

# Transport Statistics Bulletin

Road Traffic Statistics: 2003

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**Symbols and conventions:** (i) **Unless otherwise stated, all tables refer to Great Britain.**  
(ii) **Metric units are generally used.**

**Units:** Figures are shown in italics when they represent percentages, indices or ratios.

**Rounding of figures:** In tables where figures have been rounded to the nearest final digit, there may be an apparent slight discrepancy between the sum of the constituent items and the total as shown.

**Conversion factors:**

1 kilometre	= 0.6214 mile	1 tonne	= 0.9842 ton
1 tonne-km	= 0.6116 ton-mile	1 gallon	= 4.546 litres
1 billion	= 1,000 million	1 litre	= 0.220 gallons

**Symbols:** The following symbols have been used throughout.

..	= not available	.	= not applicable
-	= Negligible (less than half the final digit shown)	0	= Nil
*	= Sample size too small for reliable estimates.	ow	= of which
{	= subsequent data is disaggregated	}	= subsequent data is aggregated
	= break in the series	P	= provisional data
F	= forecast expenditure	e	= estimated outturn
n.e.s.	= not elsewhere specified	TSO	= The Stationary Office

# Transport Statistics Bulletin

Road Traffic Statistics for Great Britain: 2003

Statistics Report SB (04) 32

Department for Transport

August 2004

More detailed information on traffic flow data at selected points on the major road network and vehicle kilometre estimates by type of vehicle and class of road is available from the Department for Transport. Enquiries should be made to Margaret Talbot at the address below:

Department for Transport  
Transport Statistics Roads 2 Division  
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Great Minster House  
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LONDON SW1P 4DR

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📠 020 7944 2164

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Enquiries about the contents should be made to the above address.

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## Special note

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A number of very minor revisions have been made to the 1993 to 2002 traffic estimates previously published in the *Road Traffic Statistics: 2002* bulletin. The most significant of these relate to 1998. None of them affect the estimated underlying rate of growth of between 1 and 2 per cent since 1999. There are four reasons for the revisions:

First, when estimates were made in 2003 there was an error in the calculation of the estimate for 1998 when a very small number of the traffic counts were double-counted. Consequently, the 1998 estimate has been revised downward from 459.6bvkm to 458.5bvkm (a difference of 0.2 per cent). This is more than the revisions for any other year.

Second, further refinements to the new method for estimating traffic flows reported in last year's bulletin <sup>1</sup>. Essentially, this involved re-classifying roads as being in urban and rural areas, rather than built-up and non built-up areas, and required a number of new census points on major roads. At the time of publication, many roads were given imputed traffic values because traffic counts were still in progress. Since then, the counts have been made and the traffic estimates revised.

Third, around 3,500 kilometres of trunk roads are due to be detrunked and become principal A roads and motorways. This programme started in 2001. However, at the time of publishing *Road Traffic Statistics: 2002*, the dates of the detrunking orders were unavailable. This information has since been provided and the revised estimates showing a fall of traffic on trunk roads and a rise in traffic on principal roads since 2001.

Fourth, resolution of anomalies in the rounding for minor road traffic estimates identified after publication in 2003. The vast majority of changes are to one significant figure only.

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<sup>1</sup> See the Special Note in *Road Traffic Statistics: 2002* published in July 2003 by the Department for Transport

The Department is undertaking a Quality Review of its road traffic estimates, under National Statistics guidelines. Any enquiries on methodology or comments about this bulletin or the review should be made to the address on page 2.

A revised short paper (*How National Traffic Estimates are Made*) outlining the full methodology used by the Department to calculate traffic estimates is now available from the address on page 2.

Estimates of [road traffic statistics at local authority level](#), together with corresponding figures for [casualties in road accidents](#), are available on the DfT web site. They are provided to enable the calculation and monitoring of road casualty rates for individual local authorities. These traffic figures at local level are less robust than the regional and national totals and are not classed as National Statistics.

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Any enquiries on methodology or comments about the bulletin should be made to Andrew Smith (address on page 2).

## Glossary

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### VEHICLE TYPES

**Two-wheeled motor vehicles:** Includes motorcycle combinations, scooters and mopeds.

**Cars and taxis:** Includes estate cars, light vans with windows to the rear of the driver's seat, passenger vehicles with 9 or fewer seats, three-wheeled cars, motorised invalid carriages, Land Rovers, Range Rovers and Jeeps. Cars towing caravans or trailers are counted as one vehicle.

**Larger buses and coaches:** Public service vehicles and works buses, which have a gross vehicle weight greater than 3,500 kgs.

**Light vans:** Goods vehicles up to 3,500 kgs. gross vehicle weight. Includes all car-based vans and those of the next larger carrying capacity such as transit vans. Also included are ambulances, pickups, milk floats and pedestrian controlled motor vehicles. Most of this group are delivery vans of one type or another.

**Goods vehicles:** Goods vehicles over 3,500 kgs gross vehicle weight. Includes tractors (without trailers), road rollers, box vans and similar large vans. A two axle motor tractive unit without trailer is also included.

### ROAD CLASSES

**Major roads:** Include motorways and A roads. These roads usually have high traffic flows and are often the main arteries to major destinations.

**Motorways:** Major roads often used for long distance travel. They are usually three or more lanes in each direction and generally have the maximum speed limit of 70mph.

