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Monitoring the National Transport Plan, Baseline Report, 2010

Introduction

The Wales Transport Strategy is the key transport policy document of the Welsh Assembly Government. The aims and outcomes of the Wales Transport Strategy are being delivered by the National Transport Plan, published on 29 March 2010, and the four Regional Transport Plans. The delivery of the National Transport Plan will be monitored using a set of statistical indicators derived from those originally outlined in the Wales Transport Strategy.

The Transport Statistics Branch of the Economic Advice Division in the Welsh Assembly Government has been commissioned to compile these statistical indicators. They are based on 17 long term output indicators from the Wales Transport Strategy, which were grouped by their social, economic and environmental impacts. Full details of the 17 outcomes, the monitoring indicators developed for each outcome, the data collected and analysed are set out in sections 3, 4 and 5 of this bulletin.

This statistical bulletin is the baseline monitoring report on the progress of delivering the National Transport Plan. Following the publication of this baseline monitoring report we intend to publish the indicators and the data online, where it will be regularly updated as and when data is collected and analysed.

The National Transport Plan

The Wales Transport Strategy established the framework for the creation of an integrated transport system to deliver One Wales. The National Transport Plan is intended to take forward this process of delivering integration. This plan can be found at the following link: [National Transport Plan](#)

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1. Introduction

- 1.1 The Wales Transport Strategy is the key, long term transport policy document of the Welsh Assembly Government. To deliver the aims and outcomes of the Wales Transport Strategy at the national level, the National Transport Plan was developed and published in March 2010. The National Transport Plan stated that its delivery will be monitored using the long term output indicators that were outlined in the Wales Transport Strategy.
- 1.2 The Transport Statistics Branch of the Economic Advice Division in the Welsh Assembly Government was commissioned to monitor the delivery of the National Transport Plan in the months before the final National Transport Plan was published. As part of this commission we were constrained to:
 1. Use the 17 long term output indicators from the Wales Transport Strategy as the framework for monitoring the delivery of the National Transport Plan. Full details of the 17 outcomes, the monitoring indicators developed for each outcome, the data collected and analysed are set out in sections 3, 4 & 5 of this bulletin.
 2. Issue a statistical bulletin detailing our progress on monitoring the National Transport Plan shortly after the publication of the final Plan. Our interim report can be found here: [Interim Monitoring Report](#)
 3. Publically consult on our proposed approach to monitoring the delivery of the National Transport Plan. Details of the consultation we carried out between June and September 2010 can be found here: [Consultation](#)
 4. Publish a baseline monitoring report based on the interim report with the latest available data and suggested changes from the public consultation.
 5. Publish regular updates to the data collected to monitor changes over time and review and develop indicators to ensure the monitoring remains fit for purpose.
- 1.3 We intend that following the publication of this baseline monitoring report that we will publish the indicators and the data online, where it will be regularly updated as and when data is collected and analysed. Our intention is to use a similar format as the [State of the Environment Indicators](#) with an annual brief summary publication that reports on the key changes. We also intend to use this annual summary publication to report any changes to indicators, data sources used or other issues related to the monitoring process.

2. Executive Summary

2.1 This Summary covers the outcome indicators where statistics have been compiled for this baseline Report. The numbers in [brackets] in this summary show the number of the relevant NTP monitoring indicator and the number of the relevant data table(s). In broad summary, the indicators show:

The Wales Transport Strategy aims to improve access to healthcare (outcome 1), education, training and lifelong learning (outcome 2) and to shopping and leisure facilities (outcome 3). Moving towards achieving these outcomes will contribute to reducing social exclusion, particularly for the most disadvantaged groups.

Modelling journeys to the crucial nodes for health provision shows that most households in Wales can gain access to these services within reasonable travel times, whether they are using private car or are using public transport.

- Almost all households within Wales are within 1 hour and 30 minutes drive time, of NHS Major Acute Hospitals. Some 87 per cent of households are within 1 hour and 30 minutes travel time by public transport. [1.1]
- Almost all households within Wales are within 15 minutes drive time of a GP Surgery. Some 76 per cent of households are within a 15 minute travel time by public transport as are some 60 per cent of households by walking. [1.2]
- Almost all households within Wales are within 15 minutes drive time of a pharmacy. Some 82 per cent of households are within 15 minutes travel time by public transport and 69 per cent of households are by walking. [1.3]

Modelling journeys to the providers of education, training and life-long learning provision shows that most households in Wales can gain access to these services within reasonable travel times, whether they are using private car or are using public transport or are walking or cycling.

- Almost all households within Wales are within 15 minutes drive time of a primary school, as are some 97 per cent of households by cycling. Some 91 per cent of households are within 15 minutes travel time by public transport and 82 per cent by walking. [2.1]
- Almost all households within Wales are within 15 minutes drive time of a secondary school, and 79 per cent by cycling. Some 56 per cent of households are within 15 minutes travel time by public transport, with some 88 per cent within 30 minutes. Some 36 per cent of households are within 15 minutes travel time of a secondary school by walking, with some 63 per cent within 30 minutes. [2.2]
- Almost all people aged over 16 within Wales are within 15 minutes drive time of a higher, further or adult education establishment with 80 per cent by cycling. Some 63 per cent of people are within 15 minutes travel time by public transport, with 88 per cent within 30 minutes. Some 45 per cent of people are within 15 minutes travel time by walking, with 66 per cent within 30 minutes. [2.3]

Most people can get to a reasonable range of shopping and leisure facilities (at 'key centres') at convenient times and this enhances social interaction and reduces social exclusion, particularly for disadvantaged groups.

- During the week (Tuesday morning) some 91 per cent of households within Wales are within 15 minutes drive time of a key centre. Some 27 per cent of households are within 15 minutes travel time by public transport, with some 70 per cent within 30 minutes. 12 per cent of households are within 15 minutes travel time of a key centre by walking, with some 26 per cent within 30 minutes. [3.1]
- Access is very similar at weekends (Saturday morning) with some 91 per cent of households within Wales are within 15 minutes drive time of a key centre. Some 28 per cent of households are within 15 minutes travel time by public transport of a key centre, and 71 per cent within 30 minutes. Some 12 per cent of households are within 15 minutes travel time of a key centre by walking, with some 26 per cent within 30 minutes. [3.2]

The Wales Transport Strategy aims to encourage healthy lifestyles (outcome 4) by increasing the levels of walking and cycling, including a 'modal shift' to these methods of transport (*a modal shift is a move to using a different method of transport for a trip*).

The National Travel Survey shows the number of travel trips made by people living in Wales, and their reasons for making them, have both been broadly stable up to 2007, though with signs of a drop in car travel since 2008.

The total number of travel trips has remained fairly constant at around or just below a thousand trips per person, per year with walking representing roughly two hundred of those trips. The distance and purpose of travel has also remained consistent over the time series with shopping trips and trips of under one mile being the most common. [4.1]

(Source: National Travel Survey)

But in some areas, these modal shifts are not taking place, so there is little change in the proportion of people using a car (or van or minibus) to get to work; the slight fall for men is offset by increasing car usage by women.

For travel to work, the data for Wales over the last eight years shows that the number of male respondents using a car (or van or minibus) to access work has fallen from 85 to 83 per cent of respondents. However, the number of female respondents using a car (or van or minibus) to access work has increased by some 5 percentage points between 2001 and 2009, reaching 78 per cent of respondents in 2009. Overall, in 2009, around 81 per cent of respondents used this mode of transport for work. [4.2 & 4.3]

(Source: Labour Force Survey)

There is also little change in the proportion of children walking to school...

The proportion of children aged 5 to 16 whose main mode of travel to school is walking was the 37 per cent average for 1995 to 1999 and 36 per cent over 2008 to 2009. Over the same period car trips have risen, while bus or coach trips have fallen 8 percentage points to comprise 24 per cent of trips over 2008 to 2009. [4.4]

(Source National Travel Survey)

...and adults walking for leisure...

The proportion of adults walking over 2 miles in the past 4 weeks was 33 per cent of respondents in 2000/01 and 34 per cent in 2008/09; when asked, 86 per cent of adults stated that they had been walking in the outdoors at some point in the last 12 months. [4.6 & 4.8]

(Source: Sport Wales and Welsh Outdoor Recreation Survey)

...but an increase in adults cycling.

The proportion of adults doing any cycling in past 4 weeks rose from 6 per cent of respondents in 2000/01 to 8 per cent in 2008/09; when asked, 21 per cent of adults said that had been road cycling and 16 per cent said they had been off road cycling at some point in the last 12 months. [4.7 & 4.8]

(Source: Sport Wales and Welsh Outdoor Recreation Survey)

The concessionary fare scheme continues to be heavily used

83 per cent of adults aged 60 and over hold a concessionary bus pass and bus pass holders are currently making around 12 million bus journeys every quarter. [4.9]

(Source: Local authority administrative data)

The Wales Transport Strategy aims to improve the actual and perceived safety of travel (outcome 5). This involves reduced injury accident rates, particularly for vulnerable road users, as well as improved perceived safety for all modes of transport.

We are on track to meet the Welsh Assembly Government's 2010 casualty reduction targets.

The Welsh Assembly Government has three casualty reduction targets to be achieved by 2010 based on reductions from the average for the years 1994 to 1998. Progress towards these targets during the most recent full year, 2009, was: [5.1, 5.2 & 5.3]

- Target 1 → A 40 per cent reduction in the number of killed or seriously injured (KSI) casualties. Outturn over 2009 was 39 per cent lower than the 1994-98 average.
- Target 2 → A 50 per cent reduction in the number of children killed or seriously injured. Outturn over 2009 was 55 per cent lower than the 1994-98 average.
- Target 3 → A 10 per cent reduction in the number of people slightly injured per 100 million vehicle kilometres. Outturn for 2009 was a 40 per cent reduction.

One area of concern is child pedestrian casualties in deprived areas; by 2009 there were 53 of these casualties, with only 8 being serious and with no children killed. [5.3]

...with the latest available figures for road traffic casualties continuing to fall.

Looking at Road Traffic casualties in Wales, and comparing the most recent 12 month period, that is October 2009 to September 2010, with the previous 12 month period, October 2008 to September 2009 shows:

- All road casualties were down by 7 per cent; and within this total
- The numbers killed were 26 per cent lower
- Seriously injured were 11 per cent lower
- Slightly injured were 7 per cent lower

(Source: Welsh Assembly Government – Quarterly First Release)

Safety on public transport concerns crime as well as accidents

Recorded railway crime is dropping...

Incidents of notifiable and non-notifiable offences on the rail network: The total recorded notifiable offences dropped from 1,720 in 2007/08 to 1,608 in 2008/09 and to 1,445 in 2009/10. There was a significant fall in the number of recorded violence against the person offences to 193 offences in 2009/10. Recorded criminal damage/malicious mischief offences fell to 155 in 2009/10. But public disorder offences rose to 255 recorded cases. [5.5]

(Source: British Transport Police)

...and the perception of crime is improving as well, with rail users' perceptions of their personal security at rail stations improving.

Rail travellers' perception of personal security whilst using a rail station has improved in Wales between autumn 2005 and autumn 2010 with rail travellers having a positive perception up from 54 to 60 per cent. This can be compared to the average of regional rail services across Great Britain, which was 66 per cent during autumn 2010. [5.6]

(Source: Passenger Focus)

While their perception of their personal security onboard a train service is also increasing and has exceeded same level for comparable services elsewhere in Great Britain.

There is a better position with rail travellers' perception of personal security whilst onboard a rail service in Wales, which is up from 72 to 82 per cent over the same period as above (for Arriva Trains Wales only). For all regional rail services across Great Britain, there was a comparable increase from 75 to 78 per cent in the same period. [5.6]

(Source: Passenger Focus)

Bus users' in Wales also have a good perception of their personal security when using buses

75 per cent of bus users in Wales are satisfied with their personal safety at the bus stop, rising to 84 per cent once they are on the bus. The corresponding figures for disabled bus users are 73 per cent and 84 per cent respectively. [5.7]

(Source: Welsh Bus Passenger Survey 2010)

The Wales Transport Strategy aims to improve access to employment opportunities (outcome 6) meaning that people can get to a reasonable range of employment opportunities at the times needed, helping to reduce economic inactivity and social exclusion, particularly for disadvantaged groups.

Travel to and from work accounts for a significant share of overall transport with the private car as the dominant mode of transport. Modelling travel journeys shows that most people in Wales can get to a 'key' employment centre (the same as the key shopping and leisure centres above) in a reasonable time using the car; but this indicator shows that for many of these people public transport, or walking and cycling, are still viable alternatives.

91 per cent of people aged 16 or over within Wales are within 15 minutes drive time (at assumed average road speeds with no journey time delays) of a key centre on a Tuesday between 7-9am. 26 per cent of people aged 16 or over are within 15 minutes travel time by public transport of a key centre, some 68 per cent within 30 minutes. 42 per cent of people aged 16 or over are within 15 minutes travel time of a key centre by cycling, some 68 per cent within 30 minutes. 12 per cent of people aged 16 or over are within 15 minutes travel time of a key centre by walking, with 26 per cent within 30 minutes. [6.1]

The Wales Transport Strategy aims to improve connectivity within Wales and Internationally (outcome 7); improvements to connectivity may be reflected in how people travel within Wales, and to and from Wales.

The section above on "Transport and healthy lifestyles" was based on asking individuals about the way they travel and their use of the transport system. This section is based on usage records for various types of transport.

Bus travel has increased since 2002/03, with the introduction of concessionary travel passes for the elderly and disabled helping to promote this increase, but travel has dropped back in 2009/10 with the recession and periods of bad weather.

Bus passenger journey numbers in Wales reached a peak in 2008/09 (125 million passenger journeys); following a generally rising trend in travel that started in 2002/03; probably due to the introduction of concessionary travel passes for those aged 60 and over. Journey numbers fell back to 117 million in 2009-10, partly because of the poor weather at the beginning of 2010. [7.1]

(Source: Department of Transport)

The use of the rail system has increased sharply, both in terms of numbers of scheduled services that are run (these figures cover the services which are the responsibility of the Welsh Assembly Government)...

The principal train operating company running services in Wales, Arriva Trains Wales, has increased the number of timetabled kilometres its services operate from 18.44 million to 23.77 million between 2003/04 and 2009/10. This represents an increase of over 5 million timetabled train kilometres or a 29 per cent increase between 2003/04 and 2009/10. [7.2a]

(Source: Office of the Rail Regulator)

...and in terms of passenger numbers.

Rail station passenger usage numbers increased in every local authority area in Wales between 2005/06 to 2009/10, other than the Isle of Anglesey. Cardiff Central was by far the busiest station in Wales with almost 11 million station entries and exits in 2009/10, representing almost 25 per cent of all station entries and exits in Wales. Cardiff Queen Street was the second busiest station, ahead of Newport. [7.2b]

(Source: Office of the Rail Regulator, and Delta Rail)

Since 2005-06, the increase in rail passenger numbers within Wales has been much faster than the increase in rail journeys to or from Wales. [7.2]

(Source: Office of the Rail Regulator)

Though there is still scope for improving facilities for disabled rail passengers

The latest published figures show that of stations where Arriva Trains Wales has responsibility, only 18 per cent had staff and 52 per cent had wheelchair access to platforms. [7.3]

(Source: Arriva Trains Wales)

Air passengers using Cardiff Airport are currently declining.

The total number of domestic passenger movements at Cardiff Airport fell to 265 thousand passengers. The total number of international passengers using Cardiff Airport was 1.1 million in 2010; the majority of international passenger movements were from and to destinations in Spain. [7.4]

(Source: Civil Aviation Authority)

The long-term decline for sea passengers through Welsh ports was reversed in 2010.

There was a decline of some 23 per cent in the number of sea passenger movements from Welsh ports between 1995 and 2009. But in 2010 there was a 6 per cent increase to 2.9 million passenger movements. This was partly due to the introduction of services from Swansea to Cork; but there were also increases in passengers using both Milford Haven and Holyhead. [7.5]

(Source: Department for Transport)

The motor vehicle is the most used mode of transport, though traffic has declined in recent years.

Overall motor vehicle traffic in Wales peaked in 2007 (at 28.4 billion vehicle kilometres per year). In the past traffic has shown long term growth halted only with significant increases in fuel prices or recession. The impact of both these factors has seen traffic volumes falling to below 28 billion vehicle kilometres in 2009. [7.7]

Looking at flows between Wales and England, traffic levels at trunk road border crossing points have generally risen in line with traffic growth across the road network in Wales. Trunk border crossing points in Mid-Wales have significantly lower flows than those in South and North Wales, but appear to have had traffic flows affected less by the economic downturn in 2008 and continuing in 2009. [7.8]
(Source: DfT, Great Britain road traffic estimates).

The Welsh Transport Strategy stresses the importance to the economy of a reliable transport system and to improve the efficient, reliable and sustainable movement of people and freight (outcomes 8 and 9).

In the first instance, this is concerned with the efficiency, timeliness and reliability of public transport in Wales:

For buses, punctuality is comparable to that across the rest of Great Britain.

Bus punctuality (i.e. arriving between 1 minute early and 5 minutes late) in Wales at all bus stops in 2007 was 76 per cent. [8.1]

(Source: Department for Transport, Bus Punctuality Statistics report)

And 76 per cent of bus users in Wales state that they are satisfied with the punctuality of their bus. [8.1]
(Source: Welsh Bus Passenger Survey 2010)

Train punctuality is improving...

The percentage of Arriva Trains Wales trains operating within 5 minutes of scheduled time improved to 94.9 per cent of trains in 2009/10. [8.2, 8.3 & 8.4]

(Source: Office of the Rail Regulator)

...while the number of train services running is increasing.

There was a 2.3 per cent increase in the number of planned Arriva Trains Wales train services between 2008/09 and 2009/10. [8.3]

(Source: Office of the Rail Regulator)

These changes in the transport system (*and safety from outcome 5*) are reflected in increasing levels of passenger satisfaction with travel in Wales:

For bus users, 88 per cent were satisfied, overall, with their bus journey; while 76 per cent were satisfied with its punctuality and 61 per cent of fare-paying passengers were satisfied with value for money.

These results are comparable to levels of satisfaction across areas in England. [8.5]

(Source: Welsh Bus Passenger Survey 2010)

For rail users, overall satisfaction with both train stations and rolling stock facilities increased by 6 percentage points from 81 per cent in Spring 2005 to 87 per cent in Autumn 2010. This compares favourably with the average of 86 per cent for all other regional operators. [8.6]

(Source: Passenger Focus)

Similarly, rail passenger satisfaction with information provision at rail services operated by Arriva Trains Wales increased by 10 percentage points from 57 per cent in Spring 2005 to 67 per cent in Autumn 2010. The average for all other regional operators was a satisfaction level of 69 per cent in Autumn 2010.

[8.6]

(Source: Passenger Focus)

One purpose of an efficient reliable transport system is the movement of goods.

Looking at road freight between Wales and England, the commodity moved into Wales from the rest of the UK with the highest tonnage in 2009 was food, drink and tobacco at some 10.6m tonnes with some 5.6m tonnes moved from Wales to the rest of the UK. The commodity moved from Wales to the rest of the UK with the highest tonnage in 2009 was crude and manufactured minerals and building materials at just over 6m tonnes. [8.8]

(Source: Department for Transport)

The impact of the recession has meant that there were fewer tonnes of goods lifted within Wales, lifted from Wales to the rest of UK and exported outside of the UK from Wales in 2009 than in any year from 1990 onwards. [8.8]

(Source: Department for Transport)

The Welsh Transport Strategy is also concerned with the environmental outcomes from transport. One of these is to reduce the impact to transport on greenhouse gas emissions (outcome 12)...

Between 1990 and 2008 total greenhouse gas emissions in Wales have decreased, though emissions from transport have increased.

Total greenhouse gas emissions in Wales have fallen by some 20 per cent between 1990 and 2008. However, during the same period greenhouse gas emissions from transport have increased by some 3.4 per cent. Within the transport sector greenhouse gas emissions from rail transport have decreased by 3.6 per cent, water transport increased by 21 per cent and road transport by 4.4 per cent. Emissions have also increased within the aviation sector but the total greenhouse gas emissions from aviation represent less than 1 per cent of the total emissions from transport.

Road transport produces the vast majority of greenhouse gas emissions from the transport sector. In 1990, 85 per cent of greenhouse gas emissions from the transport sector were from road transport; by 2008 this had marginally increased to 86 per cent. [12.1]

(Source: AEA for DECC; end user green house gas inventories)

The transport sector has, however, reduced its contribution to air pollution and other harmful pollutants. Over the period 1990 to 2008, Carbon Monoxide emissions apportioned to the transport sector fell by 73 per cent; Nitrogen Oxide emissions fell by 46 per cent; Particulate emissions fell by 29 per cent; Sulphur Dioxide emissions fell by 23 per cent; Non-Methane Volatile Organic Compounds emissions fell by 81 per cent; and Lead emissions fell by 100 per cent. [14.1]

(Source: National Atmospheric Emissions Inventory)

...and to adapt to the impact of climate change

Looking at the lengths of trunk road and railway in Wales at risk of flooding, shows that some 23 per cent of the trunk road network is within a floodzone, with some 56 per cent of the railway network within a floodzone. [13.1]

(Source: Welsh Assembly Government, Environment Agency)

More locally, it also aims to improve the positive impact of transport on the local environment (outcome 15)

The percentage of high or acceptably clean highway and relevant land fell by less than one per cent between 2008-09 and 2009-10 on an all Wales basis. [15.1]

(Source: Local Authority Performance Indicators)

Another local issue is traffic noise: Looking at the number of households and people affected by road noise over a 24 hour period as calculated in the noise action plans for major roads and the agglomerations of Cardiff & Vale of Glamorgan and Swansea & Neath Port Talbot shows 184 thousand people affect by noise from major roads at the 55dB level, falling to 4 thousand at the much higher 75dB level. The figures for Cardiff and Swansea are lower. A smaller number of people are affected by noise from trains. [15.2 & 15.3]
(Source: Welsh Assembly Government)

Social outcomes monitoring

3. Wales Transport Strategy Social Outcomes & Monitoring Indicators

1. Improve access to healthcare

3.1 The Wales Transport Strategy states that people should be able to access the health services that they need at the times that they need. The National Transport Plan expands on this by stating that it aims to enable people to access key sites and key services more sustainably. The three accessibility indicators we have chosen will demonstrate how many people can access health services in a reasonable time and how many can do so using sustainable means of transport.

1.1 The proportion of households within 15, 30, 45, 60 and 90 minute travel time threshold(s) of NHS Major Acute Hospitals between 10am and 12pm on a Tuesday (i) by public transport (ii) by car (iii) by cycling (iv) by walking

3.2 This indicator has been monitored using Accession™ GIS software. Table 1.1 shows that almost all households within Wales are within 1 hour and 30 minutes drive time, at assumed average road speeds with no journey time delays, of NHS Major Acute Hospitals. Some 87 per cent of households are within 1 hour and 30 minutes travel time by public transport of NHS Major Acute Hospitals, with some 86 per cent of households within 1 hour and 30 minutes travel time by cycling. Some 39 per cent of households are within 1 hour and 30 minutes travel time of NHS Major Acute Hospitals by walking.

3.3 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

1.1 The proportion of households within 15, 30, 45, 60 and 90 minute travel time threshold(s) of NHS Major Acute Hospitals between 10am and 12pm on a Tuesday by public transport, by car, by cycling, by walking

Numbers and Percentages								
Number and proportion of households								
Time Thresholds	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	120,860	9.0	982,287	73.3	282,746	21.1	40,378	3.0
15 to 30 Minutes	380,740	28.4	266,320	19.9	278,133	20.8	82,787	6.2
30 to 45 Minutes	316,258	23.6	59,416	4.4	217,006	16.2	120,156	9.0
45 to 60 Minutes	205,020	15.3	29,248	2.2	153,607	11.5	120,668	9.0
Within 1 hour	1,022,878	76.3	1,337,271	99.8	931,492	69.5	363,989	27.2
60 to 90 Minutes	140,884	10.5	2,468	0.2	219,649	16.4	155,976	11.6
Within 1 hour 30 minutes	1,163,762	86.9	1,339,739	100.0	1,151,141	85.9	519,965	38.8
Above 90 mins or not accessible	176,074	13.1	-	-	188,695	14.1	819,871	61.2

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on 1,339,836 domestic addresses in Wales

1.2 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of: GP Surgeries between 10am and 12pm on a Tuesday (i) by public transport (ii) by car (iii) by cycling and (iv) by walking

3.4 This indicator has been monitored using Accession™ GIS software. Table 1.2 shows that almost all households within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a GP Surgery. Some 76 per cent of households are within a 15

minute travel time by public transport of a GP surgery, with some 87 per cent of households within 15 minutes travel time by cycling. Some 60 per cent of households are within 15 minutes travel time of a GP Surgery by walking.

- 3.5 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

1.2 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of: GP Surgeries between 10am and 12pm on a Tuesday by public transport, by car, by cycling and by walking

Time Thresholds	Numbers and Percentages							
	Number and proportion of households							
	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	1,015,552	75.8	1,336,325	99.7	1,159,469	86.5	799,178	59.6
15 to 30 Minutes	219,834	16.4	2,363	0.2	118,349	8.8	237,017	17.7
30 to 45 Minutes	22,618	1.7	-	-	42,874	3.2	104,217	7.8
45 to 60 Minutes	3,590	0.3	-	-	14,859	1.1	55,856	4.2
Within 1 hour	1,261,594	94.2	1,338,688	99.9	1,335,551	99.7	1,196,268	89.3
Above 60 mins or not accessible	78,242	5.8	1,148	0.1	4,285	0.3	143,568	10.7

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on 1,339,836 domestic addresses in Wales

- 1.3 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of: Pharmacies between 10am and 12pm on a Tuesday (i) by public transport (ii) by car (iii) by cycling and (iv) by walking

- 3.6 This indicator has been monitored using Accession™ GIS software. Table 1.3 shows that almost all households within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a pharmacy. Some 82 per cent of households are within 15 minutes travel time by public transport of a pharmacy, with some 88 per cent of households within 15 minutes travel time by cycling. Some 69 per cent of households are within 15 minutes travel time of a pharmacy by walking.

- 3.7 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

1.3 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of: Pharmacies between 10am and 12pm on a Tuesday by public transport, by car, by cycling and by walking

Numbers and Percentages

Time Thresholds	Number and proportion of households							
	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	1,097,466	81.9	1,335,519	99.7	1,181,067	88.2	923,404	68.9
15 to 30 Minutes	147,199	11.0	3,158	0.2	87,515	6.5	183,570	13.7
30 to 45 Minutes	15,402	1.1	-	-	34,757	2.6	66,945	5.0
45 to 60 Minutes	2,707	0.2	-	-	14,708	1.1	41,901	3.1
Within 1 hour	1,262,774	94.2	1,338,677	99.9	1,318,047	98.4	1,215,820	90.7
Above 60 mins or not accessible	77,062	5.8	1,159	0.1	21,789	1.6	124,016	9.3

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on 1,339,836 domestic addresses in Wales

2. Improve access to education, training and lifelong learning

3.8 The Wales Transport Strategy states that people of all ages should be able to access education and training to increase their skills base. The National Transport Plan expands this with the aim to enable people to access key sites and key services more sustainably. The accessibility indicators we have chosen will demonstrate how many people can access education, training and lifelong learning services in a reasonable time and using sustainable means of transport.

2.1 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of primary schools between 7am and 9am on a Tuesday (i) by public transport, (ii) by car, (iii) by cycling and (iv) by walking

3.9 This indicator has been monitored using Accession™ GIS software. Table 2.1 shows that almost all households within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a primary school. Some 91 per cent of households are within 15 minutes travel time by public transport of a primary school, with some 97 per cent of households within 15 minutes travel time by cycling. Some 82 per cent of households are within 15 minutes travel time of a primary school by walking.

3.10 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

2.1 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of Primary Schools between 7am and 9am on a Tuesday by public transport, by car, by cycling, by walking

Time Thresholds	Numbers and Percentages							
	Number and proportion of households							
	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	1,216,416	90.8	1,339,217	100.0	1,303,698	97.3	1,092,616	81.5
15 to 30 Minutes	54,306	4.1	164	0.0	33,446	2.5	91,278	6.8
30 to 45 Minutes	2,978	0.2	139	0.0	1,927	0.1	41,777	3.1
45 to 60 Minutes	116	0.0	19	0.0	170	0.0	24,861	1.9
Within 1 hour	1,273,816	95.1	1,339,539	100.0	1,339,241	100.0	1,250,532	93.3
Above 60 mins or not accessible	66,020	4.9	297	0.0	595	0.0	89,304	6.7

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on 1,339,836 domestic addresses in Wales

2.2 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of secondary schools between 7am and 9am on a Tuesday (i) by public transport, (ii) by car, (iii) by cycling and (iv) by walking

3.11 This indicator has been monitored using Accession™ GIS software. Table 2.2 shows that almost all households within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a secondary school. Some 56 per cent of households are within 15 minutes travel time by public transport of a secondary school, with some 88 per cent within 30 minutes. Some 79 per cent of households are within 15 minutes travel time of a secondary school by cycling. Some 36 per cent of households are within 15 minutes travel time of a secondary school by walking, with some 63 per cent within 30 minutes.

3.12 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

2.2 The proportion of households within 15, 30, 45 and 60 minute travel time threshold(s) of Secondary Schools between 7am and 9am on a Tuesday by public transport, by car, by cycling, by walking

Numbers and Percentages								
Number and proportion of households								
Time Thresholds	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	745,515	55.6	1,334,175	99.6	1,051,159	78.5	482,025	36.0
15 to 30 Minutes	436,118	32.6	5,564	0.4	182,225	13.6	354,546	26.5
30 to 45 Minutes	66,915	5.0	-	-	78,945	5.9	176,000	13.1
45 to 60 Minutes	9,010	0.7	-	-	22,366	1.7	99,306	7.4
Within 1 hour	1,257,558	93.9	1,339,739	100.0	1,334,695	99.6	1,111,877	83.0
Above 60 mins or not accessible	82,278	6.1	97	0.0	5,141	0.4	227,959	17.0

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on 1,339,836 domestic addresses in Wales

2.3 The proportion of people aged 16 and over within 15, 30, 45 and 60 minute travel time threshold(s) of higher, further or adult education providers between 7am and 9am on a Tuesday (i) by public transport, (ii) by car, (iii) by cycling and (iv) by walking

3.13 This indicator has been monitored using Accession™ GIS software. Table 2.3 shows that almost all people aged over 16 within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a higher, further or adult education establishment. Some 63 per cent of households are within 15 minutes travel time by public transport of a higher, further or adult education establishment, 88 per cent within 30 minutes. Some 80 per cent of households are within 15 minutes travel time of a higher, further or adult education establishment by cycling. Some 45 per cent of households are within 15 minutes travel time of a higher, further or adult education establishment by walking, with 66 per cent within 30 minutes.

