

## 5 Transport

### 5.1 Key Themes

**5.1.1** Outside of the South West's main cities and towns, the region is characterised by a dispersed pattern of settlement and a relatively low population density. Transport and the relative ease of movement within the region are therefore major issues which influence the social, environmental and economic life of the region.

**5.1.2** The South West region is one of the most travel intensive regions in the country with an average person travelling almost 7,700 miles in 2008/09. Trip rates and total distance travelled are both around 10% higher than the English average (DfT, Regional Transport Statistics, Table NTW9903).

**5.1.3** Car use and ownership in the South West is relatively high, while use of public transport is low. This is partly a reflection of the region's dispersed population and settlement pattern. Car dependency is exacerbated by poor access to public transport outside the major urban centres.

**5.1.4** The continuing rise in car ownership is creating pressure and congestion on the network in the main urban centres especially in the north of the region. The increase in population and visitors is putting pressure on the main transport routes especially to the south west and south east of the region.

**5.1.5** The proportion of household expenditure spent on motoring in the South West is above the national average. Household expenditure overall has increased in the South West and England, but the amount spent on travel has fluctuated only marginally.

**5.1.6** The environmental impact of this dependency on the private motor car is demonstrated by the South West's per capita emissions from road transport, which are above the national figures.

**5.1.7** Levels of walking and cycling to work are above the English average. In comparison to other regions, bus availability and passenger numbers are low, although availability has been rising.

**5.1.8** Rail travel in the region has increased by over 70% since 1995/6. Approaching two-thirds of South West rail travel is within the region, with London and the South East being the most important destinations outside the region.

**5.1.9** Air travel from the region has grown at a faster rate than the English average. However, the most recent year's data shows a decrease in air travel in the region, following 12 years of increase. The same has been observed for England.

### 5.2 Key Data

- Bus patronage in the South West saw a slight decline in 2009/10, having risen dramatically between 2005/06 and 2008/09.<sup>(1)</sup> Despite this, growth in bus patronage over the past 10 years stands at under 5% in the South West, much lower than the national growth, of 21% (DfT, Regional Transport Statistics, Table BUS0108)
- In 2008/09, people in the region made fewer trips by local bus per person per year than any other region except the East of England (38 against 32) and far fewer than the English average of 66 (DfT, Regional Transport Statistics, Table NTS9903).
- The South West had the second lowest number of road casualties (1,950 killed or seriously injured in 2009) of the English regions and numbers have declined by 35% compared to 1998 (DfT). This is marginally lower than the decrease in England, of 39%. The rate of decrease has been particularly high in recent years; a drop of 22% occurred between 2007 and 2009 (DfT, Regional Transport Statistics, Table CAS0002).
- The South West has one of the highest car ownership rates in the country (1.3 cars per household, along with the East, South East and East Midlands regions). Over two-thirds (68.1%) of all trips in the South West are made by car, either as a driver or passenger. This compares to 63.4% nationally (DfT Regional Transport Statistics, Table NTS992).

1 Changes in the estimation methodology were made in 2004/05, which may in part account for the dramatic changes in numbers seen in subsequent years

- In 2008, the per capita emissions from road transport (tonnes CO<sub>2</sub>) in the South West stood at 2.2, down from 2.4 in 2005 but still above the English figure of 2.1 ([CO<sub>2</sub> Emissions, Department for Energy and Climate Change](#)).
- There was a 27% decrease in the total amount of freight transported in the South West between 2006 and 2008. At 52%, the majority of freight in the South West is transported by road although this declined from 58% in 2007 (Frank Cashmore Freight Monitor, see also 5.6 'Freight').
- The annual number of passengers using airports in the region grew from 2.8 million in 1998 to 9.1 million in 2008, an increase of 225%, the highest regional growth rate and far above the England average of 45.7%. However, a 12% drop in numbers occurred between 2008 and 2009 in the region, from 9.1 to 8 million passengers. Similarly, a drop of 7% of airport passengers was seen in England over the last year ([DfT, Regional Transport Statistics, Table AVI0002](#)).

### 5.3 Personal Travel

**5.3.1** The number of journeys people in the region make, and the way they travel, reflects a whole range of factors - the relative levels of income, the distribution of employment and key services, the availability of different modes of travel, and the geography of the region. A further issue of particular importance is the impact of transport on the environment. Although South West per capita emissions from road transport declined from 2.4 tonnes CO<sub>2</sub> in 2005 to 2.2 in 2008, they were still above the English average of 2.1 ([Department of Energy and Climate Change](#)).

