TRANSPORT BACKGROUND TECHNICAL REPORT - SOUTH WEST REGIONAL SPATIAL STRATEGY

SOUTH WEST REGIONAL ASSEMBLY

SEPTEMBER 2006

CONTENTS

SWRA: Transport Background Technical Report

SECTION 1: INTRODUCTION

1.1 Background

The Planning and Compulsory Purchase Act came into effect in May 2004. The Act amends existing legislation (The Town and Country Planning Act 1990), and has changed the planning system in several important ways:

- Regional Planning Guidance has been replaced with a Regional Spatial Strategy;

- County Structure Plans are abolished; and

- Local Plans are replaced with Local Development Frameworks (LDF) cOmprising of Local Development Documents (LDD).

The Regional Spatial Strategy (RSS) for the South West   was prepared by the South West Regional Assembly (SWRA) in its role as the Regional Planning Body (RBP). The Draft RSS was submitted to Government in mid 2006. A 12 week public consultation period took place in the summer of 2006, followed by the Examination in Public (EiP) in the spring of 2007. When approved and issued by the Secretary of State in 2008, it will supersede RPG 10 as the Statutory Planning Strategy for the South West Region.

The RSS is a statutory document and will provide a long-term spatial development framework for the region. It will provide guidance to local authorities to assist with drafting LDDs. It will also provide a framework for the preparation of Local Transport Plans.

1.2 Regional Transport Strategies

As stated in PPS11, the RTS should set out how national transport policies and programmes will be delivered in the region, outline the transport and related land use policies and measures required to support the RSS and provide a long term framework for regional transport. It should also steer the developments of Local Transport Plans (LTPs) and policies in LDDs.

PPS 11 also states that the RTS should be an **integral** and clearly identifiable part of the RSS. The South West RSS does not contain a separate document that can be distinguished as a RTS. Instead transport has been integrated throughout the document (Section 1 in Climate Change, Section 4 in the Sub Regional Strategies and Section 8 in Tourism). This is due to the many links that transport has with the thematic topics that

SWRA: Transport Background Technical Report

are addressed in the RSS. The main strategic transport policies are set out in Section 5 of the document.

1.3   The Background Technical Report

1.3.1 Purpose of the Report

The purpose of this Report is to set out what the Good Practice Guide on Regional Transport Strategies requires in relation to the evidential base supporting the transport content of the RSS. Regional Planning Bodies (RPBs) are required to prepare a Background Technical Report (BTR) setting out the information which has been used to derive the RTS. This report sets out the information supporting the transport approach in the South West RSS and can potentially be used to support the transport elements of the RSS at the EiP.

The BTR is a fluid document and will be added to in the future as the RSS progresses and as more information comes to light. Not only will it provide an evidence base for the transport elements in the RSS, the BTP also provides a 'fuller' picture of transport in the South West from setting out the region's transport geography to explaining how the RSS will monitor and implement the transport policies (TR Policies).
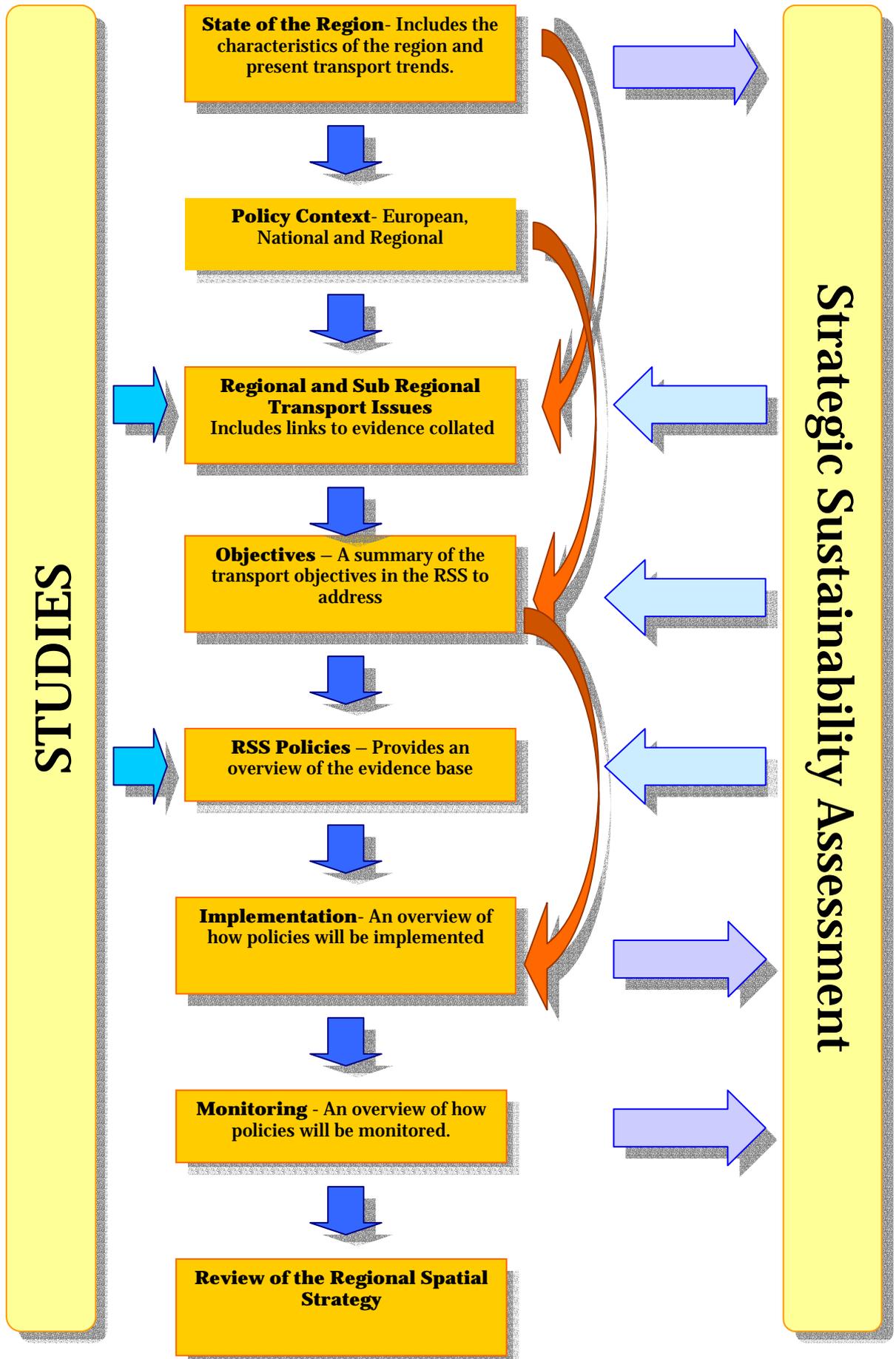
1.3.2 Structure of the Report

It is intended that the technical report will take the form of an electronic 'portfolio' rather than a single published document. Each section of the BTR will be identifiable as a separate package of information and will contain links to the next section. Setting it out in this manner will allow people to extract information more easily and to see how transport issues are addressed in the Draft RSS right from the early stages.

This Report takes the following structure:
- **Section 2:** State of the Region- outlines the 'transport geography' of the South West;
- **Section 3:** Policy Context- the current European, National and Regional policy context in relation to transport;
- **Section 4:** Regional and Sub Regional Transport Issues- the transport issues/ constraints that will need to be addressed in the future;
- **Section 5**: RSS and Transport Objectives- explains how the regional transport objectives support the RSS;

SWRA: Transport Background Technical Report

- **Section 6:** <u>RSS Policy Approach and Transport Requirements</u>- how regional transport studies relate to each emerging RSS transport policy and to transport requirements for each sub-region;

- **Section 7:** <u>Implementation</u>- outlines how the transport polices will be implemented and examines regional transport priorities ; and

- **Section 8:** <u>Monitoring Transport in the RSS</u>- how the transport policies will be monitored.

The diagram on the following page shows how each section links up with the next one and how some sections provide a link to others.

SWRA: Transport Background Technical Report

STUDIES

Strategic Sustainability Assessment

State of the Region- Includes the characteristics of the region and present transport trends.

Policy Context- European, National and Regional

Regional and Sub Regional Transport Issues
Includes links to evidence collated

Objectives – A summary of the transport objectives in the RSS to address

RSS Policies – Provides an overview of the evidence base

Implementation- An overview of how policies will be implemented

Monitoring - An overview of how policies will be monitored.

Review of the Regional Spatial Strategy

SWRA: Transport Background Technical Report

SECTION 2: STATE OF THE REGION

2.1 Introduction to the South West

Geographically, the South West is the largest of the English regions, covering some 18% of the country's land cover [but only 10% of the population]. It ranges from Gloucestershire in the north to Bournemouth in the south right down to Lands End in the far south west. The region shares boundaries with Wales, the West Midlands and the South East. Many of the region's Strategically Significant Cities and Towns (SSCTs) are within the capitals sphere of influence (Bristol is 120 miles, Bournemouth 107 miles, Exeter 180 miles),as well as the West Midlands (Bristol is 81 miles from Birmingham, Exeter 157miles) and South Wales (Bristol is 45 miles from Cardiff, Exeter 120 miles).

The region is one of many contrasts with a number of vibrant cities and towns but declining productivity to the west. It also has high quality natural landscapes (which include two national parks, AONBs, world heritage sites and environmental designations) and an internationally renowned coastline that stretches over 1,130 km in length. The region is historically and culturally rich, with places such as Bath, Stonehenge and Glastonbury. It is perhaps these diverse characteristics that help explain why the region is so unique.

The high environmental quality of the region is one factor which draws people to visit and settle in the South West. Around 26 million visitors chose to visit the South West every year, with the majority coming in the summer season. The population is about 5 million with just over 41% of the region's population living in SSCTs and 48% living outside these areas. The region therefore has a relatively low density of population. 35% of the regional population live in settlements of fewer than 10,000 residents.

The regional economy draws on the environment far more than any other region and the Regional Economic Strategy (RES) has named the environment as a regional economic driver, signifying the importance of our surroundings. The South West's main industries include aerospace, marine, creative industries, environmental technologies, tourism and food and drink. There are significant variations in the economic prosperity within the region, with the far South West experiencing lower GDP levels than the national average and areas such as Swindon, Gloucestershire, and the City of Bristol enjoying much higher levels of GDP.

Figure 1 The Regional Transport Infrastructure network

In order for any economy to function, an efficient, resilient and reliable transport system must be in place to transport goods to markets and people to work. Such systems are in place in the South West, but the region faces many transport issues that relate to or are influenced by its geography and characteristics (See Section 4).

2.2 The Influence of the Region's Geography on Transport Infrastructure

Transport requirements are affected by the peninsular nature of the South West, as well as the relative peripherality of the far south west to London and the south east. The region's settlement structure, rurality, and the fact that many people come into the region for leisure and holiday purposes are also significant. The relative ease of movement within the region and to other regions is therefore a major issue which influences many aspects of regional social and economic life.

The problem of providing adequate public transport services to such a dispersed population has been a long standing issue in the region. The increasing concentration of many services into the region's larger settlements has meant that many have little choice but to rely on the private car as their main means of transport. Households travel

SWRA: Transport Background Technical Report

expenditure accounted for 15% of total household expenditure in the region. This is a large amount when compared to other regions *(NTS 2006)*

Parts of the South West, mostly those in the north and east of the region, are relatively close to the main population and economic centres of the UK. The M4 puts Swindon, for example, within a 1hr 40 minute car journey of London and South Wales and the Midlands are also relatively short road and rail journeys from Gloucester and Bristol. However the urban character of the northern part of the South West creates significant issues with congestion but also opportunities to encourage more public transport use.

In contrast, the region's rural character and settlement patterns mean that journeys have to cover a considerable distance. The relative peripherality of the South West has meant that accessibility generally declines westward. The pattern marks not only distance but a variation in the ease of travel.

North to south communications in the region tends to be slower than those from east to west, or out of the region towards London, Wales and the Midlands. The London to South West and South Wales Multi Modal Study (SWARMMS) considered options for the east/west strategic transport corridors.

The resilience and reliability of the region's transport systems has a major influence on its ability to compete economically. The efficient movement of people and goods is essential if the region is to compete on the European and global scale. Many parts of the South West region are peripheral, both from the economic core of Britain and from the rest of Europe. Given the peripherality of the South West an effective and reliable transport infrastructure is critical to the economic performance of the region.

2.3 The Regions Road Network (Cars, Buses and Parking)

The regions road network consists of two categories of road: national and international routes (the M4 and M5) and regional routes (the A303, A30, A38, A31, A35, A417, 419, M48 and M49).

2.3.1 Routes of National Importance

The M5 is the 'backbone' of the region's road infrastructure and in the region and runs from Junction 9 near Tewkesbury to its end at Junction 31 near Exeter. It is the only major east to west road link in the region from Bristol. It provides a link between Exeter and Bristol and Gloucester/Cheltenham to the Midlands and the North West. The M4 runs east to west from Swindon at Junction 15 to the Second Severn Crossing at Junction 22. It crosses the M5 at Junction 20 just north of Bristol and connects with the M32 at

Junction 19. The east of the region has good access to London and the South East along the M4.

2.3.2 Routes of Regional Importance

In regards to the routes that are of regional importance, there are many in the region, which are outlined in Section 5. They all have different functions;

- A30: There are effectively two sections of the A30, east and west of Exeter. The A30 west of Exeter provides an important route into Cornwall and is some 103 miles long;

- A31/A35: This route runs along the South coast and provides an important link to the South East and the city of Southampton;

- A38: The A38 runs from the M5 south Exeter, south of Dartmoor to join the A30 near Bodmin;

- A303: This route joins the South West from the South East in East Wiltshire. It joins the A30 just west of Andover; and

- A417/A419: These routes form a trunk road between Junction 15, M4 at Swindon and the M5 Junction 11A at Gloucester. This provides a direct route between two major urban areas in the north of the region.

2.3.3 Road Usage in the Region

Car use and ownership in the South West is relatively high- higher than the national average. Around 2/3 of the journeys made in the region are by car. This is a reflection of the large distances between the major centres of the region and its dispersed population and settlement pattern.

Roads on average are less busy than in some regions, reflecting the sparsity of the population. However the continuing rise in car ownership is creating pressure on the roads which leads to congestion, especially in the north of the region, while the increase in population and visitors in the summer is putting pressure on the main transport routes especially to the south west and south east of the region. The region also suffers from congestion at certain strategic locations, such as the M4/M5 interchange and parts of the A30/A303.

Traffic flows vary around the region and depends on the location, function and status (whether it's a regional or national route). Traffic flows on M4 range between around 60,000 at the eastern end, reducing to about 50,000 in rural Wiltshire but rising again to about 90,000 around the urban fringe of Bristol. The M32 has traffic flows of about

SWRA: Transport Background Technical Report

46,000 and is congested in the peaks. Traffic flows on M5 around Bristol are approximately 80,000, and range between 50-65,000 over the rest of its length to Exeter. There is congestion around Bristol in the peak hours, particularly at Avonmouth Bridge which is a pinch point as the only river bridge on the western side of the city centre. Traffic flows increase markedly during the summer holiday period and on bank holiday weekends, in particular on Friday evenings and Saturday mornings, leading to very long queues, up to 20 kilometres long. Traffic volumes are over 40,000 at the southern end of the A417/A419 where it serves Swindon. Flows reduce to around 18,000 on the central part of the route north of Cirencester, before increasing again on the approaches to Gloucester. A30/A303 traffic flows increase from west to east and range from 14,000 - 20,000 from Bodmin to Exeter, around 24,000 just east of Exeter, 18,000 - 20,000 through Somerset and 30,000 - 60,000 beyond Traffic flows vary along the A30/A35 DBFO route and there are significant seasonal variations. The highest flow is in excess of 24,000 at the Exeter end.

The level of motor vehicle traffic will inevitably increase as more cars get on the road. The level of traffic in the region increased from 39, 435 to 47, 148 million vehicle kilometres in the period 1994-2004. Urban roads carried more traffic in the region than rural roads: urban roads carried 30.6 bn vehicle km's whereas rural roads carried 17.2 bn vehicle km. This is a trend that will continue as the majority of development is focused on the regions main urban areas.

At present bus availability and passenger numbers are low. People in the South West have some of the least accessible bus services in England, with only 82% living within a 13 minute walk of an hourly service compared to the English average of 90%. This may partly explain why just 6% of trips were made by public transport, the lowest recorded in any region (SWO, 2005).

Although availability has been rising, passenger numbers continue to fall as shown Figure 2 *(AMR 2004).* This is mainly due to a high percentage of the population living in rural areas and achieving a good effective coverage of services can be a challenge. The Greater Bristol Strategic Transport Study (GBSTS), highlighted that measures would be needed to improve bus patronage. However in some parts of the region bus passenger numbers have been increasing particularly where local authorities, working with operators, have focused services on strategic corridors.

SWRA: Transport Background Technical Report

Bus Journeys in the South West
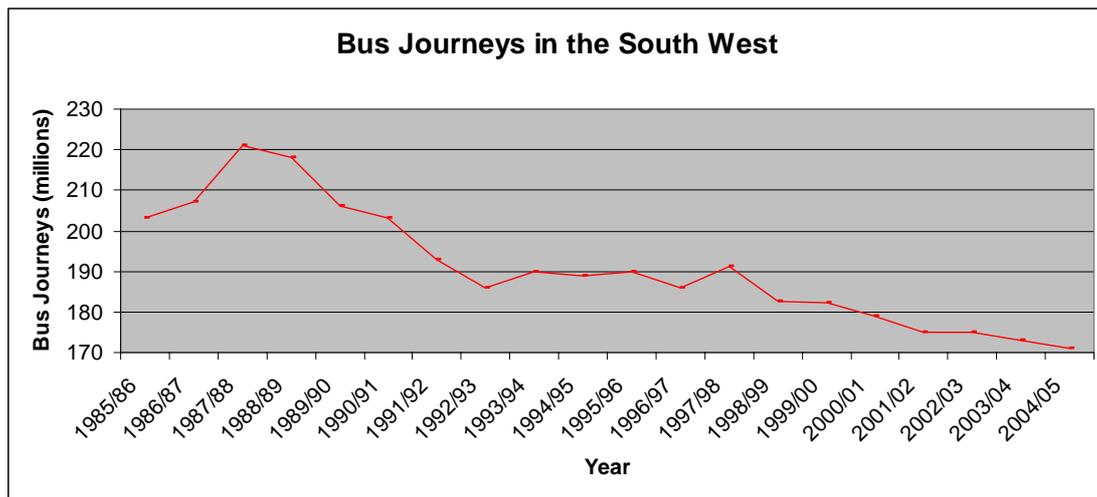
Figure 2: Bus Journeys in the South West
Source: Regional Transport Statistics 2005

The availability of car parking has a major influence on the choice of means of transport chosen. Some studies suggest that levels of parking can be more significant than levels of public transport provision in determining the mode of transport chosen, even locations well served by public transport.

Roads are getting safer, with nearly 500 fewer people a year killed or seriously injured on the region's roads since 1992, *(RTS 2005)* but the rate of decline in the number of casualties from traffic accidents has been much lower than in the rest of the country.

2.3.4 Road and Freight

Road haulage has increased in the last decade, making it the primary transportation mode for freight in the region. 62% of the region's freight was transported by road in 2004. A Regional Freight Map was produced for the Draft RSS and has been defined for the purpose of identifying priority for maintenance investment and for working with freight operators to ensure that freight utilises those roads most fit for purpose. It was produced after consultants examined freight flows in the region and recommended that the map should be produced.

2.4 The Regions Rail Network

The Region has five main networks/lines: the Great Western Mainline (GWML) The Exeter to Waterloo line, South Coast to Bristol and South Wales Route (SCBSW), Cross Country Network and the South West Mainline (SWML). The GWML is the most significant, providing an important link to/ from the Region.

SWRA: Transport Background Technical Report

2.4.1 Great Western Mainline (GWML)

The GWML is the rail link between London and the South West/South Wales, covering areas with significant variation in population density. It is a mixed traffic railway, providing a strategic route for local, regional, and inter-regional passenger and freight traffic. Long distance travel is primarily from/to Bristol and South Wales to/from London. Around half of these are for leisure purposes, a third for business and the rest for commuting. Shorter distances are typically between regional centres such as Cardiff, Reading Exeter and Bristol. This mix of fast and slow, express and stopping trains constrains the use of the infrastructure and has the effect of limiting the number of trains the route can take at any one time. In 2002/03, 75 million journeys were made within, to and from the GWML, around 8% of national passenger journeys. 27 million of those were to/form central London (SW RDA 2004).

Significant volumes of freight are carried to and from terminals within the GWML. The main types of freight are aggregate flows, coal, metals, automotives, petroleum and chemicals and waste flows.

2.4.2 Exeter to Waterloo

The Exeter to Waterloo route provides a useful adjunct to the GWML and is sometimes viewed as the regions second strategic rail route. The Line provides a diversionary east to west railway line, and serves different markets such as leisure users and students. It also takes people to another part of London. It has its own specific constraints which could again inhibit future growth. The single track sections between Exeter and Salisbury (71 miles of the 89 is single track) pose a particular capacity restriction with regard to future service enhancements.

2.4.3 South West Mainline (SWML)

The SWML involves many lines, the principal one being from London Waterloo to Weymouth, passing through Woking, Basingstoke, Southampton and Bournemouth. The Line also currently serves a number of other regional urban areas such as Reading, Guildford, Salisbury, Bristol, Paignton and Plymouth. There are also a number of cross country services from Brighton and Reading.

The Line serves a mixture of long distance services and suburban services serving London, local commuter and leisure markets. Train journeys are dominated by London commuting which accounts for 45% of the journeys made. Long distances services are between London Waterloo and Southampton, Bournemouth and Weymouth as well as to

Salisbury and Exeter. Traffic has grown in recent years, not just to London but to other locations too.

2.4.4 South Coast to Bristol and South Wales Route (SCBSW)

The rail corridor from the South Coast to Bristol and South Wales runs for 141 miles and is the only rail route that provides a north-south transport link in the region. It links the principal conurbations of South Hampshire (Portsmouth and Southampton), with Salisbury, West Wiltshire, Bath, Bristol, Cardiff and Newport.

In 2004, around 4.5 million passenger journeys were made (including regular commuting to Cardiff, Bristol and Bath). Over 30% used the Route for business purposes and 48% for leisure purposes. The corridor plays a significant role in the fields of tourism and leisure. Many well known attractions are placed along its route such as Bath and Stonehenge. The route serves steady inter-regional traffic and passengers using the services over shorter distances make up around 10% of the traffic *(RCP, 2004)*

2.4.5 Cross Country Network

The Cross Country Network covers the entire country and links Scotland with the South West and South East of England. Cross Country routes mirror the principal non-London motorway network and are principally made up of 8 routes. The routes relevant to the South West are the South West- Birmingham route and the South Coast to Birmingham, which provide an inter-regional rail link to the West Midlands. The majority of journeys made on the network are of long distance and the Network links 115 towns and cities and carried 20 million people in 2005.

In terms of the South West, the Cross Country Network is a vital link to the far South West and daily trains provide a connection to the rest of the country such as Birmingham, Sheffield, York, Newcastle and parts of Scotland. An hourly inter-city service provides a significant rail link within the region connecting Cheltenham Spa and Bristol with Taunton, Exeter and Plymouth. Since 1994, passenger numbers on the Bristol-Plymouth corridor have increased by over 90%, making it one of the Britain's fastest growing rail routes. 4.2 million Passengers per year travel on the Cross County Network to/from Bristol; of these 1.7 million are to/from Taunton and stations to the west.

2.4.6 Rail Patronage

Rail patronage, in contrast to that of buses, has increased rapidly over the past decade, as shown in Figure 3. This is due to people looking more favourable towards the rail industry. Around 44% of the people polled believed train punctuality was getting better and 51% said that rail was the most convenient and easiest form of public transport to use

(RCP, 2005). Transport Authorities, in improving local station facilities and access to the railways, coupled with land use and other transport policies may have played a significant part in raising levels of rail use.
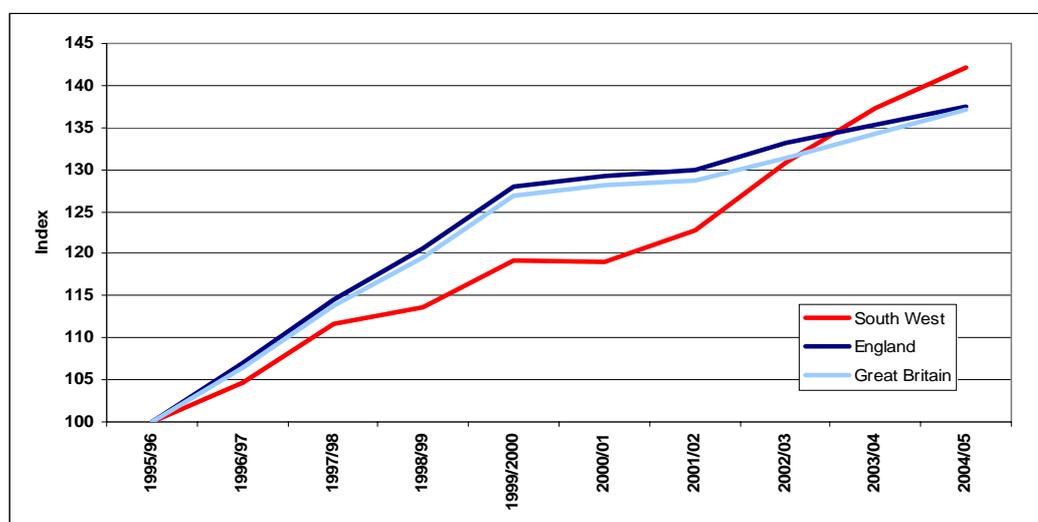
Figure 3: Rail Patronage in the South West, England and Great Britain

Source: Regional Transport Statistics, 2005

2.4.7 Rail and Freight

Rail is often seen as a sustainable mode of transport that offers an alterative to road. Rail freight flows within the region are limited because of the geography of the region and are concentrated on specific markets such as coal and aggregates. The regional rail network is currently unable to handle the largest standard containers (9'6") on conventional rail wagons. The rail industry does not see the South West as a priority for gauge enhancement based on loadings. This decision has been acknowledged but remains a concern in terms of the competitiveness for the region. There is however potential for specialist wagons to provide for standard containers in the south west. However rail freight transportation flows have the potential to increase. Around 8-14 freight trains used the GWML every day in 2005. Forecasts predict that this will increase to 16-23 trains per day in 2014. (RFG, 2006).

2.5 The Regions Ports and Ferry Links

Due to the peninsular nature of the region, the South West has an extensive coastline and a long history of maritime activity with many ports. The region has an important location in the peripheral maritime region of the European Atlantic Arc, and has good sea links with Brittany, Normandy, Ireland and Spain. The regions ports provide many functions such as providing commercial and passenger links to Europe, recreation and leisure.

SWRA: Transport Background Technical Report

Ports and water borne transport are important for the movement of goods in and out of the region. The volume of sea freight passing through the regions ports has risen at a faster rate than for the country as a whole. Overall the region handled 20 million tonnes of freight in 2003.

2.5.1 Bristol Port

In terms of freight transportation, Bristol Port is the most significant port in the region, with TEN's Status. The port experiences an annual throughput of some 11 million tonnes. Bristol Port comprises of two ports Avonmouth – north of the River Avon, where the Avon enters the River Severn and Royal Portbury Dock, south of the Avon. The entire dock estate is 2419 acres, of which the useable area for port operations is 1,084 acres. The remainder is given over to water (368 acres); green land (274 acres); land within a Site of Special Scientific Interest (SSSI) (149 acres); Green Belt (47 acres); Green Covenant (not to be developed) (30 acres); and long-term leases to other users (467 acres). Communications to the Port are good, and both docks have access to the motorway through junctions adjacent to the dock gates. Avonmouth is well served by two rail links with direct links to the South Wales and Great Western mainlines.

The port has a number of key strengths, including deep water capacity and excellent connections to the regional rail and road network. Bristol is one of eight ports nationally with the capacity to accommodate modern vessels of the 130,000t dwt type. It is also the only West coast port that can handle vessels of this type. It has the best strategic location of any deepwater port in the UK to serve any major urban area-over 42 million people live in a 250km radius. The port has also been subjected to heavy investment and commitment since the present owners took over in 1991.

The port now serves an important strategic national role in supplying several important industries – notably energy, car distribution and agricultural industries and supports a range of others including food & drink and manufacturing (through supply of timber, minerals, metals, etc.). The port plays an important role within the economy of the Bristol city-region in supporting growth in transport/logistics/distribution – a key growth sector for a modern, post-industrial city-region.

2.5.2 Plymouth

Located on the south coast of Devon, Plymouth is the one of the largest city's on the South coast and houses one of the world's finest natural harbours: Plymouth Sound. Plymouth Port is one of the few regions ports which have TEN's Status and performs a number of functions: commercial, industrial and naval. Apart from the naval dockyard

SWRA: Transport Background Technical Report

Devonport, the harbour comprises three separate commercial harbours (Millbay Docks - primarily passenger ferries; Sutton Harbour - fishing/leisure; and the Cattewater Harbour - offering access to privately owned facilities for both commercial shipping and leisure craft). Although Plymouth Port is not of national importance when compared to Bristol, the amount of freight and passengers passing through the site has increased. Traffic at Plymouth has grown by around 45 % since 1990.

Millbay Docks handles passengers on scheduled ferry services and Ro- Ro ferry services to France (Brittany), Northern Ireland and Spain and the Channel Islands. The Docks has also started to cater for the growing market of visiting passenger cruise ships. Some 627,000 passenger journeys were made to and from the port in 1999. Ro-Ro vessels also carried 617,000 ferry passengers and 112,000 tonnes of freight, whilst fish landings totalled £8.9 million. Sutton Harbour, which no longer has commercial cargoes, is now a major fishing harbour and accommodates a marina. Cattewater Harbour deals with the port's general cargoes which are varied. Imports include refined clean oil products, agribulks, timber and specialist aggregates. Exports include both primary and secondary aggregates, china clay, grains and scrap metal. There is also a large fish processing plant, which receives fish on a seasonal basis, and exports frozen fish products. Total traffic was 2.2 million tonnes in 2004, consisting mainly of oil products (57 per cent) and miscellaneous dry bulk (38 per cent). Cattewater Harbour is well placed to handle vessels of up to 150 metres in length.

2.5.3 Poole Harbour

Poole Harbour is situated in SE Dorset with the towns of Poole and Wareham on its shores and boasts one of the world's largest natural harbours, extending to 36 km². The harbour is a drowned valley formed at the end of the last ice age, and is the estuary of several rivers, the largest being the Frome. The harbour is extremely shallow (average depth 48cm), with one main dredged channel through the harbour, from the mouth to Holes Bay in Poole. During the winter of 2005/2006 approximately 1.1 million m³ (1.65 million metric tonnes) of sand dredged from Poole Harbour channels and approaches was used to replenish beaches at Poole, Bournemouth & Swanage to protect them from erosion. The harbour has 5 smaller islands, including Brownsea Island, and much of the harbour has Site of Special Scientific Interest (SSSI) status. The mudflats and salt marshes are of great ecological value for feeding and roosting birds.

The Port of Poole is an integral part of Poole Harbour. As well as Plymouth and Bristol, Poole also has TEN's Status. Of its 10,000 acres, only 60 are devoted to commercial port operations. The remainder is a very delicate balance between shipping, leisure and the

multitude of wildlife. Once a major port, freight transport has declined, but the port still takes regular cross-Channel passenger ferries. Poole is one of the main ferry ports in the region and normally handles passengers on scheduled ferry services to France, Northern Ireland and Spain and the Channel Islands. Poole also includes continental RO-RO, conventional cargoes, off-shore/on-shore oil support and bulk cargoes such as steel, sand, gravel and fuel. Poole was the second busiest West Country port after Plymouth in 2004 (1.8 million tonnes). Steady growth occurred between 1975 and 1990, when traffic almost doubled to 1.9 million tonnes. Ro-Ro traffic (58 per cent) and miscellaneous dry bulk (16 per cent) were the major cargoes in 2004. There were also 747,000 ferry passengers to France and the Channel Islands and fish landings valued at £1.1 million.

The harbour contains extensive sheltered waters which provide a magnificent haven for recreational sailing and water sports. The Port has over 6,000 registered leisure craft, as well as a public yacht haven with berths for 100 visiting craft making it a major centre for yachting.

2.5.4 Fowey

Fowey Harbour is situated on the south coast of Cornwall, approximately halfway between Plymouth and Falmouth. Fowey is a deep water harbour, with TEN's status, and is a very important exporting port on the South West peninsula, being the largest in tonnage terms. It is also in the top twelve ports for non-oil product exports in the UK. The main export shipped from Fowey is China clay to destinations all over the world. Fowey handled 1.3 million tonnes in 2004, three-quarters of which went to Scandinavia and Canada. Traffic at the port grew from 0.6 million to 1.7 million tonnes between 1965 and 1995.

Fowey also accommodates over 7000 visiting craft through the summer season and has up to 1500 resident craft.

2.5.5 Other ports

Falmouth has been reputed to have the third largest natural harbour in the world. The port has extensive deepwater moorings and is an important centre for bunkering, ship repairs, cruise calls as well as for fuel. The fishing industry is of significant economic importance to the region with something like £70 million of landings and the port handled 0.4 million tonnes in 2004. Falmouth also dealt with 605, 000 tonnes of china clay in 1999 respectively.

Portland's harbour has always been a significant regional port as a ferry terminal, for the fishing industry or for pleasure. The harbour has two main parts as well as the ferry terminal, which serves year round Ro-Ro services to the Channel Islands and Brittany, France. In 1999, 226,000 passenger journeys were made to/from Weymouth. The harbour is also a significant fishing port with landings worth £1.6 million in 2004, including crab landings worth £3.7 million.

Teignmouth Harbour is a sub regionally important port that is situated on the Teign Estuary near Newton Abbot. Its main export is ball clay, which is mined locally at Kingsteignton. Imports include animal feed, fertilizer, timber, building material, stone and coal. There are over 800 shipping movements a year handling more than 600,000 tonnes of cargo.