3.14 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

2.3 The proportion of people aged 16 and over within 15, 30, 45 and 60 minute travel time threshold(s) of Higher, Further and Adult Education providers between 7am and 9am on a Tuesday by public transport, by car, by cycling, by walking

Numbers and Percentages

Number and proportion of people aged 16 and over								
Time Thresholds	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	1,514,407	62.5	2,408,542	99.4	1,930,390	79.7	1,083,998	44.7
15 to 30 Minutes	617,348	25.5	10,693	0.4	286,518	11.8	522,646	21.6
30 to 45 Minutes	118,021	4.9	-	-	135,953	5.6	271,862	11.2
45 to 60 Minutes	23,272	1.0	-	-	44,843	1.9	147,085	6.1
Within 1 hour	2,273,048	93.8	2,419,235	99.8	2,397,703	98.9	2,025,590	83.6
Above 60 mins or not accessible	150,373	6.2	4,186	0.2	25,718	1.1	397,831	16.4

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on population figures of 2,423,421 people aged 16 and over in Wales

3. Improve access to shopping and leisure facilities

3.15 The Wales Transport Strategy states that people should be able to access a reasonable range of shopping and leisure facilities at convenient times. The National Transport Plan expands on this by stating that it aims to enable people to access key sites and key services more sustainably. The two accessibility indicators we have chosen will demonstrate how many people can access shopping and leisure facilities at key centres in Wales in a reasonable time and how many can do so using sustainable means of transport.

3.1 Proportion of households within 15, 30, 45, 60 and 90 minute travel time thresholds of A 'Key Centre' (as defined by the Regional Transport Consortia) between 10am and 12pm on a Tuesday (i) by public transport and (ii) by car (iii) by cycling and (iv) by walking

3.16 This indicator has been monitored using Accession™ GIS software. Table 3.1 shows that some 91 per cent of households within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a key centre. Some 27 per cent of households are within 15 minutes travel time by public transport of a key centre, with some 70 per cent within 30 minutes. Some 42 per cent of households are within 15 minutes travel time of a key centre by cycling, with some 68 per cent within 30 minutes. Some 12 per cent of households are within 15 minutes travel time of a key centre by walking, with some 26 per cent within 30 minutes.

3.17 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

3.1 The proportion of households within 15, 30, 45, 60 and 90 minute travel time threshold(s) of a 'Key Centre' between 10am and 12pm on a Tuesday by public transport, by car, by cycling, by walking

Time Thresholds	Numbers and Percentages							
	Number and proportion of households							
	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	355,903	26.6	1,211,904	90.5	566,442	42.3	162,151	12.1
15 to 30 Minutes	576,264	43.0	113,484	8.5	348,723	26.0	190,386	14.2
30 to 45 Minutes	218,022	16.3	14,061	1.0	188,262	14.1	170,925	12.8
45 to 60 Minutes	59,758	4.5	290	0.0	88,332	6.6	126,009	9.4
Within 1 hour	1,209,947	90.3	1,339,739	100.0	1,191,759	88.9	649,471	48.5
60 to 90 Minutes	27,506	2.1	-	-	97,826	7.3	214,704	16.0
Within 1 hour 30 minutes	1,237,453	92.4	1,339,739	100.0	1,289,585	96.2	864,175	64.5
Above 90 mins or not accessible	102,383	7.6	97	0.0	50,251	3.8	475,661	35.5

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on 1,339,836 domestic addresses in Wales

3.2 Proportion of households within 15, 30, 45, 60 and 90 minute travel time thresholds of A 'Key Centre' between 8am and 12pm on a Saturday (i) by public transport and (ii) by car (iii) by cycling and (iv) by walking

3.18 This indicator has been monitored using Accession™ GIS software. Table 3.2 shows that some 91 per cent of households within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a key centre. Some 28 per cent of households are within 15 minutes travel time by public transport of a key centre, with some 71 per cent within 30

minutes. Some 42 per cent of households are within 15 minutes travel time of a key centre by cycling, with some 68 per cent within 30 minutes. Some 12 per cent of households are within 15 minutes travel time of a key centre by walking, with some 26 per cent within 30 minutes.

- 3.19 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

3.2 The proportion of households within 15, 30, 45, 60 and 90 minute travel time threshold(s) of a 'Key Centre' between 8am and 12pm on a Saturday by public transport, by car, by cycling, by walking

Time Thresholds	Numbers and Percentages							
	Number and proportion of households							
	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Up to 15 Minutes	370,090	27.6	1,211,904	90.5	566,442	42.3	162,151	12.1
15 to 30 Minutes	577,098	43.1	113,484	8.5	348,723	26.0	190,386	14.2
30 to 45 Minutes	213,363	15.9	14,061	1.0	188,262	14.1	170,925	12.8
45 to 60 Minutes	64,960	4.8	290	0.0	88,332	6.6	126,009	9.4
Within 1 hour	1,225,511	91.5	1,339,739	100.0	1,191,759	88.9	649,471	48.5
60 to 90 Minutes	36,705	2.7	-	-	97,826	7.3	214,704	16.0
Within 1 hour 30 minutes	1,262,216	94.2	1,339,739	100.0	1,289,585	96.2	864,175	64.5
Above 90 mins or not accessible	77,620	5.8	97	0.0	50,251	3.8	475,661	35.5

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of
 Note: Based on 1,339,836 domestic addresses in Wales

4. Encourage healthy lifestyles

3.20 The Wales Transport Strategy aims to increase the levels of walking and cycling in Wales. To deliver this the National Transport Plan aspires to make it easier for people in Wales choose more healthy and sustainable means of travel. The ten indicators we have chosen to monitor this aspiration will over time demonstrate the effect the National Transport Plan has had on people's choice of transportation.

4.1 Modal share of total trips undertaken by people living in Wales

3.21 This indicator is monitored using the data collected for people living in Wales, as part of the Department for Transport's National Travel Survey covering Great Britain. The data presents a consistent picture over the last six to seven years with trips made using a car some three times greater than those made by walking. The total number of trips has remained fairly constant at around or just below a thousand trips per person, per year with walking representing roughly two hundred of those trips. The distance and purpose of travel has also remained consistent over time with shopping trips and trips of under one mile being the being the most common.

4.1 Modal share of total trips undertaken by people living in Wales (a)

	Average number of trips				
	2002/03	2004/05	2006/07	2007/08	2008/09
By main mode:					
Car / van:					
Driver	447	479	438	422	413
Passenger	252	260	251	246	236
Total	699	738	689	668	649
Walk	204	208	211	206	218
Other modes	92	85	86	95	104
All modes	996	1,031	986	969	971
By purpose:					
Commuting and business	187	188	179	165	157
Education and escort education	111	109	110	101	97
Shopping	200	204	195	199	210
Other escort	98	99	99	96	91
Other personal business	102	101	96	95	95
Visit friends	169	180	162	168	177
Leisure and just walking	129	152	146	144	146
All purposes	996	1,031	986	969	971
By length:					
Under 1 mile	207	194	202	187	197
1 to under 2 miles	179	194	174	162	161
2 to under 3 miles	117	130	100	115	113
3 to under 5 miles	144	143	139	144	139
5 to under 10 miles	170	175	171	168	179
10 to under 25 miles	127	134	142	139	132
25 miles and over	51	61	58	53	50
All lengths	996	1,031	986	969	971

Source: National Travel Survey

(a) Data shown by average over two year time period to ensure sufficient sample sizes

- 4.2 Percentage of adults whose main mode of travel to work is walking
- 4.3 Percentage of adults whose main mode of travel to work is cycling

3.22 These indicators are monitored using the Labour Force Survey (LFS) which is a quarterly sample survey of households in Great Britain. The LFS provides information on the UK labour market including data on how people usually travel to work. These indicators are two of the six monitoring indicators of the Walking and Cycling Action Plan for Wales 2009-2013.

3.23 The data for Wales over the last eight years shows that the number of male respondents using a car, van or minibus to access work has remained fairly constant between a total of 83 to 86 per cent of respondents between 2001 and 2009. The number of female respondents using a car, van or minibus to access work has increased by some 5 per cent from 2001 to 2009.

4.2 & 4.3 Percentage of adults whose main mode of travel to work is walking or cycling

	Percentages								
Autumn quarter of each year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Car, van, minibus or works van:									
Males	85	86	86	~	84	86	84	85	83
Females	73	76	76	~	75	77	77	80	78
All persons	79	81	81	~	80	82	81	83	81
Bicycle:									
Males	2	2	2	~	2	2	2	2	2
Females	1	*	*	~	*	1	1	*	1
All persons	1	1	1	~	1	1	1	1	1
Bus, coach, private bus or taxi:									
Males	4	3	3	~	3	3	3	3	3
Females	8	7	8	~	7	6	7	6	6
All persons	6	5	5	~	5	5	5	4	4
Railway train, underground train or light railway:									
Males	1	1	1	~	2	1	1	2	2
Females	1	1	1	~	1	1	2	2	2
All persons	1	1	1	~	2	1	2	2	2
Walk:									
Males	7	6	7	~	7	7	8	6	9
Females	16	16	14	~	16	15	13	12	14
All persons	12	11	10	~	11	10	10	9	11
Other modes:									
Males	2	2	1	~	2	1	2	2	1
Females	1	*	*	~	*	*	*	*	*
All persons	1	1	1	~	1	1	1	1	1

Source: Labour Force Survey

Notes: ~ figure unavailable, * sample size too small

3.24 A person's income and socio economic status has an influence on the mode of transport used to travel to work. Tables 4.2a & 4.3a below, taken from the 2008 Living in Wales survey, compare travel to work for those working full or part time, their gross household income and the type of profession they are employed in. Unsurprisingly the tables show that the greater the household income the more travel to work is via a car or a van with a corresponding fall in the numbers travelling to work on foot. There a clear divide between those households with a gross household income of less than £20,800 and those with an income in excess of that. Some 65 per cent of respondents with a gross household income of less than £20,800 use a car or van to travel

to work compared to 80 per cent with a gross household income of £20,800 to £39,999 and 87 per cent with a gross household income in excess of £40,000. 23 per cent of respondents walk to work in households with a gross household income of under £20,800, 12 per cent with a gross household income of £20,800 to £39,999 and just 7 per cent with a Gross household income in excess of £40,000. Cycling, train usage and other forms of travel remain low across the income bands, 2 per cent at most. Bus, minibus, coach or taxi usage is also low with the only notable usage being 8 per cent for those respondents with a gross household income less than £20,800.

3.25 The other contrast is between those working full time and those working part time. Some 82 per cent of full time workers use a car or van to travel to work compared to 69 per cent of part time workers. There is a corresponding increase in the numbers of part time workers walking to work, 24 per cent, compared to full time workers at 9 per cent. There is a low uptake of other modes of travel to work with the most notable being 6 per cent of part time workers and 4 per cent of full time workers using a bus, minibus, coach or taxi to travel to work.

3.26 A respondent's socio-economic status follows a similar pattern to that of household income. Broadly speaking those in higher paid, professional jobs are more likely to use a car or van to travel to work, 85 per cent of those in higher managerial or professional occupations, than those in lower paid, lower skilled jobs, 69 per cent of respondents in routine occupations. Those respondents working in semi routine or routine occupations are also the most likely to walk to work, at 24 & 22 per cent, compared to other occupations ranging from 6 to 12 per cent. Respondents in semi and fully routine occupations were the only ones to use the bus as a mode of travel to work above a level of 5 per cent. All other modes of transport have very low levels of usage across the occupations bands.

3.27 We hope to be able to update the socio-economic analysis of the travel to work pattern from the forthcoming National Survey.

4.2a & 4.3a Main mode of travel to work, by sex and employment status of respondent and by household income: 2008 (a) (b)

	Percentages							
	Male	Female	Working (c) full-time	Working (d) part-time	Gross household income (e)			Total
					Less than £20,800	£20,800 to £39,999	£40,000 and over	
Car or van	82	76	82	69	65	80	87	78
On foot	8	17	9	24	23	12	7	13
Bus, minibus, coach or taxi	3	5	4	6	8	3 *	2 *	4
Bicycle	3	0 *	2	0 *	1 *	2 *	1 *	1
Train	2 *	0 *	1	0 *	0 *	1 *	2 *	1
Other (f)	3	1 *	2	1 *	2 *	1 *	1 *	2
Total	100	100	100	100	100	100	100	100

Source: Living in Wales Survey 2008

(a) For respondents in employment; excluding those working at or from home

(b) If weighted totals are less than 5,000, figures may be statistically unreliable, and have been marked with an asterisk

(c) 30 hours a week or more

(d) Less than 30 hours a week

(e) Not every respondent answered this question.

(f) Including motorcycles and mopeds

4.4 Percentage of children aged 5 to 16 whose main mode of travel to school is walking

3.28 This indicator is monitored using the data collected as part of the Department for Transport's

National Travel Survey covering Great Britain. This indicator is one of the six monitoring indicators of the Walking and Cycling Action Plan for Wales 2009-2013. There is more information and analysis about travel to school in our learner travel bulletin which can be found at the following link: (link to learner travel bulletin)

- 3.29 The data showed a positive trend in the increase in the number of respondents stating that they walk to school, up from the 37 per cent average for 1995/99 to 45 per cent in 2007/08. However, in 2008/09 walking represented just 36 per cent of trips, a 9 percentage point fall compared to 2007/08. We have some concerns over the validity of this data set, the 2008/09 figures were based on an unweighted sample size of just 277, we are attempting to locate alternative data sources.

4.4 Percentage of children aged 5 to 16 whose main mode of travel to school is walking (a) (b) (c)

	Percentage of trips					
	1995/99	2002/03	2004/05	2006/07	2007/08	2008-09
Car	29	32	41	29	30	34
Walk	37	36	35	43	45	36
Bus or coach	32	30	22	24	22	24
Other (inc bicycle)	2	2	2	3	4	6
All modes	100	100	100	100	100	100
Average trip length (miles)	3	3	3	3	2	3

Source: National Travel Survey

(a) Table adapted to show data in 5-year bands for 1995 to 1999 and in 2-year bands from 2002/2003 to ensure sufficient sample sizes.

(b) Figures are subject to fluctuation due to small sample sizes, for example 277 unweighted individuals surveyed in total for 2008-09

(c) Trips of under 50 miles only.

4.5 Percentage of children who cycle to school

- 3.30 This indicator is monitored using the data collected as part of the Sport Wales' sports participation surveys. This indicator is one of the six monitoring indicators of the Walking and Cycling Action Plan for Wales 2009-2013.
- 3.31 The results show a low level of respondents cycling to school. A higher proportion of children aged 7-11 respond that they cycle to school than those in the 11-16 age group. This could in part be due to the greater distances travelled, on average, to access secondary education compared to primary education.
- 3.32 Data for 2008/09 will be included in the online version of the monitoring indicators once it is published by Sport Wales. We are also seeking alternative data sources to monitor this indicator in the future.

4.5 Percentage of children who cycle to school

	Percentages			
	2001/02	2004	2006	2008/09
Ages 7-11	2	2	2	
Ages 11-16	1	1	1	

Source: Sport Wales

3.33 The Transport Statistics team have been working with colleagues in the Transport & Strategic Regeneration department of the Welsh Assembly Government to provide information to support the development of the Learner Travel measure. One of the data sources that we have used is the Wales Omnibus Survey carried out by Beaufort Research. This survey is carried out four times a year, asking questions to circa 1000 people across Wales of which 290 respondents in the November 2010 survey were parents or guardians of children aged 0-16. We have included this data in the baseline monitoring report for comparison reasons only, the data is not collected in a statistically robust way. The data is presented in Table 4.5a below.

3.34 The table shows that 45 per cent of respondents stated that their children walked to school. This compares to 36 per cent whose children were passengers in car, 19 per cent passengers on a school bus, 3 per cent passengers on a public bus, 2 per cent passengers on a train with just 1 per cent cycling. The data suggests some regional variation but as it is based on so few respondents, just 28 for Mid-Wales it cannot be regarded as being reliable.

4.5a On an average day how do your children travel to and from school? - Parents / Guardians only

	Region					Numbers and percentages
	North Wales	South East Wales	South West	Mid Wales	Total	
Weighted	61	130	70	28	290	
	21%	45%	24%	10%	100%	
Walking	31	65	30	6	132	
	51%	50%	42%	23%	45%	
Private car	25	48	24	8	105	
	41%	37%	34%	30%	36%	
School bus	6	22	11	14	54	
	10%	17%	16%	50%	19%	
Public bus	-	6	-	2	8	
	-	5%	-	6%	3%	
Taxi	2	3	-	1	5	
	2%	2%	-	4%	2%	
Train	-	4	-	-	4	
	-	3%	-	-	1%	
Cycling	-	2	-	1	3	
	-	1%	-	4%	1%	
Other	2	1	-	-	3	
	4%	1%	-	-	1%	
No children currently at school	9	16	14	5	44	
	14%	13%	20%	17%	15%	

Source: Beaufort Research Ltd, Wales Adult Omnibus November 2010, total sample size 1,013, parents or guardians = 290.

4.6 Percentage of adults walking over 2 miles in the past 4 weeks

4.7 Percentage of adults undertaking any cycling in the past 4 weeks

3.35 These indicators are monitored using the data collected as part of the Sports Council Wales' adult sports participation surveys. These indicators are two of the six monitoring indicators of the Walking and Cycling Action Plan for Wales 2009-2013.

3.36 The results show a slight increase from 33 per cent in 2000/01 of the number of respondents reporting that they have walked over 2 miles in the past 4 weeks to 34 per cent in 2008/09. The results show that the amount of cycling reported by respondents also increased from 6 per cent in 2000/01 to 8 per cent in 2008/09. Data for later years will be included in the online version of the monitoring indicators once it is published by Sport Wales. We will also seek alternative data

sources to monitor this indicator in the future.

4.6 & 4.7 Percentage of adults walking over 2 miles in the past 4 weeks, percentage of adults undertaking any cycling in the past 4 weeks

	Percentage of all adults			
	2000/01	2002/03	2004/05	2008/09
Any walking (over 2 miles) in the past 4 weeks	33	31	40	34
Any cycling in the past 4 weeks	6	5	5	8

Source: Sport Wales

4.8 Percentage of adults undertaking walking or cycling on visits to the outdoors in the last 12 months

- 3.37 The Welsh Outdoor Recreation Survey 2008 (WORS) was commissioned by the Countryside Council for Wales and the Forestry Commission Wales. The WORS 2008 asked respondents whether they had visited the outdoors in the last 12 months and what their activities were. 94 per cent of respondents had visited the outdoors. The most commonly undertaken activities were walking, with 86 per cent of respondents, while 21 per cent took part in road cycling and 16 per cent in off road cycling or mountain biking.
- 3.38 Table 4.8 details differences in the levels of walking and cycling between different age groups, genders and respondents by their household incomes based on activity in the last 12 months. The table shows a high level of walking across the age bands, genders and household income. Respondents aged over 75 report the lowest level of walking with 65 per cent saying they had walked at least once in a visit to the outdoors in the last 12 months. Respondents from households with lower incomes report less walking than those with higher incomes. 81 per cent of respondents from households with an income up to £15,999 state that they have walked at least once in a visit to the outdoors in the last 12 months compared to 92 per cent of respondents from households with an income in excess of £80,000. There is a small difference in the level of walking between males and females, 85 per cent of men and 88 per cent of women stating that they had walked at least once during visits to the outdoors in the last 12 months.
- 3.39 Table 4.8 shows that male respondents reported double the level of cycling, both on and off road, compared to female respondents. Unsurprisingly those respondents in the two youngest age bands reported the highest levels of cycling. Respondents from households with lower incomes report less cycling than those with higher incomes. 11 per cent of respondents from households with an income up to £15,999 state that they have road cycled at least once in a visit to the outdoors in the last 12 months compared to 41 per cent of respondents from households with an income in excess of £80,000. 8 per cent of respondents from households with an income up to £15,999 state that they have undertaken off road cycling or mountain biking at least once in a visit to the outdoors in the last 12 months compared to 28 per cent of respondents from households with an income in excess of £80,000.

4.8 Percentage of adults undertaking walking or cycling on visits to the outdoors in the last 12 months

Percentage of respondents

	Age					Gender		Household Income					Total
	16-24	25-34	35-54	55-74	75+	Male	Female	£16,000	£31,200	£50,000	More		
								upto £15,999	to £31,199	to £49,999	to £79,999	than £80,000	
Walking	92	95	91	82	65	85	88	81	89	93	95	92	86
Road cycling	27	30	28	12	2	29	14	11	20	33	38	41	21
Off road cycling or mountain biking	27	23	22	6	0	22	11	8	17	23	30	28	16

Source: Welsh Outdoor Recreation Survey 2008, Countryside Council for Wales and the Forestry Commission

Note: Respondents could choose more than one activity, not all activities are listed in this table

4.9 Number of concessionary fares bus passes issued and trips made using the pass

- 3.40 Table 4.9a details the takeup of the over 60's concessionary bus pass in each of the local authorities in Wales. The table shows that 82 per cent of adults aged 60 or over held a concessionary bus pass in 2008-09 compared to 83 per cent in 2009-10.
- 3.41 The table shows that in 2008-09 takeup of the concessionary bus pass was highest in Swansea at 96 per cent and lowest in Powys at 55 per cent.
- 3.42 The table shows that in 2009-10 takeup of the concessionary bus pass was highest in Swansea at 100 per cent and lowest in Powys at 58 per cent.

4.9a Takeup of 60+ Concessionary Bus Pass by Local Authority

Numbers and percentages

Year	The percentage of adults aged 60+ who hold a concessionary bus pass		The total number of adults aged 60+ who hold a concessionary bus pass		The total population aged 60+	
	2008-09	2009-10	2008-09	2009-10	2008-09	2009-10
	Isle of Anglesey	71	65	13,798	12,893	19,355	19,849
Gwynedd	76	73	24,065	23,565	31,496	32,150
Conwy	73	74	24,865	25,962	34,272	34,957
Denbighshire	76	73	20,360	20,074	26,752	27,466
Flintshire	79	70	27,325	24,951	34,386	35,421
Wrexham	83	93	24,903	28,555	29,906	30,834
Powys	55	58	21,225	22,810	38,260	39,442
Ceredigion	68	69	14,137	14,931	20,909	21,570
Pembrokeshire	73	86	24,059	29,022	32,796	33,662
Carmarthenshire	77	80	37,505	39,652	48,470	49,695
Swansea	96	100	52,846	55,898	54,854	55,898
Neath Port Talbot	92	85	31,126	29,383	33,872	34,471
Bridgend	86	86	26,907	27,733	31,239	32,079
Vale of Glamorgan	86	81	25,322	24,315	29,360	30,174
Cardiff	96	94	55,795	55,718	58,021	59,004
Rhondda Cynon Taf	85	86	44,661	46,067	52,574	53,606
Merthyr Tydfil	91	92	11,403	11,680	12,505	12,736
Caerphilly	90	88	33,976	33,943	37,792	38,671
Blaenau Gwent	83	93	13,753	15,709	16,612	16,848
Torfaen	91	98	19,851	21,812	21,773	22,194
Monmouthshire	79	77	18,512	18,483	23,358	24,058
Newport	81	85	24,933	26,435	30,694	31,189
Wales	82	83	591,327	609,591	719,256	735,974

Source: Local Authority Performance Indicators, Core Set Indicator

3.43 Table 4.9b below details the number of journeys that have been made using a concessionary fares pass in Wales by local authority in 2010-11.

3.44 The table shows that over 2 million journeys were made using a concessionary fares pass in Cardiff in each of the first three quarters of 2010-11. Over 1 million journeys were made using a concessionary fares pass in Rhondda Cynon Taf and Swansea in each of the first three quarters of 2010-11. The effect of the severe weather in November and December 2010 is evident in the lower number of journeys in quarter 3 compared to both quarter 1 and quarter 2. This table will be updated once the fourth quarter data is available.

4.9b Number of journeys made using a concessionary fares pass card by local authority

Numbers

Local Authority	Number of Concessionary Journeys Made - 2010-11			
	April 2010 - June 2010	July 2010 - September 2010	October 2010 - December 2010	January 2011 - March 2011
Anglesey	148,791	152,173	134,839	
Blaenau Gwent	195,880	211,989	180,409	
Bridgend	534,134	539,659	466,926	
Caerphilly	739,696	773,882	752,491	
Cardiff	2,391,275	2,460,234	2,195,085	
Carmarthenshire	409,671	394,482	351,581	
Ceredigion	162,936	162,196	136,445	
Conwy	483,190	500,751	477,372	
Denbighshire	291,613	307,216	268,778	
Flintshire	376,085	392,768	371,545	
Gwynedd	493,350	518,861	466,860	
Merthyr Tydfil	443,431	463,139	446,029	
Monmouthshire	185,110	189,856	176,975	
Neath Port Talbot	528,010	543,932	496,935	
Newport	962,538	1,021,887	970,561	
Pembrokeshire	232,292	235,159	186,365	
Powys	131,219	142,652	146,576	
Rhondda Cynon Taf	1,252,325	1,247,190	1,228,149	
Swansea	1,223,535	1,210,092	1,091,004	
Torfaen	521,757	563,774	525,845	
Vale of Glamorgan	374,945	397,478	348,917	
Wrexham	523,823	551,637	522,350	
Wales	12,605,606	12,981,007	11,942,037	-

Source: Local authority concessionary fares quarterly returns

5. Improve the actual and perceived safety of travel

- 3.45 The Wales Transport Strategy aims to reduce injury accident rates, particularly among vulnerable road users, and to improve the perceived safety of travel in Wales. The National Transport Plan maintains these aims and will aim to further reduce the number of road casualties. The 7 indicators we have chosen will demonstrate how successful the NTP has been at reducing the numbers of road casualties and at improving the public perception of safety in using public transport.
- 5.1 Total number of killed or seriously injured (KSI) casualties by mode
- 3.46 The data for this indicator is taken from the road accident statistics database for Wales, held within the Welsh Assembly Government's Statistical Directorate. The database is populated with data from road accidents reported to the police and involving personal injury.
- 3.47 The data in Table 5.1a shows that there were 125 people killed and 1,096 people seriously injured on roads in Wales in 2009. This is a fall of some 41 per cent in the number of people killed and a fall of some 39 per cent in the number of people seriously injured compared to the 1994-98 averages. In 2000 a target was set to achieve a 40 per cent reduction in the number of killed or seriously injured casualties by 2010; in 2009 the reduction was 39 per cent.
- 3.48 Numbers of casualties have reduced for most of the modes of transport from the 1994-98 average, but the reduction has been at a different rate for each of these modes. The number of pedestrians killed or seriously injured in 2009 was 257, a reduction of 41 per cent on the 1994-98 average of 434. The number of pedal cyclists killed or seriously injured in 2009 was 84, a reduction of 22 per cent on the 1994-98 average of 107. The number of car, taxi and minibus users killed or seriously injured in 2009 was 596, a reduction of 47 per cent on the 1994-98 average of 1,115.
- 3.49 The numbers of casualties for two wheeled motor vehicles has slightly decreased from the 1994-98 average, down some 5 per cent to 240 people killed or seriously injured in 2009 compared to the 1994-98 average of 253.
- 3.50 The data in Table 5.1b shows the road accident data for 2009 for each Local Authority. In 2009 Powys had the highest number of killed or seriously injured casualties at 129. Merthyr Tydfil had the lowest level of killed or seriously injured casualties at 16.
- 3.51 In 2009 Cardiff had the highest number of slight casualties with 1,046. Merthyr Tydfil had the lowest level of slight casualties with 135.

5.1a Total number of casualties killed or seriously injured (KSI) and slight casualties, by mode, Wales 2000 to 2009

											Number of casualties
Mode & Severity	1994-98 avg	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Pedestrian											
Killed	55	37	38	21	34	33	32	20	30	17	18
Serious	379	304	275	277	257	267	237	242	247	232	239
Slight	1,606	1,431	1,366	1,351	1,297	1,231	1,141	1,062	1,013	1,034	857
Total	2,040	1,772	1,679	1,649	1,588	1,531	1,410	1,324	1,290	1,283	1,114
Pedal cyclist											
Killed	8	3	8	3	6	9	2	9	3	4	6
Serious	100	60	66	60	70	57	59	68	77	61	78
Slight	623	498	509	435	433	450	370	419	370	357	319
Total	730	561	583	498	509	516	431	496	450	422	403
Two Wheeled Motor Vehicle users											
Killed	28	28	36	27	42	39	22	38	42	24	27
Serious	225	271	274	260	249	228	201	227	233	231	213
Slight	529	516	539	560	512	511	471	548	499	468	410
Total	782	815	849	847	803	778	694	813	774	723	650
Car, taxi and minibus users											
Killed	113	89	98	90	84	111	121	89	79	91	68
Serious	1,001	933	854	811	843	722	608	611	633	680 r	528
Slight	9,229	9,046	8,899	9,515	9,425	9,249	8,780	8,555	8,352	7,321 r	7,012
Total	10,343	10,068	9,851	10,416	10,352	10,082	9,509	9,255	9,064	8,092 r	7,608
Other vehicles											
Killed	10	11	7	6	7	9	3	6	7	6	6
Serious	89	87	69	77	63	62	41	62	48	50	38
Slight	862	825	757	843	714	709	645	736	636	610	535
Total	961	923	833	926	784	780	689	804	691	666	579
Total											
Killed	213	168	187	147	173	201	180	162	161	142	125
Serious	1,795	1,655	1,538	1,485	1,482	1,336	1,146	1,210	1,238	1,254 r	1,096
Slight	12,848	12,316	12,070	12,704	12,381	12,150	11,407	11,320	10,870	9,790	9,133
Total	14,856	14,139	13,795	14,336	14,036	13,687	12,733	12,692	12,269	11,186 r	10,354

Source: Welsh Assembly Government Road Accident Statistics database

5.1b Total number of casualties killed or seriously injured (KSI) and slight casualties, by mode and Local Authority in 2009

Mode	Number of casualties																	
	Pedestrian			Pedal cyclist			Two Wheeled Motor Vehicle users			Car, taxi and minibus users			Other vehicles			Total		
	Severity	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total
Isle of Anglesey	5	12	17	2	3	5	8	6	14	38	140	178	2	9	11	55	170	225
Gwynedd	10	28	38	3	2	5	15	16	31	39	334	373	3	28	31	70	408	478
Conwy	12	30	42	6	11	17	14	17	31	21	346	367	1	39	40	54	443	497
Denbighshire	4	31	35	2	16	18	6	19	25	29	280	309	0	21	21	41	367	408
Flintshire	12	21	33	7	18	25	14	16	30	44	391	435	3	15	18	80	461	541
Wrexham	16	40	56	8	21	29	3	20	23	23	315	338	1	14	15	51	410	461
Powys	10	18	28	4	9	13	34	37	71	76	421	497	5	53	58	129	538	667
Ceredigion	7	18	25	2	8	10	16	14	30	22	180	202	5	34	39	52	254	306
Pembrokeshire	17	29	46	2	8	10	16	27	43	44	377	421	1	27	28	80	468	548
Carmarthenshire	7	57	64	8	13	21	23	39	62	51	530	581	6	24	30	95	663	758
Swansea	31	84	115	3	24	27	12	42	54	36	550	586	2	52	54	84	752	836
Neath Port Talbot	9	26	35	5	14	19	9	15	24	22	322	344	2	29	31	47	406	453
Bridgend	10	51	61	2	12	14	7	17	24	22	294	316	4	25	29	45	399	444
Vale of Glamorgan	11	31	42	4	15	19	8	11	19	24	244	268	1	17	18	48	318	366
Cardiff	25	142	167	9	78	87	17	38	55	18	732	750	0	56	56	69	1,046	1,115
Rhondda Cynon Taf	16	88	104	3	18	21	8	13	21	21	532	553	2	41	43	50	692	742
Merthyr Tydfil	7	16	23	0	3	3	2	6	8	6	101	107	1	9	10	16	135	151
Caerphilly	17	37	54	3	8	11	4	10	14	16	258	274	0	11	11	40	324	364
Blaenau Gwent	6	26	32	0	4	4	6	5	11	7	110	117	0	4	4	19	149	168
Torfaen	4	19	23	3	5	8	3	14	17	13	100	113	0	2	2	23	140	163
Monmouthshire	5	9	14	3	8	11	11	11	22	6	139	145	2	11	13	27	178	205
Newport	16	44	60	5	21	26	4	17	21	18	316	334	3	14	17	46	412	458
Wales	257	857	1,114	84	319	403	240	410	650	596	7,012	7,608	44	535	579	1,221	9,133	10,354

Source: Welsh Assembly Government Road Accident Statistics database

5.2 Total number of child KSI casualties

- 3.52 The data for this indicator is taken from the road accident statistics database for Wales, held within the Welsh Assembly Government's Statistical Directorate. The database is populated with data from road accidents reported to the police and involving personal injury.
- 3.53 The data in Table 5.2a shows that there were 5 children (0-15) killed and 131 seriously injured on roads in Wales in 2009. This is a fall of 64 per cent in the number of children killed and a fall of 52 per cent in the number seriously injured compared to the 1994-98 averages. In 2000 a target was set to achieve a 50 per cent reduction in the number of children killed or seriously injured on roads in Wales by 2010; in 2009 the reduction was 55 per cent.
- 3.54 Numbers of child casualties have reduced for most of the modes of transport from the 1994-98 average, but the reduction has been at a different rate for each of these modes. The number of child pedestrians killed or seriously injured in 2009 was 83, a reduction of 49 per cent on the 1994-98 average of 162. There were no child pedal cyclists killed in 2009 and the number of child pedal cyclists seriously injured was 21, a reduction of 55 per cent on the 1994-98 KSI average of 107. The number of child car, taxi and minibus users killed or seriously injured in 2009 was 27, a reduction of 61 per cent on the 1994-98 average of 69.
- 3.55 There were no child two wheeled motor vehicle users killed in 2009, with 4 children seriously injured, 1 more than the 1994-98 average.
- 3.56 The data in Table 5.2b shows the child road accident data for 2009 for each Local Authority. In 2009 Pembrokeshire had the highest number of child killed or seriously injured casualties at 15. Ceredigion had the lowest level of child killed or seriously injured casualties at 1.
- 3.57 In 2009 Rhondda Cynon Taf had the highest number of child slight casualties with 89, Monmouthshire had the lowest level of child slight casualties with 8.