### Journeys and distance travelled

**5.3.2** According to regional estimates from the DfT, residents of the South West made an annual average of 1,047 journeys (trips per person per year) over the period 2008/09, more than the England annual average of 984 journeys. The number of trips per person have remained broadly stable since 1998-2000. South West residents travelled 7,726 miles on average in 2008/09; more than the national average and similar to the value of the previous year ([DfT Regional Transport Statistics, Table NTS9903](#)).

**Table 5.3.1 Average Distance Travelled**

Average distance travelled per person per year				
(Per person per year)	South West		England	
	Total number of trips	Average total distance travelled (miles)	Total number of trips	Average total distance travelled (miles)
2008/9	1,047	7,726	984	6,798
2007/8	1,061	7,736	983	7,010
2005/6	1,108	8,073	1,044	7,137
2004/5	1,096	8,117	1,037	7,113
2003/4	1,056	7,919	992	6,787
2002/3	1,050	7,957	1,002	6,884
1999-2001	1,005	6,826	1,018	6,819
1998-2000	1,001	7,592	1,031	6,842

Source: DfT Regional Transport Statistics

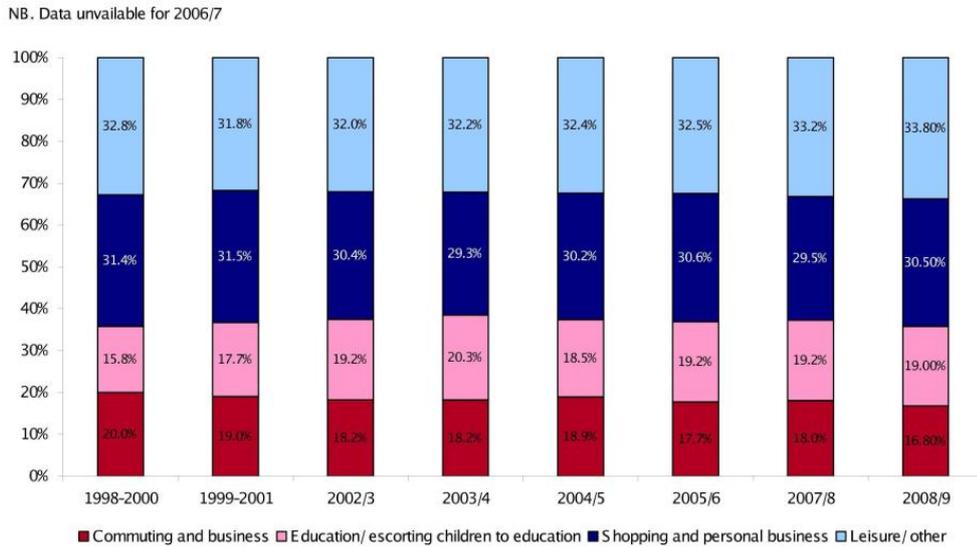
### Reasons for Travel

**5.3.3** Whilst many strategies (across the South West and its subregions) seek to support a more sustainable region by focusing on more efficient means of travel to work, commuting journeys account for only a relatively small proportion of all journeys in the South West. (see Figure 5.3.1).

**5.3.4** About a third of journeys are made for leisure purposes; roughly 30% of journeys are made for shopping and personal business. Almost a fifth of trips made in the South West are for education purposes (including escorting children to education), this has grown from under 16% in 1998-2000 (DfT, Regional Transport Statistics, Table NTS9906).

**5.3.5** The proportion of trips related to education has been increasing, whilst the proportion of trips generated for other broad purposes has decreased. Due to the rural nature of the South West, there is a propensity for children to be driven to school in many areas. It is not clear why the number of commuting and business trips has declined to such an extent (down another 1.2 percentage points in 2008/09, to 16.8%), however the increasingly common practises of atypical working (e.g. home working, flexible hours, etc.) together with video-conferencing may have had an impact. This should be monitored in the future to see if it is part of a long-term trend.