Par Harbour is situated in the village of Par, near St Austell, Cornwall. The harbour was constructed in the 19th century to export copper, granite and china clay. The tonnage carried through Par has decreased in recent years: around 1.1 mil tonnes of china clay passed in 1970 compared to 0.3 mil tonnes in 2004. Today, china clay is piped to the harbour in slurry form, where it is exported out to many destinations. The site also has a rail link used to carry away dried clay by rail.

Penzance Harbour is the most southerly harbour in the region. Given the sheltered location of Penzance, its harbour has long been used by commercial, fishing and private craft and it has a long tradition of hosting a thriving maritime industry. The ferry services to the Isles of Scilly from Penzance is locally important both for the community it serves and for supporting tourism as The Isles is primarily dependent on ship services for freight.

Sharpness Dock, at the head of the Bristol Channel, handles ships of up to 6,000 tonnes (with cargo), with a maximum beam of 16.76 m and unlimited length, and offers excellent road, rail and motorway links. The port is experienced in handling a diverse range of cargoes including various dry bulks, minerals, timber and many other products.

2.5.6 Ports and Freight

Around a quarter of freight in the region is transported by sea (26% in 2004). Transportation by sea can be increased once freight handling facilities have been expanded at the regions Ports. Bristol has been the third fastest growing port in the UK over the last decade. Its cargo traffic increased by 6.3% p.a. over the period 1990-2002, well above the national traffic growth rate of 1.1% (SWRDA, 2004). The Draft RSS reflects the importance of Bristol Port and seeks to further development at the site. However the regions other ports have not been over looked. Other ports in the region will

continue to develop specific freight markets as Policy TR7 seeks to facilitate the growth of ports to provide container and freight facilities (see Section 5).

2.6 The Regions Airports and Air Travel

Airports provide national and international gateways for the region. Improving air services and enhancing the regions links to national and international destinations for both freight and passengers will help to reduce peripherality. This will also limit the number of journeys made to airports outside the region particularly the South East. This principle forms the basis of Policy TR9 in Section 5 of the Draft RSS.

The region has five notable airports in terms of passenger movements; Bristol, Plymouth, Bournemouth, Exeter and Newquay - although Bristol is by far the most significant. There are smaller airports at Gloucestershire, Penzance and St Mary's Airport on the Isle of Scilly. The region's airports currently have complementary roles: Bristol, Bournemouth and Exeter have the most traffic in terms of international destinations. Plymouth, Newquay, Penzance and Gloucestershire airports have roles in meeting regional business needs by feeder services to London and in maintaining links with the Isles of Scilly. Overall growth in air passengers in the region stands at 13% pa with Bristol experiencing the highest growth at 14%pa (DfT, 2003).

2.6.1 Bristol International Airport

Bristol International Airport is by far the largest airport in the South West, situated 9 miles outside the city centre. The airport offers flights to 80 destinations around the world. The airport has seen substantial growth recently, with passenger throughput nearly doubling between 2000 and 2003. The airport is now handling almost 4mppa.

Strategic surface access links to Bristol are not as good as many other airports of a similar size in the UK. Links to the motorway network, which is some distance away, are via 'A' and 'B' roads that pass through villages and other built-up areas. These are not heavily congested, except to the north of the airport where the A38 enters Bristol itself. The Bristol International Flyer (express bus service) from Bristol Temple Meads to the airport is the main public transport link and is proving increasingly successful; but public transport mode share is low at 4% and the provision of a direct rail service is not a realistic prospect.

2.6.2 Bournemouth International Airport

SWRA: Transport Background Technical Report

Bournemouth International Airport is situated on the eastern edge of the region covering some 365 hectares, 8km north of Bournemouth city centre. It competes with Southampton for certain types of traffic, although the two airports have, to some extent, complementary roles as a result of Southampton's relatively short runway. Bournemouth International Airport handled over 465,000 passengers in 2003 to 36 destinations including scheduled flights to France, Netherlands, Spain, Portugal and Italy, as well as to Ireland and the Channel Islands. Holiday charter destinations include Austria, Croatia, Greece, Turkey, Sardinia, Majorca, Menorca and the Canary Islands, plus Barbados and New York in the US. The airport is likely to retain, a small but important air cargo operation: Bournemouth handled nearly 0.5mppa in 2003.

The airport has an important influence on the area both in terms of transport and as a major employment sector. A particular feature of the airport is the existence of existing and potential employment areas. The specialist nature of the employment means that workers are drawn from a wide area. It is anticipated that the overall employment at the airport will grow over the next 10 years by 60%.

The existing terminal area is about 1.5km from the A338 Bournemouth Spur Road which has direct links to the A31/M27/M3 route to the rest of the south coast and north to London. Public transport connections to Bournemouth International Airport at present are poor. The airport is not close to any rail station, and there are no scheduled bus services passing the site. The airport operates its own bus service, primarily for staff, and a new Airbus service has been started by Yellow Buses, linking the airport to Bournemouth town centre.

2.6.3 Exeter International Airport

Exeter International Airport is situated 5 miles east of the city centre. It was originally opened on 31st May 1937. From that day forward a steady growth in air services developed to the Channel Islands, and today passengers have the choice of over 20 worldwide destinations. Passenger numbers from the airport are increasing at such a rate that a new terminal is needed to meet future demand. 2003 saw over 400,000 passengers pass through its single terminal

Recent enhancements to the strategic road network in the vicinity of the airport, which is readily accessed from the M5 and upgraded A30, have also helped to extend the airport's potential catchment area. It is anticipated that passenger numbers will increase to 2.0 - 2.5mppa, or beyond, in which case a move to the new terminal will be essential.

2.6.4 Plymouth City Airport

Plymouth City Airport is 4 miles from the city centre. The airport has experienced growth of 3.2% per annum over the period 1991 – 2000. By 2001 the airport had grown to a throughput of 0.12mppa. Plymouth based Air Southwest offers regular scheduled flights to destinations in the UK, Ireland and the Channel Islands. By offering frequent flights to London Gatwick and Manchester, the airport also provides world-wide connections via these major international hubs.

The airport is near the A38 offering easy access by car to other parts of the region. Plymouth's main rail station is a short distance away; however there are no direct public transport links such as a bus service to the airport.

2.6.5 Newquay Airport

Newquay Airport is the 4th busiest airport in the region and handled around 280,000 passengers in 2004. It is a gateway to Cornwall including the Eden Project, the National Maritime Museum Cornwall and the Tate Gallery in St Ives.

Newquay Airport's traffic has seen substantial recent growth following the start up of 'no-frills' services to Stansted. The Airport serves as the main hub for Skybus, the airline serving the Isles of Scilly. The airport also serves flights to Gatwick and Stanstead. There are about 600 flights a month from the airport to these three destinations. Frequent flights also go to Bristol, Leeds-Bradford and Dublin, plus a new connection from Newquay to Manchester. The airport has potential to attract new services catering principally but not exclusively for inbound tourism markets. These are likely to have significant benefit for the Cornish economy.

2.6.6 Other airports

Gloucestershire airport is situated mid way between Gloucester and Cheltenham at Staverton handling around 900,000 aircraft movements each year, making it a thriving sub regional business and recreation airport. Gloucestershire Airport is primarily used by private light aircraft and air taxis, although there is a weekly service to Jersey provided by Air Aurigny, between April and October. Several flying schools are based at the airport.

Filton Airport has been the birthplace of many important and exciting aviation projects such as the Bristol Freighter, Bristol Fighter, the Britannia and of course Concorde. Situated just north of Bristol, close to major road and rail networks, Filton is an ideal Airport for the busy business executive. There is no better location from which to access

Bristol, it is near a main line Rail Station (Parkway), and it's just 2 miles south west of the M4/M5 intersection and only 10 minutes from the centre of Bristol.

Lands End Aerodrome is located close to Penzance and handles around 300 aircraft movements a year. Flights are primarily to the Isles of Scilly. For an airport of its size it has excellent surface access links. Bus services go to the airport from Penzance train station and several bus routes go past the airport.

Penzance Heliport is conveniently situated to the East of Penzance alongside the main A30 road, and is less than a mile from the Railway and Bus Station Penzance. It offers regular flights to the Isles of Scilly and handled some 129,000 passengers in 2004.

St. Mary's Airport provides a lifeline link between the mainland and the Islands and plays a lead role in transporting locals, visitors and key workers to and from the Islands. It also acts as a base for emergency services, for example the Air Ambulance. The airport is designated the 10th busiest regional airport in the UK. The airport also transports large amount of freight, for example for the flower industry. In 2004/5 the airport recorded 140,000 passenger movements.

Tresco Heliport in the Isles of Scilly is close to the world-famous Tresco Abbey Garden. It provides a vital lifeline to the Island of Tresco, where 98% of the residents depend on incoming tourists and the revenue that they bring. Majority of the flights from Tresco are to Penzance.

2.6.7 Air Travel in the South West

Demand for air travel has been increasing rapidly and around 189 million people passed through UK airports in 2002, of which 4.4 million were in the South West (DfT, 2003). This is due to the influx of cheap flights into the market coupled with airports now offering flights to more destinations.

Figure 4 shows that the demand for air travel in all regions has increased with the exception of 2001. Policies in Section 5 of the Draft RSS seek to meet more of the demand within the region and reduce 'leakage' to the South East and congestion on major roads routes serving the major airports.

In its White Paper on the Future of Air Transport the Government anticipated that the demand for air travel could rise nationally, from 200 million passengers in 2003 to between 400 million and 600 million by 2030. Forecasts suggest Bristol will remain the region's largest airport however this is dependent on a number of factors: the scale, timing and location of development at South East airports, the choice of destinations offered at the regions airports and mitigating the environmental costs of air travel. In

SWRA: Transport Background Technical Report

regard to Bristol, population and economic growth relative to the UK average and the extent to which the tourism market grows will influence the future growth of the airport.

Forecasts predict that Bristol would reach 7.2m passengers at 2015 and 11.6m passengers at 2030. This represents an average annual growth rate of 4.1% from 2003 (Proposed Master Plan for BIA-Statement of Intent, Feb 2005). Forecasts suggest Bournemouth in 2030 could attract around 4mppa with one new runway in the South East, but less than 3mppa with two new runways in the South East (The Future of Air Transport, DfT).
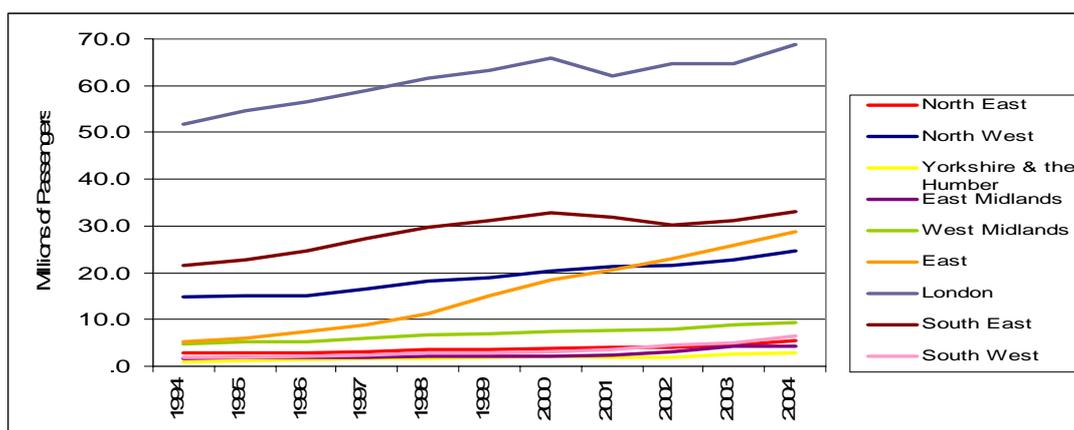
Figure 4: Air Travel in England 1994-2004

Source: Regional Transport Statistics 2005

2.6.8 Air and Freight

Only a tiny proportion of freight is transported by air in the region: around 0.001%. This has been an increase, which is explained by the expansion of freight handling facilities and capacity at a number of regional airports, such as Exeter and Bournemouth.

2.7 Walking and Cycling in the Region

The region has the highest number of journeys made by foot and bike. Walking and cycling accounted for 26% of all trips in the region in 2004, but most journeys were made by private transport, which accounted for 69% of journeys and public transport 4%. However the number of walking and cycling trips in the South West decreased between 1994 and 2004.

There are many cycle paths in the South West; many of them part of the National Cycle Network (NCN). Promotion of the NCN is important as it uses former transport routes e.g. disused railways and the network can be used to substitute short car journeys. Major

SWRA: Transport Background Technical Report

cycle routes in the region include the West Country Way in Devon and the Avon Cycle Path.

Encouraging greater use of both urban and rural Rights of Way will contribute to healthier living, and reduce the impact of transport on the environment by reducing congestion and creating less pollution. Walking also offers a sustainable and viable option to private transport.

2.8 Summary

The South West is the largest of the English regions and has many diverse characteristics which make it unique. The basic geography of the region has an influence on the regions transport infrastructure. The regional transport requirements are affected by the peninsular nature of the South West, peripherality, the settlement structure, rurality, and the fact that many people come into the region for leisure and holiday purposes. The relative ease of movement within the region is therefore a major issue which influences many aspects of regional social and economic life.

The region's road infrastructure consists of national and regional routes, each with its own function. Car use and ownership in the South West is relatively high- higher than the national average, which is due to the large distances between the major centres of the region and its dispersed population and settlement pattern. At present bus availability and passenger numbers are low which is mainly due to a high percentage of the population living in rural areas and achieving a good effective coverage of services. Road is the main transportation mode for freight.

In terms of the regional rail infrastructure, the region has 5 main lines/networks, each serving a different market. Rail patronage has increased recently due to a positive perception by the public towards rail and transport authorities, in improving local station facilities and access to the railways, coupled with land use and other transport policies may have played a significant part in raising levels of rail use. Although the region has limited potential to increase the amount of freight carried by rail due to gauging limitations, forecasts have predicted an increase in the amount of freight carried by rail.

Due to the peninsular nature of the region, the South West has an extensive coastline and a long history of maritime activity with many ports. Bristol is the most significant port in the region with other ports playing an important role in the local or sub regional economy.

Airports provide national and international gateways for the region. Improving air services and enhancing the regions links to national and international destinations for both freight and passengers will help to reduce peripherality. The region has five notable

SWRA: Transport Background Technical Report

airports in terms of passenger movements although Bristol is by far the most significant. Overall growth in air passengers in the region stands at 13% pa with Bristol experiencing the highest growth at 14%pa. Demand for air travel has been increasing rapidly and around 189 million people passed through UK airports in 2002, of which 4.4 million were in the South West. Air plays a very small role in transporting freight in the region.

The region has the highest number of journeys made by foot and by bike. Walking and cycling accounted for 26% of all trips in the region in 2004. Encouraging greater use of both urban and rural Rights of Way will contribute to healthier living, and reduce the impact of transport on the environment by reducing congestion and creating less pollution. Walking also offers a sustainable and viable option to private transport.

SECTION 3: POLICY CONTEXT

The Transport Strategy in the Draft RSS is required to comply with European and National Policy. This section outlines which pieces of policy are relevant and how they relate to the Draft RSS

3.1 European Policy

3.1.1 The European Commission Transport White Paper: European Transport Policy for 2010: "Time to Decide"

The White Paper sets out a comprehensive strategy aimed at delivering a sustainable transport system, from an economic, social and environmental viewpoint. It proposes an integrated package of some 60 Community measures some of which it has already been published in draft.

By implementing these measures, the European Commission believes that it will be possible to break the link between transport and economic growth without the need to restrict the mobility of people and goods. The measures contained within the Paper are regarded as a first step towards the delivery of a sustainable transport system which should ideally be in place in 30 years time. A key aim of the Paper is to shift the balance between transport modes by 2010 by among other things, revitalising the railways, promoting maritime and inland waterway transport, linking up the different modes of transport, further developing the transport Trans-European network (TEN) and introducing effective charging for transport. It recognises, in particular, the increasing problems of congestion and accidents on road/rail routes in towns and at airports, and the harmful effects of transport on the environment and public health.

These issues are relevant to the region as highlighted in the SWARMMS Study. The Paper also outlines what the Commission believes national and local governments should be doing themselves, in the transport field and in other areas such as urban and land-use planning and budget, fiscal and competition policy. This is of relevance and importance to the South West as it brings policy guidance down to a regional level.

3.1.2 European Union Review of the Trans European Network

The idea of Trans-European Networks (TEN in EU jargon) emerged by the end of the 1980s in conjunction with the proposed Single Market. It made little sense to talk of a big market, with freedom of movement within it for goods, persons and services, unless the

SWRA: Transport Background Technical Report

various regions and national networks making up that market were properly linked by modern and efficient infrastructure.

The construction of Trans-European Networks is also an important element for economic growth and the creation of employment.

3.2 National Policy

3.2.1 PSA Targets

The White Paper, Spending Review 2002: Public Service Agreements sets out Public Service Agreements (PSAs) for all main departments for 2003 to 2006. These set out around 130 demanding targets covering key areas of Government, underlining the importance of outputs and outcomes in raising education standards, improving health and cutting crime and improving transport amongst other things. PSA's bring together in a single document the aim, objectives and performance targets for each of the main Government departments. They include:

- An Aim: a high level statement of the role of the department;

- Objectives: in broad terms, what the department is looking to achieve;

- Performance Targets: under most objectives, outcome focused performance targets;

- Value for money: each department is required to have a target for improving the efficiency or value for money of a key element of its work; and

- A statement of who is responsible for the delivery of these targets. Where targets are jointly held this is identified and accountability arrangements clearly specified.

The Department of Transport's (DfT) aim is to provide transport that works for everyone. This will be achieved by the main objective: reliable, safe, secure transport for everyone who respects the environment. The DfT's PSA Targets are as are as follows:

- Reduce congestion on inter-urban trunk road network and in large urban areas in England below 2000 by 2010 levels;
- Secure improvements in rail punctuality/ reliability with a 50% increase in rail use in GB from 2000 levels by 2010;
- Secure improvements to the accessibility/punctuality/reliability of local public transport with an increase in use by more than 12% by 2010 compared with 2000 levels;

SWRA: Transport Background Technical Report

- Cut journey times on the London Underground by increasing capacity and reducing delays;
- Reduce the number of people killed or seriously injured in GB in road accidents by 40% and the number of children killed or seriously injured by 50% by 2010 compared with the average for 1994-98, tackling the significantly higher incidences in disadvantaged communities;
- Improve air quality by meeting our National Air Quality Strategy objectives for pollutants (Carbon dioxide, Lead, Nitrogen dioxide, particles, Sulphur dioxide, Benzene, 1-3 Butadiene); and
- Achieve annual 2.5% efficiency improvements across the Department (this is the value for money target).

The Secretary of State for Transport is responsible for delivering these PSA's, although the delivery for Target is 6 is shared with DEFRA.

The DfT's PSA Targets have influenced the Draft RSS and the transport policies within Section 5. For example, Policy Tr5 seeks to ensure the provision of reliable regional train routes.

3.2.2 Shared Priorities

In July 2002, a statement of shared priorities for central and local government was agreed by the Central Local Partnerships Committee. The purpose of this statement was to seek an agreement on high-level key priorities by combining central government's interest in seeing improvements in key public service areas delivered with local flexibility in determining how these priorities would be delivered. The Government agreed 7 shared priorities for Local Government and the transport priority aims was to meet transport needs more effectively. This is described in more detail below.

Priority	Content
Congestion	Government working closely with Local Authorities to deliver policies which are effective in managing the impacts of congestion at the local level. Government wants major urban areas to set targets for the period to 2011 to reduce congestion.
Accessibility	Ability of people to access places of work,

SWRA: Transport Background Technical Report

	learning, health care, shopping/leisure can have a positive impact on their lives. Government wishes to see all Local Transport Plans (LTP) authorities to use accessibility planning techniques to understand the links between social exclusion/transport and to develop transport solutions that reduce social exclusion.
Road Safety	Local Authorities have a role to reduce impact of road accident casualties as the majority of reported injury accidents occur on the locally managed road network. Road safety strategies should be devised as part of the LTP process.
Better Air Quality	Local Authorities responsible for local air quality management should integrate Air Quality Action Plans into the LTP covering their area - Government recommends this approach as it integrates air quality problems into transport plans.

The Draft RSS does address the four areas above, with accessibility highlighted as one of the key transport issues in the South West. Transport issues for the region are examined in Section 3 of the Report.

3.2.3 PPS11: Regional Planning and Spatial Strategies.

This Policy Statement sets out procedural policy on the nature of the RSS and outlines what should happen in preparing the initial documents and revisions to them. PPS11 recognises the need for better integration between transport and spatial planning to deliver an effective RSS. It highlights that a Regional Transport Strategy (RTS) should be integral and identifiable as part of a RSS. It should set out how national transport policies/programmes will delivered in the region, outline the transport and related land use policies and measures to support the RSS and provide a long term framework for regional transport.

The RTS should provide:

SWRA: Transport Background Technical Report

- Regional objectives and priorities for transport investment/management across all modes to support the RSS;
- A strategic steer on the role and future development of airports and ports, which are consistent with national policy;
- Guidance on priorities for managing and improving the trunk road network and local roads of regional/ sub regional dimension;
- Advice on the promotion of sustainable freight distribution which is of regional/sub regional importance;
- A strategic framework for public transport that identified measures to improve accessibility to jobs and services at the regional/sub regional level, expands travel choice, improves access for those without a car and guides new development;
- Advice on the approach to be taken to standards for the provision of off-street car parking; and
- Guidance on the strategic context for local demand management measures within the region.

In terms of the South West RSS, the transport element has been incorporated throughout the document and Section 5 contains the regional transport policies.

3.2.4 PPG13 Transport

PPG 13 contains central Government Planning Policy on transport. It came out in March 2002 and fully reflects on the Ten Year Plan. It provided a range of guidance on content and process for each mode of transport at all levels for the RTS to LTPs. The Guidance objective's is to integrate planning and transport at local, regional, national and strategic level in the aim to promote more sustainable transport choices for personal travel and freight, improve accessibility by public transport, walking and cycling and reduce the need to travel by car.

To deliver these objectives, the Guidance says that local planning authorities should actively manage the pattern of urban growth, locate facilities to improve accessibility on foot and cycle, accommodate housing principally within urban areas and recognise that provision for movement by walking, land use planning should facilitate a shift ion freight transport from road to rail/water and cycling and public transport are important but may be less achievable in some rural areas

Specifically at the regional level, PPG13 highlights the importance of RPBs in producing an RTS as part of a RSS. RTSs provide the long-term strategic framework, which informs

SWRA: Transport Background Technical Report

development plans; LTP's and transport operators in developing their plans and programmes.

3.2.5 Guidance on producing Regional Transport Strategies

The aim of the Guide is to assist in the development of strengthened RTS documents and contribute to a more effective process for their production over the next two years. It is intended as a practical tool for RPBs, Government Offices for the Regions (GOs) and other organisations engaged in the RTS process. The Guide offers advice, clarification and examples of good practice in relation to main issues and considerations in producing a RTS. The focus for the guide is on strengthening the process and content of the draft RTSs produced by RPBs. The guide was produced in conjunction with PPG11, which provides formal guidance on Regional Planning Guidance (RPG) and RTSs and is intended to build on, expand, clarify and re-iterate various points in PPG11.

3.2.6 A New Deal for Transport: Better for Everyone: White Paper

In July 1998, the Government presented the Transport White Paper, which aimed to take transport policy into a new direction. The focus shifted from a 'predict and provide' policy for road building towards a more integrated transport policy. Integration was encouraged within and between:
- Different modes of transport, so that connections can be made more quickly;
- With the environment so that people's transport choices cause less environmental damage;
- With land use planning, to support more sustainable travel choices; and
- With the policies for education, health, and wealth creation so that transport helps to create a fairer and more inclusive society.

The White Paper proposed action at European, UK, regional and local level and emphasised the importance of partnerships and sharing responsibility for action. Actions planned included relating to changing travel habits, sending the right economic and fiscal signals, setting standards, better planning and appraisal.

The White Paper has influenced the Draft RSS in terms of which direction the main transport policies should take, such as TR1 seeks to integrate all modes of transport and TR10 seeks to encourage a modal shift for car usage to public transport.

SWRA: Transport Background Technical Report

3.2.7 The Ten Year Transport Plan 2000

This was presented in 2000 and covers the ten year period up to 2010. It sets out to transform the transport system, tackling congestion and pollution, increasing choice and raising standards to make travelling more attractive, safer and accessible. The Government allocated £180 bn to help deliver this vision.

The Plan is intended to provide a more stable climate for investment in transport for both public and private sectors. There is a clear need to take a long-term view, given the typical investment horizons needed to plan for and deliver transport improvements. The Plan will take account of both the public and private sector investment likely to be needed to deliver the Government's key policy objectives.

The Draft RSS does contain a section (Section 3.9) on the Region's priorities for investment which supports the Spatial Strategy. Included is investment for urban transport systems and demand management, which contributes directly to the vision set out in the Plan.

3.2.8 The Future of Transport, A Network for 2030: White Paper

This White Paper was published in July 2004 and provides a context for a transport network in 2030. It looks at the challenges facing the government, in providing a suitable transport system. Issues include under-investment by the state over the past few decades, and social, economic or environmental costs. Travel is changing, with people travelling more often and further.

The Paper has three elements:
- Sustained investment over the long term;
- Improvements in transport management; and
- Planning ahead.

Emphasis was placed on:
- Providing a more reliable and freer-flowing service on roads for personal travel and freight;
- Providing a fast, reliable and efficient rail service, particularly for interurban and commuter journeys;
- Providing bus services that are reliable, flexible and convenient, which are tailored to local needs;
- Encouraging walking and cycling as an alternative mode of transport; and

SWRA: Transport Background Technical Report

- Ensuring that ports and airports provide improved domestic and international links.

The White Paper makes reference to the regional and sub-regional level:

'The key at the regional and sub-regional level is to provide a financial framework that will help regions to come to informed views on strategic choice and investment priorities'.

Section 5 in the Draft RSS does address the concerns raised in the White Paper: TR11 seeks to provide better intra-regional transport and TR5 seeks to provide a reliable and efficient inter-regional rail network.

3.2.9 The Future of Rail: White Paper

This Paper published in 2004, sets out the Government's proposals for restructuring of the railways. This includes the reform of the rail regulators, franchising, future investment plans and measures to ensure accountability and safety. It includes coverage of the roles of the Strategic Rail Authority (SRA), Network rail and the Office of the Rail Regulator.

Specifically it outlined significant changes to the rail system:
- The SRA will cease and its strategic functions will be moved to the DfT;
- Network Rail will be given clear responsibility for operating the network and its performance;
- The number of franchises will be reduced and aligned more closely with Network Rail's regional structure;
- Safety regulation will transfer from Health and Safety Executive to Office of Rail Regulation; and
- Freight operators will be given greater certainty about their rights on the national network.

It was hoped that through these structural and organisational changes, the rail industry could deliver more for its customers, in the way of safety, improved performance and controlled costs.

3.2.10 The Future of Air Transport: White Paper

In July 2002, the Government began a UK wide consultation on the county's airports and future development. Consultations took place on a region wide basis, with each airport documented. The White Paper was published in December 2003 and set out a strategic framework for the development of airport capacity over the next 30 years, against the wider context of the air transport sector. It also encouraged a balanced strategy and is committed to sustainable development.

The Paper recognises the importance of air travel to our national and regional economic prosperity and by not providing additional capacity would damage the economy and hinder economic growth. There was attention drawn to environmental impacts and the need to reduce them for those who live nearby and the natural environment. The Paper ensures that over time aviation pays the external costs its activities impose on society at large and it minimises the need for development to occur in new locations by making best use of existing airports facilities.

The White Paper has influenced the Draft RSS as it provided a focal point for air transport policies and the direction on which they were based. The Draft RSS supports the development of Bristol International as the main regional airport and follows what was proposed for the Region's other main airports, as set out in the White Paper.

3.2.11 Government Regions: Your Region, Your Choice: White Paper

The White Paper Your Region, Your Choice signaled the beginning of a new era for the English regions. It set out the Government's plans to decentralise powers and strengthen regional policy, and took forward the option of establishing directly elected assemblies in regions where people wanted them. Building on the success of devolution elsewhere in the UK, the Government's aim is to empower the English regions and create the conditions for better government, improved service delivery, and greater prosperity for all. The Government's vision for elected regional assemblies represents an opportunity for change and a choice for people to make.

The White Paper sets out the next steps along the path of revitalizing the English regions, which resulted in a direct influence on the process of developing the Draft RSS.

SWRA: Transport Background Technical Report

3.2.12 New Approach to Appraisal (NATA)

The New Approach to Appraisal (NATA) is an open and transparent framework to appraise and inform the prioritisation of all transport proposals. NATA is the basis for appraising all transport projects such as the Highways Agency's road schemes, Network Rail Schemes and public transport schemes. Appraisal is undertaken using the Governments five objectives for transport:

- Environment: protect the built and enhanced environment and consider noise, air quality, landscape, biodiversity, water etc;
- Economy: ensure that transport contributes to sustainable economic growth and an efficient economy;
- Safety: to improve the safety of transport users;
- Accessibility: to improve the accessibility to transport systems and that those systems in turn will improve accessibility to services; and
- Integration: improve the integration of transport services and land use planning.

These five objectives cover the economic, environmental and social impacts of a transport project and are presented in a one-page Appraisal Summary Tables (AST).

NATA was first announced in the Government's White Paper "A New Deal for Transport: Better for Everyone" and was first applied by the former DETR (Department of Environment, Transport and the Regions) to trunk road schemes as part of the Roads Review in 1998. The new approach was revised in the Guidance on the Methodology for Multi-Modal Studies (GOMMMS) to make it suitable for all transport projects. The highway appraisal techniques also had to be updated to maintain consistency with Multi-modal studies and appraisals for other modes. This guidance was given in "Applying the Multi-Modal New Approach to Appraisal to Highways Schemes, The Bridging Document".

The NATA framework has a direct influence on the transport elements of the RSS as the framework highlights the main regional transport issues such as accessibility. These issues are mentioned and addressed in Section 5 of the RSS.

3.2.13 Crossrail Bill

The Crossrail Bill was reintroduced in Parliament by the Government immediately after the General Election. It represents a major investment in the rail network and enables the construction, maintenance and operation of Crossrail: a mainline connection between

SWRA: Transport Background Technical Report

Maidenhead, in the west, through central London to Shenfield, in the east. In addition to running through a purpose-built and dedicated tunnel, it will run on parts of the over ground lines between Maidenhead and Paddington and between Shenfield and Liverpool Street.

The existing over ground lines are some of the most intensively used parts of the national network. Collectively, the train services provided by Great Western and Heathrow Express (in the West) and Great Eastern (in the East) are used by 525,000 passengers everyday. Many of these people are commuters from major conurbations, such as Shenfield, Reading, Oxford, Maidenhead and Twyford. However, Paddington and Liverpool Street stations are used by many passengers for much longer journeys – to and from Cardiff, Penzance, Bristol, Gloucester, Swindon, Norwich, Southend, Colchester and Ipswich. Over 200 freight trains also use these rail corridors, providing a valuable distribution service for many goods, in and out of London.

The Bill, although based on investment for London's transport system, does have an impact on the South West's transport infrastructure. There is a danger that Crossrail's contribution towards easing cross-London congestion issues might be at the expense of wider connectivity with other regions. In terms of the South West, the construction and long term operational arrangements are likely to limit the capacity of the route between Reading and London Paddington. In turn, there appears to be little scope to accommodate growing demand for rail travel from the Region.

The Bill has not been approved by Parliament as it is a hybrid bill: A public bill which has a private element to it. This means that any organisation/individual can petition if they are directly affected by the proposals set out in the Bill. A Select Committee are in the process of reviewing all petitions.

3.3 Regional Policy

3.3.1 Regional Planning Guidance for the South West (RPG 10)

Regional Planning Guidance (RPG 10) for the South West is provided by the Secretary of State for Transport, Local Government and the Regions. It supersedes Regional Planning Guidance for the South West issued in 1994, which covered the period to 2011.

RPG10 provides a regional spatial strategy within which local authorities plans and LTPs in the region should be prepared in, it sets out a broad development strategy for the

SWRA: Transport Background Technical Report

period 2016 and provides a spatial framework for other strategies and programmes. The RTS in RPG 10 sets the regional context for transportation planning.

The South West Regional Assembly (SWRA) as the RPB for the South West has produced new policy which will supersede RPG 10 in the form of the emerging RSS. This will take on the same role as RPG 10 and covers the period 2006-2026.

3.3.2 Regional Sustainability Development Framework (RSDF)

The RSDF's are high level strategic frameworks to guide and influence public agencies, businesses, and the community. The South West RSDF is for all organisations in the region, be they public agencies, business or community organisations. Its effect will also benefit those who live, work or visit the region and the principles of the RSDF will influence the majority of decision making within organisations. GOSW commissioned Sustainability South West (SSW) to prepare the RSDF on behalf of the region.

There are four underlying Aims expressing, at the regional level, for sustainable development which were agreed through extensive consultation:

- <u>Protection of the environment</u> - the effective safeguarding and enhancement of the region's environmental resources, both natural and built, including those which are crucial to maintaining its overall attractiveness as an area in which to live, work and play;

- <u>Progress in meeting society's needs and aspirations</u> - recognising people's requirements for good and improving standards of housing and accessibility to facilities; reducing inequalities; and promoting social inclusiveness throughout the region;

- <u>Prosperity for communities and the regional and national economy</u> – improving the competitive position of the South West within the EU and internationally to increase sustainable prosperity for all its residents and businesses; and

- <u>Prudence in the use and management of resources</u> – reducing the consumption of irreplaceable natural resources and making best use of past investment including buildings and infrastructure.

The Regional Assembly is monitoring progress on the Framework. In 2002 they produced a progress report on the RSDF which asked whether the region was 'Moving in the Right Direction' in terms of progress towards sustainability.