5.2a Total number of casualties aged 0-15 killed or seriously injured (KSI) and slight casualties, by mode, Wales 2000 to 2009

Number of casualties											
Mode & Severity	1994-98 avg	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Pedestrian											
Killed	7	5	7	4	5	4	3	2	3	2	3
Serious	155	121	113	94	80	88	87	74	74	68	80
Slight	700	631	611	548	508	457	411	358	337	356	261
Total	862	757	731	646	593	549	501	434	414	426	344
Pedal cyclist											
Killed	2	1	2	0	2	1	0	1	0	1	0
Serious	44	22	23	23	38	22	18	20	33	13	21
Slight	296	218	211	191	185	180	146	131	122	99	88
Total	343	241	236	214	225	203	164	152	155	113	109
Two Wheeled Motor Vehicle users											
Killed	0	0	2	0	0	0	0	0	0	0	0
Serious	3	8	8	7	5	3	5	7	1	3	4
Slight	14	9	11	17	14	10	11	8	12	4	6
Total	18	17	21	24	19	13	16	15	13	7	10
Car, taxi and minibus users											
Killed	4	2	2	4	5	4	3	7	2	1	2
Serious	65	56	40	51	54	44	13	31	32	27	25
Slight	814	764	717	719	775	621	620	556	547	467	460
Total	883	822	759	774	834	669	636	594	581	495	487
Other vehicles											
Killed	0	0	0	1	1	0	1	0	0	0	0
Serious	8	10	8	7	2	4	5	2	3	0	1
Slight	153	163	157	185	55	107	72	100	38	63	58
Total	160	173	165	193	58	111	78	102	41	63	59
Total											
Killed	14	8	13	9	13	9	7	10	5	4	5
Serious	275	217	192	182	179	161	128	134	143	111	131
Slight	1,977	1,785	1,707	1,660	1,537	1,375	1,260	1,153	1,056	989	873
Total	2,266	2,010	1,912	1,851	1,729	1,545	1,395	1,297	1,204	1,104	1,009

Source: Welsh Assembly Government Road Accident Statistics database

5.2b Total number of casualties aged 0-15 killed or seriously injured (KSI) and slight casualties, by mode and Local Authority in 2009

Mode	Number of casualties																	
	Pedestrian			Pedal cyclist			Two Wheeled Motor Vehicle users			Car, taxi and minibus users			Other vehicles			Total		
	Severity	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total
Isle of Anglesey	0	1	1	1	1	2	0	0	0	2	10	12	0	2	2	3	14	17
Gwynedd	3	7	10	2	1	3	0	0	0	1	24	25	0	3	3	6	35	41
Conwy	3	6	9	3	6	9	0	0	0	0	35	35	1	4	5	7	51	58
Denbighshire	0	12	12	1	4	5	1	0	1	1	18	19	0	4	4	3	38	41
Flintshire	6	6	12	3	2	5	0	0	0	0	31	31	0	2	2	9	41	50
Wrexham	8	8	16	2	2	4	0	0	0	1	24	25	0	0	0	11	34	45
Powys	0	3	3	1	0	1	0	0	0	6	34	40	0	12	12	7	49	56
Ceredigion	1	2	3	0	3	3	0	0	0	0	12	12	0	3	3	1	20	21
Pembrokeshire	7	8	15	0	5	5	0	0	0	8	28	36	0	0	0	15	41	56
Carmarthenshire	3	19	22	2	2	4	0	0	0	2	45	47	0	2	2	7	68	75
Swansea	9	25	34	2	4	6	2	2	4	0	32	32	0	6	6	13	69	82
Neath Port Talbot	2	10	12	0	6	6	0	0	0	1	10	11	0	3	3	3	29	32
Bridgend	6	18	24	1	7	8	0	0	0	2	22	24	0	3	3	9	50	59
Vale of Glamorgan	1	15	16	0	5	5	0	0	0	1	18	19	0	3	3	2	41	43
Cardiff	5	37	42	1	12	13	0	0	0	0	27	27	0	3	3	6	79	85
Rhondda Cynon Taf	5	37	42	1	6	7	0	0	0	1	40	41	0	6	6	7	89	96
Merthyr Tydfil	3	7	10	0	0	0	0	0	0	0	3	3	0	1	1	3	11	14
Caerphilly	9	11	20	0	5	5	0	1	1	1	10	11	0	0	0	10	27	37
Blaenau Gwent	2	8	10	0	2	2	1	0	1	0	11	11	0	0	0	3	21	24
Torfaen	2	7	9	0	3	3	0	1	1	0	9	9	0	0	0	2	20	22
Monmouthshire	3	2	5	0	1	1	0	1	1	0	3	3	0	1	1	3	8	11
Newport	5	12	17	1	11	12	0	1	1	0	14	14	0	0	0	6	38	44
Wales	83	261	344	21	88	109	4	6	10	27	460	487	1	58	59	136	873	1,009

Source: Welsh Assembly Government Road Accident Statistics database

5.3 Total number of child pedestrian casualties in deprived areas, as defined by Welsh Index of Multiple Deprivation (WIMD)

3.58 The data for this indicator has been taken from the road accident statistics database for Wales, held within the Welsh Assembly Government's Statistical Directorate. The database is populated with data from road accidents reported to the police and involving personal injury. The road accident statistics database contains many details about each road accident including its location, the age of the casualty or casualties and the mode or modes of transport involved. Those child pedestrian casualties that have occurred in top 10 per cent most deprived areas, as defined by WIMD, have then be mapped and counted.

3.59 Table 5.3 shows that there were 53 child pedestrian casualties in the top 10 per cent most deprived areas, as defined by WIMD. The table shows that there were no child pedestrian fatalities in the top 10 per cent most deprived areas in 2009, with 8 serious and 45 slight casualties.

5.3 Total number of child pedestrian casualties aged 0-15, in deprived areas by Local Authority in 2009

Severity	Number of casualties			
	Killed	Serious	Slight	Total
Isle of Anglesey	-	-	-	-
Gwynedd	-	-	-	-
Conwy	-	-	2	2
Denbighshire	-	-	3	3
Flintshire	-	-	1	1
Wrexham	-	1	-	1
Powys	-	-	-	-
Ceredigion	-	-	-	-
Pembrokeshire	-	-	-	-
Carmarthenshire	-	-	3	3
Swansea	-	2	3	5
Neath Port Talbot	-	-	4	4
Bridgend	-	1	3	4
Vale of Glamorgan	-	-	-	-
Cardiff	-	1	11	12
Rhondda Cynon Taf	-	1	9	10
Merthyr Tydfil	-	1	2	3
Caerphilly	-	-	1	1
Blaenau Gwent	-	-	1	1
Torfaen	-	-	1	1
Monmouthshire	-	-	-	-
Newport	-	1	1	2
Wales	-	8	45	53

Source: Welsh Assembly Government Road Accident Statistics database

5.4 Rate of KSI and slight casualties per 100 million vehicle kilometres

- 3.60 The data for this indicator is taken from the road accident statistics database for Wales, held within the Welsh Assembly Government's Statistical Directorate. The database is populated with data from road accidents reported to the police and involving personal injury. Road vehicle data is taken from the DfT's road traffic estimates.
- 3.61 Table 5.4a shows the rate of killed or seriously injured casualties (KSI) per 100 million vehicle kilometres (100mvkms) for each Local Authority and for Wales as a whole. The KSI casualty rate per 100mvkm for Wales in 2009 was 4.4, a reduction of 4.1 on the 1994-98 average of 8.5 casualties per 100mvkms.
- 3.62 Table 5.4a shows that Anglesey had the highest KSI casualty rate per 100mvkms in 2009 at a rate of 8.9 casualties. The lowest KSI casualty rate per 100mvkms in 2009 was a rate of 2.0 in Monmouthshire.
- 3.63 Table 5.4b shows the rate of slight casualties per 100mvkms for each Local Authority and for Wales as a whole. In 2000 a target was set to achieve a 10 per cent reduction in the slight casualty rate per 100mvkms compared to the 1994-98 average by 2010. In 2009 the slight casualty rate per 100mvkms for Wales was 32.7, a reduction of 40 per cent on the 1994-98 average.
- 3.64 Table 5.4b shows that Swansea had the highest slight casualty rate per 100mvkms in 2009 at a rate of 44.4 casualties. The lowest slight casualty rate per 100mvkms in 2009 was a rate of 12.9 in Monmouthshire.
- 3.65 Chart 5.4 shows the steady fall in the number of KSI and casualties per 100mvkms from the 1994-98 average to 2009. The chart also shows the sharp decrease in the number of slight casualties from the 1994-98 average to 2008.

5.4a KSI casualty rate per 100 million vehicle kilometres, by Local Authority 2000 to 2009

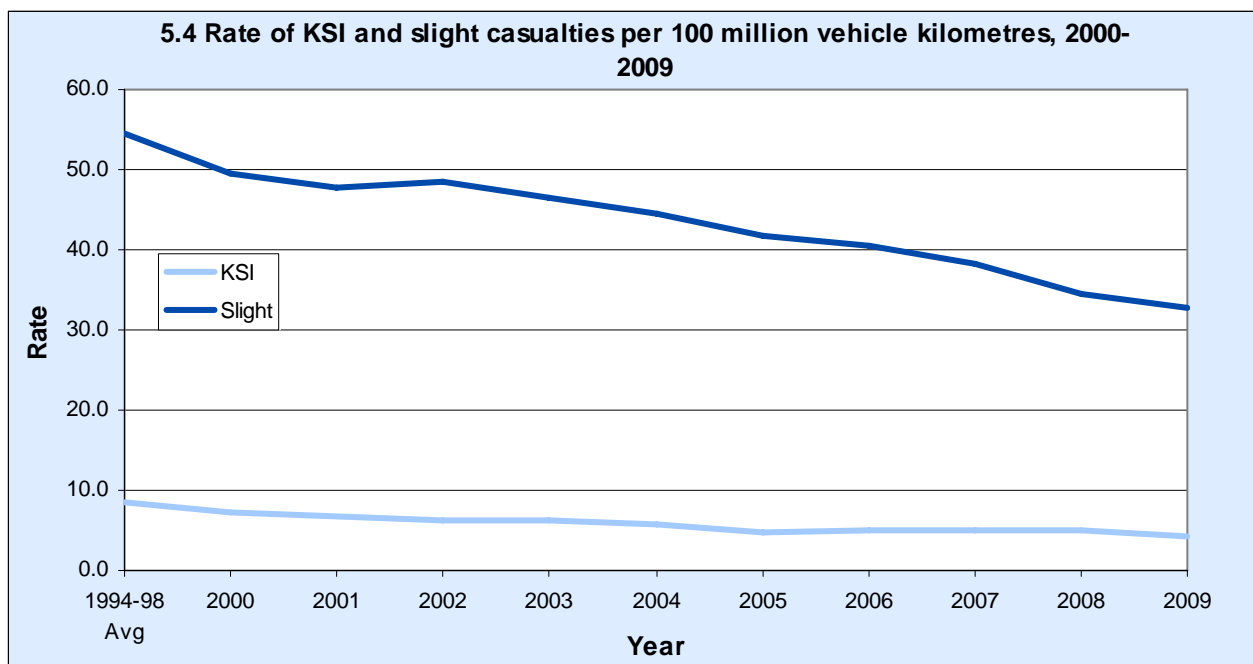
Year	Number of casualties per 100 million vehicle kilometres										
	1994- 98 Avg	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Severity	KSI	KSI	KSI	KSI	KSI	KSI	KSI	KSI	KSI	KSI	KSI
Isle of Anglesey	11.7	9.3	6.2	8.0	5.7	3.7	5.0	4.7	4.8	4.8	8.9
Gwynedd	11.3	8.7	8.6	8.5	7.3	7.1	4.0	4.6	5.0	8.6	5.5
Conwy	7.6	5.3	4.1	6.3	4.6	5.4	3.4	4.7	5.7	5.6	4.7
Denbighshire	11.9	10.5	8.8	4.0	6.6	6.5	3.3	3.9	6.5	6.0	4.6
Flintshire	7.1	4.1	4.4	4.0	4.5	3.8	3.9	2.8	3.5	6.2	4.7
Wrexham	9.1	10.7	7.4	5.9	5.9	5.6	3.4	4.8	3.6	5.9	5.4
Powys	13.8	14.3	16.0	11.5	13.5	11.4	10.6	9.5	9.4	8.3	8.6
Ceredigion	12.6	9.4	12.3	10.9	14.3	11.3	8.2	9.3	7.7	5.4	7.2
Pembrokeshire	13.1	11.9	13.3	12.8	12.2	9.6	7.5	9.3	9.7	8.6	7.3
Carmarthenshire	12.1	11.9	11.5	10.1	9.4	9.5	6.2	5.7	4.8	4.9	4.9
Swansea	4.6	4.9	5.1	4.4	4.4	4.7	5.5	6.0	4.6	4.5	5.0
Neath Port Talbot	4.5	5.2	5.0	5.9	4.1	2.4	4.1	5.6	5.1	3.8	3.5
Bridgend	5.4	4.6	3.4	3.2	4.5	4.5	5.1	4.6	3.3	4.3	3.5
Vale of Glamorgan	5.9	3.8	4.9	4.9	5.9	4.9	2.4	3.9	4.1	4.3	4.5
Cardiff	4.9	4.2	3.7	3.6	3.2	3.1	3.8	3.5	3.4	2.6	2.4
Rhondda Cynon Taf	6.2	7.3	4.9	5.4	6.7	6.9	3.9	4.7	4.3	2.8	2.4
Merthyr Tydfil	7.9	8.3	3.9	3.4	7.0	2.4	5.0	3.5	5.6	4.2	3.9
Caerphilly	7.9	8.0	7.0	5.8	4.6	5.5	6.8	5.1	6.5	6.2	3.5
Blaenau Gwent	13.9	12.2	7.3	6.0	5.5	5.0	7.1	6.9	8.2	8.6	4.6
Torfaen	11.3	5.1	7.5	6.9	4.4	4.0	4.8	4.0	4.5	2.2	3.6
Monmouthshire	11.4	7.9	6.8	7.7	6.7	5.1	5.2	3.8	2.3	3.9	2.0
Newport	8.0	4.8	4.9	3.4	2.9	2.8	2.0	1.6	3.6	3.0	2.5
Wales	8.5	7.3	6.8	6.2	6.2	5.6	4.9	4.9	4.9	4.9	4.4

Source: Welsh Assembly Government Road Accident Statistics database

5.4b Slight casualty rate per 100 million vehicle kilometres, by Local Authority 2000 to 2009

Year	Number of casualties per 100 million vehicle kilometres										
	1994-98 Avg	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Severity	Slight	Slight	Slight	Slight	Slight	Slight	Slight	Slight	Slight	Slight	Slight
Isle of Anglesey	67.7	58.3	43.2	45.9	38.0	33.4	28.1 r	34.5	27.9	21.5	27.6
Gwynedd	52.5	49.4	45.7	48.0	42.1	39.3	36.9 r	37.9	36.4	33.3	31.8
Conwy	57.5	65.9	51.3	51.0	43.3	41.2	35.7	41.4	34.5	38.9	38.6
Denbighshire	77.0	68.0	67.5	63.9	57.1	48.8	40.7 r	45.7	45.6	49.3	41.0
Flintshire	61.5	59.9	54.1	49.0	48.0	47.6	34.6	38.0	35.1	31.7	27.2
Wrexham	78.1	72.4	78.7	70.0	69.4	56.9	54.3	57.4 r	44.0	43.2	43.5
Powys	43.4	37.3	42.1	45.2	42.3 r	45.7	39.2	44.9	41.6	36.4	36.1
Ceredigion	47.2	48.6	45.8	54.8	46.8 r	45.5	52.9	43.3 r	49.9	37.8	35.1
Pembrokeshire	52.1	51.3	45.0	46.2	49.5	52.7	48.0	47.7	47.4	34.0	42.6
Carmarthenshire	45.8	40.5	43.2	39.6	42.3	43.2	43.6	41.0	38.8	36.3	34.5
Swansea	81.5	62.6	66.9	60.5	64.5 r	62.2	62.3	66.9	56.5	51.5	44.4
Neath Port Talbot	58.2	53.3	46.7	46.5	43.8 r	39.4	47.5	43.7	39.5	33.2	30.6
Bridgend	53.1	48.9	40.0	44.4	38.3	40.9	40.9	35.0	32.3	30.6	30.7
Vale of Glamorgan	46.0	38.0	38.1	52.8 r	46.3 r	41.1	43.5	31.7	31.0	27.9	30.1
Cardiff	53.5	53.4	51.0	54.4 r	52.2	47.9	48.2	43.4	44.4	38.8	36.2
Rhondda Cynon Taf	49.9	31.9	44.5	42.1	45.5	44.6	44.4 r	36.7	46.1	37.9	33.3
Merthyr Tydfil	72.9	76.3	76.3	70.8	81.2	64.2 r	54.8 r	54.7	48.5	45.5	32.9
Caerphilly	56.0	51.8	44.5	54.2	52.7	48.4	38.1	34.3	29.6	34.6	28.1
Blaenau Gwent	56.6	56.4	66.0	64.0	49.9	58.0 r	55.2	59.1 r	46.8	50.1	36.3
Torfaen	49.2	42.3	40.0	42.7	33.4	36.3 r	28.5	24.5	20.9	19.3	22.0
Monmouthshire	34.9	40.6	28.5	30.2	27.7	24.5 r	20.6	18.1	16.7	11.3	12.9
Newport	38.9	32.6	31.4	31.5	31.6	31.7	26.5	24.3	22.8	21.7	22.8
Wales	54.4	49.5	47.8	48.5	46.6	44.5	41.8	40.4	38.3	34.5	32.7

Source: Welsh Assembly Government Road Accident Statistics database



Source: Welsh Assembly Government Road Accident Statistics database

5.5 Incidents of notifiable and non-notifiable offences on the rail network

- 3.66 The data for this indicator is collected and reported on by the British Transport Police.
- 3.67 The data in Table 5.5a (overleaf) shows that the total number of recorded notifiable offences dropped from 1,608 in 2008/09 to 1,445 in 2009/10. There was a significant fall in the number of recorded theft of railway/commercial property and burglary offences between 2008/09 and 2009/10 from 259 to 176 offences. There was also a notable fall in the number of recorded motor vehicle/cycle offences from 163 to 119 in 2009/10. There was an increase in the number of public disorder offences from 195 in 2008/09 to 255 in 2009/10.
- 3.68 The data in Table 5.5b (below) shows that the total number of recorded non-notifiable offences dropped from 1,803 in 2008/09 to 1,686 in 2009/10. The most significant change between 2007/08 and 2008/09 was the fall in the number of less serious public disorder offences, from 450 to 409 offences.

5.5b Non - Notifiable Offences on the Rail Network in Wales

	Number of offences			
	2008/09		2009/10	
	Recorded	Detected	Recorded	Detected
Less serious line of route offences				
Railway trespass	627	243	601	207
Transport and works offences	1	0	0	0
Operating communication cord	0	0	0	0
Stonethrowing	106	6	89	3
Other less serious line of route offences	0	0	4	0
Total less serious line of route offences	734	249	694	210
Less serious public disorder offences				
Alcohol offences	53	51	74	74
Breach of the peace	0	0	0	0
Public order related offences	373	194	311	153
Other less serious public disorder offences	24	18	24	12
Total less serious public disorder offences	450	263	409	239
Less serious fraud offences				
Travel fraud offences	100	73	98	63
Travel related offences/greater distance	64	44	66	41
Failure to provide details/show ticket	1	1	1	1
Total less serious fraud offences	165	118	165	105
Other less serious offences				
Driving offences (R.T.A)	372	294	326	199
Vehicle related (byelaws)	12	6	15	9
Begging	16	11	20	19
Protection equipment	16	5	23	6
Other less serious offences	38	25	34	18
Total other less serious offences	454	341	418	251
Total non-notifiable offences	1,803	971	1,686	805

Source: British Transport Police: Statistical Bulletin 2009/10

For notes please see table 5.5a

5.5a Notifiable Offences on the Rail Network in Wales

	Number of offences			
	2008/09		2009/10	
	Recorded	Detected	Recorded	Detected
Violence against the person offences				
Homicide	0	0	0	0
Attempted murder	0	0	0	0
Serious assault	73	47	71	50
Common assault	76	48	82	42
Police assault	11	11	7	7
Firearms/explosive offences	26	25	17	16
Racially aggravated harassment	9	8	9	8
Other violence	3	2	7	4
Total violence against the person	198	141	193	127
Sexual offences				
Sexual offences against males	1	1	3	1
Sexual offences against females	10	5	5	2
Exposure	8	2	3	5
Offences between males	0	0	0	0
Other sexual offences	4	3	3	4
Total sexual offences	23	11	14	12
Criminal damage/malicious mischief				
Criminal damage/malicious mischief	116	26	102	23
Arson/fire-raising	8	3	5	1
Graffiti	36	3	47	3
Vandalism rolling stock	0	0	0	0
Other criminal damage	1	0	1	0
Total criminal damage/malicious mischief	161	32	155	27
Line of route offences				
Destroy or damage/endanger safety	17	5	22	2
Obstruction	53	9	38	5
Throw missile at rail vehicle	36	1	34	0
Total line of route offences	106	15	94	7
Theft of passenger property				
Theft luggage	82	10	83	16
Theft personal property	162	6	149	10
Theft from the person	58	1	47	3
Total theft of passenger property	302	17	279	29
Motor vehicle/cycle offences				
Theft motor vehicle	13	2	0	0
Take vehicle without consent	0	0	2	1
Theft from vehicle	57	2	49	1
Damage to motor vehicle	48	8	29	7
Theft/damage pedal cycle offences	42	5	36	7
Interfere with motor vehicle	3	0	3	0
Total motor vehicle/cycle offences	163	17	119	16
Robbery offences				
Robbery	7	4	5	5
Assault with intent to rob	3	2	1	0
Total robbery offences	10	6	6	5
Theft of railway/commercial property and burglary offences				
Burglary/housebreaking booking office	2	1	2	0
Burglary/housebreaking	39	7	22	2
Theft from shop/kiosk	36	17	30	21
Goods in transit offences	0	0	0	0
Theft from vending machines	2	0	1	1
Theft undertaking stores	40	7	27	5
Mail offences	0	0	0	0
Other theft/burglary offences	140	30	94	10
Total Theft of railway/commercial property and burglary offences	259	62	176	39

Public disorder offences				
Bomb hoax offences	1	0	3	0
Other public order offences	194	161	252	202
Total public order offences	195	161	255	202
Fraud offences				
Ticket fraud	0	0	0	0
Other fraud	17	9	5	3
Forgery	0	0	0	0
Total fraud offences	17	9	5	3
Drug offences				
Trafficking in controlled drug	0	0	1	0
Possession of controlled drug	150	138	133	139
Proceeds of crime (drugs)	0	0	0	0
Other drug offences	0	0	0	0
Total drug offences	150	138	134	139
Other notifiable offences/crimes				
Other theft	6	2	3	1
Handling/reset	6	4	5	6
Other firearms offences	4	4	0	0
Proceeds of crime (excluding drugs)	1	0	0	0
Other offences	7	5	7	5
Total other notifiable offences/crimes	24	15	15	12
Total notifiable offences	1,608	624	1,445	618

Source: British Transport Police: Statistical Bulletin 2009/10

Notes: Notifiable - Serious offences reported to the Home Office

Non-notifiable - Offences not reported to the Home Office

Recorded - Number of offences recorded by the British Transport Police during the year to 31 March

Detected - Number of offences cleared during year to 31 March, person charged or summoned, offender cautioned, offence taken into consideration by the Court, sufficient evidence to charge an offender, but no further action

5.6 Rail travellers perception of personal security whilst using a rail station and on board a rail service

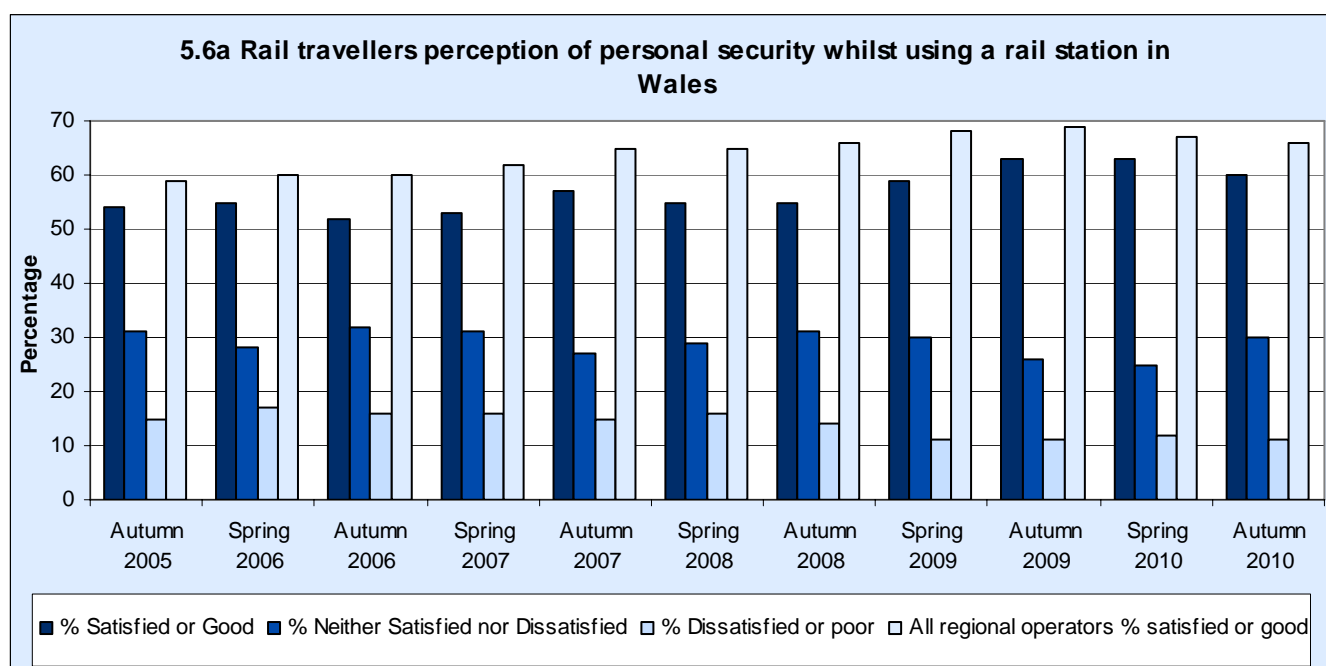
3.69 This indicator uses the results from Passenger Focus surveys of rail users. The survey asks the same set of questions about passengers' experience of using railway facilities and rolling stock in spring and the autumn of each year. All stations in Wales are run by Arriva Trains Wales. Table and chart 5.6b below cover services run by Arriva Trains Wales (ATW). These services are covered because the Welsh Assembly Government is responsible for the Wales and Borders Franchise and is responsible for passenger services through the agreement with ATW.

3.70 The survey results from autumn 2005 to autumn 2010 show a trend of an increasing number of rail travellers having a positive perception of their personal security whilst using a rail station, up from 54 to 60 per cent. This is still lower than the average of all regional rail operators which has seen an increase from 59 to 66 per cent over the same period.