**Figure 5.3.1 Trips per person per year by broad purpose**



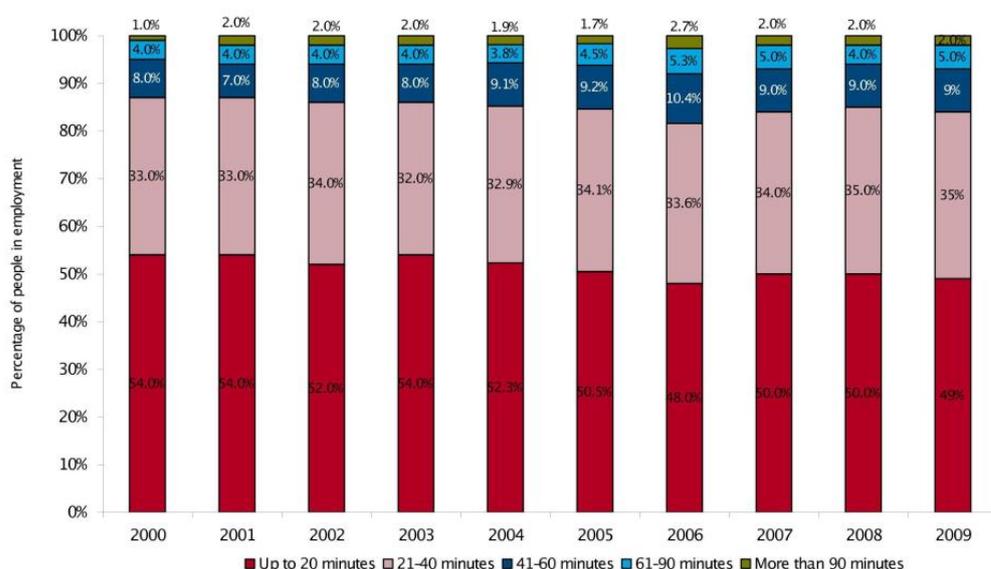
Source: DfT Regional Transport Statistics

### Travel to Work

**5.3.6** The Labour Force Survey estimates that people who live in the South West took an average of 23 minutes to get to work at the end of 2007 (latest available data; [ONS Regional Trends, Transport Chapter](#)). Journey times outside London are broadly comparable across all England regions.

**5.3.7** Although half of the workforce in the South West spend 20 minutes or less travelling to their place of employment, as indicated by Figure 5.3.2 below, this proportion is decreasing as more people spend a longer time travelling to work (down one percentage point again last year, from 50 to 49%). This trend is similar across the commuting time ranges depicted in the graph, and reflects the tendencies of increased congestion on many road corridors as well as people travelling further to work ([DfT Regional Transport Statistics, Personal Travel Dataset](#)).

**Figure 5.3.2 Time taken to travel to work in the South West**



Source: DfT Regional Transport Statistics

**Mode of Travel**

**5.3.8** Just over two-thirds of journeys made by South West residents during the period 2008/09 were made by car, as shown in Table

5.3.2 below (DfT Regional Transport Statistics, Table NTS9903). South West residents are more likely to make their journeys by car, and less likely to travel by public transport than the average for England.

**Table 5.3.2 Trips per person per year by main mode of travel 2008/09 (South West and England)**

	Walk	Car driver	Car passenger	Local bus	Other
South West	22.8%	43.6%	24.5%	3.6%	5.5%
England	22.8%	40.8%	22.6%	6.7%	7.1%

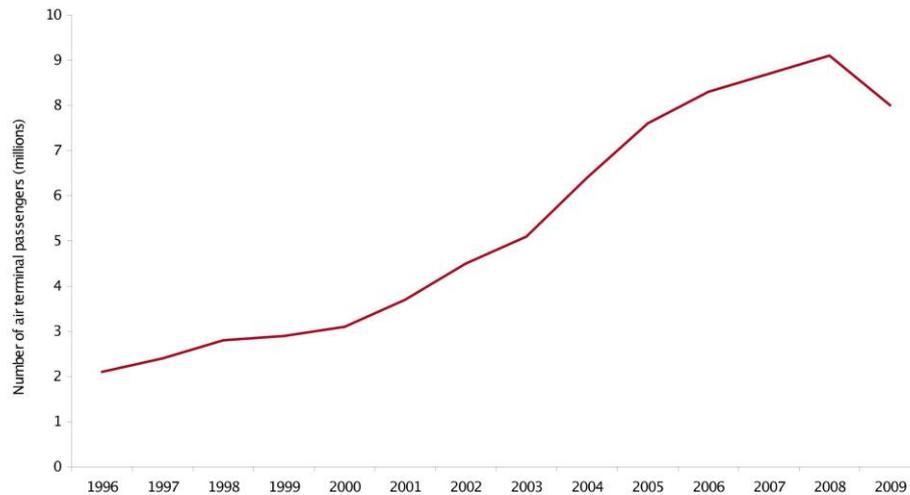
Source: DfT Regional Transport Statistics

**5.3.9** The way people travel to work reflects this same high dependence on the car. The Labour Force Survey for 2009 estimated that 77% of the South West's employed residents travelled to their place of work by car, 12% walked, 7% travelled by public transport and 4% cycled. Most of these patterns are similar to other regions with the exception of London. However, the South West had higher proportions of both those walking and cycling to work.