SWRA: Transport Background Technical Report

3.3.3 The Way Ahead: Delivering Sustainable Communities in the South West

'The Way Ahead' was launched at the Sustainable Communities Summit on 1 February 2005 and put together in collaboration with Government Office for the South West (GOSW), the Regional Assembly and South West Regional Development Agency (SWRDA). The document aims to support existing strategies by improving delivery of the provision of housing and improved productivity, and to harness the benefits of this growth to address regional inequalities and economic under-performance. It explains the challenges facing the South West and identifies a range of proposals for the region to contribute to the delivery of the UK Sustainable Communities Plan.

These proposals fall under 3 main aims:

- Improving regional productivity, including measures to develop workforce skills, business innovation and transport infrastructure;

- Building more homes, including more affordable homes - and more quickly; and

- Reducing regional disparities and deprivation, ensuring the benefits of growth are spread to individuals and communities currently disadvantaged.

The Way Ahead intends to meet these aims by targeting a small number of places that will be able to make the biggest contribution to these priorities through sustainable growth over the next decade. These are: Bristol and the wider West of England sub-region, Plymouth, Exeter, Swindon and the key Cornish towns (Truro, Camborne, Redruth, and St Austell).

3.3.4 Just Connect! An Integrated Regional Strategy for the South West

There are many important strategies in the South West dealing with particular topic based issues (Waste Strategy, Housing Strategy), but there was no overarching strategy setting the context for these strategies or expressing the overall needs of the region. This is the purpose of the Integrated Regional Strategy (IRS).

The IRS is an important mechanism for better integrated working in the region as it provides a set of broad objectives and priorities relevant across sectors. The aims and objectives expressed in the IRS seek to steer a path that both addresses the challenges that the region currently faces and takes the South West towards achieving its long term vision in the context of the issues likely to affect the region.

SWRA: Transport Background Technical Report

The IRS presents five headlining aims/objectives which aim to make the region a better one to work, live and travel in;

- to harness the benefits of population growth and manage the implications of population change

- to enhance our distinctive environments and the quality and diversity of our cultural life

- to enhance our economic prosperity and quality of employment opportunity

- to address deprivation and disadvantage to reduce significant intra-regional inequalities

- to make sure that people are treated fairly and can participate fully in society.

3.3.5 Regional Economic Strategy

The Regional Economic Strategy (RES) provides a framework for all economic development activity in the South West of England. The current RES for the South West was published in 2003, which covers the period 2003 – 2012 and sets out broad aims for the region expressed in a mission and strategic objectives. Although the development of the RES has been led by the SW RDA, the strategy aims to give a framework in which public, private and community bodies can plan and work towards common objectives.

Focusing on the particular needs and opportunities of the South West economy, the strategy revolves around three main objectives. These are:

- to raise business productivity, allowing them to become more competitive therefore more profitable;

- to increase economic inclusion, so that all parts of the region - including those currently most deprived - can benefit from increased prosperity; and

- to improve regional communications and partnership.

Work has been completed to review the existing RES and to produce a new Strategy for the South West covering the period 2005-2015. As part of the review of the RES a draft was released in September 2005 and the SWR DA consulted on priorities and actions to be in the revised RES. It was submitted to Ministers in January 2006 and was launched in April 2006.

3.3.6 "Our Environment Our Future" Regional Strategy for the South West Environment

The beauty of the South West, the quality and variety of our environment is the region's greatest asset. It is one of the key features that make the region particularly distinctive and attractive to live/work in and visit. In recognition of the importance of the regional environment, the Regional Assembly working closely with the Regional Environment Network has produced a Regional Environment Strategy (REnvS). It aims to provide a vision and aims for the environment in the future; identify pressures threatening the environment; and identify key issues to be tackled.

The REnvS builds on the key environmental issues identified in the RSDF and sets out in more detail the priorities and action needed to tackle these. The REnvS also has clear links with the RES, which identifies the environment as a driver for the region's economy and RPG 10, which sets out the spatial context for future growth and development in the region whilst safeguarding its environmental assets. As well as setting the environmental context for other activities, the REnvS provides an 'umbrella' for a range of more specific action on our environmental assets, including the Historic Environment Strategy, the Biodiversity Implementation Plan and the Protected Landscapes Prospectus. The REnvS will feed into future regional policy development by informing other regional strategies. For example, it provides a useful input into the Draft RSS. Finally, the Strategy will provide the regional context for the development of Community Strategies, Local Development Frameworks and sub-regional/local economic strategies.

3.3.7 "From Rubbish to Resource"- The Regional Waste Strategy for the South West

The Waste Strategy was agreed in 2002 by regional stakeholders and sets out how to deliver the 'South West Vision for Waste: Minimum Waste, Maximum Benefit', which states "The South West will become a minimum waste region by 2030, with households and businesses maximising opportunities for reuse and recycling"

The full 'Vision' sets out some broad aspirations for the South West region to deal with the minimisation, treatment and disposal of waste over the period to 2030. The Strategy is both in line with and tries to some extent, to anticipate changes in European and National legislation for waste disposal. It is one of a number of regional strategies which sit within the IRS. There are important relationships between the Waste and

SWRA: Transport Background Technical Report

Environment Strategies and with the RES. Key spatial elements of the Waste Strategy will ultimately find expression within the Draft RSS and will be an important supporting document to the RSS.

3.3.8 The Regional Tourism Strategy-Towards 2015

Tourism makes up 10% of the regional GDP and supports over 300,000 jobs. The South West supports 26 million staying visitors a year, which can impose a heavy burden on the regional infrastructure and environment. The challenge is to try and accommodate the growing number of visitors, whilst creating a sustainable industry and protecting the region's environment. This is the challenge that 'Towards 2015' tries to tackle.

 Towards 2015 is not just a strategic framework, it drives the creation of detailed annual and three year delivery plans bringing leadership and direction to the development of a truly sustainable, valuable tourism industry for the South West. By adopting this new strategic approach, tourism will:

- Protect the regional environment;

- Improve the quality of life for local people; and

- Take advantage of the region's existing strengths and create a long term and sustainable industry.

Towards 2015 puts a new and much needed emphasis on sustainability in all its forms. By placing this at the heart of the strategy, it is anticipated that within a decade, the region will be recognised as a model tourism destination. It will be defined by the unique balance achieved between its communities, its tourism industry, the natural environment and its customers- so achieving long term economic, environmental and social benefits for the region.

2.3.9 The Regional Renewable Energy Strategy

The Regional Renewable Energy Strategy (RRES) was published in April 2003 with an overall vision to: "maximise the social, environmental and economic benefits of renewable energy through the integration of renewable energy into mainstream policy and practice at all levels within the region."

It outlines plans for generating up to 15% of the region's power from renewable sources by 2010. The South West has led the way with national 'firsts' in wind, bio-energy and waste technologies and the Strategy builds on the region's track record of innovation and

SWRA: Transport Background Technical Report

proposes real measures to generate up to 15% of the region's own power from renewable sources. It is supported by a wide range of regional and national organisations, the Association of Electricity Producers, the Regional Assembly and the Environment Agency.

The Strategy identifies 50 actions to ensure the South West remains at the forefront of the UK's renewable energy industry, including working with farmers to develop energy crops, mapping the potential for renewable energy for every county in the region, and supporting experimental projects in wave and tidal power.

3.3.10 Regional Historic Environment Strategy

The first ever strategy for the South West historic environment has been produced by English Heritage on behalf of the South West Historic Environment Forum and published as part of the launch of Environment Strategy.

The Strategy aims to change the way the historic environment is perceived and valued in the region. It recognises that the entire environment is historic - with human activity having creating land use and settlement patterns that closely reflect the physical environment, particularly geology and topography, climate and the region's peninsula landform.

Priorities for the Historic Environment Strategy are to:

- Ensure the Historic Environment is integrated into the Region's Policy Framework;

- Develop positive and creative partnerships that reflect the many linkages and opportunities in the South West;

- Ensure the Historic Environment is accessible and relevant to people in their everyday lives;

- Raise awareness of the historic dimension of the wider environment and its contribution to quality of life; and

- Share knowledge and build a better understanding of the role and potential of the Historic Environment through 'Heritage Counts' an annual state of the historic environment report.

3.3.11 In Search of Chunky Dunsters – A Cultural Strategy for the South West.

The Cultural Strategy sets out to promote the participation in and quality of cultural life in the South West, celebrating our regional identity and the rich diversity of South West cultural life and traditions. The Strategy is an important starting point to understanding what culture is in the South West and what is so special about it.

The environment is highlighted as a key factor in influencing and shaping culture, in terms of our high quality of life, the landscape and wildlife, natural resources, built and historic environment.

Outlined in the Strategy is the need to celebrate, champion and increase cultural opportunities across the South West. Four strategic themes emerged:

- Encouraging increased access to and participation in cultural activities across the South West, capitalising on the latest developments in Information and Communications Technology;

- Improving the quality and relevance of the Region's cultural activities;

- Supporting the South West's cultural and creative industries and nurturing creativity; and

- Celebrating regional identity and the rich diversity of South West cultural life and traditions.

The Strategy was published in 2001 and was the work of many regional partners lead by Culture South West.

3.3.12 Regional Housing Strategy

The South West Regional Housing Strategy (RHS) 2005-16 has been prepared by the South West Housing Body (SWHB) within the context of the IRS. It identifies ways to tackle the under-provision of housing (against evidence of increasing housing demand and need for affordable housing), and supports the delivery of 'The Way Ahead'. The RHS supports action to tackle homelessness and to reduce the use of temporary accommodation through investment in new social rented housing and through promoting positive models of prevention such as advisory services, and multi-agency support.

The RHS strongly supports the principles of the RSDF and seeks to improve the contribution housing can make to enhancing economic prosperity and reducing social and health inequalities in the region. Equality and diversity, community cohesion and

SWRA: Transport Background Technical Report

social inclusion issues are embedded in the RHS priorities. It also provides a strategic framework for regional investment decisions on affordable housing, and is intended to be a strong influence on the development of key regional strategies such as the RSS and RES and on stakeholders' housing-related plans and delivery programmes at sub-regional and local level.

The Government proposes to merge Regional Housing Bodies (RHBs) with RPBs later in 2006 to improve the interrelationship between housing and planning policies and delivery. The SWHB see this as an opportunity to maximise housing's role within the planning system, and will advocate that housing stakeholders remain integral to the new institutional arrangements

<u>Section 4: Regional and Sub-Regional Transport Issues</u>

4.1 Introduction

The key transport issues for the region have been identified through extensive consultation and partnership working as well as derived from factual evidence and studies. The key issues identified are:

- Maintaining and improving the **reliability** and **resilience** of the region's transport Network/Intra and Inter Connectivity;
- Supporting the development and regeneration of the Region's main urban areas ;
- Improving accessibility and reducing Social Exclusion; and
- Reducing the impact of transport on the environment.

The above lists are region wide issues that require solutions to be applied to the entire region. There are issues that arise for specific parts of the region that result from different pressures and characteristics in the sub regions. These are considered in Section 4.6.

4.2 Connectivity

Connectivity can be defined as 'providing reliable connections to places and markets in assisting economic investment and the movement of people and to reduce regional disparities'. Reliable connections are essential if goods and people are to get around and in/out of the region efficiently.

The study conducted by DTZ Pieda on connectivity in the south west outlined the following types of connectivity which are important to the region:

- <u>Local Connectivity</u>-travel undertaken locally;
- <u>Intra-regional Connectivity</u>- travel undertaken within the South West;
- <u>Inter-regional Connectivity</u>- Travel undertaken between the South West and other regions in the UK; and
- <u>International Connectivity-</u> travel undertaken between the South West and destinations outside the UK.

Due to the peninsular nature of the South West, the main East-West transport links are multi functional and provide local and regional links as well as facilitating long distance movement in/out of the region. This is particularly true for the M4/M5 and the Great Western Main Line

(GWML). Therefore in some parts of the region all forms of connectivity (including international connectivity) are dependent on the same transport infrastructure.

Connectivity in the region will be examined by transport mode due to the current specific remit of the delivery organisations. This aims to provide a clear picture of the issues facing the region, although from a policy perspective the integration between modes will need to be addressed.

4.2.1 Roads and Connectivity

The M4/M5 lies at the heart of the regions intra and inter road network and provides the only high standard route in and out of the region. This makes the network vulnerable if there is an accident or road works and can cause major delay in moving people and goods around or in/out of the region. There is a perception among business groups that the motorway network is susceptible to increasing delay which anecdotal evidence suggests affects investment decisions. Severe congestion builds up on local routes whenever there is a delay on the motorway. This is affecting the economic productivity of the main urban areas. It is essential therefore that the road network is resilient and reliable. If parts of the transport network are not robust, it can undermine the region's economic competitiveness. Studies have shown this is a particularly important issue for businesses in the region. The Draft RSS has placed strong emphasis on maintaining and improving the resilience of the road network as this has a direct affect on the network's reliability, which in turn can affect journey times.
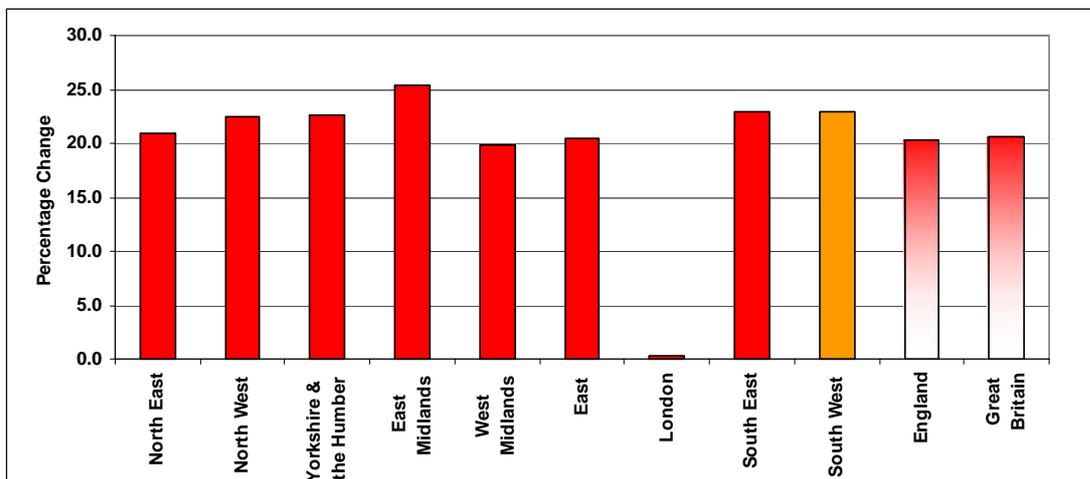
Figure 1: Traffic increase by Region 1994-2004

Source: Regional Transport Statistics 2005

Congestion is a major issue that affects the regions key road routes. The 'South Wales and South West Multi Modal Study' (SWARMMS) identified particular problems around Bristol, on the M4

SWRA: Transport Background Technical Report

entering Swindon and the M5 Junctions around Exeter and Taunton. Figure 1 shows that traffic levels have increased by 23% in the last decade: one of the highest figures in the country. More recent work by the Highway Agency-Regional Network Report-highlights the key areas of stress on the trunk road network and include parts of the M4/5 and A303 as well as the A417/9 and the A31 and A38.

Seasonal congestion on the M4/5 is especially a problem in the region due to motorists heading for Devon and Cornwall in the summer. This causes major delay on other routes including the A303/A30/A38 and greatly increases journey times, which was highlighted in the SWARMMS study.

One other cause of congestion is the increasing number of cars on the road. In 2002, 76% of the region's population used private cars to get to work (NTS, 2005). This is a particular issue for the South West where due to the regional geography; there is limited coverage of public transport, with a higher proportion of residents than average using private cars. (1999-2001, South West residents travelled an average 6,015 miles in their cars). This means that without policy intervention the future levels of car use in the south west will be significantly higher.

The growth in car use is also responsible for many congestion 'hot spots' in or near urban areas, as noted in the SWARMMS study. This trend prevents urban areas from functioning smoothly and clogs up routes in/out of the urban areas as well as impacting on the strategic network. Indeed much of the growth in the regions urban areas has been facilitated by previous investment in the strategic network. With fuel costs reducing in real terms and unrestrained capacity on the strategic network, commuting trips have increased substantially with journey distances increasing. As most of the regions main urban areas are adjacent to the trunk road network there is increasing conflict between local traffic and longer distance movements.

Work carried out by local authorities in relation to all the main urban areas show that without strong policy intervention including a "step change" in public transport supported by demand management the urban areas will become unattractive places to live and work negating the spatial strategy objective of focusing most development in the strategically significant towns and cities.

The M5 stops at Exeter and there is no consistent high standard road link to the far South West. It was highlighted in the Highway Agency's Network Performance Study that any places south of Plymouth do not have reliable road links to the rest of the region, due to the sub regions geography. This creates problems regarding accessibility to main urban centres and international "hubs". It also impacts on the reliability of the road network.

SWRA: Transport Background Technical Report

4.2.2 Rail Connectivity

The regional rail network is equally important as the road network. A recent study of the economic contribution of rail conducted by the SW RDA (Great Western Mainline Economic Assessment) showed that reliable rail services were seen as an essential part of the region's transport needs. Several issues exist with regard to rail and connectivity.

The region is largely reliant on the GWML (including the Berks and Hants line) as the only strategic rail route into and out of the region. In recent years this route has experienced significant growth in passenger numbers as it caters for both intra and inter regional connectivity. This was highlighted in the SWARMMS study. Overcrowding of trains and infrastructure bottlenecks are apparent on sections of the Line as well as a need to renew the infrastructure such as signalling at Bristol and Reading.

Journey time is a critical factor on the rail network. Business investment decisions tend to be sensitive to rail journey times to London. London from some places in the region is a 2 hr train journey with Plymouth being 3 hrs away. It is crucial to maintain these journeys times, as most businesses in the East of the region require reliable 2 hour journey times to London. The effectiveness of regional rail services and particularly the GWML is crucially dependent on key improvements outside the region, notably Reading and London Paddington.

The GWML is the key rail strategic route in the region. However the Exeter to Waterloo Line is viewed as the region's second strategic rail route into the far south west. This route caters for a different market to the GWML such as leisure users and students. It also takes people to South London. The capacity of the Line is restricted due to the single track between Exeter and Salisbury. This constrains the ability to offer an hourly timetable to Exeter from London. If the service on the Exeter to Waterloo Line is to be improved, new infrastructure by way of passing loops must be put in place.

The only north to south rail route in the region is the South Coast to Bristol and South Wales Route. (Most of the region's key transport routes are east to west, which in itself causes connectivity implications). This route (as highlighted by the study 'The Mainline they shouldn't ignore-South Coast to Bristol and South Wales Route' by the Rail Passengers Committee) should be planned as a mainline as it connects two major urban areas: Bristol and Bournemouth as well as providing links to Wales.

The Rail Franchising process also creates some issues for the region. Services beyond Exeter are provided through a combination of franchises. There is the potential for franchises not to take heed of each others operations and to cut services which can have an impact on accessibility to

SWRA: Transport Background Technical Report

the far South West. The region does not yet have a long term rail planning strategy or a Regional Planning Assessment (RPA), which means that rail franchises do not have a longer- term framework within which to operate. This can lead to a mismatch in services provided and passenger demand. It could also lead to less public transport coverage reducing connectivity within and between the regions.

4.2.3 Air Travel and Connectivity

Improving air services and enhancing the regions links to domestic and international destinations for both passengers and air freight traffic will help reduce peripherality and limit the number of journeys to airports outside the region. This is the basis for Policy TR9 in Section 5 of the Draft RSS.

There are concerns about the sustainability implications of growth in air travel which has been highlighted in the Strategic Sustainability Assessment (SSA), However, in the context of national policy, the aim of the region's air strategy is to meet more of the South West demand for air travel within the region and to reduce journeys to airport outside the region, particularly road traffic to Heathrow and Gatwick. This is considered to deliver some sustainability benefits.

The journey to the airport and the actual flight can be considered as one single journey, therefore good surface access links to airports for efficient movement of passengers and freight is essential. This was highlighted by the DfT's study 'The Future Development of Air Transport in the United Kingdom: South West'. Surface access is a particular issue at Bristol International. The only public transport link is the Bristol International Flyer: a bus service between the airport and the city centre. Passenger numbers are rising at 14% pa and if the airport is to cater for more passengers, there must more efficient surface access links to the site.

4.2.4 Ports and Connectivity

The South West has many ports, with Bristol Port as the largest port and Plymouth and Poole as the main ferry ports. Bristol is the only port in the region which has national significance, which was confirmed by a SW RDA study (the Bristol Ports Study). There is a desire to increase the tonnage of freight carried by sea to reduce the amount carried by road, which can be seen as being less sustainable. In terms of the South West, the regions key ports are near some the major urban areas such as Bristol. This presents an issue of expanding ports at the expense of other land uses such as regeneration, residential, office and leisure use. There is considerable scope for expansion with plans to develop enhanced container facilities at Bristol. Possible conflicts could be caused as to which land use has priority.

Bristol is a significant port and handles around 11 million tonnes each year. Around two thirds of UK port traffic is from Europe, which usually comes into ports on the East coast. With Bristol being located on the West coast it can't attract this traffic, drawing limited traffic with Ireland and the Iberian Peninsula as well as further west. No matter how well it performs, Bristol will never get the trade volumes which are available to ports which are well-located in the middle of the East coast. On the other hand, the shift of the UK's trade towards Europe trade has now stabilised, so that there will be limited further traffic loss for this reason. As with airports, surface access to ports is also an issue.

The motorway network and access to rail lines mean that potentially Bristol Port is readily accessible both for national and international passengers and freight operators. However Bristol's road and rail network constitutes a major barrier to moving freight once it has arrived at the port. The GOSW, together with the Highways Agency, SW RDA, and the four Unitary Authorities are seeking to address these issues through the Greater Bristol Transport Study (GBSTS) which will identify long term solutions to support spatial and economic strategic objectives. SWARMMS also examined the issue of surface access in relation to Bristol Port and key recommendations for inter-modal freight include the development of a network of rail lines with a Loading Gauge that allows containers on international rail wagons, and provision of additional slip roads and climbing lanes on the road network for lorries.

Bristol Port is not the only port that experiences surface access problems. Access to Poole Port is problematic from the A31 and motorists seeking to get to Portland Port have to drive through Weymouth, causing high levels of traffic in the town.

4.3 Transport in the Main Urban Areas

RPG10 and the Draft RSS concentrate most of the future regional development in the main urban areas as they represent the key areas for economic growth. In terms of the South West, these are the West of England city region (Bristol, Bath and Weston-super-Mare), Swindon, Gloucester and Cheltenham, Exeter, Taunton, SE Dorset (Bournemouth, Poole and Christchurch), Plymouth and Torbay. Figures show that the urban areas account for the majority of the region's GVA, with the West of England City Region (WoE) accounting for a quarter alone.

Future development must be coupled with new or enhanced transport networks, which if not in place can create problems. Good transport infrastructure can 'make urban areas work' and allow a place to function with ease and compete economically. Problems such as congestion and capacity constraints will impinge on future growth creating unreliable

journey times, scheduling and delivery of public transport, health and safety and environmental problems will all impact on future performance. Many of these issues were flagged up in the GBSTS, in relation to the West of England. In many parts of the region's urban areas investment in the transport networks have not kept up with economic and housing growth giving rise to a 'deficit' in investment. Investment must be kept up if there are to be reliable transport networks for planned developments. Delivery of future strategies will require new funding mechanisms, which includes joint working to deliver the new transport schemes.

Problems such as the above can be solved by introducing a package of measures which will lead to a step change in transport use. Separate studies by Mott MacDonald and Ove Arup have suggested that demand management can ease transport issues in urban areas. Policy TR1 in the Draft RSS seeks to achieve this by introducing a step change in the prioritisation of public transport provision supported by demand management measures.

Good public transport links can ease congestion and contribute to sustainable communities. This was a key message coming out of the Regional Assembly's Bus and Coach Working Group. However attention seems to be drawn more on routes in/out of urban areas, with limited internal links. This can lead to social exclusion, affecting the elderly, poor families and the disabled the most. Transport within and between urban areas must be efficient to allow major development to happen and to reduce travel by car, the main cause of congestion.

4.4 Accessibility and Social Exclusion

Accessibility can be defined as "the ease with which a person can reach and take part in, or use an activity". Activities designed to be accessible by private cars are likely to be inaccessible to people who have no access to a car, highlighting why all modes of transport, private or public need to be considered. Anyone who has limited or no access to opportunities is said to be socially excluded. This is especially true for people without access to private transport, the elderly, disabled and families in deprived areas.

As the SWARMMS report identifies, accessibility on a regional scale tends to decline westwards and southwards within the region. SWARMMS concluded that without investment, accessibility will decline further due to congestion on the existing routes and this will widen regional disparities. The far south west of the region relies on only one major rail and road route; there is no motorway west of Exeter and the rail links beyond the city are slow with track speeds below 75mph.

SWRA: Transport Background Technical Report

Rural accessibility is a challenge for the region. Meeting the transport needs of the rural areas presents particular issues arising from the changing nature of the rural economy and the separation of home and the workplace. Many people have the use of a private car and therefore personal mobility is not an issue. However some residents in the region do not own a car. The most obvious solution would be to introduce better public transport links. However, this might not be the solution (RTS 2005). The answer is to examine all factors and create an integrated solution that involves partnership working. The basis for this comes from the Faber Maunsell Study "The significance of transport availability and cost in limiting access in training and jobs", which concluded that transport is not the only factor that determines accessibility and social exclusion. The placement of critical services, location of jobs, the demographics of an area and local issues also need to be considered to decrease social exclusion.

In urban areas, transport services are generally better, but tend to focus on routes in and out of towns, with limited links to many other 'internal' areas. This tends to impact most on the elderly, young families and the disabled. In some urban areas employment sites are located where they are poorly served by public transport. Urban children from deprived wards are up to 8 times more likely to be killed or injured in road accidents than those from richer or rural households.

4.5 Reducing the Impact of Transport on the Environment

The relationship and impacts between transport and the environment is not unique to the South West; however it is an important issue to consider as there are numerous impacts, some of which can have a huge magnitude. The REnvS outlines how transport effects the local, national and global environments.

The immediate environment of local communities can be severely damaged by high volumes of traffic especially where high levels of strategic HGV traffic pass through villages and urban communities. This also creates high levels of noise and air pollution. This was an issue that was highlighted in the 'Bristol/Bath to South Coast' Study (BB2SC) and the 'A31 to Poole' study. Air Quality Management Areas have been set up in the region, mainly in urban areas. The effects of road traffic on the built environment through noise, vibration and soot can affect buildings and areas of high conservation value.

Almost 40% of the region's land area merits some form of landscape or environmental designation and protection. The regional environment has been identified by the SW RDA and other bodies as a major asset in encouraging tourism and inward investment and the IRS identified it as a significant reason why people wish to live and work in the South West. The

effects of transport infrastructure in valued landscape areas can have a negative effect on enjoyment of the countryside. The "A31 to Poole" study called for tougher regulations for environmental designations to be protected from transport infrastructure. The Campaign for the Protection of Rural England (CPRE) have produced a 'Tranquillity' map which shows how the amount of 'tranquil' areas in the countryside have reduced over time, mainly because of transport infrastructure. 4% of SSSIs (Sites of Special Scientific Interest) within the region are in an unfavourable condition due to disturbance by vehicles.

Pollution from road transport has increased significantly in the South West. There are a number of larger urban areas (Bristol, Plymouth and Bournemouth/Poole) that are already suffering from peak hour congestion and medium/smaller towns are beginning to experience the negative impacts of too much traffic. There is also a fear that improvements to strategic road routes such as the M4/M5 and A303/A358 may increase traffic flows whilst not bringing in the economic benefits that are desired. The management of travel and transport networks should improve their connectivity, reliability and resilience. If the concerns of the SSA are to be considered, improvements on the transport network must be supported by economic intervention to stimulate business and employment in less developed areas of the region.

Transport is a major contributor to global climate change with carbon dioxide emissions from transport growing nationally by 98% between 1971 and 2001. Current trends show that there has been an increase in traffic levels not just in the South West but nation wide. This can have serious environmental implications, as well as be economically damaging through congestion and reducing competitiveness. It can also be socially damaging with increased noise, air pollution and health impacts. Reducing the need to travel in the interests of the local and global environment is an objective of the Government's transport and planning policies. The SSA implies that a sustainable approach alone will not be sufficient to make a difference to regional CO_2 emissions and congestion unless parallel measures are taken to compliment these. Initial findings from the SSA question the extent to which a regional approach to transport can lead to a reduction in traffic in the absence of greater national intervention. Encouraging travel by more sustainable means such as walking and cycling for local journeys and public transport for longer journeys can reduce regional CO_2 emissions- this is a key priority of the RTS.

The majority of impacts arising from the relationship between transport and the environment are negative ones, which were picked up in the SSA. The implications of reducing 'leakage', in regards to air travel has already been examined and it was concluded that meeting most of the regional air travel demand 'internally' is more sustainable than driving to other airports outside the region.

4.6 The Sub-Regions and Transport

An important feature of the Draft RSS is the way in which development is guided by different sub regional strategies, thus recognising that the region is not uniform. Different pressures and opportunities will arise in the sub-regions which can result in different transport issues.

4.6.1 West Of England

The West of England (WoE) is the economic 'powerhouse' of the region and includes the largest urban area in the South West including: Bristol, Bath and Weston-super-Mare. The emphasis placed by the Draft RSS on the sub-region is to realise the economic potential by enabling the key urban areas to develop, maintain and improve their role as service and employment centres. In order to fulfil this, development will need to be coupled with investment in transport infrastructure.

The WoE 'suffers' from many transport problems:
- Congestion is a serious problem with traffic growing by 21% in the last ten years (JLTP, 2006), as highlighted in the GBSTS;
- Road safety is major issue, around 500 people are killed or seriously injured on the sub-regions roads;
- Air Quality is an increasing problem, with 25% of Bristol under an Air Quality Management Area (AQMA) and Bath having a AQMA; and
- Bristol Airport is situated in the sub regions green belt and is the fastest growing airport in terms of passenger numbers. Any expansion will be subject to a detailed appraisal.

Perhaps the obstacle that needs to be addressed promptly is the balance between development and infrastructure. Land use and development changes have and will continue to have a significant impact on travel behaviour, use of the private car and increasing congestion. Past growth has put pressure on the transport system and investment in infrastructure has not kept pace with the scale of development. Decreasing this deficit will lay the foundation for achieving future growth, but it must be accompanied by new infrastructure. The Draft RSS has highlighted the need for a package of measures: Greater Bristol Bus Network; P&R and improvements to roads in South Bristol and Greater Bristol Rail Network.

There is also a need to carefully plan the distribution of future development to reduce the trend for longer distance commuting in the sub region. The GBSTS sets out a transport strategy for the sub region.

SWRA: Transport Background Technical Report

4.6.2 Swindon

Swindon in recent years has transformed itself from a declining railway town to a dynamic thriving economic centre. The borough enjoys good connections with London and the SE and Bristol. Its location will continue to be an advantage, enabling Swindon to prosper and grow. The Draft RSS has envisaged Swindon to grow, which can result in transport problems.

Swindon does tend to have a good track record on keeping congestion low, with a reduction in accidents and increasing bus patronage. However, the borough still has some significant challenges:

- The development of the city centre has not kept pace with recent development and a transformation can well lead to greater traffic flows in the town. These can be dealt with more demand management measures as outlined in the Draft RSS;

- Swindon will continue to grow and it is important to have a long term strategy that will deliver an efficient sustainable transport network to tackle the range of journeys across Swindon as well as into the town centre;

- Swindon does have areas of deprivation and transport planning needs to ensure that all key service and employment sites are accessible to as many people as possible; and

- One specific challenge is to facilitate the growth of the town without causing increased congestion at M5 Junctions 15 and 16 and on the A417/419 trunk road.

4.6.3 Gloucester and Cheltenham

Gloucester and Cheltenham have different and complimentary roles, in relation to their economies, retail, cultural and tourist functions. The cities are strategically located between Bristol and Birmingham in the Midlands and have good access to the national road and rail network. Despite these advantages in transport terms, the sub-region still experiences from some set backs:

- Gloucester does not have a major rail station on a main line and the siting of a proposed parkway station will improve the city's rail connectivity;

- The A417/A419 is an important road link from Gloucester to Swindon. Reliability of journey times on this route for connectivity is a challenge given rising traffic levels and sensitive environmental habitats and landscapes;

- Gloucester and Cheltenham are tightly constrained by green belt and special landscape constraints (AONB). Siting future Park and Ride sites are subject to environmental appraisal; and

- Urban extensions have been proposed in the Draft RSS for both Gloucester and Cheltenham and a long term transport strategy will need to be in place to facilitate the extensions.

SWRA: Transport Background Technical Report

4.6.4 Exeter

Located centrally in the region, Exeter enjoys good connections with the national road and rail network. Exeter also benefits from an airport. The City has a strong economic base, which has resulted from a combination of retail and cultural strengths, the university and its location. The Draft RSS has anticipated that growth will increase, therefore infrastructure enhancements will need to be made to support the growth.

The key transport issues for Exeter and the surrounding area are:

- As mentioned in Section 4.2.2 part of the Exeter to Waterloo line is single tracked. There is a need for infrastructure investment by way of passing loops to facilitate an hourly service to London;
- Exeter already has an excellent P&R system. With future growth anticipated, this system will need to maintained and enhanced. Future sites will need to planned to encourage a further modal shift;
- There is a need for enhanced bus services in targeted areas and main transport corridors in Exeter, Newton Abbot and through to Barnstaple to capture the main journey to work flows; and
- Congestion is an issue in the city centre. Demand management measures and a step change in public transport will be required to control the level of congestion. Improved interchanges will also contribute to the solution.
- Specific public transport and other measures will be required to facilitate the development of the urban extension to the east of Exeter.

4.6.5 Taunton, Bridgwater sub region

Taunton is the second most important town for commercial and retail activity after Exeter in the centre of the region. It has strong links with nearby Bridgwater and Wellington. Taunton enjoys good connections with the national rail and road network, being on the GWML and M5.