**A Roads:** Can be trunk or principal roads. These are often described as 'main' roads and tend to have heavy traffic flows though not as high as motorways.

**Trunk roads:** Most motorways and many of the long distance rural A roads are trunk roads (National Through Routes). The responsibility for their maintenance lies with the Secretary of State and they are managed by the Highways Agency in England, the National Assembly of Wales in Wales and the Scottish Executive in Scotland.

**Principal roads:** These are major roads maintained by local authorities. They are mainly A roads (though the local authorities do have responsibility for some motorways) and tend to be in urban areas.

**Minor roads:** These are B roads, C roads and unclassified roads and are all maintained by the local authorities

**Urban roads:** Major and minor roads within an urban area with a population of 10,000 or more, based on the 2001 ODP definition of Urban Settlements.

**Rural roads:** All other roads, i.e. those outside urban areas with a population of 10,000 or more.



**Built-up roads:** Have a speed limit of 40 mph or less (irrespective of whether there are buildings or not). This definition was originally introduced to identify roads in built-up areas. However, there has been an increase in the adoption of speed limits of 40mph or less in rural areas in recent years. As a result, the new classification of roads as urban or rural (see above) has been adopted for traffic estimates from 1993.

**Non built-up roads:** All roads with a speed limit of 40mph or more. As explained above, this classification has now been replaced by the distinction between urban and rural roads.

## MEASURES OF TRAFFIC

**Annual Average Daily Flow (AADF):** The average over a full year of the number of vehicles passing a point in the road network each day.

**Vehicle kilometre:** One vehicle times one kilometre travelled (vehicle kilometres are calculated by multiplying the AADF by the corresponding length of road). For example, 1 vehicle travelling 1 kilometre a day for a year would be 365 vehicle kilometres. This is sometimes known as the volume of traffic.

### Rounding of figures

In tables where figures have been rounded to the nearest final digit, there may be an apparent slight discrepancy between the sum of the constituent items and the total as shown.

### Sources

The source for all tables is the National Road Traffic Survey unless otherwise stated.

### Symbols

..	=	not available
.	=	not applicable
0	=	zero
-	=	less than half the final digit shown
billion	=	thousand million
P	=	provisional

## Section 1: Trends in road traffic

This section provides details of traffic estimates for Great Britain, which give the number of vehicle kilometres travelled in any given year for different levels of disaggregation.

### Road traffic by vehicle type: 1955 - 2003

- Overall estimated total traffic rose by under 3.8 billion vehicle kilometres (bvkm) between 2002 and 2003, a rise of 0.8 per cent. Most of this is due to the rise in light van traffic (2.8bvkm) which grew by 5.2 per cent in the same period. Goods vehicle traffic (see Glossary) increased by 0.1 per cent in 2003 compared to 2002.
- There was little change in the volume of car traffic between 2002 and 2003.
- There was also a rise in motorcycle traffic of 10.4 per cent between 2002 and 2003. The increase in motorcycle traffic since 1993 has been greater, proportionately, than for any other vehicle type (see Chart 1.1b).
- The latest estimates also show a small increase in pedal cycle traffic, of about 2 per cent between 2002 and 2003.

**Table 1.1**  
**Road traffic by vehicle type: 1955 - 2003**<sup>1</sup>

	Billion vehicle kilometres						
	Cars and taxis	Motor -cycles etc.	Buses and coaches	Light vans	Goods vehicles	All motor vehicles	Pedal cycles
1955	42.3	7.5	4.2	9.8	13.2	77.0	18.2
1960	68.0	10.0	3.9	15.0	15.3	112.3	12.0
1965	115.8	6.7	3.9	19.0	17.3	162.7	7.0
1970	155.0	4.0	3.6	20.3	17.6	200.5	4.4
1975	181.6	5.1	3.2	23.5	18.3	231.7	4.4
1980	215.0	7.7	3.5	26.1	19.7	271.9	5.1
1985	250.5	7.4	3.7	28.6	19.6	309.7	6.1
1990	335.9	5.6	4.6	39.9	24.9	410.8	5.3
1991	335.2	5.4	4.8	41.7	24.5	411.6	5.2
1992	338.0	4.5	4.6	41.2	23.8	412.1	4.7
1993	338.1	3.8	4.6	41.6	24.3	412.3	4.0
1994	345.0	3.8	4.6	43.3	24.8	421.5	4.0
1995	351.1	3.7	4.9	44.5	25.4	429.7	4.1
1996	359.9	3.8	5.0	46.2	26.2	441.1	4.1
1997	365.8	4.0	5.2	48.6	26.9	450.3	4.1
1998	370.6	4.1	5.2	50.8	27.7	458.5	4.0
1999	377.4	4.5	5.3	51.6	28.1	467.0	4.1
2000	376.8 <sup>2</sup>	4.6	5.2	52.3	28.2	467.1	4.2
2001 <sup>3</sup>	382.8	4.8	5.2	53.7	28.1	474.4	4.2
2002	392.9	5.1	5.2	55.0	28.3	486.6	4.4
2003	393.0	5.6	5.4	57.9	28.5	490.3	4.5