Although the South West airports service the fourth lowest number of passengers of all of the nine English regions (in 2009), it has experienced the highest growth rate in the past 10 years of all the English regions (DfT, Regional Transport Statistics, Aviation Dataset). Figure 5.3.3 shows a drop in air travel growth between 2008 and 2009. This pattern is shown in all of the English regions, and may be owing to economic conditions and changing holiday patterns (see also, 11 'Culture').

**5.3.10** As Figure 5.3.3 indicates, airports in the region have seen an overall 175% increase in passenger numbers between 1999 and 2009.

**Figure 5.3.3 Air Travel Growth in the South West**



Source: DfT Regional Transport Statistics

### Use of Public Transport

**5.3.11** Figure 5.3.4 shows that bus usage in the South West has generally been declining through most of the past decade (bus passenger journeys fell by almost 10% between 1998 and 2003, [DfT Regional Transport Statistics, Table BUS0108](#)). Significant variation can be found in bus usage across the region. As the region differs widely between urban areas and remote rural locations, it is more likely to experience improvements in bus usage in urban areas and decreasing patronage in rural areas.

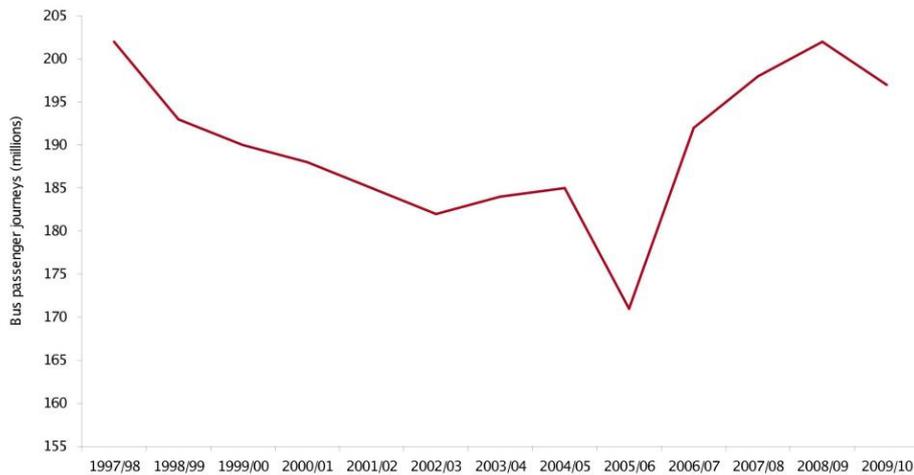
**5.3.12** Caution should be exercised with regard to the data for 2004/05 onwards, as the data methodology was revised causing considerably increased numbers. It is therefore difficult to assess whether the positive changes experienced between 2003 and 2005 constitute a trend or just an anomaly in the data. Data for

2005/06 onwards appears to show significant increases in usage; however again this may be owing to the methodology change.

**5.3.13** According to 2008/09 results from the National Travel Survey, the South West is the region with, on average, the furthest walk to a bus stop. Six percent of households in the region have to walk 14 minutes or more to walk to their nearest bus stop, compared with 4% in England ([Department for Transport, National Travel Survey](#)).

**5.3.14** Efficient bus and light rail services play a significant role in achieving a shift away from car usage on to more sustainable means of travel. It is not evident that the up-take of these services have been very good in the past, and it is therefore vital that more well developed schemes come forward in an integrated manner with planned growth areas so that they will provide a real and immediate alternative to car travel.