Despite these advantages, Taunton has the following challenges:

- About 3 out of 4 residents go to w0rk in a private car. This can cause high levels of congestion and has an impact on people who are less mobile;
- Freight transportation by road tends to be on less suitable roads in Somerset. Although this practice has been reduced in recent years, it still causes a problems for rural communities in terms of noise and environmental impacts;
- Bus patronage has decreased not just for Taunton but for the County due its rurality; and
- Air Quality is a problem in central Taunton. Taunton Deane Borough Council is considering designating the whole town centre as an AQMA.

SWRA: Transport Background Technical Report

- Transport investment is required to support the regeneration of town centre sites and to facilitate an urban extension to the north east of the town.

4.6.6 South East Dorset

The SE Dorset conurbation consists of Bournemouth, Poole, Christchurch and its immediate hinterland of Wimbourne Minster, Colehill, Ferndown, Verwood, West Moors and Fareham. It is a key driver in the South West and is the second largest urban area in the region. The sub region contains some significant transport sites such as Bournemouth Airport and Poole Harbour. SE Dorset contains a high concentration of environmental and wildlife sites of significant value, reflected in their designation under the European Habitats Directive. The designations present major constraints for future development and in preventing urban sprawl. This has lead to the majority of development being focused in the main urban area.

These constraints have also presented problems for transport:
- Bournemouth Airport is projected to grow in passenger numbers by 3 million by 2030. This will require improved surface access, a new terminal and will result in greater environmental impacts and noise levels;
- Poole port is of regional significance and is a crucial gateway to the region. However access to the site from the A31 is poor, which has a detrimental effect on business. This issue will partly be solved by the 'Twin Sail' Regeneration Network;
- Much of the existing network is subject to peak hour congestion and delays;
- There is a higher than average accident rate for the A31; and
- Environmental constraints make it difficult to site P&R initiatives and enhance the network.
- There is a need to carry out further analysis to provide up to date modelling of the urban area.
- There is a need to develop public transport corridors within the urban area supported by other measures to facilitate further development within the built up area.

4.6.7 Plymouth

Plymouth is the biggest settlement in the far South West. Because of redevelopment opportunities, Plymouth has the potential to accommodate the majority of development in the sub region, thereby minimising impacts on the surrounding environment. Plymouth's setting is unsurpassed and the city has a vibrant cultural life, a high order retail centre, a growing University and a regionally significant port. Stimulating economic development will transform the city into one of Europe's finest waterfront cities.

Although the future does look positive for Plymouth, development must be coupled with enhancements in transport infrastructure to support it;

- The main railway line beyond Plymouth is largely single track and a journey form Penzance to Exeter currently take 3 hours;
- Much of the surrounding area (Saltash, Torpoint, Tavistock, etc) rely on Plymouth for employment, education, leisure and health services. It is important that public transport systems are enhanced to improve accessibility for all;
- The relatively short runway at Plymouth Airport restricts the size of planes it can accommodate and limits destinations. Its urban surroundings affect it potential to expand.
- There is a need for a coherent transport strategy to ensure that urban extensions proceed with the benefit of improved public transport corridors linked to park and ride.
- There is a need to develop the technical understanding of the network's performance.

4.6.8 Torbay

Torbay collectively consists of Torquay, Paignton and Brixham. The 'Torbay Vision' identifies the need for sustainable urban and rural regeneration and the need to provide a mix of new jobs and housing. A step change is required to move the sub region towards a high quality tourist destination. This will require enhancements to many aspects of Torbay, including its transport network.

Some of the issues that Torbay faces in terms of transport are;
- Congested access by road (A roads);
- A declining rail service pattern;
- Torbay has a small population base with a high proportion of elderly residents and around 30% don't have access to a car. This puts extra pressure to develop reliable public transport systems.

4.6.9 Cornish Towns and Isles of Scilly

Cornwall is a rural and maritime county in the far South West and is one of the most remote, peripheral and isolated parts of Britain. The county has the lowest population density in the region and is perhaps the most deprived county in the region. Objective 1 funding has helped to boost the county's economy and bought in key developments such as the Eden Project and Combined Universities. The Cornwall Towns Study identified the relationship of Truro, Camborne-Pool-Redruth and Falmouth-Penryn, which indicated them as the county's significant settlements. The Study also singled out Newquay, St Austell and Penzance as key towns.

The Isles of Scilly are located 45km south west of Lands End and support a population of around 1800. It is vital to maintain the links to the Isles be it by air or sea.

The main transport issues are:

- An emerging pattern of congestion on key corridors (mainly the A30) serving the County, with increasing delays and journey times, this is especially evident in summer ;
- The county is served by only one major rail and route road;
- The dispersed nature of the population means providing public transport is a difficult challenge; and
- The need to identify transport investment to support development and regeneration in Truro and Camborne, Pool and Redruth.
- Links to the Isles of Scilly especially by sea need to be enhanced as these are a lifeline to the Isles.

4.7 Summary

Transport issues for the south west were identified through extensive consultation. Sub regional areas also have transport issues which are unique to their area.

The main road and rail networks perform a dual function of supporting inter and intra regional connectivity. Key issues on the road network include the rising number of cars on the road, which is leading to congestion and the fact that the region only has one high standard road route.

Issues relating to rail include the need for investment and renewal on the GWML, the limited capacity on the Exeter-Waterloo Line, and limited recognition of the South Coast to Bristol and South Wales Route. In relation to Air travel the region is trying to reduce 'leakage' to other regions as well as ensuring that there are effective surface access links to airports sites.

The Draft RSS focuses the majority of future development in the regions major urban areas. In order for those developments to function smoothly, there has to a sufficient injection of investment to provide for key transport links. Many problems can arise if this does not happen such as congestion, health impacts, air and noise pollution and social exclusion.

Transport links and increasing accessibility can greatly reduce social exclusion on both a rural and urban setting. Most of the South West's residents own private cars and personal mobility is not an issue. However residents without private transport are presented with a

barrier in gaining access to employment and key services. This is certainly the case in more rural parts of the region. Recent research by Faber Maunsell has concluded that transport is one of several factors that influence accessibility. Others include the placement of critical services, location of jobs and the demographics of an area. Therefore solutions need to include organisations working in partnerships at a local level.

The relationship between transport and the environment is often a negative one. The SSA has picked up issues of conflict between transport and the environment. The SSA did question whether a regional approach to transport could achieve a decrease in CO_2 emissions without a change in the national policy framework and whether it was sustainable to increase air travel in the South West. Although measures can be built into the transport network, solutions have to be multi-faceted and take into consideration future economic development, people's attitudes to transport and investment priorities.

The Draft RSS contains many sub regional strategies that lay down the foundations for future development at a sub regional level, thus recognising that the 'one size fits all approach' is inadequate for the South West. Different pressures and opportunities will give rise to transport issues that are unique to that sub region. Key transport infrastructure requirements are identified for each sub region in Section 4 of the Draft RSS.

The regions transport problems need to be considered in a more integrated way, which address capacity, accessibility issues, environmental issues, demand management and encourages a modal shift from private cars to using public transport more.

5.   RSS AND TRANSPORT OBJECTIVES

5.1 The Integrated Regional Strategy and RSS

The Draft RSS is the spatial expression of the region's policies and has a particular role in responding to the key challenges of the Integrated Regional Strategy (IRS) *just connect!* (explained in Section 3). This overarching document contains five headline "Aims" and a series of 'crunch' objectives which regional partners have agreed will be the focus of regional policy and delivery (see Section 3).

Different sections of the Draft RSS respond to each of the aims of the IRS. The policies in the Draft RSS will help deliver the aims through positive planning for managing growth and development in the region to improve the quality of life for all.

Although transport is not specifically mentioned in the headlining aims, it contributes to some of the crunch objectives, demonstrating that transport has a role to play in all parts of regional policy.

IRS Aim	Crunch Objectives relating to Transport
To harness the benefits of population growth and manage the implications of population change	To use growth as an opportunity to provide adequate transport infrastructure and make best use of existing and proposed investment
To enhance our economic prosperity and quality of employment opportunity	To improve intra and inter-regional communications and embrace new technological developments to enhance access to labour and product markets, whilst shifting towards a more sustainable transport policy which protects the environment and manages 'greenhouse' gas emissions
To ensure that people are treated fairly and can participate fully in society	To ensure that everyone has access to jobs, services, cultural facilities and activities and quality environments to enable them to participate in society.

Table 1: IRS Aims and Crunch Objectives

SWRA: Transport Background Technical Report

5.2 The Objectives of the RSS

The Draft RSS does not contain a set of aims as it aspires to deliver the aims and objectives set out in the IRS. The IRS aims have however shaped the content of the RSS. The essence of the RSS is set out in four Sustainable Development (SD) Policies and ten Development Policies.

Sustainable Development Policies
SD1- The Ecological Footprint
SD2- Climate Change
SD3-The Environment and Natural Resources
SD4- Sustainable Communities

Development Policies
Development Policy A- Development in the Strategically Significant Cities and Towns
Development Policy B- Development in Market Towns
Development Policy C- Development in Small Towns and Villages
Development Policy D- Infrastructure for Development
Development Policy E-High Quality Design
Development Policy F-Master Planning
Development Policy G-Sustainable Construction
Development Policy H- Re-using Land
Development Policy I- Release, Redevelopment or Disposal of Land
Development Policy J-Joint Working

Table 2: Core Policies of the RSS

The SD Policies set the broad sustainability context for the RSS. These policies can be interpreted at local level and can be applied in practice in LDDs and other local policies. It is hoped that by implementing these policies, future development in the South West will be sustainable and contribute to the delivery of sustainable communities.

The most effective way for the Draft RSS to deal with future growth pressures and contribute to a sustainable future for the region is to guide most development to a relatively small number of places. This strategy has the potential to reduce the need for travel by linking homes and jobs. Polices state where development should take place (Development Policies A, B, and C) and sets guidelines for the implementation of this

SWRA: Transport Background Technical Report

approach to development, placing emphasis on the quality of development and the necessity of linking infrastructure to development (Development Policies D-J). This is the purpose of the Development Policies in Section 3 of the RSS.

5.3 Formulating the Transport Policies

The identification of the transport policies contained in the Draft RSS was guided by the formation of officer advisory groups set up by the Regional Assembly. These groups helped to identify and discuss the key transport issues and outcomes that were of importance to the region.

The Regional Spatial Planning and Transport Group (RSPTG) main task is to oversee the development and preparation of the Draft RSS, and to recommend to the Regional Assembly its submission to the Deputy Prime Minister. In relation to transport, the Group's role is to oversee the review of the Regional Transport Strategy (RTS) as part of the revised RSS and to ensure that the review of the regional spatial and transport strategies is consistent with and supports the development and implementation of the Integrated Regional Strategy (IRS). RSPTG is made of Assembly Members and meets on average 4 0r 5 times a year.

The Regional Assembly Transport Officer Sub-Group (RATOSG) is drawn from local authorities, the South West Regional Development Agency (SW RDA), the Highways Agency, Network Rail and The Government Office for the South West (GOSW) and is the main technical advisory group, which provided input into Section 5 of the Draft RSS. Topic sub groups were formed to explore the development of policy on specific topics including demand management, public transport, freight and accessibility. The group has met approximately every six weeks during the process of preparing the RSS and discussed draft policies at three meetings.

The second advisory group is the Regional Transport Forum, which comprises of a wider range of people: local authorities, regional organisations, the voluntary sector, business and interest groups. The Forum provided advice and input into the formation of the transport policies. Various sub groups within the Forum examined particular matters such as freight, public transport and demand management and provided more specific advice. The Forum was a useful body as many interests were represented and numerous aspects of transport could be discussed including a debate about the content of Section 5.

Transport studies commissioned by the Regional Assembly or conducted by other organisations have provided an input and examined specific issues which could be expressed in the Draft RSS. Steering groups were set up to advise the Assembly in managing the contracts and considering the consultants reports.

In addition to the strategic transport issues and policies contained in section 5, transport formed an integral part of the Joint Sub Area studies commissioned on behalf of the Assembly to prepare land use/transport strategies and policies for the Strategically Significant towns and Cities. These studies were guided by steering groups set up locally.

Early consultation took place on the Spatial Options for the Draft RSS in November 2004 and on the Draft RSS in the Summer and Winter Debates 2005. The consultation events included views on what people would like to see happen to the regional transport network in the future. Section 5 policies were modified after comments were received. The Pre-Submission Consultation Statement report provides more detail on the formal and informal consultation carried by the Regional Assembly during the preparation of the Draft RSS.

Lastly European and national policy have had an influence in shaping the transport policies. The European Commission's Transport White Paper stated that travel should be split between modes, which are expressed in the Draft RSS. National Policy in the form of White Papers such as the 'A New Deal for Transport: Better for Everyone', 'The Future of Transport, A Network for 2030', 'The Future of Rail', 'The Future of Air Transport', contain aspirations for national transport systems which are incorporated into the Draft RSS.

5.4 Transport in the RSS

The Draft RSS does not have a separate set of transport objectives. In preparing the RSS the decisi0n was taken to integrate transport into the overall document. Section 5 of the Draft RSS sets out a series of strategic transport policies but they are supplemented by relevant policies in other sections of the Draft RSS. Transport has been integrated throughout the document (Section 1 in Climate Change, Section 4 in the Sub Regional Strategies and Section 8 in Tourism).

The formulation of the transport elements of the RSS derive from a series of documents which have been the subject of discussion within the region. RPG10 has been taken as the starting point. RGP10 sets out a set of transport objectives and issues which were then developed further in a document called Developing the Regional Transport Strategy

(DRTS), to reflect the changing nature of transport in the region and changes in national policy. It was approved by the Regional Assembly in September 2004 and was intended as an interim and informal "update" of RPG10. Its primary purpose was to provide guidance to local transport authorities in the preparation of LTP's in advance of the formal review of the Spatial Strategy. In particular it gave updated guidance on emerging regional priorities but did not seek to revise the objectives or review policies set out in RPG10.

The issues, objectives and potential policy solutions were further developed in a document called the Review of the Regional Transport Strategy (RRTS), which was produced in July 2005. A regional strategic transport objective was drawn up which would be achieved through more detailed key objectives. Each of these objectives would be achieved by policy outcomes/principles. These have essentially been carried over and are integrated into the Draft RSS. The regional transport objective is:

'To create a modern, efficient and integrated transport system that will meet the demands of a dynamic regional economy, help overcome regional peripherality and support the spatial strategy'.

The relationship between the transport objectives and the Draft RSS is illustrated in Figure 1.
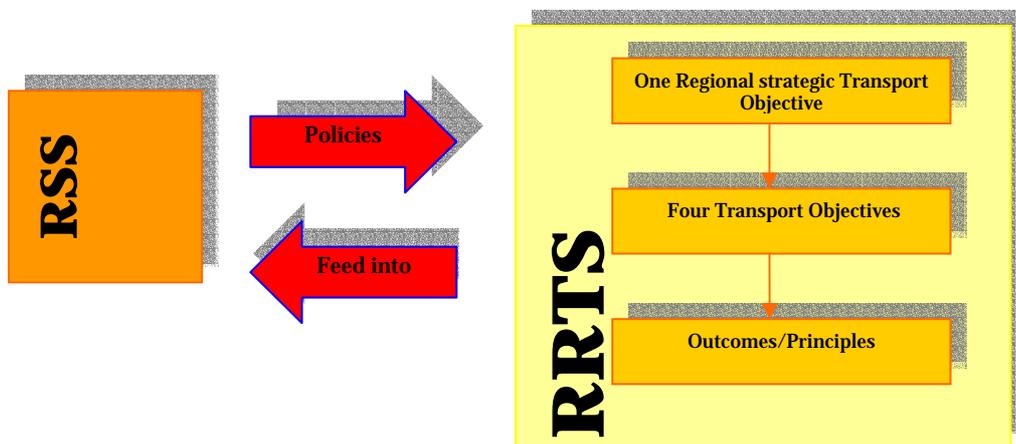
Figure 1: Relationship between Transport and the RSS

The strategic transport policies in Section 5 state that proper planning for transport will assist in achieving the Spatial Strategy. Planning development carefully can influence movement in the region, particularly by car. Actually reducing the need to travel is a

SWRA: Transport Background Technical Report

significant challenge given the geography of the region, its rural nature and the sparsity of the population. Transport networks assist the ongoing activities within the region and support the regional economy by facilitating the movement of goods and people. Appropriate transport investment is therefore required across the region to deliver the RSS as well as the Regional Economic Strategy (RES) and meet the wider aims of the Integrated Regional Strategy (IRS), in addition to facilitating spatial development.

The core policies (Outlined in Section 5.2) also make reference to transport, showing that transport relates to many parts of the RSS.

Policy	Transport Element	Supporting Text
SD1- Ecological Footprint	The Ecological Footprint will be stabilised and reduced by minimising the need to travel by better alignment of jobs, homes, and services, reducing the reliance on the private car by improved public transport and effective planning of future development, and a strong demand managing regime applied in the regions main centres	
SD2-Climate Change		Para 1.6.9 Regional transport is responsible for 28% of CO_2 emissions and is consequently one area where the RSS can have an effect by addressing the need to travel. Para 1.6.11- The RTS could bring down regional CO_2 emissions by 15%
SD4- Sustainable Communities	Sustainable Communities can be maintained by promoting a step change in public transport, taking steps to manage demand for travel and promoting public transport 'hubs' and access to them	
Development Policy A- Development in the Strategically Significant Cities and Towns	Provision will be made to maintain and enhance the strategic function of these SSCTs through the development of a wide range of commercial and public services, community and cultural facilities and non-car links to the communities that they serve.	Para 3.3.3 secure fundamental improvements to public transport, traffic management and use of road space to tackle congestion
Development Policy B- Development in Market Towns	Where there is potential to maintain and develop sustainable transport modes, including accessible public transport services to meet community needs.	
Development Policy C- Development in Small Towns and Villages	Development will be appropriate where it does not significantly increase traffic on local roads and where traffic implications can be demonstrated to be acceptable.	
Development Policy D - Infrastructure for Development	Infrastructure required to support strategically significant development is secured and	

SWRA: Transport Background Technical Report

	investment infrastructure......is phased in step with economic, residential and other development proposals.	
Development Policy F - Master Planning	LAs should work closely with landowners, developers, stakeholders and service providers to achieve a master plan......and wherever possible cycling, walking and public transport links.......	

Table 3: The Core Policies and Reference to Transport

5.6 Regional Transport Objectives and the RSS

The regional objectives relate to the issues (in brackets) documented in Section 3 of the Report:

- **Objective One**: Facilitating economic and social regeneration, investment and development by tackling congestion and accessibility in urban areas *(Transport in the Main Urban Areas, Accessibility and Social Exclusion)*;
- **Objective Two:** Providing reliable connections to the UK, European and International markets to assist economic investment and reduce regional disparities (*Connectivity, Accessibility and Social Exclusion and Transport and the Environment)*;
- **Objective Three**: Facilitating reliable movement of goods and people in the region *(Connectivity)*; and
- **Objective Four:** Improving rural accessibility *(Accessibility and Social Exclusion)*.

These four objectives do contribute to the RSS as the tables below demonstrate.

5.6.1. Objective One

Objective and Policy Outcomes/Principles	Contribution to the RSS
Facilitating economic and social regeneration, investment and development by tackling congestion and accessibility in urban areas ***Key Policy Outcomes/Principles*** Network Performance- Increasing use of	In order to support and deliver the RSS there is a need for each of the SSCTs to have a longer term vision and transport strategy to include public transport enhancement and demand management measures. Policies are included in Section 5 that seek to achieve this. The Sub Regional Strategies include policies which will seek to facilitate

SWRA: Transport Background Technical Report

public transport within the urban areas, meeting network performance standards set for each main urban area, reduce the rate of growth of car traffic within urban areas. ▰ Making the Main Urban Areas Attractive Places to Live and Work - Reduce accident levels, especially in areas of social regeneration, maintain/improve the reliability of urban journey times, reduce pollution 'hot spots' within the urban network and improve air quality. ▰ Facilitating Development- facilitating future development without increasing the use of the Strategic (Trunk) Network for local trips.	economic and social regeneration and identify the strategic investment and management measures needed to provide for growth, address congestion, safety and pollution problems to meet the DfT shared priority targets. They will also identify requirements to facilitate regeneration

Table 4: Objective One and links with the RSS

5.6.2 Objective Two

Objective and Policy Outcomes/Principles	Contributions to the RSS
Providing reliable connections to the UK, European and International markets to assist economic investment and reduce regional disparities *Key Policy Outcomes/Principles* ▰ Reduce the rate of growth of traffic on strategic road routes. ▰ Improve journey time reliability on the strategic road and rail connections between the South West main urban areas, London/South East/Birmingham through selective investment (where appropriate). ▰ Protect integrity of existing strategic links into and out of the region in the context of climatic change. ▰ Meeting more of the region's demand for air	If the region's economy is to prosper it will be important to maintain the journey time to the rest of the UK, Europe and the rest of the world. In order to prosper it is essential that the SSCTs maintain and improve their accessibility to London and the SE. Policies in Section 5 recognise this and highlight that the role and future performance of the M4 and M5 is of fundamental importance to the region. Section 5 also recognises the importance of a reliable inter-regional rail network, which can play its part in creating sustainable transport links and reducing peripherality. All major transport routes continue to address the issue of peripherality to the far South West and play a pivotal part in supporting essential movement to and from the majority of the SSCTs.

SWRA: Transport Background Technical Report

travel within the region.	In addition other trunk roads assist in addressing
◪ Increase capacity to reduce overcrowding on the rail network.	the issue of peripherality by extending the high standard of access from the M4, the M5 and from
◪ Meeting future demand for travel on the rail network to achieve more sustainable travel to relieve the congested M4.	motorways outside the region. These other core trunk roads are important in that they provide alternative strategic routes, access to port and airport facilities and essential support for growth
◪ Improved service quality on the rail network including safer and attractive stations and improved interchange facilities and services including car parking capacity.	at SSCTs. Section 2 recognises that climate change will pose a serious challenge to the region and has highlighted the role that transport plays in
◪ Improved connections to Heathrow airport from the west through a direct rail connection to Heathrow from the GWML. (from the West)	emitting emissions. A target of reducing CO_2 emissions emitted by transport by 15 % has been included in the Section.
◪ Achieve a reduction in disruption caused by road closure due to accidents/incidents.	The Policy outcomes that make up Objective Two have influenced the content of Section 5 and many have provided input into the TR Policies.
◪ Reduce accidents particularly on the strategic road network.	
◪ Reduce pollution 'hot spots' on the strategic road network.	
◪ Reduce noise levels on the strategic transport network.	
◪ Improve the resilience of the strategic road network through investment in the second strategic road route from the South East to the South West – A303/A358 improvements.	
◪ Increase the percentage of freight moved by rail and sea.	

Table 5: Objective Two and Links with the RS

5.6.3 Objective Three

Objective and Policy Outcomes/Principles	Contribution to the RSS
Regional connectivity- facilitating reliable movement of goods and people in the region *Key Policy Outcomes/Principles*	A "Corridor" or 'Route Management' approach is desirable to make the best use of the network and to provide a framework to ensure local issues get addressed without conflicts in approach. This forms

SWRA: Transport Background Technical Report

▣ Reduction/slowing down in the incidence of longer distance commuting by car. ▣ Improving journey time reliability on routes between the main urban areas. ▣ Increase use of public transport between the urban areas. ▣ Reduce accidents on the road network. ▣ Reduce air pollution 'hot spots' on the network. ▣ Increasing proportion of HGV traffic utilising the national/regional routes Regional Freight Map.	the basis of TR10 and requires the need for a Regional Freight Map (RFM) - the basis of TR12. The objective of a RFM is to co-ordinate the preparation of individual local authority freight maps to ensure consistency of approach. In addition the region wanted to identify which routes were most significant in terms of HGV flow and to go on to define a hierarchy of routes based on the nature and volume of flow. This will ensure that freight is transported in/out and within the region using the most suitable route.

Table 6: Objective Three and Links with the RSS

5.6.4 Objective Four

Objective and Policy Outcomes/Principles	Contributions to the RSS
▣ **Rural Accessibility** **_Key Policy Outcomes/Principles_** ▣ The region is recognised as a 'show case' for addressing rural accessibility issues. ▣ Rural routes those are safer to use by all users. ▣ Co-ordinated delivery of cross boundary strategic cycling and walking routes (including bridleways) ▣ Manage the growth of traffic on non-strategic rural routes so that they are suitable for local use. ▣ Co-ordinate the delivery of passenger transport services in rural areas to ensure an integrated network with effective	The Spatial Strategy recognises the role that service centres can play in ensuring the availability of services in rural areas. Research carried out for the Regional Assembly looked at the functions of settlements and identifies a role for centres of varying size which will act as centres for limited growth and change to maintain the prosperity of the rural areas. This is addressed in Development Policies A, B and C. Section 5 sets the framework for future LTPs and states that they should deliver an accessibility strategy. It is important that in developing accessibility strategies and plans local authorities take account of accessibility to these centres from surrounding villages and look to develop good connections from these local 'hubs' to strategic

SWRA: Transport Background Technical Report

interchanges e.g. Jurassic Coast Services in Devon/Dorset.	transport interchange points relating to the inter-regional network.
	Specific consideration should also be given to connecting these rural 'hubs' to the regional transport network. The RSS recognises that transport is only one policy area that needs to be considered in order to resolve the future regeneration and other needs of the rural areas. Particular issues must be understood at a local level and the right package of solutions devised to address them.

Table 7: Objective Four ands Links with the RSS

5.7 Summary

The Draft RSS has a key role in delivering the IRS. The IRS has 5 headlining aims which are achieved through 'crunch' objectives. Although the headlining aims do not address transport in the South West directly, some of the crunch aims mention transport-signifying that transport has a part to play in most areas of regional policy.

The Draft RSS does not have a set of aims like the IRS which it aspires to deliver. The drive behind the Draft RSS is in the form of 4 Sustainable Development Policies and 10 Development Polices. It is through these core policies that the Spatial Strategy will be delivered. Several of these policies do mention transport.

The formulation of the core transport policies was the result of many processes which occurred simultaneously. Officer groups such as RSPTG, RATOSG and the Regional Transport Forum contributed in shaping up Section 5 in the Draft RSS. Transport studies, European and national policy and work conducted as part of the JSA studies provided input into drawing up section 5.

The regional objectives for transport were developed through a series of documents with RPG10 as the starting point. Present objectives which were translated in the Draft RSS

SWRA: Transport Background Technical Report

are documented in the RRTS.   The objectives do contribute to the delivery of the IRS and help to deliver the Spatial Strategy as various tables in this section demonstrates.

SECTION 6: RSS POLICY APPROACH AND TRANSPORT STUDIES

6.1 Summary of Studies against the RSS Transport Policies

This section provides a summary of the evidence base that supports the transport policy approach in Section 5 of the Draft RSS. A range of studies have been used to provide a justification for the content of the transport policies. These include studies commissioned by regional organisations (such as the Regional Assembly and SW RDA), National Policy and studies carried out by other organisations. The table below summarises which literature supports which transport policy.

Policy Number	Policy Heading and Text	Issue Relating to Policy (Section 3)	Documents/Studies relating to Policy
TR1	**Demand Management and Public Transport in the SSCTs**- Demand Management measures will be introduced progressively in those places identified in Development Policy A, accompanied by a step change in public transport provision serving these places, including bus priority and better integration of development proposals and public transport provision.	Accessibility, Connectivity, Intra Regional Connectivity, Making urban areas work.	- Demand Management Policy Review- *Mott Macdonald* - Demand Management- *Ove Arup* - Greater Bristol Strategic Transport Study (GBSTS) - *Atkins* - Consultancy Framework Agreement for the Transport Planning Services-*Atkins* - Developing public transport policies for the South West PUA's- *Ray Bentley*
TR2	**The M4 and M5**- The M4 and M5 will be managed and where appropriate improved so as to ensure that they perform their function as the main strategic inter-regional links to London and the Midlands. Measures should seek to maintain the reliability of journey times in and out of the region. Regional Stakeholders will work with the Highways Agency to seek a complimentary package of measures to manage the demand for travel in relation to the M4/M5 and ensure the most effective use of the trunk network and reduce congestion, including the implementation of: - Incident Management	Intra- Regional Connectivity	- London to South West and South Wales Multi Modal Study (SWARMMS)-*Halcrow* - Network Performance Study- *Highways Agency* - Regional Freight Map- *Atkins*

SWRA: Transport Background Technical Report

	- Intelligent Technology Measures - Information Management - Access Control Measures		
TR 3	**Second Strategic Route**-Regional Stakeholders will work with the Highways Agency to achieve a second strategic route into the region from London to dual carriageway standard utilising the A303/A358 in order to improve the resilience of the inter regional network and maintain the competitiveness of the South West.	Inter Regional Connectivity	▪ London to South West and South Wales Multi Modal Study (SWARMMS)-*Halcrow* ▪ Network Performance Study- *Highways Agency* ▪ Intra Regional Connectivity in the South West- *DTZ* ▪ A303 Stonehenge Improvement-Scheme Review-Stage 1 Report- *Highways Agency*
TR4	**Reminder of the Trunk Road Network**- The remainder of the trunk road network will be managed and investment targeted so as to ensure that it performs its strategic function. Measures should seek to maintain safe, efficient operation and reliability of journey times within, into and out of the region. Regional Stakeholders will work with the Highways Agency to manage demand so as to avoid congestion compromising the strategic function.	Intra-Regional Connectivity and Demand Management.	▪ Network Performance Study- *Highways Agency* ▪ London to South West and Wales Multi Modal Study (SWARMMS*)- Halcrow*
TR5	**Inter-Regional Rail Network**- Rail Infrastructure, signalling systems and stations on the strategic inter-regional rail routes will be enhanced so as to ensure the provision of reliable train services with enhanced capacity to meet the growth in demand embodied in the Spatial Strategy. This will include the following: - improved platform capacity at Reading Station, and junction improvements at Reading; - additional passing loops between Salisbury and Exeter; - appropriate engineering measures to secure the long term future of the Great Western route through Dawlish; - additional track capacity and power supply between Poole and Weymouth; - new/improved parkway stations at Gloucester, Worle, Bristol Parkway and Tiverton; - improved quality and capacity trains, particularly replacement High Speed Trains; - improved infrastructure at major stations including bus interchange, car and cycle parking, passenger information and waiting facilities;	Intra-Regional Connectivity	▪ Great Western Mainline Economic Assessment- *Halcrow* ▪ London to South West and South Wales Multi Modal Study (SWARMMS)-*Halcrow* ▪ Intra Regional Connectivity in the South West- *DTZ* ▪ The Future of Rail-White Paper - *DfT* ▪ Great Western Mainline Route Utilisation Strategy (GWML RUS)- *Strategic Rail Authority* ▪ South West Mainline Route Utilisation Route (SWML RUS) - consultation draft-*Network Rail* ▪ The Mainline they shouldn't ignore-South Coast to Bristol and South Wales Route-*Rail Passengers Committee* ▪ South Western Franchise report- *DfT*

SWRA: Transport Background Technical Report

	- direct rail links to Heathrow from the Great Western Main Line; - investment in the Worle (Weston super Mare) loop to facilitate the reliability of inter-regional services; - development of opportunities to facilitate modal shifts, address overcrowding and improve the network on routes between Wales, Bristol and the south coast by enhancing speeds, frequencies and the capacity of passenger service; and - Resignalling and route modernisation of the Great Western Main Line. -		
TR6	**Inter-regional Bus and Coach Network**- LDDs and LTPs should provide for the enhancement of long distance bus and coach services, and should make provision for interchange infrastructure at SSCTs and other nodal centres on the Strategic Road Network.		▪ London to South West and South Wales Multi Modal Study (SWARMMS)-*Halcrow* ▪ Greater Bristol Strategic Transport Study (GBSTS)- *Atkins* ▪ Intra Regional Connectivity in the South West- *DTZ* ▪ Bristol/Bath to South Coast Study (BB2SC)-*WSP*
TR7	**Ports**- Proposals at all of the region's ports which facilitate the development of markets for freight and passenger services are supported, particularly where they include measures, such as improved rail access, in order to reduce the use of road based haulage. LDDs should facilitate the growth of ports to provide (where appropriate): - improved passenger facilities; - new recreational passenger services; - facilities to support the fishing industry; - land for port growth, marine sectors and related uses; - Rail connections; and - Container and freight facilities.	Connectivity?	▪ RDA Gateways Strategy - Developing policy on ports and shipping-*URS Dames and Moore* ▪ Promotion of Short Sea Shipping in the Atlantic Arc- Interreg 111 B- *Various* ▪ Regional Freight Map- *Atkins* ▪ Ports Policy Review-*DfT*
TR8	**Bristol Port**- LDDs should demonstrate how the projected growth of general and container freight at Bristol can be supported, especially where it can be related to rail access, in order to provide for more sustainable distribution.		▪ Gateways Strategy - Developing policy on ports and shipping-*URS Dames and Moore* ▪ Bristol Port Economic Assessment- *Roger Tyms and Partners* ▪ Strategic Green Belt Review- *Colin Buchanan* ▪

TR 9	**Airports**-Airports within the region should be meet an increasing proportion of regional demand for air travel to reduce 'leakage' to other regions and the London airports, with the expected growth met by developing the major existing airports in the region-Bristol, Exeter and Bournemouth. Other airports will satisfy important local markets, for example Newquay, Plymouth and Staverton (Gloucester). Plymouth/Newquay should continue to provide business links to international hubs and London while facilitating tourist visits into the region. Local Authorities, airport operators and other agencies will provide improvements to aviation facilities and access to airports (including public transport) in the region to meet future development requirements consistent with the overall transport strategies for the urban areas.	Demand Management and Intra-Regional Connectivity	☐ Future of Air Transport -White Paper *DfT* ☐ Development of an Air Transport Strategy for the Far South West of England-*Avia Solutions* ☐ The Future Development of Air Transport in the United Kingdom: South West- *DfT*
TR 10	**Regional Connectivity**-A Corridor Management approach making best use of the network will improve the reliability and resilience of journey times for the routes listed. As part of a Corridor Management approach, Local Authorities working with rail and bus industries will develop opportunities to facilitate modal shift, address public transport overcrowding, improve strategic interchanges and improve use of the network. Within the scope of the Corridor Management approach, highway authorities should also develop proposals to reduce the impact of long distance traffic on the built and the natural environment and improve the quality of life of communities seeking to improve air quality and to reduce accidents, severance and the impact of noise.	Accessibility and Intra-regional connectivity	☐ Bristol/Bath to South Coast Study (BB2SC)-*WSP* ☐ Intra Regional Connectivity in the South West- *DTZ* ☐ A31 to Poole – *Buro Happold*
TR 11	**Intra-regional Public Transport**-Improved rail, bus and coach services will be sought to facilitate sustainable travel between settlements within the region. This will be achieved through the removal of infrastructure constraints; better quality trains and buses/coaches; enhanced station and interchange facilities, station parking and passenger information.	Accessibility and Intra regional Connectivity	☐ The significance of transport availability and cost in limiting access in training and jobs - *Faber Maunsell.*
TR 12	**Regional Freight Map**-The strategic network (national and regional routes) will be promoted for use by HGV vehicles rather than county routes. Local Authorities, through their LTPs will reflect the regional hierarchy of routes identified in the Regional Freight Map and give priority to strategic routes in determining allocations for road maintenance	Connectivity	☐ Regional Freight Map-*Atkins*
TR 11	**Rail Freight Interchange Facilities**-Sites for rail freight interchange facilities will be identified and safeguarded in LDDs for East Devon, and	Connectivity	☐ Regional Freight Map- *Atkins* ☐ Great Western Mainline Route Utilisation

SWRA: Transport Background Technical Report

	Plymouth and should be identified in Cornwall and other locations in the region, subject to viability.		Strategy (GWML RUS)- *Strategic Rail Authority*

6.2 Transport Policies and Relevant Studies

The following tables set out how each of the studies/policies supports the contents, principles and aims of each transport policy. Outlined with each table are the policy context and relevance guidance in relation to the policy, the regional context and what each 4/4 Authority provided in terms of their advice regarding each policy?

