
South East	5,853	7,216	9,035	South West	5,001	5,934	7,154
South West	5,719	6,511	7,653	Yorks&Humb	4,646	5,470	6,610
Greater London	2,042	2,593	3,253	Greater London	2,847	3,592	4,553
North East	1,426	1,611	1,890	North East	1,395	1,656	2,007
Scotland	1,145	1,397	1,776	Scotland	1,393	1,591	1,918
TOTAL	**163,929**	**164,859**	**168,713**	**TOTAL**	**156,418**	**158,713**	**162,833**

Source: MDS Transmodal GBFM

Graph 1: Forecast Road Freight West Midlands by Region 2011 and 2021 v 2002



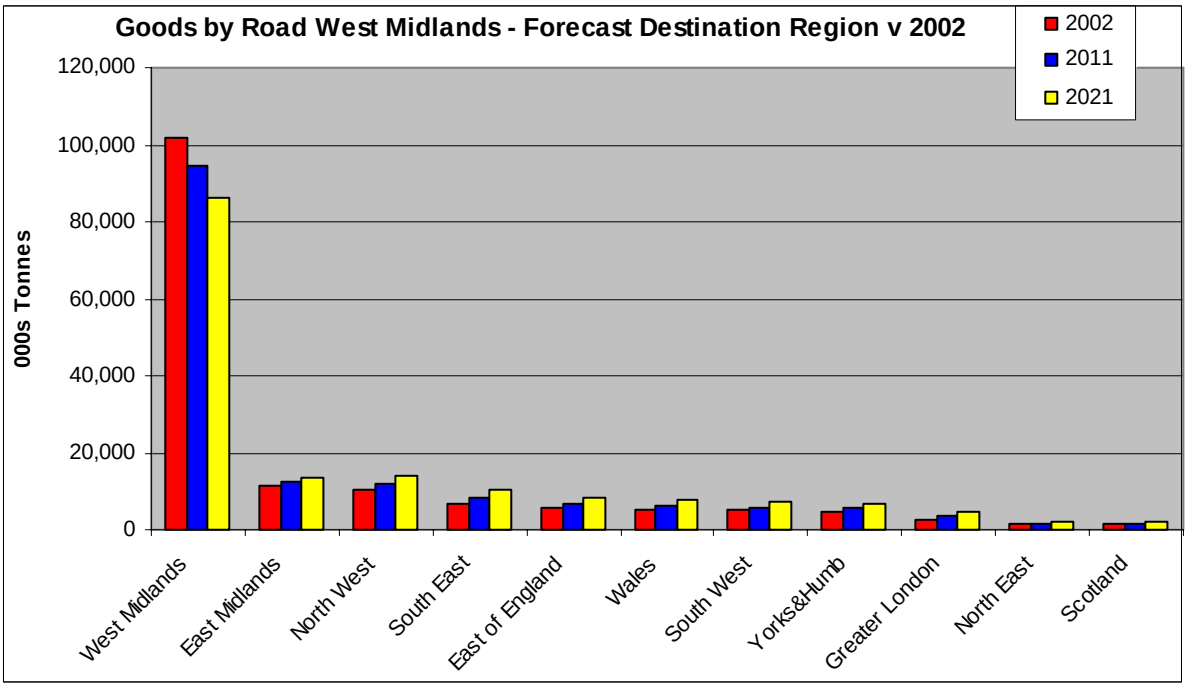


Table 3: Forecast Road Freight Intra West Midlands by County 2011 and 2021

Intra West Midlands 2011

	Destination County			**000s Tonnes**		
	Hereford/ Worcester	Shropshire	Staffordshire	Warwickshire	West Midlands	**TOTAL**
Origin County						
Hereford/Worcester	8,766	685	342	392	1,412	**11,597**
Shropshire	820	6,491	930	92	1,115	**9,448**
Staffordshire	607	859	15,939	975	4,454	**22,834**
Warwickshire	837	527	897	5,264	3,251	**10,777**
West Midlands	1,357	1,086	3,096	2,644	31,807	**39,990**
TOTAL	**12,387**	**9,648**	**21,205**	**9,366**	**42,039**	**94,646**

Intra West Midlands 2021

	Destination County			**000s Tonnes**		
	Hereford/ Worcester	Shropshire	Staffordshire	Warwickshire	West Midlands	**TOTAL**
Origin County						
Hereford/Worcester	7,792	835	397	374	1,342	**10,739**
Shropshire	936	5,754	864	106	1,082	**8,742**
Staffordshire	649	819	14,715	1,033	4,127	**21,343**
Warwickshire	798	640	1,085	4,658	2,952	**10,133**
West Midlands	1,237	1,029	2,713	2,347	28,042	**35,367**
TOTAL	**11,410**	**9,077**	**19,773**	**8,517**	**37,546**	**86,324**

Source: MDS Transmodal GBFM

Table 4: Forecast Road Freight by Commodity Destination West Midlands 2011 and 2021

Destination West Midlands 2011		Destination West Midlands 2021	
Commodity	**000s Tonnes**	**Commodity**	**000s Tonnes**
Manufactures	17,804	Agri	3,968
Food	12,708	Auto	3,640
Construction	11,960	Beverages	2,684
Mail	5,172	Chemicals	3,607
Metals	4,572	Coal	1,179
Agri	3,295	Construction	12,723
Chemicals	3,078	Food	14,992
Auto	3,028	Forest	1,961
Beverages	2,277	Mail	6,476
Forest	1,631	Manufactures	21,398
Petro	1,563	Metals	5,434
Unknown	1,385	Ore	828
Coal	1,001	Petro	1,839
Ore	730	Unknown	1,651
Waste	8	Waste	8
TOTAL	**70,213**	**TOTAL**	**82,389**

Table 5: Forecast Road Freight by Commodity Origin West Midlands 2011 and 2021

Origin West Midlands 2011		Origin West Midlands 2021	
Commodity	**000s Tonnes**	**Commodity**	**000s Tonnes**
Agri	3,551	Agri	4,232
Auto	3,442	Auto	4,140
Beverages	2,781	Beverages	3,356
Chemicals	1,870	Chemicals	2,250
Coal	386	Coal	450
Construction	9,110	Construction	10,491
Food	9,969	Food	12,046
Forest	1,396	Forest	1,661
Mail	5,071	Mail	6,293
Manufactures	16,002	Manufactures	19,306
Metals	4,188	Metals	5,077
Ore	1,153	Ore	1,302
Petro	3,335	Petro	3,772
Unknown	1,798	Unknown	2,118
Waste	16	Waste	14

TOTAL	**64,067**	**TOTAL**	**76,509**

Table 6: Forecast Road Freight by Commodity Intra West Midlands 2011 and 2021

Intra West Midlands 2011		**Intra West Midlands 2021**	
Commodity	**000s Tonnes**	**Commodity**	**000s Tonnes**
Agri	4,367	Agri	4,172
Auto	4,249	Auto	3,826
Beverages	2,478	Beverages	2,255
Chemicals	1,697	Chemicals	1,532
Coal	553	Coal	524
Construction	25,197	Construction	23,052
Food	9,662	Food	8,857
Forest	1,111	Forest	1,060
Mail	1,876	Mail	1,706
Manufactures	25,188	Manufactures	22,701
Metals	6,667	Metals	5,968
Ore	1,506	Ore	1,344
Petro	5,493	Petro	5,173
Unknown	2,113	Unknown	1,938
Waste	2,488	Waste	2,215
TOTAL	**94,646**	**TOTAL**	**86,324**

Source: MDS Transmodal GBFM

Table 7: Forecast North-South Transit Flows via West Midlands 2011 and 2021 v 2002

North to South 2011

	Origin	**000s Tonnes**	
Destination	**North West**	**Scotland**	**TOTAL**
East of England	5,225	399	**5,624**
Greater London	2,101	259	**2,361**
South East	4,633	495	**5,128**
South West	3,086	269	**3,355**
TOTAL	**15,046**	**1,422**	**16,468**
TOTAL 2002			***14,155***

North to South 2021

	Origin		
Destination	**North West**	**Scotland**	**TOTAL**
East of England	6,634	440	**7,074**
Greater London	2,700	283	**2,983**
South East	5,962	502	**6,464**
South West	3,722	295	**4,016**
TOTAL	19,018	1,519	**20,538**
TOTAL 2002			***14,155***

South to North 2011

	Destination	**000s Tonnes**	
Origin	**North West**	**Scotland**	**TOTAL**
East of England	5,391	642	**6,033**
Greater London	1,729	281	**2,010**
South East	4,660	417	**5,077**
South West	2,645	479	**3,125**
TOTAL	**14,426**	**1,819**	**16,245**

South to North 2021

	Destination		
Origin	**North West**	**Scotland**	**TOTAL**
East of England	6,715	861	**7,575**
Greater London	2,175	327	**2,502**
South East	5,912	398	**6,311**
South West	3,295	529	**3,824**
TOTAL	**18,097**	**2,115**	**20,212**

TOTAL 2002	***13,633***	***TOTAL 2002***	***13,633***

Table 8: Forecast North East-South West Transit Flows via West Midlands 2011 and 2021 v 2002

North East to South West 2011

	Origin	000s Tonnes		
Destination	**East Midlands**	**North East**	**Yorks&Humb**	**TOTAL**
South West	3,714	327	2,055	**6,097**
Wales	2,727	453	2,361	**5,540**
TOTAL	**6,441**	**780**	**4,416**	**11,637**
TOTAL 2002				***10,468***

South West to North East 2011

	Destination	000s Tonnes		
Origin	**East Midlands**	**North East**	**Yorks&Humb**	**TOTAL**
South West	2,321	257	1,475	**4,052**
Wales	2,014	550	1,725	**4,290**
TOTAL	**4,335**	**807**	**3,200**	**8,342**
TOTAL 2002				***7,306***

North East to South West 2021

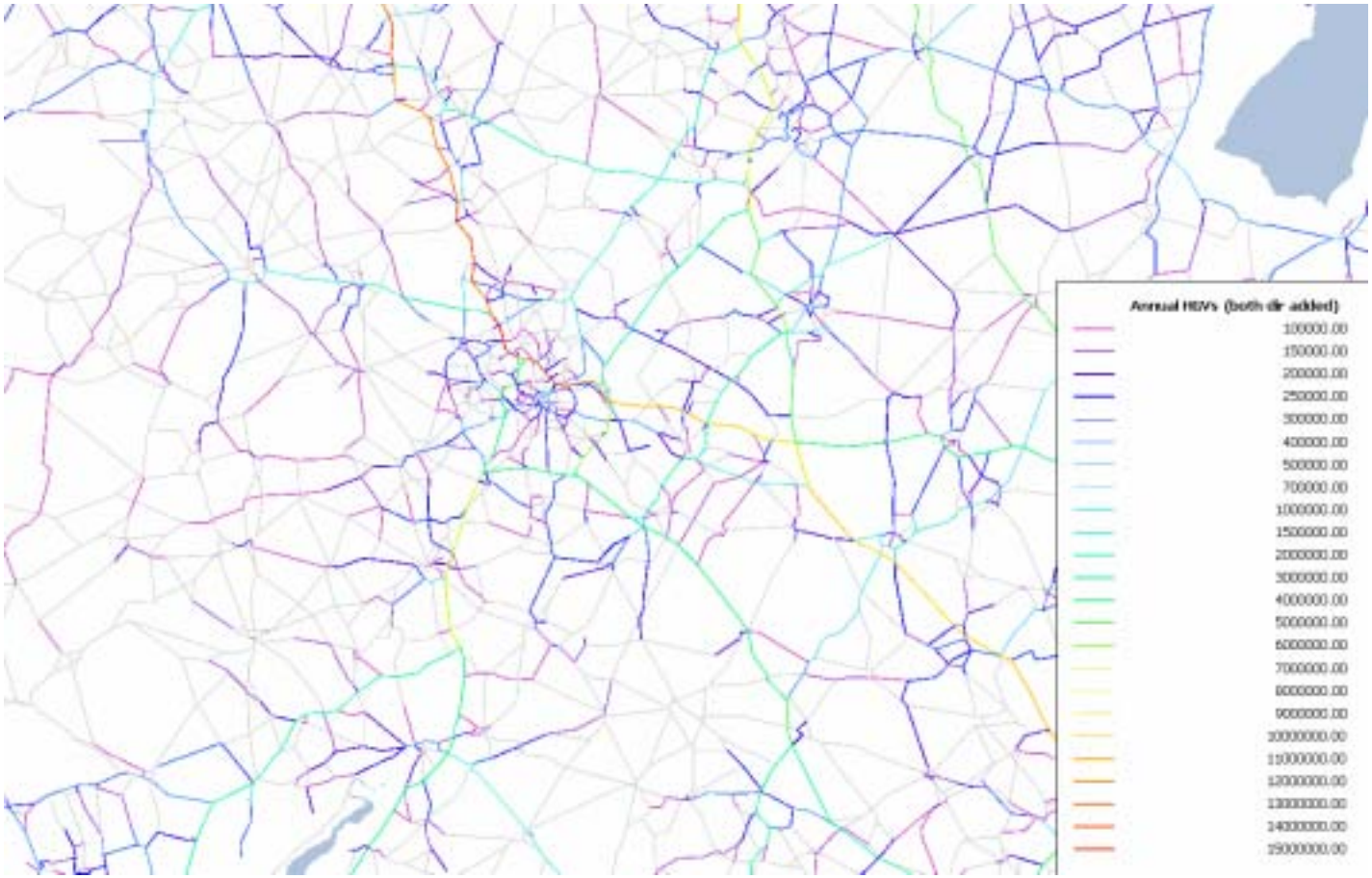
	Origin	000s Tonnes		
Destination	**East Midlands**	**North East**	**Yorks&Humb**	**TOTAL**
South West	4,359	356	2,444	**7,159**
Wales	3,144	512	2,786	**6,442**
TOTAL	**7,503**	**868**	**5,230**	**13,601**
TOTAL 2002				***10,468***

South West to North East 2021

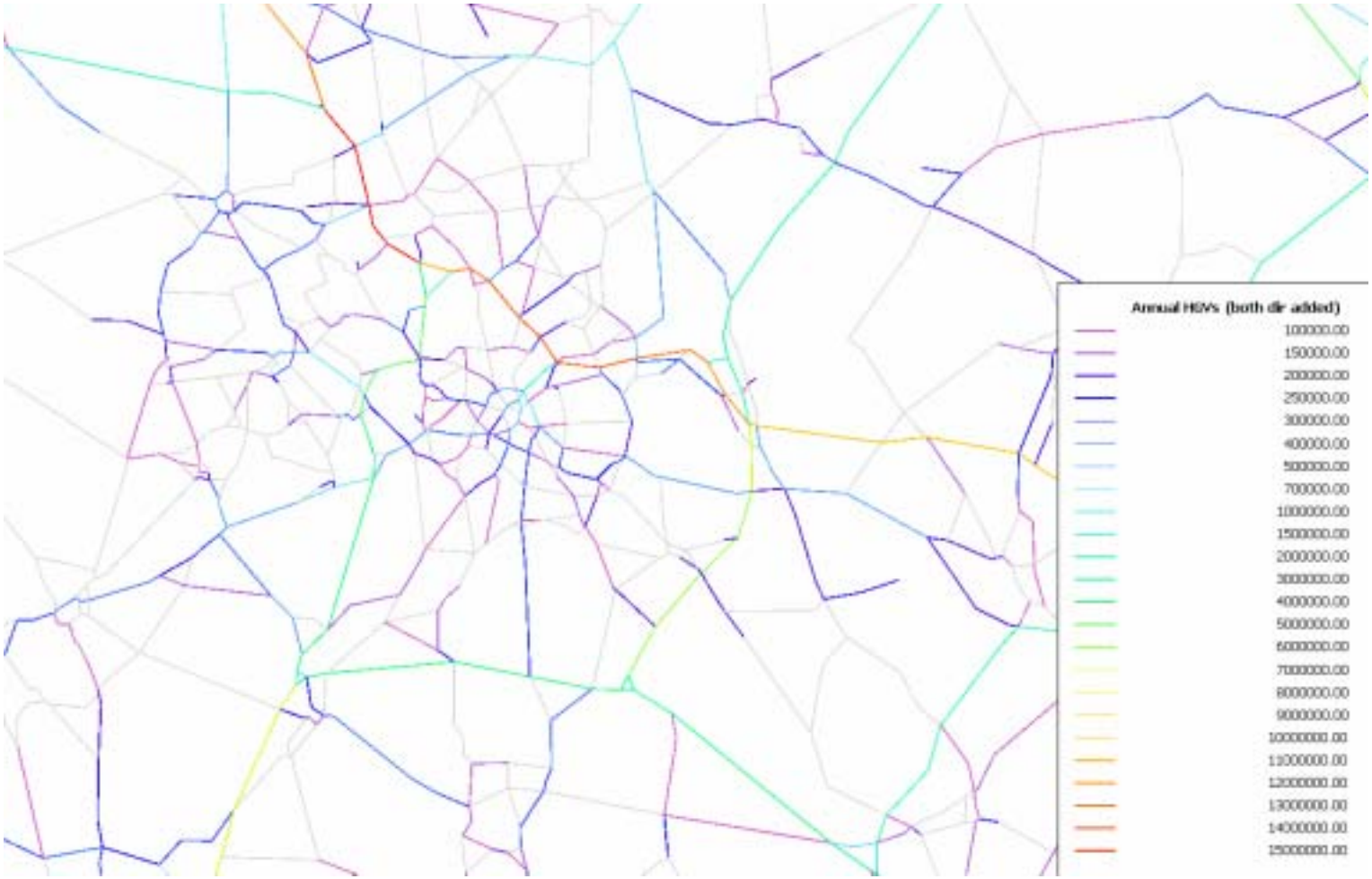
	Destination	000s Tonnes		
Origin	**East Midlands**	**North East**	**Yorks&Humb**	**TOTAL**
South West	2,815	289	1,813	**4,917**
Wales	2,303	642	2,005	**4,950**
TOTAL	**5,118**	**931**	**3,818**	**9,867**
TOTAL 2002				***7,306***

The GIS maps below show theses forecast tonnages as vehicle numbers, modelled as annual numbers of goods vehicles allocated to the West Midlands highway network, including those flows which 'transit' via the West Midlands. They are shown as annual two-way flows i.e. both directions added together. The first map shows the entire West Midlands region, with the second map focusing on the West Midlands conurbation. The order of the GIS maps is:

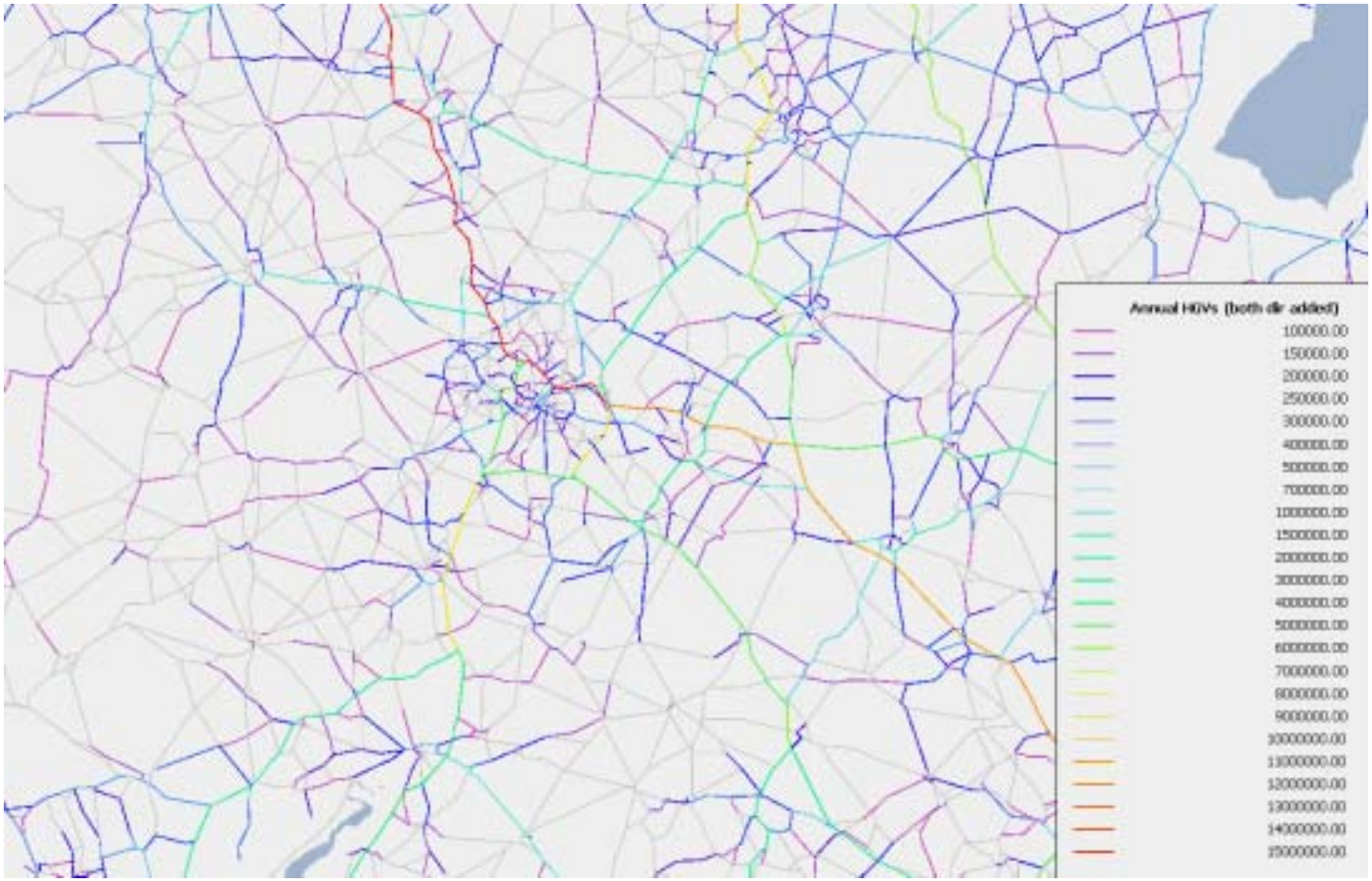
- West Midlands 2011
- Birmingham area 2011
- West Midlands 2021
- Birmingham area 2021



Map 1: Forecast Annual HGVs by Route West Midlands 2011



Map 2: Forecast Annual HGVs by Route Birmingham Area 2011



Map 3: Forecast Annual HGVs by Route West Midlands 2021

Map 4: Forecast Annual HGVs by Route Birmingham Area 2021

Table 9: Annual Forecast HGVs for 2011 and 2021 v 2002 for Selected Highway Links (Both Directions)

	Millions HGVs		
	2002	**2011**	**2021**
M6 Jct 13-12	13.6	14.3	17.3
M6 Jct 10-8	14.3	15.4	18.4
M6 Jct 8-6	13.8	14.1	16.8
M6 Jct 6-4a	13.1	13.7	16.4
M6 Jct 4-2	9.9	10.8	12.9
M5 Jct 1-2	5.5	5.8	6.7
M5 Jct 3-4a	4.0	4.3	5.0
M5 Jct 4a-5	7.3	7.7	8.9
M42 Jct 1-2	4.4	4.6	5.3
M42 Jct 4-6	6.0	6.6	7.8
M42 Jct 8-10	3.4	3.9	4.4
A50 between A500-A38	1.8	2.1	2.3
M54 Jct 2-3	2.2	2.4	2.7
M54 Jct 3-4	1.8	1.9	2.1
A38 between A5-A50	1.2	1.3	1.3
A38 between A5-M6	0.8	0.8	0.8
A5 between M54-A49	1.3	1.3	1.5
A5 between A49-A483	0.6	0.6	0.6
A49 between A5-A456	0.4	0.4	0.4

2.2 Rail Freight Forecasts

The rail freight forecasts are for 2015 and 2021. The forecasts are consistent with those undertaken for the SRA to support the preparation of their Strategic Rail Freight Interchange policy document (Appendix G of the policy document). Nationally the model forecasts that total non-bulk rail freight lifted in 2015 will be 66 million tonnes. Bulk rail freight in the same year is forecast to be 135 million tonnes. This is shown in the table below by traffic type.