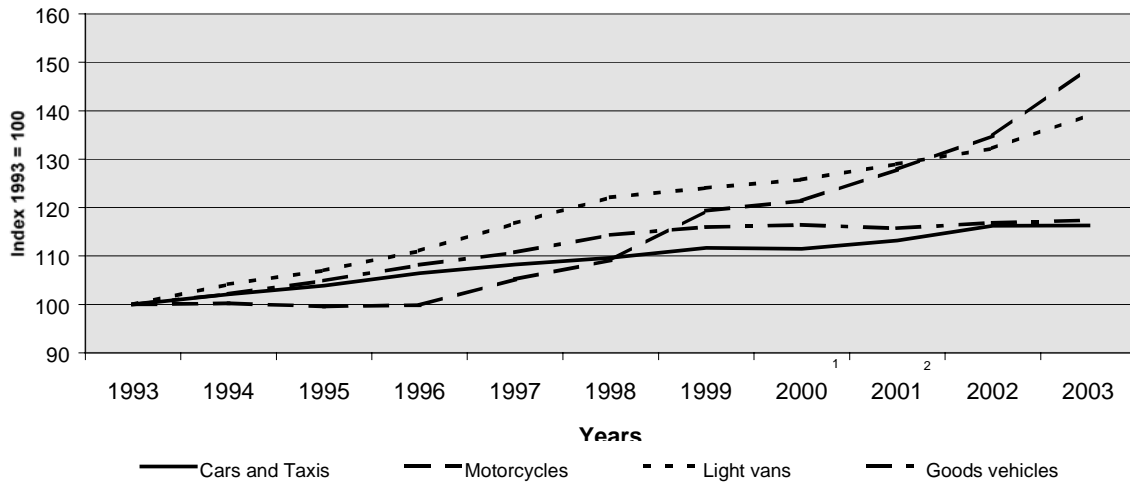
1. There have been minor revisions to the traffic estimates for 1993 to 2003 (and these are explained in the Special Note), and they are not directly comparable with the figures for 1992 and earlier.

2. The decline in the use of cars and taxis in 2000 was due to the fuel dispute.

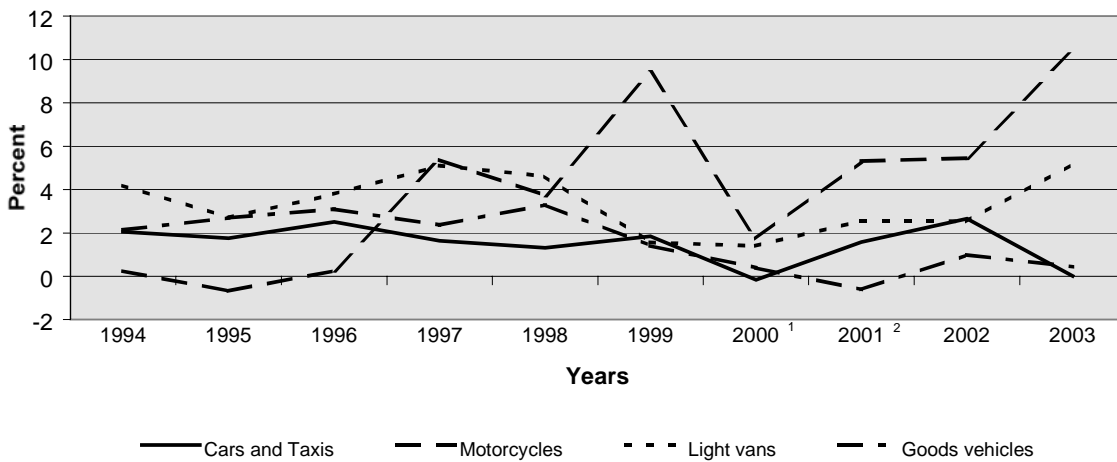
3. Figures affected by impact of Foot and Mouth disease during 2001.

Source: National Road  
Traffic Survey, DfT.  
☎ 020-7944 3095

**Chart 1.1a**  
**Road traffic by vehicle type:1993 - 2003**

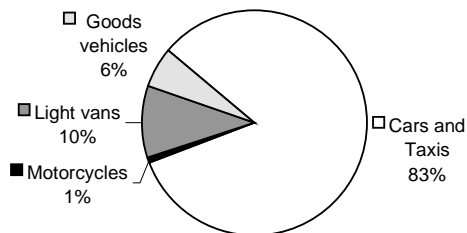


**Chart 1.1b**  
**Year-on-year change in road traffic by vehicle type: 1994 - 2003**

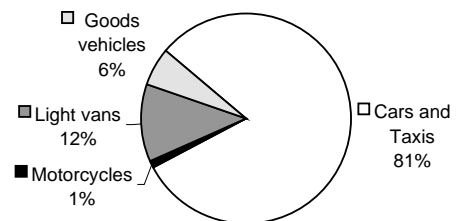


- 1. The decline in the use of cars and taxis in 2000 was due to the fuel dispute.
- 2. Figures affected by the impact of Foot and Mouth disease during 2001.