6.2.1 Policy TR1: Demand Management and Public Transport in the SSCTs

Demand Management measures will be introduced progressively in those places identified in Development Policy A, accompanied by a step change in public transport provision serving these places, including bus priority and better integration of development proposals and public transport provision.

Policy Context and Relevant Guidance
PPG 3: Housing
PPS 6: Planning for Town Centres
PPG 13: Transport
PPS11: Regional Spatial Strategies
DfT Guidance on Second round of LTPs
RPG 10: Regional Planning Guidance for the South West
 DfT 1998: A New Deal for Transport: Better for Everyone: White Paper
DfT 2004: 'The Future of Transport, a network for 2030' White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)

Local (South West) context:
Existing RPG 10 policies are no longer fit for purpose. Due to the predominantly rural nature of the region use of the private car is likely to remain the dominant mode of transport for the foreseeable future. Congestion levels are not serious enough in the majority of places to warrant implementation of anything but the most basic of demand management measures. However the region's larger towns and cities often suffer from congestion to a

SWRA: Transport Background Technical Report

greater or lesser extent and therefore such measures are deemed necessary. The congestion experienced typically varies according to time of day and may be subject to seasonal fluctuations.

4 /4 Authorities First Detailed Proposals
- *Cornwall:* network management including parking, P&R and consistency of charging**.**
- *Exeter*: Parking management and allocation of road space.
- *Gloucester and Cheltenham:* Modelling work confirmed to accommodate RPG10 levels of major growth infrastructure investment as well as a congestion charge would be needed to provide the required transport capacity**.** The location of parking will be considered with the aim of providing car parks at the most accessible point to the highway network and discouraging the use of unsustainable town centres roads. Extensions of on-street pay and display will be considered and resident parking schemes will be considered in market towns where there are issues of commuter parking.
- *Plymouth:* Continue to support and develop the use of ITS on the strategic road network.
- *SE Dorset*: increasing demand management by transferring more road space to priority vehicles and managing the supply and use of parking.
- *Swindon*: Demand Management is a critical element of a sustainable transport system, particularly in the light of the JSA findings. Investment in demand management may well be a priority in itself.

	Demand Management Policy Review	Assistance to the Transport Team- Demand Management report	Greater Bristol Strategic Transport Study (GBSTS)	Consultancy Framework Agreement for Transport Planning Services
Purpose of study	To undertake a review of existing policy and practice with regard to demand management as an aid to developing the transport elements of the RSS.	To provide an evidence base on the effects of highway demand management measures particularly on economic activity and hence recommend measures which appear to be more promising for application in the urban and inter urban contexts in the South West.	Examines the current and future transport needs within the Greater Bristol area. It seeks to deal with strategic issues of determining and managing the most suitable routes and to make a detailed assessment, which will identify resources required to address the traffic and environmental issues in and around Bristol	To review all the sub regions transport studies and to identify any major in consistencies in the data, forecasting procedures and assumptions which could have a bearing on the findings. **Page 1**-3 contains a list of key areas of investigation.
Who and When	Commissioned by SWRA, completed by Mott MacDonald, February 2005	Commissioned by SWRDA completed by Ove Arup, March 2005	Atkins-May 2006	Commissioned by the SWRA, completed by Atkins, November 2005
How the findings link to policy as drafted	**Section 7.3** of the final report set out a list of recommended measures, as follows: • Congestion charging (road	Discusses possible demand management measures such as workplace parking levies, road pricing/congestion charging, car	**Chapter 4:** examines several demand management methods in detail such as workplace parking charges, parking controls and road	The findings suggest that there are inconsistencies in the sub regional areas work-particularly in the modelling side. Unless these

SWRA: Transport Background Technical Report

	user charging); • Parking strategies; • Effective car use; • Management of road space; and • Out-of-town centres.	parking charges and reducing the need to travel.	user charging, (urban congestion charging, inter urban/motorway charging, area wide congestion charging). A potential implementation programme is also outlined.	inconsistencies can be solved, JSA will find it difficult to implement Policy TR1.
Key issues and opportunities	Opportunity to focus effort and resources on a small number of measures and thereby help to enable a step-change in travel behaviour. Major issue as to the capacity of some local authorities to deliver ambitious schemes in the short timeframe required by the various funding regimes, e.g. Local Transport Plan.	Not many of the measure discussed have been tried and tested i.e. a matter of uncertainty in the outcomes and effects.	**Pg 4-1**: It would not be prudent to develop an overall transport strategy that is critically dependent upon measures that have such a high risk associated with them. This is particularly true of various forms of road user charging which would require a combination of additional legislation, new technology and the resolution of significant technical and policy issues before they could be implemented.	Opportunity to consider gaps and to identify consistencies in the sub regional studies work submitted.
Delivery issues	Congestion charging not yet proven to be deliverable outside of London. Doubt as to whether any of the South West settlements would be suitable. Workplace parking levies may be more suitable.	Unsure of the economic impacts surrounding the London congestion charging scheme, different studies come up with different outcomes, adding to the matter of uncertainty. How will congestion charging be delivered in the South West?-in the PUA's since the region is sparsely populated, seasonal charging when traffic levels are higher in the summer?	**Pg 4-17**: The introduction of demand management measures, based on a national charging scheme, would therefore have a timescale and implementation programme that is tied to the national scheme. Due to the risks in such an approach, which could involve the cancellation or dilution of the national scheme, it would not be prudent for the demand management measures to be a core element of a single transport strategy produced by the study.	**Pg 2-1**: Cornwall JSA did not provide any documentation regarding their approach; therefore they can not be assessed. The modelling approaches used by the JSA differed in many respects and finding a consistent manner in analysing them was problematic. Need to develop capacity to move forward to improve modelling in order to improve the justification of schemes.
Key Decisions	**Section 7.6** included draft	**Section 5.2:** Outlines the issues	A series of measures would need to	**Chapter 5**: Outlines the transport

SWRA: Transport Background Technical Report

	policies for each measure considered which can feed into the RTS.	for the South West in regard to congestion charging as a possible demand management measure. **Section 5:** outlines some of the regions key transport issues and relates these to congestion charging and its implications	be put into place to address the issues raised. Some of these were short and medium term (improving existing facilities , rapid transit routes) or long term (construction of new roads)	models used by each JSA and provides a short summary of the findings.
Alternatives Considered	The report considered these demand management measures- - Congestion charging (road user charging); - Parking strategies; - Effective car use; - Management of road space; and - Out-of-town centres.	**Chapter 3**: Covers possible demand management measures.	A number of alternatives have been considered in a number of areas. **Chapter 4** covers various demand management measures. **Chapter 5** covers public transport measures	No alternatives were considered.
Notes	The Motts study lead to the statement on Parking Charges? (see p S-1 in the Motts report).	It is important to develop a transport strategy that will generally involve the development of a package of measures. An effective transport strategy will generally include a suitable mix of supply management, demand management and traffic management measures.	**Section 5**: Can a road user charging system be applied in the South West?	N/A

	Developing Public Transport Policies for the South West PUA's
Purpose of the study	To provide input into developing the public transport policies for the RTS.
Who and When	Bus and Coach Working Group-October 2004
How the findings link to the policy	**Pg 6**: Improving public transport will be key in reducing congestion **Pg 21**: Bus Strategies can help reduce congestion
Key issues and opportunities	**Pg 8**: Opportunity to see which format demand management delivers how much % of peak passenger growth
Delivery issues	**Pg 10**: It will be difficult to balance out bus/P&R/rail solutions in a PUA, depending on what the nature of the issues are.

SWRA: Transport Background Technical Report

Key Decisions	**Pg 2:** Recommends that partner authorities within a PUA sub region prepare a document entitled "Public Transport Strategy for..........PUA", the production of which should form part of one of the core RTS policies. Key parts of the PTS will be Bus Speed Master plans and Statutory Quality Bus Partnerships,
Alternatives considered	**Pg 18**: Various demand management methods were considered-time penalty congestion charge, Bus P&R
Notes	N/A

6.2.2 Policy TR2: The M4 and M5

The M4 and M5 will be managed and where appropriate improved so as to ensure that they perform their function as the main strategic inter-regional links to London and the Midlands. Measures should seek to maintain the reliability of journey times in and out of the region. Regional Stakeholders will work with the Highways Agency to seek a complimentary package of measures to manage the demand for travel in relation to the M4/M5 and ensure the most effective use of the trunk network and reduce congestion, including the implementation of:

- Incident Management
- Intelligent Technology Measures
- Information Management
- Access Control Measures

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
DfT 1998: 'A New Deal for Transport: Better for Everyone' White Paper
DETR: Transport 2010: The Ten Year Plan,
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft

Local (South West) context:
The M4 and M5 are designated by Government as roads of national importance and provide the region with an important link to the Midlands and London. Due to the peninsular nature of the region, the majority of the South West is relatively remote and is dependent at present on a single high quality road link: the M4/M5. This puts enormous strain on the route and any delays or accidents can create unreliable journey
times. Therefore it is of regional importance that the route's reliability and resilience is maintained.

4/4 Authorities First Detailed Proposals
- *Exeter:* improvements in the vicinity of M5 Junctions 29 and 30

SWRA: Transport Background Technical Report

	SWARMMS	Highways Agency Network Performance Study	Regional Freight Map
Purpose of the study	Sought to develop a vision for the development of main transport corridors between London and the South West and South Wales.- develop the strategic transport system to enhance its economic, social and environmental health by providing safe, reliable, efficient and convenient transportation of people and goods.	The report is to help the region produce advice by assessing how the performance of the trunk road network would vary over time for a range of investment decisions. (The Government asked all the Regions to provide advice on their priorities for transport, housing, and economic development showing how these relate to each other and how they align with the resources that are likely to available).	Three main aims: Seeking to reduce impact of road freight on rural settlements, work with freight industry to set out routes for road freight to better focus activities and resources and develop a consistent nomenclature and hierarchy for freight routes across transport authority boundaries.
Who and When	Halcrow-May 2004	Highways Agency September 2004	Atkins-April 2006
How the findings link to the policy drafted.	Examined the entire M5 and parts of the M4 that are IN the region. Considered several corridors (Bristol-Exeter, Exeter to Penzance), the Greater Bristol area and outlined problems and issues and key recommendations.	**Pg 4:** The report has a role to play in informing effective engagement in the spatial planning process, particularly at the RSS level. **Pg 13**: Provides an overview of the region's motorways. **Pg 21-22:** Examines some schemes which will improve the M4/M5 capacity/performance at various junctions.	The RFM will help define how much freight will be transported on the M4/M5. (This in the long term can affect the route's performance)
Key issues and opportunities	Opportunity to review the present state of the study area's transport systems and to put forward recommendations. **Pg 28**: M5 junctions experience delays at peak times	**Part 1**: Provides an overview of the regional road infrastructure.	An opportunity to bring some consistency in the region regarding road freight transportation. Trip lengths were not used to inform hierarchical designations of routes, due to the inconclusiveness of the data. Not much emphasis has been made on rail freight.

SWRA: Transport Background Technical Report

			Pg 7-15: There was some debate with regard to the terminology to be used for the lowest of the levels. The use of 'Local Freight Route' had apparently caused some confusion as to exactly what its role was and what HGV trips should be using these routes.
Delivery issues	**Pg iv**: Total capital costs for the entire Preferred Strategy will be about £3bn and there will need to be ongoing revenue expenditure of about £200mil annually to support the public transport services and operate other transport measures within the strategy. Due to the strategic approach that the Study adopted, it did not adequately address congestion and other problems around the Bristol area.	There are many issues that the Report does try to cover such as road safety, environmental impacts, congestion and demand management. Providing solutions to all these issues with just a few measures can be problematic. **Part 4**: A simple spreadsheet model has been developed to project network performance forward into the future and takes into account the current performance of the network at existing traffic levels. It will also assess how traffic will change in regard to future network improvements. For this purpose perhaps a simple spreadsheet model might not be adequate-a more sophisticated model many be required.	Not much emphasis has been made on rail freight. **Pg 7-14**: In regard to creating a hierarchical freight map, there are two potentially conflicting factors of economy and environment that need to be balanced, so as to provide a viable freight network in the region to sustain and grow economic development, while at the same time ensuring that the natural and built heritage in the region is not compromised.
Key Decisions	**Pg ii:** The study resulted in the Preferred Strategy which amongst many things will create a more robust strategic road network and improve reliability and safety on the road network. **Pg 32:** A new ITS is proposed for the M5 corridor which will assist in reducing accidents and provide better congestion information. **Pg 42:** There will be significant improvements to the M5/M4 corridor in the Bristol area in an attempt to decrease congestion. This includes widening schemes and climbing lanes on sections of the M5.	**Pg 68:** the historic trend is for traffic to grow as a result of increases in car-ownership and increases in wealth. (This is an underlying reason why the reliability and the resilience of the M4/M5 must be maintained in order to perform its strategic function).	Anticipated outcome was that the majority of HGV traffic on Local routes would be internal traffic, with the majority of Regional and National routes carrying the external and through traffic. However, nothing conclusive could be drawn from the data, which indicated a large majority of internal trips on all of the routes, i.e. on the Local, Regional and National freight routes.
Alternatives considered	**Section 3.2**: Many ideas were considered, such	**Part 4:** Other tools and measures have been	N/A

SWRA: Transport Background Technical Report

	as highway schemes, cordon charging schemes at Bristol, motorway widening and new motorways. Many of these were rejected on the grounds of practicality, cost and alternative methods.	used to input into the Regional Trunk Road Strategy such as stress maps, maps and accident data.	
Notes			

6.2.3 Policy TR3: Second Strategic Route

Regional Stakeholders will work with the Highways Agency to achieve a second strategic route into the region from London to dual carriageway standard utilising the A303/A358 in order to improve the resilience of the inter regional network and maintain the competitiveness of the South West.

Policy context and relevant guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
DfT Guidance on Second round of LTPs
RPG 10: Regional Planning Guidance for the South West
DfT 1998: A New Deal for Transport: Better for Everyone- White Paper
DfT 2004: 'The Future of Transport, a network for 2030'- White Paper
ODPM 2002: 'Your Region, Your Choice: Revitalising the English Regions' – White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft

Local (South West) Context
At present the region has only one high quality road route which serves as an intra and inter regional route: the M4/M5. This places pressure on the route and the expectation to maintain its reliability and resilience are high. The creation of a second strategic route will improve the regions inter-regional connectivity and take off some of the pressure placed on the M4/M5 as the key regional strategic road route. Completion of this strategic upgrading is a prime requirement if the RSS is to stimulate economic activity in parts of the region.

4/4 Authorities First Detailed Proposals
- *Exeter:* Improvements to the A303 road corridor to ensure journey time reliability and enhance safety.

	Intra Regional Connectivity in the South West	Highways Agency Network Performance Study	SWARMMS	A303 Stonehenge Improvement Scheme Review-Stage 1 Report
Purpose of the study	To develop a better understanding of the current intra-regional	The report is to help the region produce advice by assessing how	Sought to develop a vision for the development of main transport	The report outlines the Terms of Reference for the study, which is to screen the large

SWRA: Transport Background Technical Report

	connectivity in the SW and the strengths of the links that exist between JSA's, to consider the transport implications of future economic change and the need of intra-regional connectivity to enable the growth to take place.	the performance of the trunk road network would vary over time for a range of investment decisions. (The Government asked all the Regions to provide advice on their priorities for transport, housing, and economic development showing how these relate to each other and how they align with the resources that are likely to available.)	corridors between London and the South West and South Wales.- develop the strategic transport system to enhance its economic, social and environmental health by providing safe, reliable, efficient and convenient transportation of people and goods.	number of alternatives for the A303 and to recommend a shortlist for consultation and further assessment.
Who and when	Commissioned by the RDA and completed by DTZ Pieda Consulting, April 2005	Highways Agency September 2004	Halcrow-May 2004	Highways Agency-January 2006
How the findings link to the policy drafted.	**Pg 2**: The M4/M5 is at the core of connectivity, in the SW with both intra/inter regional significance. Issues arise in their reliability, congestion and lack of other major routes into/out of the region. **Pg 1**: The report concluded that inter-regional connectivity is more important than intra-regional connectivity for future growth and that intra regional needs of a business were much less significant than their inter regional requirements. (Therefore a 2nd strategic route is required in the future).	**Pg 11**: Any places south of Plymouth do not have reliable road links to the Midlands and London, highlighting the need for a 2nd strategic route.	**Pg ii**: the provision of two high quality routes along the study area will create a more robust network. **Pg 28**: A significant programme of road construction to create a high quality dual carriageway route (A303/A358), between the SW and SE was recommended.	**Pg 5:** The Secretary of State has supported the dualling of the A303/A358, reinforcing the strategic nature of the route within the integrated transport network of the South West.
Key issues and opportunities	The report is a chance to review inter and intra regional routes and their significance.	**Pgs 24-32:** Key issues which need to be addressed in relation to the regions road network are, safety and environmental issues (air quality, biodiversity, landscaping and water pollution)	Opportunity to review the present state of the study area's transport systems and to put forward recommendations.	**Pg 5:** Stonehenge is in close proximity of the A303. Any alterations/improvements to the route will have an affect on the monument. Opportunity to review the present situation of the A303 and to find a solution for the

SWRA: Transport Background Technical Report

				local transport network around Stonehenge.
Delivery Issues	N/A	**Pg 68**: There is the issue of whether future transport schemes will actually make a significance difference to the operational performance of the regional strategic road network. This will affect the requirement for a 2nd strategic route.	**Pg iv**: Total capital costs for the entire Preferred Strategy will be about £3bn and there will need to be ongoing revenue expenditure of about £200mil annually to support the public transport services and operate other transport measures within the strategy.	**Pg 5**: Stonehenge is in close proximity of the A303. Any alterations/improvements to the route will have an affect on the monument.
Key Decisions	**Pg 1**: The report concluded that inter-regional connectivity is more important than intra-regional connectivity for future growth; therefore a 2nd strategic route is required. **Pg 2**: Unreliability of routes and journey times is a key concern on many intra and inter regional routes.	**Pg 68**: The historic trend is for traffic to grow as a result of increases in car-ownership and increases in wealth (thus putting pressure on the strategic road network and increasing the need for a second strategic route).	**Pg ii**: The study concluded with a 'Preferred Strategy' which was wide ranging and balanced to improve transport conditions between London and the South West and Wales. Key Features are outlined on **Pgs ii – iii.**	**Section 9:** Three Options have been taken forward for consideration (Northern Route Option, Southern Route Option and the Cut and Cover Tunnel Option). Scenario 4 (grade-separation of Countess Roundabout, closure of A344/A303 junction and Winterbourne Stoke Bypass) would have the most benefit.
Alternatives considered	**Pg 13**: There is a need to consider how to address the issue of unreliability on the regions road network-the answer could lie in traffic and demand management solutions. This can be adapted to existing routes. **Pg 14**: Any forms of movement (local, within or out of the region), will use the strategic regional transport infrastructure. Therefore any studies on connectivity should not just focus on inter regional connectivity.	**Part 4:** Other tools and measures have been used to input into the Regional Trunk Road Strategy such as stress maps, maps and accident data.	**Pg iii**: There were many alternatives suggested in the 'Preferred Strategy' such as two high quality routes and improved reliability and safety on the road network.	**Pg 5**: Building a tunnel underneath the monument will remove all roads and traffic form the heart of the World Heritage Site. **Pg 10**: Providing a bypass for the nearby village of Winterbourne Stoke will divert traffic from Stonehenge. **Section 6:** Reviews 'Partial Solutions'- they meet a number of objectives as set out in the Stonehenge Management Plan but currently considered unaffordable **Section 7**: Outlines the discussion for a Northern Route and a Southern Route.

SWRA: Transport Background Technical Report

Notes				

6.2.4 Policy TR 4: Reminder of the Trunk Road Network

The remainder of the trunk road network will be managed and investment targeted so as to ensure that it performs its strategic function. Measures should seek to maintain safe, efficient operation and reliability of journey times within, into and out of the region. Regional Stakeholders will work with the Highways Agency to manage demand so as to avoid congestion compromising the strategic function.

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
RPG 10: Regional Planning Guidance for the South West
DfT 1998: A New Deal for Transport: Better for Everyone- White Paper
DfT 2004: 'The Future of Transport, a network for 2030'- White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft**)**

Local (South West) Context:
Safe, resilient and reliable roads are required to support the regional economy and to reduce social exclusion. Investing in the strategic and regional road network particularly links to the Midlands and London will enable for the objectives of the RSS and strategy emphasis to be achieved. If the economic potential of the region is to be fully realised, it will be essential to ensure that the road network is maintained.

4/4 Authorities First Detailed Proposals
- *Gloucester and Cheltenham:* The County Council will be lobbying for capacity and safety improvements to the A417 and A46.
- *Torbay:* Is not linked by a dual carriageway, a pressing need for the Kingskerswell Bypass to improve links with the national road network.

	Highways Agency Network Performance Study	SWARMMS
Purpose of the study	The report is to help the region produce advice by assessing how the performance of the trunk road network would vary over time for a range of investment decisions. (The Government asked all the Regions to provide advice on their priorities for transport, housing, and economic development showing how these relate to each other and how they align with the resources that are likely to	Sought to develop a vision for the development of main transport corridors between London and the South West and South Wales.- develop the strategic transport system to enhance its economic, social and environmental health by providing safe, reliable, efficient and convenient transportation of people and goods.

SWRA: Transport Background Technical Report

	available.	
Who and When	Highways Agency-September 2004	Halcrow-May 2004
How the findings link to the policy	The report assesses the current performance of the trunk road network against a range of indicators for safety and congestion. **Pgs 24-32:** Key issues which need to be addressed in relation to the regions road network are safety, congestion and environmental issues (air quality, biodiversity, and landscaping and water pollution).	**Pg iii:** Elements of the Preferred Strategy include creating safe reliable roads **Pg iv:** the Study is focussed on reducing congestion accidents in key corridors and underpinning planned land use changes.
Key issues and opportunities	**Part 1**: Provides an overview of the regional road network.	Opportunity to review the present state of the study area's transport systems and to put forward recommendations.
Delivery issues	There are many issues that the Report does try to cover such as road safety, environmental impacts, congestion and demand management. Providing solutions to all these issues with just a few measures can be problematic. **Part 4**: A simple spreadsheet model has been developed to project network performance forward into the future and takes into account the current performance of the network at existing traffic levels. It will also assess how traffic will change in regard to future network improvements. For this purpose perhaps a simple spreadsheet model might not be adequate-a more sophisticated model many be required.	**Pg iv**: Total capital costs for the entire Preferred Strategy will be about £3bn and there will need to be ongoing revenue expenditure of about £200mil annually to support the public transport services and operate other transport measures within the strategy.
Key Decisions	**Pg 68:** the historic trend is for traffic to grow as a result of increases in car-ownership and increases in wealth. (This is an underlying reason why the road network should be maintained in the future).	**Pg ii**: The study concluded with a 'Preferred Strategy' which was wide ranging and balanced to improve transport conditions between London and the South West and Wales. Key Features are outlined on **Pgs ii – iii.**
Alternatives considered	**Part 4:** Other tools and measures have been used to input into the Regional Trunk Road Strategy such as stress maps, maps and accident data**.**	**Pg iii**: There were many alternatives suggested in the 'Preferred Strategy'.
Notes		

SWRA: Transport Background Technical Report

6.2.5 Policy TR5: Inter-Regional Rail Network-

Rail Infrastructure, signalling systems and stations on the strategic inter-regional rail routes will be enhanced so as to ensure the provision of reliable train services with enhanced capacity to meet the growth in demand embodied in the Spatial Strategy. This will include the following:

- improved platform capacity at Reading Station, and junction improvements at Reading;
- additional passing loops between Salisbury and Exeter;
- appropriate engineering measures to secure the long term future of the Great Western route through Dawlish;
- additional track capacity and power supply between Poole and Weymouth;
- new/improved parkway stations at Gloucester, Worle, Bristol Parkway and Tiverton;
- improved quality and capacity trains, particularly replacement High Speed Trains;
- improved infrastructure at major stations including bus interchange, car and cycle parking, passenger information and waiting facilities;
- direct rail links to Heathrow from the Great Western Main Line;
- investment in the Worle (Weston super Mare) loop to facilitate the reliability of inter-regional services;
- development of opportunities to facilitate modal shifts, address overcrowding and improve the network on routes between Wales, Bristol and the south coast by enhancing speeds, frequencies and the capacity of passenger service; and
- resignalling and route modernisation of the Great Western Main Line.

Policy Context and Relevant Guidance

Regional Economic Strategy
RPG 10: Regional Planning Guidance for the South West
DfT 2004: The Future of Rail-White Paper
The SRA's Capacity Utilisation Policy
DfT 1998: 'A New Deal for Transport: Better for Everyone' White Paper
DETR 2000: Transport 2010 10 Year Plan
DfT 1995: Railways Act
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)
Network Rail Route utilisation strategies

Local (South West) Context:

The RSS is seeking to meet more of the future demand for inter-regional travel on the rail network as this will deliver more sustainable travel. Whilst the focus within the rail industry on improving rail reliability and reducing costs has been recognised, rail infrastructure needs to be planned to take account of growth provided for in the spatial strategy. Rail Patronage is increasing rapidly in the region as the public's perception of rail becomes more favourable. However the regional rail network does suffer from a number of set backs: service reliability, overcrowding, punctuality and general quality of services. In order to achieve an integrated transport system and a modal shift, the rail network will need to be improved in terms of renewed infrastructure.

SWRA: Transport Background Technical Report

4/4 Authorities First Detailed Proposals

- *Exeter*: improved stations and additional train capacity on the local rail network, securing fast and reliable train services on the GWML to London, and on the Cross Country network, improvements on the SW Trains Network.
- *Gloucester and Cheltenham*: Stroud Valleys offer the potential for a major scheme bid based on improved rail services on the Bristol-Birmingham line, including rail access by provision of a new station at Bristol Road, Stonehouse.
- *Plymouth*; Provision of rail interchange at Tavistock Junction and acquisition and protection of land that can be used for a Light Rail System on established HQPT Routes.
- *Torbay*: the hope for better rail services to and from Torbay is needed to improve integration with the Paddington and Penzance, including improvements and increased capacity at Newton-Abbot.
- *West of England:* Key elements of the sub regions transport requirements include significant development of the heavy rail network including local rail links with no loss to existing services.

	GWML Economic Assessment	SWARMMS	Intra Regional Connectivity in the South West	The Future of Rail- White Paper	GWML RUS
Purpose of the study	To assess the current contribution of the Great Western Mainline to the regional economy and to identify values that would add the most value to the region. Of particular importance is the need to understand the value placed on GWML services by businesses in the region and if necessary, the forms of improvements which would be seen to generate greatest benefits for the regional economy	Sought to develop a vision for the development of main transport corridors between London and the South West and South Wales.- develop the strategic transport system to enhance its economic, social and environmental health by providing safe, reliable, efficient and convenient transportation of people and goods.	To develop a better understanding of the current intra-regional connectivity in the South West and the strengths of the links that exist between JSA's, to consider the transport implications of future economic change and the need of intra-regional connectivity to enable the growth to take place.	A review which considered the structural and organisational changes needed to enable the rail industry to deliver for its customers, as well as looking at the regulation of safety and the progress being made by the industry in improving performance and controlling costs.	The RUS presents solutions to the principal problems in the Great Western area. In particular it addresses the causes of poor punctuality and problems of overcrowding.

SWRA: Transport Background Technical Report

Who and When	Commissioned by the SW RDA and completed by Halcrow-March 2005	Halcrow-May 2004	Commissioned by the RDA and completed by DTZ Pieda Consulting, April 2005	DfT-July 2004	Strategic Rail Authority, June 2005
How the findings link to the policy	**Pg 14**: Rail supports the spatial strategy by reducing the regions peripherality. Is also important for strategic communications and raising business productivity and increasing economic inclusion. **Pg 36**: From the economic review, the strong conclusion have drawn up is that the GWML is of critical importance to the general accessibility and functioning of the regional economy	**Pg ii:** The Study resulted in the Preferred Strategy which included some key features regarding rail: improved reliability and reduced journey times on the network, more choice and less overcrowding. **Pg 18:** Enhanced rail infrastructure and services were highlighted as important. **Pg 30:** The GWML is operated intensively and minor problems can lead to significant delays. This suggests that improvements do need to take place. **Pg 45:** Proposed improvements to GWML and Exeter-Waterloo lines will eliminate all the main bottlenecks in the rail corridor.	Evidence collated points that inter-regional connectivity particularly with the SE is more important than intra regional connectivity-attention is turned to Mainlines.	**Pg 9:** Puts in place a new structure fit to deliver the improvements that the public expects. **Pg 30:** Gives a list of values that passengers would like to see in the rail industry. Some of these are mentioned in the policy e.g. reduce overcrowding. **Pg 78:** the Government want to give regional and local stakeholders more influence over transport decisions –means that more integrated ones will be made.	**Pg 4:** The aim is to provide properly performing train services, which meet demands for growth in a way that maximises overall value for money and, is affordable. There is continual need to improve operational performance on the route. There is a need to define and develop service patterns in order to inform the scope of major infrastructure renewal projects. **Pg 74:** Improved operational performance is sought by stakeholders and the rail industry.
Key issues and opportunities	Opportunity to assess how the GWML contributes to the regional economy and if it does make a difference	Opportunity to review and put forward suggestions that improve the key rail lines.	Opportunity to consider how transport infrastructure will need to change to accommodate future regional economic	Opportunity to review the history of the rail industry, consider its present state, and look forward to making future	An opportunity to review the present situation on the GWML and to present solutions for current issues such as unreliability and overcrowding.

SWRA: Transport Background Technical Report

| | | | growth

Issues surround key changes in sub regional economies, which will generate a need for infrastructure improvements to facilitate the potential growth. Need to consider the issue of unreliability in the transport network | structural and organisational changes within the rail industry. | |
|---|---|---|---|---|---|
| **Delivery issues** | Delivering reliable services over a big area will prove to be a huge challenge in the future, in terms of resources and finances | **Pg iv**: Total capital costs for the entire Preferred Strategy will be about £3bn and there will need to be ongoing revenue expenditure of about £200mil annually to support the public transport services and operate other transport measures within the strategy. | Whilst reviewing current literature on the relationship of transport and economic growth, it appeared that evidence was contradictory. | The main issue is that The White Paper aims to achieve a great deal, with a haphazard industry and limited resources. The question is, can all this be delivered? | **Pg 7:** The task of the RUS is to ensure that in the years before the implementation of major projects, the very best use is made of the railway that will exist in the meantime. Considering the issues and problems that exist on the network presently, this will be a challenge. |
| **Key Decisions** | **Pg 35:** The nature of accessibility in the region has shaped, and continues to shape the spatial economy and prosperity of the region. Links to London remain an important business component for the region with many sectors and businesses seeing accessibility to London as important for clients | **Pg 43:** In terms of rail, the strategy proposes to strengthen the GWML and the Exeter-Waterloo. Improvements include providing additional capacity to carry the forecasted increase in demand, reducing overcrowding, higher service frequencies and reliability and providing direct connections | Transport is more likely to influence local, rather than intra/inter regional labour market movements. Where transport is an important factor in DM, it is reliability which is more important than speed and cost. | **Pg 6-8** The Government will take care of setting the strategy for the railways, Network Rail will be given clear responsibility for operating the network and its performance, track and train companies will work more closely together and there will be more local decision making. | **Pg 7:** The RUS will hope to examine and amend the timetable in order to eliminate the factors that most commonly raise to unpunctuality.

Pg 8: To meet the expectation of punctuality and reliability some aspects of the timetable need now to be simplified.