Table 10: National Rail Freight Forecasts for 2015 and 2021 v 2003

	000s Tonnes		
	2003	**2015**	**2021**
Commodity			
Auto	810	1,785	2,040
Beverages	0	2,115	2,391
Food	0	3,473	4,035
Intl Intermodal	2,627	17,550	24,497
Mail	375	933	1,193
Manufactures	0	14,972	17,366
Maritime Containers	10,054	24,578	29,171
Nuclear	96	96	95
TOTAL	**13,962**	**65,501**	**80,789**

	000s Tonnes		
	2003	**2015**	**2021**
Commodity			
Chemicals	1,757	4,856	5,096
China Clay	998	871	807
Coal	45,882	31,731	24,482
Construction	13,361	58,855	61,126
Forest	1,409	2,687	2,836
Metals	10,373	14,295	14,339
Ore	6,832	6,339	7,025
Petro	5,547	12,001	12,642
Waste	2,663	2,879	2,821
TOTAL	**88,821**	**134,515**	**131,174**

Source: MDS Transmodal GMFM

The forecasts were further interrogated to describe the West Midlands region's share of these projections and how these sub divide by traffic type. The Table below presents a summary of total forecast rail freight for the West Midlands in 2015 and 2021 compared to 2002 actual tonnes lifted.

Table 11: Summary Forecast Rail Freight for the West Midlands 2015 and 2021 v 2003

	000s Tonnes		
	2003	**2015**	**2021**
Origin West Midlands - to other regions	2,189	4,859	5,490
Destination West Midlands - from other regions	7,563	14,555	15,384
Intra West Midlands	1,153	1,313	1,333
TOTAL	**10,905**	**20,727**	**22,208**

Source: MDS Transmodal GMFM

Total forecast rail freight for the West Midlands is forecast to grow to 20.7 million tonnes lifted in 2015 and to 22.2 million tonnes by 2021. The table in the Appendix to this strategy document shows how these forecast volumes divide by region of origin and destination.

The table below shows these forecast volumes divided by freight train type i.e. non-bulk and bulk/conventional for 2015 and 2021.

Table 12: Forecast Rail Freight 2015 and 2021 by Freight Train Type v 2003

	000s Tonnes		
	2003	**2015**	**2021**
Origin West Midlands			
Non Bulk*	878	3,334	3,951
Bulk/Conventional	1,311	1,525	1,539
Total	2,189	4,859	5,490
Destination West Midlands			
Non Bulk*	1,275	4,682	5,520
Bulk/Conventional	6,288	9,873	9,864
Total	7,563	14,555	15,384
Intra West Midlands			
Bulk/Conventional	1,153	1,313	1,333
TOTAL	**10,905**	**20,727**	**22,208**

* Inc Maritime Containers, Channel Tunnel, Domestic Intermodal and Auto

Clearly the largest growth in rail freight traffic to/from the West Midlands is forecast to be non-bulk sector. The table below details forecast non-Bulk rail freight volumes for the West Midlands by traffic type.

Table 13: Non Bulk Rail Freight West Midlands 2015 and 2021 by Type v 2003

Origin West Midlands	**000s Tonnes**		
	2003	**2015**	**2021**
Auto	76	583	686
Maritime Containers	622	1,014	1,170
Domestic Non Bulk	38	1,296	1,521
International Intermodal	142	441	573
TOTAL	**878**	**3,334**	**3,951**

Destination West Midlands	**000s Tonnes**		
	2003	**2015**	**2021**
Auto	46	456	512
Maritime Containers	0	243	269
Domestic Non Bulk	0	264	301
International Intermodal	174	976	1,233
TOTAL	**1,275**	**4,682**	**5,520**

Source: MDS Transmodal GMFM

The table below details forecast bulk rail freight for the West Midlands by commodity.

Table 14: Current and Forecast Bulk Rail Freight for the West Midlands by commodity

From West Midlands	**000s Tonnes**		
	2003	**2015**	**2021**
Coal	1,005	196	155
Construction	80	627	677
Forest	7	4	5
Metals	219	676	681
Ore	0	21	21
TOTAL	**1,311**	**1,525**	**1,539**

To West Midlands	**000s Tonnes**		
	2003	**2015**	**2021**
Chemicals	66	188	197
China Clay	69	61	58
Coal	2,464	1,748	1,392
Construction	281	2,404	2,517
Forest	0	25	29
Metals	1,578	3,742	3,775
Ore	0	45	43
Petro	1,831	1,660	1,853
TOTAL	**6,289**	**9,873**	**9,864**

Source: MDS Transmodal GMFM

The rail freight forecast volumes for 2015, including non West Midlands region to region flows which are likely to pass via the West Midlands network, have been estimated as train numbers by route. This has been undertaken in order to assess the likely future demand for freight paths on the West Midlands Rail network and across individual sections/junctions resulting from the forecast rail freight volumes. The results are detailed in the tables below. The calculations upon which these estimations have been based are detailed in the Appendix to this freight strategy document.

Table 15: Non-Bulk Freight Forecasts 2015 as Estimated Train Numbers

	Estimated Trains per day		Estimated Trains per day
From West Mids		***Via West Mids South to North***	
West Mids - WCML South	14	SE/EAng - NW/Scot	67
West Mids - WCML North	5	S Coast - NW/Scot	9
West Mids - South Coast	8	S Coast - NE/YH & EMids	5
West Mids - NE	3	SW - NE/YH & EMids	5
West Mids - SW	3	SW - NW/Scot	9
TOTAL	**34**	**TOTAL**	**96**
To West Mids		***Via West Mids North to South***	
WCML South - West Mids	21	Scot/NW - SE/EAng	65
WCML North - West Mids	6	Scot/NW - S Coast	8
South Coast - West Mids	3	NE/YH & EMids - S Coast	8
NE - West Mids	3	NE/YH/EMids - SW	7
SW – West Mids	9	NW/Scot - SW	10
TOTAL	**43**	**TOTAL**	**97**

Table 16: Bulk Freight Forecasts 2015 as Estimated Train Numbers

	Loaded Trains per day	Empty Return	Total per day		Loaded Trains per day	Empty Return	Total per day
From West Mids				***Via West Mids South to North***			
West Mids - WCML South	1	4	5	SE/EAng - NW/Scot	1	3	4
West Mids - WCML North	2	5	7	S Coast - NW/Scot	0	0	0
West Mids - South Coast	0	0	0	S Coast - NE/YH & EMids	0	3	3
West Mids - NE	5	29	34	SW - NE/YH & EMids	7	13	20
West Mids - SW	2	15	17	SW - NW/Scot	3	8	11
TOTAL	**10**	**53**	**63**	**TOTAL**	**11**	**27**	**38**
To West Mids				***Via West Mids North to South***			
WCML South - West Mids	4	1	5	Scot/NW - SE/EAng	3	1	4
WCML North - West Mids	5	2	7	Scot/NW - S Coast	0	0	0
South Coast - West Mids	0	0	0	NE/YH & EMids - S Coast	3	0	3
NE - West Mids	29	5	34	NE/YH/EMids - SW	13	7	20
SW - West Mids	15	2	17	NW/Scot - SW	8	3	11
TOTAL	**53**	**10**	**63**	**TOTAL**	**27**	**11**	**38**

NB. Non-bulk trains are generally run loaded in both directions, where as bulk trains are re-positioned empty.

The above estimated train numbers by direction of flow have been allocated to the West Midlands rail network by the key route and section of track such flows would normally take. This is shown in the table below.

Table 17: Total Rail Freight Forecasts 2015 as Estimated Train Numbers by Key Routes

	Non-Bulk Trains	Bulk Trains	Total per Day	Total 2003
WCML Rugby-Nuneaton	88	9	97	33
Nuneaton-Birmingham	21	5	26	14
WCML Nuneaton-Stafford	76	7	83	35
WCML Stafford-Crewe	83	11	94	42
Cherwell Valley	25	3	28	19
Leamington-WCML	9	0	9	10
Leamington-Birmingham	16	3	19	9
Gloucester-Birmingham	17	37	54	17
Birmingham-Tamworth	18	55	73	24
Shrewsbury-Crewe	10	11	21	5

Clearly the rail freight element of the West Midlands Freight Strategy will need to include measures so that the forecast and estimated future demand for freight paths through the region can be accommodated. In particular there is a need for additional freight paths on the following corridors/sections of track to accommodate the forecast growth in rail freight volumes to, from and via the West Midlands:

- WCML through Trent Valley and onward to Crewe
- Nuneaton to Whitacre Junction and Washwood Heath
- Cherwell Valley to WCML
- South West to North East flows

3. ROAD FREIGHT STRATEGY

3.1 Summary of Data and Key Issues Presented in Technical Annex

The table below shows the current and forecast road freight volumes to, from and within the West Midlands region (Annex Section 3 and Freight Strategy forecasts).

Table 18: Summary of Current and Forecast Road Freight Volumes

	000s Tonnes		
	2002	**2011**	**2021**
Goods Delivered in West Midlands - from Other Regions	62,278	70,213	82,389
Goods Collected in West Midlands - to Other Regions	54,768	64,067	76,509
Goods Collected/Delivered Intra West Midlands	101,650	94,646	86,324
TOTAL	**218,697**	**228,926**	**245,222**

The table below shows the modelled current and forecast annual goods vehicle numbers on key sections of the West Midlands highway network (Annex Section 3 and Freight Strategy forecasts).

Table 19: Annual HGVs Numbers on Key Highway Sections

	Millions HGVs		
	2002	**2011**	**2021**
M6 Jct 13-12	13.6	14.3	17.3
M6 Jct 10-8	14.3	15.4	18.4
M6 Jct 8-6	13.8	14.1	16.8
M6 Jct 6-4a	13.1	13.7	16.4
M6 Jct 4-2	9.9	10.8	12.9
M5 Jct 1-2	5.5	5.8	6.7
M5 Jct 3-4a	4.0	4.3	5.0
M5 Jct 4a-5	7.3	7.7	8.9
M42 Jct 1-2	4.4	4.6	5.3
M42 Jct 4-6	6.0	6.6	7.8
M42 Jct 8-10	3.4	3.9	4.4
A50 between A500-A38	1.8	2.1	2.3
M54 Jct 2-3	2.2	2.4	2.7
M54 Jct 3-4	1.8	1.9	2.1
A38 between A5-A50	1.2	1.3	1.3
A38 between A5-M6	0.8	0.8	0.8
A5 between M54-A49	1.3	1.3	1.5
A5 between A49-A483	0.6	0.6	0.6

A49 between A5-A456	0.4	0.4	0.4

Congestion is a growing problem for the logistics industry, especially since the adoption of 'just-in-time' delivery systems by manufacturing organisations, such as the automotive industries, and retailers. Late deliveries can create major problems for assembly line manufacturers, and the freight industry increasingly has to bear the financial penalty for late deliveries. An analysis of vehicle journey times on the West Midlands highway network was undertaken using data from in-vehicle satellite navigation systems provided by iTIS Holdings of Altrincham, for both HGVs and LGVs (light goods vehicles, between 1.5 and 3.5 tonnes gross vehicle weight). The full analysis is presented in the Technical Annex, Section 3.

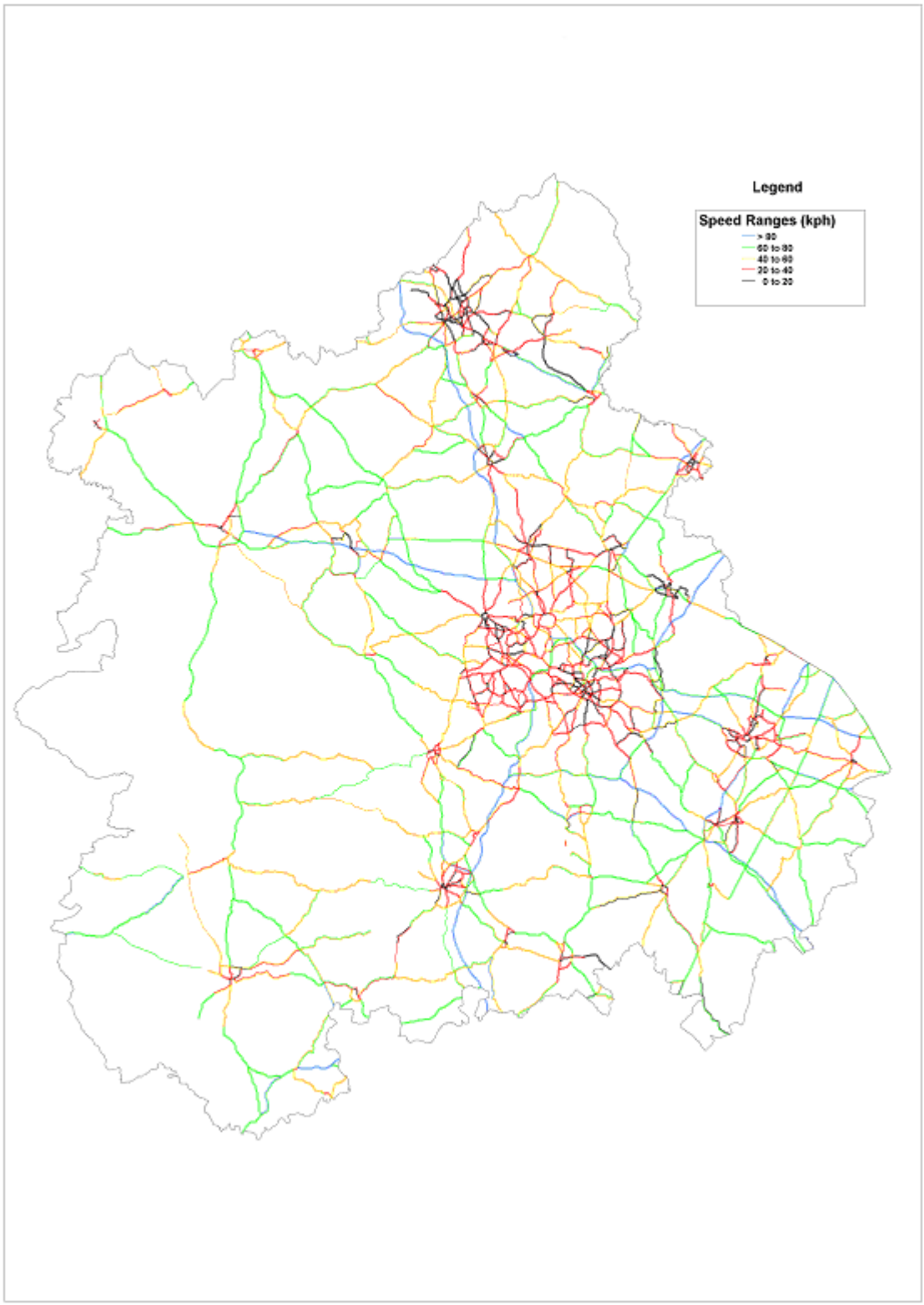
3.1.1 Summary of Network Stress Analysis – Heavy Goods Vehicles

A summary of the network stress analysis for HGVs is presented below and in the map following. For the purpose of this analysis, network stress is defined as average link speeds of less than 40 km/h.

- The worst network stress occurs within the major regional urban centres with Birmingham and Stoke-on-Trent exhibiting the most highly congested links.
- The Black Country Boroughs and Coventry also display high levels of network stress.
- The older industrial areas of South Staffordshire have major stress problems on the local links between the individual centres.
- Network stress within the Shire Counties is restricted to the larger urban centres within them.
- Goods vehicle stress in Burton, Stafford, Lichfield, Tamworth, Kidderminster and Shrewsbury is restricted to a few key routes – usually adjacent to the centres. In some cases, factors other than high vehicle flows can be a contributory factor in low HGV speeds – for example steep gradients and narrow sections within the strategic highway network.
- The 'new towns' of Telford, Redditch and Tamworth with their modern road systems are less affected by network stresss than the older industrial centres.
- Away from the principal urban areas, the strategic highway network has fewer stress problems. The major trunk roads (A5, A49, A449, A45, A46 A38, A34 and A41) operate at speeds of greater than 60 km/h for much of their length except when affected by topographical considerations. Within the major urban centres, stress on Trunk Roads increase with the A50 and A500 routes within the potteries particularly badly affected.
- The motorways network within the region operates satisfactorily during the off-peak period for its inter-urban sections. Within the major conurbations, speeds fall to less than 40km/h on the M6 between Junction 11 and Junction 8. The M42 between the M5 and M40 also displays sections operating close to or at congestion. The most

stressed section of route would appear to be the A38(M) Aston Expressway which suggests that HGV speeds are 20km/h or less during the off-peak period.

Map 5: Off-Peak Heavy Goods Vehicle Network Stress Levels 2003


Legend
Speed Ranges (kph)
> 80
60 to 80
40 to 60
20 to 40
0 to 20

3.1.2 Summary of Flow-Weighted Network Stress – Heavy Goods Vehicles

By itself, network stress is a relatively crude device for prioritising key routes in the Region for future improvement or upgrade. Consequently a secondary filter was introduced to focus on these priority routes. The best measure available to assist in refining the list of key routes is HGV flow, and a flow data has been derived from both the MDS Transmodal GB Freight Model traffic model and from Department for Transport traffic surveys. The full analysis is presented in the Technical Annex (Section 3). A summary is shown below and in the following maps.

Urban Links

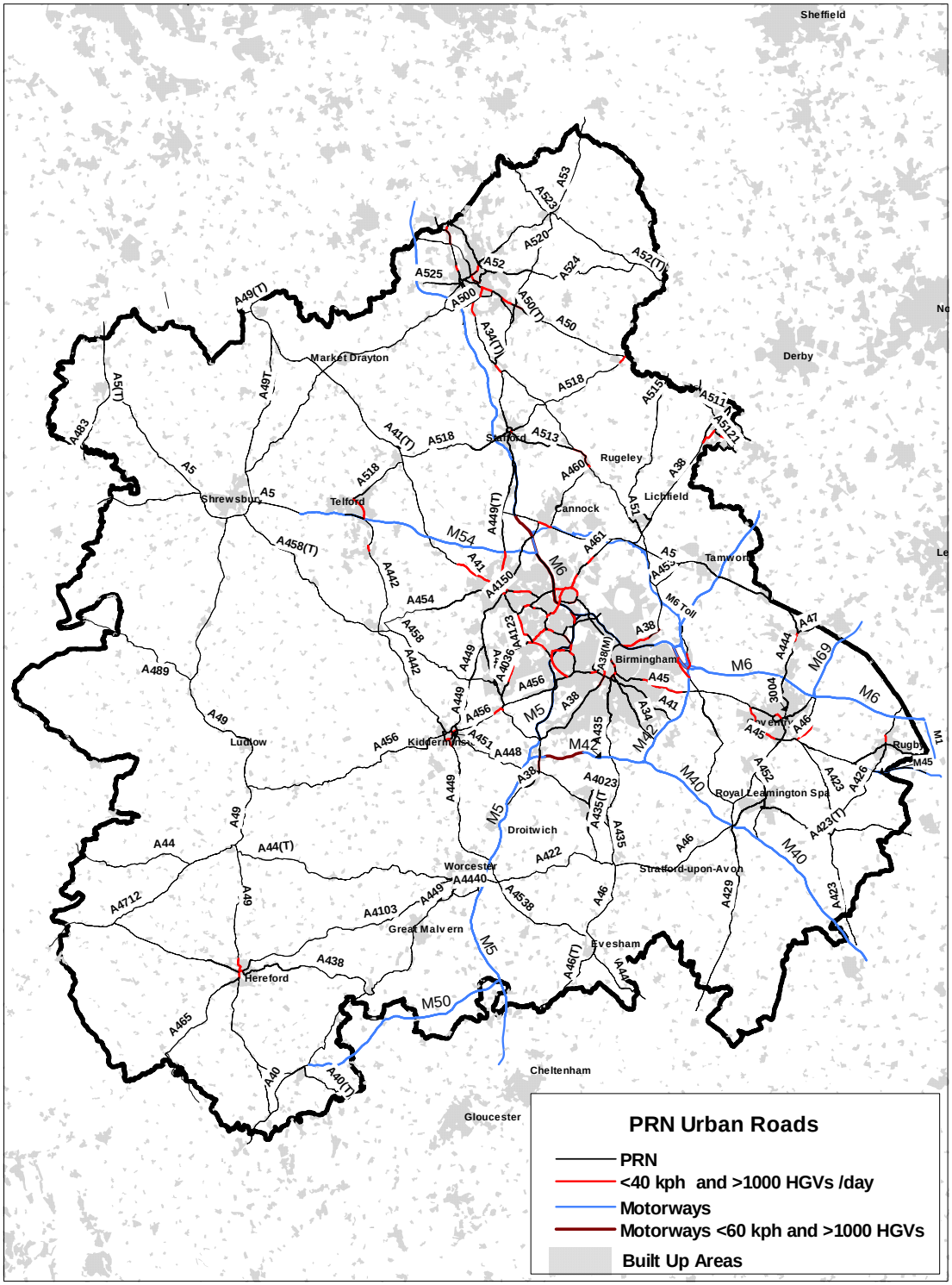
- As expected, the majority of the most stressed links occur in and around the West Midlands conurbation with over 75% of all congested urban links within the Region.
- Of these, by far the largest proportion are concentrated within the Black Country with the A461 and A4123 most affected
- Surprisingly, Birmingham has only a small number of links meeting the stress criteria. Of these, the A45 Coventry Road and A38 Tyburn Road are the most stressed links.
- In Coventry, the A45 Fletchampstead Highway exhibits the greatest degree of stress, but the southern section of the A46 Coventry Eastern Bypass and parts of the A4053 Ring Road are also affected.
- The A50 and A500 in the North Staffordshire Conurbation are severely stressed, particularly either side of the junction between the two routes.
- Within the larger urban areas outside the major conurbations, a relatively small number of routes appear in the analysis, with Telford, Hereford, Kidderminster, Rugby, Cannock, Rugeley and Burton each having short stretches of road affected.
- All of the most stressed Motorway sections occur within the West Midlands Conurbation, with the M6 between Junctions 12 and 9, the M5 at Junction 8 Ray Hall and The M42 between Junctions 1 to 3 most severely affected.

Rural Links

- There is a relatively consistent distribution of stressed links across the rural PRN, with no obvious concentrations within specific areas.
- Within the western half of the region, the majority of east-west routes are affected; in some cases over considerable distances. The A44, A4103 and A449 in Herefordshire are particularly stressed. The topographical considerations, however, play a part in skewing the results, as most of these routes pass through hilly terrain. Nevertheless, the analysis does point to there being a problem for HGVs using this part of the PRN.

- In North Staffordshire, there are significant sections of the PRN in the Staffordshire Moorlands which exhibit high levels of stress, but the A53, A523, A520 and A52 have lower speed sections for most of their length.
- There are a number of major settlements in the Region which suffer from high degrees of network stress on the links which service them. Notable amongst these settlements are Ashbourne, Shrewsbury, Bridgenorth, Worcester, Kidderminster, Cannock and Hereford. It is highly likely that the economies of these towns are suffering as a consequence of their relatively poor accessibility to heavy goods vehicles, a situation which will worsen as traffic volumes continue to rise.
- Communications within the West Midlands Region would appear to be significantly worse than communications between adjacent Regions, on the basis of this evidence. The major routes which connect the West Midlands Region with those in the North-West, East Midlands, South Midlands and Wales do not exhibit high levels of stress for Goods Vehicles, and only relatively short stretches of the A483, A458 and A5 in Shropshire which cross in Wales are deemed to be stressed. To the North, the A49 has a short stretch of stressed conditions as it enters Cheshire, and the A500 merges with the M6 almost on the Cheshire border. The M6 here does not show any signs of excessive stress for goods traffic during the off-peak period. As previously indicated, a number of routes through the Staffordshire Moorlands are stressed – especially where they cross the Region's boundaries into the East Midlands, but this is due as much to adverse topographical conditions as to restrictions in highway capacity. For the remainder of the Regional boundary, there would appear to be very few crossing points with stress problems for HGVs, and this is particularly the case for the motorways and Trunk Road network which carries a large proportion of Goods Vehicle trips.