5.6a Rail travellers perception of personal security whilst using a rail station in Wales

	Sample Size	Percentage of respondents			
		% Satisfied or Good	% Neither Satisfied nor Dissatisfied	% Dissatisfied or poor	All regional operators % satisfied or good
Autumn 2005		54	31	15	59
Spring 2006	567	55	28	17	60
Autumn 2006	649	52	32	16	60
Spring 2007	655	53	31	16	62
Autumn 2007	701	57	27	15	65
Spring 2008	688	55	29	16	65
Autumn 2008	640	55	31	14	66
Spring 2009	678	59	30	11	68
Autumn 2009	669	63	26	11	69
Spring 2010	846	63	25	12	67
Autumn 2010	636	60	30	11	66

Source: Passenger Focus surveys



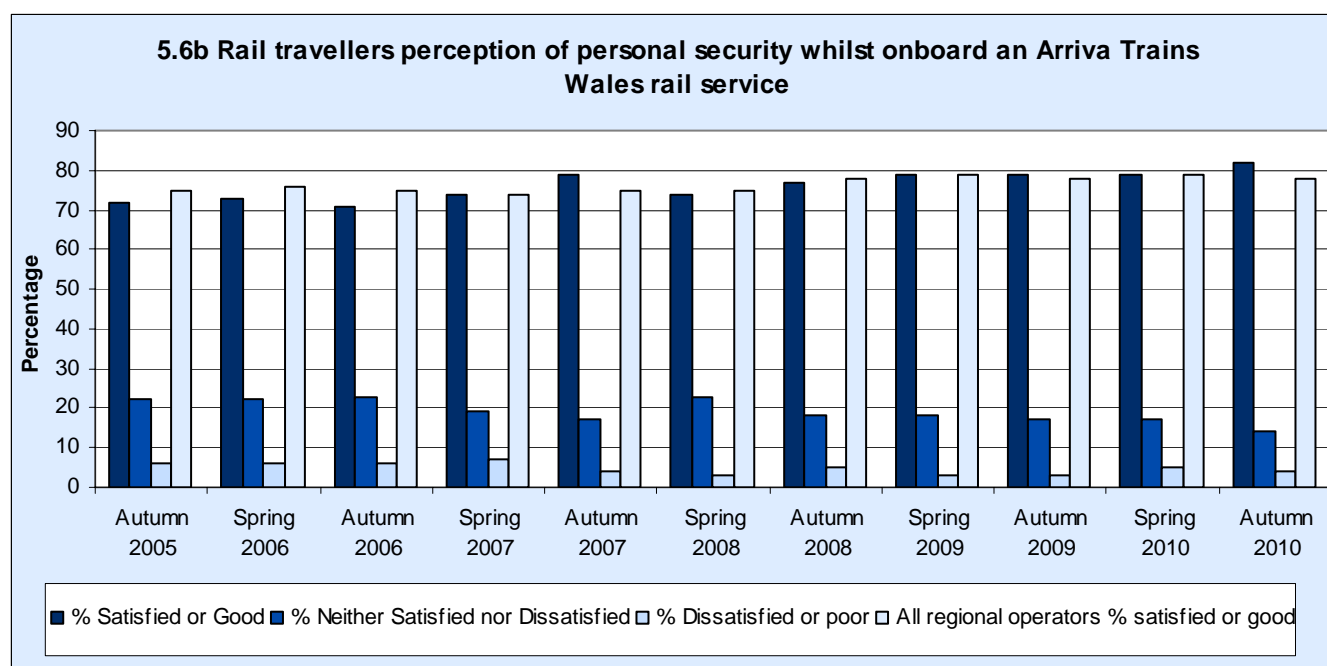
Source: Passenger Focus surveys

- 3.71 The Passenger Focus survey results from autumn 2005 to autumn 2009 show a trend of an increasing number of rail travellers having a positive perception of their personal security whilst onboard a rail service, up from 72 to 82 per cent. This is a higher figure than the average of all regional rail services which has seen an increase from 75 to 78 per cent in the same period.
- 3.72 The number of rail travellers dissatisfied with their personal security was just 4 per cent in autumn 2010.

5.6b Rail travellers perception of personal security whilst onboard a rail service (Arriva Trains Wales only)

	Sample Size	% Satisfied or Good	% Neither Satisfied nor Dissatisfied	% Dissatisfied or poor	Percentage of respondents
Autumn 2005		72	22	6	75
Spring 2006	666	73	22	6	76
Autumn 2006	734	71	23	6	75
Spring 2007	737	74	19	7	74
Autumn 2007	725	79	17	4	75
Spring 2008	745	74	23	3	75
Autumn 2008	687	77	18	5	78
Spring 2009	735	79	18	3	79
Autumn 2009	719	79	17	3	78
Spring 2010	921	79	17	5	79
Autumn 2010	705	82	14	4	78

Source: Passenger Focus surveys



Source: Passenger Focus surveys

5.7 Bus users perception of personal security whilst using a bus service and at bus stops

- 3.73 This indicator uses the results from the 2010 Bus Passenger Survey, commissioned by Transport Statistics and operated by BDRC Continental. This survey was carried out during November and December 2010 across Wales. Passengers were asked to rate their overall satisfaction with their bus journey and their rating of value for money. They were asked to rate their satisfaction with a wide range of aspects of their bus journey, for example the bus stop, waiting for the bus, on the bus, the outside of the bus, the bus driver.
- 3.74 Table 5.7a below details the levels of satisfaction amongst respondents with their personal security at bus stops and on bus services. The table shows that overall three quarters, 75 per cent, of bus passengers were satisfied with their personal security at the bus stop and more than eight out of ten passengers, 85 per cent, were satisfied with their personal security on the bus service itself. There was some limited regional variation with respondents from TraCC being the most satisfied with their personal security at both bus stops and on bus services.
- 3.75 Table 5.7b shows the levels of satisfaction with personal security whilst at a bus stop from those respondents who identified themselves as having a disability. Some 25 per cent of respondents to the bus user survey stated that they had a disability. The overall level of satisfaction reported by those respondents stating that they had a disability is very similar to the overall level reported in table 5.7a, at 73 per cent. The overall level of dissatisfaction was slightly higher at 13 per cent compared to the 11 per cent reported in table 5.7a. Those respondents who identified themselves as having a speech impairment reported the highest level of satisfaction at 82 per cent along with the lowest level of dissatisfaction at 6 per cent. Those respondents who selected 'other' in the disabled category had the lowest levels of satisfaction at 69 per cent, Wheelchair users had the highest levels of dissatisfaction at 26 per cent.
- 3.76 Table 5.7c shows the levels of satisfaction with personal security whilst on a bus service from those respondents who identified themselves as having a disability. The overall level of satisfaction reported by those respondents stating that they had a disability is very similar to the overall level reported in table 5.7a, at 84 per cent. The overall level of dissatisfaction was also similar at 5 per cent compared to the 4 per cent reported in table 5.7a. Those respondents who identified their eyesight as a disability reported the highest level of satisfaction at 93 per cent along with the lowest level of dissatisfaction at 3 per cent. Those respondents who identified themselves as having learning had the lowest levels of satisfaction at 75 per cent, Wheelchair users had the highest levels of dissatisfaction at 19 per cent.

5.7a Bus users perception of personal security whilst using a bus service and at bus stops

	Percentage of respondents									
	Personal safety at the bus stop					Personal safety on the bus service				
	Sew ta	SWWITCH	TAITH	TraCC	Total	Sew ta	SWWITCH	TAITH	TraCC	Total
Very satisfied	37	35	43	44	38	46	46	55	63	49
Fairly satisfied	37	38	35	34	37	37	38	32	26	36
Neither satisfied nor dissatisfied	15	17	15	14	15	12	12	9	8	11
Fairly dissatisfied	6	5	4	5	5	4	2	2	2	3
Very dissatisfied	5	4	2	4	4	2	1	1	1	1
Total satisfied	74	74	78	77	75	82	85	88	89	84
Total dissatisfied	11	9	7	9	10	6	3	3	3	5

Source: Bus Passenger Survey, 2010

5.7b Disabled bus users perception of personal security whilst at a bus stop

Percentage of respondents

	Disability							
	Any disability	Mobility	Wheelchair user	Hearing	Eyesight	Speech impairment	Learning difficulties	Other
Very satisfied	38	34	52	37	39	45	50	41
Fairly satisfied	34	37	19	39	32	37	29	28
Neither satisfied nor dissatisfied	14	14	3	10	16	12	10	20
Fairly dissatisfied	7	7	2	7	6	6	3	7
Very dissatisfied	6	8	24	6	7	-	9	3
Total satisfied	73	71	71	76	71	82	78	69
Total dissatisfied	13	15	26	14	13	6	12	11

Source: Bus Passenger Survey, 2010

Note: The totals may appear to not sum due to percentages not being whole numbers

5.7c Disabled bus users perception of personal security whilst on a bus service

Percentage of respondents

	Disability							
	Any disability	Mobility	Wheelchair user	Hearing	Eyesight	Speech impairment	Learning difficulties	Other
Very satisfied	49	49	46	48	51	39	45	47
Fairly satisfied	36	36	35	38	41	40	30	36
Neither satisfied nor dissatisfied	10	10	-	8	4	18	15	11
Fairly dissatisfied	3	3	-	2	1	4	5	4
Very dissatisfied	2	1	19	3	2	-	5	1
Total satisfied	84	86	81	86	93	78	75	83
Total dissatisfied	5	4	19	6	3	4	10	6

Source: Bus Passenger Survey, 2010

Note: The totals may appear to not sum due to percentages not being whole numbers

6. Improve access to employment opportunities

3.77 The Wales Transport Strategy states that people should be able to access reasonable range of employment opportunities at key centres at the times needed. The National Transport Plan expands on this by stating that it aims to enable people to access key sites and key services more sustainably. The accessibility indicator we have chosen will demonstrate how many people can access employment opportunities at key centres in Wales in a reasonable time and how many can do so using sustainable means of transport.

6.1 The proportion of people aged 16 and over within 15, 30, 45, 60 and 90 minute travel time thresholds of A 'Key Centre' between 7am and 9am on a Tuesday (i) by public transport (ii) by car, (iii) by cycling and (iv) by walking

3.78 This indicator has been monitored using Accession™ GIS software. Table 6.1 shows that some 91 per cent of people aged 16 or over within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a key centre on a Tuesday between 7-9am. Some 26 per cent of people aged 16 or over are within 15 minutes travel time by public transport of a key centre, some 68 per cent within 30 minutes. Some 42 per cent of people aged 16 or over are within 15 minutes travel time of a key centre by cycling, some 68 per cent within 30 minutes. Some 12 per cent of people aged 16 or over are within 15 minutes travel time of a key centre by walking, with 26 per cent within 30 minutes.

3.79 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

6.1 The proportion of people aged 16 and over within 15, 30, 45, 60 and 90 minute travel time thresholds of A 'Key Centre' between 7am and 9am on a Tuesday (i) by public transport (ii) by car, (iii) by cycling and (iv) by walking

Time Thresholds	Numbers and Percentages							
	Number and proportion of people aged 16 and over							
	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Upto 15 Minutes	636,562	26.3	2,195,925	90.6	1,026,336	42.4	282,619	11.7
15 to 30 Minutes	1,028,104	42.4	202,191	8.3	630,916	26.0	350,392	14.5
30 to 45 Minutes	398,170	16.4	22,530	0.9	339,900	14.0	315,206	13.0
45 to 60 Minutes	126,439	5.2	419	0.0	162,599	6.7	228,074	9.4
Within 1 hour	2,189,275	90.3	2,421,065	99.9	2,159,752	89.1	1,176,291	48.5
60 to 90 Minutes	48,864	2.0	-	-	177,222	7.3	387,940	16.0
Within 1 hour 30 Minutes	2,238,139	92.4	2,421,065	99.9	2,336,974	96.4	1,564,230	64.5
Above 90 mins or not accessible	185,282	7.6	2,356	0.1	86,447	3.6	859,191	35.5

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on population figures of 2,423,421 people aged 16 and over in Wales

Economic outcomes monitoring

4. Wales Transport Strategy Economic Outcomes & Monitoring Indicators

7. Improve connectivity within Wales and internationally

4.1 The Wales Transport Strategy recognises the importance that transport links and connectivity both within Wales and internationally has on sustaining and developing economic prosperity in Wales. The Wales Transport Strategy states that improved connectivity means better access to goods and services using Wales' ports, railways, roads and air services. The National Transport Plan aims to improve connectivity across Wales and to develop a more integrated and sustainable transport system. The indicators we have chosen will measure the levels of connectivity both within Wales and internationally.

7.1 Number of local bus services & passenger journeys within Wales

4.2 This indicator uses data collected by the Traffic Commissioners from bus companies registering bus routes and from the DfT's annual publication "Transport Statistics Great Britain".

4.3 The Traffic Commissioners report in Table 7.1a shows that the number of live local bus registrations in Wales has fallen from 1,944 in 2008 to 1,869 in 2009. This follows a similar trend across the rest of Great Britain with a drop in the number of live local bus registrations in England and Scotland.

4.4 Table 7.1b details the total number of bus passenger journeys in Great Britain, by area. The data shows that bus passenger journey numbers in Wales were at the same level in 2009/10 as in 1999/00 at some 117 million passenger miles. The introduction of concessionary travel passes in Wales, the devolved nations and England has had a positive impact on the increasing bus passenger numbers in Great Britain as a whole since 2006/07.

7.1a Local bus service registrations – live, new, variations and cancelled local bus services as at 31 March 2009

Traffic Area	Number of local bus services													
	Live local bus registrations		Applications processed: New		Applications processed: Variations		Applications accepted: New		Applications accepted: Variations		Applications Withdrawn		Existing registrations cancelled	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Wales	1,944	1,869	258	276	570	816	257	276	557	807	14	9	175	259
England	17,893	17,648	2,416	2,633	5,858	7,400	2,393	2,617	5,757	7,286	124	130	2,055	2,032
English Regions														
Eastern	2,996	2,974	318	431	983	1,230	317	428	971	1,210	13	23	312	348
North Eastern	4,245	4,108	634	561	1,208	1,511	631	556	1,183	1,472	28	44	478	403
North Western	4,241	4,268	600	738	1,166	1,662	588	736	1,148	1,643	29	21	507	563
South Eastern and Metropolitan	1,302	1,313	160	157	545	648	159	157	538	643	9	5	109	133
West Midland	2,300	2,265	288	389	756	865	284	388	738	854	22	12	277	260
Western	2,809	2,720	416	357	1,200	1,484	414	352	1,179	1,464	23	25	372	325
Scotland	3,027	2,839	441	455	1,148	1,389	440	455	1,140	1,388	9	1	389	464
TOTAL	22,864	22,356	3,115	3,364	7,576	9,605	3,090	3,348	7,454	9,481	147	140	2,619	2,755

Source: Traffic Commissioners Reports

Note: There were no applications refused in 2008 or 2009

7.1b Local bus services: passenger journeys by area: 1999/00-2009/10

Millions of passenger journeys

Area	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Wales	117	119	108	115	116	121	120	109	120	125	117
England	3,804	3,842	3,881	3,964	4,087	4,005	4,077	4,260	4,519	4,626	4,604
London	1,294	1,347	1,422	1,527	1,692	1,802	1,881	1,993	2,160	2,228	2,238
English metropolitan	1,213	1,203	1,196	1,182	1,162	1,066	1,037	1,060	1,075	1,080	1,073
England: other areas	1,297	1,292	1,263	1,255	1,233	1,137	1,158	1,236	1,283	1,317	1,292
Scotland	455	458	466	471	478	461	468	459	498	493	467
Great Britain	4,376	4,420	4,455	4,550	4,681	4,587	4,664	4,827	5,137	5,244	5,188
All outside London	3,082	3,073	3,033	3,023	2,989	2,785	2,783	2,834	2,977	3,016	2,950

Source: Transport Statistics Great Britain 2009, Department for Transport

Note: Figures from 2004/05 onwards have been revised due to changes in the methodology used to estimate passenger numbers

7.2 Number of scheduled train kilometres, station usage and rail passenger journeys in & within Wales

- 4.5 The data for this indicator has been collected by the Office of the Rail Regulator and by Delta Rail for the Office of the Rail Regulator.
- 4.6 Table 7.2a shows that the principal train operating company running services in Wales, Arriva Trains Wales, has increased the number of timetabled kilometres its services operate from 18.44 million to 23.77 million between 2003/04 and 2009/10. This represents an increase of more than 5 million timetabled train kilometres, some 29 per cent, between 2003/04 and 2009/10.
- 4.7 Table 7.2b details rail station usage by Local Authority and ticket type in 2009/10. It shows that, unsurprisingly, Cardiff has the highest level of station usage with 16.8 million station entries and exits. The lowest level of station usage was on the Isle of Anglesey with over 236k station entries and exits in 2009/10. Table 7.3b also shows that just over a third of station entries and exits were made using full price tickets, with almost half being discounted tickets and the remainder season tickets. There were some 1.3 million more station entries and exits, or 3.1 per cent, overall in Wales in 2009/10 compared to 2008/09. The largest rise in entries and exits was in Blaenau Gwent due to new stations opening in late 2008/09. There were also over 20 per cent more entries and exits in Merthyr Tydfil in 2009/10 compared to 2008/09, this is likely to be due to an increase in the frequency of services in this area. There were reduced levels of station entries and exits in Caerphilly, 5.6 per cent and Vale of Glamorgan, 1.1 per cent.
- 4.8 Table 7.2c details station exit and entries by Local Authority from 2005/06 to 2009/10. The table shows a clear trend of increasing passenger numbers over the period for all the Local Authorities other than the Isle of Anglesey.
- 4.9 Table 7.3d looks at the 20 busiest stations in 2009/10. Unsurprisingly Cardiff Central was by far the busiest station in Wales with over 10.7 million station entries and exits in 2009/10, representing almost a quarter of all station entries and exits in Wales. Cardiff Queen Street was the second busiest station, ahead of Newport, demonstrating the high number of passengers using the Valley Lines services. Cardiff Central was the 30th busiest station in terms of entries and exits in England, Scotland & Wales for the third year in a row.

4.10 Chart 7.3e graphically represents the increase in rail passenger numbers since the mid 1990s in Wales. The chart shows that from 1999/00 onwards that the increase in the number of journeys within Wales has been much greater than the increase in journeys to or from Wales.

7.2a Timetabled Train Kilometres

Millions of train kilometres

Train Operating Company	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Arriva Trains Wales	18.44	19.59	21.05	22.34	22.79	23.09	23.77

Source: Office of the Rail Regulator

7.2b Rail station usage by Local Authority, 2008-09

Passenger numbers & percentages

Local Authority	Station Entries & Exits 2009-10			Total 2009-10	Total 2008-09	Per cent change
	Full Price	Reduced Fare	Season Ticket			
Isle of Anglesey	56,034	160,358	20,358	236,750	231,166	2.4
Gwynedd	592,410	562,468	327,446	1,482,324	1,397,808	6.0
Conwy	431,696	537,192	92,132	1,061,020	1,004,244	5.7
Denbighshire	280,880	533,530	102,662	917,072	898,380	2.1
Flintshire	366,732	183,054	52,902	602,688	567,522	6.2
Wrexham	476,980	247,756	42,470	767,206	698,736	9.8
Powys	297,122	150,994	5,716	453,832	434,150	4.5
Ceredigion	199,250	157,552	3,860	360,662	323,918	11.3
Pembrokeshire	296,278	163,112	2,930	462,320	450,970	2.5
Carmarthenshire	622,660	232,616	156,636	1,011,912	1,005,668	0.6
Swansea	692,734	1,181,950	250,842	2,125,526	2,082,054	2.1
Neath Port Talbot	329,378	787,598	172,562	1,289,538	1,240,616	3.9
Bridgend	591,698	990,288	496,322	2,078,308	2,044,564	1.7
Vale of Glamorgan	1,106,154	983,566	778,924	2,868,644	2,901,814	-1.1
Cardiff	5,030,874	7,563,500	4,263,810	16,858,184	16,507,478	2.1
Rhondda Cynon Taf	1,650,946	1,741,044	1,362,300	4,754,290	4,548,926	4.5
Merthyr Tydfil	230,266	218,072	87,140	535,478	435,682	22.9
Caerphilly	726,244	983,074	792,172	2,501,490	2,648,902	-5.6
Blaenau Gwent	65,454	202,362	32,814	300,630	40,946	634.2
Torfaen	135,980	152,614	59,910	348,504	297,722	17.1
Monmouthshire	280,276	329,850	143,730	753,856	713,508	5.7
Newport	594,980	1,240,200	438,680	2,273,860	2,231,528	1.9
Wales	15,055,026	19,302,750	9,686,318	44,044,094	42,706,302	3.1

Source: Delta Rail, Station Usage 2007-08, report for the Office of Rail Regulation

Note: The 2008-09 station usage figures are derived from the MOIRA Replacement Demand Matrix which does not disaggregate single journeys, and so when estimating passenger journeys all ticket sales have been split equally into the two directions of travel. This will only have an impact on the O-D Matrix if there is more travel on single tickets away from a station compared to travel to the station, which is not likely to be material. Therefore in the station usage figures entries are the same as exits. Full details of the methodology used to derive the figures is available from: <http://www.rail-reg.gov.uk/server/show/nav.1529>

7.2c Rail station usage annual summary by Local Authority, 2005 to 2010

Passenger numbers & percentages

Local Authority	2005-06	2006-07	2007-08	2008-09	2009-10	Per cent change
	Total station Entries & Exits	Total station Entries & Exits	Total station Entries & Exits	Total station Entries & Exits	Total station Entries & Exits	from 2005-06 to 2009-10
Isle of Anglesey	245,918	259,925	260,529	231,166	236,750	-3.7
Gwynedd	1,279,363	1,279,542	1,510,400	1,397,808	1,482,324	15.9
Conwy	870,767	910,769	970,265	1,004,244	1,061,020	21.8
Denbighshire	723,071	805,270	823,803	898,380	917,072	26.8
Flintshire	470,999	498,411	543,933	567,522	602,688	28.0
Wrexham	522,278	568,743	636,389	698,736	767,206	46.9
Powys	353,242	372,192	421,222	434,150	453,832	28.5
Ceredigion	302,142	304,390	321,805	323,918	360,662	19.4
Pembrokeshire	359,425	400,135	438,802	450,970	462,320	28.6
Carmarthenshire	815,988	864,732	946,197	1,005,668	1,011,912	24.0
Swansea	1,453,825	1,607,845	1,874,891	2,082,054	2,125,526	46.2
Neath Port Talbot	815,843	959,065	1,107,141	1,240,616	1,289,538	58.1
Bridgend	1,489,094	1,643,600	1,840,348	2,044,564	2,078,308	39.6
Vale of Glamorgan	2,432,651	2,665,085	2,845,605	2,901,814	2,868,644	17.9
Cardiff	13,010,508	14,004,292	15,485,855	16,507,478	16,858,184	29.6
Rhondda Cynon Taf	3,795,357	4,079,766	4,358,504	4,548,926	4,754,290	25.3
Merthyr Tydfil	392,116	405,453	407,845	435,682	535,478	36.6
Caerphilly	1,875,534	1,955,990	2,160,751	2,648,902	2,501,490	33.4
Blaenau Gwent	-	-	52,429	40,946	300,630	-
Torfaen	214,337	243,583	277,530	297,722	348,504	62.6
Monmouthshire	584,879	625,890	668,144	713,508	753,856	28.9
Newport	1,906,008	2,011,630	2,166,043	2,231,528	2,273,860	19.3
Wales	33,913,345	36,466,308	40,118,431	42,706,302	44,044,094	29.9

Source: Delta Rail, Station Usage 2009-10, report for the Office of Rail Regulation

Note: The 2009-10 station usage figures are derived from the MOIRA Replacement Demand Matrix which does not disaggregate single journeys, and so when estimating passenger journeys all ticket sales have been split equally into the two directions of travel. This will only have an impact on the O-D Matrix if there is more travel on single tickets away from a station compared to travel to the station, which is not likely to be material. Therefore in the station usage figures entries are the same as exits. Full details of the methodology used to derive the figures is available from: <http://www.rail-reg.gov.uk/server/show/nav.1529>

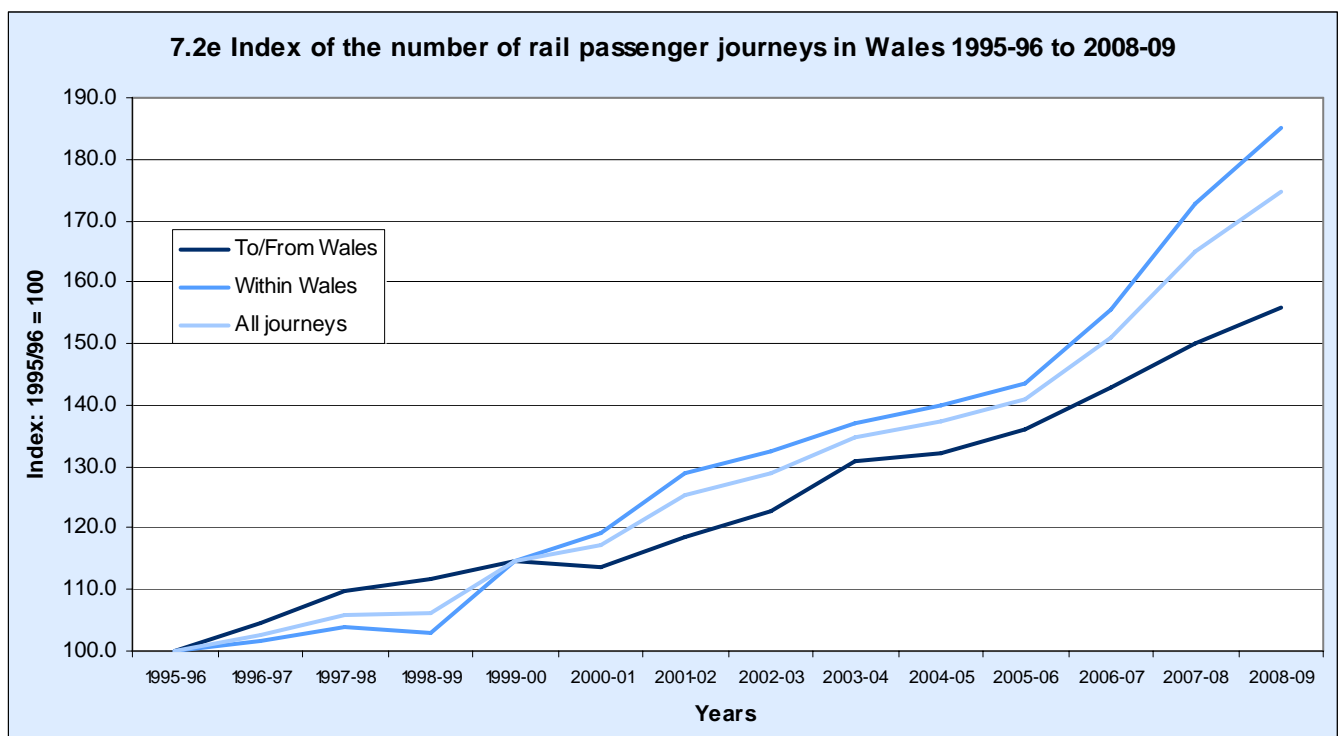
7.2d Rail station usage, 20 busiest stations in Wales, 2009-10

Station	Passenger numbers									
	Station Entries				Station Exits				Summary	
	Full Price	Reduced Fare	Season Ticket	Entries Total	Full Price	Reduced Fare	Season Ticket	Exits Total	Entries & Exits 2009-10	Entries & Exits 2008-09
Cardiff Central	1,346,227	2,916,865	1,108,181	5,371,273	1,346,227	1,346,227	1,108,181	5,371,273	10,742,546	10,485,084
Cardiff Queen Street	431,366	376,237	411,216	1,218,819	431,366	376,237	411,216	1,218,819	2,437,638	2,559,748
New port (Gwent)	285,069	596,472	209,274	1,090,815	285,069	596,472	209,274	1,090,815	2,181,630	2,160,498
Swansea	331,297	579,994	115,149	1,026,440	331,297	579,994	115,149	1,026,440	2,052,880	2,014,042
Bridgend	194,447	373,642	199,243	767,332	194,447	373,642	199,243	767,332	1,534,664	1,504,498
Pontypridd	141,701	161,872	104,126	407,699	141,701	161,872	104,126	407,699	815,398	784,516
Neath	95,271	237,645	47,911	380,827	95,271	237,645	47,911	380,827	761,654	731,728
Trefforest	141,733	150,818	80,757	373,308	141,733	150,818	80,757	373,308	746,616	696,650
Cardiff Bay	122,223	107,422	113,159	342,804	122,223	107,422	113,159	342,804	685,608	594,520
Cathays	136,525	84,968	115,860	337,353	136,525	84,968	115,860	337,353	674,706	622,306
Caerphilly	91,261	121,001	98,746	311,008	91,261	121,001	98,746	311,008	622,016	598,214
Bangor (Gwynedd)	60,342	208,914	26,733	295,989	60,342	208,914	26,733	295,989	591,978	550,714
Penarth	105,034	92,527	94,828	292,389	105,034	92,527	94,828	292,389	584,778	585,232
Wrexham General	179,179	98,459	14,450	292,088	179,179	98,459	14,450	292,088	584,176	534,256
Rhyl	87,051	170,550	34,109	291,710	87,051	170,550	34,109	291,710	583,420	577,748
Barry Island	79,137	102,956	98,652	280,745	79,137	102,956	98,652	280,745	561,490	577,924
Aberdare	81,352	103,415	69,143	253,910	81,352	103,415	69,143	253,910	507,820	506,004
Barry	100,411	83,855	68,613	252,879	100,411	83,855	68,613	252,879	505,758	480,254
Treherbert	76,151	98,779	74,188	249,118	76,151	98,779	74,188	249,118	498,236	503,456
Radyr	86,156	58,680	84,509	229,345	86,156	58,680	84,509	229,345	458,690	449,530

Source: Delta Rail, Station Usage 2009-10, report for the Office of Rail Regulation

Note: The station usage figures are derived from the LENNON rail ticketing database. Full details of the methodology used to derive the figures is available from: http://www.rail-reg.gov.uk/upload/pdf/stn_usage_report_0910.pdf

Note: Cardiff Central was the 30th most busy station in the UK in 2009-10, the same as in 2008-09 & 2007-08



7.3 Number of rail stations that have facilities that accessible by disabled passengers.

- 4.11 This indicator is based on the data collected by Arriva Trains Wales about their stations and reported in their leaflet "Making Rail Accessible: Helping Older and Disabled Passengers".
- 4.12 Table 7.3 shows that 18 per cent of stations operated by Arriva Trains Wales are staffed, though a number of these stations are staffed by booking office staff only. Table 7.3 also shows that only 35 stations, some 14 per cent, have accessible ticket machines.
- 4.13 Table 7.3 also details wheelchair access to platforms and wheelchair access to trains. The table shows that 52 per cent of stations have wheelchair access to platforms. However, this figure does include stations with access ramps steeper than 1:12 and those with a variety of potential issues with car parking facilities. Table 7.3 shows that 88 per cent of stations have wheelchair access to trains.

7.3 Number of rail stations that have facilities that accessible by disabled passengers.

Total Number of Stations	Numbers and percentages							
	Stations with staff		Stations with accessible ticket machines		Stations with wheelchair access to platforms		Stations with wheelchair access to trains	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
243	44	18	35	14	127	52	213	88

Source: "Making Rail Accessible: Helping Older and Disabled Passengers" taken from the Arriva Trains Wales website. Note that this data may include stations in England as well as in Wales

7.4 Number of passenger movements and destinations served from Cardiff Airport

- 4.14 The data for this indicator has been collected and published by the Civil Aviation Authority.
- 4.15 Table 7.4a details the domestic passenger movements to and from Cardiff Airport in 2009 and 2010. The total number of domestic passenger movements at Cardiff Airport decreased by some 109,000 passengers, a decrease of some 29 per cent, between 2009 and 2010. For both years the majority of domestic passengers travelled to or from Scotland and Northern Ireland, with 111,456 flying to or from Edinburgh, 52,400 flying to Glasgow and 49,170 flying to the two Belfast airports from Cardiff Airport in 2010. Other domestic destinations with notable passenger numbers are Jersey, Newcastle and Anglesey. The Intra Wales Air Service, supported by funding from the Welsh Assembly Government began operations in May 2007 to improve connections and journey times between North and South Wales.
- 4.16 Table 7.4b details the international passenger movements to and from Cardiff Airport in 2009 and 2010. There has been a fall in the total number of international passengers using Cardiff Airport, from some 1.2 million to some 1.1 million between 2009 and 2010, a fall of just under 10 per cent. The number of chartered passenger movements fell by some 9 per cent whilst the number of scheduled passenger movements fell by some 11 per cent. For both 2009 and 2010 the majority of international passenger movements were from and to destinations in Spain. In 2010 there were also over 100,000 passenger movements between Cardiff Airport and the Netherlands, Canary Islands and Turkey.