Pg 8: The second task is to ensure that all physical attributes of the infrastructure are fully exploited. This |

SWRA: Transport Background Technical Report

	and networking **Pg 64**: There is strong evidence that strong rail links are perceived as essential to the future economic well-being of the region. Secondly, businesses do not believe that the current service provision is sufficient to support their future need. **Pg 69**: It is clear that improving the reliability of rail services should be a key priority for the region. **Pg 71**: business surveys and regional analysis have highlighted the importance of service frequency in supporting the aspirations of the region.	between centres that do not have these at present. **Pg 48:** The Strategy will have many positive effects on the rail industry.			means for example maximising the number of train capable of running at 125mph where the infrastructure is designed to support such a speed. **Pg 75-76:** sets out aspirations for the region in terms of schemes and improvements
Alternatives considered	**Section 6.3** focuses on rail outcomes that should be the focus for investment for the South West. These include service reliability quality and frequency, connections to GWML stations regional airports and other regions, reducing costs, station	**Pg 15:** Many alternatives were considered but rejected on the grounds of practicality and cost. These included the construction of a high speed rail link to London.	**Pg 14**: Any forms of movement (local, within or out of the region), will use the strategic regional transport infrastructure. Therefore any studies on connectivity should not just focus on inter regional connectivity.	N/A	**Chapter 2:** Contains discussions of improved capacity utilisation that have been identified and evaluated, but rejected or deferred.

SWRA: Transport Background Technical Report

	car parking and improving rail time journeys.			
Notes	**Pg 3:** It is notable that little work has been carried out in determining the links between the economy of the South West and the operation of the Great Western Mainline			

	SWML RUS- Consultation Draft	**The Mainline they shouldn't ignore- South Coast to Bristol and South Wales Route**	**South Western Franchise Report**
Purpose of the study	To inform the development of the Government's specification for the South Western franchise, inform the required outputs for infrastructure renewals and inform the High Level Output Specification.	**Pg 11:** A list of specific aims is given such as, to review passenger requirements and station provision, to raise the profile of the route with potential bidders for the GW franchise and examine the role of the route as part of an integrated transport system.	The document will inform stakeholders of the process of awarding the South Western franchise and to advise them of the objectives and expectations for the franchise.
Who and When	Network Rail- 2005	Rail Passenger Committee- April 2004	Department of Transport, November 2005
How the findings link to the policy	**Pg 5:** Rail network capacity is heavily utilised in many key sections of the SWML RUS area. This constrains the extent to which additional services can be accommodated, and has a significant impact on the performance of the existing services. **Pg 12:** The RUS will facilitate the further development that takes into account both cost issues and the impact of freight and passenger users. The RUS will recommend efficient use of and identify opportunities to improve	**Pg 27:** Passenger views were sought as they require assurance that services are punctual and reliable. Passengers were also asked abOut their aspirations for future services. This provides a motivation to improve routes. **Pg 51:** the route crosses over 3 planning regions (Wales, the SW and E) and has the potential to be an important route in an integrated transport system.	**Chapter 4:** States the five key objectives envisioned for the new Franchise. These include: - to meet affordability targets for the railway - to improve performance in terms of punctuality and reliability - to accommodate current and continued demand growth - to reflect stakeholders requirements and aspirations - to optimise the use of the network, staff and rolling stock

SWRA: Transport Background Technical Report

	the network.		
Key issues and opportunities	**Pg 4:** Passenger demand has increased significantly since the mid 1990's, resulting in overcrowding. **Pg 5:** Rail freight has increased consistently in the last few years, creating more pressure on the line. **Pg 39:** There is not enough capacity on the West of England Line to provide the level of service aspired to. **Pg 7:** Provides an opportunity to review the progress in the development of the SWML so far.	**Pg 7:** The route has suffered from under investment and current fragmentation of managerial responsibilities is an added complication. **Pg 8:** An opportunity to collect passenger views, review the current state of the route and put forward any suggestions.	An opportunity to present a vision for the SW Franchise and to outline what will be required from bidders to make the Franchise a success. **Pg 25:** The new Franchise will face a number of major challenges. Foremost is the fact that passenger numbers are increasing and a number of peak hour services are reaching uncomfortable levels of overcrowding.
Delivery issues	**Pg 6:** Issues and forecast changes lead to a number of significant gaps between what is currently deliverable and what is required to meet future demand. Some gaps are: overcrowding, a shortage of station car parking, and insufficient capacity.	**Pg 7:** Managerial responsibilities are fragmented which can delay decisions and implementing enhancements.	**Pg 25:** The new Franchise will face a number of major challenges. Foremost is the fact that passenger numbers are increasing and a number of peak hour services are reaching uncomfortable levels of overcrowding.
Key Decisions	**Pg 6:** Further work is needed to provide the information necessary to inform the appraisal process and recommendations. Some further work includes: investigate options in addressing overcrowding, current timetable analysis, car parking and various infrastructure enhancements along the line. **Pg 39:** There is not enough capacity on the West of England Line to provide the level of service aspired to	**Pg 5:** The route needs a management with strategic vision and the ability to build on the commercial opportunities afforded by the major housing growth planned along the route. In order to overcome the effects of fragmentation, a Route Czar is recommended to oversee the enhancements. **Pg 9:** Concludes by suggesting that modest investment will greatly improve passenger experience and encourage modal shift. **Pg 33:** Passengers and Stakeholders agreed that service reliability and punctuality needed	**Chapter 4:** Outlines the objectives for the new Franchise. **Chapter 6:** States what is required from bidders in their bids and what they need to demonstrate.

SWRA: Transport Background Technical Report

		to be addressed. Stations along the route needed to be improved and enhanced. **Chapter 13:** Sets out a list of recommendations.	
Alternatives considered	**Pg 61-62**: Presents some options to deal with the West of England issue.	**Chapter 13:** Sets out a list of recommendations.	**N/A**
Notes			

6.2.6 TR6: Inter-regional Bus and Coach Network
LDDs and LTPs should provide for the enhancement of long distance bus and coach services, and should make provision for interchange infrastructure at SSCTs and other nodal centres on the Strategic Road Network.

Policy Context and Relevant Guidance:
PPG 13: Transport
DfT 1998: 'A New Deal for Transport: Better for Everyone' White Paper
DETR: Transport 2010: The Ten Year Plan,
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)

Local (South West) Context:
The region has a network of coach links to other regions, particularly London, which have the potential for expansion and networking to improve the level of service. Opportunities need to be developed to improve integration and interchange between strategic and local services and rail by focussing on interchange facilities at the SSCTs.

4/4 Authorities First Detailed Proposals
- *Exeter*: The City's vision is to develop a high quality, innovative, public transport which meets the needs of the City and wider sub region. The City aims to improve public transport interchanges, such Exeter St Davids, Exeter Bus/Coach Stations and Honiton Road Interchange.

	Greater Bristol Strategic Transport Study	SWARMMS	Intra Regional Connectivity in the South West	BB2SC (Strategic Report)
Purpose of the Study	Examines the current and	Sought to develop a vision for	To develop a better	To recommend a transport strategy

SWRA: Transport Background Technical Report

	future transport needs within the Greater Bristol area. It seeks to deal with strategic issues of determining and managing the most suitable routes and to make a detailed assessment, which will identify resources required to address the traffic and environmental issues in and around Bristol	the development of main transport corridors between London and the South West and South Wales.- develop the strategic transport system to enhance its economic, social and environmental health by providing safe, reliable, efficient and convenient transportation of people and goods.	understanding of the current intra-regional connectivity in the SW and the strengths of the links that exist between JSA's, to consider the transport implications of future economic change and the need of intra-regional connectivity to enable the growth to take place.	for maintaining an appropriate level of service in the corridor in a multi modal approach.
Who and When	Atkins-November 2005	Halcrow-May 2004	Commissioned by the RDA and completed by DTZ Pieda Consulting, April 2005	WSP- February 2004
How the findings link to policy as drafted	**Pg 5-6** In some locations across Bristol there may be the potential for expanded activities, for example by the provision of stops on the regional or national coach network which would be attractive to passengers who do not wish to travel into the town/city centres to catch the coach. **Pg 5-7:** There is the opportunity to increase the level of coach usage by providing increased locations from which to access coach services in the area:	**Pg 49:** New coach ways at Taunton, Weston-super-Mare, Cribbs Causeway, Swindon and Chievley will substantially improve access to the network. The system of coach ways will allow a proportion of services to avoid congested urban areas so reducing journey times for passengers and costs for operators.	**Pg 1**: Study concluded that inter-regional connectivity is more important than intra-regional connectivity. Therefore long distance bus travel should be promoted to sustain good inter-regional links.	**Pg 30:** The report's objectives were to develop a strategy to improve transport services in the corridor. **Pg 11:** Strategic issues relating to bus services relate mainly to opportunities for long distance travel between PUAs. At present only one service exists in the Bath area. A number of other improvements are also promoted by Las to improve interconnections between bus services in order to facilitate long distance travel-particularly important for reducing social exclusion. **Pg 30**: Longer distance coach and stage carriage services also have a role to play in facilitating opportunities fir the car driver to travel on the road network.
Key issues and opportunities	**Pg 5-7:** Most of the proposals	Opportunity to review the	The report is a chance to review	Opportunity to review the transport

SWRA: Transport Background Technical Report

	put forward rely on expanding existing sites or constructing new ones. This can create many problems, such as preliminary research, development integration, forecasting demand and environmental impacts.	present state of the study area's transport systems and to put forward recommendations.	inter and intra regional routes and their significance.	links form Bristol and Bath to the South Coast and to offer solutions to issues
Delivery issues	**Pg 5-7**:it is outside the scope of the study to specify detailed changes to the network of coach services although improved connections with the rest of the public transport network in the area will provide the opportunity for expansion to the current services.	**Pg iv**: Total capital costs for the entire Preferred Strategy will be about £3bn and there will need to be ongoing revenue expenditure of about £200mil annually to support the public transport services and operate other transport measures within the strategy. **Pg 49**: The coach network can only be a 'success' if there are improvements to coach stations, higher comfort standards, and more frequent services to popular destinations.	N/A	**Pg 30**: The focus is expected to be more on quality of service, encouraging and consolidating the market rather than improving the existing market share.
Key Decisions	**Pg 5-7**: Lists some solutions to expanding the coach network	**Pg 49**: New coach ways at Taunton, Weston-super-Mare, Cribbs Causeway, Swindon and Chievley will substantially improve access to the network.	**Pg 1**: Sustaining good inter-regional links is more of value to businesses than sustaining intra-regional links.	**Pg 21**: Delivery of the majority of bus improvements will be cone by the LAs in partnership with bus operators. **Pg 22**: the study recommended that a cross boundary Transport Planning and Operations Partnership is established to ensure that travel from the South West and the South Coast conurbations is addressed.
Alternatives Considered	**Pg 5-7**: Lists a number of	**Pg 49**: Recommends traffic	**Pg 14**: Any forms of movement	**Pg 21**: Improvements include

SWRA: Transport Background Technical Report

	alternatives which could increase the facilities and usage of coach travel. Possible locations for expansion have also been listed.	priorities for busier coach corridors where other wise these would be affected by congestion.	(local, within or out of the region), will use the strategic regional transport infrastructure. Therefore any studies on connectivity should not just focus on inter regional connectivity.	passenger information at bus stops, interchanges, improving quality of services and bus stops,
Notes				

6.2.7 Policy TR7: Ports

Proposals at all of the region's ports which facilitate the development of markets for freight and passenger services are supported, particularly where they include measures, such as improved rail access, in order to reduce the use of road based haulage. LDDs should facilitate the growth of ports to provide (where appropriate):

- improved passenger facilities;
- new recreational passenger services;
- facilities to support the fishing industry;
- land for port growth, marine sectors and related uses;
- Rail connections; and
- Container and freight facilities.

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
RPG 10: Regional Planning Guidance for the South West
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT2003: Good Practice Guide on Preparing Regional Transport Strategies (Draft)
DfT 2002: Modern Port: A UK Policy

Local (South West) Context
The South West has an extensive coastline, and a long history of maritime activity and many ports. However due to a decline in the fishing industry and concentration of sea borne freight onto larger vessel, most activity is now centred in a few locations. It is important to safeguard and enhance the role of the ports, which provide a sustainable option to road freight. Development of port traffic can support local regeneration and employment of coastal communities. The coast and in particular the regions smaller ports offer a potential resource for supporting the more peripheral parts of the

SWRA: Transport Background Technical Report

region. It is therefore important to protect and develop opportunities for appropriate port development to facilitate more sustainable movement of goods.

4/4 Authorities First Detailed Proposals
- *Cornwall*: Penzance's role in providing transport links to the Isles of Scilly should be recognised and supported.
- *SE Dorset*: Port of Poole deeper access channel and berth improvements and further expanding rail freight use at the Port.

	Gateways Strategy- Developing Policy on Ports and Shipping	Promotion of Short Sea Shipping in the Atlantic Arc- Interreg 111B	Regional Freight Map	Ports Policy Review
Purpose of the study	The Study aims to identify the contribution of the region's airports and ports to local, regional and national economies, to identify the potential operational constraints to the future growth of the region's airports and ports and develop a strategy for gateways that allows expansion and investment at specific airports and ports to be considered within a broader sub-regional and regional economic development context.	The Study aimed to identify ways in which short sea shipping and ports could be used to reduce the reliance on road based travel and in doing so, assist economic and social cohesion. Its objectives were to promote the maritime network of the European regions bordering the Atlantic Arc and encourage the role of ports, with the ultimate purpose of attracting more freight movement by sea and facilitating this by better integration between sea and other forms of transport.	Three main aims: Seeking to reduce impact of road freight on rural settlements, work with freight industry to set out routes for road freight to better focus activities and resources and develop a consistent nomenclature and hierarchy for freight routes across transport authority boundaries.	To examine whether the government has got it right in following a 'light touch' ports policy and whether there are areas of 'market failure' where more government intervention is required. Questions are asked at the end of each section which will provide an input into the review.
Who and When	Commissioned by the SW RDA and completed by URS Dames and Moore, June 2001	Prepared by Uniport Bilbao, Bilbao Plaza Maritima and IDOM, February 2005.	Atkins-April 2006	Department of Transport-May 2006
How the findings link to the policy drafted	**Pg 14:** The key components of the Regional Ports Strategy	The research established that four ports in the South West have the capacity and capability for enhanced use in Short Sea	**Pg 5-4**: Proposals to develop markets for short sea shipping, bulk and specialist freight at South West ports including	**Pg 28:** Modern Port Policy did not review ports from a regional perspective which the Review examines in some detail in Chap 4.

SWRA: Transport Background Technical Report

	are: - Support the improvement of land based links to the region's ports, with the emphasis on the most sustainable means of transport. - Support the development of each port in its individual roles where such development provides economic benefit and can occur without environmental damage. - Encourage the promotion of coastal and short sea shipping opportunities at selected gateway ports. - Support development of life line services to the peripheral parts of the region. - Support tourism and economic regeneration role of ports through water based leisure activities, cruise shipping and visiting pleasure craft.	Shipping in terms of draught, dock length, current volume moved and access to the trans-European transport network.	improved rail access are supported where they reduce the use of road based haulage. Proposals to develop facilities for passenger services are also supported.	**Pg 38:** Ports cannot function without the effective transport links. **Pg 39:** New developments, which by expanding the amount of port traffic trigger a need for expanding rail or road capacity.

SWRA: Transport Background Technical Report

Key issues and opportunities	**Pg 5**: The strategic issues that face the region are defining and enhancing the economic role of ports and airports in the region, improving local access to the gateways and integrated transport opportunities at the gateways and building on existing infrastructure provision at the gateway facilities **Pg 10**: Outlines some weaknesses that the regional ports experience	Opportunity to review the suitability and capacity of SW ports to use Short Sea Shipping. **Pg 36:** There was no awareness among users (Transport companies and individuals) of the environmental costs in the use of specific forms of transport as they did not pay for the harmful effects.	Opportunity to seek consistency in the manner that freight is transported into/out and within the region. It is hoped that a consistent terminology will also be adopted	**Pg 9:** Key issues examined are the likely demand for port capacity, how to ensure that the market response to that demand reflects the objectives of sustainable development, how far the Govt should reflect regional development objectives in encouraging the future provision of ports capacity and how the Govt can help smaller ports.
Delivery issues	**Pg 1:** a number of important policy issues fall outside the scope of this study, but are nevertheless relevant considerations in the decision making process regarding investment and support for the region's gateways.	**Pg 36:** There was no awareness among users (Transport companies and individuals) of the environmental costs in the use of specific forms of transport as they did not pay for the harmful effects. This can hinder the shift of road freight transportation to short sea shipping.	**Pg 7-13:** the roads that provide links to those airports, ports and rail depots that have freight facilities need to be suitably classified so as to provide a convenient access network for the freight movements.	**Pg 39:** Some developers have argued that new capacity is in practice usually added in the form of substantial indivisible elements e.g. a new road lane or railway. This can produce practical difficulties and impose extra investment for the port operator.
Key Decisions	**Pg 9:** Sets out a list of key components for the overall Strategy. **Pg 11:** Outlines key drivers that will promote short sea shipping in the region. **Pg 14**: Outlines the key components of the Regional Ports Strategy	The research established that four ports in the South West have the capacity and capability for enhanced use in Short Sea Shipping in terms of draught, dock length, current volume moved and access to the trans-European transport network. The study concluded that, of the South West ports, only Bristol offers a real opportunity for encouraging more SSS.	**Pg 3-6:** Promotion of access strategies/facilities to regional ports was one of the conclusions drawn from a review of the South West Freight Strategy in the Policy RFM.	At the end of each section, there are a set of questions that can provide input into the review. This will lead to an input into the consultation.

SWRA: Transport Background Technical Report

		Pg 32: Three basic axis of potential motorways of the sea on the Atlantic Arc were defined. Bristol featured in the Axis AM-1 (Southern GBR-Southern Atlantic Coast of France). **Pg 36**: Maritime transport would reduce costs by 37% compared to road transport.		
Alternatives considered	**Pg 12:** In terms of a designating a hub for coastal shipping in the South West, several ports were put forward including Par, Plymouth, Fowey and Falmouth.	**Pg 32**: Three basic axis of potential motorways of the sea on the Atlantic Arc were defined. Bristol featured in the Axis AM-1 (Southern GBR-Southern Atlantic Coast of France).		N/A
Notes	**Pg 8:** ports and airports seem to compliment each other's role e.g. Bristol Port and Airport and Fowey and Newquay Airport.			

6.2.8 TR8: Bristol Port
LDDS should demonstrate how the projected growth of general and container freight at Bristol can be supported, especially where it can be related to rail access, in order to provide for more sustainable distribution.

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
RPG 10: Regional Planning Guidance for the South West
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT2003: Good Practice Guide on Preparing Regional Transport Strategies (Draft)
DfT 2002: Modern Port: A UK Policy

SWRA: Transport Background Technical Report

Local (South West) Context:

Bristol is the largest port in the region and the only port of national significance. The port fulfils an important national, regional and local roles and this could be built to benefit the region, although land constraints will affect the port to reach its potential. Further more, continued investment is required of the port is to maintain it competitiveness and economic success.

4/4 Authorities First Detailed Proposals

■ West Of England: In terms of the Port, the emphasis will be making the best use of its existing area of operation and ensuring that future development has regard to its impact on, benefits for adjourning areas.

	Gateways Strategy - Developing policy on ports and shipping	Bristol Port Economic Assessment	Strategic Green Belt Review
Purpose of the study	The Study aims to identify the contribution of the region's airports and ports to local, regional and national economies, to identify the potential operational constraints to the future growth of the region's airports and ports and develop a strategy for gateways that allows expansion and investment at specific airports and ports to be considered within a broader sub-regional and regional economic development context.	The aims of the study were to examine the current position of Bristol port operations within the European, national, regional and local policy contexts , to explore the investment profile of the port based on past trends and future potential and understand the existing and future economic contribution of the port to the immediate sub-regional and regional area	Aims of the study are to provide a robust, consistent and independent review of green belts in the region and to undertake an assessment of the technical work on green belts carried out by the relevant JSAs.
Who and When	Commissioned by the SW RDA and completed by URS Dames and Moore, June 2001	Commissioned by the SW RDA and completed by Roger Tyms and Partners March 2004.	Commissioned by the SWRA and completed by Colin Buchanan Feb 2006
How the findings link to the policy drafted	**Pg 3:** The port has been identified as a key gateway facility (therefore creating a strong case for expansion) **Pg 10:** the port is rail fed, which brings	**Pg 17:** Tackling congestion on the M5/M4 and in the Bristol PUA is identified as a key transport priority within the RES. Improvements will have knock on effects for Bristol Port,	**Para 5.3.4** An area between Gordano and Portishead had not been included in the green belt because of its potential for developing Bristol Port.

SWRA: Transport Background Technical Report

	an advantage for expanding sustainable freight transportation at the port.	which is recognised by the RES as the largest freight handling port in the South West. **Pg40:** the local significance of the port is marked both in terms of the total level of employment supported – 7,660 jobs – which creates and estimated £270 million per year GDP. **Pg 40:** large proportion of its cargo throughputs are of national strategic importance rather than purely local – cars, coal, oil, bulk cargoes. (This builds a case for expanding the port).	
Key issues and opportunities	**Pg 5**: The strategic issues that face the region are defining and enhancing the economic role of ports and airports in the region, improving local access to the gateways and integrated transport opportunities at the gateways and building on existing infrastructure provision at the gateway facilities **Pg 10**: Outlines some weaknesses that the regional ports experience **Pg 15:** provides an opportunity to review Bristol's present and future role.	**Pg 10:** Outlines some of the weaknesses that the port experiences which can hinder its development and economic competitiveness. **Pg 14:** Bristol Port is operating in a very poorly defined national policy context, which does nothing to assist strategic public and port management decision-making in relation to either current activities or longer-term plans for the future. **Pg 21**: There are also calls to make the most of the economic opportunities created by new investment within	Opportunity to review the regions green belts and to offer locations to support development.

SWRA: Transport Background Technical Report

		Bristol Port	
Delivery issues	**Pg 1:** a number of important policy issues fall outside the scope of this study, but are nevertheless relevant considerations in the decision making process regarding investment and support for the region's gateways.	**Pg 14:** Many of the obstacles and delays to port development stem from environmental objections, which create a barrier for Bristol in fulfilling its potential. **Chap 9:** outlines some of the constraints of growth such as land availability and requirement, infrastructure requirements and regulatory issues,	**Para 6.1.2** There were some inconsistencies in the way that the relevant JSA had approached examining their green belts.
Key Decisions	**Pg 14:** Outlines the key components of the Ports Strategy., which include supporting the development of each port in terms of industrial roles, tourism and regeneration and expanding land links, focusing on sustainable transport.	**Pg 41:** Para 7.11 lists some conditions that will be crucial on developing the ports role in the future. **Pg 53:** estimates suggest that there is real potential to continue the significant levels of growth seen at Bristol over the past 10 years, and to see a rate of growth which will result in anything up to a doubling of the scale of operations at the port by 2022.	**Para 6.1.1** Across all three green belts there are a limited numbers of locations where development can occur without affecting the green belt.
Alternatives considered	N/A- no alternatives were mentioned for Bristol Port	**Pg 64:** lists a number of recommendations which can push forward the development and expansion of Bristol Port.	In the appendices, areas that could be included in each of the three regional green belts were documented.
Notes	**Pg 8:** ports and airports seem to compliment each other's role e.g. Bristol Port and Airport and Fowey and	**Pg 15:** Bristol appears to fit the EU model - being self-sustaining, making	

SWRA: Transport Background Technical Report

	Newquay Airport.	no demands on public funds and operating in a highly competitive market	

6.2.9 Policy TR9: Airports

Airports within the region should be meet an increasing proportion of regional demand for air travel to reduce 'leakage' to other regions and the London airports, with the expected growth met by developing the major existing airports in the region-Bristol, Exeter and Bournemouth. Other airports will satisfy important local markets, for example Newquay, Plymouth and Staverton (Gloucester). Plymouth/Newquay should continue to provide business links to international hubs and London while facilitating tourist visits into the region. Local Authorities, airport operators and other agencies will provide improvements to aviation facilities and access to airports (including public transport) in the region to meet future development requirements consistent with the overall transport strategies for the urban areas.

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
RPG 10: Regional Planning Guidance for the South West
 DfT 1998: A New Deal for Transport: Better for Everyone: White Paper
 DfT 2003: The Future of Air Transport -White Paper
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)

Local (South West) Context
The demand for air travel is set to increase nationally as well as regionally. There are concerns about the sustainability implications of growth which have been highlighted in the SSA. However in the context of national policy, the aim of the regions air strategy is to meet more the South West's demand for air services within the region and to reduce journeys to airports outside the region, particularly road traffic to Heathrow and Gatwick. This is considered to deliver some sustainability benefits.

4/4 Authorities First Detailed Proposals
- *Cornwall*: improvements to Newquay Airport to improve links beyond the County.
- *Exeter:* Developing role of Exeter International Airport will need to be matched by increased capacity and quality of terminal facilities, improved apron capacity and taxiways and public transport access.
- *Plymouth:* improvements to the Airport to enable it to play a key role in the transformation of the City: new safety areas runway extensions, new terminal facilities and surface access improvements.
- *SE Dorset:* making provision for a new passenger terminal at Bournemouth Airport and a package of measures to improve access including link to the A338.
- *West of England:* NSC and the Partnership will work with the Airport to address its needs for development, taking into account environmental considerations and impact on local communities.

	Future of Air Transport-White Paper	Development of an Air Strategy for the Far SW of England	The Future Development of Air Transport in the United Kingdom: South West
Purpose of the study	The White Paper sets out a strategic framework for the development of airport capacity in the United Kingdom over the next 30 years, against the background of wider developments in air transport.	The report forms a part of the SW's response to the DfT's Regional Consultation Documents and considers air transport in the far South West. It's focused on three development options.	Provides an overview of a number of national and regional issues that have implications for the future development of air services and airports both in the SW and across the UK. Analysis and comments will then go into the White Paper as it relates to the SW.
Who and When	Department of Transport, Dec 2003.	Commissioned by SWRDA, completed by Avia Solutions June 2003	Department for Transport-July 2002
How the findings link to the policy drafted.	**ES Pg 1:** It sets out the conclusions of the Government, and of the devolved administrations where appropriate, on the case for future expansion at airports across the country. This can be useful when meeting demand of air travel in the SW.	Provides an opportunity to explore and establish the current state of air transport infrastructure in the far SW. This provides an overview of infrastructure requirements in order to meet demand in the SW to prevent further 'leakage' to other regions.	**Pg 12**: A combination of geography and poor surface access for many of the region's airports implies limited catchments. Good surface access from the north and east of the region result in leakage to London and the Midlands.
Key issues and opportunities	Provides an opportunity to review air travel, airport infrastructure of the UK at present. Sets out proposals for future expansion at all airports region by region. **Pg 101**: The regions population is dispersed	If Option 2 is the preferred option, this can have economic implications for Plymouth. **Pg 165**: A key issue is the financial deliverability of each option. The	Gives a chance to assess the current situation regarding air travel in the SW. Strategic Surface Access to airports is a major issue.

SWRA: Transport Background Technical Report

	which means that providing air services can be problematic. **Pg 106:** The quality of surface access links to SW airports will be important in order to increase catchment areas.	capital investment requirements are likely to be significant. The only airport likely to be able to fund its capital requirements from cash flow and borrowings is Exeter.	
Delivery issues	**Pg 106:** Improving or increasing surface access will prove to be a challenge. Providing air services to the far SW will also present a challenge, which ties in with providing surface access.	**Pg 166:** There is not much difference between the options in the forecasts and potential services that could be supported, therefore a decision is harder to achieve.	A number of National Policy Scenarios were outlined in the document-which one is the most suitable for the SW? **Pg 25**: Regional benefits exist if Bristol was promoted as a regional hub, but this can be constrained by significant environmental and infrastructure issues which need to be addressed to increase traffic levels.
Key Decisions	**Pg 102:** The main potential of growth in the SW will be at Bristol. The Government supported development to 12 mppa to include a runway extension and new terminal. Newquay and Exeter have a distinctive role in serving local catchment areas and there is scope for major development without major environmental impacts. The Government agreed for additional terminal capacity as and when required at Bournemouth.	**Pg 164**: All options require a new terminal, apron, stands, new access road and additional car parking at Newquay airport. **Pg 166**: Initial conclusions from this study are that Option 2 (closing Plymouth airport) is preferable, providing better support for the regional economy overall and costing the public sector around £24m to deliver. This can have implications for Plymouth economy.	**Pg 24:** If the SE is not constrained, SW passengers will continue to use SE airports resulting in 'leakage'. A constrained Bristol airport can lose custom to Cardiff.
Alternatives considered	**ES pg 4:** The option of a new airport north of Bristol was suggested but was not supported.	**Pg 3:** Three scenarios or options have been considered: - *Option 1:* Exeter, Plymouth and Newquay are developed within their physical/operational constraints. - *Option 2*: Plymouth Airport is closed down. - *Option 3*: A new airport is developed	A Set of National Policy Scenarios were outlined and can influence how regional airports develop (Reference Case, SE Constrained , UK Wide Constrained and Facilitating Growth Scenarios)

SWRA: Transport Background Technical Report

		in South Hams replacing Exeter and Plymouth. Newquay remains operational.	
Notes		**Pg 165:** In planning terms, Options 1 is likely to be the easiest to deliver.	

6.2.10 Policy TR10: Regional Connectivity

A Corridor Management approach making best use of the network will improve the reliability and resilience of journey times for the routes listed. As part of a Corridor Management approach, Local Authorities working with rail and bus industries will develop opportunities to facilitate modal shift, address public transport overcrowding, improve strategic interchanges and improve use of the network. Within the scope of the Corridor Management approach, highway authorities should also develop proposals to reduce the impact of long distance traffic on the built and the natural environment and improve the quality of life of communities seeking to improve air quality and to reduce accidents, severance and the impact of noise.

Policy Context and Relevant Guidance
DfT: Roads Review-Consultation Document-What Role for Trunk Roads in England
PPG 13: Transport
PPS11: Regional Spatial Strategies
DfT Guidance on Second round of LTPs
RPG 10: Regional Planning Guidance for the South West
DfT 1998: A New Deal for Transport: Better for Everyone: White Paper
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)

Local (South West) Context:
Regionally significant transport routes are the major transport routes connecting the major urban areas within the region and are the primary arteries for long distance intra-regional freight and passenger traffic. Therefore their upkeep and management is essential for the efficient functioning of movement of goods and people across the region. This must be balanced against the impact of traffic on the natural and built environment as well as the quality of life of communities along the route.

4/4 Authorities First Detailed Proposals
 Cornwall: Major schemes proposals to improve links between main towns and to improve the A30 'strategic spine road'.

SWRA: Transport Background Technical Report

- *Exeter:* investment in walking, cycling and public transport facilities on the Exeter-Exmouth Corridor. Transport links to other areas will need to be enhanced-such as fast and reliable train services and improvements to the A303 road corridor.
- *Gloucester and Cheltenham*: Highway improvements may include the Cheltenham North West Relief Road.
- *SE Dorset:* Delivering strategically significant transport corridor improvements such as A31 to Poole improvements and introducing new links to Bristol and other major centres in the South West. Poole Bridge Regeneration network is also a priority.
- *Taunton;* A programme of sustainable transport improvements between Taunton, Wellington and Bridgewater, based upon quality bus corridors and rail links between the towns.

	BB2SC (Strategic Report)	BB2SC (Bath Report)	Intra Regional Connectivity in the South West	A31 to Poole
Purpose of the study	To further investigate detrunking proposals for the A36/A46, identify and recommend a transport strategy for maintaining an appropriate level of service in the corridor in a multi modal approach.	To develop an integrated transportation strategy, to address the issues relating t0 through traffic in the corridor on the historic City of Bath	To develop a better understanding of the current intra-regional connectivity in the SW and the strengths of the links that exist between JSA's, to consider the transport implications of future economic change and the need of intra-regional connectivity to enable the growth to take place.	Aims to identify current transport problems and related issues and broadly identify alternative proposals to alleviate transport problems between the A31 and the Bournemouth/Poole PUA.
Who and When	WSP- February 2004	WSP-February 2004	Commissioned by the RDA and completed by DTZ Pieda Consulting, April 2005	Commissioned by Bournemouth Borough Council, Dorset County Council, and the Borough of Poole and completed by Buro Happold, October 2004.
How the findings link to the policy drafted	Provides an insight into one of the key regional routes. **Pg 7:** There are specific issues of service reliability due to the age of the rolling stock and the ageing of the signalling infrastructure. **Pg 19**: Encourage and influence travel by other modes.	Findings link in with the Strategic Report as the A46/A36 corridor passes through Bath. **Pg 7:** Bath is a UNESCO World Heritage Site, which has long term implications for conservation. Addressing the impacts of 'through traffic (noise pollution,	Will shed light on the strengths of transport links between JSA's. **Pg 2:** Unreliability of routes and journey times is a key concern on many intra and inter regional routes. **Pg 2:** There are economic concerns over the susceptibility of the M4/M5 to accidents and	**Pg 2:** Severance caused by general traffic and the HGV's has a severe impact on the local communities.

SWRA: Transport Background Technical Report

	Pg 19: The study acknowledges that measures must be promoted to combat the environmental damage caused by cars and HGV's within the study area in assisting with more sustainable transport solutions. **Pg 30:** The report's objectives were to develop a strategy to improve transport services in the corridor.	congestion), is something that has been highlighted by residents.	seasonal congestion, particularly given the lack of major alternative routes.	
Key issues and opportunities	**Pg 3**: Issues identified as relevant to the study were access to the SE Dorset conurbation, the impacts on the villages of Dorset, the upgrade and opportunity for enhanced use of the Salisbury/Bristol railway line focussing intermodal transfer, the A350 Bypass and improving safety between Codford and Heytesbury on the A36. **Pg 19:** Environmental damage caused by cars and HGV's is an issue in the study area. **Pg 26:** The route of the proposed A36/A46 link road has significantly large affects on the landscape, biodiversity and water environment	**Pg 7**; Bath is a UNESCO World Heritage Site. Measures put in place must take this into account to protect the built environment. **Pg 7:** There are many issues that need addressing, which have been highlighted from different sources (residents, the LTP, and the Council): congestion, parking availability, environmental issues and the scale of 'through traffic'.	The report is a chance to review inter and intra regional routes and their significance	Opportunity to review the A31 corridor and related issues. **Pg 2:** Severance caused by general traffic and the HGV's has a severe impact on the local communities. **Pg 3:** Environmental assets such as European environmental designations should be protected from transport infrastructure.
Delivery issues	**Pg 17**: The A46 corridor to the M4 is within the Cotswold AONB and the southern end of the A36 approaching Jct 2, M27 passes a RAMSAR site. Environmental designations also appear on the A350 route. This can present environmental constraints. **Pg 20**: Rail improvements will be	**Pg 7**; Bath is a UNESCO World Heritage Site. Measures put in place must take this into account to protect the built environment. **Pg 29**: Issues must be solved without the need for any	N/A	**Pg 8:** Recommended non road options can offer good value for money, but they do not solve the underlying transport problems in the corridor, namely severance. This justifies improvements to the highway network.