**Figure 5.3.4 Bus passenger journeys (millions)**



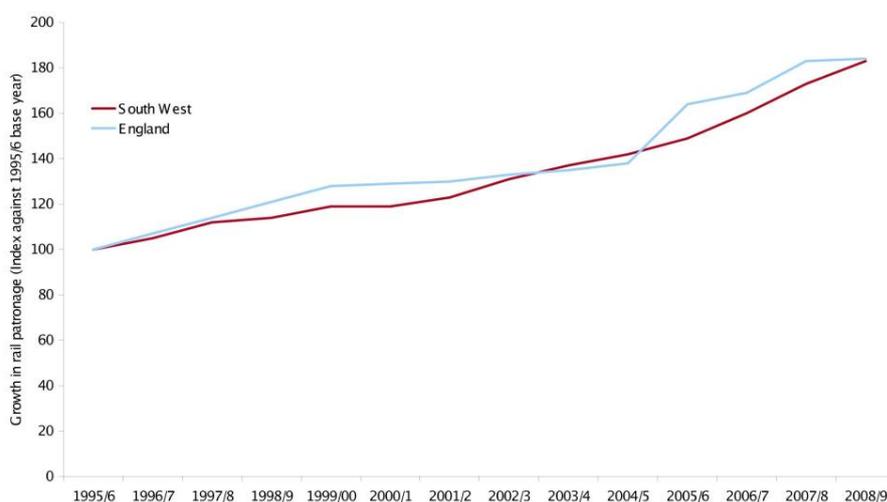
Source: DfT Regional Transport Statistics

**5.3.15** As Figure 5.3.5 shows, regional rail patronage has been growing over the last decade. Although the new data methodology employed in 2006/07 is likely to have had the effect of increasing the numbers over and above the trend for the previous years, a significant increase can be identified in the 10-year period up to 2005/06. The regional rail patronage index was below the England value between 2006 and 2008, but both are now at a similar level (both indices were 183 in 2008/09). Whilst the latest

data represents a slight fall for England, it represents continued growth for the South West ([DfT, Regional Transport Statistics, Rail Dataset](#)).

**5.3.16** Rail patronage is expected to continue to grow and the challenge for the rail industry and local authorities is to grow the network to provide the necessary capacity and quality of service to accommodate and encourage future growth.

**Figure 5.3.5 Rail Patronage Index**



Source: DfT Regional Transport Statistics

**Household Expenditure on Travel**

**5.3.17** Travel is now the second largest expenditure category for households in the South West (second to Recreation and Culture). Nationally, travel remains the biggest category. According to the [Family Spending Report on the 2009 Living Costs and Food Survey](#), households in the South West spent an average of £62.60 per week on travel and transport in 2007-09, slightly higher than the England average of £61.70 per week. Transport

expenditure accounted for approximately 13% of total household expenditure in the South West, a decrease of one percentage point compared with 2007/08 (see Table 5.3.3). Total household expenditure in both South West and the England rose between 2008/08 and 2007 - 09. The slight drop in the proportion made up by transport may be due to increases in other areas of expenditure (see also, Social and Welfare chapter).

**Table 5.3.3 Household Expenditure on Travel**

Year	Area	Total household expenditure (£)	Total transport costs (£)	Motoring as % of overall expenditure	Transport Services as % of overall expenditure	Transport costs as % of overall expenditure
2006/7	South West	446.20	70.30	14%	2%	16%
	England	460.30	62.40	11%	2%	14%
2007/8	South West	469.20	65.60	12%	2%	14%
	England	465.20	62.50	11%	2%	13%
2007-09*	South West	474.10	62.60	12%	3%	13%
	England	467.50	61.70	11%	3%	13%

Source: Family Spending, A report on the 2009 Living Costs and Food Survey

\*3 year average

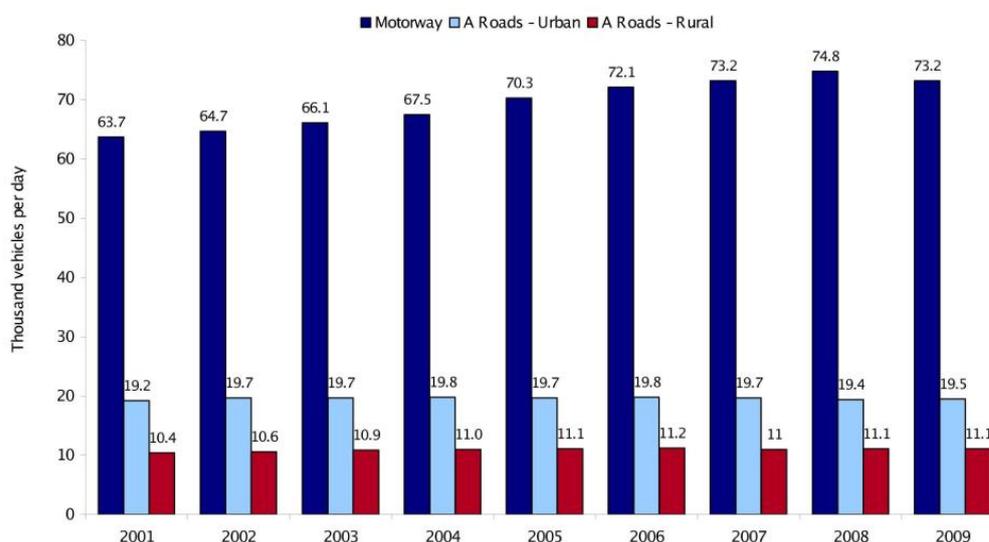
5.3.18 Motoring costs continue to account for a slightly larger percentage of household expenditure in the South West than in England overall.