7.4a Domestic passenger numbers to and from Cardiff Airport 2010

Numbers and percentages

	Total Passengers		Per cent change	Total Scheduled		Per cent change	Total chartered		Per cent change
	2009	2010	2009-2010	2009	2010	2009-2010	2009	2010	2009-2010
Aberdeen	6,937	477	-93.1	6,937	477	-93.1	-	-	-
Anglesey (Valley)	11,846	7,816	-34.0	11,846	7,816	-34.0	-	-	-
Barrow -In-Furness	32	-	-	-	-	-	32	-	-
Belfast City (George Best)	32,754	41,594	27.0	32,754	41,594	27.0	-	-	-
Belfast International	49,806	7,566	-84.8	49,767	7,388	-85.2	39	178	356.4
Blackpool	53	-	-	-	-	-	53	-	-
Bristol	-	2	-	-	-	-	-	2	-
Cambridge	-	40	-	-	-	-	-	40	-
Durham Tees Valley	-	134	-	-	-	-	-	134	-
Edinburgh	161,001	111,456	-30.8	159,376	111,192	-30.2	1,625	264	-83.8
Gatw ick	219	-	-	-	-	-	219	-	-
Glasgow	56,429	52,400	-7.1	56,309	52,241	-7.2	120	159	32.5
Jersey	25,058	22,164	-11.5	25,058	22,164	-11.5	-	-	-
Luton	96	-	-	-	-	-	96	-	-
New castle	30,436	21,339	-29.9	29,894	21,297	-28.8	542	42	-92.3
New quay	-	37	-	-	-	-	-	37	-
Norw ich	153	44	-71.2	-	-	-	153	44	-71.2
Plymouth	1	43	4,200.0	-	-	-	1	43	4,200.0
Total	374,821	265,112	-29.3	371,941	264,169	-29.0	2,880	943	-67.3

Source: CAA UK Airport Statistics 2010

7.4b International passenger numbers to and from Cardiff Airport 2010

Country	Number of Passengers					
	2009			2010		
	Total	Scheduled	Chartered	Total	Scheduled	Chartered
Austria	6,684	-	6,684	5,315	-	5,315
Barbados	2,509	-	2,509	5,352	-	5,352
Bulgaria	11,474	-	11,474	12,705	-	12,705
Canada	-	-	-	139	-	139
Croatia	184	-	184	134	-	134
Cyprus	48,113	-	48,113	43,816	-	43,816
Dominican Republic	2,183	-	2,183	1,480	-	1,480
Egypt	25,089	14,815	10,274	34,615	27,262	7,353
Finland	961	-	961	1,070	-	1,070
France	45,350	39,724	5,626	45,392	32,478	12,914
Germany	300	-	300	2,913	2,734	179
Greece	83,457	-	83,457	83,885	-	83,885
Irish Republic	81,461	76,178	5,283	88,707	83,684	5,023
Isle of Curacao Netherlands Antilles	-	-	-	258	-	258
Italy	8,604	-	8,604	576	-	576
Jamaica	1,511	-	1,511	509	-	509
Malta	7,025	-	7,025	5,243	-	5,243
Mexico	277	-	277	-	-	-
Netherlands	135,259	135,216	43	125,118	125,070	48
Norway	-	-	-	276	-	276
Oman	107	-	107	-	-	-
Poland	393	269	124	353	-	353
Portugal(Excluding Madeira)	61,819	39,739	22,080	45,581	33,937	11,644
Portugal(Madeira)	3,709	-	3,709	-	-	-
Spain	462,643	257,288	205,355	348,540	199,941	148,599
Spain(Canary Islands)	153,671	-	153,671	134,372	-	134,372
Switzerland	9,786	9,738	48	6,223	6,064	159
Tunisia	2,058	-	2,058	23,950	-	23,950
Turkey	92,257	-	92,257	109,312	-	109,312
USA	283	-	283	872	-	872
Total	1,247,167	572,967	674,200	1,126,706	511,170	615,536

Source: CAA UK Airport Statistics 2010

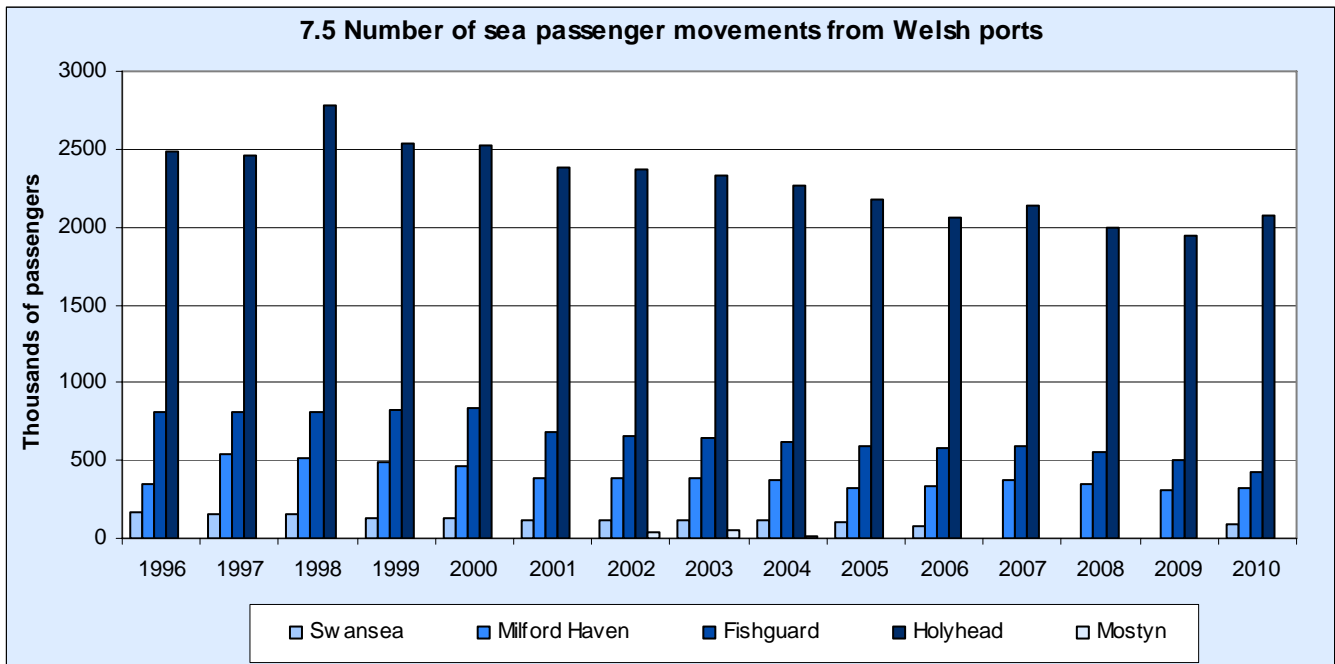
7.5 Number of sea passenger movements from Welsh ports

- 4.17 The data for this indicator is collected and published by the Department for Transport in the publication Sea Passenger Statistics.
- 4.18 The data in table 7.5a shows a decline of some 24 per cent in the number of sea passenger movements from Welsh ports between 1996 and 2010. A part of the decline in the total number of passenger movements was due to the removal of the Swansea – Cork service which restarted in 2010. However, the three other ports running ferry passenger services have seen a decline of passenger movements over the period some 6 per cent at Milford Haven, 17 per cent at Holyhead and 49 per cent at Fishguard.
- 4.19 Holyhead has seen a dramatic change in route usage from 1996-2010. In 1996 Holyhead, and Wales', busiest route was the Holyhead to Dun Laoghaire service with over 1.6 million passenger movements. In 2010 this had fallen to just over 0.25 million passengers a fall of some 84 per cent. However, over the same period the Holyhead to Dublin route has seen a corresponding increase in passenger numbers from just under 0.9 million in 1996 to some 1.8 million in 2010, an increase of some 108 per cent.
- 4.20 Chart 7.5 clearly shows the overall declining number of sea passenger movements between 1996 and 2010. Table 7.5b provides some historical context to the levels of sea passenger movements from Welsh ports.

7.5a Number of sea passenger movements from Welsh ports, by port and route: 1996-2010

	Thousands														
Ro-ro ferry passengers on short sea routes	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ports															
Swansea	172	150	158	133	124	122	121	118	116	100	81	-	-	-	94
Milford Haven	345	546	512	495	463	388	387	384	378	321	333	379	345	315	325
Fishguard	817	815	810	830	832	687	662	645	614	590	584	597	554	501	419
Holyhead	2,489	2,457	2,775	2,541	2,518	2,380	2,371	2,333	2,262	2,173	2,057	2,138	1,996	1,942	2,073
Mostyn	-	-	-	-	-	5	44	48	10	-	-	-	-	-	-
Total Wales Ports	3,823	3,968	4,255	3,999	3,937	3,582	3,585	3,528	3,380	3,184	3,055	3,114	2,895	2,757	2,910
Routes															
Swansea - Cork	172	150	158	133	124	122	121	118	116	100	81	-	-	-	94
Milford Haven -	340	546	512	495	463	388	387	384	378	321	333	379	345	315	325
Fishguard - Rosslare	817	815	810	830	832	687	662	645	614	590	584	597	554	501	419
Holyhead - Dublin	874	959	1,051	1,193	1,342	1,316	1,354	1,350	1,376	1,327	1,311	1,404	1,374	1,598	1,821
Holyhead - Dun Laoghaire	1,615	1,498	1,724	1,348	1,176	1,064	1,017	984	887	847	745	734	622	343	252
Mostyn - Dublin	-	-	-	-	-	5	44	48	10	-	-	-	-	-	-
Total Wales Routes	3,819	3,968	4,255	3,999	3,937	3,582	3,585	3,528	3,380	3,184	3,055	3,114	2,895	2,757	2,911

Source: Department for Transport: Sea Passenger Statistics 2010



Source: Department for Transport: Sea Passenger Statistics 2010

7.5b Historic levels of sea passenger movements from Welsh ports 1957-2010

Ports	Thousands															
	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	
Swansea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Milford Haven	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fishguard	250	259	261	270	270	252	249	306	343	314	372	393	337	359	353	
Holyhead	855	868	872	893	844	798	771	806	893	743	891	1,029	1,042	447	298	
Mostyn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	
Swansea	..	178	..	..	..	201	221	58	-	-	-	-	-	1	2
Milford Haven	..	..	..	..	..	..	..	183	289	326	217	232	271	239	5
Fishguard	205	258	278	280	254	322	421	399	430	409	505	490	526	529	713	
Holyhead	671	788	824	791	723	939	1,093	1,109	1,142	1,069	1,276	1,406	1,443	1,594	1,426	
Mostyn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
Swansea	101	125	3	72	121	130	153	183	163	172	150	158	133	124	122	
Milford Haven	7	241	249	247	278	315	315	358	341	345	546	512	495	463	388	
Fishguard	669	474	647	757	830	839	775	755	945	817	815	810	830	832	687	
Holyhead	1,429	1,528	1,634	1,622	1,744	1,783	2,111	2,125	2,125	2,489	2,457	2,775	2,541	2,518	2,380	
Mostyn	..	..	..	..	..	..	..	..	..	..	..	-	-	-	5
	2002	2003	2004	2005	2006	2007	2008	2009	2010							
Swansea	121	118	116	100	81	-	-	-	94							
Milford Haven	387	384	378	321	333	379	345	315	325							
Fishguard	662	645	614	590	584	597	554	501	419							
Holyhead	2,371	2,333	2,262	2,173	2,057	2,138	1,996	1,942	2,073							
Mostyn	44	48	10	-	-	-	-	-	-							

Source: Department for Transport: Sea Passenger Statistics 2010

7.6 Annual average flow per 1,000 km of motorway, trunk and principal roads

- 4.21 The data for this indicator is collected and published by the Department for Transport as part of the Great Britain road traffic estimates. Road length data, as collected and supplied by the local authorities in Wales, is also used as part of the calculation.
- 4.22 The data in table 7.6 is a standardised calculation of road traffic density rather than a presentation of the actual amount of traffic on the roads. The nature of the calculation means that for Local Authorities with short road lengths and relatively high vehicle flows, for example urban areas, there will be a high average daily flow per 1000kms. The data shows a higher average daily flow per 1000kms of motorway in the Vale of Glamorgan than in Newport despite there being higher actual vehicle flows on the M4 in Newport. This is because there is a shorter length of motorway in the Vale of Glamorgan, just 4kms, compared to Newport, 25kms, with still relatively high vehicle flows. Mainly rural local authority areas such as Powys have comparatively low average daily flows per 1000kms of road due to a combination of long road lengths and low vehicle flows.

7.6 Average daily flow of vehicles per 1,000kms of Motorway, Trunk and Principal Roads, 2009

Local Authority	Number of vehicles		
	Motorway	A - Trunk	A - Principal
Isle of Anglesey	-	13,566,731	4,246,906
Gwynedd	-	7,085,716	3,527,797
Conwy	-	13,400,113	4,893,170
Denbighshire	-	11,855,680	6,467,164
Flintshire	-	39,458,947	9,084,164
Wrexham	-	28,825,131	6,556,842
Powys	-	4,667,563	2,542,429
Ceredigion	-	5,906,859	2,665,305
Pembrokeshire	-	8,789,954	4,382,863
Carmarthenshire	49,548,237	13,268,796	5,064,576
Swansea	59,597,936	-	15,778,246
Neath Port Talbot	75,823,769	23,157,208	8,195,354
Bridgend	64,743,246	-	11,143,309
Vale of Glamorgan	102,739,726	-	13,049,845
Cardiff	71,731,009	24,353,120	31,697,993
Rhondda, Cynon, Taf	79,932,213	38,545,111	11,039,189
Merthyr Tydfil	-	18,115,128	5,955,926
Caerphilly	-	21,308,980	12,888,289
Blaenau Gwent	-	25,684,932	10,865,580
Torfaen	-	28,767,123	15,521,642
Monmouthshire	41,796,751	14,882,795	5,647,476
Newport	89,475,973	39,850,560	14,205,987
Wales	69,131,733	11,524,713	7,634,382

Source: National Road Traffic Survey, DfT

7.7 Total annual motor vehicle kilometres travelled in Wales

4.23 The data for this indicator is collected and published by the Department for Transport as part of the Great Britain road traffic estimates.

4.24 The data shows that overall motor vehicle traffic has grown by some 12 per cent across Wales between 2000 and 2009. The effect of the recession can be seen beginning in 2008 with some local authorities experiencing traffic levels either falling slightly or remaining at same level as 2007 and the all Wales figure slightly down compared with 2007. The effect is more pronounced in 2009 with all local authorities showing negative or static traffic growth compared to 2008 and the all Wales figure showing lower traffic levels than 2006.

7.7 Total annual motor vehicle kilometres travelled in Wales, by local authority: 2000-2009

Local Authority	Billion vehicle kilometres									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Isle of Anglesey	0.50	0.56	0.56	0.58	0.60	0.60	0.61	0.62	0.62	0.62
Gwynedd	1.13	1.14	1.18	1.22	1.23	1.26	1.31	1.29	1.30	1.28
Conwy	0.98	0.99	1.06	1.08	1.10	1.08	1.13	1.15	1.15	1.15
Denbighshire	0.76	0.77	0.79	0.82	0.85	0.86	0.89	0.89	0.90	0.90
Flintshire	1.53	1.53	1.59	1.62	1.64	1.64	1.71	1.72	1.72	1.69
Wrexham	0.87	0.88	0.91	0.92	0.94	0.94	0.96	0.96	0.96	0.94
Powys	1.33	1.32	1.40	1.43	1.44	1.46	1.51	1.51	1.50	1.49
Ceredigion	0.65	0.66	0.69	0.71	0.72	0.71	0.72	0.74	0.73	0.72
Pembrokeshire	0.97	0.96	1.00	1.02	1.03	1.05	1.09	1.09	1.11	1.10
Carmarthenshire	1.64	1.63	1.72	1.75	1.76	1.79	1.92	1.97	1.96	1.92
Swansea	1.51	1.54	1.62	1.64	1.69	1.70	1.73	1.76	1.73	1.69
Neath Port Talbot	1.11	1.14	1.18	1.21	1.26	1.28	1.31	1.39	1.35	1.33
Bridgend	1.14	1.16	1.22	1.21	1.27	1.25	1.29	1.34	1.31	1.30
Vale of Glamorgan	1.00	0.99	1.02	1.03	1.07	1.06	1.06	1.09	1.08	1.06
Cardiff	2.74	2.83	2.90	2.95	3.05	2.92	2.96	3.00	2.96	2.89
Rhondda Cynon Taf	1.85	1.88	1.95	1.94	2.01	2.02	2.06	2.10	2.10	2.08
Merthyr Tydfil	0.34	0.34	0.36	0.36	0.37	0.38	0.39	0.41	0.41	0.41
Caerphilly	1.05	1.05	1.09	1.10	1.13	1.13	1.15	1.17	1.16	1.15
Blaenau Gwent	0.35	0.36	0.36	0.36	0.38	0.40	0.39	0.40	0.41	0.41
Torfaen	0.55	0.56	0.58	0.60	0.60	0.60	0.63	0.63	0.64	0.64
Monmouthshire	1.22	1.23	1.27	1.25	1.33	1.34	1.33	1.37	1.40	1.38
Newport	1.68	1.72	1.77	1.80	1.85	1.82	1.84	1.83	1.85	1.81
Wales - major roads	15.56	15.87	16.43	16.77	17.39	17.22	17.72	17.81	17.78	17.62
Wales - minor roads	9.31	9.38	9.77	9.82	9.93	10.05	10.26	10.60	10.56	10.33
Wales- All roads	24.87	25.25	26.20	26.59	27.31	27.28	27.99	28.41	28.35	27.95

Source: Department for Transport

7.8 Average annual trunk road cross border traffic flows

- 4.25 The data for this indicator is collected and published by the Department for Transport as part of the Great Britain road traffic estimates.
- 4.26 The data in table 7.8 shows that traffic levels at trunk road border crossing points have generally risen in line with traffic growth across the road network in Wales. Trunk border crossing points in Mid-Wales have significantly lower flows than those in South and North Wales, but appear to have had traffic flows affected less by the economic downturn in 2008 and continuing in 2009.

7.8 Cross border trunk road traffic flows

		Annual Average Daily Vehicle Flow									
Road	Section	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
M48	Severn Crossing	16,708	17,179	17,463	18,949	19,523	19,575	19,776	20,842	20,452	20,140
M4	Second Severn Crossing	51,217	50,050	55,607	49,748	56,745	59,384	59,472	64,885	66,466	66,805
A5	Chirk Bypass	19,930	20,549	21,005	21,427	21,086	21,165	21,377	21,971	21,865	21,652
A40	Dixton (Monmouth)	28,549	29,335	30,006	24,762	24,963	27,548	27,876	28,727	27,485	27,138
A48	Chepstow Inner Relief Road	17,467	19,716	20,506	20,496	20,464	20,047	20,147	21,732	21,427	21,247
A55	Haw arden Bypass to England	27,597	29,221	29,991	30,832	31,653	31,577	32,197	37,354	37,130	33,646
A458	Trew ern	6,577	7,558	7,928	8,724	8,822	11,081	11,424	7,961	7,869	7,997
A465	Pandy	5,514	5,550	5,830	5,623	5,688	5,708	5,885	6,674	6,647	6,764
A483	Four Crosses	8,069	8,356	8,599	9,127	9,239	9,303	9,421	8,951	8,812	8,741
A483	New bridge Bypass	18,248	22,019	22,534	23,335	23,526	22,210	22,433	23,345	22,848	23,533
A483	North of Rossett	30,610	31,793	33,208	34,380	35,658	35,249	41,146	33,515	39,031	38,598
A550	North of Deeside Park	54,075	55,739	57,194	58,100	59,796	59,686	60,917	57,925	57,543	56,474

Source: GB National Road Traffic Survey, DfT

8. Improve the efficient, reliable and sustainable movement of people
9. Improve the efficient, reliable and sustainable movement of freight

4.27 The Wales Transport Strategy stresses the importance to the economy of having a reliable transport network for the efficient movement of people and freight. For people this means having access to public transport services that operate on time, with vehicles and transport interchanges of a satisfactory standard and a road network of a good standard that enables reliable journey times. For freight this means having access to a road network of a good standard that provides reliable journey times and access to rail, sea and air freight facilities. The National Transport Plan commits to maintaining and operating the road network to deliver strategic objectives and to make Wales' transport system more efficient and sustainable. The indicators we have chosen to monitor these outcomes will demonstrate how efficient, reliable the transport networks are and provide evidence on the level of sustainable movement of people and freight.

8.1 Percentage of scheduled bus services to arrive punctually (between 1 min early and 5 mins late)

4.28 The data for this indicator was collected and reported on by the Department for Transport in their Bus Punctuality Statistics report.

4.29 The data in Table 8.1a shows that bus punctuality in Wales at all bus stops surveyed in 2007 was 76 per cent, the same level as 2005 and 1 per cent better than the GB average. Bus punctuality at all other points in Wales was better than the GB average by 1 to 2 per cent.

4.30 There are currently no more recent data sources available than the 2007 Bus Punctuality Statistics publication. However, the 2010 Bus Passenger Survey in Wales asked respondents how satisfied they were with the punctuality of the bus service they were using. Table 8.1b details the responses to this question. The table shows that overall over three quarters, 76 per cent, of respondents were satisfied with the punctuality of their bus. This level of satisfaction was broadly similar to that in the Sewta, SWWITCH and Taith Transport Consortia regions, with 83 per cent of respondents in TraCC satisfied with the punctuality of their bus. Overall, 15 per cent of respondents were dissatisfied with the punctuality. There were similar levels of dissatisfaction in the Sewta, SWWITCH and Taith Transport Consortia regions, with 10 per cent of respondents in TraCC dissatisfied with the punctuality of their bus.

8.1a Percentage of scheduled bus services to arrive punctually (between 1 min early and 5 mins late)

	Start Timing Points	Intermediate Timing Points	Other	Percentage of local bus stops	
				All Bus Stops	All Bus Stops (2005)
Wales	85	75	69	76	76
England exc. London	84	74	69	75	74
Northern/Midland Regions	82	71	69	74	67
Southern Regions	87	76	69	77	79
Scotland	82	71	66	73	66
GB exc. London	84	73	68	75	72

Source: Bus Punctuality Statistics GB: 2007, DfT

8.1b Passenger satisfaction levels with bus punctuality

Percentage of respondents

	Satisfaction with bus punctuality				
	Sew ta	SWWITCH	TAITH	TraCC	Total
Very satisfied	43	40	44	54	44
Fairly satisfied	33	34	31	29	32
Neither satisfied nor dissatisfied	9	11	9	7	9
Fairly dissatisfied	8	6	7	5	7
Very dissatisfied	7	8	9	5	8
Total satisfied	76	74	75	83	76
Total dissatisfied	15	15	16	10	15

Source: Welsh Bus Passenger Survey, November/December 2010

Note: The totals may appear to not sum due to percentages not being whole numbers

8.2 Percentage of rail services that operate within 10 minutes of scheduled time

8.3 Percentage of Arriva Trains Wales services that operate within 5 minutes of scheduled time

4.31 The data for this indicator was collected by Network Rail and published by the Office of Rail Regulation in their National Rail Trends publication. We have been unable to collect or analyse data relating to any services operating in Wales other than those run by Arriva Trains Wales. We hope that we will be able to collect and publish data for this indicator soon once we publish the indicators online.

4.32 The data in Table 8.3 shows that the percentage of Arriva Trains Wales trains operating within 5 minutes of scheduled time improved by 1.6 percentage points to 94.9 per cent of trains in 2009/10 compared to 93.1 per cent in 2007/08. There was also a 1.1 percentage point improvement of trains operating within 10 minutes of scheduled time to 96.8 per cent, with a 0.6 percentage point improvement to 97.8 per cent of trains operating within 20 minutes of scheduled time. There was a 2.3 per cent increase in the number of planned train services between 2008/09 and 2009/10.

8.3 Percentage of Arriva Trains Wales services that operate within 5 minutes of scheduled time, 2009-10

	Percentage of trains within				Percentages and numbers	
	5 mins	10 mins	20 mins	Cancelled	Total no. of trains planned	
2008-09	93.1	95.7	97.2	0.4	311,516	
2009-10	94.9	96.8	97.8	0.0	318,675	
Q1	95.0	97.0	98.0	0.3	77,627	
Q2	95.6	97.4	98.2	0.3	79,482	
Q3	93.8	93.8	97.3	0.3	76,517	
Q4	95.1	96.7	97.6	0.3	77,890	
Annual change	1.8	1.1	0.6	-0.4	7,159	

Source: Office of Rail Regulation, National Rail Trends (data supplied by Network Rail)

8.4 Percentage of Arriva Trains Wales services that operate reliably

- 4.33 The data for this indicator is collected and supplied by Arriva Trains Wales.
- 4.34 Table 8.4 shows the percentage of services that operated reliably across Wales in 2009. The data shows that over 99 per cent of services in Wales operated reliably, across all the operating areas.

8.4 Percentage of Arriva Trains Wales services that operate reliably

Operating area	Percentages
	Reliability over the past 12 months (2010)
Cambrian	99.7
Marches	99.5
Wales - England	99.6
South, West & Central Wales	99.8
Valley Lines	99.6
North Wales Inter Urban	99.4
North Wales Rural	99.7

Source: Arriva Trains Wales

8.5 Passenger satisfaction levels with local bus services and facilities including information provision

- 4.35 This indicator uses the results from the 2010 Bus Passenger Survey, commissioned by Transport Statistics and operated by BDRC Continental. This survey was carried out during November and December 2010 across Wales. Passengers were asked to rate their overall satisfaction with their bus journey and their rating of value for money. They were asked to rate their satisfaction with a wide range of aspects of their bus journey, for example the bus stop, waiting for the bus, on the bus, the outside of the bus, the bus driver.
- 4.36 Table 8.5a and Chart 8.5a detail passengers overall satisfaction with local bus services. The table and chart show that for all Wales, 88 per cent of respondents were satisfied with their bus journey. Overall, 76 per cent of respondents were satisfied with punctuality and 61 per cent of fare paying passengers were satisfied that local bus services represent value for money. There were some regional differences compared to the national level, 92 per cent of respondents in the TraCC region were satisfied overall with their bus journey compared to 87 per cent in Sewta. 83 per cent of respondents in the TraCC region were satisfied with bus punctuality compared to 74 per cent in SWWITCH. 68 per cent of fare paying passengers in the TraCC region were satisfied with value for money compared to 53 per cent in SWWITCH.
- 4.37 Table 8.5b details passenger satisfaction levels with different sources of information provision about bus services. Respondents to the survey were asked which, if any, of the following sources of information provision they used to plan their trip and then asked about their satisfaction with those information sources. The options were, printed bus timetable, visited a travel shop, phoned a bus company, phoned local council, phoned Traveline Cymru, timetable from the bus company website, Traveline Cymru website, other website, other.
- 4.38 Table 8.5b shows that overall 88 per cent of respondents were satisfied with the different sources of information provision about bus services they had used. There was some slight regional variation with 90 per cent of respondents from the Taith region being satisfied with the different sources of information provision about bus services compared to 87 per cent of respondents in the Sewta and SWWITCH regions and 88 per cent of respondents in TraCC.

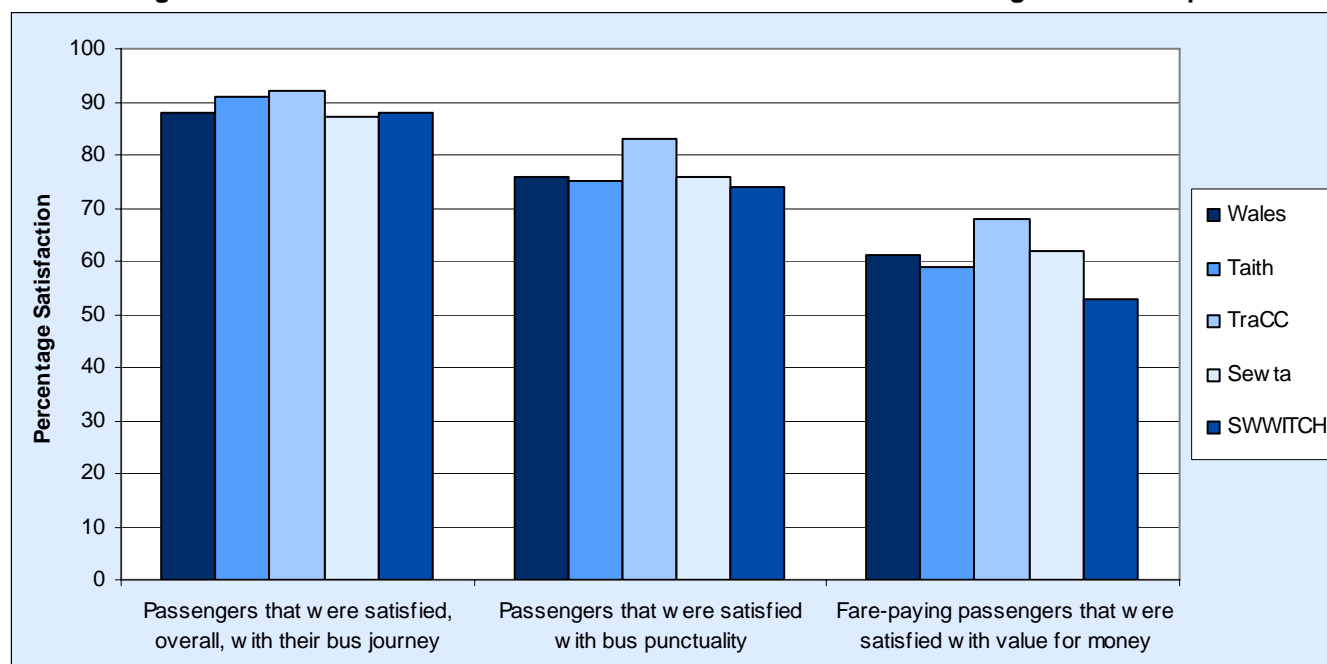
4.39 Table 8.5c details disabled bus users satisfaction levels with different sources of information provision about bus services. The table shows that overall 89 per cent of respondents who identified themselves as having a disability were satisfied with the different sources of information provision about bus services they had used. Those respondents who stated that they had a disability which effected their mobility reported the highest level of satisfaction at 91 per cent along with the joint lowest dissatisfaction at 4 per cent. Wheelchair users reported the lowest level of satisfaction with different sources of information provision about bus services at 54 per cent and the highest level of dissatisfaction at 43 per cent.