**Chart 1c: Road traffic by vehicle type: 1993**



**Chart 1d: Road traffic by vehicle type: 2003**

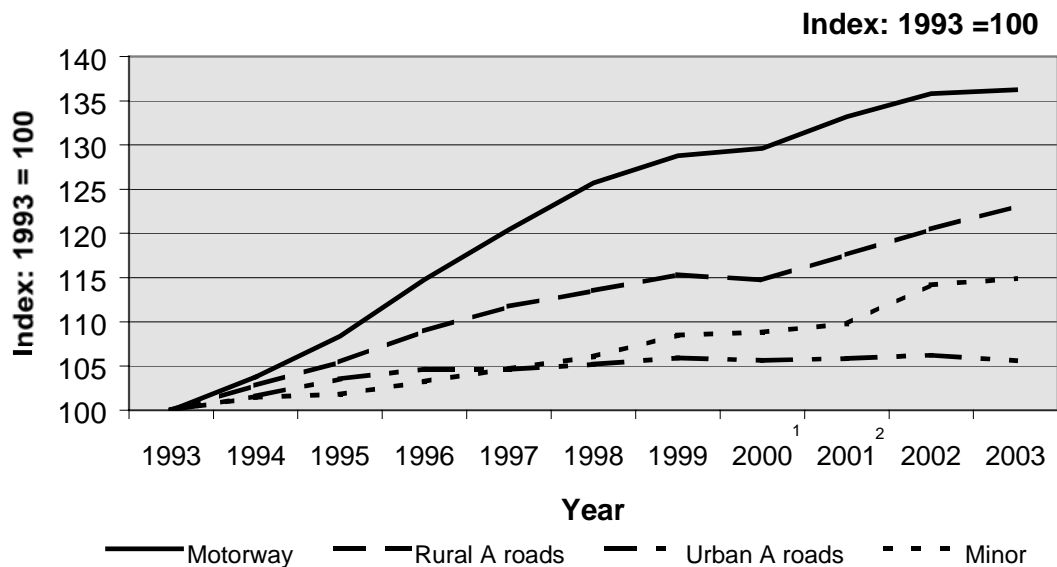


## Motor vehicle traffic by road class: 1955 - 2003

- Motorway traffic levels in 2003 were about 0.3 per cent higher than in 2002. This is considerably lower than the average annual increase of 2.0 per cent since 1999, which in turn was less than the 1993 to 1998 average year-on-year increase of 4.3 per cent.
- The proportion of traffic carried on motorways rose from 17 per cent in 1993 to 19 per cent in 2003 (see Charts 1.2a and 1.2b).
- Traffic on rural 'A' roads in 2003 increased by 2.1 per cent (similar to the year-on-year increase in 2002) but traffic on urban 'A' roads decreased by 0.6 per cent over the same period.
- Minor road traffic rose by 1 per cent between 2002 and 2003, accounting for almost 30 per cent of the 3.8bvkms increase in total traffic. The average annual rate of increase between 1993 and 2003 was just 1 per cent.
- Table 1.2a below shows traffic split between built-up (roads with a speed limit of 40mph or less) and non built-up areas. A distinction based on the speed limit of the road was once a good method of distinguishing between traffic in towns and cities as opposed to traffic in rural areas. Over time, low speed limits have also been applied in the countryside and as a result, the use of built-up/non built-up has now been replaced with the new urban/rural classification; urban roads are those that lie within an urban area with a population of 10,000 or more. The new classification has been adopted for the figures for traffic from 1993 to 2003 in Table 1.2b below.

### Chart 1.2a

#### Motor vehicle traffic by road class: 1993 - 2003



1. The decline in the use of cars and taxis in 2000 was due to the fuel dispute.
2. Figures affected by the impact of Foot and Mouth disease during 2001.

**Table 1.2a**  
**Motor vehicle traffic by road class and built-up and non built-up areas: 1955 - 1993 <sup>1</sup>**

Billion vehicle kilometres

	Major roads								All roads
	Motorway	'A' roads			Total major roads	Minor roads			
		Non built-up	Built-up	All		Non built-up	Built-up	All	
1955	.	..	..	..	..	..	..	..	77.0
1960	0.7	31.8	32.8	64.6	65.4	19.9	27.1	47.0	112.3
1965	3.8	43.6	47.6	91.3	95.1	..	..	67.6	162.7
1970	9.5	51.9	56.3	108.2	117.7	..	..	82.8	200.5
1975	21.9	60.0	59.2	119.2	141.1	37.8	52.8	90.6	231.7
1980	29.4	69.8	64.7	134.5	163.8	39.0	69.1	108.1	271.9
1985	38.0	86.8	66.4	153.2	191.2	43.4	75.1	118.5	309.7
1990	61.6	114.8	78.3	193.1	254.8	51.6	104.4	156.1	410.8
1991	61.0	117.0	79.4	196.5	257.4	50.7	103.4	154.2	411.6
1992	61.5	117.0	79.5	196.5	258.0	49.7	104.4	154.1	412.1
1993	63.9	118.1	78.0	196.1	260.0	45.5	106.7	152.2	412.2

1. Prior to 1993, built-up roads are those with a speed limit of 40 mph or less (irrespective of whether there are buildings or not).