SWRA: Transport Background Technical Report

	dependent upon train franchises.	major infrastructure. **Pg 30:** Depending on which measure is adopted, some further work will be required to determine its costs and benefits. Issues in the meantime such as congestion can become more serious. **Pg 31:** The timing of when measures are delivered is crucial if they are to be successful.		
Key Decisions	**Pg 19**: Most road journeys will be taken by road therefore environmental impacts must be addressed. Measures will need to influence and encourage travel by other modes. **Pg 27:** Recommended the GOSW request that the A36/A46 is covered as a separate item under the Annual Progress Report. A lead authority should be nominated to manage the traffic model on behalf of the local authorities along the route-WCC is proposed. **Pg 31**: Further work is required to assess the environmental costs/benefits of a proposed A36/A46 link road. **Pg 26:** The route of the proposed A36/A46 link road will have significant environmental	**Pg 29;** Consideration of expanding the Park and Ride scheme, improvement on rail and bus services. **Section 5**: Some of the measures considered have been outlined. **Section 7**: Some of the recommendations are outlined to address the transport problems in the A36/A46 corridor local to Bath	**Pg 2:** Unreliability of routes and journey times is a key concern on many intra and inter regional routes.	Came up with 4 non road options and 11 highway options which are hoped will address the transport problems in the corridor.

SWRA: Transport Background Technical Report

	implications. These need to be balanced with the benefits likely to accrue from traffic reduction, and improvements in noise, vibration and air quality in Bath. Isn't this just shifting impacts from one area to another?		
Alternatives considered	**Pg 31**: Further work is required to assess the environmental costs/benefits of a proposed A36/A46 link road.	**Pg 17-19**: Park and Ride, Congestion Charging, HGV Ban, demand management **Pg 30:** Construction of a A36/46 link road **Section 5**: Some alternatives addressing the 'through traffic' are discussed: Park and Rides, congestion charging, HGV ban and a demand management package involving a mixture of measures.	**Pg 13**: There is a need to consider how to address the issue of unreliability on the regions road network-the answer could lie in traffic and demand management solutions. This can be adapted to existing routes.	**Pg 3:** Non Road options were considered: Rapid Transit, Park and Ride, Bus links only and Bus Service improvements.
Notes			

6.2.11 Policy TR11: Intra-regional Public Transport

Improved rail, bus and coach services will be sought to facilitate sustainable travel between settlements within the region. This will be achieved through the removal of infrastructure constraints; better quality trains and buses/coaches; enhanced station and interchange facilities, station parking and passenger information.

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
DfT Guidance on Second round of LTPs
RPG 10: Regional Planning Guidance for the South West

SWRA: Transport Background Technical Report

DfT 1998: A New Deal for Transport: Better for Everyone: White Paper
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)

Local (South West) Context:
Rail services play a vital role in linking the different parts of the large and diverse region. This includes cross-country routes, stopping services which link towns on the major rail corridors and rural branch lines. Rail patronage has been increasing steadily and the full growth potential of regional rail services has not been realised. Intra-regional coach and bus services also have a role to play on some corridors often in parallel with rail routes but serving different markets and communities. It is important that local authorities working with bus operators identify and strengthen interchange facilities to promote the use of more sustainable travel.

4/4 Authorities First Detailed Proposals
- *Cornwall*: investment in transport to reduce car dependency tailored across a range of settlements enhancing significantly the quality of public transport provision in the towns and in key corridors.
- *Exeter:* Particular priority being given to the development of improved public transport networks and services. The City's vision is to develop a high quality, innovative, public transport which meets the needs of the City and wider sub region. The City aims to improve public transport interchanges, such Exeter St Davids, Exeter Bus/Coach Stations and Hontion Road Interchange.
- *Gloucester and Cheltenham:* Provide an integrated transport hub at Elmbridge Court, which will include a new railway station, Gloucestershire Parkway and a P&R site. As many of the work destinations are dispersed throughout the central area it is proposed to link the development of P&R strategy with high quality bus services linking many major employment services.
- *Plymouth,* To deliver the Vision, it will be necessary to implement a series of integrated strategies, such as HQPT.
- *Taunton;* A programme of sustainable transport improvements between Taunton, Wellington and Bridgewater, based upon quality bus corridors and rail links between the towns.
- *Torbay:* is not linked by a dual carriageway, a pressing need for the Kingskerswell Bypass to improve links with the national road network.
- *West of England:* Key elements of the sub-region's transport requirements include a step change in the provision of accessible public transport., rapid transit network delivering an alternative to the private car,

	The Significance of Transport Availability and Cost in limiting access in Training and Jobs
Purpose of the study	The report presents an overview of the role of transportation in restricting access to employment and training, leading to recommendations for regional and national level spatial policies and transport options.
Who and When	Faber Maunsell, September 2005
How the findings link to the policy drafted	**Pg 7:** The core purpose of the report is to provide guidance and advice in establishing policies suitable to address barriers to people in accessible employment and training opportunities.

SWRA: Transport Background Technical Report

Key issues and opportunities	An opportunity to review national and regional policy and guidance in terms of accessibility, costs of transport and transport availability.
	Pg 119: Key issues in accessing jobs and training have been identified as: - Low expectations/aspirations and behavioural issues - Pockets of social deprivation - Uneven match of jobs and available skills - Low car ownership - Provision and availability of public transport - Dispersed employment and isolated communities
Delivery issues	**Pg 119:** Partnerships between organisations are required to impose solutions; this in part is a reflection of the diverse range of factors that limit access to jobs and training. In some case, partnerships may be difficult to establish and can break down in the process of implementing a solution.
Key Decisions	**Pg 119:** In most urban areas, regardless of their size, transport was ranked as the equal third most important barrier with car ownership viewed as the main attributable factor. In rural areas and remote rural areas, transport is ranked as the second most important barrier with provision and availability of public transport viewed as the main attributable factor.
Alternatives considered	**Pg 120**: Recommendations have been made for further work. This will happen in the form of a database of case studies which will focus on ongoing schemes cost, monitoring processes and problems encountered and their solution.
Notes	

6.2.12 Policy TR12: Regional Freight Map

The strategic network (national and regional routes) will be promoted for use by HGV vehicles rather than county routes. Local Authorities, through their LTPs will reflect the regional hierarchy of routes identified in the Regional Freight Map and give priority to strategic routes in determining allocations for road maintenance.

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
DfT Guidance on Second round of LTPs
RPG 10: Regional Planning Guidance for the South West
 DfT 1998: A New Deal for Transport: Better for Everyone: White Paper
DfT 2004 'The Future of Transport, a network for 2030' White Paper

SWRA: Transport Background Technical Report

DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)
South West Freight Strategy

Local (South West) Context:
The South West is not a major area for manufacturing and therefore much of the freight moved into and within the region is for distribution. Mineral extraction and agriculture both give rise to significant volumes of freight traffic. The desire is to ensure that large goods vehicles are using the most appropriate routes have given rise to the development of the Regional Freight Map.

	Regional Freight Map
Purpose of the study	Three main aims: Seeking to reduce impact of road freight on rural settlements, work with freight industry to set out routes for road freight to better focus activities and resources and develop a consistent nomenclature and hierarchy for freight routes across transport authority boundaries.
Who and When	Atkins-April 2006
How the findings link to the policy	The Freight Map will help LAs prepare their freight strategies for the LTPs. The Freight Map will encourage the better usage of routes and lay down the foundations of the identification of road freight routes in the South West.
Key issues and opportunities	An opportunity to bring some consistency in the region regarding road freight transportation. Nothing conclusive could be drawn from the data, which indicated a large majority of internal trips on all of the routes, i.e. on the Local, Regional and National freight routes.
Delivery issues	Designations are based on the existing HGV flows and do not take into account other issues, such as the surrounding environment of the road or height/weight restrictions that may be present on the routes or the Regional Spatial Strategy & Joint Study outcomes
Key Decisions	Anticipated outcome was that the majority of HGV traffic on Local routes would be internal traffic, with the majority of Regional and National routes carrying the external and through traffic.
Alternatives considered	N/A
Notes	

6.2.13 Policy TR13: Rail Freight Interchange Facilities
Sites for rail freight interchange facilities will be identified and safeguarded in LDDs for East Devon, and Plymouth and should be identified in Cornwall and other locations in the region, subject to viability.

SWRA: Transport Background Technical Report

Policy Context and Relevant Guidance
PPG 13: Transport
PPS11: Regional Spatial Strategies
DfT Guidance on Second round of LTPs
RPG 10: Regional Planning Guidance for the South West
 DfT 1998: A New Deal for Transport: Better for Everyone: White Paper
DfT 2004 'The Future of Transport, a network for 2030' White Paper
DfT 2004: The Future of Rail: White Paper
DfT Good Practice Guide on Preparing Regional Transport Strategies (Draft)

Local (South West) Context:
Past studies identified the scope for an additional freight interchange at Exeter and the need for more facilities in the far South West. The requirements of the far South West are likely to be met at Plymouth and in Cornwall which offers the best opportunities to consolidate loadings from the diverse economic spatial pattern. However, there is scope for the development of local facilities and local authorities preparing LDDs and LTPs should work with the haulage industry to identify and protect opportunities for local rail freight facilities.

	Regional Freight Map	**GWML RUS**
Purpose of the study	Three main aims: Seeking to reduce impact of freight on rural settlements, work with freight industry to set out routes for freight to better focus activities and resources and develop a consistent nomenclature and hierarchy for freight routes across transport authority boundaries.	The RUS presents solutions to the principal problems in the Great Western area. In particular it addresses the causes of poor punctuality and problems of overcrowding.
Who and When	Atkins-April 2006	Strategic Rail Authority, June 2005
How the findings link to the policy drafted	The Freight Map will help LA's prepare their freight strategies for the LTP's. The Freight Map will encourage the better usage of routes and lay down the foundations of the identification of rail freight routes in the South West.	**Pg 4:** Growth in freight traffic is forecast and potential competition for capacity between passenger and freight may develop **Pg 74:** A general aspiration for stakeholders is to increase the freight capacity, often by encouraging the provision of additional track or terminals. **Pg 76**: A small number of new freight terminals have been proposed at various locations. They are generally in the early stages of the planning approval process and the timing and extent of rail activity is currently uncertain.

SWRA: Transport Background Technical Report

Key issues and opportunities	An opportunity to bring some consistency in the region regarding rail freight transportation. Nothing conclusive could be drawn from the data, which indicated a large majority of internal trips on all of the routes, i.e. on the Local, Regional and National freight routes	**Pg 5:** The strategy assesses the extent to which freight growth can be accommodated on the existing network in the period up until 2012; **Pg 28**: Some constraints exist today when engineering access is required, with some diversionary routes unable to accept freight traffic and a number of stations having platforms on only two tracks in four-track sections.
Delivery issues	**Pg 8-16** the SWARMMS study examined the potential demand for inter-modal sites at Westbury, Taunton, Exeter, Plymouth and mid-Cornwall, and for a number of reasons, it was "deemed unlikely that the cost of developing an inter-modal freight terminal which can handle the full range of international freight requirements could be justified either as a commercial venture or on environmental grounds at any location to the South West of Bristol."	**Pg 28:** Some constraints exist today when engineering access is required, with some diversionary routes unable to accept freight traffic and a number of stations having platforms on only two tracks in four-track sections.
Key Decisions	Identified and mapped the key rail freight and what freight gauge each line can manage (W8 being the maximum that the region's lines can take)	**Pg 72:** It is likely that existing freight capacity will be largely taken up by the end of the RUS period either with or without W10 gauge enhancement. **Pg 76**: A small number of new freight terminals have been proposed at various locations. They are generally in the early stages of the planning approval process and the timing and extent of rail activity is currently uncertain.
Alternatives considered	N/A	**Chapter 2:** Contains discussions of improved capacity utilisation that have been identified and evaluated, but rejected or deferred.
Notes		

SWRA: Transport Background Technical Report

6.3 Transport Requirement for the Sub-Regional Strategies.

In recognition of the diversity of the South West, the Draft RSS contains 9 sub regional strategies which aim to focus development and solutions directly to issues. The sub regional strategies do not have hard boundaries based on administrative units of discrete issues but rather based on boundaries linked with functionality.

In Section 4 of the Draft RSS, the sub regional strategies are outlined along with key infrastructure requirements which include transport. The inclusion of this element in Section 4 is an underlying factor in explaining why the Draft RSS does not have an identifiable RTS. The tables below outline the transport requirement for each sub region along with the evidence base. There are some transport infrastructure requirements that have been suggested that do not have any justifications; work is currently underway to examine the feasibility.

Bristol

Transport Requirement	Study (s) and Justification
▪ Greater Bristol Bus Network/showcase bus routes along strategic corridors	▪ **Access West: Findings from the West of England Sustainable Mobility Project Pg 39:** the plans for the Greater Bristol Bus Network and the 'Bath Package' mark a welcome change of gear in terms of bus provision. Showcase bus routes in Bristol have increased patronage.
▪ Major Park and Ride improvements	▪ **Greater Bristol Strategic Transport Study Pg 5-4/5-5:** There is potential to expand and enhance the city P&R system, which can help take motorists off the road.
▪ Strategic rapid transit network (Hengrove/North Fringe, Ashton Vale/Emersons Green, Bath/Cribbs Causeway)	▪ **Greater Bristol Strategic Transport Study Pg 5-13:** The study has completed an assessment of a system involving four cross-Bristol rapid transit routes: Ashton Vale – Emersons Green; Hengrove – North Fringe/Cribbs Causeway; Bath – Cribbs Causeway; and Whitchurch – Avonmouth/Portishead. These routes do have a potential to reduce congestion and improve accessibility.
▪ Improvements to the roads in South Bristol, including the South Bristol Ring Road, improving access to the Airport and facilitating investment for regeneration of South Bristol	▪ **Access West: Findings from the West of England Sustainable Mobility Project Pg 46:** Focus short terms efforts on putting in place much more effective surface access routes to BIA ▪ **Greater Bristol Strategic Transport Study Pg 6-9-6-14:** The South Bristol Ring

SWRA: Transport Background Technical Report

	Road is considered as a positive scheme that can help regenerate South Bristol.
■ Selective additional strategic highway capacity to serve business investment and selective additional strategic links to motorways and other trunk route networks, including investigation of a new River Avon crossing and Bristol Parkway link	■ **Greater Bristol Strategic Transport Study Pg 6-48-6-54:** The Study considers a 2nd Avon Crossing in some detail which will improve public transport access to Portishead and Portbury Docks. ■ **Joint LTP 2006- 2011 Pg 6**: Selective highway enhancements will be submitted in the future as major schemes. These are essential for lying the foundations down for public transport and future development.
■ Improvements to the Greater Bristol Rail Network, such as additional turn-around facilities and platform capacity to allow increases in cross Bristol local services.	■ **Greater Bristol Strategic Transport Study Pg 5-1:** At present there is an acute shortage of capacity on the rail network, especially through the principal rail stations in the study area;
■ Additional land near Bristol Port may be required to ensure that it meets the changing needs of the industry	■ **Strategic Greenbelt Review Para 5.3.4** An area between Gordano and Portishead had not been included in the green belt because of its potential value for developing Bristol Port.

Bath

Transport Requirement	Study (s) and Justification
■ Bath Public transport package including longer term Rapid Transit measures	■ **Greater Bristol Strategic Transport Study Pg 5-34:** An implementation programme for the public transport schemes has been developed and this includes the Bath Package, including new P&R sites and rapid transit Measures in the short term.

Weston-super-Mare

Transport Requirement	Study (s) and Justification
■ Weston-super-Mare package including improvements to motorway junction	■ **Joint LTP 2006-2011 Pg 217:** The package will enable sustainable development to take place and encourage people to live and work in the town.
■ Significantly enhanced interchange facilities	■ **Greater Bristol Strategic Transport Study Pg 5-7** there is the potential for increased public transport activity at Worle rail station with the creation of a major multi-modal interchange including significant park and ride facilities.

SWRA: Transport Background Technical Report

Swindon

Transport Requirement	Study (s) and Justification
Increasing demand management	**Swindon JSA Transport Assessment Pg 11:** Including demand management in the Final Strategy provides the incentive to users to adopt more sustainable patterns of travel
Swindon integrated transport package	**Swindon LTP 2006/11 Pg 107:** The JSA Transport Assessment concluded that in order to accommodate the new trips made very day, there would need to be investment in high quality mass transit corridors, provision of facilities for walking and cycling and travel plans.
North Swindon Strategy (Great Western Way to Purton Road Link Corridor)	**Swindon LTP 2006/11 Pg 124:** The North Swindon Transport Strategy would make best use of existing transport infrastructure to provide the optimum level of service for all users, promote travel choice and increase opportunities for cycling; walking and public transport and develop orbital and other route networks that acknowledge the complex journey patterns.
Swindon wide corridor and junction improvements (including urban traffic control systems)	**Swindon JSA Transport Assessment Pg 3:** the Final Strategy has been formulated on the 4 principles embodied in the LTP such as working on key highway links and junctions to enable transport corridors to function. **Swindon JSA Transport Assessment Pg 5:** Area wide improvements include implementation of signal controlled junction schemes at M4 Jct 15 and 16.

Gloucester and Cheltenham

Transport Requirement	Study (s) and Justification
Gloucestershire Parkway Station (supported by and subject to an impact assessment)	**Gloucestershire LTP 2006/11 Pg 154:** the Major Scheme (Integrated Transport at Elmbridge Court) will reduce congestion, improve accessibility to the national rail network, improve access to Gloucester for rural communities, and encourage a modal shift.
Improvements to the A40 to the north of Gloucester and between Gloucester and Cheltenham and key intersections	**Background Paper on Transport Modelling for the C&C JSA Pg 19:** The following transport intervention are likely to be necessary: major capacity increases added to all junctions on the A40 form Highnam to the M5, A40 from Longford to Over converted to dual carriage way and a new connection added from the A40 to Walham.
Increased demand management and integrated transport package	**Gloucestershire LTP 2006/11 Pg 11:** In Gloucester and Cheltenham, there is a need for demand management, which will be achieved through the price of parking, expansion of areas covered by on-street charges, and the balance between short and long stay spaces.
Park and Ride Sites	**Gloucestershire LTP 2006/11 Pg 118:** Park and Ride services and sites for Gloucester

SWRA: Transport Background Technical Report

	and Cheltenham is a key and existing part of the proposed strategy.
	▪ **Background Paper on Transport Modelling for the C&C JSA Pg 10:** P&R has been a success story with 50% increase in ridership-clearly more potential to expand sites.

Exeter and Newton Abbot

Transport Requirements	Study (s) and Justification
▪ A major step change in public transport with enhanced quality, frequency and capacity, through significant new investment in innovative public transport systems and high quality public transport links between Exeter and the New Community	▪ **Exeter Area Sub Regional Study-Transport Issues Pg 2:** High quality public transport links will be required between the existing urban area and the new community
▪ Progressive implementation of bus priority measures	▪ **Devon LTP 2006-2011 pg 46:** Outlines the key elements of the bus strategy such as working towards a step change, maintain and develop P&R sites, and implementing bus priority measures on key corridors.
▪ Intelligent transport measures	▪ **Devon LTP 2006-2011 Pg 155:** The Exeter Sub Regional Strategy seeks to improve journey time reliability through key improvements and ITS.
▪ Demand Management, including parking management and allocation of road space	▪ **Devon Structure Plan 2001-2016 Pg 84:** Parking strategies should be developed for each of Devon's Principal Urban Areas, Sub Regional Centres and Area Centres.
▪ Improved railway stations and additional train capacity on the local rail network	▪ **Exeter Area Sub Regional Study-Transport Issues Pg 2:** the new community will be supported by infrastructure improvements such as improvements to the Exeter-Waterloo rail line and services.
▪ Additional Park and Ride sites to the west and north of the city	▪ **Devon LTP 2006-201 Pg 151:** It is important to maintain and improve standards at existing P&R sites as well as seek to provide comparable facilities to the west and north of the city.
▪ Improved public transport interchanges, notably Exeter St David's and Exeter Central stations, Exeter Bus/Coach Station and Honiton Road Interchange	▪ **Devon LTP 2006-2011Pg 151:** Development of interchange facilities at Exeter St Davids, Exeter Central and Digby and Sowton stations in conjunction with the rail industry is in progress.
▪ Intermodal freight terminal	▪ **Devon Structure Plan 2001-2016 Pg 98:** The provision of a multi-modal freight facility in the Exeter area will support the economic development of that part of Devon and encourage the use of the rail network for the movement of freight.
▪ Improvements to key junctions on the City's distributor road network (Exeter ring road and Alphington Corridor)	▪ **Devon LTP 2006-2011 Pg 83:** Proposals to reduce congestion and improve traffic flow out bound on Alphington Road have been developed as part of the Exeter PUA major scheme package. ▪ **Devon LTP 2006-2011 Pg 164:** The Exeter PUA Infrastructure Scheme aims to provide 2 outbound lanes over the River Exe on the Exeter Ring Road to reduce delays and congestion.

SWRA: Transport Background Technical Report

Transport Requirements	Study (s) and Justification
■ Provision of a new railway station on the Waterloo to Exeter railway	■ **Devon LTP 2006-2011 Pg 238:** The expansion of Exeter includes the provision of a new railway station on the Exeter-Waterloo line, which will be crucial as part of the access strategy for the new community.
■ Strategic road infrastructure including Monkerton Link Road, Clyst Honiton Bypass and improvements in the vicinity of M5 junctions 29 and 30	■ **Exeter Area Sub Regional Study-Transport Issues: Pg 2:** Infrastructure required to support development in the east include the Clyst Honiton bypass and planned infrastructure improvements to the A30/M5.
■ Increased capacity at Exeter International Airport and quality of terminal facilities	■ **Development of an Air Transport Strategy for the Far South West Pg 7:** Exeter Airport submitted an application to replace the existing terminal with new facilities-in order to cope with increasing passenger numbers.
■ Improved airport apron capacity and taxiways	■ **Development of an Air Transport Strategy for the Far South West Pg 7:** Apron areas, car parking and support facilities would be phased in line with demand.
■ Improved public transport access for the airport by direct bus services and shuttles from railway stations	■ **Devon Structure Plan 2001-2016 Pg 97:** Exeter Airport requires a high level of accessibility, particularly from the strategic transport network and by public transport. Policy TR14 states that this will come from improved surface access links by road and rail.
■ Transport links from Newton Abbot to Torbay are enhanced	■ **Devon LTP 2006-2011 Pg 197:** The Newton Abbot Area Strategy will aim to improve strategic access to Torbay, supporting economic regeneration and tourism.
■ Provision should be made in Newton Abbot for enhanced public transport interchange facilities together with park and change facilities.	■ **Devon LTP 2006-2011 Pg 202 & 220:** Investment will include the creation of a high quality interchange in the town centre.

Taunton and Bridgewater

Transport Requirements	Study (s) and Justification
■ On going investment in walking and cycling networks linking key areas of employment, education and other key facilities with housing	■ **Taunton Transport Strategy Review, Baseline Review of Transport Conditions Pg 83:** much of the existing cycle network is a little disjointed and the lack of continuity needs to be addressed by linking existing sections of the network. ■ **Taunton Transport Strategy Review, Baseline Review of Transport Conditions Pg 110:** Generally there are no crossings over major roads- which are a concern for people's safety.
■ Progressive implementation of bus priority measures, particularly along the A38 public transport corridor and Bridgewater, Taunton and Wellington	■ **Taunton Transport Strategy Review, Baseline Review of Transport Conditions Pg 78:** Bus Priority can lead to considerable improvements in journey time, with consequential reduction in operating costs.
■ Specific road improvements	■ **Somerset LTP 2006-2011:** Various improvements to the county's main road network are proposed throughout the LTP.
■ Implementation of the 'Third Way' and Northern Inner Distribution Road, to deliver town centre regeneration sites	■ **Somerset LTP 2006-2011 Pg 232-239:** The schemes will help regenerate the town centre and open up employment sites, as well as supporting new leisure, cultural and retail facilities.

SWRA: Transport Background Technical Report

South East Dorset

Transport Requirements	Study (s) and Justification
Investment in public transport, walking and cycling provision	**SE Dorset LTP 2006-2011 Pg 50:** Providing an alternative to the private car is an essential part of the congestion strategy. The bus network is most likely to provide the main alternative to local journeys. **SE Dorset LTP 2006-2011 Pg 52:** There is potential to develop and enhance cycling and walking networks in the sub region.
Increased demand management by transferring more road space to priority vehicles and managing the supply and use of parking	**Bournemouth, Dorset and Poole Structure Plan 2001 Pg 84**: The availability of car parking has a major influence on modal choice to the extent that its availability can be more significant than the level of public transport provision.
Prime transport corridor improvements	**SE Dorset LTP 2006-2011 Pg 20:** This concept combines the Spatial Strategy with the delivery programme of transport schemes so that land use and transport strategies are fully integrated. PTC's will encourage development and contain a number of road links. **SE Dorset Strategy SED 08 Transportation Pg 22:** The initiatives on PTC's will manage congestion, provide more reliable journey times for people and goods, improve accessibility and act as a focus for denser development.
Poole Bridge regeneration network	**SE Dorset Strategy SED 08 Transportation Pg 30:** The scheme will regenerate the Hamworthy and Poole area, creating new homes and jobs.
A31 to Poole corridor improvements	**A31 to Poole Corridor Scoping Study Pg 3**: Rapid Transit, P&R, Bus Only Links and Bus Service Improvements were considered as improvements in the study.
Provision of new passenger terminal at Bournemouth Airport and package of measures to improve access, including a link road to the A338	**A31 to Poole Corridor Scoping Study Pg 4:** Existing public transport services to the Airport are minimal. The A338 Spur road, plus new access to the Airport site offers a suitable corridor for some form of segregated rapid transit. **SE Dorset Strategy SED 08 Transportation Pg 11:** Bournemouth Airport has planning permission for anew terminal, to provide increased passenger capacity in line with the Government White Paper.
Port of Poole deeper access channel and berth improvements (subject to further work)	**SE Dorset Strategy SED 08 Transportation Pg 12:** The main access channel to the Port of Poole is to be dredged to 7 metres to keep the cross-channel ferry business viable.
Provision of new local rail passenger services and stations, including Swanage connection and use for a local Park and Ride	**SE Dorset LTP 2006-2011 Pg 25:** The rail improvements for the period to 2026 comprise if several elements including a reconnection to Swanage. **SE Dorset Strategy SED 08 Transportation Pg 13:** A new interchange and passenger facilities at Poole station is expected.
Improvements to rail links to other major centres in the South West	**SE Dorset LTP 2006-2011 Pg 48:** The rail services are substantially geared towards

	the needs of London-based passengers, which can lead to a reduction in local services and to other conurbations.
◼ Improved accessibility by public transport, cycling, and walking to significant areas of country side recreation.	◼ **SE Dorset LTP 2006-2011 Pg 50:** Providing an alternative to the private car is an essential part of the congestion strategy. The bus network is most likely to provide the main alternative to local journeys. ◼ **SE Dorset LTP 2006-2011 Pg 52:** There is potential to develop and enhance cycling and walking networks in the sub region. ◼ **Bournemouth, Dorset and Poole Structure Plan 2001Pg 82:** To maximise the use of public transport, cycling and walking, new major development should be encouraged where a choice of travel modes is available.

Plymouth

Transport Requirements	Study (s) and Justification
◼ Provision of a High Quality Public Transport (HQPT) link between the Sherford New Community and Plymouth City Centre along an Eastern Corridor	◼ **Plymouth Eastern Corridor Study Pg 31 :**The recommended package consists of Bus Rapid Transit (BRT) service operating from the Deep Lane Park and Ride site, through the Sherford New Community, and along segregated bus route to the Plymstock Quarry development ◼ **Plymouth Eastern Corridor Study Pg 34** The site (Park and Ride) will also represent the initial terminus for the high quality public transport service in the eastern corridor.
◼ Improvements to junctions along transport corridors between the new community at Sherford and the City Centre, provision of a transport interchange, (including Strategic P&R facilities) accessible to the proposed HQPT link and road based public transport networks	◼ **Plymouth Eastern Corridor Study Pg 34** The potential for a Park and Ride site at Deep Lane on the A38 has been identified as core requirement in association with the Sherford development. ◼ **Plymouth Eastern Corridor Study Pg 70:** Additional bus priority is recommended on the A379 on the approach to key junctions, including bus gate at the approaches to Laira Bridge.
◼ Upgrading to a HPQT link along the Northern Corridor into the City Centre	◼ **Plymouth Area Transport Strategy Pg 22:** A new interchange on the northern corridor will complement existing park and ride services.
◼ Improvements to links to the Sherford New Community to the A379	◼ **Plymouth Eastern Corridor Study Pg 70:**The transport package would also include a fully segregated bus way along the disused rail line north of the A379 to Plymstock

SWRA: Transport Background Technical Report

	Quarry and then operating on carriageway with enhanced bus priority from Laira Bridge to the city centre.
▪ Provision of a new boulevard link between Millbay and the City Centre and HQPT extension through the City Centre to Millbay and Devonport	▪ Further work is underway on the feasibility of the requirement
▪ Improved links between City and Saltash/Torpoint and along the waterfront including ferry, bridge tolling, water transport and public transport links (with Park and Ride provision)	▪ Further work is underway on the feasibility of the requirement
▪ Improvements to Plymouth Airport including runway extension, new terminal facilities and surface access	▪ **Devon Structure Plan 2001-2016 Pg 97:** Tr14 seeks to improve surface access links to the major road and rail links at Plymouth. ▪ **Devon Structure Plan 2001-2016 Pg 102:** Tr17 proposes a runway extension at Plymouth.
▪ Provision of road/rail freight interchange at Tavistock junction	▪ **Plymouth Area Transport Strategy Pg 16**: There is potential to achieve a modal shift from road to rail freight. One way of doing this is to provide interchange facilities to transfer freight: a site at Tavistock junction has been identified as a suitable one.
▪ Creation of sea freight/cruise liner facilities and rationalisation of land uses	▪ **Plymouth Area Transport Strategy Pg 19**: It is possible to expand the use of water links for commuting and to cater for tourists.

Torbay

Transport Requirements	Study (s) and Justification
▪ On going investment in walking and cycling networks, linking key areas of employment, education and other key facilities with housing	▪ **Torbay LTP 2006-2011 Pg 132:** By promoting walking in Torbay, it will increase sustainable travel, reduce congestion and improve health of those living and working in the Bay. ▪ **Torbay LTP 2006-2011 Pg 133:** In 2003, the ERCDT highlighted the failings in terms of provision and promotion of cycling in the bay.
▪ Progressive implementation of bus priority measures and improving bus services, in context of the existing Torbay Quality Bus Partnership	▪ **Torbay LTP 2006-2011 Pg 91:** There is a continuing need to improve bus and make them easier to use. Measures will be included in the proposed Quality Partnership Agreement.
▪ Improving rail facilities and capacity	▪ **Torbay LTP 2006-2011 Pg 23:** Torbay suffers from a declining rail pattern.
▪ Improvements to the Torbay/Newton Abbot corridor-public transport, rail and road	▪ **Torbay LTP 2006-2011 Pg 23:** Poor external bus links to Exeter, Totnes and beyond.

SWRA: Transport Background Technical Report

Cornwall and Isles of Scilly

Transport Requirements	Study (s) and Justification
◼ Integrated land use and transport strategies for Camborne-Pool-Redruth; Truro and Falmouth-Penryn	◼ **Cornwall LTP 2006/11 Pg 102:** Integrated Transport Strategies are proposed for the 7 main urban areas. Each Strategy is designed to closely link and support the spatial planning requirement set out through the LDFs.
◼ On going investment in walking and cycling networks linking key areas of employment, education and other facilities with housing	◼ **Cornwall LTP 2006/11 Pg 10-115:** Each Integrated Transport Strategy includes public transport, walking, and cycling measures, which have been planned in conjunction with land uses.
◼ An integrated public transport system linking the main towns and based on a strategic network of public transport routes comprising the rail network, core bus corridors and waterborne transport	◼ **Cornwall LTP 2006/11 Pg 10-115:** Each Integrated Transport Strategy includes public transport, walking, and cycling measures, which have been planned in conjunction with land uses. Each Strategy also considers links with surrounding urban areas.
◼ Improved railway stations and additional train capacity on the local rail network	◼ **Cornwall LTP 2006/11 Pg 80:** It is important that the rail network in Cornwall is utilised to it maximum potential, with enhanced levels and quality of service where appropriate.
◼ Improvements at key ports and Newquay airport to improve links beyond the County	◼ **Development of an Air Transport Strategy for the Far South West Pg 8:** The airport have identified the long term need to grow the facilities to cater for the forecast passenger numbers-the current terminal site should be extended
◼ Improvements to the A30 'strategic spine road' through Cornwall	◼ **London to South West and South Wales Multi Modal Study Pg 13:** Seasonal congestion on the A30 can create problems for the local economy. ◼ **London to South West and South Wale Multi Modal Study Pg 28:** Single carriage sections of the A30 experience significantly higher accident rates than the dual carriage way sections. Several communities along the A30 suffer from severance and noise.
◼ Isle of Scilly sea link	◼ **Cornwall LTP 2006/11 Pg 226:** In December 2002, a study commissioned by the Isles of Scilly Council identified the need for measures to be implemented to maintain the sea links between Cornwall and the Isles of Scilly in order to sustain the economic well being of the islands.