Map 6: Flow-Weighted HGV Network Stress Levels Urban Links 2003



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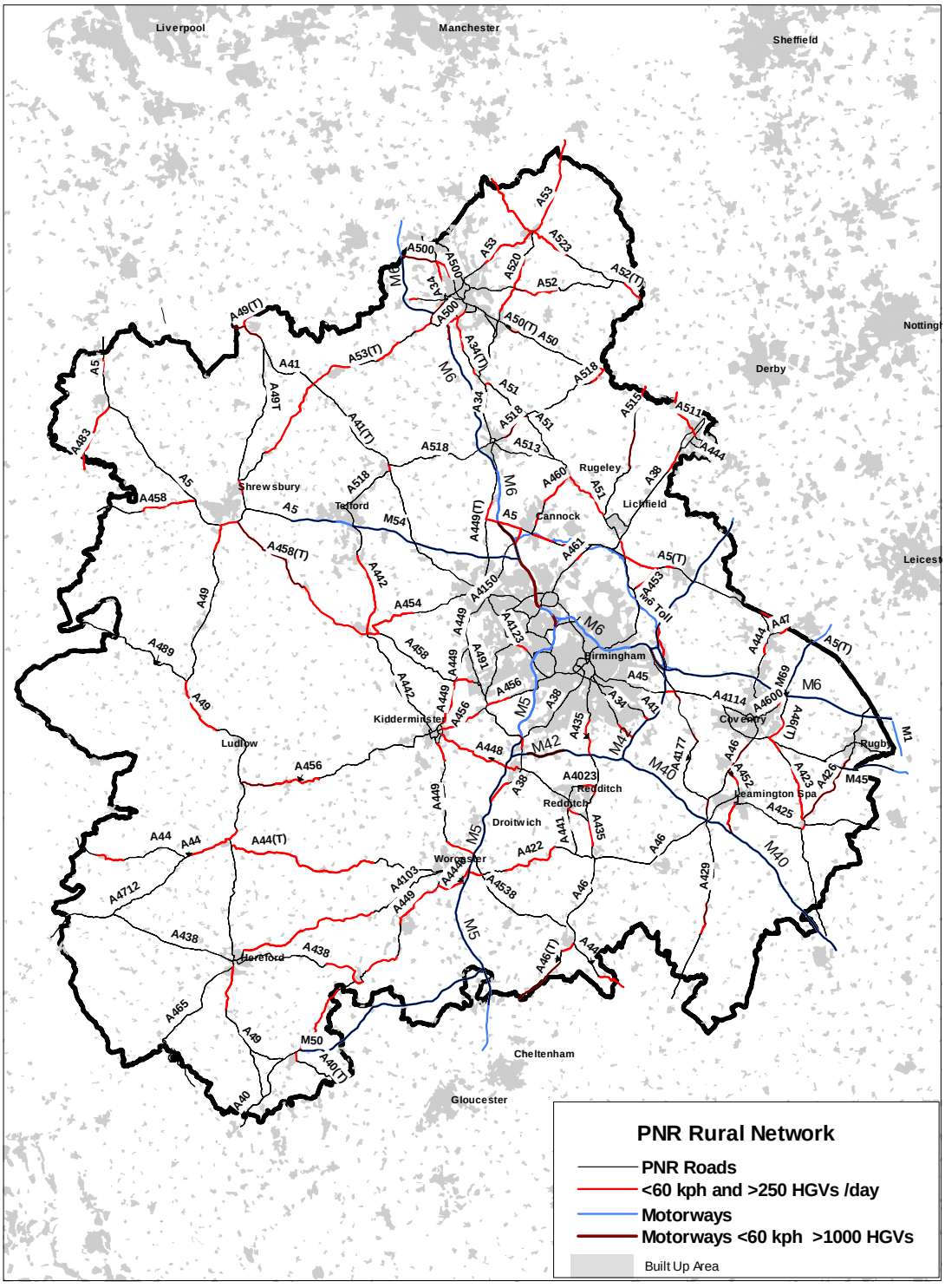
Map 7: Flow-Weighted HGV Network Stress Levels Rural Links 2003



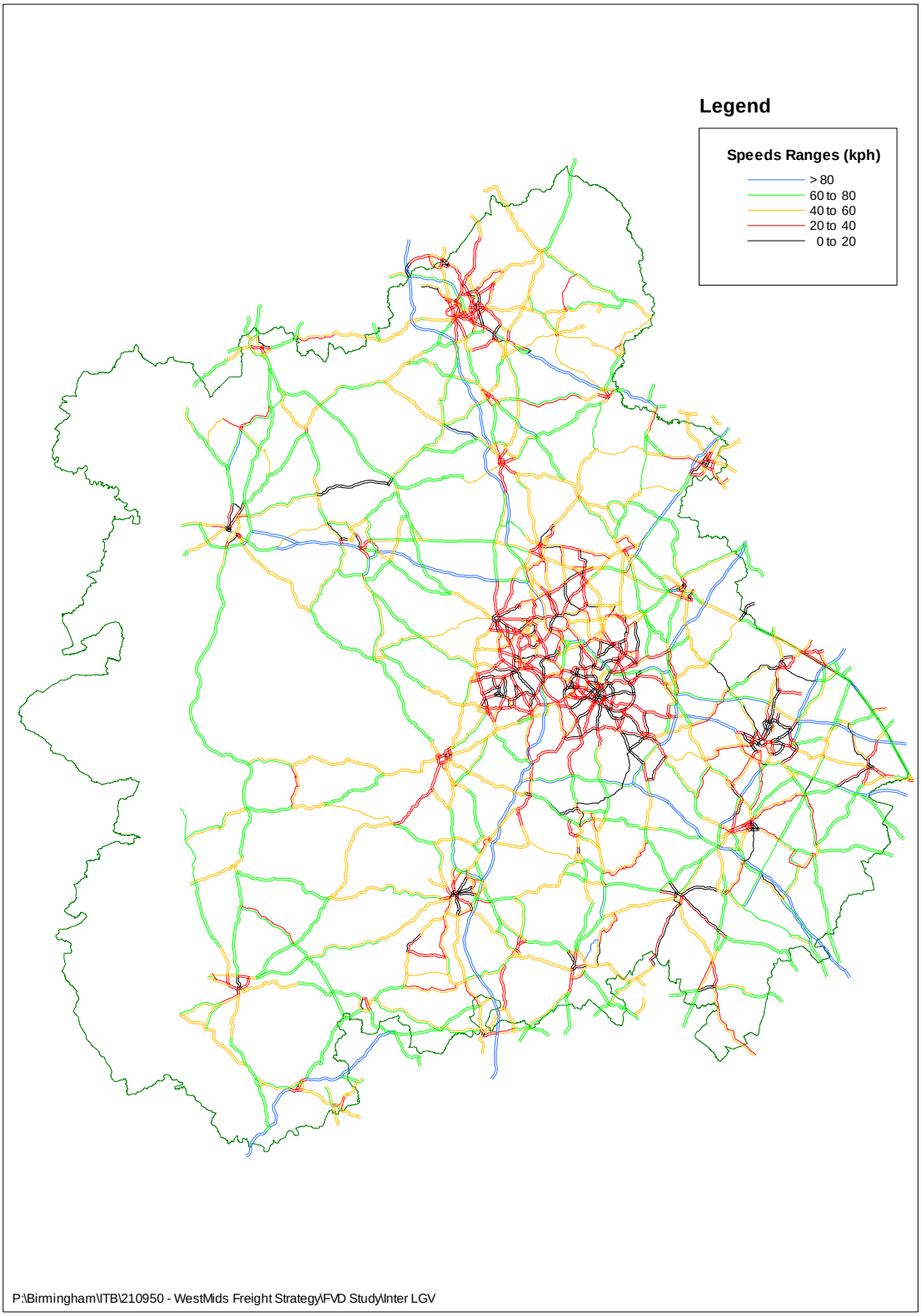
P:\Birmingham\ITB\210950 - WestMids Freight Strategy\FVD Study\Urban - Rural congestion maps\WM_NetworkFlows_Rural.WOR

3.1.3 Summary of Network Stress Analysis – Light Goods Vehicles

The map below summarises the results of the network stress analysis for light goods vehicles on the West Midlands Strategic Highways Network for the off-peak period in 2003. The full analysis is presented in the Technical Annex, Section 3. A summary of the major issues to arise from this analysis are shown below.

- There is a greater concentration of highway network stress in urban areas for LGVs, reflecting the essentially local nature of LGV operations. The two major conurbations in the Region, the West Midlands and North Staffordshire, have the greatest apparent levels of congestion and network stress, reflecting both their concentrations of commerce and industry, and the lack of existing highway capacity in certain areas within the conurbations. Within the West Midlands, southern Dudley, central Wolverhampton, Coventry, Birmingham centre and a number of its suburban centres are particularly badly affected. In North Staffordshire, Newcastle-under-Lyme, Stoke-upon-Trent and Hanley have particular congestion problems on a number of major and minor routes.
- A number of other major Regional centres also exhibit evidence of network stress for LGVs such as Worcester, Shrewsbury, Stafford, Burton and Leamington, but this may be due to the historic nature of these towns with their narrow streets and concentrations of small businesses within the core. Nevertheless, the problems of accessing and delivering to these centres still represent a major burden in time, cost and convenience to LGV operators and to local businesses alike.
- Away from the urban centres, there would appear to be few stress points on the inter-urban road network in comparison to those for their HGV counterparts. The differences are well seen in the hillier areas of Staffordshire, Shropshire and Herefordshire, and are likely to reflect the better operational characteristics of light goods vehicles under these conditions.
- The motorways network is largely stress-free for LGVs with the single exception of the M6 between junctions 8 and 10. However, delays and congestion are endemic for all vehicles in this section for much of the time, and the observed pattern for LGVs is simply a reflection of this.

Map 8: Off-Peak Light Goods Vehicle Network Stress Levels 2003


Legend
Speeds Ranges (kph)
> 80
60 to 80
40 to 60
20 to 40
0 to 20
P:\Birmingham\ITB\210950 - WestMids Freight Strategy\FVD Study\Inter LGV

3.1.4 Summary of Other Key Issues Presented in Technical Annex

Journey time reliability is a key issue for road freight transport operators. The West Midlands Regional Planning Guidance (June 2004) acknowledges this in its Policy T10 on Freight which states that "*The reliable movement of goods and services is the lifeblood of the West Midlands economy….."* and that strategies should aim to "*…improve the efficiency of freight movement and support the development of Regional Logistics Sites".* An unreliable transport network can lead to timed deliveries being missed. Alternatively hauliers have to allow additional time when planning journeys (Annex Section 3 and 4)

The hub of most medium to large logistics operations is the distribution centre, of which there are two types; National Distribution Centres (NDCs) and Regional Distribution Centres (RDCs). The ability to hold, consolidate and distribute goods from one location is the most efficient method of organising supply chains, hence the development of distribution centres (Annex Section 4).

A number of recent developments are altering the traditional structure of the logistics market. These include:

- Large purchasers of goods, such as the major retailers, are increasingly purchasing goods 'ex works' and taking over the control of the inward flows of goods to distribution centres, thus controlling the whole supply chain (Annex Section 4).
- Goods being held and distributed from NDCs and RDCs are increasingly being sourced from international markets. As a result a growing percentage of a retailer's product lines are arriving at a port in some type of unit load e.g. maritime container (Annex Section 4).
- There is an increasing demand from the operators of NDCs and RDCs for larger but fewer warehouses (Annex Section 4).

The Government intends to replace the current taxation system for goods vehicles with a distance based charging scheme in 2008. All goods vehicles in the UK, whether British registered or continental based, will pay a charge for every kilometre they drive. The system will use GPS technology to track vehicles. While the Government has stated that this new system will initially be 'cost neutral' for British based hauliers, once the technology has 'bedded in' the new system is likely to be used to manage demand for the highway network. Congested sections of roads will thus attract a higher per kilometre charge at peak times (Annex Section 4).

A key issue is the use of inappropriate roads by HGVs when moving between the strategic motorway/trunk route network and freight generating/attracting locations. While the strategic

highway network has been designed for use by HGV in large numbers, connecting road to freight origins and destinations sometimes are not suitable (Annex Section 4). Regional Planning Guidance recognises the need the need to address freight and freight distribution issues through the implementation of traffic management schemes. (Policy T10 ii).

There are three main reasons why a lorry will need to park away from a depot (Annex Section 4):

- Legal requirements for goods vehicle drivers to take breaks and rests
- Vehicles need to wait before delivering or collecting goods
- So that drivers can access basic amenities such as food and toilet facilities

Similar to other regions across the country, it is acknowledged that there is a lack of suitable parking facilities for goods vehicles in the West Midlands region (Annex Section 4).

The recruitment, retention and training of employees in the logistics industry is currently one of the key issues which the sector has to address. In particular there are major problems in recruiting and training qualified HGV drivers. In a recent survey undertaken by the FTA, 83% of respondents reported that they were experiencing difficulties in recruiting drivers. The Government's road haulage forum estimates that the demand for qualified drivers in 2010 will be around 600,000. and that between 50,000 and 60,000 drivers will need to be recruited to the industry over the next few years to meet this demand (Annex Section 6).

The reasons for the current and future predicted driver shortages is a combination of many factors (Annex Section 6), including:

- Hauliers in the past had no need for recruitment and retention schemes, there was always a steady supply of drivers e.g. those leaving the armed forces. Companies lack the skills/knowledge to recruit and train drivers
- Hauliers reluctant to pay for training – fear that drivers will leave once qualified
- 21 year old qualification age to drive goods vehicles
- Perceived poor working conditions – school leavers not attracted to the industry

3.2 A Recommended Highways Infrastructure Strategy

The need to provide better transport links for the Region; internally, inter-regionally and internationally, is addressed in detail within Policies T9 and T10 of RPG, and this recommended Regional Freight Strategy will be complementary to the conclusions reached within the Guidance. In addition, RPG identifies priorities for investment both for the medium

and long-term, and for regional and national transport objectives. It should be noted, however, that the RPG priorities are restricted to the core trunk road and motorway networks, so that local needs must be identified and resourced separately.

The West Midlands should therefore consider supporting a strategy based on an integrated approach involving:

- Focussing resources on the development of a Strategic road freight network based on current and future needs.
- Improvements to Local freight routes in key manufacturing and commercial centres aimed at improving network capacity and journey reliability for road goods vehicles.
- Where major infrastructure investment cannot be justified, or is not feasible, goods vehicle movements will be improved through the implementation of traffic management measures such as:
    - Sharing of bus lanes
    - Removal of traffic bottlenecks through traffic regulation orders and better enforcement
    - Localised junction improvements to increase stop-line width.
- The strategy should take full account of the outcomes of other strategic studies currently underway, including:
    - North Staffordshire Integrated Transport Study
    - Coventry, Solihull and Warwickshire Transport and Regeneration Study
    - Black Country Sub-Regional Study
- Better information for goods vehicle drivers through a package of measures including:
    - Improved signing for goods vehicle trips.
    - Web-based traffic information systems, such as the West Midlands MATTISSE system, informing drivers of congestion and delay problems, and suitable HGV routes to destinations.
    - Development and publication of a lorry driver guides showing principal routes and destinations for road-borne freight.
- Increased use of Freight Quality Partnerships to encourage a multi-agency approach to addressing freight issues.
- The identification of suitable sites for strategic lorry parks throughout the Region designed to improve vehicle security and driver comfort.

3.2.1 Strategic Freight Routes

The current Regional Planning Guidance identifies a priority programme for investment (Policy T12), both to generate efficiencies in the movement of freight specifically (Policy T10) and to provide additional capacity for all vehicles (Policy T9), which will implicitly benefit goods vehicles. It is recommended that the West Midlands supports these investment priorities, which are listed below, and regards their early implementation as a high priority.

RPG Policy T12 Endorsed Schemes

- M6 widening between J11a and J19
- M40 J15 Longbridge Improvement
- M42 Active Traffic Management implementation
- M42 widening J3 to Junction J7
- M54/M6/M6 Toll Link
- Active Traffic Management for the M5/M6/M42 motorway box
- A5 Weeford to Fazeley Improvements
- A38 Streethay to A50 Improvements
- A45 Tollbar/A46 Improvements
- A483 Pant and Llanymynech bypass
- A50/A500 Junctions Upgrade

However, the HGV network stress analysis (summarised above and detailed in the Technical Annex) have identified other, equally pressing, needs which require appraisal. Network stress on the motorways network through the West Midlands Conurbation is creating long delays for goods vehicles, with the M6 between Junction 8 and Junction 12 particularly affected. The problems on the Midlands motorways network is compounded by their use as both national and local distributors, and the avoidance of the recently opened M6 Toll by goods vehicle drivers and operators because of the perceived high cost of tolls. The M6 Toll, however, will not remove goods vehicle trips from the M6 to M5 corridor, and alternative routes within this corridor are already seriously affected by congestion.

One possible solution lies in the implementation of a relief route to the west of the West Midlands conurbation which would:

- Encourage the shift of long-distance goods vehicle trips within the NW to SW axis away from the M5/M6.
- Provide better freight access to the western side of the conurbation.
- Relieve congestion on non-motorway roads within Dudley and Wolverhampton.
- Promote economic growth by the creation of development opportunities in this part of the conurbation.

- Remove a significant proportion of vehicles from the M5 and M6 motorways which would relieve congestion and improve journey reliability for those trips remaining.

The West Midlands Area Multi Modal Study (WMAMMS) considered this issue in detail and recommended, taking into account environmental considerations, bypasses to Stourbridge and Wolverhampton at lower than motorway level. The Secretary of State for Transport, after consideration of the consultant's recommendations, decided that he could not support such a proposal, and this was endorsed by the Planning Inspector's review of RPG11. However it was decided that there was a need for a sub-regional review of planning and land use in the Black Country, which would establish what further transport links are needed over a 30 year time frame. It is therefore important that the needs of both through and destination freight traffic are taken into account in that study.

The means by which such a road is financed and operated will be of great importance to the freight industry, as experience with the M6 Toll has demonstrated. Any PFI arrangement that may be implemented should actively encourage freight vehicles to use such a route.

Within the North Staffordshire Conurbation, problems exist for goods vehicles using the A50 and A500 routes. Severe network stress occurs for most of the day at points on these two strategic routes which is seriously impacting on the viability of industry within the Potteries. While Regional Planning Guidance has recognised the problem by promoting the improvement of both the City Road and Stoke Road junctions on the A500, it is questionable whether these local junction improvements will provide the additional capacity and reliability for goods vehicles in the longer term. The North Staffordshire Integrated Transport Study is currently researching future transport needs for the conurbation, and the results are expected soon. This study will recognise the needs of goods vehicle operators and recommend an upgrade of key sections the A50 and A500 to three lane standards, which this strategy should endorse.

There appears to be a case therefore, based on the analysis of freight movements and network stress levels, for the following additional major schemes.

- A relief route to the west of the West Midlands conurbation
- A50/A500 upgrade.

The Highways Agency are carrying out Route Managements Strategies (RMS) for all the West Midlands by Autumn 2005. The information contained in the Technical Annex to this recommended strategy and the needs of freight should be taken into account in the RMS. Local Authorities should also consider whether to follow the lead of the Highways Agency in addressing the issues of journey time reliability in the region.

3.2.2 Local Freight Routes, Signing and Information Strategies

The identification and treatment of sub-regional and local freight routes should be carried out by Local Authorities themselves, advised and directed by the Freight Quality Partnership (FQP – Section 5.5) in each area. Local Authorities should use the LTP process to meet the Government's shared priorities for improved accessibility and reduced congestion. It is necessary for a high degree of cooperation between adjacent authorities to be put in place to ensure that there is an integrated approach to route improvements where routes cross between authorities.

It is recommended that a freight routing strategy should be developed by the West Midlands region to address the issues raised in the Annex (Section 4) concerning the use of inappropriate roads by HGVs between trunk routes and freight generating locations and the navigation problems that can be experienced by drivers unfamiliar with a particular location.

Freight routing schemes are simple and relatively inexpensive solutions that can help achieve solutions to the above mentioned issues. When freight routing is implemented correctly, it can be very successful in minimising the impact of goods vehicles while increasing accessibility (hence efficiency), and due to its relatively low cost provides good value for money. Freight routing has also been promoted by the Government through its various White Papers (New Deal for Transport, Sustainable Distribution) and by the FTA's Trade Routes.

A freight routing strategy should therefore be delivered by each LTP area, in conjunction with its FQP, through the following process:

- Each LTP area identifying the main freight generating or attracting locations within their area e.g. industrial estates, factories or retail parks.
- Identifying and designating the most suitable routes which HGVs should use when moving from the strategic road network (e.g. Motorways, A road dual carriageways etc..) to the identified freight attracting/generating locations. This should be undertaken through a combination of survey work and consulting freight operators on the FQP. The most appropriate road may not be the shortest by distance, but is the most suitable for handling vehicles which are up to 16.5m in length and 44 tonnes gross weight. For example the shortest route could be through a residential area and past a school, while the most suitable route even though longer in distance is an urban dual carriageway.
- Upgrading the designated routes where required to allow easier passage for goods vehicles. This could include widening the road, provision of extra lanes, imposition of

parking restrictions (e.g. red routes) and the installation of traffic lights/filter lanes at the entrance to the freight attracting location. A recent development is the provision of joint bus/HGV lanes on the approach to town centres.

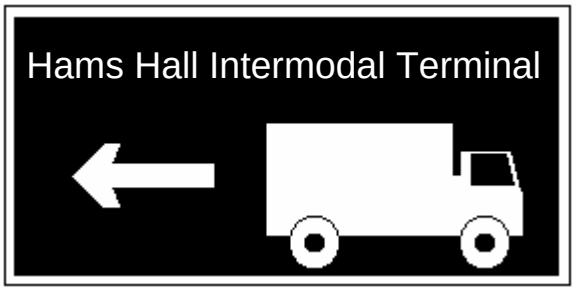
- Implementing better traffic management systems which ensures that HGVs utilise the identified freight routes to/from the freight attracting/generating locations. This, as a minimum, should include erecting and maintaining suitable freight advisory signs in the standard format i.e. black background, white freight vehicle picture and white writing. Some examples and the normal procedure for locating the signs are given below. Consideration will also be given, where appropriate and in agreement with operators, to enforce designated routes through the use of weight restrictions on alternative and un-suitable routes, a power granted local authorities under the Road Traffic Regulation Act 1984

Shown below are some examples of the format freight advisory signs take.

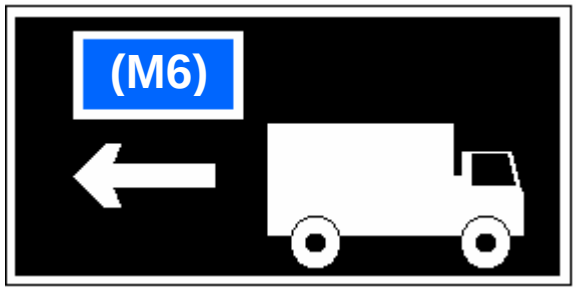
Example 1

Example 2

Example 3



Example 4



Example 1 would be located on a major trunk route when approaching a particular town/city and indicates the correct junction/exit to use for a particular freight attracting location. This obviously informs drivers which is the designated exit to take. Example 2 is normally located on a trunk route close to the required junction, say between the ½ mile and 1/3 mile exit signs. Example 3 is located at suitable locations after the junction along a designated freight route towards a freight attracting/generating location. They are used to indicate which road to take at subsequent junctions and the entrance into the freight attracting location. The signs should be suitably large and positioned at the correct height to be seen from the cab of a goods vehicle. In reverse, signs similar to those in example 4 would direct HGVs from the freight attracting location back to a trunk route.