## 5.4 Traffic Flow

5.4.1 Figure 5.4.1 shows that the most significant growth has been on the region's motorways, which indicates an increase in

middle and long distance journeys, but also continued use of the motorway network for more local trips. Interestingly however, data for 2009 shows a slight decrease in motorway traffic flow in the region, following year on year increases for every year from 2001 - 2008 (DfT Regional Transport Statistics, Table TRA7902). Traffic volume on A roads has remained stable as trips have increased on or transferred to motorways.

Figure 5.4.1 Traffic Volume (thousand vehicles)



Source: DfT Regional Transport Statistics

5.4.2 According to a report by the Highways Agency<sup>(2)</sup>, several strategic road corridors experience considerable delays throughout the day. Whereas delays of around 15-30 and 30-45 daily seconds<sup>(3)</sup> are experienced on most of the stressed sections, particular sections on the A30, A31, A35, A38, A303, A417 and the M5 are significantly more congested resulting in daily delays per vehicle of 60 seconds or longer. Although some parts of the strategic road network are relatively uncongested, a considerable number of corridors experience congestion during the morning and evening

peak. A growing number of corridors experience high levels of stress for substantial parts of the day.

## 5.5 Connectivity

5.5.1 Figure 5.5.1 confirms the previous trend that the most common destinations for rail journeys outside the South West are London and the South East of England.

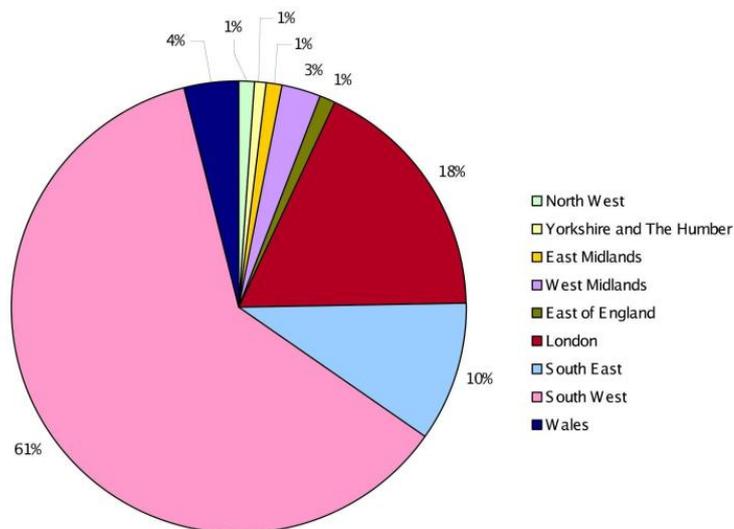
5.5.2 However, the importance of intra-regional connectivity must not be underestimated as the majority of rail journeys are to places within the

2 Highways Agency Regional Network Report for the South West 2008 <http://www.highways.gov.uk/business/14462.aspx>

3 The total observed delay is divided by the traffic volume using that road length to produce a delay, in seconds, for each vehicle. Because the delay is summed over the whole day, peak hour delays at some critical junctions may be diluted by improved performance in off-peak hours.

South West. The proportion has increased from 57% of journeys in 2001/2 to 61% in 2008/09 (DfT Regional Transport Statistics, Rail Dataset).