**Table 1.2b**  
**Motor vehicle traffic by road class and urban and rural areas: 1993 - 2003 <sup>1</sup>**

Billion vehicle kilometres

	Major roads				Total Major roads	Minor roads			All roads
	Motorway	'A' Roads		All		Rural	Urban	All	
		Rural	Urban						
1993 <sup>2</sup>	68.2	113.3	77.3	190.6	258.8	56.1	97.4	153.5	412.3
1994	70.7	116.5	78.5	195.1	265.8	57.6	98.1	155.7	421.5
1995	73.9	119.5	80.1	199.6	273.5	57.8	98.5	156.2	429.7
1996	78.3	123.5	80.9	204.4	282.7	58.9	99.6	158.5	441.1
1997	82.1	126.6	80.9	207.5	289.6	60.0	100.7	160.7	450.3
1998	85.7	128.7	81.3	210.0	295.7	60.4	102.4	162.8	458.5
1999	87.8	130.7	81.9	212.6	300.4	61.3	105.3	166.6	467.0
2000 <sup>3</sup>	88.4	130.0	81.7	211.7	300.0	61.5	105.5	167.0	467.1
2001 <sup>4</sup>	90.8	133.3	81.8	215.1	305.9	61.6	106.9	168.5	474.4
2002	92.6	136.5	82.1	218.7	311.3	64.5	110.8	175.3	486.6
2003	92.9	139.4	81.6	221.1	314.0	64.4	111.9	176.4	490.3

1. Urban roads: Major and minor roads within an urban area with a population of 10,000 or more.

These are based on the 2001 urban settlements. The definition for 'urban settlement' is in *Urban and rural area definitions: a user guide* which can be found on the ODPM web site at:

[http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_609188.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_609188.hcsp)

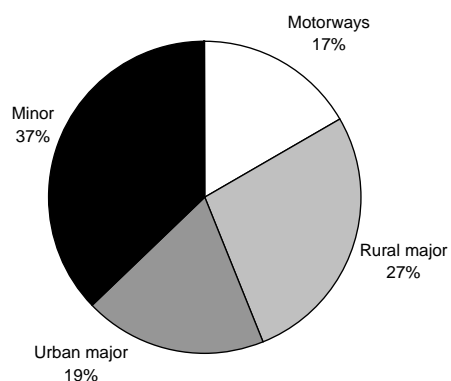
2. There have been minor revisions to the traffic estimates for 1993 to 2003 (and these are explained in the Special Note), and they are not directly comparable with the figures for 1992 and earlier in Table 1.2a.

3. The decline in the use of cars and taxis in 2000 was due to the fuel dispute.

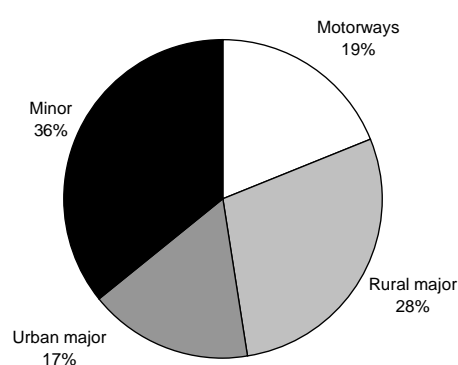
4. Figures affected by impact of Foot and Mouth disease during 2001.

Source: National Road Traffic Survey, DfT.  
 ☎ 020-7944 3095

**Chart 1.2b: Percentage of motor vehicle traffic by road class: 1993**



**Chart 1.2c: Percentage of motor vehicle traffic by road class: 2003**



## Motor vehicle traffic by road class, country and Government Office Region: 2003

- Table 1.3 shows motor vehicle traffic on the different classes of road: motorways, 'A' roads and minor roads. The 'A' roads are split into 2 categories (trunk and principal), and are managed by the Highways Agency and Local Transport Authorities respectively.
- Not surprisingly the vast majority of traffic in 2003 was in England with 86 per cent of traffic on all roads. Scotland had 8 per cent of the traffic and Wales 5 per cent.
- The South East region at about 17 per cent had the largest share of English traffic on all roads. The East of England and the North West had the next highest share with about 11 per cent each. The North East carried the lowest amount of traffic on all roads with 4 per cent.
- Motorway traffic in 2003: Motorways carried 19 per cent of traffic in England. In Scotland and Wales, motorways carried 14 and 12 per cent of traffic respectively. The South East and West Midlands had the highest percentages of traffic on motorways at 25 and 24 per cent respectively, with the North East motorways carrying the lowest percentage of traffic (5 per cent).
- Major road traffic (including motorways) in 2003: Major roads carried 64 per cent of traffic in England. In Scotland and Wales, major roads carried 66 and 63 per cent of traffic respectively. All regions had between 61 and 67 per cent of traffic being carried on the major road network (including motorways), other than the North East where the major road network carried 58 per cent of the traffic.
- Minor road traffic in 2003: Minor roads carried 36 per cent of all motorised traffic in England. In Scotland and Wales, minor roads carried 34 and 37 per cent of traffic respectively. All regions had between 33 and 39 per cent of traffic carried on the minor road network, other than the North East where the minor road network carried 44 per cent of the traffic.