Such a freight routing strategy will provide a number of benefits at a local level, improving the efficiency of road freight operations and minimising their environmental impact. The benefits of freight routing include:

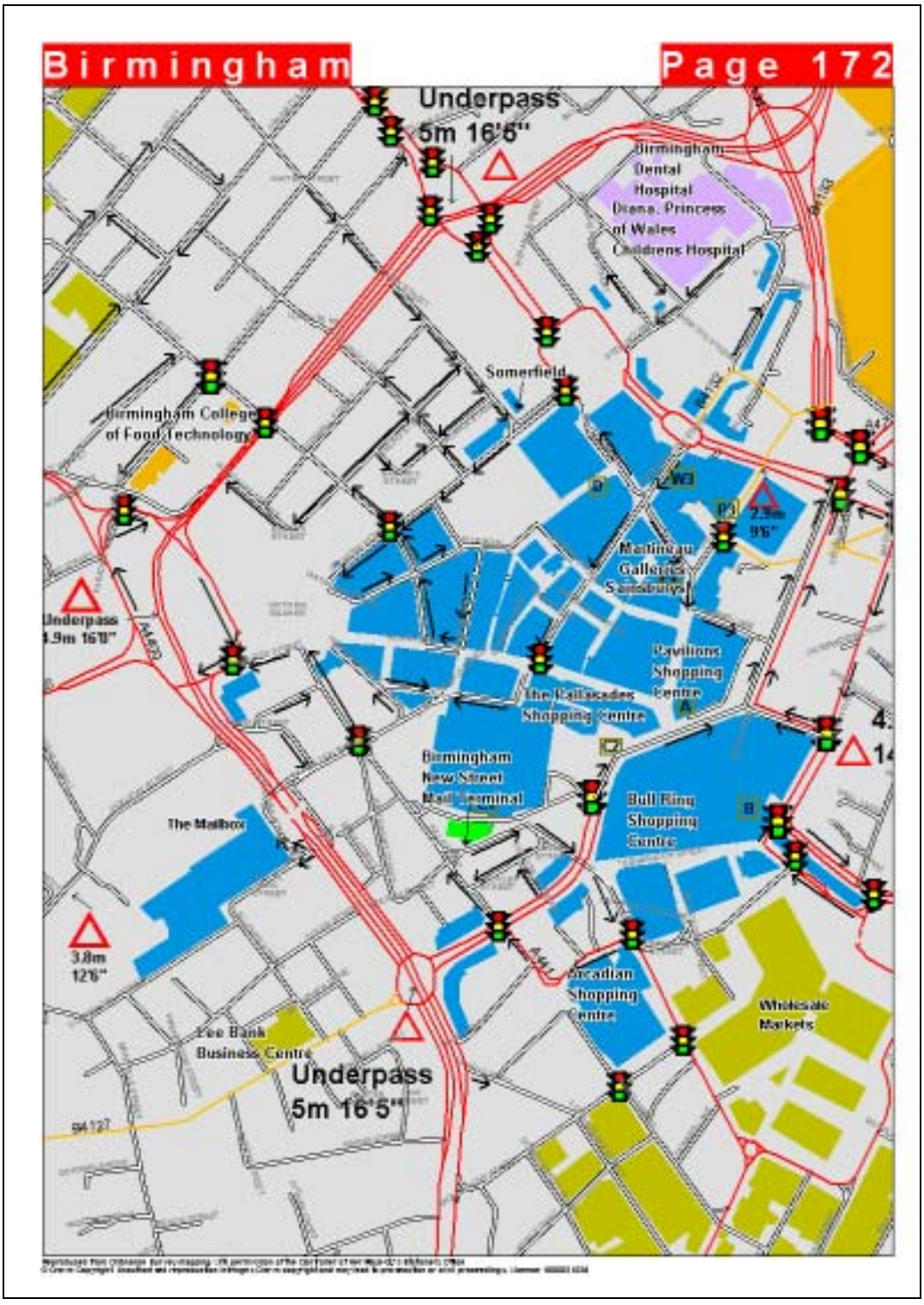
- Freight vehicles are concentrated onto particular roads, thus restricting the environmental impact of freight activity to a small number of roads which are suitable for handling large freight vehicles. As a consequence, the environmental impact is reduced/eliminated from un-suitable routes e.g. past schools, through residential areas.
- Local authorities can concentrate their resources on upgrading and maintaining a limited number of known designated routes rather than have to maintain a variety of roads
- They make more efficient use of existing road capacity
- Properly upgraded and managed roads allow goods vehicles to travel to and from freight attracting locations smoothly and efficiently without having to keep stopping and starting e.g. to pass parked vehicles, consult maps or let oncoming traffic pass. This improves the efficiency of goods vehicle operations – less fuel used, allocated delivery times met etc…
- Effective sign posting means drivers not familiar with an area know which roads to take, and are thus not having to stop (holding up traffic), use unsuitable roads by accident, read maps while driving, perform turn around manoeuvres and potentially miss allotted delivery times – improves efficiency

Given the very localised nature of this type of scheme, it is beyond the scope of this strategy to identify possible locations for treatment. The most appropriate means of delivering such improvements is within the Local Transport Plan minor schemes allocation, and a separate budget head for ‘Improvements for Freight Access and Movement’ might be identified. An additional benefit to this approach is that improvements to the network can be evaluated

across the spectrum of road users (bus passengers, pedestrians, cyclists and P2W users) to ensure adherence to DfT requirements for scheme funding.

In addition to effective roadside signing as described above, the creation of high quality lorry driver guides can greatly increase the efficiency of goods vehicle routeing by both showing the principal destinations for goods vehicles and the most appropriate route to access them. A number of initiatives within this area have been commissioned, most notably in Bristol and within the West Midlands Conurbation. The map below shows a typical page from the West Midlands HGV Atlas.

Map 9: Example of West Midlands HGV Atlas



3.2.3 Better Traffic Management

Many pinch points in the local road network are not so much the direct result of poor alignment, adverse topography or inadequate junction capacity as they are the consequence of inappropriate vehicle parking, poorly located bus stops and right-turning vehicles. In most cases, it is likely that many such problems are avoidable, but in some cases, inappropriate parking can be better managed – particularly where local authorities have adopted control through Decriminalised Parking powers. The West Midlands should therefore promote Local Authorities and the Police implementing traffic management procedures to reduce the impact of impendences to freight movements, wherever feasible and appropriate.

It should also be pointed out that there are a number of websites which now can advise drivers and operators of actual and potential traffic hold-ups on the network. One in particular is extremely useful within parts of the Region and that is the MATTISSE system which has been jointly developed by a number of Local Authorities and private sector organisations and informs drivers of a range of traffic issues. Consideration should be given to extending this system, or developing a similar one, across the Region to both inform and advise freight operators.

3.3 Lorry Parks

It is recommended that the West Midlands should seek to address the issues raised in the Technical Annex (Section 4) concerning the parking of HGVs, through developing a network of lorry parks with driver amenity facilities across the region.

Parking/amenity provision does exist on the motorway network in the region, where drivers can take their legal breaks/rests en-route between journey origin and destination. However there are known to be problems associated with these facilities, in particular the limited parking capacity at many sites which results in vehicles not being able to park. Additionally they are located away from freight attracting areas, and therefore they cannot act as suitable parking for vehicles waiting to undertake deliveries to distribution centres. The West Midlands should therefore promote an expansion of parking capacity at these facilities.

Away from the motorway network, the West Midlands should focus on delivering additional and improved parking/amenity facilities close to existing freight attracting locations. The provision of such lorry parking facilities to date has essentially been left to the private sector to deliver. As this has not resulted in adequate lorry park/driver amenity provision, some form of intervention by the public sector is clearly required to achieve the delivery of additional and suitable lorry parking facilities. While it is not the role and responsibility of West Midlands Local Authorities to invest in and operate lorry parking facilities, there should

be a role for local government bodies in stimulating and assisting the private sector to develop additional suitable lorry parking facilities, and this could be undertaken in two ways.

Firstly, through the planning process. The Local Plan/UDP process should allocate suitable sections of land for the development of lorry parking facilities, such as within or close to the Regional Logistics Sites. Also planning applications for new industrial estate developments could be required to provide a minimum level of goods vehicle parking and associated driver amenities. Local Authorities do impose conditions on such developments, for example by requiring that a rail link is provided or safeguarded. Similar conditions could be imposed concerning the provision of goods vehicle parking facilities.

Secondly, through public private partnership arrangements. The motorway service area model is probably a good one to follow. The largest cost component involved in developing a new lorry park will be the purchase of land, hence land owners/developers seeking uses which will produce higher value returns. As with motorway service areas, the land could be owned by a Local Authority, but with the provision of services and day to day operation of the lorry park undertaken by a private company on a franchise basis. A franchise contract would specify the minimum number of parking slots and level of driver amenities the operator would be required to provide. The franchisee could either pay an annual rent to the Local Authority for the privilege of operating the truck park, but retain the revenue generated from parking charges and café food facilities etc. or some form of profit share arrangement agreed.

A recent proposal has suggested that Park and Ride sites could also be utilised as overnight lorry parks. Many of these facilities are only used between 08.00 and 18.00, and are left empty once city/town centre retail outlets have closed. This time co-incides with the time that most HGV drivers spending the night away from base and taking their daily rest will want to park. Generally Park and Rides are located on out of town locations, adjacent to strategic highway routes and away from residential housing, which means that noise pollution should not be an issue. Again driver amenities such as washrooms and food/refreshment facilities could be provided on a franchise basis. However potential practical drawbacks include:

- They could not be used during the day
- They may be located away from industrial estates, meaning they could not be used for parking by goods vehicles waiting for their 'time window' at a distribution centre
- Their design and layout may not be suitable for large goods vehicles. Also many Park and Ride sites have height restriction barriers at the entrance specifically to prohibit the entry of HGVs

The assessment as to whether proposed locations for new lorry parks are suitable, either land being allocated during the Local Plan/UDP process, during the assessment of planning applications or possible use of Park and Ride sites, should be undertaken using a criteria based approach. These criteria should include:

- Located adjacent to strategic highway routes used by HGVs. This will minimise any diversion goods vehicles will take to reach the lorry park and also provide a critical mass which will assist in their financial viability. It also means that approach roads will be suitable for accommodating large volumes of goods vehicles
- Located adjacent to freight attracting/generating locations. Again this not only minimises any diversion away from normal HGVs routes and provides a critical mass, but also provides areas where goods vehicles can wait prior to allocated time delivery windows at factories and distribution centres.
- Located away from unsuitable land uses, such as residential areas.

It is important that a sufficient level of clean modern driver amenities are provided at truck parks, and facilities are not token efforts such as a solitary 'burger van'. As a minimum the following facilities should be provided:

- Sufficient number of HGV parking spaces
- Toilets
- Showers
- Café facilities – provide evening meals and breakfast
- Security gate and perimeter fencing

3.4 Addressing Goods Vehicle Driver Shortages

While the issues concerning the recruitment and retention of qualified Class C and C+E drivers is a problem which needs to be addressed primarily by Government and the logistics industry itself, public sector agencies in the West Midlands region should also play a role.

It is fair to say that the logistics industry itself has not been forward enough in addressing this issue, particularly in developing recruitment/training programmes and the working conditions/wage rates it offers potential employees. Ironically the Working Time Directive, opposed by many in the industry, may actually help its perceived image and therefore improve recruitment/retention. The logistics industry itself will have to take a greater role in training new drivers to Class C+E qualification, including funding the training required and driving test fees. A number of companies have started to introduce imaginative schemes. Gist/Marks and Spencer have recently started training warehouse staff to drive goods

vehicles. This not only addresses recruitment problems but also offers flexibility in their working practices through the ability to move staff between warehousing and driving duties when required.

Equally important, sector image is also a factor the logistics industry will have to mainly address itself. It will have to become an industry people want to work for. Unfortunately the perception for many potential employees is a 'dirty over-alls' image, with low pay rates and long unsociable working hours. Essentially, there are other similar level occupations which offer better rates of pay and more fixed/sociable hours of work which tie in better with family life. The logistics industry will have to introduce better rates of pay, more family friendly working hours, shorter working hours and career development training schemes. It will have to start promoting itself as a well paid, highly trained, high tech industry in order to remove the perceived image.

The public sector in the West Midlands should have a role to play in two main areas to assist in addressing recruitment/retention issues: the provision of more lorry parks to create a healthier and more attractive working environment (hence assists in addressing the image issues), and assisting the industry to develop and fund HGV driver training schemes. The sub-section above deals fully with the availability and provision of lorry parks.

Linked to creating a healthier and more attractive working environment, HGV driving should be promoted by Local Education Authorities career services as an attractive career option.

However the main role of the public sector lies with the Learning and Skills Councils (LSCs), the bodies responsible for funding and planning training and education of over 16 year olds in England. While the logistics industry itself will have to take a greater role in training new drivers to Class C+E qualification, they may not have the skills in-house to provide it, or the money available to fund it. The LSCs in the West Midlands should therefore take a proactive role with the logistics industry to develop work placed schemes for HGV drivers, and providing/identifying the sources of funding that are available. The role of the LSCs should therefore be to:

- Identify formal Government backed work place training schemes which the logistics industry can utilise
- Identify formal training organisations which can provide work placed training
- Act as both a source of funding and a source of information concerning public funding sources which could assist haulage companies in the costs of training drivers to full HGV standard i.e. Class C+E. A recent FTA survey reported that around 50% of haulage companies were unaware that funding was potentially available to assist the training of new HGV drivers.

Section 6 of this document identifies the formal training schemes and funding sources that are available to the logistics industry.

Recommended Policy and Interventions Summary

HF1: To support the schemes contained within Policy T12 of RPG 11 (Priorities for Investment): 1. M6 widening between J11a and J19 2. M40 J15 Longbridge Improvement 3. M42 Active Traffic Management implementation 4. M42 widening J3 to Junction J7 5. M54/M6/M6 Toll Link 6. Active Traffic Management for the M5/M6/M42 motorway box 7. A5 Weeford to Fazeley Improvements 8. A38 Streethay to A50 Improvements 9. A45 Tollbar/A46 Improvements 10. A483 Pant and Llanymynech bypass 11. A50/A500 Junctions Upgrade
HF2: The Black Country Sub-Regional Study and the North Staffordshire Integrated Transport Study should consider the following additional major highway infrastructure schemes: 1. A relief route to the west of the West Midlands conurbation 2. A50/A500 upgrade.
HF3: To support improvements to local freight routes in key manufacturing and commercial centres aimed at improving network capacity and journey time reliability for goods vehicles. To be achieved through: 1. Identification and implementation of schemes by local authorities, advised by the Freight Quality Partnership in each area. 2. Coordinating the efforts of the infrastructure providers to ensure that routes are treated in an integrated manner. 3. Ensure that currently approved schemes meet with the requirements of goods vehicle operators.
HF4: To develop a freight routing strategy for the West Midlands. To be achieved through: 1. Keeping under review the PRN as being the most suitable routes for long distance freight movements 2. Designating most suitable routes for HGVs between trunk routes and freight generating locations. 3. If required upgrading route to allow easier passage for HGVs 4. Implementing traffic management systems to ensure HGVs utilise routes – to include freight advisory signing, weight restrictions

HF5: To improve the capacity of freight routes for goods vehicle operators through the implementation of appropriate traffic management measures:

1. Implementing traffic management systems to ensure HGVs utilise routes – to include freight advisory signing, weight restrictions etc.
2. To encourage better implementation of traffic regulation orders at pinch-points in the network
3. To investigate, and promote if feasible, innovative means of improving goods vehicle speeds – for example shared use of bus lanes.
4. Development of lorry driver guides for the West Midlands Region
5. Encourage wider use of web-based information systems such as MATTISSE

HF6: Increase the availability of lorry parks with driver amenities in the West Midlands. To be achieved through:

1. The planning system – allocating suitable locations for lorry parks in UDPs/Local Plans using a criteria based approach. Imposing planning conditions on new developments requiring the provision of parking facilities.
2. Public/private partnerships – Local Authority owned land with amenity facilities provided by private sector on franchise basis.

HF7: The promotion of HGV driving as an attractive career option through Local Education Authority careers services.

The promotion of HGV driving as an attractive career through the provision of HGV parking and driver amenities.

The LSCs in the West Midlands should take a proactive role with the logistics industry to develop work placed schemes for HGV drivers, and providing/identifying the sources of funding that are available. The LSCs should :

Identify formal Government backed work place training schemes which the logistics industry can utilise

Identify formal training organisations which can provide work placed training

Act as both a source of funding and a source of information concerning public funding sources

4. RAIL FREIGHT STRATEGY

4.1 Summary of Data and Key Issues Presented in Technical Annex

The table below shows a summary of current and forecast rail freight flows to and from the West Midlands (Annex Section 3 and Freight Strategy forecasts).

Table 20: Summary of Current and Forecast West Midlands Rail Freight Flows

	Tonnes		
	2003	**2015**	**2021**
Origin West Midlands			
Non-Bulk*	878,000	3,334,227	3,951,001
Bulk/Conventional	1,311,000	1,524,624	1,539,315
Total	2,189,000	4,858,851	5,490,316
Destination West Midlands			
Non-Bulk*	1,275,000	4,682,346	5,519,878
Bulk/Conventional	6,288,000	9,872,622	9,864,139
Total	7,563,000	14,554,968	15,384,017
Intra West Midlands			
Bulk/Conventional	1,153,000	1,313,235	1,333,191
TOTAL	**10,905,000**	**20,727,054**	**22,207,524**

* Inc Maritime Containers, Channel Tunnel, Domestic Intermodal and Auto

The promotion of modal shift, where appropriate, from road to rail, is based on the following factors:

- Both EU and national Government White Papers and legislation encourages growth in the volume of goods moved by rail freight (Annex Section 2).
- Rail freight offers operational benefits in that it has the capacity to haul large volumes in one move and over a short time period (Annex Section 5)
- In many cases it is able to offer a more cost competitive transport solution compared to road haulage, with costs reducing on a per unit basis with distance and train size (Annex Section 4 and 5).
- It is unaffected by and does not contributing to road congestion (Annex Section 5).
- Rail freight produces lower environmental impact in all areas (emissions, energy use, accidents etc) (Annex Section 5)

- The increasing volumes of goods being sourced from international markets, and the consequent increase in deep sea container trade through British ports works in favour of rail freight and provides further opportunities for growth in rail volumes nationally (Annex Section 5).
- The demand for larger distribution centres generates the volumes required to operate full length trains (Annex Section 5)
- Other policy driven factors, such as the Working Time Directive, distance based road user charging and driver shortages, all add to the cost base of the road transport industry, and hence make rail freight a more viable option (Annex Section 4).
- The Sensitive Lorry Miles report, produced by the SRA and endorsed by the DfT, clearly show that road haulage fails to cover fully non-user costs in the taxation it pays, indicating that there are wider economic benefits in shifting cargo from road to rail (Annex Section 2)

A growth in the volume of goods carried by rail freight can only be achieved through establishing and maintaining an open competitive market for the provision of rail freight services. It is only through competition and choice that more cost efficient higher quality services will be provided (Annex Section 5).

W9 is the minimum loading gauge at which intermodal services conveying a full range of intermodal units can operate without the loading gauge imposing serious cost or operational flexibility penalties on rail freight operating costs. It is therefore around lines gauge cleared to W9, W10 and W12 (or lines earmarked for enhancement to W10/W12) that freight operators and property developers will wish to develop their services and large scale rail linked distribution parks (Annex Section 5).

A number of strategically important railway routes through the West Midlands have a restricted loading gauge. The SRA has adopted a policy to gauge enhance these key routes, rather than perusing a 'wagon solution', due to:

- The high level of importance being placed on intermodal services, which require larger loading gauges, in delivering the 80% growth target (Annex Section 5)
- The deep sea container shipping lines are increasingly switching to the 2.90/9'6" tall high cube container (Annex Section 5).
- There are serious cost and operational flexibility penalties caused through using low deck height wagons (Annex Section 5)
- Without a network of W10/W12 gauge cleared routes, intermodal rail freight shippers will ultimately decline as shippers increasingly seek other modes of transport. To regions such as the West Midlands, this will essentially mean road haulage (Annex Section 5).

However it is also important to recognise that terminals or sites with a W8 loading gauge are able to handle some intermodal services. This is particularly important for terminals where a base load traffic which is site specific already exists e.g. MoD site in Donington

The availability of freight train paths to accommodate trains passing through the region is the key issue concerning rail network capacity in the West Midlands (Annex Section 5). An analysis of current demand for freight paths showed that there are currently 541 train movements Monday to Friday through the region. Weekly freight train movements to and from the West Midlands is currently just under 250 in each direction (Annex Section 3). There is a need to provide additional freight train capacity in the West Midlands region on a number of key routes in order to meet the forecast demand in rail freight traffics, particularly for trains passing through the region (Strategy Forecasts). In particular the strategy forecasts indicate a growth in demand for freight paths on the following key corridors:

- WCML through Trent Valley and onwards to Crewe
- Nuneaton to Whitacre Junction and Washwood Heath
- South Coast via Cherwell Valley to WCML at Stafford
- South West to North East corridor

There are a number of 'bottlenecks' and key constraints on the region's rail network which are restricting the availability of freight paths on these key corridors. The key issues which are restricting freight capacity growth, or have the potential to further curtail freight capacity include:

- The double tracked sections of the WCML via the Trent Valley, and track layouts at Rugby, Nuneaton and Stafford Stations (Annex Section 5)
- The need to cross 4 tracks 'at grade' in Coventry station; operating more than 2 high speed West Midlands-London passenger trains per hour per direction via Coventry in the off-peak (Annex Section 5)
- Operating more than one Birmingham-Reading Cross Country passenger train service per hour per direction in the off-peak via the single tracked Coventry-Leamington line (Annex Section 5)
- The proposed new passenger station at Kenilworth (Annex Section 5)
- The need to cross 4 tracks 'at grade' in Nuneaton station; operating more than 5 high speed North West-London passenger trains per hour per direction via Nuneaton in the off-peak (Annex Section 5)
- The restricted capacity of the Sutton Park line means that it is not currently a viable alternative for freight trains passing through the region (Annex Section 5)

- Poor track layouts combined with a large demand for paths (passenger and freight) on the Barnt Green-Kings Norton and St Andrews Junction-Washwood Heath sections of track (Annex Section 5)
- The 'steep' 1:34 gradient at Blackwell Summit which restricts train length (Annex Section 5)

A growth in the volume of goods carried by rail freight is dependent on an increase in intermodal terminal capacity and distribution warehousing which is located on rail linked sites, 3 million m^2 nationally and 365,000m^2 in the West Midlands region. This is based on the following rationale:

- Logistics operations are organised around distribution centre 'hubs' (Annex Section 4) and the need for rail freight to organise its strategies around distribution centres (Annex Section 4)
- The crucial factor in rendering rail freight cost competitive against other modes, principally road transport, is the availability of terminal capacity and the ability to locate distribution centres on rail linked sites (Annex Section 5)
- Increasing volumes of goods handled at RDCs and NDCs arrive are sourced from international markets and therefore arrive at a port in some form of unit load, particularly maritime containers (Annex Section 4)
- Intermodal rail freight is operationally more flexible compared to conventional box wagon traffics (Annex Section 5)

4.2 Rail Freight Strategy - Summary

It is recommended that the West Midlands should promote modal shift from road to rail, where appropriate, for flows of goods to, from and via the West Midlands region. This should be achieved through a combination of three policies and interventions:

- Promoting and maintaining an open competitive market for the provision of rail freight services in the West Midlands.
- The provision of a reliable railway network infrastructure in the West Midlands which is capable of delivering the types of rail freight services demanded by the logistics market
- The provision of additional rail freight terminal capacity and distribution warehousing which is located on rail linked sites in the West Midlands.

4.3 Competitive Market for Rail Freight Services

The West Midlands should promote EU and Government initiatives that will achieve an open and competitive market for rail freight service provision in the region. It is only through competition and choice that more cost efficient higher quality services will be provided to the logistics market. The West Midlands should work with the agencies and organisations responsible for the railway industry (DfT, Network Rail and ORR) to ensure that:

- The current structure, where shippers of goods to, from and via the West Midlands have a choice of rail freight traction operators, is maintained and developed
- Restrictive practices such as 'path blocking', which prevent rival operators from running train services, are eliminated. Trains paths through the West Midlands should be allocated on the 'use it or lose it' principal.
- Shippers and rail freight traction providers have unrestricted access to a network of open access rail freight terminals across the region

4.4 Railway Network Infrastructure

It is recommended that the West Midlands should work with the agencies and organisations responsible for the railway industry to promote and support the provision of a reliable railway network infrastructure, which is capable of delivering the types of rail freight services demanded by the logistics market. Recommended interventions to achieve this cover three main areas; loading gauge enhancement, the provision of additional network capacity and the creation of diversionary routes in the region.