8.5a Passenger satisfaction levels with local bus services and facilities including information provision

Administrative areas	Proportion of:		
	Passengers that were satisfied, overall, with their bus journey	Passengers that were satisfied with bus punctuality	Fare-paying passengers that were satisfied with value for money
Wales	88	76	61
Taith	91	75	59
TraCC	92	83	68
Sew ta	87	76	62
SWWITCH	88	74	53

Source: Welsh Bus Passenger Survey, November/December 2010

8.5a Passenger satisfaction levels with local bus services and facilities including information provision



Source: Welsh Bus Passenger Survey, November/December 2010

8.5b Passenger satisfaction levels with different sources of information provision about bus services

Percentage of respondents

	Satisfaction with the information sources used				
	Sew ta	SWWITCH	TAITH	TraCC	Total
Very satisfied	60	57	67	66	61
Fairly satisfied	27	30	23	22	26
Neither satisfied nor dissatisfied	7	7	7	7	7
Fairly dissatisfied	3	4	3	4	3
Very dissatisfied	3	2	1	1	2
Total satisfied	87	87	90	88	88
Total dissatisfied	5	6	4	6	5

Source: Welsh Bus Passenger Survey, November/December 2010

Note: The totals may appear to not sum due to percentages not being whole numbers

8.5c Disabled bus users satisfaction levels with different sources of information provision about bus services

Percentage of respondents

	Disability							
	Any disability	Mobility	Wheelchair user	Hearing	Eyesight	Speech impairment	Learning difficulties	Other
Very satisfied	65	68	35	61	69	49	56	62
Fairly satisfied	23	23	19	25	16	37	16	25
Neither satisfied nor dissatisfied	6	5	3	7	8	10	14	5
Fairly dissatisfied	2	2	12	5	4	-	-	2
Very dissatisfied	3	2	31	2	3	4	14	6
Total satisfied	89	91	54	86	85	86	72	87
Total dissatisfied	5	4	43	7	7	4	14	8

Source: Bus Passenger Survey, 2010

Note: The totals may appear to not sum due to percentages not being whole numbers

8.6 Passenger satisfaction with train services and station facilities including information provision

- 4.40 This indicator uses the results from Passenger Focus surveys of rail users. The survey asks the same set of questions about passenger's experience of using railway facilities and rolling stock in spring and the autumn of each year.
- 4.41 The data in table 8.6a reports on passengers overall satisfaction with both train stations and rolling stock facilities. The data shows that passenger satisfaction has increased by 6 percentage points from 81 per cent in Spring 2005 to 87 per cent in Autumn 2010. This compares favourably with the average of 86 per cent for all other regional operators. Passenger dissatisfaction in Wales was 5 per cent in Autumn 2010.
- 4.42 Table 8.6b reports on rail passenger satisfaction with information provision at rail stations owned and operated by Arriva Trains Wales. The data shows that passenger satisfaction has increased by 5 percentage points from 73 per cent in Spring 2005 to 78 per cent in Autumn

2010. The average for all other regional operators was a satisfaction level of 83 per cent in Autumn 2010.

- 4.43 Table 8.6c reports on rail passenger satisfaction with information provision at rail services operated by Arriva Trains Wales. The data shows that passenger satisfaction has increased by 10 percentage points from 57 per cent in Spring 2005 to 67 per cent in Autumn 2010. The average for all other regional operators was a satisfaction level of 69 per cent in Autumn 2010.

8.6a Passenger satisfaction with Arriva Trains Wales stations and train facilities

	Percentage of respondents				
	Sample Size	% Satisfied or Good	% Neither Satisfied nor Dissatisfied	% Dissatisfied or poor	All regional operators % satisfied or good
Autumn 2005		81	11	8	82
Spring 2006	713	79	11	10	85
Autumn 2006	799	80	11	9	84
Spring 2007	781	84	10	6	82
Autumn 2007	775	85	9	6	83
Spring 2008	782	83	11	6	84
Autumn 2008	730	86	7	7	86
Spring 2009	791	87	9	3	86
Autumn 2009	775	86	9	5	89
Spring 2010	999	88	8	4	88
Autumn 2010	757	87	8	5	86

Source: Passenger Focus surveys

8.6b Passenger satisfaction with information provision at Arriva Trains Wales stations

	Percentage of respondents				
	Sample Size	% Satisfied or Good	% Neither Satisfied nor Dissatisfied	% Dissatisfied or poor	All regional operators % satisfied or good
Autumn 2005		73	13	15	77
Spring 2006	660	65	16	19	78
Autumn 2006	740	70	12	17	76
Spring 2007	743	73	13	14	76
Autumn 2007	754	74	14	12	77
Spring 2008	732	74	12	13	79
Autumn 2008	681	74	13	13	80
Spring 2009	722	80	8	11	81
Autumn 2009	716	80	11	9	84
Spring 2010	934	79	9	12	83
Autumn 2010	697	78	12	9	83

Source: Passenger Focus surveys

8.6c Passenger satisfaction with information provision on Arriva Trains Wales services

	Percentage of respondents				
	Sample Size	% Satisfied or Good	% Neither Satisfied nor Dissatisfied	% Dissatisfied or poor	All regional operators % satisfied or good
Autumn 2005		57	29	15	65
Spring 2006	596	51	26	23	65
Autumn 2006	663	51	29	19	67
Spring 2007	653	55	30	15	67
Autumn 2007	679	61	26	13	66
Spring 2008	683	63	24	13	67
Autumn 2008	639	61	24	15	69
Spring 2009	691	65	25	10	69
Autumn 2009	695	63	22	15	71
Spring 2010	886	69	21	10	70
Autumn 2010	669	67	23	10	69

Source: Passenger Focus surveys

8.7 Percentage travel time reliability on key sections of the trunk road network for both cars and HGV's

4.44 We currently do not have any data available to monitor this indicator. However, we have developed a network we wish to monitor and a method to achieve this. We are currently engaging in a procurement exercise to identify a suitable contractor to supply data for this indicator. We hope to be able to publish data for this indicator soon, certainly once we publish our indicators and data online.

8.8 Road freight tonnage by commodity, origin and destination

- 4.45 Table 8.8a details the goods lifted by road within, to and from Wales by UK registered HGV's by commodity group in 2009. The table shows that overall Wales imported more goods from the rest of the UK than it exported in 2009. The commodity imported into Wales from the rest of the UK with the highest tonnage in 2009 was food, drink and tobacco at some 10.6m tonnes with some 5.6m tonnes exported from Wales to the rest of the UK. The commodity exported from Wales to the rest of the UK with the highest tonnage in 2009 was crude and manufactured minerals and building materials at just over 6m tonnes with some 5.3m tonnes imported into Wales from the rest of the UK.
- 4.46 Table 8.8b shows the tonnage of goods lifted in Wales for domestic or international haulage between 1990 and 2009. The table shows that there were fewer tonnes of goods lifted within Wales, lifted from Wales to the rest of UK and exported outside of the UK from Wales in 2009 than in any year from 1990 onwards.

8.8a Goods lifted by road within, to and from Wales by UK registered HGVs in 2009, by commodity group (a)

	Thousand tonnes		
	Within Wales	To Wales from rest of United Kingdom	From Wales to rest of United Kingdom
Food, drink and tobacco	7,169	10,634	5,670
Crude and manufactured minerals and building materials	16,941	5,309	6,046
Ores and metal waste	399	788	*
Raw Textiles	266	*	*
Coal and petroleum products	1,604	1,318	*
Chemicals	2,283	1,337	1,138
Metal manufactures	2,064	769	1,860
Miscellaneous manufactures (not elsew here specified)	1,029	2,033	2,436
Engineering products	1,470	1,648	1,068
Wood, cork and glass	2,109	1,321	1,055
Miscellaneous transactions	10,235	4,118	4,036
Total	45,569	29,453	24,000

Source: Department for Transport

(a) The domestic legs of international journeys are included in the above figures.

8.8b Goods lifted in Wales for domestic or international haulage, by origin and destination

	Thousand tonnes				
	Within Wales (a)	To Wales from rest of United Kingdom (a)	From Wales to rest of United Kingdom (a)	Imports from outside the United Kingdom	Exports to outside the United Kingdom
1990	69,468	22,811	25,197	209	526
1991	64,509	24,152	27,972	240	489
1992	62,695	21,753	24,640	232	621
1993	63,625	24,585	24,897	195	480
1994	69,692	25,607	26,727	293	582
1995	70,772	24,537	29,618	304	567
1996	66,423	25,117	31,220	292	665
1997	74,777	25,017	32,109	324	656
1998	63,433	27,337	33,388	373	650
1999	62,927	24,096	26,669	397	680
2000	57,492	29,031	30,334	307	611
2001	58,184	26,684	28,274	301	686
2002	52,798	26,495	29,609	329	689
2003	59,201	26,458	27,908	367	570
2004	59,421	26,499	27,090	254	431
2005	63,917	30,063	30,325	267	427
2006	63,540	29,985	26,945	258	452
2007	68,236	32,009	29,617	295	477
2008	62,124	29,069	30,619	235	358
2009	45,569	29,453	24,000	203	340

Source: Department for Transport

(a) The domestic legs of international journeys are included in the above figures

8.9 Non-road freight tonnage by mode

4.47 The data for this indicator is supplied by the DfT's Port Statistics and the Civil Aviation Authority's Airport Statistics publications. We have been unsuccessful so far in our attempts to locate suitable rail freight data. We are continuing to work on this and hope to be able to locate and publish this in the near future.

4.48 Table 8.9 below details the tonnages of freight carried by sea and by air in Wales. The table demonstrates that air freight is relatively nominal with just 28 tonnes carried in 2010. The data also shows that the level of freight carried by sea has remained at a consistent level between 1999-2008 at around 56 million tonnes with a slight decrease to some 54 million tonnes in 2009. Sea freight data for 2010 will not be available until autumn 2011.

8.9 Non-road freight tonnage by mode

	Thousand tonnes											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total air freight	0.355	0.900	1.153	1.287	2.186	2.622	2.564	2.212	2.391	1.334	0.178	0.028
Total sea freight	56,578	57,892	54,734	52,020	52,613	60,051	59,310	56,673	56,598	55,790	53,723	

Source: DfT regional maritime statistics & CAA Airport Statistics 2010

8.10 Proportion of trunk and local authority road network in need of further investigation due to its condition.

- 4.49 Table 8.10a shows the proportion of the Welsh motorways and all purpose trunk roads network needing immediate close monitoring of its structural condition. The data in the table shows detail about the estimated number of years before close monitoring of the road is required, in terms of the percentage of the network.
- 4.50 5.8 per cent of all purpose trunk roads in Wales required close monitoring in 2009. This is a decrease of 0.4 per cent from 2008 and some 2.2 per cent from 2007. The percentage of motorways needing close monitoring was 4.3 per cent, a decrease of 0.3 per cent from 2008 and an increase of 1 per cent point from 2007.
- 4.51 Table 8.10b suggests there was a lower proportion of the principal, A roads requiring further investigation than non-principal classified, B/C roads. The results also show limited variation between local authorities. The proportion of principal roads requiring further investigation varied between 1 per cent of roads in Torfaen, with only one authority, Rhondda Cynon Taff exceeding 10 per cent of road surveyed in 2009/10.
- 4.52 On other classified roads in Wales, there was again a limited level of variation between local authority areas with the proportion of non-principal roads requiring further investigation varying between 5 per cent and 14 per cent of the road surveyed in 2009/10.

8.10a Percentage of network requiring close monitoring of structural condition¹, Motorways and Trunk roads, Wales, 1993 to 2009

Percentages and Kilometres

Road Class	Percentage of network requiring close monitoring ²				Whole Network		Percentage of network surveyed ³
	Now	in 0 to 4 years	in 5 to 19 years	in 20 or more years	per cent	kms	per cent
Motorway							
1993	3.2	1.0	8.7	87.1	100	304	84
1994	3.3	1.1	9.7	85.9	100	306	85
1995	3.4	1.1	11.4	84.1	100	306	88
1996	3.5	1.6	12.8	82.1	100	306	80
1997	3.7	1.7	14.5	80.1	100	303	89
1998	4.5	1.7	16.5	77.3	100	303	89
1999	5.3	1.8	17.9	75.0	100	303	89
2000	6.6	2.8	17.4	73.2	100	303	89
2001	5.6	4.6	19.5	70.3	100	303	100
2002	7.6	5.9	18.8	67.7	100	303	100
2003	8.6	5.9	21.5	64.0	100	303	100
2004	7.3	7.3	23.1	62.4	100	303	100
2005	6.3	5.0	20.1	68.6	100	303	100
2006	7.9	4.3	15.8	71.9	100	303	100
2007	3.3	3.3	12.2	81.2	100	303	100
2008	4.6	4.6	23.4	67.3	100	303	100
2009	4.3	3.6	18.2	73.9	100	303	100
Trunk							
1993	2.6	3.4	16.6	77.4	100	2,313	61
1994	3.7	3.9	16.8	75.6	100	2,292	71
1995	5.0	4.7	16.8	73.5	100	2,304	79
1996	6.2	4.7	17.6	71.5	100	2,293	74
1997	7.2	5.0	18.1	69.7	100	2,313	80
1998	8.5	4.9	18.6	68.0	100	2,301	81
1999	10.8	4.4	19.1	65.7	100	2,301	81
2000	12.7	4.8	19.0	63.5	100	2,295	81
2001	13.1	5.0	18.6	63.3	100	2,295	81
2002	14.1	5.9	18.0	62.0	100	2,295	81
2003	11.2	4.7	20.2	63.9	100	2,295	86
2004	11.5	4.4	19.2	64.9	100	2,295	83
2005	10.6	3.9	20.7	64.7	100	2,295	86
2006	11.1	4.0	20.9	64.0	100	2,295	88
2007	8.0	3.4	19.4	57.4	100	2,295	88
2008	6.2	3.7	21.7	68.4	100	2,295	89
2009	5.8	3.6	20.9	69.7	100	2,295	92

Source: Road Conditions 2008 Bulletin, Welsh Assembly Government

1 The structural condition of a section of road is in need of close monitoring when it has a negative residual life.

2 Percentage of whole flexible network including long life pavements.

3 Concrete pavements and elevated carriageways are not surveyed but are included in "Whole Network".

8.10b Percentage of network requiring close monitoring of structural condition¹, Local Authority roads 2008-09 & 2009-10

Percentages and Kilometres

Year	Percentage of Principal (A) roads		Total length of A county roads ²	Percentage of Non-principal / classified (B/C) roads		Total length of B and C roads ²
	THS/010a	THS/010a	Km	THS/010b	THS/010b	Km
	2008-09	2009-10	2010	2008-09	2009-10	2010
Local Authority						
Isle of Anglesey	2.28	3.20	145.15	7.75	12.20	483.37
Gwynedd	3.62	3.76	325.40	9.15	8.14	1,063.40
Conwy	2.10	2.90	122.06	7.32	8.53	667.28
Denbighshire	5.00	5.66	139.80	10.09	13.69	655.30
Flintshire	1.03	1.66	151.70	3.03	5.19	338.80
Wrexham	2.38	3.08	100.70	5.83	12.08	516.60
Powys	4.08	-	238.15	9.89	-	2,699.84
Ceredigion	2.75	4.48	158.30	8.09	10.53	1,165.60
Pembrokeshire	6.30	7.40	156.90	7.78	11.10	1,217.20
Carmarthenshire	4.84	5.29	247.70	7.86	10.40	1,584.10
Swansea	3.38	-	102.10	3.66	-	228.10
Neath Port Talbot	3.65	-	115.00	4.94	4.94	113.70
Bridgend	7.57	6.63	104.00	11.92	10.97	139.00
Vale of Glamorgan	6.55	5.29	73.90	9.60	9.50	369.10
Cardiff	4.75	4.96	86.00	7.62	8.14	137.50
Rhondda Cynon Taf	11.36	12.58	163.80	12.55	12.55	191.30
Merthyr Tydfil	6.27	6.83	27.60	11.12	10.75	46.80
Caerphilly	2.82	3.63	102.40	5.52	7.36	212.00
Blaenau Gwent	6.10	5.40	41.10	13.69	13.81	68.10
Torfaen	7.99	1.40	26.30	5.05	6.66	101.60
Monmouthshire	4.15	3.93	58.70	8.63	10.24	609.30
Newport	1.33	2.08	51.30	8.48	8.23	189.10
Wales	4.38	4.98	2,738.06	8.35	10.07	12,797.09

Source: Local authority performance indicators, Local Government Data Unit

1 The structural condition of a section of road is in need of close monitoring when it has a negative residual life.

2 The total length of road is as reported by each local authority and shown in Table 1.2 of "Welsh Transport Statistics 2010".

10. Improve sustainable access to key visitor attractions

4.53 The Wales Transport Strategy states that tourism is vital for the economy of Wales and that transport must provide sufficient, sustainable access to key visitor attractions. The National Transport Plan restates the aim to deliver improved and sustainable access across Wales. The indicators we have chosen will demonstrate how accessible key visitor attractions are and the number of people using more sustainable forms of transport.

10.1 The proportion of households within 15, 30, 45, 60 and 90 minute travel time thresholds of A 'Key Visitor Attraction' (as defined in Welsh Transport Statistics 2008 as those attractions receiving over 50,000 visitors annually) between 10am and 12pm on a Saturday (i) by public transport (ii) by car, (iii) by cycling and (iv) by walking

4.54 This indicator has been monitored using Accession™ GIS software. Table 10.1 shows that some 83 per cent of households within Wales are within 15 minutes drive time, at assumed average road speeds with no journey time delays, of a key centre. Some 15 per cent of households are within 15 minutes travel time by public transport of a key centre, with some 41 per cent within 30 minutes. Some 27 per cent of households are within 15 minutes travel time of a key centre by cycling, with some 50 per cent within 30 minutes. Some 6 per cent of households are within 15 minutes travel time of a key centre by walking, with some 16 per cent within 30 minutes.

4.55 Details of the data and methodology used to calculate these results are in the Key Quality section at the end of this bulletin. Map plots of the data are also available in .PDF format via the [Statistics for Wales](#) website.

10.1 The proportion of households within 15, 30, 45, 60 and 90 minute travel time thresholds of A 'Key Visitor Attraction' (as defined in Welsh Transport Statistics 2008 as those attractions receiving over 50,000 visitors annually) between 10am and 12pm on a Saturday (i) by public transport (ii) by car, (iii) by cycling and (iv) by walking

Time Thresholds	Numbers and Percentages							
	Number and proportion of households							
	Via Public Transport		Via Car		Via Cycling		Via Walking	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Upto 15 Minutes	196,554	14.7	1,107,400	82.7	363,780	27.2	82,438	6.2
15 to 30 Minutes	357,916	26.7	202,149	15.1	303,782	22.7	129,237	9.6
30 to 45 Minutes	276,395	20.6	27,537	2.1	246,545	18.4	125,226	9.3
45 to 60 Minutes	201,005	15.0	2,653	0.2	154,551	11.5	100,864	7.5
Within 1 hour	1,031,870	77.0	1,339,739	100.0	1,068,658	79.8	437,765	32.7
60 to 90 Minutes	123,705	9.2	-	-	139,580	10.4	178,364	13.3
Within 1 hour 30 Minutes	1,155,575	86.2	-	-	1,208,238	90.2	616,129	46.0
Above 90 mins or not accessible	184,261	13.8	-	-	131,598	9.2	723,707	54.0

Source: Accessibility modelling using Accession™ GIS software. Details of data used in calculations available in the Key Quality section of this bulletin.

Note: Based on 1,339,836 domestic addresses in Wales

10.2 The proportion of tourist trips made using public transport

4.56 This indicator is monitored using tourism data collected and published by Visit Britain, Visit Wales, Visit Scotland and the Northern Ireland Tourist Board in their joint publication The UK Tourist 2009.

4.57 The data in table 10.2 shows that just 10 per cent of tourist trips in Wales in 2009 were made using public transport. This is 9 per cent lower than the UK average of 19 per cent. Tourist trips to visit friends or family in Wales had the highest public transport usage at 21 per cent of trips, though this was 4 per cent lower than the UK average. Where public transport was used for tourist trips in Wales the main mode used was the train at 7 per cent with just 2 per cent using buses or coaches and 1 per cent using sea or air transport.

10.2 Proportion of tourist trips made using public transport 2009

Main mode of transport used	Percentage of respondents							
	All tourism		Holiday Trips		Business & Work tourism		Visits to friends & relatives	
	Wales	UK	Wales	UK	Wales	UK	Wales	UK
Public Transport	10	19	7	16	18	28	21	25
Train	7	12	5	10	14	19	12	15
Bus/Coach	2	3	2	3	-	1	2	3
Sea/air	1	4	1	3	4	9	7	7
Personal Transport	86	76	89	80	72	62	75	72
Car	84	75	86	78	72	61	75	71
Car - own/friends/company	83	73	85	77	69	59	75	70
Car - hired	1	2	1	1	3	2	-	2
Motorised caravan/camper	2	1	2	2	-	*	-	*
Motor cycle	*	*	*	*	-	*	-	*
Bicycle	*	*	*	*	-	-	-	*
Other	4	5	4	4	10	10	4	3
Coach tour	2	2	2	3	-	2	1	1
Hitch hiking	-	-	-	-	-	-	-	-
Walking	1	*	1	*	-	*	-	*
Lorry/Van	1	1	*	*	9	6	2	1
Minibus	1	1	1	1	1	1	1	*
Other	*	*	*	*	-	*	-	*

Source: Visit Britain - The UK Tourist 2009

10.3 Modal share of transportation used to access the location of outdoor visits

4.58 This indicator uses data collected by the Forestry Commission and Countryside Council for Wales from their Welsh Outdoor Recreation Survey carried out in 2008. Table 10.3 details the modal choice respondents made when accessing the location of their outdoor visit. 46 per cent of respondents travelled to access the outdoors by walking, with 44 per cent of respondents using a car or van and 3 per cent using a bicycle.

4.59 Table 10.3 shows that 38 per cent of male respondents walked to access the location of their outdoor visit compared to 53 per cent of female respondents. This is reversed when looking at car use with 51 per cent of males using a car to access the location of their outdoor visit compared to 38 per cent of female respondents.

4.60 The table shows that respondents with higher household incomes were more likely to use a car or van than those with lower household incomes. The table also shows that those with lower household incomes were more likely to walk than those with higher household incomes. The table shows that 8 per cent of respondents in each of the top two household income brackets cycle to access the location of their outdoor visit compared to just 2 per cent in the bottom household income bracket.

10.3 Modal share of transportation used to access the location of outdoor visits

Percentage of respondents

	Age					Gender		Household Income					Total
	16-24	25-34	35-54	55-74	75+	Male	Female	upto £15,999	£16,000 to £31,199	£31,200 to £49,999	£50,000 to £79,999	More than £80,000	
On foot/w alking	50	41	45	50	42	38	53	47	46	40	39	38	46
Car or Van	38	50	46	41	44	51	38	40	44	55	51	51	44
Bicycle	2	7	4	2	1	5	2	2	5	2	8	8	3
Public bus/coach	5	1	1	3	10	3	3	5	1	1	-	-	3
Train	3	-	-	-	-	1	-	-	1	-	-	-	1
Other	2	1	3	4	4	4	3	6	3	1	2	4	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Welsh Outdoor Recreation Survey 2008, Countryside Council for Wales and the Forestry Commission

Environmental outcomes monitoring

5. Wales Transport Strategy Environmental Outcomes & Monitoring Indicators

5.1 We have developed a series of indicators to monitor the Wales Transport Strategy environmental outcomes in line with the monitoring requirements of the Strategic Environmental Assessment (SEA) of the National Transport Plan. The indicators in this sector, along with a number of the indicators in the social & economic outcomes section, will deliver part of the monitoring commitment in SEA of the National Transport Plan. For this interim monitoring report only limited data has been collected and analysed for the environmental outcomes section. This is due, in part, to the work to ensure that the indicators are fit for purpose for the SEA monitoring. Data for these indicators will be developed for inclusion in the baseline report in Autumn 2010. We will also hope to have developed further indicators for this section, via the public consultation and further discussions with colleagues in our Transport and Strategic Regeneration Department.

11. Increase the use of more sustainable materials in our country's transport assets and infrastructure

5.2 The Wales Transport Strategy states that Wales needs more sustainable transport assets, utilising materials more efficiently, minimising waste and where possible recycling the use of materials. The National Transport Plan has a stated aim of the use of sustainable construction and maintenance methods to reduce the environmental effects of the transport infrastructure for which we are responsible. The indicator we have chosen will measure how this aim has been delivered.

11.1 The percentage use of sustainable resources in constructing and maintaining transport infrastructure.

5.3 The data for this indicator will be collected from road schemes and projects as part of the contractual reporting processes. At present we only have limited data on the usage of sustainable resources, but systems are being developed to ensure this information is routinely collected and reported on.

12. Reduce the impact of transport on greenhouse gas emissions

5.4 The Wales Transport Strategy states that as the travel patterns in Wales include a high proportion of trips of less than 5 miles then this presents an opportunity to reduce greenhouse gas emissions by a shift from car trips to more sustainable modes such as walking and cycling. The National Transport Plan aims for the provision of realistic alternative modes of transport that enable people to choose sustainable modes of travel via a shift in the balance of expenditure towards sustainable transport. Many of the indicators we have chosen to monitor the social and economic outcomes deal with monitoring modal shift. If the modal shift aimed for in the National Transport Plan does occur there should be an effect on the levels of greenhouse gas emissions from the transport sector. This effect will be picked up by the indicator we have chosen.

12.1 Greenhouse gas inventories for the transport sector

5.5 The data for this indicator is collected and reported on by the Atomic Energy Agency for the National Air Quality Emissions Inventory.

5.6 The data in Table 12.1 shows that total greenhouse gas emissions in Wales have fallen by some 20 per cent between 1990 and 2008. However, during the same period greenhouse gas emissions from transport have increased by some 3.4 per cent. Within the transport sector greenhouse gas emissions from rail transport have decreased by 3.6 per cent, water transport increases by 21 per cent and road transport by 4.4 per cent. Emissions have also increased within the aviation sector but the total greenhouse gas emissions from aviation represent less than 1 per cent of the total emissions from transport.

5.7 Road transport produces the vast majority of greenhouse gas emissions from the transport sector. In 1990, 85 per cent of greenhouse gas emissions from the transport sector were from road transport, by 2008 this had marginally increased to 86 per cent.

12.1 Greenhouse gas inventories for the transport sector, 1990, 2003-2008

	Mt CO ₂ -e						
Sector	1990	2003	2004	2005	2006	2007	2008
Rail Transport	0.4	0.3	0.4	0.4	0.4	0.4	0.4
Road Transport	6.5	7.0	7.0	7.0	6.9	7.0	6.8
Cars	4.3	4.7	4.7	4.6	4.5	4.5	4.4
HGV's	1.3	1.0	1.0	1.1	1.1	1.1	1.1
Buses	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Water Transport	0.5	0.4	0.4	0.5	0.6	0.5	0.6
Military Transport (Air and Water)	0.3	0.1	0.1	0.1	0.1	0.1	0.1
Aviation take off and landing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aviation cruise	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Transport	7.6	7.9	8.0	8.0	8.1	8.1	7.9
Transport percentage of total Wales GHG Emissions	13.7	16.9	16.7	17.2	17.3	17.6	17.7
Total Wales GHG Emissions	55.6	46.8	47.9	46.8	47.0	46.1	44.7

Source: AEA, End user greenhouse gas inventories for England, Scotland, Wales and Northern Ireland: 1990, 2003-2008

13. Adapt to the impacts of climate change

5.8 The Wales Transport Strategy states that transport networks in Wales need to be resilient and to cope with the effects and impacts of climate change. The National Transport Plan aims to review the resilience of the motorway and trunk road infrastructure and to develop a climate change adaptation strategy by 2011. The two indicators we have chosen will monitor the level of risk to the transport network, how that risk is mitigated and investment to deliver resilience to climate change.

13.1 Probability of flooding of transport assets at risk

13.2 Number of interventions made to trunk road and motorway infrastructure to mitigate for the effects of climate change

5.9 Table 13.1 below details the length of trunk road and railway in Wales at risk of flooding. We have overlaid the floodzone mapping carried out by the Environment Agency onto a GIS map of the trunk road network and railway. The table shows that some 23 per cent of the trunk road network is within a floodzone, with some 56 per cent of the railway network within a floodzone. The table details the differing levels of risk attributable to each of the floodzones.

13.1 Probability of flooding of transport assets at risk

		Kilometres & percentage					
Asset	Total length	Within Floodzone 2		Within Floodzone 3		Total in floodzones	
		Length	Percentage of total network	Length	Percentage of total network	Length	Percentage of total network
Trunk road	1710.0	239.4	14.0	159.6	9.3	399.0	23.3
Railway	1223.1	381.6	31.2	299.8	24.5	681.4	55.7

Source: Trunk road length from Welsh Transport Statistics 2010, Railway length from Network Rail RUS 2008. Floodzone GIS data supplied from Environment Agency

Note: Floodzone 2 - Land assessed, ignoring the presence of flood defences, as having between a 1% and 0.1% annual probability of fluvial flooding or between a 0.5% and 0.1% annual probability of tidal flooding in any year. Floodzone 3 - Land assessed, ignoring the presence of flood defences, as having a 1% or greater annual probability of fluvial flooding or a 0.5% or greater annual probability of tidal flooding.

5.10 The data for indicator 13.2 has not yet been collected and analysed. We will work with colleagues in the Welsh Assembly Government transport team to develop a method to collect information on transport interventions, projects, schemes and maintenance works that improve the resilience of the trunk and motorway network. We hope that we will be able to publish data for this indicator soon once we publish the indicators online.