**Table 1.3**  
**Motor vehicle traffic by road class, country and Government Office Region: 2003**<sup>1,2</sup>

	Billion Vehicle Kilometres										
	Major roads								Minor roads		
	Motorway	Rural 'A' roads			Urban 'A' roads			Total major roads	Rural	Urban	All roads
		Trunk	Prin- cipal	Total	Trunk	Prin- cipal	Total				
North East	1.1	2.9	3.1	6.1	0.9	2.9	3.8	10.9	1.9	6.8	19.6
North West <sup>3</sup>	16.7	3.1	5.9	9.0	0.6	10.2	10.8	36.5	4.5	14.3	55.3
Yorkshire and The Humber	8.7	3.9	6.0	9.9	0.4	6.9	7.3	26.0	5.3	9.3	40.6
East Midlands	6.5	6.6	8.9	15.4	0.7	4.2	4.8	26.8	6.1	7.0	39.9
West Midlands	11.2	4.3	5.8	10.1	1.0	7.1	8.1	29.4	5.4	12.9	47.7
East of England	8.0	9.0	11.0	20.0	0.4	5.0	5.4	33.4	10.2	10.3	53.9
London	2.1	.	0.7	0.7	.	17.4	17.4	20.1	0.2	12.5	32.8
South East	21.8	9.4	15.3	24.6	0.6	9.7	10.3	56.7	11.4	17.4	85.6
South West	7.9	6.2	10.6	16.8	0.4	4.6	5.0	29.7	8.5	8.3	46.5
<b>England</b>	<b>84.0</b>	<b>45.3</b>	<b>67.3</b>	<b>112.6</b>	<b>5.0</b>	<b>68.0</b>	<b>73.0</b>	<b>269.5</b>	<b>53.5</b>	<b>98.9</b>	<b>421.9</b>
Wales	3.1	5.7	4.6	10.3	0.5	2.9	3.3	16.8	4.7	5.1	26.6
Scotland	5.8	8.9	7.6	16.5	0.9	4.4	5.4	27.6	6.2	8.0	41.8
<b>Great Britain</b>	<b>92.9</b>	<b>59.9</b>	<b>79.5</b>	<b>139.4</b>	<b>6.4</b>	<b>75.3</b>	<b>81.6</b>	<b>314.0</b>	<b>64.4</b>	<b>111.9</b>	<b>490.3</b>

1. There have been minor revisions to the traffic estimates for 2003, and these are explained in the Special Note.

2. Figures for trunk and principal roads in England since 2001 are affected by the detrunking programme - see Special Note.

3. Includes Merseyside.

Source: National Road  
Traffic Survey, DfT.  
020-7944 3095

NB: Versions of this table for the years 1993 - 2002 are available for downloading from the DfT website at:

<http://www.dft.gov.uk/transtat/roadtraff>

## Motor vehicle traffic by vehicle type and road class: 2003

- Cars & taxis accounted for four-fifths of all motor traffic by type of roads with little variation.
- Nineteen per cent of all motor traffic was on motorways, which represent less than 1 per cent of total road length (see table 4.1). Minor roads on the other hand account for 87 per cent of the length of the road network but only 36 per cent of traffic in 2003.
- Forty one per cent of all heavy goods vehicle traffic was on motorways, 35 per cent was on rural 'A' roads, 10 per cent on urban 'A' roads and 14 per cent was on minor roads.

**Table 1.4**  
**Road traffic by vehicle type and road class: 2003**<sup>1</sup>

	Billion vehicle kilometres						
	Cars and taxis	Motor-cycles etc.	buses & coaches	Light vans	Goods vehicles	All motor vehicles	Pedal cycles
<b>Motorways</b>	<b>70.3</b>	<b>0.4</b>	<b>0.5</b>	<b>10.2</b>	<b>11.5</b>	<b>92.9</b>	<b>.</b>
<b>Rural 'A' roads:</b>							
Trunk <sup>2</sup>	46.6	0.5	0.3	6.8	5.8	59.9	-
Principal	64.5	0.9	0.6	9.2	4.3	79.5	0.1
<b>All rural 'A' roads</b>	<b>111.1</b>	<b>1.4</b>	<b>1.0</b>	<b>15.9</b>	<b>10.1</b>	<b>139.4</b>	<b>0.1</b>
<b>Urban 'A' roads:</b>							
Trunk <sup>2</sup>	5.1	0.1	-	0.7	0.4	6.4	-
Principal	62.3	1.1	1.2	8.1	2.5	75.3	0.6
<b>All urban 'A' roads</b>	<b>67.5</b>	<b>1.1</b>	<b>1.2</b>	<b>8.8</b>	<b>3.0</b>	<b>81.6</b>	<b>0.6</b>
<b>All major roads</b> <sup>3</sup>	<b>248.8</b>	<b>2.9</b>	<b>2.6</b>	<b>35.0</b>	<b>24.6</b>	<b>314.0</b>	<b>0.8</b>
<b>Minor roads:</b>							
Minor rural roads	50.9	0.8	0.8	10.0	1.9	64.4	0.9
Minor urban roads	93.2	1.9	2.0	12.9	1.9	111.9	2.9
<b>All minor roads</b>	<b>144.2</b>	<b>2.7</b>	<b>2.8</b>	<b>22.9</b>	<b>3.9</b>	<b>176.4</b>	<b>3.8</b>
<b>All roads</b>	<b>393.0</b>	<b>5.6</b>	<b>5.4</b>	<b>57.9</b>	<b>28.5</b>	<b>490.3</b>	<b>4.5</b>

1. Urban roads: Major and minor roads within an urban area with a population of 10,000 or more.

These are based on the 2001 urban settlements. The definition for 'urban settlement' is in *Urban and rural area definitions: a user guide* which can be found on the ODPM web site at:

[http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_609188.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_609188.hcsp)

2. Figures for trunk and principal roads in England since 2001 are affected by the detrunking programme - see Special Note.

3. Includes motorways, urban and rural 'A' roads.

NB: Versions of this table for the years 1993 - 2002 are available for downloading from the DfT website at:

<http://www.dft.gov.uk/transtat/roadtraff>

Source: National Road  
Traffic Survey, DfT.  
☎ 020-7944 3095

## Section 2: Motor vehicle flows

Section 1 looked at the volume of traffic (vehicle kilometres) within the year. Section 2 looks at average daily traffic flows - in other words, the number of vehicles that would pass by you on a particular class of road on an average day in the year.