Loading Gauge Enhancement

The West Midlands should work with the public sector agencies responsible for the railway industry to support the creation of a network of routes to, from and through the region with an enhanced loading gauge capable of handling larger intermodal units, in particular the 2.9m (9'6") high cube container.

Upgrading the rail freight routes to/from Southampton is a key element of RPG Policy T12 (Priorities for Investment). The West Midlands should therefore promote the enhancement to W10/W12 loading gauge between Southampton and the WCML in the West Midlands via the Leamington-Coventry-Nuneaton route and via the St Andrews-Washwood Heath-Whitacre Jct route (Landor Street to Nuneaton section already W10/W12). This will enable the movement of 2.90m (9'6") high cube containers by intermodal rail freight on standard intermodal platform wagons without the need to use low deck height wagons (cost and operational penalties) or road transport from the major deep sea container port at Southampton to the West Midlands and other regions which are accessed via the region. The West Midlands should regard early implementation as a high priority.

Upgrading the rail freight routes to/from Felixstowe is also a key element of RPG Policy T12 (Priorities for Investment). The West Midlands should therefore promote enhancement to W10/W12 loading gauge on the route from Felixstowe via Ely, Peterborough and Leicester to the WCML in the West Midlands (Nuneaton). This will provide of a key trunk route between Felixstowe and the West Midlands, North West and Scotland avoiding the need to travel via London which can accommodate the movement of 2.90m (9'6") high cube containers on standard intermodal platform wagons without the need to use low deck height wagons (cost and operational penalties) or road transport. The West Midlands should regard early implementation as a high priority.

It is recommended that the West Midlands should promote enhancement to W10/W12 loading gauge on the Sutton Park line. This would create a W10/W12 gauge cleared diversionary route through the West Midlands for intermodal rail freight traffics, which could be utilised when the primary trunk routes through the region are closed, such as during engineering possessions or after incidents.

In the longer term, the West Midlands should also promote enhancement to W10/W12 loading gauge from Wolverhampton to Telford. This would create a W10/W12 cleared route to the Telford Rail Freight Terminal at Donnington, currently under development.

Network Capacity

The West Midlands should work with the agencies and organisations responsible for the railway industry to consider freight capacity issues through the Route Utilisation Strategies and Regional Planning Assessments. The West Midlands should promote and support measures which will create a network of routes to, from and through the region with adequate network capacity to meet the long term growth in rail freight volumes. The provision of additional network capacity to, from and through the West Midlands should be considered as an essential component in promoting modal shift in the region. Additional freight paths on the network will be required in order to accommodate the forecast growth in rail freight volumes. Without additional capacity, growth will be constrained and lead to shippers to seek other modes of transport. To regions such as the West Midlands, this will essentially mean road haulage. Capacity growth should be achieved through a combination of three policies and interventions:

- Enhancements to the current railway infrastructure
- New railway infrastructure
- Striking an appropriate balance between the needs and aspirations of the passenger railway (TOCs and Centro) and freight operators

In the longer term, the West Midlands should promote and support enhancements to the railway network which will enable the operation of 775m length trains to, from and via the region. This would provide the following benefits:

- Provide additional capacity by allowing longer trains to occupy freight paths
- As many rail freight costs are fixed, unit costs will be lower

Analysis presented in the Annex (Section 3) and the strategy forecasts show that the greatest demand for freight paths in the future will be on the important South East-Midlands-North West/Scotland corridor. The WCML via the Trent Valley is the 'primary freight route' through the region for such flows. The SRA detail in their WCML Strategy a number of infrastructure enhancement schemes which are aimed at providing additional capacity on this route. The West Midlands should therefore support the completion of these schemes, namely:

- The re-modelling of Rugby Station, as detailed in the Technical Annex
- The re-modelling of Nuneaton Station, as detailed in the Technical Annex
- Four tracking of the Trent Valley section of the WCML, as detailed in the Technical Annex
- The re-modelling of Stafford Station, as detailed in the Technical Annex

These schemes, which are also a key element of RPG Policy T12 (Priorities for Investment), will provide additional capacity for freight trains services on the WCML by eliminating conflicting train movements through segregating high speed passenger services from slower passenger/freight trains. The enhancements should provide the additional paths required for freight train services along the Trent Valley section of the WCML. The West Midlands should regard completion of these schemes as a high priority.

Analysis presented in the Annex (Section 3) and the strategy forecasts also shows that South Coast-Midlands-North West/Scotland flows are an important rail freight movement to and through the region, and that demand for at least 2 paths per hour per direction in the future can be expected. The Leamington-Coventry-WCML Nuneaton route should be maintained as the 'primary freight route' through the region for freight trains from the south coast needing to reach Stafford (and visa versa). It is estimated that this route can currently accommodate 2 freight trains per hour per direction in the off-peak. The West Midlands should therefore work with the agencies and organisations responsible for the railway industry to promote the maintenance of current capacity on this route through the following interventions:

- Ensuring that future West Midlands-London high speed passenger train service frequency and timetabling does not restrict the current freight capacity through Coventry station (need for freight trains to cross 4 tracks 'at grade')
- Ensuring that West Midlands-Reading Cross Country passenger train service frequency and timetabling via the single tracked section of line between Coventry and Leamington does not restrict the current capacity on this section of line. Additional train services on this route should operate via Bordesley-Solihull.
- Ensuring that any proposed station developments on the route, such as Kenilworth, only proceed if they do not restrict current freight capacity.
- Ensuring that WCML North West-London high speed passenger train service frequency and timetabling does not restrict current capacity through Nuneaton station (need for freight trains to cross 4 tracks 'at grade')

The rationale behind promoting the Leamington-Coventry-WCML Nuneaton route is:

- Most South Coast-North West/Scotland freight trains would avoid the key St Andrews Jct/Washwood Heath corridor, thus relieving pressure on that ‘bottleneck’
- It is already gauge cleared to W8, and is understood to be the easiest/cheapest to gauge enhance to W10/W12
- It provides the shortest route between the Cherwell Valley line and the WCML, which is already W10 and is currently being upgraded to provide additional freight capacity

Analysis presented in the Annex (Section 3) shows that South West-Midlands-North East flows are an important rail freight movement through the region, while the strategy forecasts show a significant growth in future demand for freight paths on this important corridor. The West Midlands should therefore work with the agencies and organisations responsible for the railway industry to support and promote the re-opening of the former Stourbridge Junction to Walsall line as a freight only line. This new route would then become the 'primary freight route' through the region for South West-North East flows. This re-opened line would then connect with an upgraded Sutton Park Line (see below) to provide a high quality high capacity freight only route through the region that will be able to handle the forecast growth in traffics on this key corridor. This new route would avoid the congested St Andrews-Washwood Heath and Barnt Green-Kings Norton corridors, thus relieving pressure on these key 'bottlenecks'. Capacity released by removing freight trains from these congested corridors could be re-allocated for additional passenger capacity. This route would also avoid 'Blackwell Summit' thus enabling longer/heavier trains to be operated. Infrastructure work will also be necessary to ensure freight and passenger train segregation at Walsall so that conflicts are avoided. It is important that the Black Country Sub-Regional Study fully considers these issues.

The West Midlands should work with the agencies and organisations responsible for the railway industry to promote and support policies which maintain and in the long term provide additional capacity for freight trains on the key Washwood Heath-Water Orton-Nuneaton corridor. This is a key route supporting a number of important rail freight terminals. In the medium term, this will be achieved through:

- Adopting the interventions described above concerning South Coast-North West/Scotland train flows, thus ensuring that most train services on this corridor avoid the Washwood Heath area
- Adopting the interventions described above concerning the re-opening of the Stourbridge-Walsall route as a freight only line, thus diverting traffic away from St Andrews Jct-Washwood Heath
- Ensuring that off-peak passenger train service frequency and timetabling on the Water Orton to Nuneaton corridor allows for at least 3 freight paths per hour per direction in the off-peak
- Ensuring that the proposed new passenger station at Coleshill allows for at least 3 freight paths per hour per direction in the off-peak on the Water Orton to Nuneaton corridor

In the longer term a re-modelling of the St Andrews Jct-Washwood Heath corridor may be required to ensure greater segregation of passenger and freight train services and to limit conflicting train movements.

Diversionary Routes

Emergency closures and planned engineering possessions can have a significant impact on freight train services. A key factor in modal choice is reliability of service, and today's logistics market requires 24 hours a day access to the transport infrastructure. However this has to be balanced against the need to maintain the railway network to a high standard. The West Midlands therefore should work with the agencies and organisations responsible for the railway industry to promote the creation of W10/W12 gauge cleared diversionary routes through the West Midlands for South East-North West/Scotland flows and South Coast-North West/Scotland flows.

The Coventry-Stechford-Bushbury route should be maintained as key diversionary route through the West Midlands region during night time engineering possessions on the WCML Trent Valley or the Coventry-Nuneaton line. It is already gauge cleared to W10.

The Sutton Park line should be upgraded so that it can be utilised as a diversionary route through the region during engineering possessions for South East-North West/Scotland and

South Coast-North West/Scotland flows. An added benefit of this upgrade is that it would connect with the re-opened Stourbridge Junction to Walsall line to provide a high quality South West-North East route. Any upgrade would need to include the following:

- Faster line speeds than currently exist
- Additional capacity through shorter signal blocks
- Double tracking the entry/exit chords to enable trains to enter/leave line simultaneously

The outcome of such an upgrade is that it would enable freight trains on South East-North West/Scotland flows and South Coast-North West Scotland flows to pass through the West Midlands region on W10 cleared routes during engineering possessions on the primary routes through the West Midlands.

4.5 Rail Freight Terminal Facilities

A key component in the policy of promoting modal shift from road to rail is the availability of rail freight terminal facilities and the provision of additional terminal capacity. The West Midlands should recognise there is a need to increase terminal capacity in the region to promote modal shift. It is therefore recommended that the West Midlands support and facilitate proposals which will lead to an increase in rail freight terminal capacity in the region.

Rail Linked Distribution Parks

Due to the way the distribution market operates and taking into account developments in the logistics market, there is a particular need for additional large scale rail freight terminal capacity aimed at the FMCG and general cargo sectors in the West Midlands. It is recommended that new terminal capacity should follow the form and structure as laid out in the SRA's Strategic Rail Freight Interchange policy. This means that new facilities should include both distribution warehousing and intermodal terminal facilities located together on the same site (rail connected distribution parks). The Annex (Sections 4 and 5) discuss the rationale behind this recommended policy. The output of this policy should be an increase in intermodal terminal capacity and the amount of warehousing that is located on rail linked sites in the region. As capacity is particularly lacking to the north and west of the West Midlands conurbation, developments should be encouraged and promoted in these areas.

In line with current Government and EU policy, it is ultimately the responsibility of the private sector to develop, fund and operate new rail freight facilities, with targeted support where appropriate from the public purse (see funding strategy). However, due to its planning

responsibilities, the West Midlands should recognise that it has a role to promote and facilitate private sector investments in new rail linked distribution parks. Two approaches to this should be adopted:

Private sector led developments – The private sector, such as property developers, will identify sites where potential new terminals could be developed. The private sector will then design the proposed new facility, undertake the planning application(s), and ultimately finance, build and operate the new rail freight terminal. The West Midlands authorities should provide suitable assistance where appropriate, principally through the UPD/Local Plan process and ensuring that developments, where they are located in a suitable location, receive planning permission.

Public Sector led developments. As part of its regeneration role, sites can be identified for development by the public sector. The relevant body would lead the development, however they would seek private sector partners to design, finance, build and operate any new facility. Input would also be required from planning authorities where appropriate e.g. the UPD/Local Plan process. Recent developments in Widnes (Ditton), lead by Halton Borough Council, provides a model for such developments.

In terms of the West Midland's planning role, there is a need, from a transport, economic and environmental view point, for new large scale rail connected distribution parks (intermodal terminals and distribution warehousing) to be developed at suitable locations. The West Midlands should adopt a criteria based approach in assessing the suitability, from a transport, economic and environmental view point, of new rail freight terminals and rail connected warehousing.

The criteria that should be used to assess the suitability of new rail freight terminal sites are presented below.

- New sites should have appropriate rail access. Sites should be located on a railway line which has a W9 or greater loading gauge, so that it can accommodate the full range of intermodal units without the need to incur operational and cost penalties through the use low level wagons. Sites should be located on a railway line which permits full operational flexibility – train operations to/from the site ideally should be direct, without any need to reverse and use long diversionary or circuitous routes. Sites should be located on a railway line which has available track capacity
- New sites should have good road access. They will be located close to strategic motorway or trunk road networks
- New sites should be of large size and scale. Sites must be able to accommodate large distribution warehousing, intermodal handling facilities and internal railway

sidings on the same site. Ideally sites should be able to accommodate at least 150,000m^2 of distribution warehousing and some of the individual units must be at least 50,000m^2 in size

- New sites should be located in close proximity to markets and available traffic. A market need must be demonstrated. There must be a significant regional need to justify the development
- New sites should be located in close proximity to a workforce. As distribution activity is labour intensive, the development must be able to attract a sufficient labour force within a reasonable distance of the proposed development
- New sites should be located so that they can operate 24 hours per day without impacting on incompatible neighbouring land uses
- New sites should must be developed at a reasonable cost in terms of installing the railway infrastructure and land rent

The rationale behind these criteria are discussed in the Technical Annex (Section 2, Section 4 and Section 5).

However the West Midlands should also recognise that terminals or sites could be developed which only have access to a W8 loading gauge line. The W8 loading gauge is able to handle intermodal services, albeit supplemented by the use of low level wagons for some intermodal units (2.90m/9'6" containers). This is particularly the case where a base load traffic which is site specific already exists e.g. The Telford Rail Freight Terminal at Donington and Burton on Trent.

Other Rail Freight Terminal Facilties

The West Midlands should also recognise the key role played by smaller scale private siding freight terminals in the region, principally handling bulk/semi bulk goods in conventional railway wagons. These include facilities designed to handle a single commodity (e.g. aggregates) or smaller scale rail terminals handling a base load cargo but with the ability to handle other traffics where appropriate. The West Midlands should therefore promote and assist the development of new private siding rail freight terminals where feasible. The planning bodies will ensure that applications for planning permission for new private siding rail terminals, where appropriately located, are approved.

The West Midlands should, where appropriate, protect both existing and former rail connected sites and railway routes, which could be developed as rail freight terminals (either Strategic RFIs and private sidings). The West Midlands should also ensure that disused rail connected sites are not severed from the network through new developments. A list of

former/redundant rail linked sites and mothballed railway routes are detailed in the Annex (Section 5).

Recommended Policy and Interventions Summary

RF1: To promote modal shift from road to rail, where appropriate, for goods flows to, from and via the West Midlands region. To be achieved through promoting and maintaining open competitive markets for rail freight services, the provision of a reliable railway infrastructure and additional rail freight terminal capacity.
RF2: To promote EU and Government initiatives that support an open and competitive market for rail freight service provision in the region.
RF3: Enhancement to W10/W12 loading gauge between Southampton and the WCML in the West Midlands via the Leamington-Coventry-Nuneaton route and via the St Andrews-Washwood Heath-Whitacre Jct route (RPG Policy T12)
RF4: Enhancement to W10/W12 loading gauge between Felixstowe and the WCML in the West Midlands and Hams Hall and Landor Street via Ely and Peterborough (RPG Policy T12)
RF5: In the longer term, enhancement to W10/W12 loading gauge from Wolverhampton to Telford and Shrewsbury
RF6: Enhancement to W10/W12 loading gauge on the Sutton Park Line.
RF7: Ability to operate 775m length trains to, from and through the West Midlands
RF8: The WCML is the 'primary freight route' through the region for South East-North West/Scotland flows, To provide additional capacity on this route, to be achieved through: 1. Completing the re-modelling of Rugby Station, as proposed by the WCML Strategy. 2. Completing the re-modelling of Nuneaton Station, as proposed by the WCML Strategy. 3. Completing the four tracking of the Trent Valley section of the WCML, as proposed by the WCML Strategy. 4. Completing the re-modelling of Stafford Station, as proposed by the WCML Strategy. (RPG Policy T12)
RF9: The Leamington-Coventry-WCML Nuneaton route is the 'primary freight route' through the region for south-coast-North West Scotland flows. To maintain current freight train capacity on this route, to be achieved through: 1. Ensuring West Midlands-London passenger trains frequency and timetabling off-peak via Coventry do not restrict current freight capacity through Coventry station 2. Ensuring that West Midlands-Reading passenger train frequency and timetabling via the single tracked Coventry-Leamington line does not restrict current freight capacity 3. Ensuring that any proposed station developments on the route, such as Kenilworth, only proceed if they do not restrict current freight capacity 4. Ensuring North West-London passenger train frequency and timetabling via Nuneaton does not restrict current freight capacity
RF10: Re-open the Stourbridge Jct to Walsall line as a freight only line, which would then become the 'primary freight route' through the region for South West-North East flows. This would connect with an upgraded Sutton Park Line (see below). Will also require infrastructure works at Walsall to ensure freight and passenger train segregation at Walsall so that conflicts are avoided.

RF11: To maintain the current and provide additional capacity on the South West-North East corridor, to be achieved through: 1. Re-opening the Stourbridge-Walsall route 2. Ensuring that passenger train frequency and any proposed station developments, such as Coleshill, on the Water Orton-Nuneaton route allows for at least 3 freight paths per hour per direction off-peak 3. In the longer term a re-modelling of the St Andrews Jct-Washwood Heath corridor may be required to ensure greater segregation of passenger and freight train services
RF12: Maintain the Coventry-Stechford-Bushbury route as a key diversionary route (already W10) through the West Midlands region during night time engineering possessions on the WCML Trent Valley or the Coventry-Nuneaton line. Upgrade the Sutton Park Line so that it can be used as a diversionary route through the region during engineering possessions or as realistic alternative through route. To be achieved through: 1. Faster line speeds 2. Additional capacity through shorter signal blocks 2. Double tracked entry/exit chords to enable trains to enter/leave line simultaneously
RF13: To increase rail freight terminal capacity and the amount of warehousing that is located on rail linked sites in the West Midlands region. Developments should follow the form and structure laid out in the SRA's Strategic Rail Freight Interchange policy i.e. intermodal terminals and rail linked warehousing located on the same site Developments to the north and west of the West Midlands conurbation will be particularly promoted
RF14: The use of a criteria based approach in assessing the suitability, from a transport, economic and environmental view point, of new Strategic Rail Freight Interchanges. New Strategic Rail Freight Interchanges should be located so that they: 1. Have suitable rail access – W10/12 loading gauge, available capacity and operational flexibility 2. Have suitable road access – trunk road/motorway access 3. Are large enough to accommodate 775m length trains, intermodal terminal facilities and distribution warehousing 4. Have a local market to justify the development 5. Are located in proximity to labour 6. Have the ability to operate 24/7
RF15: To promote and assist the development of new rail freight terminals. Two approaches are to be adopted: 1. Private sector led developments – private sector identifies sites (in line with criteria), designs, undertakes planning application, finances, builds and operates terminals. Assistance from planning authorities where appropriate e.g. through the UPD/Local Plan process. 2. Local Authorities identify sites in line with criteria, and seek private sector partners to design, finance, build and operate terminals. Input from planning authorities where appropriate e.g. the UPD/Local Plan process.
RF16: To promote and assist the development of new private siding rail freight terminals. Ensuring that planning applications for new rail freight terminals, where appropriately located, are approved
RF17: To protect former railway lines and opportunities for rail connection to existing manufacturing,

distribution and warehousing sites.

5. OTHER STRATEGY POLICIES AND INTERVENTIONS

5.1 Summary of Data and Key Issues Presented in Annex

The table below presents a summary of air freight volumes in the UK for selected UK airports (Annex Section 3).

Table 21: Air Freight Volumes UK Selected UK Airports

	Tonnes 2003	**Total Growth 1993-2003**	**% Change**
London Airports			
Gatwick	222,916	26,320	13%
Heathrow	1,223,439	376,953	45%
Luton	22,850	1,944	9%
Stansted	198,565	137,650	226%
Total - London	*1,667,770*	*542,867*	48%
Selected Other			
East Midlands	227,060	197,537	669%
Manchester	122,639	38,552	46%
Kent International	43,026	40,822	1,852%
Liverpool	11,580	(3,582)	-24%
Birmingham	11,573	(4,952)	-30%
Coventry	3,314	(18,096)	-85%
TOTAL UK	**2,208,232**	**831,919**	**60%**

There are generally three types of air freight (Annex Section 6):

- Air freight which is transported in the bellyholds of scheduled long haul intercontinental passenger flights. This type of air freight forms the majority (63%) of air freight flown into and out of the UK. Air freight forwarders normally buy bellyhold space from the scheduled airlines, which they then fill through orders placed by shippers of goods.
- Air freight which is transported by express service providers (Integrators). These providers operate their own dedicated freighter aircraft on hub and spoke basis. They specialise in moving high value time sensitive consignments on a Just in Time basis.

- Air freight which is transported on freighter aircraft specially chartered for the consignment. Chartered aircraft normally fly large out of gauge consignments, or when an air freight forwarder has attracted a sufficient number of orders from shippers for a particular destination to fill a whole aircraft.

As most long haul flights to/from the UK operate from Heathrow and Gatwick, there is a lack of long haul bellyhold capacity in the West Midlands region. Therefore most air freight consignments from the West Midlands that are to be flown in passenger bellyholds is transported by road haulage to the South East. The majority of passenger services from Birmingham and Coventry airports are short haul flights which generally do not convey cargo. Government policy promotes a greater number of long haul flights being operated from regional airports such as Birmingham (Annex Section 6).

Coventry Airport is currently allowed to handle night time flights. This is important as many chartered and dedicated airfreight flights require night time departures. The recent decision of Thompsonfly to base itself at Coventry, and potential passenger terminal developments, may lead to restrictions on night time flying (Annex Section 6).

Nottingham East Midlands airport has developed into a key national hub for a number of express service providers, including TNT, UPS and DHL (Annex Section 6).

Petrochemical pipelines can be considered a mode of transport as they move refined petroleum products from their point of importation/production to a storage facility (primary distribution), from where the liquids are re-distributed to non pipeline connected end users (secondary distribution), normally by road transport (Annex Section 6).

While pipelines provide a sustainable way of transporting bulk liquids, they are very expensive to construct and operate, and they are highly inflexible. They are therefore only economically viable and practical as a form of transport where large regular volumes of liquids need to be moved between fixed locations. Consequently pipelines are essentially confined to the primary distribution of refined petroleum products (Annex Section 6).

There are 7 main petroleum pipeline networks across England and Wales, linking oil refineries to inland storage/distribution depots. Three of these networks serve depots in the West Midlands. The following shows the location of petroleum pipeline connected distribution terminals in the West Midlands (Annex Section 6).

Terminal	Location	Pipelines Serving
Pipeline Connected		
Kingsbury Oil Terminal	Near Tamworth	BPA, Mainline
Bromford	Birmingham	Esso, Mainline
Siesdon	Wolverhampton	Esso, Mainline
Astwood	Reditch	Esso
Birmingham Airport	Near Birmingham	Esso
Uttoxeter	Uttoxeter	BPA

The table below shows UK inland waterway freight volumes. The West Midlands currently does not handle any inland waterway traffics (Annex Section 3).

Table 22: UK Inland Waterway Freight Volumes

	Million Tonnes	
	2002	**1992**
Internal	4.0	5.9
Seagoing	38.8	41.9
One Port	6.2	12.1
Total	**49.0**	**59.9**

There are approximately 5,000km of navigable inland waterways in Britain. Out of this total, around 2,100km are classified as 'commercial waterways', which means they are either used for the movement of freight or are deemed to be capable of carrying freight in a commercial way. While a fairly extensive network of inland waterways exists in the West Midlands, the majority comprises narrow canals classified as 'non commercial' and therefore deemed not capable of carrying freight commercially. The only 'commercial waterway' in the West Midlands is a 38km section of the River Severn from Stourport downstream towards Gloucester. Non of this section is currently in active freight use (Annex Section 6).