14. Reduce the contribution of transport to air pollution and other harmful pollutant emissions

- 5.11 The Wales Transport Strategy states the importance of reducing the transport sector's contribution to air pollution and other harmful pollutants. The National Transport Plan states that the Welsh Assembly Government will continue to work to the requirements set out under European and UK legislation on air quality.
- 14.1 Emissions of air pollutants (sulphur dioxide, nitrogen oxides, fine particulates, Non Methane Volatile Organic Compounds, carbon monoxide, ammonia) apportioned to the transport sector
- 5.12 Tables 14.1a to 14.1g detail the emissions of air pollutants apportioned to the various modes within the transport sector in Wales from 1990, 1995, 2000 to 2008. For all air pollutants emissions on an all Wales basis are down by many percentage points on the levels recorded for 1990. For air pollutants apportioned to the transport sector emissions are down for all except Ammonia which has seen over a thousand percentage point increase from 0.05 kilotonnes in 1990 to 0.70 kilotonnes in 2008.
- 5.13 Table 14.1a shows that in the period 1990 to 2008 Carbon Monoxide emissions apportioned to the transport sector fell by 73 per cent from 324.3 kilotonnes to 87.5 kilotonnes. Over the same time period all Carbon Monoxide emissions in Wales fell by 61 per cent from 660.7 kilotonnes to 260.5 kilotonnes.
- 5.14 Table 14.1b shows that in the period 1990 to 2008 Ammonia emissions apportioned to the transport sector rose by 1,276 per cent from 0.05 kilotonnes to 0.70 kilotonnes. Over the same time period all Ammonia emissions in Wales fell by 18 per cent from 34.1 kilotonnes to 26.7 kilotonnes.
- 5.15 Table 14.1c shows that in the period 1990 to 2008 Nitrogen Oxide emissions apportioned to the transport sector fell by 46 per cent from 78.4 kilotonnes to 42.2 kilotonnes. Over the same time period all Nitrogen Oxide emissions in Wales fell by 38 per cent from 170.4 kilotonnes to 106.0 kilotonnes.
- 5.16 Table 14.1d shows that in the period 1990 to 2008 Particulate emissions apportioned to the transport sector fell by 29 per cent from 3.7 kilotonnes to 2.6 kilotonnes. Over the same time period all Particulate emissions in Wales fell by 47 per cent from 20.2 kilotonnes to 10.7 kilotonnes.
- 5.17 Table 14.1e shows that in the period 1990 to 2008 Sulphur Dioxide emissions apportioned to the transport sector fell by 23 per cent from 7.6 kilotonnes to 5.8 kilotonnes. Over the same time period all Sulphur Dioxide emissions in Wales fell by 78 per cent from 189.2 kilotonnes to 42.3 kilotonnes.
- 5.18 Table 14.1f shows that in the period 1990 to 2008 Non-Methane Volatile Organic Compounds emissions apportioned to the transport sector fell by 81 per cent from 46.1 kilotonnes to 8.6 kilotonnes. Over the same time period all Non-Methane Volatile Organic Compounds emissions in Wales fell by 62 per cent from 130.4 kilotonnes to 50.1 kilotonnes.
- 5.19 Table 14.1g shows that in the period 1990 to 2008 Lead emissions apportioned to the transport sector fell by 100 per cent from 0.1 kilotonnes to 0.0 kilotonnes. Over the same time period all lead emissions in Wales fell by 91 per cent from 0.1 kilotonnes to 0.0 kilotonnes.

14.1a Transport Carbon Monoxide Emissions 1990-2008

In kt and percentages

Emission Source	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	In kt and percentages	
												% Change 1990-2008	% of Wales CO total 2008
International Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39%	0%
Civil Aviation	1.4	0.9	2.2	2.5	1.5	1.1	1.6	2.6	2.4	1.9	1.7	20%	1%
Passenger cars	271.2	231.7	173.1	155.9	141.3	126.9	114.5	98.8	88.6	79.4	72.3	-73%	28%
Light duty vehicles	38.1	30.6	14.6	11.5	9.2	7.6	6.3	5.2	4.6	4.1	3.6	-90%	1%
Heavy duty vehicles	3.8	3.4	2.7	2.5	2.4	2.4	2.3	2.3	2.2	2.0	1.8	-53%	1%
Mopeds & Motorcycles	4.1	3.6	4.3	4.3	4.4	4.6	4.1	4.1	3.7	3.5	3.1	-24%	1%
Railways	1.1	1.1	1.4	1.0	0.9	0.9	1.1	1.1	1.2	1.1	1.1	-5%	0%
National Navigation	1.0	0.9	0.7	0.6	0.4	0.8	0.9	1.0	1.2	1.1	1.2	25%	0%
Off road vehicles, other mobile sources and machinery	3.6	3.4	3.2	3.1	3.1	3.1	3.0	3.0	2.8	2.7	2.7	-24%	1%
Total Transport	324.3	275.7	202.2	181.4	163.3	147.4	133.8	118.1	106.8	95.9	87.5	-73%	34%
Wales CO Total	660.7	611.5	477.1	431.8	325.0	306.7	314.4	291.4	318.9	294.2	260.5	-61%	100%

Source: National Atmospheric Emissions Inventory, Air Quality Pollutant Inventories 1990-2008

14.1b Transport Ammonia Emissions 1990-2008

In kt and percentages

Emission Source	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	In kt and percentages	
												% Change 1990-2008	% of Wales NH3 total 2008
Passenger cars	0.0	0.4	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.7	0.7	850%	1%
Light duty vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	144%	0%
Heavy duty vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17%	0%
Mopeds & Motorcycles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38%	0%
Off road vehicles, other mobile sources and machinery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26%	0%
Total Transport	0.1	0.4	1.3	1.2	1.1	1.0	1.0	0.9	0.8	0.8	0.7	1276%	3%
Wales NH3 Total	34.1	32.3	31.5	31.8	30.3	31.1	31.0	30.4	30.1	28.3	26.7	-18%	100%

Source: National Atmospheric Emissions Inventory, Air Quality Pollutant Inventories 1990-2008

14.1c Transport Nitrogen Oxides Emissions 1990-2008

Emission Source	In kt and percentages											% Change 1990-2008	% of Wales NOx total 2008	
	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008			
International Aviation	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	173%	0%
Civil Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	300%	0%
Passenger cars	34.0	26.4	18.6	16.8	15.6	14.1	13.1	11.9	11.0	10.0	9.2	9.2	-73%	8%
Light duty vehicles	5.0	4.8	4.8	4.7	4.7	4.6	4.5	4.2	3.8	3.4	3.0	3.0	-39%	3%
Heavy duty vehicles	16.4	14.8	13.0	12.4	11.9	11.5	11.2	10.9	10.6	10.2	9.3	9.3	-44%	12%
Mopeds & Motorcycles	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-4%	0%
Railw ays	2.1	2.6	4.2	3.3	2.9	2.8	3.4	3.5	3.6	3.5	3.3	3.3	54%	4%
National Navigation	9.5	8.4	6.9	5.4	4.4	7.8	8.4	9.3	11.9	10.6	11.8	11.8	25%	11%
Off road vehicles, other mobile sources and machinery	11.2	10.9	10.0	9.7	9.3	9.0	8.4	7.8	6.9	6.0	5.5	5.5	-51%	0%
Total Transport	78.4	68.1	57.7	52.4	48.9	49.9	49.2	47.8	47.8	43.9	42.2	42.2	-46%	40%
Wales NOx Total	170.4	147.6	133.1	130.1	110.9	112.3	114.7	110.1	116.4	99.3	106.0	106.0	-38%	100%

Source: National Atmospheric Emissions Inventory, Air Quality Pollutant Inventories 1990-2008

14.1d Transport Particulate Emissions 1990-2008

Emission Source	In kt and percentages											% Change 1990-2008	% of Wales PM10 total 2008	
	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008			
International Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54%	0%
Civil Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36%	0%
Passenger cars	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	-28%	3%
Light duty vehicles	0.3	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	-21%	2%
Heavy duty vehicles	0.8	0.7	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	-81%	1%
Mopeds & Motorcycles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-40%	0%
Automobile tyre and brake w ear	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	22%	4%
Railw ays	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-16%	1%
National Navigation	0.5	0.5	0.4	0.3	0.2	0.4	0.5	0.6	0.8	0.8	0.9	0.9	67%	8%
Other mobile sources and machinery	1.1	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.5	0.5	-56%	5%
Total Transport	3.7	3.8	3.1	2.9	2.7	2.8	2.8	2.8	2.8	2.6	2.6	2.6	-29%	24%
Wales PM10 Total	20.2	16.4	14.0	12.4	9.8	10.9	10.8	10.3	11.0	11.4	10.7	10.7	-47%	100%

Source: National Atmospheric Emissions Inventory, Air Quality Pollutant Inventories 1990-2008

14.1e Transport Sulphur Dioxide Emissions 1990-2008

Emission Source	In kt and percentages											% Change 1990-2008	% of Wales SO2 total 2008
	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008		
International Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	233%	0%
Civil Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	190%	0%
Passenger cars	1.3	1.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-95%	0%
Light duty vehicles	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-99%	0%
Heavy duty vehicles	1.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%
Mopeds & Motorcycles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-93%	0%
Railw ays	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	-59%	0%
National Navigation	2.9	3.1	2.1	1.6	1.4	2.3	3.3	3.8	4.9	4.8	5.4	86%	13%
Other mobile sources and machinery	1.3	1.2	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.3	-78%	1%
Total Transport	7.6	6.9	3.0	2.4	2.2	3.2	4.1	4.6	5.7	5.5	5.8	-23%	14%
Wales SO2 Total	189.2	130.5	94.6	83.7	63.4	66.7	63.1	55.6	64.2	56.0	42.3	-78%	100%

Source: National Atmospheric Emissions Inventory, Air Quality Pollutant Inventories 1990-2008

14.1f Transport Non-Methane Volatile Organic Compounds Emissions 1990-2008

Emission Source	In kt and percentages											% Change 1990-2008	% of Wales VOC total 2008
	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008		
International Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-62%	0%
Civil Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-12%	0%
Passenger cars	27.9	22.4	14.2	12.3	10.9	9.5	8.4	7.3	6.5	5.9	5.3	-81%	11%
Light duty vehicles	3.5	2.8	1.4	1.1	0.9	0.7	0.6	0.5	0.5	0.4	0.4	-89%	1%
Heavy duty vehicles	1.3	1.1	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	-77%	1%
Mopeds & Motorcycles	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	-49%	0%
Road Traffic, Gasoline evaporation	10.8	8.3	3.3	2.6	2.3	1.9	1.5	1.2	1.0	0.8	0.6	-95%	1%
Railw ays	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0%	1%
National Navigation	0.5	0.4	0.3	0.3	0.2	0.4	0.4	0.5	0.6	0.5	0.6	25%	1%
Other mobile sources and machinery	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.0	0.9	0.9	-41%	2%
Total Transport	46.1	37.2	22.1	19.0	16.8	15.0	13.3	11.8	10.7	9.5	8.6	-81%	17%
Wales VOC Total	130.4	107.3	73.1	64.3	59.8	59.1	57.3	53.1	53.5	53.2	50.1	-62%	100%

Source: National Atmospheric Emissions Inventory, Air Quality Pollutant Inventories 1990-2008

14.1g Transport Lead Emissions 1990-2008

In kt and percentages

Emission Source	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Change 1990-2008	% of Wales Pb
													total 2008
International Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	248%	0%
Civil Aviation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97%	0%
Passenger cars	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%
Light duty vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%
Heavy duty vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9%	0%
Mopeds & Motorcycles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	0%
Railways	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7%	0%
National Navigation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48%	1%
Other mobile sources and machinery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-30%	0%
Total Transport	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-100%	2%
Wales Pb Total	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-91%	100%

Source: National Atmospheric Emissions Inventory, Air Quality Pollutant Inventories 1990-2008

14.2 Average levels of transport related air pollution in urban areas

5.20 We have not agreed a suitable method or collected suitable data as yet to monitor this indicator. We hope that we will be able to publish data for this indicator soon once we publish the indicators online.

15. Improve the positive impact of transport on the local environment

- 5.21 The Wales Transport Strategy states that transport in Wales should deliver a reduction in the individual and cumulative impact that transport has on communities, the built and natural environment. The National Transport Plan states that the Welsh Assembly Government will continue to work to the requirements under European and UK legislation for noise, air quality, water pollution and soils. The indicators we have chosen will monitor the impact transport has on the local environment.
- 15.1 Percentage of highways and relevant land inspected of a high or acceptable standard of cleanliness
- 5.22 The data for this indicator is collected by Local Authorities in Wales and is reported on as part of the Local Authority Key Performance Indicators.
- 5.23 Table 15.1 shows the percentage of highways and relevant land inspected that was of a high or acceptable standard of cleanliness for all Wales and for each Local Authority. Table 15.1 shows that the percentage of high or acceptably clean highway and relevant land fell by less than one percentage point between 2008-09 and 2009-10 on an all Wales basis.
- 5.24 In 2008-09 Torfaen reported the highest percentage of highways and relevant land inspected that was of a high or acceptable standard of cleanliness at 99.5 per cent. In the same period Blaenau Gwent had the lowest percentage at 75.5 per cent.
- 5.25 In 2009-10 Torfaen again reported the highest percentage of highways and relevant land inspected that was of a high or acceptable standard of cleanliness at 99.6 per cent. In the same period Blaenau Gwent again had the lowest percentage at 85.0 per cent.

15.1 Percentage of highways and relevant land inspected of a high or acceptable standard of cleanliness 2008-09 & 2009-10

Percentages and number of inspections

Local Authority	The percentage of highways and relevant land inspected of a high or acceptable standard of cleanliness		The number of inspections of highways and relevant land undertaken that had a high or acceptable level of cleanliness		The total number of inspections of highways and relevant land	
	2008-09	2009-10	2008-09	2009-10	2008-09	2009-10
Isle of Anglesey	95.00	91.08	1,501	1,287	1,580	1,413
Gwynedd	89.01	94.59	251	297	282	314
Conwy	96.85	95.85	645	416	666	434
Denbighshire	95.17	86.55	276	251	290	290
Flintshire	91.90	89.62	465	466	506	520
Wrexham	84.07	89.26	227	241	270	270
Powys	96.85	96.27	277	258	286	268
Ceredigion	94.62	94.89	176	130	186	137
Pembrokeshire	95.80	95.68	365	399	381	417
Carmarthenshire	98.58	99.23	3,893	3,844	3,949	3,874
Swansea	92.32	93.74	866	824	938	879
Neath Port Talbot	95.28	95.30	27,681	15,301	29,051	16,055
Bridgend	97.93	97.69	378	381	386	390
Vale of Glamorgan	92.32	95.40	661	435	716	456
Cardiff	86.93	89.03	346	357	398	401
Rhondda Cynon Taf	94.82	95.20	751	754	792	792
Merthyr Tydfil	96.95	92.41	2,127	3,435	2,194	3,717
Caerphilly	95.14	93.88	2,077	1,364	2,183	1,453
Blaenau Gwent	75.45	85.00	83	119	110	140
Torfaen	99.54	99.55	429	440	431	442
Monmouthshire	93.62	94.28	631	841	674	892
Newport	83.87	95.12	416	468	496	492
Wales	95.20	94.90	44,522	32,308	46,765	34,046

Source: Local Authority Performance Indicators, Core Set Indicator

15.2 Number of targeted noise action plans that are related to transport

15.3 The number of households affected by noise action plans

5.26 These data for these indicators is collected and published by the Department of Environment, Sustainability and Housing in the Welsh Assembly Government in their Environmental Noise Action Plans publications. There are currently four noise action plans and they are all related to transport.

5.27 Table 15.3a shows the number of households and people affected by road noise over a 24 hour period as calculated in the noise action plans for major roads and the agglomerations of Cardiff & Vale of Glamorgan and Swansea & Neath Port Talbot. The table shows that over a 24 hour period noise from Major Roads affects more households and people than noise from roads in the agglomeration of Cardiff & Vale of Glamorgan or the agglomeration of Swansea & Neath Port Talbot.

5.28 Table 15.3b shows the number of households and people affected by noise from roads at different levels between 23:00 and 07:00. The table shows that over the night time period noise from Major Roads affects more households and people than noise from roads in the

agglomeration of Cardiff & Vale of Glamorgan or the agglomeration of Swansea & Neath Port Talbot.

- 5.29 Table 15.3c shows the number of households and people affected by noise from roads exceeding the listed value for over 10 per cent of the time averaged hourly over the period 06:00 to 24:00. The table shows that noise exceeding the listed value for over 10 per cent of the time from Major Roads affects more households and people than noise from roads in the agglomeration of Cardiff & Vale of Glamorgan or the agglomeration of Swansea & Neath Port Talbot.
- 5.30 Table 15.3d shows the number of households and people affected by railway noise over a 24 hour period as calculated in the noise action plans for major roads and the agglomerations of Cardiff & Vale of Glamorgan and Swansea & Neath Port Talbot. The table shows that over a 24 hour period noise from railways in the agglomeration of Cardiff & Vale of Glamorgan affects more households and people than noise from Major Railways or railways in the agglomeration of Swansea & Neath Port Talbot. The table also shows that much fewer households and people are affected by noise from railways than from roads.
- 5.31 Table 15.3e shows the number of households and people affected by noise from railways at different levels between 23:00 and 07:00. The table shows that over the night time period noise from railways in the agglomeration of Cardiff & Vale of Glamorgan affects more households and people than noise from Major Railways or railways in the agglomeration of Swansea & Neath Port Talbot.
- 5.32 Table 15.3f shows the number of households and people affected by noise from railways exceeding the listed value for over 10 per cent of the time averaged hourly over the period 06:00 to 24:00. The table shows that noise exceeding the listed value for over 10 per cent of the time from railways in the agglomeration of Cardiff & Vale of Glamorgan affects more households and people than noise from Major Railways or railways within the agglomeration of Swansea & Neath Port Talbot.

15.3a Number of households effected by noise from roads over a 24 hour period

Noise Level (dB)	Numbers					
	Major Roads		Roads within the Cardiff and Vale of Glamorgan agglomeration		Roads within Swansea/Neath Port Talbot agglomeration	
	Dwellings	People	Dwellings	People	Dwellings	People
≥55	82,400	184,100	55,000	122,400	54,900	117,100
≥60	38,200	83,900	35,500	78,400	35,600	75,800
≥65	18,800	41,000	13,200	28,000	16,700	34,900
≥70	8,000	17,700	6,800	14,400	6,500	13,200
>75	1,800	4,100	1,300	2,700	600	1,300

Source: Welsh Assembly Government END noise mapping

Note: This table presents the number of households and residents effected by road noise over a 24 hour period. The (dB) values are average noise levels over the period 0000 – 2400, but with the evening values (1900 – 2300) weighted by the addition of 5 dB(A), and the night values (2300 – 0700) weighted by the addition of 10 dB(A).

15.3b Number of households effected by noise from roads between 23:00 & 07:00

Noise Level (dB)	Numbers					
	Major Roads		Roads within the Cardiff and Vale of Glamorgan agglomeration		Roads within Swansea/Neath Port Talbot agglomeration	
	Dwellings	People	Dwellings	People	Dwellings	People
≥50	44,800	98,800	39,200	86,700	39,200	83,400
≥55	21,900	48,000	16,600	35,800	21,100	44,600
≥60	10,000	22,000	8,100	17,400	8,300	17,000
≥65	2,700	6,100	2,200	4,800	1,200	2,600
≥70	200	500	<100	<100	100	200

Source: Welsh Assembly Government END noise mapping

Note: This table presents the number of households and residents effected by road noise between 23:00 and 07:00. The (dB) values are average noise levels over the period 23:00 – 07:00.

15.3c Number of households effected by noise from roads exceeding listed noise level for 10% of the time averaged hourly over the period 0600 – 2400.

Noise Level (dB)	Numbers					
	Major Roads		Roads within the Cardiff and Vale of Glamorgan agglomeration		Roads within Swansea/Neath Port Talbot agglomeration	
	Dwellings	People	Dwellings	People	Dwellings	People
≥55	79,400	177,300	53,700	119,300	53,600	114,200
≥60	37,000	81,000	34,300	75,800	34,600	73,700
≥65	18,100	39,600	12,600	26,600	15,600	32,500
≥70	7,500	16,800	6,300	13,500	6,100	12,200
≥75	1,600	3,500	1,000	2,200	500	1,100

Source: Welsh Assembly Government END noise mapping

Note: This table presents the number of households and residents effected by road noise that exceeds the listed (dB) value for 10% of the time between 0600-2400.

15.3d Number of households effected by noise from railways over a 24 hour period

Noise Level (dB)	Numbers					
	Major Railways		Railways within the Cardiff and Vale of Glamorgan agglomeration		Railways within Swansea/Neath Port Talbot agglomeration	
	Dwellings	People	Dwellings	People	Dwellings	People
≥55	2,700	6,200	9,300	21,200	2,900	6,200
≥60	1,600	3,600	5,300	11,700	1,000	2,200
≥65	600	1,500	2,300	4,100	100	300
≥70	<100	200	200	200	<100	<100
≥75	<100	<100	<100	<100	0	0

Source: Welsh Assembly Government END noise mapping

Note: This table presents the number of households and residents effected by railway noise over a 24 hour period. The (dB) values are average noise levels over the period 0000 – 2400, but with the evening values (1900 – 2300) weighted by the addition of 5 dB(A), and the night values (2300 – 0700) weighted by the addition of 10 dB(A).

15.3e Number of households effected by noise from railways between 23:00 & 07:00

Noise Level (dB)	Numbers					
	Major Railways		Railways within the Cardiff and Vale of Glamorgan agglomeration		Railways within Swansea/Neath Port Talbot agglomeration	
	Dwellings	People	Dwellings	People	Dwellings	People
≥50	1,800	4,000	6,100	13,500	1,400	3,100
≥55	800	2,000	2,800	5,500	200	500
≥60	100	300	300	500	<100	<100
≥65	<100	<100	100	<100	0	0
≥70	0	0	0	0	0	0

Source: Welsh Assembly Government END noise mapping

Note: This table presents the number of households and residents effected by railway noise between 23:00 and 07:00. The (dB) values are average noise levels over the period 23:00 – 07:00.

15.3f Number of households effected by noise from railways exceeding listed noise level for 10% of the time averaged hourly over the period 0600 – 2400.

Noise Level (dB)	Numbers					
	Major Railways		Railways within the Cardiff and Vale of Glamorgan agglomeration		Railways within Swansea/Neath Port Talbot agglomeration	
	Dwellings	People	Dwellings	People	Dwellings	People
≥55	2,100	4,700	7,200	16,000	1,800	3,900
≥60	1,000	2,400	3,600	7,600	400	900
≥65	200	500	600	1,200	<100	<100
≥70	<100	<100	100	<100	0	0
≥75	0	0	0	0	0	0

Source: Welsh Assembly Government END noise mapping

Note: This table presents the number of households and residents effected by railway noise that exceeds the listed (dB) value for 10% of the time between 0600-2400.

15.4 Levels of tranquillity affected by transport

15.5 Levels of light pollution resulting from transport

5.33 We have not agreed a suitable method or collected suitable data as yet to monitor these indicators. We are working with colleagues to develop a methodology and datasets for these indicators. We hope that we will be able to publish data for this indicator soon once we publish the indicators online.

16. Improve the impact of transport on our heritage

- 5.34 The Wales Transport Strategy states that the choice and design of transport measures should have, as a minimum, a neutral impact on Wales' natural and built heritage and where possible enhance it. The National Transport Plan states that importance of working to protect, conserve and enhance the historic environment.
- 5.35 We have been unable at present to develop a suitable set of indicators to monitor this outcome. We did not receive any suggestions of how best to monitor this outcome during our public consultation exercise, though it was suggested that it may not be possible to effectively monitor this outcome. We will continue to work to develop an indicator set a data source to monitor this outcome and hope to publish both via our future online outputs.

17. Improve the impact of transport on biodiversity

5.36 The Wales Transport Strategy states that biodiversity is to be protected and enhanced when improving or developing transport measures with mitigation and compensatory measures to be provided where transport has a significant negative effect. The National Transport Plan details the Welsh Assembly Government's responsibility to reduce the adverse environmental effects of transport infrastructure and the duties under the Natural Environment and Rural Communities (NERC) Act 2006 to conserve and enhance biodiversity. The indicator we have chosen will monitor how the management of the Trunk Road Estate affects biodiversity. We will develop further indicators to monitor other transport impacts on biodiversity in line with the responses to our public consultation.

17.1 Proportion of Trunk Road Estate Biodiversity Action Plan targets met

5.37 The data for this indicator has not yet been collected and analysed. We intend to use data and reports generated by colleagues in Transport & Strategic Regeneration to monitor this indicator.

5.38 We will develop further indicators in line with the responses we receive to our public consultation and in consultation with colleagues in Transport & Strategic Regeneration.

Annexes

Quality Report for Monitoring the National Transport Plan, Baseline Report

Introduction

This report sets out the information that has been used in assessing the quality of the suite of statistical and other indicators that have been used to monitor the National Transport Plan. It describes the statistical and other indicators that have been used to compile this report. It also sets out the 'National Statistics' status of the figures (see box below).

Glossary of terms: Official Statistics, National Statistics, Administrative Sources and other information

The term 'official statistics' includes a range of statistics produced by public bodies: statistical outputs produced by central Government departments and agencies; by the devolved administrations; by other Crown bodies (over 200 bodies in total); and some statistics, as set out by secondary legislation, from non-Crown Bodies. Official statistics are subject to scrutiny and assessment by the UK Statistics Authority. Many of the indicators used for monitoring the NTP are official statistics.

'National Statistics' – are a subset of official statistics that are certified as compliant with the Code of Practice for Official Statistics.

Official statistics can be based on two main sources - data gathered from statistical surveys, or data extracted from 'administrative sources' or management systems. Using data which is already available within administrative or management systems limits the burden placed on data providers, and reduces data collection costs. Data from administrative sources is often timely and has wide coverage.

The monitoring indicators also contain data that are not official statistics. These data can either be modelled information, such as the Accession data; administrative data that is not part of official statistics; and lastly statistical and market research data compiled by non-public sector organisations and companies.

The structure of this section is to describe and assess each data source in turn. Where indicators are based on the same data source, then they have been grouped together. Other than that, the indicators are taken in order.

Each data source is covered in the same way with (1) Source, (2) Status – this is the status as set out in the box above, (3) Description – of the data source, (4) Quality and (5) Links to further information.

The indicators

1. **Improve access to healthcare**
Indicators 1.1 to 1.3
2. **Improve access to education, training and lifelong learning**
Indicators 2.1 to 2.3
3. **Improve access to shopping and leisure facilities**
Indicators 3.1 to 3.2
6. **Improve access to employment opportunities**
Indicator 6.1
10. **Improve sustainable access to key visitor attractions**
Indicator 10.1

All these indicators take the form: the proportion of households or proportion of population aged 16 and over within [range of] travel time thresholds of [type of service point] between [time range] on a Tuesday [or Saturday] by [some, or all of] public transport, car, cycling and walking.

Source: All these accessibility indicators are based on modelled data using (1) information about the location of each service point; (2) for access by car, information about the road network and average vehicle speeds; (3) for access by public transport, information about bus and rail timetables. The modelling process is carried out using a program called 'Accession'.

Status: Modelled data

Description: This description covers each element of this calculation.

Destination of journeys: The grid reference of these service points (that is for each hospital, for each pharmacy and so on) were provided by the Cartographics Unit of the Welsh Assembly Government Statistics. The decision about the number and location of the 'key centres' for to be used for indicators 3.1, 3.2 & 6.1 were decided by each of the Regional Transport Planning Consortia. The Key visitor attractions used for indicator 10.1 were those attracting more than 50 thousand visitors annually as recorded in Welsh Transport Statistics 2008.

Origins of journeys: This is the origin points for journeys individuals would need to make to these service points. These journeys were calculated from the central point ('centroid') of each postcode in Wales. The specification of each postcode is provided through a pan-Government agreement.

Number of households in each origin postcode: Earlier work for the Access to Services domain of the Welsh Index of Multiple Deprivation 2008 (WIMD 2008) had provided locations of households (domestic address points) and these were allocated to postcodes.

Number of people aged 16 or over in each origin postcode: This was calculated using the ONS Mid-2007 Population Estimates for Lower Layer Super Output Areas in England and Wales by Broad Age Group and Sex. Earlier work for the Access to Services domain of the Welsh Index of Multiple Deprivation 2008 (WIMD 2008) had provided a lookup table to allocate population data from Lower Layer Super Output Areas to postcodes.

Journey between origin and destination: This was between the centroid of the origin postcode and the destination point using the shortest travel time from that origin.

Travel by car: This was based on (1) a digital representation of the road network, as defined by Ordnance Survey Mastermap Topographic and Integrated Transport Network (ITN) layers, provided by Ordnance Survey under the pan-Government agreement. The time taken for car journeys was calculated using average speeds for each link of the road network. These average speed were not adjusted in any way to reflect congestion; other traffic delays or weather conditions. The following has details about these average speeds:

<http://www.dft.gov.uk/adobe/pdf/162469/221412/221692/474257/accessibilityreport2008.pdf>

Travel by public transport: The journeys were based on the bus and rail timetables set out in the National Public Transport Data Repository, using October 2008 timetables:

<http://www.nptdr.org.uk/LoginForm.aspx>

The time needed to get from each origin to each service point was then calculated based on the distance and availability of public transport. A maximum walk of 800 metres was set for the start and end parts of the journey, i.e. from home to the bus stop and from the bus stop to the service, or direct to the service point if that should apply. If more than one bus (or train) trip was needed to complete the journey, then the total journey time includes waiting time between buses (or trains).

Travel by cycle: The same digital road network (excluding motorways) was used as for cars, with an assumed cycle travel speed of 16km per hour; apart from pedestrian links where the cyclist was assumed to travel at 4.8km per hour.

Travel by walking: As above, with an assumed speed of 4.8km per hour.

Quality: The assumptions and other decision made in this modelling process:

- The origin of journeys is based on postcodes; this is a coarser classification than that used for the WIMD 2008 access to services domain, which was based on individual address points, but is finer than accessibility work by the DfT which is based on LSOA areas. The choice of origin are is a trade-off between detail and computational difficulty.
- Some origin postcodes in rural areas are quite large, though the number of households they contain will not be larger than other postcodes.
- There was a limited range of average car speeds used for links in the road networks; in total around 10 separate average speeds.
- The same speed was always used for any link, so no allowance is made for time of day, for weather conditions, for congestion and so on.
- More importantly there was not allowance made for delays at junctions. So these journey times reflect 'unimpeded' car travel times.
- There was no separate checking of the road network ITN layer provided by OS for this project.
- Accession is a program designed for local authority use where

they are investigating local accessibility issues. That is, access to a single point over a small number of roads or limited public transport options. This use of Accession is beyond the intended scope of this computer program, that is by extending it to analyse multiple destination points covering a large area, that is Wales as a whole.

Links to further information: Here is the DfT work of accessibility:
<http://www.dft.gov.uk/pgr/statistics/datatablespublications/tp/coreaccessindicators2008>
This links to a document with a description of WIMD 2008:
<http://wales.gov.uk/topics/statistics/publications/wimd2008tech/?lang=en>

Indicator 4.1 Modal share of total trips undertaken by people living in Wales

Indicator 4.4 Percentage of children aged 5 to 16 whose main mode of travel to school is walking

Source: National Travel Survey

Status: National Statistics

Description: The National Travel Survey (NTS) has run continuously since mid-1988. The subject of the NTS is personal travel. This is travel for private purposes or for work or education, provided the main reason for the trip is for the traveller himself or herself to reach the destination. Details of trips over the course of one week, as recorded by members of the household, are collected as part of the survey. The survey excludes people who are not living in households.

Data from the National Travel Survey (NTS) is collected via two main sources:

- Interviews with people in their homes
- Diary that they keep for a week to record their travel

The information about the modal share of total trips is collected from the travel diary. The information about travel to school is based on the interview component.

Trips: Trips are one-way travel for a single main purpose and information collected on them includes mode of travel, reason for the trip and the distance travelled. Trips made in the course of work are included provided that the purpose of the trip is for the traveller to reach a destination. Travel to deliver goods, or to convey a vehicle or passengers (e.g. as a bus or train driver, or other member of the crew, or a taxi driver), is not covered. Trips in course of work by people paid to drive, walk or cycle, such as policemen, traffic wardens, leaflet distributors or postmen. Travel for a leisure purpose is normally included. However, trips which are themselves a form of recreation are not, for example yachting or gliding, and travel by foot away from the public highway

Modes of travel: 'Car' includes light vans, Land Rovers and privately owned lorries. 'Other': modes depend on the context, but may include local bus, other types of bus (works or school bus, private hire, express bus and tours and excursions), rail, bicycle, two-wheeled motor vehicles, motorcaravans, taxis/minicabs, domestic air travel and other private and public transport.