### Motor vehicle flow by road class: 1955 - 2003

- Table 2.1a shows flows by road class estimated using the built-up/non built-up definition and Table 2.1b is estimated using the urban/rural definitions – see ‘Special Note’.
- Traffic flows on all types of roads in 2003 were slightly higher than those observed in 2002, other than a slight decrease in traffic on 'A' urban roads. The slight falls in traffic flows on motorways and major roads in 2000, were due to the effects of the September 2000 fuel dispute.
- Traffic flows on minor rural roads have remained virtually unchanged since 1994.

**Table 2.1a**  
**Motor vehicle flow by road class: 1955 - 1993**<sup>1</sup>

	Thousand vehicles per day								
	Major roads					Minor roads			
	Motorway	'A' roads			All major roads	Non built-up	Built-up	All	All roads
		Non built-up	Built-up	All					
1955	.	..	..	..	..	..	..	..	0.7
1960	12.9	..	..	3.9	3.5	..	..	0.5	1.0
1965	18.3	3.7	9.9	5.5	5.1	..	..	0.7	1.4
1970	24.6	..	..	6.4	6.3	..	..	0.8	1.7
1975	30.2	5.1	11.5	7.0	7.6	..	..	0.9	1.9
1980	31.4	5.9	12.6	7.9	8.8	..	..	1.0	2.2
1985	37.0	7.2	12.9	8.9	10.3	0.7	1.6	1.1	2.4
1990	55.0	9.3	15.3	11.0	13.7	0.8	2.1	1.4	3.1
1991	53.8	9.5	15.5	11.2	13.8	0.8	2.1	1.4	3.1
1992	53.7	9.4	15.4	11.2	13.9	0.8	2.0	1.4	3.1
1993 <sup>2</sup>	55.7	9.6	15.2	11.2	14.0	0.7	2.1	1.3	3.1

1. Prior to 1993, built-up roads are those with a speed limit of 40 mph or less (irrespective of whether there are buildings or not).

2. Figures for 1993 are estimated on the old basis and thereby differ from 1993 figures in Table 2.1b.

**Table 2.1b**  
**Motor vehicle flow by road class: 1993 - 2003**<sup>1,2</sup>

	Thousand vehicles per day								
	Major roads					Minor roads			
	Motorway	'A' roads			All major roads	Rural	Urban	All	All roads
		Rural	Urban	All					
1993 <sup>3</sup>	58.2	8.9	19.2	11.3	14.4	0.7	2.1	1.3	2.9
1994	59.8	9.1	19.5	11.6	14.7	0.8	2.1	1.3	3.0
1995	61.9	9.3	19.9	11.8	15.1	0.8	2.1	1.3	3.0
1996	64.8	9.6	20.1	12.1	15.6	0.8	2.1	1.3	3.1
1997	66.6	9.8	20.1	12.3	16.0	0.8	2.1	1.3	3.2
1998	68.7	10.0	20.2	12.4	16.3	0.8	2.2	1.3	3.2
1999	69.7	10.1	20.2	12.5	16.5	0.8	2.2	1.3	3.3
2000 <sup>4</sup>	69.6	10.0	20.1	12.4	16.4	0.8	2.2	1.3	3.3
2001 <sup>5</sup>	71.6	10.3	20.1	12.6	16.7	0.8	2.2	1.4	3.3
2002	73.0	10.5	20.2	12.8	17.0	0.8	2.3	1.4	3.4
2003	73.2	10.8	20.1	13.0	17.2	0.8	2.3	1.4	3.4

1. The calculation for the average daily flow is estimated by dividing the annual traffic estimate by the road length and the number of days in the year.

2. Urban roads: Major and minor roads within an urban area with a population of 10,000 or more.

These are based on the 2001 urban settlements. The definition for 'urban settlement' is in *Urban and rural area definitions: a user guide* which can be found on the ODPM web site at: [http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_609188.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_609188.hcsp)

3. Figures are estimated using the new methodology and differ from those in Table 2.1a.

4. Figures affected by a decline in the use of cars and taxis in 2000, due to the fuel dispute.

5. Figures affected by impact of Foot and Mouth disease during 2001.

Source: National Road Traffic Survey, DfT.  
☎ 020-7944 3095



## Motor vehicle flows by road class, country and Government Office Region: 2003

- London had the highest average daily flows for all road classes in 2003, other than minor urban roads in the West Midlands and North East. Average flows on roads in London were almost twice the average for Great Britain.
- In general average flows on urban roads were higher than those of rural roads of the same road class. In London, East of England and the South East however, there was little difference between traffic flows on urban and rural major roads.
- Average vehicle flows ranged from about 100,000 vehicles per day on motorways in London to 500 vehicles per day on minor rural roads in Scotland.