The Government has promoted Freight Quality Partnerships (FQPs) as a forum whereby Local Authorities and the distribution industry can work together. They can be defined as a forum where agreed constructive solutions can be found to the issues, concerns and problems raised by each party, which balance the need for accessibility and the efficient movement of goods with environmental and social issues (Annex Section 4).

However a number key issues arise concerning the structure, operation, participation and outputs of FQPs. They can be considered by local authorities as the 'solution to all their problems'. They might also be viewed by hauliers as 'talking shops' or another way of imposing restrictions of road transport operations. Also different sectors of industry, and similar companies located at different locations will have different problems and issues. (Annex Section 4).

The Department for Transport has subsequently issued a guidance document in 2003 entitled 'A Guide on How to Set up and Run Freight Quality Partnerships', which attempts to address these issues. It suggested a number of different structures for FQPs:

- region wide partnerships – to focus on strategy and more likely to involve trade bodies rather than individual operators (Annex Section 4).
- LTP wide partnerships – again strategy focused for the area covered, and likely to involve trade bodies. They would also act as 'umbrella FQPs' for more sector/location specific FQPs (Annex Section 4)
- Sector/location specific partnerships – focused on problems and solutions, involve individual transport operators (Annex Section 4)

5.2 Air Freight Strategy

The West Midlands should recognise that the majority of air freight is flown in the bellyholds of scheduled long haul passenger services. Significant volumes of air freight is transported long distances by road to/from the West Midlands. This is due to a lack of long haul bellyhold capacity in the region due to the dominance of Heathrow, Gatwick, Manchester and mainland European airports such as Charles de Gaulle and Schipol in this market.

The West Midlands should aim to reduce the volumes of air freight that has to be transported long distances by road haulage through increasing the volume of air freight that is flown directly to/from the region. Birmingham Airport is the key facility in the region which can help achieve this aim. Most passenger air services which currently use Birmingham are short haul scheduled and charter flights. However the White Paper, “The Future of Air Transport” acknowledges the recent and projected passenger service growth opportunities for the airport. This should provide a basis for cargo development at Birmingham, as airlines seek to launch more long haul routes from the airport in addition to those operated from London.

The West Midlands should therefore promote, in line with the White Paper, additional long haul passenger services from Birmingham Airport as a means of providing more bellyhold freight capacity in the region. An increase in the volume of air freight handled at Birmingham

Airport should result in fewer road transport trips of air freight to/from the South East and mainland European airports.

The important role of 'transit sheds' at or close to airports for handling and consolidating air freight should also be recognised by the West Midlands. Any significant increase in the volumes of air freight being handled from Birmingham Airport will result in the need for additional transit shed capacity on/close to Birmingham Airport. The West Midlands should therefore ensure that the regional/local planning process recognises this need, and that the regional/local planning bodies plan effectively for an increase in the need for transit sheds on/close to Birmingham Airport.

The West Midlands should recognise that for chartered and dedicated air freight services, the ability to land and take-off at night time is an important requirement. Coventry Airport is currently allowed to handle night time flights. The assessment in the recent White Paper is that Coventry serves a specialist role within the region, catering for business aviation, mail and freight handling, and that this role is likely to continue despite the re-introduction of passenger flights by Thompsonfly. The West Midlands should promote and support Coventry Airport continuing this important role and its ability to handle chartered air freight flights 24 hours per day.

While Nottingham East Midlands airport is located in a neighbouring region, the excellent road links places the airport within easy reach of the main population centres of the West Midlands meaning it is effectively a West Midlands airport also. The airport is a key hub for a number of express service providers such as TNT and DHL. Given this situation, there is no requirement to provide additional express service capacity to the region. The West Midlands should therefore support and promote the continued development of express air freight services at Nottingham East Midlands.

5.3 Pipelines

As a form of transport, pipelines provide a sustainable way of transporting large volumes of liquids over long distances. They do not contribute to road traffic congestion or rail network path demand. If buried under ground they do not pose any visual problems. However they are very expensive to construct and operate. However they are only economically viable as a form of transport where large regular volumes of liquids needs to be moved between fixed locations, and consequently they are confined to the primary distribution of refined petroleum products to the region from oil refineries located outside the region.

Given that they are expensive to construct and operate, and that an extensive pipeline network already exists and serves six petroleum distribution depots in the West Midlands region, the West Midlands should recognise that additional capacity to this network is

unlikely to be required in the foreseeable future. However the West Midlands should continue to support and promote the existing pipeline network ahead of other transport modes for the primary distribution of petroleum products to the region. The West Midlands should support and promote additional pipeline capacity when it is required and justified, and where it would be beneficial to the region and result in fewer road or rail journeys.

5.4 Inland Waterways

While an extensive network of inland waterways exists in the West Midlands, the majority of this network comprises narrow canals classified as 'non commercial' and therefore deemed not capable of carrying freight commercially. The only 'commercial waterway' in the West Midlands is a 38km section of the River Severn from Stourport downstream towards Gloucester, and non of this section is currently in active freight use.

The absence of a network of commercial inland waterways in the West Midlands means that only small vessels with a limited cargo carrying capacity can operate to and from the West Midlands. Given these vessel limitations, the West Midlands should recognise that large scale use of the inland waterway network as a means of moving freight into, out of and through the region is neither an economically viable or realistic mode of freight transport.

However the West Midlands should also recognise that some small scale niche market opportunities are likely to be available, particularly on the 38km 'commercial waterway' section of the River Severn from Stourport to Gloucester. In the past the river was used to transport grain from Bristol to Tewksbury mill. The transport of building materials, such as sand or cement, to riverside construction sites or storage depots may be another potential opportunity. Other potential flows which have recently been identified or trialed are shown below:

- Proposal (including a trial load) for 100,000 tonnes waste paper and card over parts of the Birmingham canal
- Baled rags from south side of Birmingham to the Black Country
- Bricks to a development at Brierly Hill (not waste)
- Straw based fuel pellets. Trial cargo of cereal pellets from Buckby locks to Rugeley power station on Trent and Mersey canal (loaded in big bags)
- Recycled clothing from Solihull (northern Stratford canal) to Pudding Green (Oldbury)
- Household waste from towns in N Worcestershire to incinerator in Wolverhampton (100,000 tonnes p.a. has to be supplied to incinerator).
- Canal side recycling plants at Slatley, incinerators at Tyseley and Wolverhampton.

The West Midlands should therefore promote the use of the inland waterway network, particularly the River Severn downstream of Stourport, for the movement of freight, and should support any realistic and feasible niche market opportunity that may arise. In particular the West Midlands should support, financially where possible, studies examining realistic potential market opportunities, feasibility trials and applications for Freight Facility Grant funding as a contribution towards any capital expenditure.

5.5 Freight Quality Partnerships

A number of local authorities in the region, including the metropolitan boroughs of West Midlands, have already established Freight Quality Partnerships (FQPs). However they have been established and structured at a local authority/LTP area level only. Wider regional structures and smaller local sector/location focused forums have yet to be established. The Annex (Section 4) also discussed a number key issues concerning the structure, operation, participation and outputs of FQPs.

To address these issues, and recognising that properly structured and organised FQPs can produce significant benefits, the West Midlands should review the structure and roles of the current FQPs with a view to restructuring them along the following lines. These are in line with The Department for Transport's guide document entitled 'A Guide on How to Set up and Run Freight Quality Partnerships'.

A Regional Strategic Partnership/Freight Advisory Group.

This would be a FQP covering the whole of the West Midlands Region, and would develop and support freight strategies for the West Midlands Region. As well as providing a platform for communication, they would also have a role in developing regional planning policy. It could also identify and agree freight infrastructure projects and develop regional strategies. Suggested partners could be:

- Regional Development Agency
- Regional Assembly
- Government Office
- Other Government Agencies such as SRA, British Waterways and Highways Agency
- FTA, RHA, CBI and Chambers of Commerce
- Rail freight and airport operators
- Local Authority representatives

The North West Region established a Freight Advisory Group in 1999 in recognition of the importance of freight movements in the economic development of the Region. The Freight Transport Association was tasked to pull together a wide ranging group of freight interests to inform the regional decision-making process. Since 1999 it has been very active in the generation of freight policies and strategies in the North West. The terms of reference of the Group are to:

- Promote the integral role of freight transport in the economic development of the region and to seek sustainable transport policies through partnerships.
- Offer informed, independent advice on freight issues, and to share this knowledge openly.

The Group was given a set of tasks to ensure that freight transport in the North West was delivered efficiently and effectively, and their agenda is to:

- Influence transport infrastructure developments
- Understand the role of government in industry.
- Provide feedback to Government from Industry.
- Share, encourage and promote best practice.

The success of the North West Freight Advisory Group lends weight to the necessity of creating a similar body within the West Midlands Region. The West Midlands should therefore seek to develop a similar initiative for the region.

Local Transport Plan Area Wide FQPs

Each LTP should establish a FQP. These area wide FQPs could assist the process of developing a freight strategy for the LTP area and help to deliver some specific schemes. Suggested partners could be:

- Local Authority(s) responsible for LTP
- District Councils
- FTA, RHA and Chambers of Commerce
- Police
- Other Government Agencies such as SRA, British Waterways and Highways Agency
- Road freight transport operators
- Rail freight, port and airport operators

Location and Sector Specific FQPs

Each LTP area wide FQP would act as an 'umbrella' FQP for the whole LTP area, with a remit to develop strategy. Beneath the 'umbrella' more local and sector specific FQPs should be developed where appropriate, which would be focused on the delivery of solutions to location and sector specific problems. These delivery focused FQPs could be organised along the following lines.

Industrial Areas FQPs

Suggested partners should be a Local Authority and the occupants of a particular industrial estate (or groups of industrial estate located in the same area, sharing same road access etc…). Potential problems and issues could potentially include:

- Goods vehicles using unsuitable routes to and from the estate via residential areas e.g. 'rat runs'
- Night time movements of vehicles into and out of the estate
- All the main access routes may be unsuitable for goods vehicles
- Lack of suitable parking areas for goods vehicles

Constructive solutions agreeable to all parties could therefore include:

- Agreeing suitable 'freight routes' into and out of the estate. The road transport operators would agree to stick to the freight routes while in return the local authority would upgrade the routes so that they are suitable for goods vehicles. Weight limits could then be imposed on the 'rat runs'.
- Providing suitable parking areas for goods vehicles waiting for delivery
- Agreeing best practice operations such as not leaving vehicle engines running when not in use.

Retail Area FQPs

Suggested partners should be a Local Authority and the occupants of a particular retail area such as a town centre or 'out of town' retail park. This type of FQP was the basis of the FTA *'Delivering the Goods'* initiative. This was a partnership between local government and industry to encourage best practice and develop environmentally sensitive, economic and efficient delivery of goods in towns and cities. As a result schemes were introduced in Chester, Birmingham, Southampton and Aberdeen which balanced the need for making

retail deliveries efficiently with local environmental concerns. Potential problems could include:

- Unsuitable goods vehicles being used to make deliveries to retail outlets
- Goods vehicles blocking lanes at peak times while making deliveries, thus causing congestion
- Cars parked illegally in loading areas
- Lack of suitable unloading areas adjacent to retail outlets
- The delivery restrictions city centres potentially resulting in goods vehicles entering the centre at peak times adding to congestion
- Goods vehicles using unsuitable routes to access town centres e.g. via residential areas

Constructive solutions agreeable to all parties could therefore include:

- Agreeing suitable 'freight routes' into and out of retail areas.
- Agreeing suitable time limits for retail deliveries to avoid peak hours congestion in town centres
- Agreeing and providing suitable loading areas for goods vehicles while increasing traffic warden patrols to clamp down on illegal parking
- Agreeing best practice operations such as using the most suitable type of vehicle for making urban retail deliveries. Perhaps enforcing best practice through weight restrictions to force out unsuitable vehicles. Using time and weight restrictions could reserve the best time slots for making urban deliveries for the most suitable vehicles e.g. small low pollution rigids
- Local Authority publicising any retailer in return for partaking in any FQP.

Individual FQPs

Some organisations may be large enough and attract sufficient quantities of goods vehicle traffic for a local authority to engage in an individual partnership with that organisation.

Therefore by keeping these delivery focused FQPs at a local level means the problems and issues will be common and can be the focus of the forum. The core to these FQPs must be sharing problems and issues at a local level that have a direct impact on daily life, leading to implementable solutions where the direct benefits are open for all to see. Due to the nature of the above structure, it is likely that the freight industry would be represented on the region wide and LTP FQPs by the relevant trade associations such as the FTA and RHA. The delivery focused FQPs beneath LTP FQPs would obviously involve individual operators.

The guide document also stresses that FQP also should not purely be seen as structures for imposing restrictions on freight activity. The document mentions 'win-wins' initiatives. If one party has to give up something the other party must also do something in return. Therefore while restrictions may be imposed they should be linked with making improvements in other areas that will ultimately improve the operational efficiency of road transport operators. For example limiting delivery times and vehicles sizes in town centres should be developed at the same time as improving unloading facilities for goods vehicles.

Policy and Interventions Summary

OS1: To reduce the level of airfreight that has to be transported by road haulage to/from Heathrow, Gatwick, Manchester and mainland European airports. To be achieved through promoting, in line with the White Paper, additional long haul passenger services from Birmingham Airport as a means of providing more bellyhold freight capacity in the region.
OS2: To ensure that regional and local planning recognise the for and plan for an increase in the need for transit sheds on/close to Birmingham Airport.
OS3: To promote and support Coventry Airport's continued ability to handle air freight flights 24 hours per day.
OS4: To promote and support the continued development of express air freight services at Nottingham East Midlands Airport
OS5: To support and promote the existing pipeline network serving the West Midlands To support additional pipeline capacity when required and where it would be beneficial to the West Midlands
OS6: To promote the use of the inland waterway network, particularly the River Severn downstream of Stourport, for the movement of freight, and support any realistic and feasible niche market opportunity that may arise. To support, financially where possible, studies examining realistic potential market opportunities, feasibility trials and applications for Freight Facility Grant funding.
OS7: To review the structure and roles of the current FQPs with a view to restructuring them along the following lines, in line with recent Government recommendations: 1. Regional Strategic Partnerships/Freight Advisory Group – assist in the identification and implementation of schemes to benefit the road freight industry. Act as a conduit between infrastructure providers and the freight industry. 2. LTP area FQP – responsible for strategy and acting as an 'umbrella' for - 3. Sector and location specific FQPs

6. FUNDING SOURCES

The West Midlands should promote the availability of various grant funding schemes which provide contributions towards capital/start up costs and offer operating support. The grants are funded by both the EU and the UK Government.

6.1 Pan European Grants – Marco Polo

The Marco Polo Programme is a funding programme administered by DG TREN of the European Commission, which seeks to provide EC financial assistance to sustainable transport services through various types of intervention, based on environmental benefits that such services might generate. The programme has a budget of €15 million for 2003, its first full year of operation.

Three types of action can be funded, as follows:

- **Modal Shift Actions:** effectively, EC operating subsidy is provided to secure a shift of traffic from road to more sustainable modes, justified on the basis of the net unpaid external costs of road transport. It applies to new sustainable transport services addressing an established market. Projects do not necessarily have to be innovative as the Commission has accepted that launching new combined transport services is sufficiently risky without requiring a degree of technological or commercial innovation; the key requirement is to achieve the modal shift targets set out in the proposal. Projects can be funded up to 30% of operating costs.

- **Catalyst Actions** are actions involving services acting as a "catalyst for structural change in the market" and are expected to be highly innovative, involving a high level of dissemination, leading to replication of results in other services around Europe. They are therefore more ambitious than Modal Shift Actions and are expected to change the structure of the entire market and involve the launch of commercial services. Up to 35% of the operating costs of the project can be funded by the Programme.

- **Common Learning Actions are designed to** encourage the freight transport industry to carry out co-operative actions to optimise work methods and procedures. Examples include: new co-operation and capacity management models in rail transport; adapting, in co-operation with transport users, procedures and methods in the rail transport system to meet today's logistics requirements; setting up of European training centres for rail professionals and train drivers. They are expected to be highly innovative and a high level of dissemination is expected. The projects would be highly ambitious in their goals, but would not involve the launch of commercial services. As these actions are not so "close to the market", up to 50% of implementation costs can be funded by the Programme.

Awards are made following a competition, with a closing date in December. Awards of funding for the 2003 competition are expected to be announced in April 2004.

6.2 UK Government Grants

Rail Freight Grant Funding

One of the main barriers to using rail freight is that under some circumstances it is more expensive when compared to road transport. Therefore lowering/removing the cost difference could result in rail winning traffics that would otherwise go by road. The main method that is used to lower the cost of rail freight is through the provision of grant funding of various types. These sources of funding generally relate to:

- Subsidy for infrastructure works, often justified by the environmental benefits that arise from rail terminal developments through removing trucks from the road network or by a need to foster the economic development of the region; this therefore provides a direct contribution to funding sustainable infrastructure development.

- Operational subsidy for rail services, which indirectly provides funding for infrastructure development through handling charges levied on customers, as well as supporting the services themselves. Again, these are generally justified by the environmental benefits from removing trucks from the road network.

There are currently three main grant funding schemes available at a UK national level to assist rail freight terminals and services. These are:

- Freight Facilities Grants
- Track Access Grants
- Company Neutral Revenue Support

Freight Facilities Grants

Freight Facilities Grants (FFGs) are grants made as a contribution towards the capital costs of constructing new rail freight terminal infrastructure, handling equipment and related facilities which will enable the rail mode to handle traffic which would otherwise go by road. In England, the scheme is administered and funded by the SRA to whom applications are made.

In any FFG application, eligible costs which the grant aid will support are those capital costs which are directly related to the construction of new or replacement rail facilities that will enable the rail mode to handle traffic which would otherwise be carried by road. Eligible costs under the grant regime therefore include internal railway sidings and connections to

the mainline, handling/lifting equipment, hard standing storage areas and railway wagons specifically built for the operation.
Grants are paid towards both completely new terminal infrastructure and renewing life expired terminal facilities. There are two main criteria for qualifying for a grant, which are:

- Environmental benefits will arise through removing HGVs journeys from the road network
- Without the grant funding, the rail based supply chain will be more expensive than undertaking the operation purely by road i.e. there is a 'cost gap'

The scheme is based on the principle that rail freight is more environmentally friendly than road transport, and thus by removing HGV journeys from the road and switching traffic to rail there will be environmental benefits. The environmental benefits are expressed in monetary terms by applying certain monetary values to each HGV mile removed from the roads. These are called Sensitive Lorry Miles (SLMs) values and include elements such as accidents, noise, pollution and road congestion.

The SRA announced new Sensitive Lorry Mile (SLM) values in May 2003, the first re-valuation since 1996. The new values, agreed with the Department for Transport (DfT), reflect more accurately the costs to society of HGVs, and take into account the different type and level of impacts of lorries on different locations, different roads and under different conditions. The new SLM values are as follows:

- Low congested motorway £0.04 per mile (£0.025 per km)
- Medium congested motorway £0.27 per mile (£0.168 per km)
- High congested motorway £0.69 per mile (£0.429 per km)
- Conurbation - Trunk & Principal £1.38 per mile (£0.857 per km)
- Conurbation - Other £1.74 per mile (£1.081 per km)
- Rural & Urban - Trunk & Principal £0.53 per mile (£0.329 per km)
- Rural & Urban - Other £0.45 per mile (£0.280 per km)

A map on the SRA website shows which sections of motorway have been placed in which congestion category. Conurbation is defined as the main metropolitan counties in England and Scotland i.e. Greater London, West Midlands, Greater Manchester, Merseyside, West Yorkshire, South Yorkshire, Tyne and Wear and Glasgow, Rural and Urban being all other areas of the country. Trunk and Principal routes are defined as all single and dual A class roads. Other means B class roads and unclassified routes. The new SLM values will be used to calculate the environmental benefits in all awards under the scheme from April 2004.

Therefore any application for a FFG has to first demonstrate that the grant will result in HGVs being removed from the road and therefore environmental benefits will be gained from the grant funding. The above SLM values are used to produce an overall monetary valuation on the environmental benefits produced.
The other main criteria is that there has to be a 'cost gap' between the rail and road solutions. Therefore as part of the application process, an applicant would have to prepare a detailed business case showing that the rail based supply chain's overall cost would be more than using a road transport based distribution system. The total rail costs will include the terminal's capital costs (e.g. loan re-payments) and the facility's annual operating costs i.e. terminal handling charges. In effect the FFG reduces the overall construction costs of the facility. This enables the terminal to charge lower handling fees and this saving can then be passed on to the shippers, reducing the rail freight based supply chain's overall costs. This way the FFG would therefore 'fill the gap' between the rail and road costs. In future, the financial case will have to account for any assistance received under the new Company Neutral Revenue Scheme (see below).

A FFG will normally finance up to 50% of any scheme but this may be increased to 75%, the maximum level allowed under EU state aid rules. However three figures will cap the amount of grant that is given:

- The total eligible capital costs of the overall project. The SRA will not pay a grant more than the project actually costs.

- The 'gap' between the rail costs for the project and the equivalent road operation. If more than the 'gap' was provided the SRA would in effect be subsidising the company rather than just 'filling the gap' between the road and rail costs.

- The total net environmental benefits that result from using a more environmentally friendly mode of transport.

The lower of the above three figures will cap the grant. The business case and environmental benefits can be calculated using either committed or forecast traffic flows. However where they are based on forecasts, if the predicted traffics do not materialise (and hence the benefits are lower than forecast) the SRA can claim part of the grant back.

Any FFG application will also have to take into account the SRA's new appraisal system, which was published in April 2003. The document explaining the new system contained details of the methodology the SRA will use in deciding whether to support projects financially. Briefly schemes seeking SRA financial support will be compared and then ranked based on costs and benefits per £ of SRA support. As a consequence, this is a

further 'hurdle' which FFG funding applications will need to cross. Any application will have to demonstrate a high level 'value for money' in addition to meeting the other qualifying criteria. Essentially all applications will enter a 'beauty parade', and schemes which can demonstrate very good value for money will be the projects that receive funding.

Additionally for intermodal terminal facilities, the impact of the new CNRS scheme will need to be accounted for when applying for any funding under the revised scheme. When comparing the road and rail costs as part of the business case, the total rail freight costs will have to include any CNRS grant that could be available. The CNRS levels have been calculated based on terminal handling charges at the current market rates. Therefore if a new terminal can be developed and constructed at a cost which allows the terminal operator to charge the current market rates and make a suitable return, FFG funding will not be required as it will not be possible to show a financial need i.e. there will be no 'cost gap'.

However where development costs are high and consequent handling charges (to make a suitable return) would be above market rates i.e. there would be a 'cost gap' after including the CNRS grant, FFG is likely to still be available as a financial case could be made. The full value of the environmental benefits have not used in calculating the CNRS grant rates, and therefore the balance of these benefits will be 'held back' and available to fund these types of FFG grant applications. In effect the FFG would lower the handling charges towards the market rate. New or expanded facilities that handle bulk and semi bulk goods will still be able to apply for FFG funding in a similar manner to the current scheme.

The SRA announced in February 2003 that it was suspending the scheme and that new awards would not be granted until at least April 2004. Recent statements suggest that it will be April 2005 at the earliest before the scheme is re-instated fully. Additionally the budget will probably be less than in previous years. However the SRA has suggested that FFG applications can still be lodged with their grants department. The purpose of this is two fold. Firstly, a portfolio of good value grant applications will assist the SRA in its funding negotiations with the DfT. Secondly, if/when the scheme is reintroduced it is likely to be applications already lodged with the SRA who will get first call on the funds.

Track Access Grants

Track Access Grants (TAGs) have been available for a number of years and is in effect an operating subsidy designed to lower the operating costs of rail freight. While FFGs assist capital costs, TAGs are payable as a contribution towards one of rail freight's running costs, track access charges. The TAG is therefore paid to the organisation that actually pays the track access charges to Network Rail i.e. the traction supplier. TAGs are administered and funded by the SRA for both England and Wales, and any application would normally be submitted at the same time as an FFG.