Quality:

- The survey is designed to pick up long-term trends and is not suitable for monitoring short-term trends.
- Sample sizes in Wales are small, meaning that two years of data

have to be combined to reduce statistical variability. Estimates for Wales for 2008 and 2009 together are based on around 35 thousand recorded trips made by just under 2 thousand individuals.

Links to further information: Further details for Wales in Chapter 6 of Welsh Transport Statistics: <http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>
Information about the NTS from DfT: <http://www.dft.gov.uk/pgr/statistics/datatablespublications/nts/>

Indicator 4.2 Percentage of adults whose main mode of travel to work is walking

Indicator 4.3 Percentage of adults whose main mode of travel to work is cycling

Source: Labour Force Survey

Status: National Statistics

Description: The Labour Force Survey (LFS) is a quarterly survey of households run by the Office for National Statistics. It is mainly designed to give information about the number of people with jobs, the details of these jobs, the job-search activities of those without work, and so on. It also asks a little about travel to work with questions on usual method of travel to work asked in each autumn survey since 1992, and a question on whether car users were drivers or passengers added in autumn 1996. The survey is based on a random sample throughout the whole of the United Kingdom. Every three months almost 53 thousand households take part in the survey.

The results shown are for those respondents whose place of work was in Wales. Included in the results are the self-employed, those on Government training schemes and unpaid family workers as well as employees, but exclude those working at home, and those whose workplace or mode of transport to work was not known.

Data for some cells in these tables are not shown because they are based on data below the reliability threshold for Labour Force Survey estimates.

Reasons for using the LFS data in preference to the APS data (see below) is that it provides figures that are comparable with other regions of the UK and the lack of a time series of APS data.

Quality:

- Sampling variability, particularly as the results are confined to Wales
- Questions about travel to work are only asked in the Autumn quarter each year. So this survey does not provide any information about how travel to work will vary at different times of year. This is potentially important for travel to work by bicycle (which will be higher in the summer, and lower in winter) or by walking.
- The LFS estimates have periodically re-weighted which changes more up to date information on the socio-demographic characteristics of the UK population.
- The Annual Population Survey is a large survey (1 thousand respondents in each local authority in Wales) that gives more local detail about the labour market than the LFS. It has the same questions as the results from analysing the APS
- Response rates for the LFS have shown a downward trend, falling from just under 80 per cent in the early 1990s to less than 60 per cent by the end of 2010 (average response rate over the five quarterly waves of the survey, including data for imputed households)

Links to further information: A link to regional travel to work data (see Regional tables on Personal Travel - Travel to Work and Accessibility:

information: <http://www.dft.gov.uk/pgr/statistics/datatablespublications/regionaldata/rtslivetables>
Further details for Wales in Chapter 6, Tables 6.9 and 6.10, of Welsh
Transport Statistics:
<http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>

Indicator 4.5 Percentage of children who cycle to school

Indicator 4.6 Percentage of adults walking over 2 miles in the past 4 weeks

Indicator 4.7 Percentage of adults undertaking any cycling in the past 4 weeks

Source: Sport Wales surveys

Status: Official statistics

Description: Sport Wales surveys (previously Sports Council for Wales)

Sport Wales carries out a series of surveys looking at sports participation and recreation across Wales. These are:

Children's Sports and Physical Activity Participation Survey

Sport Wales has commissioned, on a biennial basis, large scale surveys of primary school pupils' involvement in sport since 1991. The purpose of this study is to examine children's (aged 7-11) levels of participation in sport and physical recreation in Wales, both inside and outside of school. It examines activities undertaken in PE during curricular time and sport as part of extracurricular activity. In the community it aims to discover the part played by sport in the pattern of children's leisure activities.

Young People's Sports and Physical Activity Participation Survey now Active Young People Survey

Similarly, Sport Wales has commissioned, on a biennial basis, large scale surveys of secondary school pupils' involvement in sport since 1991. The purpose of this study is to examine young people's (aged 11-16) levels of participation in sport and physical recreation in Wales, both inside and outside of school. It examines activities undertaken in PE during curricular time and sport as part of extracurricular activity. In the community it aims to discover the part played by sport in the pattern of children's leisure activities.

Adult's Sports and Physical Activity Participation Survey, now Active Adult Survey

Since 1987, Sport Wales has collected data on participation levels in sport and leisure in Wales. This data is collected biennially and has formed a base from which to develop and inform policy and programme development. The purpose of this survey has been to monitor and evaluate participation in sport, and more recently assessing the level of physical activity of people in Wales.

Initially participation data was collected through the Welsh Omnibus Survey run by Beaufort Research among a representative sample of Welsh adults 15+. This allowed analysis of four regions of Wales defined by SCW as Rural Heartland, Rural North, Metropolitan Wales, and The Valleys. In response to the need for data at a local authority level, the survey was revised for the 1998/99 survey onwards. The main change was an increase in sample size, while maintaining the quota sample methodology, to allow robust analysis for each local authority.

Quality: The Sport Wales website (as at March 2011) does not readily provide any

information that can be used to assess the quality of the results from these surveys; for example, copies of questionnaires, details of sampling strategy for survey, details of imputing and weighting strategy, explanations to changes in times series resulting from methodological changes and so on. There is no explanation for the delay in producing results from the 2009 Active Young People survey. When this information becomes available, then this part of the key quality section will be updated.

Links to further information: This is the link to Sport Wales website. In order to find information about their surveys, follow the links to 'Research & Policy' <http://www.sportwales.org.uk/>

Indicator 4.8 Percentage of adults undertaking walking or cycling on visits to the outdoors in the last 12 months

Indicator 10.3 Modal share of transportation used to access the location of outdoor visits

Source: The 2008 Welsh Outdoor Recreation Survey

Status: Official Statistics

Description: This survey was commissioned jointly by Countryside Council for Wales and Forestry Commission Wales. They plan to repeat this survey every three years, with the next survey due in 2011. The findings represent the responses of residents of Wales on:

- Their use of the outdoors
- Places visited, including woodlands
- Motivations for using the outdoors
- Barriers to visiting the outdoors
- The 'latent demand' for outdoor recreation.

Quality: A total of 6,045 telephone interviews were carried out by Ipsos MORI between January 2008 and January 2009 with people living in Wales, stratified by the 6 Spatial Plan areas. The interviews were with adults aged 16+ living in Wales. Interviews lasted an average of 13 minutes and were conducted on all days of the week (including weekends) and at different times of the day and month.

The sample was stratified by Spatial Plan Area with at least 1000 interviews in each of Wales' six Spatial Planning Areas (SPAs). To achieve a random sample, households were selected by Random Digital Dialling (RDD) and the Computer Assisted Telephoning Interviewing (CATI) system was used to randomly select individual respondents if there was more than one adult in the household at the time.

Results were weighted to be representative of the Welsh population as a whole. This was either done using the demographic characteristics of this population; or, for the results that covered respondents' most recent trip to the outdoors, the number of visits made in the last 4 weeks.

Links to further information: Forestry Commission report of results: <http://www.forestry.gov.uk/forestry/INFD-7VQEPA>
Countryside Council for Wales report: <http://www.ccw.gov.uk/enjoying-the-country/welshoutdoor-recreation-survey.aspx>

Indicator 4.9 Number of concessionary fares bus passes issued and trips made using the pass

Source: The Welsh local authority performance measurement framework

Status: Administrative data

Description: The information relating to concessionary fares bus passes is contained in National Strategic Indicator THS/007.

One of the functions of the Local Government Data Unit ~ Wales is to collect, process, interpret and disseminate statistical data on local government services and activities in support of local government improvement. A major part of this is the Welsh local authority performance measurement framework, which was initially introduced in 2005-06, and included a revised set of nationally agreed and defined performance measures for local authorities. Developed in collaboration with local and central government representatives and regulatory bodies, the framework provides a mixture of strategic and operational measures across a range of local authority service/policy areas.

The Data Unit Wales co-ordinates an annual review and revise process for the framework in order to ensure that it remains relevant and fit for purpose. They collect framework data from local authorities annually and publish the resulting data set, along with an accompanying performance bulletin each autumn. The 2009-10 data and bulletin were published on 30 September 2010.

Quality:

- Data for the framework is collected from the 22 local authorities in Wales.
- The National Strategic Indicator data, including THS/007, have been audited by the Wales Audit Office.
- A guidance document relating to the 2009-10 indicator set is also available on our website. This provides a detailed definition for each of the indicators along with their classification i.e. National Strategic Indicator or Core Set Indicator.
- Note that the population figures quoted in table 4.9a are as provided by the local authorities and do not match the ONS mid-year population estimates.

Links to further information: Link to Local Government Data Unit Wales, performance measurement framework: <http://www.dataunitwales.gov.uk/ProductsServices.asp?cat=37>

Indicator 5.1 Total number of killed or seriously injured (KSI) casualties by mode

Indicator 5.2 Total number of child KSI casualties

Indicator 5.3 Total number of child pedestrian casualties in deprived areas [as defined by WIMD].

Indicator 5.4 Rate of KSI and slight casualties per 100 million vehicle kilometres.

Source: Police reported road casualties in Wales

Status: National Statistics

Description: The statistics refer to casualties resulting from personal injury accidents on public roads reported to the police and forwarded to the Welsh Assembly Government. The police compile statistical data about road traffic accidents and casualties (called Stats19 data) for the Welsh Assembly Government and the Department for Transport (DfT). This follows police attendance at accidents that involve any personal injury, member of the public reporting personal injury accidents directly to the police. The figures are based on information available to the Assembly Government 14 weeks after the end of the latest quarter.

A casualty is defined as, a person killed or injured in an accident. One accident may give rise to several casualties. Casualties are subdivided into

killed, seriously injured and slightly injured categories. Casualties reported as killed include only those cases where death occurs in less than 30 days as a result of the accident. They do not include those who died as a result of natural causes (e.g. heart attack) rather than as a result of the accident, nor do they include confirmed suicides.

Uses of data There are a variety of organisations that use the Welsh road traffic accident and casualty data. The Welsh Assembly Government uses road traffic collision and casualty data to help set road safety policy. It is also used for performance indicators, both for the Assembly Government's Transport Strategy and for some Health Performance indicators. They are also component indicators in the Welsh Assembly Government's Child Poverty and Sustainable Development indicators. The Assembly Government also publishes statistical data which is used for a range of transport-police purposes.

Other users include Highway Authorities, covering the Welsh Assembly Government, which is responsible for the motorway and trunk road network, and local authorities, which are responsible for other roads in Wales. Other bodies involved in road safety include Safety Camera Partnerships, Trunk Road Agents, and Police & Community Safety Partnerships.

Quality:

- The figures shown may change in future if there are late amendments.
- Similarly, the figures for earlier years may differ from those previously published. The figures cover only road accidents reported to the police and involving personal injury. There is some possibility of under-reporting and under-recording as well as for the misclassification of accidents. These issues are discussed in the following reports from the Department for Transport: 'Under-reporting of road accidents: phase 1' (Road Safety Research Report 69) by Heather Ward, Ronan Lyons and Roselle Thoreau, and the related document 'Road accident casualties: a comparison of STATS19 data with Hospital Episodes Statistics'.

Links to further information: Further details for Wales in Chapter 4 of Welsh Transport Statistics: <http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>
Further details for Wales in terms of a range of Statistical Bulletins: <http://wales.gov.uk/topics/statistics/headlines/transport2011/?lang=en>

Indicator 5.5 Incidents of notifiable and non-notifiable offences on the rail network

Source: British Transport Police

Status: Administrative data

Description: Notifiable: Serious offences reported to the Home Office.

Non-notifiable: Less serious offences not reported to the Home Office.

Offences reported: The number of offences recorded by the British Transport Police during the period to the 31 March.

Offences cleared: The number of offences cleared during the period to 31 March. An offence can be cleared by the following four methods:

- A person has been charged or summonsed for the offence.
- The offender has been cautioned by the Police.
- The offence has been taken into consideration by the court.
- There is sufficient evidence to charge an offender, but no further action is taken.

Where more offences were cleared than reported in a given period, this is

Quality: due to offences being cleared that were recorded in an earlier period.
Links to further information: Complete coverage of administrative process by the police
Further details for Wales in Chapter 9 of Welsh Transport Statistics:
<http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>
British Transport Police:
<http://www.btp.police.uk>

Indicator 5.6 Rail travellers perception of personal security whilst using a rail station and on board a rail service

Indicator 8.6 Passenger satisfaction with train services and station facilities including information provision

Source: Passenger Focus

Status: Official Statistics

Description: These figures are collected by the National Passenger Survey (NPS) which provides a picture of customers' satisfaction with rail travel. Passenger opinions of train services are collected twice a year from a representative sample of passenger journeys. Passengers' overall satisfaction and satisfaction with 30 specific aspects of service can therefore be compared over time.

Questionnaires are handed out at stations to passengers about to board a train, with a reply paid envelope provided for returning questionnaires. Fieldwork is carried out each Spring (principally in February/March) and in the Autumn (principally in September/October) over an 11 week period.

Quotas for returned questionnaires, and weighting for the survey results, are set overall and by weekday/weekend, journey purpose and station size based on information from each Train Operating Company (TOC). This sample design and weighting ensures that data is representative of all passenger journeys made on each TOC. National results are constructed by combining data for all TOCs together, weighting by number of journeys.

Quality: Details of the compliance of this survey with National Statistics standards can be found at:

<http://www.passengerfocus.org.uk/research/statistics/official-statistics.asp>

Other points:

- Approximately 33% of questionnaires that are given out are returned each survey. Returned questionnaires are checked to confirm that details provided are for a real journey and then the questionnaire response is assigned to the appropriate Train Operating Company (TOC).

Links to further information: The overall link to this survey at Passenger Focus:
<http://www.passengerfocus.org.uk/research/nps/content.asp>

Indicator 5.7 Bus users perception of personal security whilst using a bus service and at bus stops

Indicator 8.5 Passenger satisfaction levels with local bus services and facilities including information provision

Source: Welsh Bus Passenger Survey 2009-10

Status: Official Statistics

Description: The Welsh Assembly Government undertook a bus passenger survey across Wales during November and December 2010. This survey was based closely on the methodology established by Passenger Focus in their November 2009 Bus Passenger Survey in 14 English Transport Planning Areas. The second and related reason was to produce figures for Wales that could be directly compared with results for areas in England.

The survey used a self completion questionnaire that was handed to passengers onboard buses. The interviewers went on each selected timetabled bus service and made as many return trips as feasible whilst offering questionnaires to every passenger that boarded during the shift period. The interviewers also collected information about the number of passengers boarding by their assessment of the passengers' broad age band. This information was required for the weighting of the survey.

Quality:

- The survey was carried out in November and December 2010. In part this was to coincide with the time of year of the initial survey in areas across England during 2009. The type of bus passenger might be different at other times of year, and hence some of the satisfaction data reported here might vary if this survey had been run, for example, during the spring.
- The weather during the survey period was exceptionally severe and this did mean that the response to the survey was lower than expected; not because the response rate was low, but rather because buses were emptier than usual.

Links to further information: See link to the Bus Passenger Survey from: <http://wales.gov.uk/topics/statistics/headlines/transport2011/?lang=en>
And a more direct link to Bus Passenger Survey results: <http://wales.gov.uk/topics/statistics/publications/bussurvey2010/?lang=en>

Indicator 7.1 **Number of local bus services & passenger journeys within Wales**

Source: Traffic Commissioners reports

Status: Administrative data

Description: The seven Traffic Commissioners are appointed by the Secretary of State for the Transport and have responsibility in their area for:

- The licensing of the operators of Heavy Goods Vehicles (HGVs) and of buses and coaches (Public Service Vehicles or PSVs).
- The registration of local bus services.
- Granting vocational licences and taking action against drivers of HGVs and PSVs.

Traffic Commissioners use their powers to ensure that people operating the types of vehicle detailed above are reputable, competent, and adequately funded. As part of the system for the licensing of public service vehicle and good vehicle operators, and the registration of local bus services Traffic Commissioners can also take action against members of those industries. They can also impose financial penalties against bus companies for failures to run registered local transport services on time. They are also given responsibility to consider on behalf of the Secretary of State the fitness of drivers or those applying for passenger carrying vehicle or large goods vehicle driving licences based on their conduct. Traffic Commissioners work at 'arms length' from the Department for Transport (DfT),

Quality: No issues as this is administrative data
Links to further information: Link to the Traffic Commissioners reports
<http://www.dft.gov.uk/pgr/roads/tpm/trafficcommissioners/annualreports/>

Indicator 7.1 Number of local bus services & passenger journeys within Wales

Source: Bus statistics for Great Britain compiled by DfT

Status: National Statistics

Description: The statistics for these tables are derived from annual returns made by samples of holders of Public Service Vehicle (PSV) Operators' licences. The PSV Survey is an annual survey run by the DfT to collect information on the bus and coach industries. It is a source for data on- Passenger Journeys, Vehicle Miles, Passenger Miles, Operating Revenue, Operating Cost, Vehicles and Staff.

The sample of operators is stratified by size to collect more detail from the larger operators.

Passenger journeys: Each trip made by a passenger on one bus on one route counts as a separate journey. Return tickets or round trips are counted as two journeys. Journeys on season tickets or travel passes are included, calculated or estimated by operators.

Quality: In 2009-10 there were 8,245 PSV operators in Great Britain. PSV operators provide public services on buses, coaches, minibuses and other similar vehicles. Of these 971 were operating "local" bus services. In 2009-10 1600 operators were chosen to take part in the PSV Survey. The sample included all operators with more than 20 licence discs - 20 vehicles. The selection is otherwise stratified by operator size and local authority to ensure these reflect, approximately, the overall operator list.

<http://www.dft.gov.uk/pgr/statistics/datatablespublications/public/bus/technical/psv-survey.pdf>

In the PSV Survey imputation is used in three different cases:

- When an operator is not part of the sample.
- When an operator is part of the sample but does not respond.
- When an operator responds to the survey but misses certain questions.

Imputation is carried out by:

- Use data supplied in previous years for the same measure.
- Use other sources of data for the same measure
- Apply a factor to another response in this year's survey

Estimate using the basic information collected on all operators by VOSA, which is their address and the number of discs they hold.

Response Rates: In 2009-10 61 per cent of operators asked responded to the survey. In 2007-08 this was 72 per cent.

Links to further information: Further details for Wales in Chapter 8 of Welsh Transport Statistics:

<http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>

Link to the main PSV survey on the DfT website:

<http://www.dft.gov.uk/pgr/statistics/datatablespublications/public/bus/>

Indicator 7.2 Number of scheduled train kilometres, station usage and rail passenger journeys in & within Wales

Source: Office of Rail Regulation (ORR)
Status: Official statistics
Description: The rail industry's central ticketing system, LENNON, is the basis for passenger kilometres, journeys and revenue data. LENNON holds information on all national rail tickets purchased in Great Britain and is used to allocate the revenue from ticket sales between train operating companies (TOCs). The figures now included some non-LENNON journey data such as operator specific tickets and Passenger Transport Executive (PTE) multi-modal tickets.
Quality: To see how the statistics from the ORR comply with National Statistics Code of Practice see:
<http://www.rail-reg.gov.uk/server/show/nav.2255>
Links to further information: Further details for Wales in Chapter 9 of Welsh Transport Statistics:
<http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>
A link to 'National Rail Trends' the compendium ORR rail statistics publication.
<http://www.rail-reg.gov.uk/server/show/nav.2026>

Indicator 7.2 Number of scheduled train kilometres, station usage and rail passenger journeys in & within Wales

Source: Delta Rail for the Office of Rail Regulation (ORR)
Status: Official statistics
Description: Station usage data is collated by Delta Rail for the ORR and consists of estimates of the total numbers of people entering, exiting and interchanging at stations. The station usage figures are subdivided by ticket type (full, reduced and season tickets), whilst information on the county and region of each station is also provided.
Quality: The latest station usage information is based on ticket sales in the financial year 2009-10 and covers all National Rail stations throughout England, Scotland and Wales. Station usage data are an estimate of the number of passengers travelling to and from each station (entries and exits) based on ticket sales data from the national ticketing database. There are limitations to the dataset and these estimates should be treated with caution. For more information about the sources and methods used for these data see the report '2009-10 station usage report' available from the link below:
Links to further information: A link to the ORR station usage data.
<http://www.rail-reg.gov.uk/server/show/nav.1529>

Indicator 7.3 Number of rail stations that have facilities that are compliant with the Disability Discrimination Act 2005

These figures come directly from Arriva Trains Wales and thus represent purely 'administrative' data.

Indicator 7.4 Number of passenger movements and destinations served from Cardiff Airport

Source: Civil Aviation Authority (CAA)
Status: Administrative data

Description: The information on air transport is primarily provided by the Civil Aviation Authority (CAA) and the airport authorities. The CAA data are outside the scope of National Statistics.

Definitions:

- Domestic services: Services flown entirely within the United Kingdom, Isle of Man and Channel Islands
- International services: Services flown between the United Kingdom, including the Isle of Man and the Channel Islands, and places outside.
- Scheduled services: Those performed according to a published timetable, including supplementary timetables, available for use by members of the public.
- Non-scheduled or charter services: All air transport movements other than scheduled services.
- Passengers: All revenue and non-revenue passengers on air transport movement flights.

Quality: The information is compiled from various sources of data by the CAA; the CAA validates this data but they do not provide any warranty as to its accuracy, integrity or reliability.

Links to further information: Further details for Wales in Chapter 11 of Welsh Transport Statistics: <http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>
CAA airport statistics: <http://www.caa.co.uk/default.aspx?catid=80&pagetype=88&sqlid=3>

Indicator 7.5 Number of sea passenger movements from Welsh ports

Source: Sea Passenger Statistics - DfT

Status: National Statistics

Description: UK sea passenger movements for 2010 includes all vehicle drivers and their passengers, and foot passengers on ferries; the total scope of the figures also includes those on cruises and long sea journeys.

Quality: The data for international ferry passenger routes, domestic sea crossings and inter-island routes are collected regularly from the operators. These data sets are checked in detail and considered to be extremely robust. Full guidance on the methods used in the publication of these releases, and the quality of the data, can be found in the Technical Note at <http://www.dft.gov.uk/pgr/statistics/datatablespublications/maritime/passengers>

Links to further information: Further details for Wales in Chapter 10 of Welsh Transport Statistics: <http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>
Link to DfT Sea Passenger Statistics <http://www.dft.gov.uk/pgr/statistics/datatablespublications/maritime/passengers>

Indicator 7.6 Annual average flow per 1,000 km of motorway, trunk and principal roads

Indicator 7.7 Total annual motor vehicle kilometres travelled in Wales

Indicator 7.8 Average annual trunk road cross border traffic flows

Source: Road traffic

Status: National Statistics

Description: The Department for Transport (DfT) carry out manual traffic counts as a first step in producing road traffic statistics. These statistics are used to inform Government, businesses, media and society and are used internally for policy formulation and monitoring. There are no other comprehensive

data sources to enable the production of statistics about traffic for Great Britain. To produce the current suite of traffic statistics data, counts are needed about traffic on different types of roads (urban, rural, A roads, B roads etc) in different parts of the country and about the different types of vehicles on these roads.

Quality: In summary, the general manual traffic count process across England and Wales starts with:

- A manual traffic count is carried out by enumerators by the road side (occasionally by video camera);
- Ranging from 1-2 enumerators for quiet roads up to 6-7 enumerators for very busy dual carriageways);
- The count is of traffic in both directions, by vehicle type (11 categories, from pedal cycle to articulated 6+ axle goods vehicles);
- Takes place for 12 hour periods; 7am to 7pm;
- On single days during the period from mid-March to Mid-July, or from early-September to end-October, excluding bank holidays and school holidays, which are deemed neutral days;
- The date for each count is set by the DfT;
- For major roads (motorways and A roads) counted on 'links'; around 1,100 major road links in Wales; 60 per cent of these links are counted every year, rest less frequently, down to once every 8 years for the least busy; and
- For minor roads, just a sample of sites counted; around 700 sites in Wales; and around a third of these counted each year.

So it can be seen that the manual traffic counts is based on (1) the assumption that one day's observations will provide a good guide to traffic flows over the whole year for major roads. The 12 hour counts are expanded using information from automatic traffic counters (ATCs) to produce 24 hour values, which adjusts in part for the single data observation, alongside the use of neutral days.

It also involves (2) a methodology for 'grossing-up' the results from one day's observations at around 230 minor road sites in Wales to estimate the levels and changes in road traffic across all the 30 thousand miles of B, C and minor roads in Wales.

A short paper How the National Traffic Estimates are made, outlining the full methodology used to calculate annual traffic estimates, is available at: <http://www.dft.gov.uk/pgr/statistics/datatablespublications/roads/traffic/#technical>

Links to further information:

Further details for Wales in Chapter 7 of Welsh Transport Statistics:

<http://wales.gov.uk/topics/statistics/publications/transport2010/?lang=en>

DfT publications on traffic:

<http://www.dft.gov.uk/pgr/statistics/datatablespublications/roads/traffic>

This site enables the user to view and download estimated traffic flows on every link of the 'A' road and motorway network in Great Britain (and excludes minor roads). The data are for the years 1999 to 2009.

<http://www.dft.gov.uk/matrix/>

Indicator 8.1 Percentage of scheduled bus services to arrive punctually (between 1 min early and 5 minutes late)

Note that the figures shown from the 2007 bus punctuality survey are now out-of-date. These figures have been complemented by information from the 2010 Bus

Passenger Survey, which is described above

Indicator 8.2 Percentage of rail services that operate within 10 minutes of scheduled time

Indicator 8.3 Percentage of Arriva Trains Wales services that operate within 5 minutes of scheduled time

Indicator 8.4 Percentage of Arriva Trains Wales services that operate reliably

Source: Office of Rail Regulation (ORR)

Status: Official statistics

Description: Public performance measure (PPM) is an indication of the actual performance of Britain's passenger railways. It combines figures for punctuality and reliability into a single performance measure. It covers all scheduled services, seven days a week and measures the performance of individual trains against their planned timetable (the published timetable with amendments reflecting pre-published engineering amendments); PPM is, therefore, the percentage of trains 'on time' compared to the total number of trains planned.

A train is defined as on time if it arrives within five minutes of the planned destination arrival time for regional operators (like Arriva Trains Wales); or ten minutes for long distance operators (like FGW). Where a train fails to run its entire planned route, calling at all timetabled stations, it will either be shown as cancelled (if it runs less than half its planned mileage) or will be added to the trains in the '20 minutes or more' lateness band. Trains which complete their journey as planned are measured for punctuality at their final destination.

Quality: A train's performance is generally recorded by the automated monitoring systems which log performance using the signalling equipment.

To see how the statistics from the ORR comply with National Statistics Code of Practice see:

<http://www.rail-reg.gov.uk/server/show/nav.2255>

Links to further information: A link to 'National Rail Trends' the compendium ORR rail statistics publication. See Chapter 2 for performance and Chapter 8 for details of individual TOCs

<http://www.rail-reg.gov.uk/server/show/nav.2026>

Indicator 8.7 Percentage travel time reliability on key sections of the trunk road network for both cars and HGV's

This indicator is currently under development

Indicator 8.8 Road freight tonnage by commodity, origin and destination

Indicator 8.9 Non-road freight tonnage by mode

This indicator is currently under development

Indicator 8.10 Proportion of trunk and local authority road network in need of further investigation due to its condition.

Source: The information is based on the performance indicator data for local

authorities in Wales, compiled by the Local Government Data Unit ~ Wales together with administrative data compiled for the management of the trunk road and principal road networks in Wales.

Status: Official statistics

Description: Some definitions:

Trunk roads are owned, managed and maintained by Central Government. In Wales they are the responsibility of the Welsh Assembly Government. These are strategic roads with a high proportion of long distance traffic. They include almost all motorways and some "A" roads. Non-trunk roads are the responsibility of local authorities; they cover the non-trunk principal roads, that is "A" roads; the "B" and "C" roads; and the unclassified minor road network.

The structural condition of trunk roads. This is done with a Deflectograph, a lorry-based machine that measures the deflection of the road as the vehicle passes over it. This information is used to calculate the road's structural capacity and residual life. Deflectograph surveys are not used for non-flexible (e.g. concrete) roads, or for elevated carriageways. Currently the condition of the trunk road network in Wales is only reported on the basis of Deflectograph.

The surface condition of the road, for example the degree of cracking or rutting of the road surface. This is measured in two ways: The *first method* uses machine-based surveys of surface condition using a vehicle mounted with lasers, video and inertial measurement. The methodology (for both machinery used and the survey process) is called "SCANNER" for roads in Wales. A SCANNER-based condition indicator for the trunk road network in Wales is currently being developed.

Quality: The information is based on the performance indicator data for local authorities in Wales, compiled by the Local Government Data Unit ~ Wales together with administrative data compiled for the management of the trunk road and principal road networks in Wales.

Links to further information: Welsh Assembly Government Statistical Bulletin on road conditions: <http://wales.gov.uk/topics/statistics/headlines/trans2009/hdw200912102/?lang=en>
DfT publications on road conditions: <http://www.dft.gov.uk/pgr/statistics/datatablespublications/roads/condition>

Indicator 10.2 The proportion of tourist trips made using public transport

Source: UK tourism survey

Status: Official statistics

Description: UKTS now comprises:

- 100,000 face-to-face interviews per annum, conducted in-home, giving a weekly sample size of around 2,000 adults aged 16 or over - representative of the UK population in relation to various demographic characteristics including gender, age group, socio-economic group, and geographical location.
- Respondents are asked about any overnight trips taken in the last four weeks and survey outputs provide data from May 2005 for total number of trips, nights spent, breakdown of expenditure, purpose of trip, accommodation used and party composition on each trip by destination.

Quality: The UKTS results for 2005 are not comparable with those from previous years.
The data do not cover travel by day visitors or by overseas visitors
Further information about the UKTS can be found at:
<http://wales.gov.uk/topics/tourism/research/tourisminwales/volumeandvalue/?lang=en>

Links to further information: Visit Britain with links to the result of the UK tourism survey: "The UK Tourist - Statistics 2009"
<http://www.visitbritain.org/insightsandstatistics/domesticvisitorstatistics/index.aspx>
A link to general research results about tourism in Wales, including links to the results of the UK tourism survey for destinations in Wales.
<http://wales.gov.uk/topics/tourism/research/tourisminwales/?lang=en>

Indicator 11.1 The percentage use of sustainable resources in constructing and maintaining transport infrastructure.

This indicator will be developed as data is collected from new transport infrastructure projects carried out by the Welsh Assembly Government.

Indicator 12.1 Greenhouse gas inventories for the transport sector

Indicator 14.1 Emissions of air pollutants (sulphur dioxide, nitrogen oxides, fine particulates, Non Methane Volatile Organic Compounds, carbon monoxide, ammonia) apportioned to the transport sector

Source: UK greenhouse gas emissions – compiled by Department for Climate Change (DECC)

Status: National Statistics

Description: See link below for full details

Quality: See link below for full details

Links to further information: Here is the link to the DECC website:
http://www.decc.gov.uk/en/content/cms/statistics/climate_change/gg_emissions/gg_emissions.aspx