**Figure 5.5.1 Destinations of rail passenger journeys from the South West, 2008/09**



Source: DfT Regional Transport Statistics

## 5.6 Freight

**5.6.1** Symptoms of the start of the recession were evident in the movements of freight in and out of the region between 2007 and 2008. Road freight in particular reduced, its share of tonne-kms falling from 58% to 52%, its smallest share since this indicator was first calculated in 2003. Rail carryings also reduced, by 6%, but increased their share from 9% to 10%; ocean shipping fell by 3.3%, but increased its share from 29% to 33% between 2007 and 2008. Coastal shipping and air freight showed absolute increases in 2008 over 2007, air freight nearly doubling its mode share as a result. As the recession has taken hold of the economy the level in freight travel across different modes has reduced further.<sup>(4)</sup>

4 Text source: South West Freight Monitor 2008, Frank Cashmore.

**Table 5.6.1 Percentage of freight transported by mode in the South West**

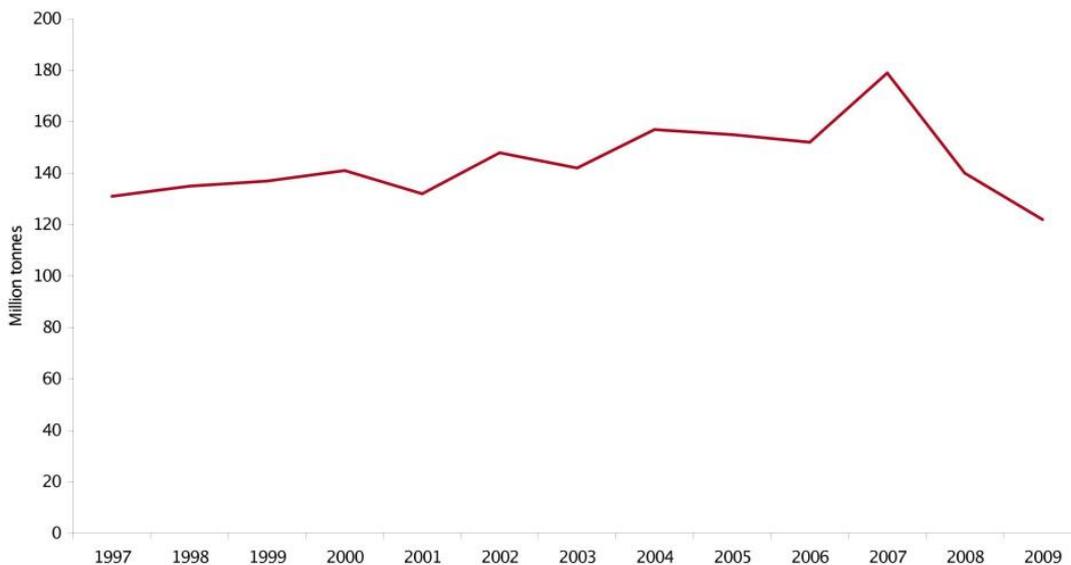
	2004	2005	2006	2007	2008
Road	64%	62%	62%	58%	52%
Rail	7%	7%	8%	9%	10%
Coastal shipping	3%	4%	3%	4%	4%
Seagoing ships	25%	26%	28%	29%	33%
Air	0.10%	0.12%	0.11%	0.01%	0.02%
Pipeline	0.48%	0.48%	0.44%	0.50%	0.50%
Total (million tonne km)	N/A	20,464	21,165	17,996	15,422

Source: SW Freight Monitor 2008, Frank Cashmore. *NB. Data beyond 2008 is not available.*

**5.6.2** Figure 5.6.1 indicates that the long-term trend for total road freight is increasing, which follows the general trend for the UK although the South West has experienced a lower increase

than other regions, and in recent years (2007 - 2009) has seen a decline in numbers ([DfT Regional Transport Statistics, Road Freight Dataset](#)).

**Figure 5.6.1 Freight transported by road originating in the South West**



Source: DfT Regional Transport Statistics *NB. Figures for 2004 onwards are not fully comparable with those for earlier years*

**5.6.3** Freight movement from the region's airports is very limited in comparison to road and even sea freight and most of it is dealt with by

Bournemouth International Airport. Although it appears that the trend has been static if not slowly decreasing over the last 10 years,

decreasing from 6,300 tonnes in 1997 to 6,000 in 2006, the statistics show a significant drop from 2006 onwards, to just 400 tonnes in 2009. It is currently unclear whether this portrays an actual decrease in the air freight business within the region, or if it is a calculation error and caution should therefore be exercised when interpreting these figures. Data for England also shows a drop in air freight between 2007 and 2009 (of 10%, from approximately 2,200 tonnes, to 1,900) (DfT, Regional Transport Statistics, Aviation Dataset).