The TAG is applied for in a similar way to the FFG. An application document has to be produced demonstrating that environmental benefits will arise from moving the goods by rail rather than road haulage (using the same SLM values), together with a detailed business case showing that the rail option is more expensive than the road alternative. Hence the TAG grant application would normally be undertaken by the traction supplier. However to promote more openness in rail freight charges, the SRA welcomes applications from shippers/logistics providers, although the actual grant is still paid directly to the traction supplier. As with the FFG, the TAG will also be 'capped' by three figures:

- The total environmental benefits, calculated in a similar manner to the FFG using the same SLM values

- The 'gap' between the rail costs and the equivalent road operation. Again, if more than the 'gap' was provided the government would in effect be subsidising the company rather than just 'filling the gap' between road and rail

- The total track access charge payable to Network Rail.

The lower of the three figures will cap the size of the TAG. Any TAG that is granted is paid monthly in arrears directly to the traction supplier. The effect of the TAG is to reduce the running costs incurred by the traction supplier when undertaking a rail freight movement. The full value of the TAG should then be past on to the shipper, reducing the rail freight based supply chain's overall costs. The SRA also announced in February 2003 that it was suspending new TAG awards. Recent statements suggest that it will be April 2005 at the earliest before the scheme is re-instated fully. When the scheme is re-instated, it will only be available to non intermodal and box wagon flows such as conventional bulk rail freight movements e.g. coal, steel and aggregates

Company Neutral Revenue Support (CNRS)

The Company Neutral Revenue Support grant scheme was introduced in April 2004. It will replace TAG for intermodal rail freight, however it will be similar to TAG in that it will provide an operational subsidy as a contribution towards rail freight running costs. However it will differ from TAG in two main respects:

Firstly it will be paid to the organisation taking the commercial risk in committing traffics to rail, not necessarily the traction supplier. As TAG was applied for and paid to the traction suppliers, organisations contracting dedicated train services i.e. the organisation taking the risk in committing the traffics to rail, did not receive the benefit of the grant directly. This

'flaw' will be removed and the CNRS grant will be paid direct to such organisations. These will include container shipping lines contracting their own dedicated trains between deep sea port and inland terminals, or logistics providers offering their customers rail based solutions. In the case of common user intermodal services, where the traction supplier sells slots on a scheduled train service, they will receive the CNRS grant as they are the organisation taking the commercial risk.

Secondly rather than undertake a complicated application document when new flows arise, the CNRS operates a much simpler structure. The grant system will operate along the following lines:

- The country is divided into a number of regions.
- Each possible region to region movement (and intra region movements) is allocated two grant rates. One grant rate is for a port to inland terminal flow, the other for an inland terminal to inland terminal flow. The grant levels have been based the need for grant to undercut road haulage and the environmental benefits of transferring goods to rail. Grants are per unit moved i.e. container, swap body.
- The organisation committing the traffic to rail will register the traffic flow with the SRA. They will then be able to obtain the grant by producing evidence the movement occurred, such as a delivery note.

The SRA has published each region to region grant level via its website and in an application form document. The grant rates are shown in the report Appendix. The grant levels have been calculated on the basis of the environmental benefits that will arise and road haulage costs compared to rail freight charges, including terminal handling charges at the current market rates. The grants will not be effected by the suspension of the FFG/TAG schemes as the money to fund it is currently allocated to the TAG scheme for intermodal traffics, which the CNRS is replacing for intermodal traffics.

6.3 Training Schemes and Funding Sources for Goods Vehicle Drivers

The following is a list of formal training schemes and accompanying funding that are available to industry.

Modern Apprenticeships. Government backed training and development initiative aimed at school and college leavers up to the age of 25 years old. In England and Wales both Foundation and Advanced Modern Apprenticeships are available in road transport and distribution. The Learning and Skills Council network will assist in identifying recruits, training suppliers and funding opportunities. The Foundation framework offers a work based programme with a strong emphasis on practical training, including the acquisition of a Class

C+E licence, but also with class room based elements delivered through local colleges and private training establishments. Employees are free to select candidates they feel are most suitable. A Foundation Apprenticeship can attract funding between £3,670 and £6,878. This programme can also run alongside the Young Driver Training Scheme (see below) and is assisted by funding up to £6,878 per trainee.

The Young Driver Training Scheme. This has been designed to address the issue of school leavers employees being lost to the industry. It allows young employees to train for a goods vehicle licence from 18 years old rather than 21 years old. Young drivers already holding a clean Class B licence can learn to drive a Class C vehicle from 18 years old, and once they have passed the driving test can drive such vehicles unaccompanied (subject to regular driving assessments). They can also apply to drive a Class C+E vehicle two years after passing their Class C licence if accompanied by an experienced driver. The employer must be registered with an Approved Training Organisation, which will undertake the actual training, and the driver must stay with the same employer throughout the training programme. Despite the scheme's strict rules, it could potentially attract a large number of employees leaving formal education at 17/18 years old straight into logistics industry, essentially those not going to University, and they would not be lost to other occupations.

The New Deal. The New Deal, available through Job Centre Plus, may also help the training of unemployed persons to Class C+E licence standard, prior to offering the candidate for work placement and ultimately full time employment. An accredited training provider in partnership with an employer selects applicants to be trained. The employer commits to accepting the applicant for a placement and provide an experienced driver mentor for training. In nearly all cases the applicants training and living expenses are met by Job Centre Plus. Following completion of training, the applicant is free to take up a full time position with either the participating employer or with another employer. Job Centre Plus also handles local emergency funds where there are mass redundancies such as a factory closure.

Funding sources available to assist the costs of training drivers are:

Military Service Leavers. The Career Transition Partnership assists employers seeking to employ ex-service personnel. Personnel leaving the Armed Forces can attract funding to become civilian drivers under the MoD resettlement scheme. This source of funding is accessed by employers through local resettlement offices.

Logistics Skills Awards. The Logistics Skills Award can provide funding up to £2,500 for employees of 25 years and over in England. Trainees will obtain a Class C or C+E licence, a basic skills certificate and an NVQ Level 2 in Driving Goods Vehicles. The scheme is funded through the Road Haulage Modernisation Fund.

European Social Funds or Workforce Development Funds. These funds are available for certain driver training and licence acquisition enterprises. They are accessible through the Learning and Skills Council network.

Individual Learning Accounts (ILAs). ILAs have been set up by the Government to help people save money to pay for small amounts for learning. The account is owned by the individual and, subject to some conditions, there are contributions also paid in by the Government. They are available to everyone over 18 and can be used to pay for vocational driving licence acquisition. Employers can also contribute to ILAs tax free.

Small Firms Training Loans (SFTLs). SFTLs are deferred repayment loans to help small firms fund training. An SFTL allows companies to borrow the funds to pay for training from the major banks without having to repay anything for 12 months. The Government pays the interest in this time. After this the applicant has between 1 and 7 years to repay the loan in full. Businesses must employ less than 50 people, loans can be up to £125,000 and cover up to 90% of the training costs.

Career Development Loan (CDL). A CDLs are deferred repayment loans to help small firms fund training. A CDL can be used to fund any full time or part time vocational training that lasts no longer than two years. Candidates can borrow up to £8,000. The Government pays the interest on the loan and repayment commences one month after the end of the training period.

7. SUMMARY AND IMPLEMENTATION PLAN

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
	Highways Strategy					
Para A, i)	The need to provide better road transport links to, from and through the region to generate greater efficiency and reliability in the freight sector, and to provide additional capacity for all vehicles. The need for improved journey time reliability.	HF1: To support the schemes contained within Policy T12 of RPG 11 (Priorities for Investment), and regards their early implementation as a high priority: 1. M6 widening between J11a and J19 2. M40 J15 Longbridge Improvement 3. M42 Active Traffic Management implementation 4. M42 widening J3 to Junction J7 5. M54/M6/M6 Toll Link 6. Active Traffic Management for the M5/M6/M42 motorway box 7. A5 Weeford to Fazeley Improvements 8. A38 Streethay to A50 Improvements 9. A45 Tollbar/A46 Improvements 10. A483 Pant and Llanymynech bypass 11. A50/A500 Junctions Upgrade	Greater efficiency and reliability in the freight sector Improved journey time reliability	Highways Agency Local Authorities Regional Strategic Partnerships/ Freight Advisory Group	1. 2011 - 2015 2. 2011 - 2015 3. 2001 - 2005 4. 2015 - 5. 2006 - 2010 6. 2006 - 2015 7. 2001 - 2005 8. NA 9. 2006 - 2010 10. 2006 - 2010 11. 2001 - 2005	RPG policy

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, i)	The need to provide better road transport links to, from and through the region to generate greater efficiency and reliability in the freight sector, and to provide additional capacity for all vehicles. The need for improved journey time reliability.	HF2: The Black Country Sub-Regional Study and the North Staffordshire Integrated Transport Study should consider the following additional major highway infrastructure schemes: 1. A relief route to the west of the West Midlands conurbation 2. A50/A500 upgrade.	Greater efficiency and reliability in the freight sector Improved journey time reliability	Highways Agency Local Authorities Regional Strategic Partnerships/ Freight Advisory Group	2005-	Proposal
Para A, i)	The need to provide better road transport links to, from and through the region to generate greater efficiency and reliability in the freight sector, and to provide additional capacity for all vehicles. The need for improved journey time reliability.	HF3: To support improvements to local freight routes in key manufacturing and commercial centres aimed at improving network capacity and journey time reliability for goods vehicles. To be achieved through: 1. Identification and implementation of schemes by local authorities, advised by the Freight Quality Partnership in each area. 2. Coordinating the efforts of the infrastructure providers to ensure that routes are treated in an integrated manner. 3. Ensure that currently approved schemes meet with the requirements of goods vehicle operators.	Greater efficiency and reliability in the freight sector Improved journey time reliability	Local Authorities FQPs	2005-	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, ii)	The use of inappropriate roads by HGVs between trunks routes and freight generating locations. Poor signing between trunk routes and freight generating locations.	HF4: To develop a freight routing strategy for the West Midlands. To be achieved through: 1. Keeping under review the PRN as being the most suitable routes for long distance freight movements 2. Designating most suitable routes for HGVs between trunk routes and freight generating locations. 3. If required upgrading route to allow easier passage for HGVs 4. Implementing traffic management systems to ensure HGVs utilise routes – to include freight advisory signing, weight restrictions	Freight vehicles concentrated on the most appropriate routes to/from freight generating locations. Effective signing to reduce/eliminate 'lost' vehicles Improved efficiency	Local Authorities Highways Agency FQPs	2005-2007	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, ii)	The need for improved journey time reliability. The need for better traffic management to make the best use of existing highway capacity.	HF5: To improve the capacity of freight routes for goods vehicle operators through the implementation of appropriate traffic management measures: 1. Implementing traffic management systems to ensure HGVs utilise routes – to include freight advisory signing, weight restrictions etc. 2. To encourage better implementation of traffic regulation orders at pinch-points in the network 3. To investigate, and promote if feasible, innovative means of improving goods vehicle speeds – for example shared use of bus lanes. 4. Development of lorry driver guides for the West Midlands Region 5. Encourage wider use of web-based information systems such as MATTISSE	Better traffic management. Greater efficiency and reliability in the freight sector Improved journey time reliability	Local Authorities Highways Agency FQPs	2005-	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, i) and ii)	Parking of HGVs in inappropriate locations. Lack of parking for HGVs and driver amenities. Failure of private sector to invest and support form Local Authorities.	HF6: Increase the availability of lorry parks with driver amenities in the West Midlands. To be achieved through: 1. The planning system – allocating suitable locations for lorry parks in UDPs/Local Plans using a criteria based approach. Imposing planning conditions on new developments requiring the provision of parking facilities. 2. Public/private partnerships – Local Authority owned land with amenity facilities provided by private sector on franchise basis	The provision of lorry parks and driver amenities in appropriate locations.	Local Authorities Highways Agency FQPs	2005-2008	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, i) and viii)	The shortage of qualified Class C and C+E drivers in the logistics industry, and the need to recruit/retain more qualified drivers. The high cost to individuals of HGV training. The reluctance of industry to pay for training schemes. Young people are lost to the industry due to the 21 years old qualifying age.	HF7: The promotion of HGV driving as an attractive career option through Local Education Authority careers services. The promotion of HGV driving as an attractive career through the provision of HGV parking and driver amenities. The LSCs in the West Midlands should take a proactive role with the logistics industry to develop work placed schemes for HGV drivers, and providing/identifying the sources of funding that are available. The LSCs should: Identify formal Government backed work place training schemes which the logistics industry can utilise Identify formal training organisations which can provide work placed training Act as both a source of funding and a source of information concerning public funding sources	An increase in the supply of qualified Class C and C+E drivers.	Learning and Skills Councils FQPs FTA/RHA LEA careers services	2005-	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
	Rail Freight Strategy					
Para A, iv), v) and vi)	EU and Government Policy promoting rail freight. In many cases rail can provide more cost competitive services compared to road haulage Rail freight is unaffected by and does not contribute to road congestion Rail freight produces lower environmental impacts in all areas (emissions, energy use, accidents etc). Changes to the structure/operation of the logistics market provide opportunities for rail freight growth.	RF1: To promote modal shift from road to rail, where appropriate, for goods flows to, from and via the West Midlands region. To be achieved through promoting and maintaining open competitive markets for rail freight services, the provision of a reliable railway infrastructure and additional rail freight terminal capacity.	Enable rail freight to operate more efficiently and with greater reliability, thereby providing a more cost and quality competitive service.	West Midlands Local Authorities AWM DfT Network Rail	2005-	Policy
Para A, iv), v) and vi)	Competition and choice in rail freight service provision produces more cost efficient higher quality services.	RF2: To promote EU and Government initiatives that support an open and competitive market for rail freight service provision in the region.	An open and cost competitive rail freight industry in the West Midlands	West Midlands Local Authorities AWM DfT Network Rail	2005-	Policy

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	The W8 loading gauge on the Cherwell Valley route from Southampton to the WCML in the West Midlands and to the intermodal terminals at Landor Street and Hams Hall – cannot accommodate 2.90m (9'6") high cube containers on standard intermodal platform wagons.	RF3: Enhancement to W10/W12 loading gauge between Southampton and the WCML in the West Midlands via the Leamington-Coventry-Nuneaton route and via the St Andrews-Washwood Heath-Whitacre Jct route (Landor Street to Nuneaton now W12).(RPG Policy T12)	Enable the movement of 2.90m (9'6") high cube containers by intermodal rail freight on standard intermodal platform wagons without the need to use low deck height wagons (cost and operational penalties) or road transport.	DfT Network Rail	2010	Under develop-ment
Para A, iv), v) and vi)	The W7/W8 loading gauge between Felixstowe and the WCML in the West Midlands and the intermodal terminals at Landor Street and Hams Hall via Ely and Peterborough – cannot accommodate 2.90m (9'6") high cube containers on standard intermodal platform wagons.	RF4: Enhancement to W10/W12 loading gauge between Felixstowe and the WCML in the West Midlands (Nuneaton) via Ely and Peterborough. (RPG Policy T12)	The provision of a key trunk route between Felixstowe and the West Midlands, North West and Scotland avoiding London which can accommodate the movement of 2.90m (9'6") high cube containers on standard intermodal platform wagons without the need to use low deck height wagons (cost and operational penalties) or road transport	DfT Network Rail	2010	Under develop-ment
Para A, iv), v) and vi)	The W7 loading gauge from Wolverhampton to Telford and Shrewsbury – cannot accommodate 2.90m (9'6") high cube containers or 2.59m (8'6") containers on standard intermodal platform wagons.	RF5: In the longer term, enhancement to W10/W12 loading gauge from Wolverhampton to Telford and Shrewsbury.	The provision of a W10/W12 cleared route to the proposed Telford Rail Freight Terminal at Donnington.	DfT Network Rail	2010	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	The W9 loading gauge on the Sutton Park Line.	RF6: Enhancement to W10/W12 loading gauge on the Sutton Park Line.	The provision of a W10/W12 gauge cleared diversionary route through the West Midlands, during engineering possessions etc, for intermodal rail freight traffics	DfT Network Rail	2010	Proposal
Para A, iv), v) and vi)	Network Capacity to, from and through the region	RF7: Ability to operate 775m length trains to, from and through the West Midlands.	Additional capacity by allowing longer trains to occupy freight paths, and more cost efficient freight train services.	DfT Network Rail	2015	Under develop-ment
Para A, iv), v) and vi)	Network Capacity through the West Midlands region for South East-North West/Scotland flows.	RF8: The WCML is the 'primary freight route' through the region for South East-North West/Scotland flows. To provide additional capacity on this route, to be achieved through: 1. Completing the re-modelling of Rugby Station, as proposed by the WCML Strategy. 2. Completing the re-modelling of Nuneaton Station, as proposed by the WCML Strategy. 3. Completing the four tracking of the Trent Valley section of the WCML, as proposed by the WCML Strategy. 4. Completing the re-modelling of Stafford Station, as proposed by the WCML Strategy. (RPG Policy T12)	Additional capacity for freight trains services as stated in the SRA WCML Strategy, by eliminating conflicting train movements through segregating high speed passenger services from slower passenger/freight trains.	DfT Network Rail	2008	On-going

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	Network capacity through the region for south coast-North West/Scotland flows.	RF9: Maintain the Leamington-Coventry-WCML Nuneaton route as the 'primary freight route' through the region for south-coast-North West Scotland flows. To maintain current freight train capacity on this route, to be achieved through: 1. Ensuring that West Midlands-London passenger trains frequency and timetabling off-peak via Coventry does not restrict current freight capacity through Coventry station 2. Ensuring that West Midlands-Reading passenger train frequency and timetabling via the single tracked Coventry-Leamington line does not restrict current freight capacity 3. Ensuring that any proposed station developments on the route, such as Kenilworth, only proceed if they do not restrict current freight capacity 4. Ensuring North West-London passenger train frequency and timetabling via Nuneaton does not restrict current freight capacity.	Maintain capacity for South Coast-North West/Scotland freight trains flows via the Leamington-Coventry-Nuneaton route. Relieve pressure on the key St Andrews Jct/Washwood Heath 'bottleneck' through ensuring most South Coast-North West/Scotland freight trains avoid this corridor.	DfT Network Rail Virgin Trains Centro Warwickshire CC	2005-	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	Network capacity through the region for South West-North East flows.	RF10: Re-open the Stourbridge Jct to Walsall line as a freight only line, which would then become the 'primary freight route' through the region for South West-North East flows. This would connect with an upgraded Sutton Park Line (see below). Will also require infrastructure works at Walsall to ensure freight and passenger train segregation at Walsall so that conflicts are avoided.	Additional freight train capacity through the West Midlands region through the provision of a new freight only route which avoids the congested St Andrews-Washwood Heath and Barnt Green-Kings Norton corridors. This route would also avoid 'Blackwell Summit' thus enabling longer/heavier trains to be operated.	DfT Network Rail	2015	Proposal
Para A, iv), v) and vi)	Network capacity on the St Andrews Jct-Washwood Heath-Water Orton-Nuneaton corridor, to which many important rail terminals in the West Midlands are connected	RF11: To provide the current and additional capacity on the South West-North East corridor, to be achieved through: 1. Re-opening the Stourbridge-Walsall route 2. Ensuring that passenger train frequency and any proposed station developments, such as Coleshill, on the Water Orton-Nuneaton route allows for at least 3 freight paths per hour per direction off-peak 3. In the longer term a re-modelling of the St Andrews Jct-Washwood Heath corridor may be required to ensure greater segregation of passenger and freight train services	Additional freight train capacity to, from and through the West Midlands region.	DfT Network Rail	2015	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	Provision of W10/W12 gauge cleared diversionary routes through the West Midlands for South East-North West/Scotland flows and South Coast-North West Scotland flows.	RF12: Maintain the Coventry-Stechford-Bushbury route as a key diversionary route (already W10) through the West Midlands region during night time engineering possessions on the WCML Trent Valley or the Coventry-Nuneaton line. Upgrade the Sutton Park Line so that it can be used as a diversionary route through the region during engineering possessions or as realistic alternative through route. To be achieved through: 1. Faster line speeds 2. Additional capacity through shorter signal blocks 3. Double tracked entry/exit chords to enable trains to enter/leave line simultaneously	Enable freight trains on South East-North West/Scotland flows and South Coast-North West Scotland flows to pass through the West Midlands region on W10 cleared routes during engineering possessions on the primary routes through the West Midlands. Provide a realistic alternative route through the region via the Sutton Park Line.	DfT Network Rail	2010	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	Logistics operations are organised around distribution centre 'hubs' The need for rail freight to organise its strategies around distribution centres The crucial factor in rendering rail freight cost competitive against other modes, principally road transport, is the availability of terminal capacity and the ability to locate distribution centres on rail linked sites. The need for additional large scale rail freight terminal capacity aimed at the FMCG and general cargo sectors, hence the need to increase freight terminal capacity and the amount of warehousing that is located on rail linked sites, particularly to the north and west of the West Midlands conurbation, to promote modal shift.	RF13: To increase rail freight terminal capacity and the amount of warehousing that is located on rail linked sites in the West Midlands region. Developments should follow the form and structure laid out in the SRA's Strategic Rail Freight Interchange policy i.e. intermodal terminals and rail linked warehousing located on the same site Developments to the north and west of the West Midlands conurbation will be particularly promoted	An increase in intermodal terminal capacity in the West Midlands region and the amount of distribution warehousing that is rail connected, enabling rail freight to gain a greater share of the transport market.	Private developers Local Authorities AWM Network Rail	2005-	Policy

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	The need, from a transport, economic and environmental view point, for new Strategic Rail Freight Interchanges to be developed in suitable locations.	RF14: The use of a criteria based approach in assessing the suitability, from a transport, economic and environmental view point, of new Strategic Rail Freight Interchanges. New Strategic Rail Freight Interchanges should be located so that they: 1. Have suitable rail access – W10/12 loading gauge, available capacity and operational flexibility 2. Have suitable road access – trunk road/motorway access 3. Are large enough to accommodate 775m length trains, intermodal terminal facilities and distribution warehousing 4. Have a local market to justify the development 5. Are located in proximity to labour 6. Have the ability to operate 24/7	Strategic Rail Freight Interchanges suitably located so that they enable rail freight to supply cost and quality competitive services.	Private developers Local Authorities AWM	2005-	Policy

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv), v) and vi)	The need to promote and assist the development of new rail freight terminal capacity and warehousing located on rail linked sites. Rail freight terminals need to be private sector funded and operated.	RF15: To promote and assist the development of new rail freight terminals. Two approaches are to be adopted: 1. Private sector led developments – private sector identifies sites (in line with criteria), designs, undertakes planning application, finances, builds and operates terminals. Assistance from planning authorities where appropriate e.g. through the UPD/Local Plan process. 2. Local Authorities identify sites in line with criteria, and seek private sector partners to design, finance, build and operate terminals. Input from planning authorities where appropriate e.g. the UPD/Local Plan process.	The development and implementation of new Strategic Rail Freight Interchanges	Private developers Local Authorities AWM	2005-	Policy
Para A, iv), v) and vi)	Key role played by single commodity private siding rail freight terminals.	RF16: To promoting and assist the development of new private siding rail freight terminals. Ensuring that planning applications for new rail freight terminals, where appropriately located, are approved	The development of new private siding terminals in the West Midlands region, enabling rail freight to gain a greater share of the transport market.	Private developers Local Authorities AWM	2005-	Policy