Barnstaple and Bideford

Transport Requirements	Study (s) and Justifications
◼ Maintaining the capacity and effectiveness of the North Devon Link Road	◼ Further work is underway on the feasibility of the requirement
◼ Enhancement of rail services and facilities on the Barnstaple branch line	◼ **Devon Structure Plan 2001-2016 Pg 102:** Tr17 proposes to provide improvements to the track and in signalling to increase capacity on the Exeter-Barnstaple branch line.

SWRA: Transport Background Technical Report

▪ Improved bus/rail interchange facilities at Barnstaple and enhanced Park and Ride capacity	▪ **Devon LTP 2006-2011 Pg 186:** An improved interchange at Barnstaple rail station will allow all buses crossing the Longbridge to call at the station which currently only has an hourly service. ▪ **Devon LTP 2006-2011 Pg 182:** P&R sites will offer alternatives to drivers, especially at peak times and in the summer.
▪ Opportunities to create a ferry link to South Wales should be explored	▪ Further work is underway on the feasibility of the requirement

SECTION 7: IMPLEMENTATION

7.1 Introduction

The Draft RSS provides the strategy and policies by which change should be managed, and growth in the region appropriately accommodated, and seeks to pull together and integrate the spatial requirements of other regional strategies. Ensuring that the RSS is translated into action requires considerable co-ordination and a targeted focus, which is provided by a Draft Implementation Plan as a single point of reference.

This section sets out the draft framework within which the transport policies of the Draft RSS and their effectiveness and delivery are monitored in the Implementation Plan, which was submitted along with the Draft RSS. The Plan has three main functions:

- summarises key actions;
- lists its measurable or desirable outcomes and targets; and
- provides key information on delivery including the lead organisation; other key partners in delivery; delivery mechanisms; timescales for delivery (where appropriate).

Following final publication of the RSS and annual review of the Implementation Plan, the Tables will also:

- provide an indicative summary of how effective the policies have been to date drawing data from monitoring;
- summarise the implications of this effectiveness and introduce measures, where necessary, to stimulate action where it is not being delivered; and
- provides an indication of key barriers to delivery (for sub-regional policies only).

7.2 Transport and Implementation

Section 5 of the Draft RSS provides a core set of strategic transport policies and provides the framework for the preparation of LTPs and transport

SWRA: Transport Background Technical Report

elements of LDDs. It emphasises the need for transport to be planned for in an integrated way, and spatially in relation to places and for improvements to the road and rail networks to be managed to bring about better connectivity, reliability and resilience. Policies TR1 to TR13 of the Draft RSS seek to achieve this addressing: transport and the SSCTs; provision of reliable connections to the UK, European and International Markets; ports and airports; regional connectivity – facilitating reliable movements of people, goods and services within the region; and freight transport.

Each of the following tables represents one policy in Section 5. Information included in the tables are key actions, a list of desirable/measurable outcomes and the tables provides key information on delivery including the lead organisation, other key partners in delivery, delivery mechanisms and timescales for delivery.

N.B these are not the final tables and will be completed on an annual review of the Implementation Plan following final publication of the Final RSS.

TR1 Demand Management and Public Transport in the SSCTs			
Summary/Key Actions (s)	Demand Management to be introduced in the SSCTs accompanied by a 'step change' in provision transport	**Other Key Partners in Delivery**	**Public Transport Operators**
Desirable/Measurable Outcomes	Network Performance: Meeting network performance standards, reduce the rate of growth in car traffic, increasing public transport provision and use Making the SSCTs attractive places to live and work: maintain and improve reliability of journey times, reduce accident levels, especially in areas of social regeneration, reduce pollution 'hotspots' within the urban network, and improve air quality Facilitating development: facilitating	**Delivery Mechanism/ Implementation Framework/Strategy**	**LTPs, TIF, Investment Plans of Operators, Quality Bus Partnerships**
		Timescales for Delivery/Targets	**Ongoing linked to LTP Annual Progress/Delivery Reports and Partnership Agreements**

SWRA: Transport Background Technical Report

	future development without increasing the use of the Strategic (Trunk) Network for local trips		

TR2 The M4 and M5			
Summary/Key Action(s)	Maintenance of the reliability of journey times on the motorways Complimentary package of measures to be introduced to manage demand	**Lead Organisation(s)**	HA
		Other Key Partners in Delivery	LAs
Desirable/Measurable Outcomes	Reduce the rate of growth of traffic on strategic road routes Improve journey time reliability on the strategic road connections between the South West main urban areas and London/South East/ Birmingham through selective investment (where appropriate) Protect the integrity of existing regional transport links and strategic links into and out of the region in the context of climate change Achieve a reduction in disruption caused by road closure due to accidents/incidents Reduce accidents, particularly on the strategic road network Reduce pollution "hot spots" on the	**Delivery Mechanism/ Implementation Framework/Strategy**	TPI
		Timescales for Delivery/Targets	TPI

SWRA: Transport Background Technical Report

	strategic road network Reduce noise levels on the strategic transport network Improve the resilience of the strategic road network through investment in the second strategic route from the South East to South West (A303/ A358 improvements		

TR3   Second Strategic Route

Summary/Key Action(s)	Achieve second strategic route, improving resilience of inter-regional network	Lead Organisation(s)	HA
		Other Key Partners in Delivery	LAs
Desirable/Measurable Outcomes		Delivery Mechanism/ Implementation Framework/Strategy	TPI
		Timescales for Delivery/Targets	TPI

TR4   Remainder of the Trunk Road Network

Summary/Key Action(s)	Identifies measures which should be used to manage trunk road network	Lead Organisation(s)	HA
		Other Key Partners in Delivery	SAs, LAs
Desirable/Measurable Outcomes		Delivery Mechanism/ Implementation Framework/Strategy	TPI, LTPs
		Timescales for Delivery/Targets	On going

SWRA: Transport Background Technical Report

TR5 Inter-regional Rail Network			
Summary/Key Action(s)	Identifies criteria required to enable provision of reliable train services with enhanced capacity	**Lead Organisation(s)**	DfT Rail, Network Rail
		Other Key Partners in Delivery	TOCs, SAs, LAs
Desirable/Measurable Outcomes	Reduce noise levels on the strategic transport network Improve journey time reliability on the strategic rail connections between the South West main urban areas and London/South East/Birmingham through selective investment (where appropriate) Increase capacity to reduce overcrowding on the rail network. Meeting future demand for travel on the rail network to achieve more sustainable travel to relieve the congested M4 Improved connections to Heathrow Airport from the west through a direct rail connection from the GWML Improved service quality on the rail network including safer and attractive stations and improved interchange facilities and services including car parking capacity	**Delivery Mechanism/ Implementation Framework/Strategy**	Route Utilisation Strategies, Franchise Agreements, Network Rail Discretionary Fund, Franchise Agreements, LTPs
		Timescales for Delivery/Targets	On going

TR6 Inter-Regional Bus and Coach Network			
Summary/Key Action(s)	Identifies requirements for LDDs and LTPs to provide for enhancement of long distance bus and coach services	**Lead Organisation(s)**	Bus Companies, public transport providers, LAs
		Other Key Partners in Delivery	SAs, LTAs

SWRA: Transport Background Technical Report

	and interchange infrastructure		
Desirable/Measurable Outcomes	To improve bus and coach services	**Delivery Mechanism/ Implementation Framework/Strategy**	LDDs, LTPs
		Timescales for Delivery/Targets	On going

TR7 Ports			
TR8 Bristol Port			
Summary/Key Action(s)	Identifies the criteria required for support of development and change at ports	**Lead Organisation(s)**	Ports
		Other Key Partners in Delivery	SAs, LAs, HA, Rail organisations
Desirable/Measurable Outcomes	To support the role of port development	**Delivery Mechanism/ Implementation Framework/Strategy**	Port Investment Plans, LTPs, LDDs, TPI
		Timescales for Delivery/Targets	On going

TR9 Airports			
Summary/Key Action(s)	Identifies the role of airports in the region	**Lead Organisation(s)**	Airport Operators
		Other Key Partners in Delivery	LAs, SW RDA, Private Interests
Desirable/Measurable Outcomes	Reducing "leakage" to other regions	**Delivery Mechanism/ Implementation Framework/Strategy**	Airport Development Plans/ Masterplans LDDs RES
		Timescales for Delivery/Targets	On going

TR10 Regional Connectivity			
Summary/Key Action(s)	Identifies the corridor management approach to improve regional connectivity	**Lead Organisation(s)**	SAs, LAs
		Other Key Partners in Delivery	Rail organisations, Public Transport Operators, Haulage Industry

SWRA: Transport Background Technical Report

Desirable/Measurable outcomes	Improving the reliability of journey times, resilience of the network and improvement of connectivity Reduction of longer distance commuting by car Reduction of accidents on the road network Reduction of air pollution "hot spots" on the network	Delivery Mechanism/ Implementation Framework/Strategy	LTPs, LDDs, Franchise Agreements, Investment Plans
		Timescales for delivery/targets	On going

TR11 Intra-Regional Public Transport			
Summary/Key Action(s)	Identifies the need for improved intra-regional public transport and actions required to help achieve this	Lead Organisation(s)	SAs LAs
		Other Key Partners in Delivery	Rail organisations Public Transport Operators
Desirable/Measurable Outcomes	Increased use of public transport between urban areas More sustainable travel	Delivery Mechanism/ Implementation Framework/strategy	LTPs LDDs Franchise Agreements Investment Plans
		Timescales for Delivery/Targets	On going

TR12 Regional Freight Map			
Summary/Key Action(s)	Regional Freight Map used to promote use of strategic network for use of HGV's LAs to utilise Regional Freight Map through LTPs	Lead Organisation(s)	HA, SAs, LAs
		Other Key Partners in Delivery	Freight Transport Association, Road Haulage Associations
Desirable/Measurable Outcomes	Increasing proportion of HGV traffic utilising the national/regional routes	Delivery Mechanism/	TPIs, LTPs

	identified on the Regional Freight Map	Implementation Framework/Strategy	
		Timescales for Delivery/Targets	On going

TR13 Rail Freight Interchange Facilities			
Summary/Key Action(s)	Specifies the LDDs which should identify and safeguard sites for rail freight interchange facilities	**Lead Organisation(s)**	SAs, LAs, Private Sector Investment, Rail organisations
		Other Key Partners in Delivery	Private investment
Desirable/Measurable Outcomes	More freight moved by rail	**Delivery Mechanism/ Implementation Framework/Strategy**	LDDs (to safeguard land)
		Timescales for Delivery/Targets	On going

7.3 Implementation and Monitoring

The Draft Implementation Plan does not provide detail on which indicators will be used to monitor the policies and outcomes of the Draft RSS. An audit of data and indicators will be undertaken to clearly identify gaps of data in monitoring outcomes, policies and principles. This work has already begun and will be completed during 2006. As a result, this will provide a full picture of how the RSS, including Section 5 and the transport elements will be monitored as part of the Implementation plan. This is covered in the next section of the report.

7.4 Regional Funding Allocation and Transport

7.4.1 Background

The Government announced in July 2005 that it would be asking regions to submit advice base on shared priorities for regional transport, housing and economic development. This would enhance regional input into Government policy development, showing how such priorities relate to each other to form a coherent, credible and strategic vision for improving the economic performance of regions; and how these priorities are aligned to resources. This process is called the Regional Funding Allocations (RFA).

The rationale for inviting regions to give advice on policy development and public spending decisions based on realistic funding assumptions for transport, housing and economic development is clear. Firstly, housing, transport and economic development often entail investment for a number of years and require sensible planning so that the right resources focus on the right development at the right time. Secondly, decisions on economic development, transport and housing are inter-related and inter-dependent and decisions taken in one of these areas have an impact on the others. Thirdly, projects or other kinds of strategic interventions in these areas tend to have impacts that cross over local authority boundaries, but are often not nationally significant.

RFAs were announced for the three years up to and including 2007/8 to help improve the integration of decision making together with indicative longer term planning assumptions for regional allocations beyond the three current year spending review to 2015/16. For the current RFA, advice had to be submitted by the end of January 2006.

7.4.2 Regional Transport Priorities

The South West's regional priorities for transport for 2005/6 are outlined below:

The priorities for investment of the Transport RFA funding are:
- Promoting more sustainable patterns of transport
- supporting development and economic activity in the strategically significant towns and cities through improved public transport, demand management, and selectively providing for new roads
- improving the reliability and resilience of inter and intra-regional connectivity through a second strategic road route into the region from London (along the A303/A358), on regionally significant transport corridors and on other transport corridors
- tackling access to jobs and delivery of services in rural areas
- delivering against DFT/ Regional "shared priorities".

These are in line with the main transport policies in the Draft RSS, such as TR2, 3 and 4 seek to improve the reliability and resilience of the regional road network hence improving intra and regional connectivity.

7.4.3 The South West RFA Process and its Relation to Transport

The RFA for transport focuses on major capital projects over £5 million. It does not cover roads of strategic national importance, or at present rail investment, important as these are. Nor does it cover smaller scale schemes, i.e. under £5m, funded through the Integrated Transport Block (ITB) for local authorities and by the Highways Agency or schemes funded by developer contributions or maintenance. So a good range of the region's priorities, for example, reducing the need to travel, improving public transport or encouraging smarter choices in transport lie outside the RFA. The region's strategy for delivering more sustainable patterns of transport will draw in a large part on the Draft RSS, aimed at reducing the trends of long distance

commuting, providing a framework for better planning for transport at a local level, encouraging smarter choices including public transport and increasingly for demand management. Likewise strategies for improving access to jobs and services, particularly in deprived neighbourhoods and in rural areas largely depend on flexible provision and small scale schemes, requiring relatively limited capital investment often depending on revenue support. The RFA advice therefore aims to address the relative shortfall in capital investment in regional transport infrastructure over the past decade and more, based on evidence that this is a critical ingredient in improving the sustainable economic development of the South West.

Against this background the region developed a methodology for prioritising transport investment in the South West which takes account of:

- Contributions to growth priorities in the RSS
- Contributions to connectivity
- Benefits for DfT/shared priorities including environmental impact
- Value for money
- Deliverability
- Affordability
- Potential for developer contribution

The RFA advice is in tabular form, which is included on the following page:

- *Table 1* - Schemes where the region has concluded that there is a strong case for inclusion within an RFA programme to 2016

- *Table 2A* - Schemes which require further work and/or that require further analysis in relation to profiling of the programme and that could potentially be added to the RFA programme (subject to environmental impact, affordability, deliverability and statutory procedures).

- *Table 2B* - Schemes which require further work and/or that require further analysis in relation to profiling of the programme and that could potentially be added to the RFA programme (subject to environmental impact, affordability, deliverability and statutory procedures).

- *Table 3*- Schemes which may well prove to be longer term priorities for the region, but which at present either are under developed or not sufficiently focussed on top level priorities to be included in the proposed RFA programme to 2016.

In June/July 2006, DfT responded to the advice which had been submitted. The Response can be found at on the DfT Website. The Greater Bristol Bus Network and the Taunton Scheme were approved for the Programme.

SWRA: Transport Background Technical Report

Table 1 - Schemes where the region has concluded that there is a strong case for inclusion within an RFA programme to 2016

Schemes already in progress or firmly planned	Scheme Sponsor	Current Estimated spend						
		2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13 - 2015/16
North West Taunton Package	Somerset CC	0.5						
Gloucester South West Bypass	Gloucestershire CC	1.2						
A419 Commonhead Junction	Highways Agency	9.6	0.3					
Northern Corridor [mixed] (Plymouth)	Plymouth CC	1.3	0.3					
A30/A382 Merrymeet Junction	Highways Agency	6	0.5					
A30 Bodmin Indian Queens	Highways Agency	44.1	17.0					
Barnstable Western Bypass	Devon CC	5.7	0.2	0.4				
A38 Dobwalls Bypass	Highways Agency	9	17.6	5.1	0.0			
A419 Blunsdon Bypass	Highways Agency	0.5	42.6	14.4	0.0			
Contribution to Regional Infrastructure Fund [1]				10	10		5	5
Contribution to Small Scale Schemes Fund				10	10		10	10
Contribution to Regional Capacity Building Fund [2]				1	1	1	1	1
Scheme name	Scheme Sponsor	Current Estimated spend (£m)						
		2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13 - 2015/16
Poole Bridge Regeneration Initiative	Poole BC	5	9					
Greater Bristol Bus Network [1]	West of England UAs		5	9	12	17		
Taunton Third Way & Northern Inner Distributor Road [2]	Somerset CC			2	3	6	1	1
East of Exeter (Phase 2) A30 Junc Improvement nr Junc 29 [2]	Devon CC			2	6	4		
Exeter PUA Infrastructure [2]	Devon CC			4	4	5	6	
Integrated Transport Gloucester Parkway	Gloucestershire CC			7	18	1		
East of Plymouth developments (stage 1) including Deep Lane Junction	Plymouth			5	7	4		
Bath Public Transport Package (inc Newbridge P&R & Bath City Rapid Transit)[2]	Bath NE Somerset			9	14	17	10	4
South Bristol Ring Road (A38-A370 Red Route)	North Somerset and Bristol City					10	10	
Bristol Rapid Transit - Hengrove/North Fringe	West of England UAs						12	9
Weston-super-Mare area Package (Phase 1)(Inc Worle)	North Somerset						3	10
Bristol Rapid Transit - Ashton Vale/Emersons Green	West of England UAs							28
Bristol Rapid Transit - Bath/Cribbs Causeway	West of England UAs							22
South Bristol Ring Road (Hengrove-A38)	North Somerset and Bristol City							20
A358 Ilminster to Taunton / A303 Ilminster Bypass [4]	Highways Agency							80
TOTAL ESTIMATED SPEND OF PROGRAMME		82.9	92.8	78.1	84.8	84.8	57.8	188.6
REGIONAL ALLOCATION/PLANNING ASSUMPTION		None	88	90	92	94	96	405
UNCOMMITTED RFA ALLOCATION		None	-4.6	10.9	7.2	29.2	38.2	215.5
PERCENTAGE OF RFA BUDGET SPENT		None	105%	89%	92%	69%	60%	47%

SWRA: Transport Background Technical Report

Scheme name	Scheme Sponsor	Estimated cost (£M) 2007/08 to 2015/16
ESTIMATED SPEND OF (PROPOSED PROGRAMME - Table 1)		569
Callington Road Link	Bristol City Council	20
Camborne Pool Redruth Transport Package	Cornwall CC	59
Exeter HQPT [1]	Devon CC	60
Gloucester A40 Improvements / Widening [2]	Gloucestershire CC	9
Gloucester/Cheltenham Park and Ride	Gloucestershire CC	38
North Swindon Strategy (Great Western Way & Purton Link)	Swindon BC	90
SE Dorset ITS (network control and information)	SE Dorset	15
South Devon Link Road A380 (Kingskerswell Bypass)	Devon CC/Torbay BC	108
Truro Transport Package	Cornwall CC	29
Westbury Bypass (A350)	Wiltshire CC	26
Weymouth Relief Road (Some spend in 06/07) [3]	Dorset CC	70
ESTIMATED SPEND OF (SCHEMES THAT REQUIRE FURTHER WORK - Table 2)		524
TOTAL ESTIMATED SPEND OF TABLES 1 AND 2		1093
REGIONAL ALLOCATION/PLANNING ASSUMPTION		865
PERCENTAGE OVERBUDGET		26%

Table 2A - Schemes which require further work and/or that require further analysis in relation to profiling of the programme and that could potentially be added to the RFA programme (subject to environmental impact, affordability, deliverability and statutory procedures).

SWRA: Transport Background Technical Report

Scheme name	Scheme Sponsor	This programme is illustrative and provides an example of possible timing but will be subject to further discussion in the region. (£m)					
		2007/08	2008/09	2009/10	2010/11	2011/12	2012/13 - 2015/16
ESTIMATED SPEND OF (PROPOSED PROGRAMME - Table 1)		93	79	15	65	51	196
Callington Road Link	Bristol City Council					5	15
Camborne Pool Redruth Transport Package	Cornwall CC		5	19	23	15	
Exeter HQPT [?]	Devon CC						80
Gloucester A40 Improvements / Widening [?]	Gloucestershire CC						9
Gloucester/Cheltenham Park and Ride [?]	Gloucestershire CC					8	39
North Swindon Strategy (Great Western Way & Foxton Link)	Swindon BC						20
SE Dorset ITS (network control and information)	SE Dorset						15
Sth Devon Link Road (Kingskerswell Bypass) A380	Devon CC / Torbay BC				32	35	35
Truro Transport Package	Cornwall CC		8	14	7		
Westbury Bypass [?]	Wiltshire CC		8	13	10		
Weymouth Relief Road [?]	Dorset CC	14	33	12	18	2	
ESTIMATED SPEND OF (SCHEMES THAT REQUIRE FURTHER WORK - Table 2)		14	42	54	64	85	254
TOTAL ESTIMATED SPEND OF TABLES 1 AND 2		107	121	139	159	123	444
REGIONAL ALLOCATION/PLANNING ASSUMPTION		88	90	92	94	96	405
PERCENTAGE OVER BUDGET		21%	35%	51%	69%	28%	10%	26%

Table 2B - Schemes which require further work and/or that require further analysis in relation to profiling of the programme and that could potentially be added to the RFA programme (subject to environmental impact, affordability, deliverability and statutory procedures).

SWRA: Transport Background Technical Report

Table 3 - Schemes which may well prove to be longer term priorities for the region but which at are to under developed or not sufficiently focussed on top level priorities to be included in the propos programme to 2016

Table 3a - Projects Associated with the Second Strategic Route - the region wishes to see an early start on the second strategic route o Ilminster Bypass or at Stonehenge if the current review identifies a deliverable and affordable scheme

Scheme Name	Scheme Sponsor
A303 Carrigate Roundabout	Highways Agency
A303 Sparkford to Ilchester Imp	Highways Agency
A303 Chicklade Bottom to Mere	Highways Agency
A303 Wylye to Stockton Wood	Highways Agency
A358 Ilminster to Taunton / A303 Ilminster Bypass (works beyond 2015/16)	Highways Agency
A303 Stonehenge (Scheme costs subject to Govt Review)	Highways Agency
A30 Temple to Higher Carblake Imp	Highways Agency
A30 Carland Cross - Chiverton Cross	Highways Agency

Table 3b - Schemes where the degree of work done at present does not allow a confident judgement on the value of the schemes or whether they could be delivered within the RFA period but which the region would want to include in the later part of the RFA programme in the light of further work

Scheme Name	Scheme Sponsor
A31 Poole corridor improvements	SE Dorset
A38-A370 Link Road (Orange Route - Banner Stumer)	North Somerset Council
Bournemouth Airport access improvements	Dorset CC
East of Plymouth developments (stage 2) including Hub Quality Off Road Public Transport Route	Plymouth City Council
Salisbury, Brunel Link & Harnham Relief Road	Wiltshire CC
Weston-super-Mare area Package (Phase 2) including Banwell)	North Somerset Council
Weston-super-Mare Relocation of M5 Junction 21	North Somerset Council

Table 3c - Longer term schemes which are unlikely to be available for delivery within the RFA period but on which the region would like to see preparatory work begun so that schemes are available for delivery in the period beyond 2016;

Scheme Name	Scheme Sponsor
A31 dualling Ferndown to A35	Highways Agency
A417 Cowley-Brockworth (Air Balloon)	Highways Agency
Avonmouth Crossing	North Somerset & West
Bristol Parkway link (between B4427 and A4174)	South Gloucestershire
East of Bath A46 A4d Link	Bath NE Somerset
East of Plymouth developments (stage 3)	Plymouth City Council
Gloucester Key Intersections Improvements	Gloucestershire CC
Plymouth HQPT Northern Corridor	Plymouth City Council
Plymouth HQPT Western Corridor	Plymouth City Council
South Bristol Ring Road (Hengrove-Hicks Gate)	Bristol City & Bath NE Somerset

Table 3d - Schemes which, while representing in themselves sensible transport aspirations, and potentially being available for relatively early delivery, do not score sufficiently highly against regional priorities to be included in the RFA programme to 2016;

Scheme Name	Scheme Sponsor
A350 corridor improvements between Shaftsbury and A31	Dorset CC
A391 St Austell - Inels Downs	Cornwall CC
A390 Falmouth-CPR/A30	Cornwall CC
Camelford Distributor Road [1]	Cornwall CC
Sandford bypass & Purbeck Integrated TP	Dorset CC

Table 3e - Smaller scale projects which are essentially local, rather than regional and strategic, in their benefits which should be assessed separately against a provision of funding for smaller scale schemes.

Scheme Name	Scheme Sponsor
Isles of Scilly sea link	Cornwall CC
Olympic Games Transport Package	Dorset CC
RAF St Mawgan / Newquay airport [2]	Cornwall CC
Torbay Integrated Transport Package	Torbay BC

Table 3f - Rail schemes - The region has not had the opportunity to fully understand the benefits of these rail improvements nor how they might score against other interventions. The region would like continue to understand how and when the rail industry might bring these improvements forward and what the role of RFA funding might play in this process.

Scheme Name	Scheme Sponsor
Poole Parkway	
Waterloo to Exeter improvement	
Other rail improvements recommended by the GBSTS	

[1] VfM may now be too low to receive DfT funding
[2] Essential Works for CAA operation following MOD withdrawal, likely to be funded mainly in 2006/07

Total

SECTION 8: MONITORING TRANSPORT IN THE RSS

8.1 Introduction

Monitoring is integral to having a better understanding of how effective the Draft RSS policies are and how they work collectively as a Strategy. There are three main functions of monitoring:

- To assess the extent to which a policy is being implemented through a system of indicators;
- To evaluate whether a policy is effective and achieves the desired outcome; and
- To identify those external factors that are outside the scope of implementation.

The focus for monitoring the Draft RSS however, is based upon monitoring the effectiveness of the Strategy in reaching desired (and where possible, measurable) outcomes of the policies and principles. Many of the policies and principles in the Draft RSS are therefore not directly monitorable, but will require several indicators (largely monitoring context and process) which can paint a picture of whether the policy is having the desired effect.

Indicators vary in their purpose and in the nature that they are designed to monitor:

- _Output_ indicators and targets which relate to matters which can be directly influenced by a policy.
- _Process_ indicators and targets which relate to the means by which policy objectives are to be delivered in terms of policies, programmes and proposals in "lower order" plans and strategies.
- _Contextual_ indicators which relate to the general policy-related environment of the real world within which a policy operates, but over which has only a very indirect and/or indistinct influence. Examples include issues such as performance of the economy, house prices and affordability, air quality etc
- _Outcome_ indicators aim to measure if a policy has ended in the desirable outcome that the policy intended to achieve originally.

The monitoring framework, in terms of the RSS is the Implementation Plan and The Annual Monitoring Report.

SWRA: Transport Background Technical Report

8.2 The Implementation Plan

The Draft Implementation Plan (covered in Section 7) does not provide details on which indicators will be used to monitor the policies and outcomes of the Draft RSS. An audit of data and indicators will be undertaken to clearly identify gaps in data in monitoring outcomes, policies and principles. Monitoring data collected by the Assembly through various delivery and monitoring organisations and groups (for example, Local Authorities, regional agencies, the Strategic Information Providers [SIP] Group and the South West Observatory) will help to inform the overall picture and guide implementation This work has already begun and will be completed during 2006. As a result, this will provide a full picture of how the RSS, including Section 5 and the transport elements will be monitored as part of the Implementation plan.

In terms of transport indicators, guidance on monitoring the second round of Local Transport Plans (Technical Guidance on Monitoring the LTP2 Mandatory Indicators, DfT), formed the basis of which indicators could be potentially adopted.

 Out of a list of 17 indicators, the ones that were initially chosen are:
- *BVPI99 (x and y) Road Casualties*
- *BVPI102 Bus and Local Public Transport Patronage*
- *3a Car Parking Standards*
- *LTP2 Change in area wide Road Traffic*
- *LTP5 Bus Punctuality* - this should be confined to bus corridors, a better definition is required
- *LTP7 Congestion-Average Vehicle Delay* - this will only be relevant to the major urban areas in the region and can only be monitored if sufficient data is available
- *LTP8 Air Quality* - this can come under environmental policies

NB. This is only an initial list and could be amended in the future.

It was felt by the Assembly that the other indicators were perceived as less relevant at present to the policies in Section 5 and therefore might not be used. All of these are mandatory and include some Best Value Performance Indicators. These are a national measure of performance set by the government that allows comparison between authorities.

SWRA: Transport Background Technical Report

8.2.1 Indicators and the TR (Transport) Policies

Table 1 sets out how each of the provisional indicators will monitor the TR Policies. A single indicator will only capture one aspect of a policy, leading to several indicators monitoring one policy.

TR Policy	Indicator
TR1 Demand Management	BVP102, 3a
TR2 The M4 and M5	BVPI99, LTP2,
TR3 Second Strategic Route	BVPI99, LTP2
TR4 Remainder of the Trunk Road Network	BVI99, LTP2
TR5 Inter-Regional Rail Network	BVPI102
TR6 Inter-Regional Bus and Coach Network	LTP5
TR7 Ports	
TR8 Bristol Ports	
Tr9 Airports	
TR10 Regional Connectivity	BVPI99, LTP2, LTP5, LTP7, LTP8
TR11 Intra-Regional Public Transport	BVPI99, LTP2, LTP5
TR12 Regional Freight Map	
TR13 Rail Freight Interchange Facilities	

Table 1: TR Policies and Indicators

Table 1 indicates that there are aspects of Section 5 that are not covered by the list above. These have been labelled as 'desirables' and can be potentially monitored:
- Air Travel- this would consider reducing 'leakage' to airports outside the region;
- Ports- monitoring passenger and freight numbers;
- Freight- the modal split between freight transportation, a issue to consider is how to monitor types of freight;
- Connectivity- this a key issue in the South West, but can be problematic in monitoring; and
- Rail- this would include the usage and reliability

Indicators will need to be used to monitor the 'desirables' and finding a suitable indicator will depend on if monitoring the policies has been attempted in the past, investigating what indicators are available in regard to each policy and if suitable data is available.

SWRA: Transport Background Technical Report

8.3 The Annual Monitoring Report

The Annual Monitoring Report (AMR) is an important document produced by the Assembly, whose purpose is to present evidence on what actions have been taken to implement the RPG 10 and the forthcoming RSS, what outputs have been achieved and to comment on further actions. The present AMR (2005) monitors policies in RPG 10 and the subsequent AMR will form an important input on the development of the RSS. The Implementation Plan importantly works alongside and draws from the AMR which is produced as a statutory requirement. The two are closely linked and will both be reviewed on an annual basis.

8.3.1 Transport and the AMR

Transport has its own section in the AMR and reports on the monitoring of the established RPG 10 indicators which relate to the Regional Transport Strategy (RTS). It shows to what extent to which of its objectives ands policies have been met, whether it has an effect on travel patterns and to examine the general transport trends in the South West.

The Regional Assembly has established a specialist officer group drawn from local authorities and other agencies, who supply the major data for the AMR. The group is called the Strategic Information Providers group (SIP) and their function is to assist with information supply and analysis of RPG 10 and in the future the RSS. Indicators used for the formation of the AMR were decided through discussions in the SIP group.

Areas that are covered in respect to monitoring RPG 10's transport policies are:
- Bus Accessibility (Soc 10)
- Public Transport Patronage
- Congestion (Soc 22)
- Road Safety
- Distance Travelled and Mode (Soc 24)
- Freight Transport (SOc 26)
- Parking (Soc 28)
- Air Transport (r)

The above indicators are incorporated into the National Core Output Indicators

SWRA: Transport Background Technical Report

(NCOIs) and draft guidance requires that they are used at monitoring on a regional level. The 2005 AMR was the second year that they were included.

The present AMR can be found on the Assembly website at: http://www.southwest-ra.gov.uk/swra/ourwork/planningandtransport/monitorrpg.shtml

8.4 Other Monitoring Arrangements-Conformity

Due to the new planning system introduced under the Act in 2004, LTPs are required to comply and be consistent with the Draft RSS. Although most LTPs do mention the RSS in their background text, very few of them actually make links between the aims of the document and the objectives of the RSS (covered in Section 4).

The Assembly will continue to liaise with Local Transport Authorities with regard to the consistency between the Draft RSS and LTPs. It is vital that some consistency is reached as LTPs have a role in contributing to achieving the Spatial Strategy.

9. CONCLUSIONS

The purpose of this Report is to set out what the Good Practice Guide on Regional Transport Strategies requires in relation to the evidential base supporting the transport content of the RSS. Regional Planning Bodies (RPBs) are required to prepare a Background Technical Report (BTR) setting out the information which has been used to derive the Regional Transport Strategy (RTS). This report sets out the information supporting the transport approach in the South West RSS and can potentially be used to support the transport elements of the RSS at the EiP.

Due to the geography of the region, it became very clear what the main issues would be in regards to transport. These issues would provide the foundations of what the RSS would have to address. The rurality and peninsular nature of the region meant that connectivity and accessibility were key focuses and are addressed in Section 5 of the Draft RSS. Since the RSS focuses the majority of development in the regions main urban areas, there is an added matter in the fact that infrastructure should couple the growth. This is a key challenge for the RSS in ensuring that the growth and infrastructure is developed side by side in order to build sustainable communities.

The Draft RSS does not contain a separate RTS, which is a requirement in PPS 11. Because transport is a cross cutting theme and has many inputs into other policy areas, it has been integrated into the document. This is an extremely important concept when regarding the Draft RSS. Because of this the Draft RSS does not include a set of transport objectives. There is one regional transport objective that is included in the RRTS that has been reflected in Section 5 of the Draft RSS.

The BTR provides an evidence base for which justifications for the main transport policies can be seen. Evidence is also presented for the transport requirements for each Sub-Regional Strategy. This is the main purpose for the BTR and hopefully will provide a useful tool for the upcoming EiP next year.

As well as this, the BTR also provides an overview of the transport geography of the region, the policy context, the main transport issues, and the implementation and monitoring framework for the policies. All these elements together provide a 'fuller' picture of transport in the South West.

SWRA: Transport Background Technical Report