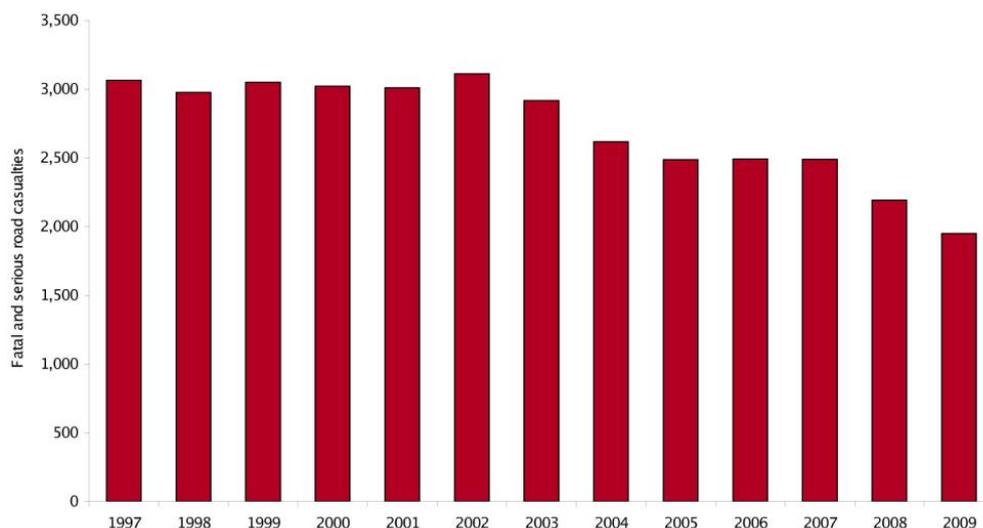
## 5.7 Road Safety

**5.7.1** The Department for Transport information on road traffic accidents shows that in 2008 there were 18,117 casualties of traffic

accidents in the South West, down by over 3,500 from 21,866 in 2007. This figure was considerably below the 1998 figure of 24,964 (DfT, Regional Transport Statistics, Road Accidents and Casualties Dataset).

**5.7.2** As can be seen in Figure 5.7.1 below, the number of fatal and serious road casualties in the South West continues to fall. Between 1998 and 2009, killed and seriously injured casualties have fallen by 34%. This follows the England trend, where a drop of just under 40% has been observed over the same time period.

**Figure 5.7.1 Reported Killed or Seriously Injured Casualties, South West, 1997 - 2009**



Source: DfT Regional Transport Statistics

**5.7.3** As observed in 5.7.2 above, the level of casualties is falling at a slightly slower rate in the South West, compared with the national trend. This is also true for the numbers of child deaths and serious injuries. In 2009, for the South West this was almost 50% below the figure in 1998. In England, the reduction was 56%.

## 5.8 Conclusions

**5.8.1** The South West is a large region with a dispersed population. Historically, spend on transport in the region has taken up a larger proportion of household expenditure than the English average, although the latest data shows the percentage to be the same in both the region and in England. Expenditure on motoring remains higher in the South West, however.

**5.8.2** Transport and communications, like many aspects of life in the region, show a strong east to west trend, from the generally accessible east, closer to the national core, to the more remote and sparsely populated west.

**5.8.3** There is a strong reliance upon the private car, with some 68% of all trips being made by motor vehicle.

**5.8.4** In comparison to other regions the use of buses and their availability is low. Rail patronage however, continues to increase.

**5.8.5** Traffic volumes on motorways have increased significantly since 2001, although a slight reduction in motorway usage has been observed in the last year. Traffic on A-roads has fluctuated minimally, showing stabilisation since 2001.

**5.8.6** The roads in the South West are amongst the safest in England and safety continues to improve, albeit at a slower rate than the national average.

**5.8.7** An increasing number of passengers are using region's airports with numbers doubling between 2002 and 2008. However, the data shows a tailing off of this trend in the last year. This has been observed across other regions and England as a whole, and may well be owing to economic conditions, and changes in holiday patterns. See also,11 'Culture'

**5.8.8** Despite annual fluctuations, the amount of freight being transported by road in the South West increased between 1997 and 2007 at a similar rate to that of England. However, the tonnage fell considerably between 2007 and 2009.