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	
Para A, iv), v) and vi)	The need to protect former rail linked sites and routes for future use	RF17: To protect former railway lines and opportunities for rail connection to existing manufacturing, distribution and warehousing sites.	The protection of former sites and routes so that they may be used for rail freight in the future	Local Authorities AWM	2005-	Policy
	Other Policies & Interventions					
Para A, viii) and Para B	Most airfreight moved in the bellyholds of long haul passenger services. Limited number of long haul passenger services from Birmingham Airport, and consequent lack of long haul capacity, means significant volumes of West Midlands airfreight is moved by road to/from Heathrow, Gatwick, Manchester and mainland European airports.	OS1: To reduce the level of airfreight that has to be transported by road haulage to/from Heathrow, Gatwick, Manchester and mainland European airports. To be achieved through promoting, in line with the White Paper, additional long haul passenger services from Birmingham Airport as a means of providing more bellyhold freight capacity in the region.	An increase in the volume of airfreight handled at Birmingham Airport, resulting in fewer road transport trips of airfreight to/from the South East and mainland European airports.	Local Authorities AWM DfT Birmingham Airport CAA	2005-	Policy
Para A, viii) and Para B	The important role of 'transit sheds' at or close to airports in handling and consolidating airfreight. Any significant increase in the volumes of airfreight from Birmingham Airport will result in the need for additional transit shed capacity on/close to Birmingham Airport,	OS2: To ensure that regional and local planning recognise the for and plan for an increase in the need for transit sheds on/close to Birmingham Airport.	Allocation of land in UDP for increased airfreight transit shed capacity.	Local Authorities Birmingham Airport AWM	2005-	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, viii) and Para B	The important requirement for dedicated air freight services to land and take-off at night time	OS3: To promote and support Coventry Airport's continued ability to handle air freight flights 24 hours per day.	Continued ability to handle air freight flights 24 hours per day.	Local Authorities DfT CAA Coventry Airport	2005-	Proposal
Para A, viii) and Para B	Nottingham East Midlands Airport, and its important role as a hub for express service providers. Given the ease of access to Nottingham East Midlands Airport from the West Midlands, there is no requirement to provide additional express air freight capacity in the West Midlands	OS4: To promote and support the continued development of express air freight services at Nottingham East Midlands Airport	Continued and expanding express air freight provision at Nottingham East Midlands Airport	Nottingham East Midlands Airport DfT CAA	2005-	Proposal
Para A, viii) and Para B	Pipelines provide a sustainable way of transporting large volumes of bulk liquids Due to their expense, only viable for transporting petroleum products Extensive network of pipelines already serving 6 storage depots in the West Midlands, additional capacity unlikely to be required	OS5: To support and promote the existing pipeline network serving the West Midlands. To support additional pipeline capacity when required and where it would be beneficial to the West Midlands	Continued use of the pipeline network for transporting petroleum products to the West Midlands ahead of road or rail transport	Local Authorities Pipeline operators Storage depot operators	2005-	Policy

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
Para A, iv) and Para B	Extensive network of inland waterways in the West Midlands Majority of inland waterway network is non commercial Large scale use of the inland waterway network is neither an economic or realistic mode of transport Potential niche market opportunities on River Severn downstream of Stourport	OS6: To promote the use of the inland waterway network, particularly the River Severn downstream of Stourport, for the movement of freight, and support any realistic and feasible niche market opportunity that may arise. To support, financially where possible, studies examining realistic potential market opportunities, feasibility trials and applications for Freight Facility Grant funding.	The movement of freight on the River Severn that would otherwise move by road transport	Local Authorities British Waterways	2005-	Policy
Para A, iii)	The role Freight Quality Partnerships can play in solving problems associated with distribution which satisfy the need to mitigate the environmental impacts of distribution while ensuring a more efficient freight transport industry Region has established some FQPs, but at local authority/LTP area level only Issues concerning the structure, operation, participation and outputs of FQPs	OS7: To review the structure and roles of the current FQPs with a view to restructuring them along the following lines, in line with recent Government recommendations: 1. Regional Strategic Partnerships / Freight Advisory Group – assist in the identification and implementation of schemes to benefit the road freight industry. Act as a conduit between infrastructure providers and the freight industry. 2. LTP area FQP – responsible for strategy and acting as an 'umbrella' for - 3. Sector and location specific FQPs	Establishment of a West Midlands Freight Advisory Group Re-structuring of FQPs	Local Authorities WMLGA AWM FTA RHA	2006	Proposal

RPG11 Policy T10	Key Issue	Policy and Intervention	Objective	Suggested Lead Agency and Partners	Time-frame	Status
	Funding Sources					
Para A, iv), v) and vi)	The need to provide new freight terminals which support sustainable distribution and support sustainable transport services. The expense involved in providing new terminals and the cost gap that can exist between road and sustainable modes of transport.	FS1: To promote the availability of grant funding schemes which provide contributions towards capital/start up costs and offer operating support. The grant schemes include: Freight Facilities Grants – for rail freight terminal schemes Company Neutral Revenue Support – operating support for intermodal rail freight Track Access Grants – operating support for non intermodal rail freight Marco Polo – for international services	The provision of grant funding which promotes and supports sustainable distribution.	DfT EU	2005-	Policy
Para A, i) and viii)	The shortage of qualified Class C and C+E drivers in the logistics industry, and the need to recruit/retain more qualified drivers. The high cost to individuals of HGV training. The reluctance of industry to pay for training schemes. Young people are lost to the industry due to the 21 years old qualifying age.	FS2: To promote the following formal training schemes and funding sources: Modern Apprenticeships The Young Driver Training Scheme The New Deal Military Service Leaders Logistics Skills Awards European Social Funds Individual Learning Accounts Small Firms Training Loans Career Development Loan	The provision of formal training and funding to increase the number of qualified C+E drivers	LSCs	2005-	Policy

APPENDIX

PROJECT BRIEF
STRATEGY FORECASTS DATA TABLES AND CALCULATIONS

WEST MIDLANDS REGIONAL FREIGHT STRATEGY

Project Brief

Background

Motorways and trunk roads, by their very nature, pass through a number of the counties of the West Midlands and initiatives introduced by one local authority may have a knock-on effect elsewhere.

The distribution industry currently favours the use of National and Regional distribution centres. In a drive for operational efficiency, these are often clustered in certain strategic locations. As these facilities serve a wider area than just the immediate locality, their implications need to be analysed on a regional level.

Given the nature of rail freight, it offers a more profitable alternative to road the further it travels. Many of the LTPs are only concerned with improving access to the network for companies in their area. Looking at issues such as routing and services needs to be done at a regional level.

Key constraints on the rail network are not limited to localised effects. Analysis of the main bottlenecks necessarily requires a wider viewpoint than the LTPs can offer.

Most of the counties in the West Midlands have commissioned their own freight strategy or rail freight strategy. Recommendations are, of course, location specific, but the reinstatement and creation of new rail facilities featured in each. It could be suggested that such a large scale infrastructure changes requires a more co-ordinated approach.

Air freight facilities are only currently available in two locations in the West Midlands (although East Midlands airport just outside the region). It is important that all should have access to these facilities, and providing this is an issue that should be considered from a regional perspective.

A West Midlands Regional Freight Strategy Scoping Study was compiled in September 2002 which identified key issues. A logistics study has made significant progress on looking at demand and supply for these aspects.

Aims and objectives of project

The aim of the project is to produce a Regional Freight Strategy for the West Midlands Region. The region includes the Metropolitan areas of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton, the shire counties of Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire, and the unitary authorities of Stoke-on-Trent and Telford and Wrekin. Each of the Metropolitan area and the local authorities in the West Midlands region has produced its own Local transport Plan, covering freight issues but the essence of an LTP is to create strategies for a fairly localised area. They do not, and are not able to, define strategies that cover beyond the county boundaries, even if the effects are felt acutely within the county.

The Regional Freight Study would promote the following transport priorities of the region

- Heavy Rail Infrastructure – Increasing the capacity of the region's heavy rail system as the hub of the nation's freight network;

- Best Use of Strategic Road Capacity; and

- Immediate Feasibility Work

The objectives of the Regional Freight Strategy will include:

- Develop and complete the regional freight profile

- Present objectives and relevant policies linked to Regional Transport Strategy/ Regional planning Guidance

- Highlight the key trends and issues

- Present regional (and sub-regional) data in a clear, concise and understandable manner. Source data from the strategy stakeholders including, where possible, directly from the freight industry

- Propose short, medium and long term strategic interventions

    - Identify opportunities for modal shift

    - Identify economically viable ways of making road based freight safer and less environmentally damaging

- Generate and implement a plan with defined targets and measurable outputs

Description of project

The study would be a Region-wide investigation, taking into account the whole of the West Midlands region; centred on, but not exclusively covering the Metropolitan area, and taking into account the views of all local authorities (see Aims and Objectives of Project)and the major private sector companies. The study would look at the bigger picture, rather than the 'parochial' concerns of individual local councils. It would link to the strategies already undertaken for the East Midlands and North West regions.

The Regional Freight Strategy will address the following issues:

- It will identify a strategy which sets out changes to demand, policy measures and recognise improvements by all parties involved – based on Regional planning Guidance, the Regional Transport Strategy and the Regional Economic Strategy taking into account national guidance on road, rail, water and air, including sustainable distribution.

- It will identify the need for an emphasis to be placed on a balance between economic, environmental and social goals.

- It will look at the issues of journey time reliability, traffic management and improving access to intermodal facilities.

- It will take account of logistics and distribution trends, present locations and seek to identify suitable locations to provide facilities for lorry drivers.

- Consideration will be given to the huge volumes of through traffic and any measures which could reduce their impact.

- Provision will be made for rail facilities which could be better utilised by different types of industry.

- It will encourage the transfer of freight from road to rail where it is possible.

- It will identify key regional routes and links to national/ international routes.

- It will identify sites for new major rail freight facilities, including potential sites for rail depots and ensuring sidings are protected and developed to encourage modal shift.

- It will address the negative attitudes and misconceptions associated with rail freight.

A West Midlands Regional Freight Strategy scoping study was carried in September 2002 with a view to proposing a methodology for compiling a Regional Freight Strategy. The proposed methodology includes the following stages:

Understand Baseline Conditions: before any strategies can be generated, it is important to identify current freight activities in the area. This will include maps of existing transport networks, details of freight-related land uses, freight transport traffic and existing services and bottlenecks.

Much of this information will be derived from the Regional Freight Profile (West Midlands Regional freight Strategy Scoping Study), although an important first stage is to perform additional data collection to fill knowledge gaps. Government policy and wider issues also need to be taken into account.

Future Trends and Problem Identification: The Regional Freight Strategy needs to look at freight activities in the West Midlands in the short and the long term. There are commitments to upgrade the transport networks, other strategy recommendations that will be implemented, changes to networking practices, and the underlying fluctuations in supply and demand that all need to be taken into account. Forecasts should be carried out, potentially drawing on outputs from simulation and modelling packages (Not a basic requirement). This stage will include the analysis of aspirational developments to the network which may cause problems.

Strategy Identification: Drawing on the findings of the baseline/ future problems identification reports, overarching regional policies and the outcomes of the first stage of consultation, strategies need to be developed that solve these problems. This involves re-evaluation of previously considered ideas, as well as generating new solutions. A secondary consultation exercise, particularly focusing on workshop discussions, is one way of achieving this. A brainstorming session involving the consultants and the steering group should also be considered to enable a variety of perspectives to be taken into account.

Identify Obstacles: An important part of putting forward potential strategies is identification of the obstacles that need to be overcome before solutions can be realised. Many of the relevant issues will be addressed during the strategy generation, although top-level financial, environmental and political impacts of any solution will require more careful consideration. Consulting with key organisations will help to gauge where they would see problems arising.

This is much more focused than the initial 'problems identification', but must still be concerned with strategic issues.

Generate Policies: having identified the obstacles to implementing potential freight strategies, the next stage is to generate policies which will address these obstacles. The outcomes of this stage are very much dependant upon the nature of the factors that are identified during earlier analysis. These are the policies that will help to deliver the freight strategy.

Formal Policy Appraisal: Strategies and policies should be subject to a stringent formal appraisal. Once an appropriate framework has been agreed, the appraisal process becomes quite straightforward. Where conflicting views exist regarding a particular input, it is important that the final decision is agreed by all parties, including the steering group.

Defining Targets: it must be ensured that the recommended interventions address the problems whilst being both realistic and achievable. Also, as the strategy will be looking at the current situation and the future situation, the objectives and targets will need to have differing timescales and levels of investments. Measures should be clearly defined, and must be aligned with strategic aims. Timescales, deliverables, funding sources and parameters all need to be determined.

Setting Responsibilities: The Freight Strategy will deal with regional issues, but taking it forward will require the use of national, regional *and* local resources. It is important that responsibilities for achieving targets are clearly outlined to ensure that there is accountability.

Management of Project and other Project Partners

The project would be managed by the representatives of West Midlands Regional Transport Group, Economic Development and Planning officers plus representatives from councils and industry in the non-Metropolitan West Midlands area, e.g. the Highways Agency, Chambers of Commerce, Freight Transport Association, Network Rail and the Road Haulage Association.

Support for the project

There is general support from all bodies involved in the project. Please see attached letters of support.

Timetable of Key Tasks

The project will start in October 2003 and will be completed by March 2004.

Consultation with key organisations will take place throughout the process

Monthly progress reports will be submitted to the Regional Steering Group

Ten copies of an interim and then final report will be submitted and presentation given to the to Regional Transport Partnership and other bodies.

Project Outcomes

The Regional Freight Strategy will create the blueprint for development of West Midlands Freight activity for the foreseeable future. Economic, environmental and financial decision making will be very much influenced by the outcomes of the study, and as such, the recommendations need to be defined with regard to:

Cost. An indicative appraisal of the cost of implementing each of the recommendations should be provided. An appreciation of external sources of funding (e.g. Freight Facilities Grants, Private Investment), and what proportion of the total could be applied for also needs to be taken into account.

Timescale. For each initiative, the strategy should define whether it is a short, medium or long term target. A timetable of interventions should be provided, distinguishing between incremental improvements and step changes in the West Midlands freight network. Likely timescales for implementation should indicate the key planning milestones that must be achieved if targets are to be realised.

Ownership. The question of responsibility is of paramount importance. For each initiative, the ownership of the implementation process should be defined, following consultation with relevant national, regional and local bodies. Funding arrangements play a key role in deciding who controls each intervention.

Measures of progress. Each recommendation, to achieve the optimum level of benefits, needs to understand the effectiveness of the initiative once it is put into place. The means of measuring the success of each recommendation should be an out put of the freight strategy.

Submission

The consultant will need to organise monthly management meetings and will identify all surveys and information required containing:

- The consultant's understanding of the project brief
- The consultant's approach to the described in this brief
- Details of the methodology to be adopted to complete the work
- Details of the project team and their relevant experience
- Timetable for undertaking the work and the production of draft and final reports
- Fixed price for work to be undertaken
- The proposal should demonstrate that the work would be carried out to a high standard

The consultant should explain how the organisation of the study and the monitoring of quality would ensure that the work is carried out satisfactorily and in the time specified.

Ten copies of the tender proposal should be supplied.

STRATEGY FORECASTS DATA TABLES AND CALCULATIONS

Table A1: Forecast Rail Freight by Region of Origin and Destination 2015 and 2021

Origin West Midlands		**Tonnes**	
	2003	**2015**	**2021**
Destination Region			
West Midlands	1,153	1,390	1,404
SE & E England	915	1,955	2,266
East Midlands	562	600	594
Yorks&Humb	342	312	338
Continent	155	441	573
North West	136	611	697
Wales	36	315	317
South West	28	251	285
Scotland	15	212	245
North East	0	163	175
TOTAL	**3,342**	**6,249**	**6,894**

Destination West Midlands		**Tonnes**	
	2003	**2015**	**2021**
Origin Region			
Yorks&Humb	2,948	3,123	3,395
West Midlands	1,153	1,390	1,404
SE & E England	1,077	2,671	3,005
Wales	943	1,490	1,440
South West	745	1,064	1,061
East Midlands	664	3,089	3,067
Scotland	512	1,004	974
North West	280	705	744
Continent	232	976	1,233
North East	153	435	465
TOTAL	**8,707**	**15,945**	**16,788**

Source: MDS Transmodal GMFM

Table A2: Non-Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction

Tonnages per Train

Maritime/Int Intermodal	510
Domestic Non Bulk	440
Auto	250
Days per annum	250

From West Mids	**000s Tonnes per annum**	**Tonnes per Train**	**Trains per annum**	**Trains per day**
West Mids - WCML South				
Auto	158	250	635	3
Maritime Containers	623	510	1,223	5
Domestic Non Bulk	388	440	883	4
International Intermodal	440	510	865	3
Total	**1,611,895**		**3,606**	**14**
West Mids - WCML North				
Maritime Containers	171	510	337	2
Domestic Non Bulk	352	440	800	3
Total	**523**		**1,137**	**5**
West Mids - South Coast				
Auto	381	250	1,525	6
Maritime Containers	190	510	373	2
Domestic Non Bulk	6	440	14	0
Total	**577**		**1,912**	**8**
West Mids - North East				
Maritime Containers	19	510	38	0
Domestic Non Bulk	319	440	726	3
Total	**338**		**764**	**3**
West Mids - SW/S Wales				
Auto	43	250	174	1
Maritime Containers	8	510	17	0
Domestic Non Bulk	230	440	523	2
Total	**282**		**714**	**3**

Table A3: Non-Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction - Continued

To West Mids	000s Tonnes per annum	Tonnes per Train	Trains per annum	Trains per day
WCML South - West Mids				
Maritime Containers	984	510	1,930	8
Domestic Non Bulk	617	440	1,402	6
International Intermodal	975	510	1,913	8
Total	**2,577**		**5,246**	**21**
WCML North - West Mids				
Maritime Containers	128	510	252	1
Domestic Non Bulk	569	440	1,295	5
Total	**698**		**1,547**	**6**
South Coast - West Mids				
Maritime Containers	380	510	746	3
Domestic Non Bulk	6	440	15	0
Total	**386**		**760**	**3**
NE - West Mids				
Maritime Containers	17	510	34	0
Domestic Non Bulk	373	440	848	3
Total	**390**		**882**	**3**
SW/SWales - West Mids				
Auto	455	250	1,823	7
Maritime Containers	15	510	30	0
Domestic Non Bulk	158	440	360	2
Total	**629**		**2,213**	**9**

Table A4: Non-Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction - Continued

South to North Via West Mids	Tonnes per annum	Tonnes per Train	Trains per annum	Trains per day
SE/EAng - NW/Scot				
Auto	136	250	548	2
Maritime Containers	2,233	510	4,380	18
International Intermodal	2,377	510	4,661	19
Domestic Non Bulk	3,196	440	7,264	29
Total	**7,944**		**16,853**	**67**
S Coast - NW/Scot				
Auto	42	250	171	1
Maritime Containers	825	510	1,619	6
Domestic Non Bulk	197	440	449	2
Total	**1,065**		**2,238**	**9**
S Coast - NE/YH & EMids				
Maritime Containers	567	510	1,112	4
Domestic Non Bulk	89	440	204	1
Total	**656**		**1,316**	**5**
SW/SWales - NE/YH & EMids				
Maritime Containers	32	510	63	0
Domestic Non Bulk	566	440	1,288	5
Total	**598**		**1,351**	**5**
SW/SWales - NW/Scot				
Maritime Containers	101	510	198	1
Domestic Non Bulk	914	440	2,078	8
Total	**1,015**		**2,276**	**9**

Table A5: Non-Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction - Continued

North to South Via West Mids	Tonnes per annum	Tonnes per Train	Trains per annum	Trains per day
Scot/NW - SE/EAng				
Auto	129	250	518	2
Maritime Containers	2,097	510	4,113	16
International Intermodal	2,796	510	5,483	22
Domestic Non Bulk	2,700	440	6,138	25
Total	**7,723**		**16,252**	**65**
Scot/NW - S Coast				
Auto	80	250	320	1
Maritime Containers	569	510	1,118	4
Domestic Non Bulk	211	440	480	2
Total	**861**		**1,918**	**8**
NE/YH & EMids - S Coast				
Maritime Containers	897	510	1,760	7
Domestic Non Bulk	97	440	223	1
Total	**995**		**1,983**	**8**
NE/YH/EMids - SW/SWales				
Maritime Containers	41	510	82	0
Domestic Non Bulk	755	440	1,717	7
Total	**797**		**1,799**	**7**
NW/Scot - SW				
Maritime Containers	11	510	226	1
Domestic Non Bulk	954	440	2,168	9
Total	**1,069**		**2,394**	**10**

Table A6: Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction

Tonnages per Train

Aggregates	1,200
Coal	1,200
Petro/Chemicals	1,500
Metals	450
Ore	450
Forest	350
China Clay	600
Days per annum	250

From West Mids	**Tonnes per annum**	**Tonnes per Train**	**Trains per annum**	**Trains per day**
West Mids - WCML South				
Construction	114	1,200	95	0
Metals	47	450	105	0
Total	**161**		**200**	**1**
West Mids - WCML North				
Coal	4	1,200	4	0
Construction	99	1,200	83	0
Forest	4	350	12	0
Metals	183	450	407	2
Ore	6	450	15	0
Total	**298**		**521**	**2**
West Mids - South Coast				
Coal	23	1,200	19	0
Construction	19	1,200	16	0
Total	**42**		**36**	**0**
West Mids - NE/YH/EMids				
Coal	172	1,200	144	1
Construction	461	1,200	385	2
Metals	315	450	700	3
Total	**949**		**1,229**	**5**
West Mids - SW/SWales				
Construction	31	1,200	27	0
Metals	244	450	543	2
Ore	7	450	17	0
Total	**283**		**586**	**2**

Table A7: Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction - Continued

To West Mids	Tonnes per annum	Tonnes per Train	Trains per annum	Trains per day
WCML South - West Mids				
Chemicals	53	1,500	36	0
Construction	102	1,200	85	0
Metals	366	450	815	3
Petro	61	1,500	41	0
Total	**583**		**976**	**4**
WCML North - West Mids				
Coal	695	1,200	580	2
Construction	45	1,200	38	0
Forest	24	350	71	0
Metals	234	450	522	2
Ore	9	450	20	0
Total	**1,010**		**1,231**	**5**
South Coast - West Mids				
Chemicals	72	1,500	48	0
Petro	25	1,500	17	0
Total	**98**		**65**	**0**
NE/YH/EMids - West Mids				
Chemicals	63	1,500	42	0
Coal	674	1,200	562	2
Construction	2,228	1,200	1,857	7
Metals	1,727	450	3,839	15
Petro	1,561	1,500	1,041	4
Total	**6,255**		**7,341**	**29**
SW/SWales - West Mids				
China Clay	60	600	101	0
Coal	378	1,200	315	1
Construction	26	1,200	22	0
Metals	1,413	450	3,140	13
Ore	34	450	76	0
Petro	11	1,500	8	0
Total	**1,924**		**3,662**	**15**

Table A8: Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction - Continued

South to North via West Midlands	Tonnes per annum	Tonnes per Train	Trains per annum	Trains per day
SE/EAng - NW/Scot				
Coal	8	1,200	7	0
Construction	81	1,200	68	0
Metals	32	450	72	0
Ore	29	450	64	0
Petro	16	1,500	11	0
Total	**167**		**222**	**1**
S Coast - NW/Scot				
Total	**0**	**0**	**0**	**0**
S Coast - NE/YH/EMids				
Total	**0**	**0**	**0**	**0**
SW/SWales - NE/YH/EMids				
Chemicals	78	1,500	52	0
Coal	123	1,200	103	0
Metals	752	450	1,672	7
Ore	15	450	34	0
Total	**969**		**1,862**	**7**
SW/SWales - NW/Scot				
Chemicals	27	1,500	19	0
China Clay	105	600	176	1
Coal	12	1,200	11	0
Construction	58	1,200	49	0
Forest	39	350	113	0
Metals	151	450	336	1
Ore	10	450	23	0
Petro	26	1,500	17	0
Total	**432**		**743**	**3**

Table A9: Bulk Rail Forecasts 2015 as Estimated Train Numbers by Direction - Continued

North to South via West Midlands	Tonnes per annum	Tonnes per Train	Trains per annum	Trains per day
NW/Scot - SE/EAng				
Coal	18	1,200	15	0
Construction	171	1,200	143	1
Forest	120	350	345	1
Ore	136	450	303	1
Total	**446**		**806**	**3**
NW/Scot - S Coast				
Total	**0**	**0**	**0**	**0**
NE/YH/EMids - S Coast				
Chemicals	31	1,500	21	0
Construction	417	1,200	348	1
Petro	480	1,500	320	1
Total	**929**		**689**	**3**
NE/YH/EMids - SW/SWales				
Chemicals	298	1,500	199	1
Coal	47	1,200	40	0
Construction	218	1,200	182	1
Metals	1,135	450	2,524	10
Ore	102	450	228	1
Petro	66	1,500	44	0
Total	**1,869**		**3,217**	**13**
NW/Scot - SW/SWales				
Construction	106	1,200	89	0
Forest	660	350	1,887	8
Metals	8	450	20	0
Total	**776**		**1,996**	**8**