Table 2.2

Motor vehicle flows by road class, country and Government Office Region: 2003 <sup>1</sup>

	Thousand vehicles per day						
	Major roads				Minor roads		
	Motorway	'A' roads		All major roads	Rural	Urban	All roads
		Rural	Urban				
North East	50.1	13.3	20.8	16.5	0.7	2.7	3.3
North West <sup>2</sup>	71.4	10.6	17.7	21.6	0.9	2.1	4.1
Yorkshire & the Humber	65.6	12.2	18.5	19.4	0.9	2.0	3.5
East Midlands	92.6	13.5	19.1	18.2	0.9	2.1	3.5
West Midlands	79.7	11.4	20.2	20.7	0.9	2.8	4.0
East of England	82.8	17.8	18.1	22.0	1.2	2.6	3.7
London	96.4	29.1	28.8	31.1	1.5	2.7	6.1
South East	91.0	17.9	19.5	26.5	1.4	2.5	4.9
South West	66.1	10.9	19.7	15.5	0.7	2.2	2.6
England	78.0	13.7	20.7	21.0	1.0	2.4	3.9
Wales	60.5	7.8	16.7	10.6	0.6	2.1	2.2
Scotland	41.1	4.8	16.2	7.1	0.5	1.8	1.9
Great Britain	73.2	10.8	20.1	17.2	0.8	2.3	3.4

1. The calculation for the average daily flow is estimated by dividing the annual traffic estimate by the road length and the number of days in the year.

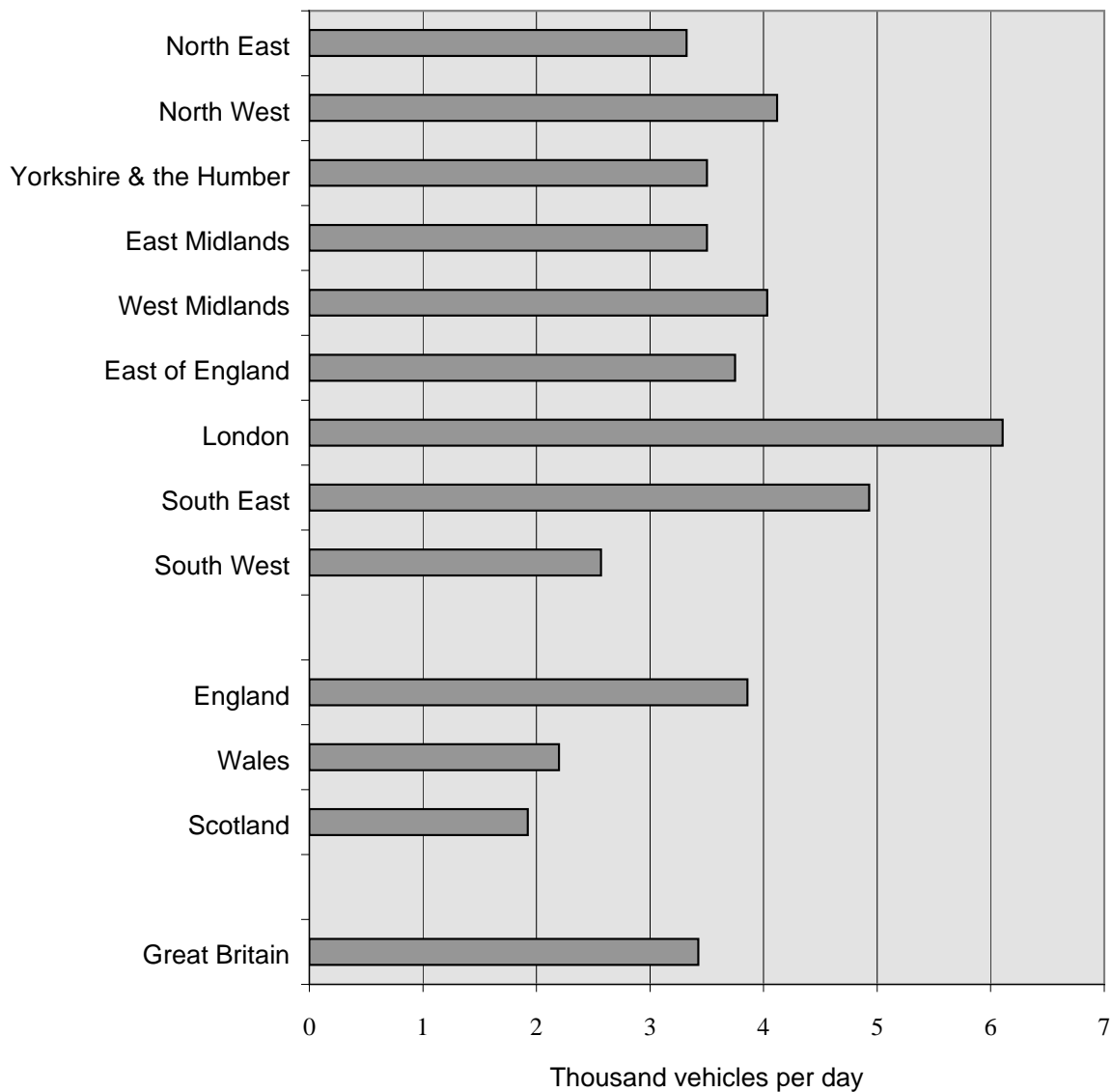
2. Includes Merseyside.

NB: Versions of this table for the years 1993 - 2002 are available for downloading from the DfT website at

Source: National Road Traffic Survey, DfT.  
☎ 020-7944 3095

<http://www.dft.gov.uk/transtat/roadtraff>

**Chart 2.2**  
**Comparison of motor vehicle flows by country and**  
**Government Office Region: 2003**



## Motor vehicle flows for major sections of motorway network: 2003

- According to DfT count data, the busiest single motorway link in Britain during 2003 was between junctions 13 and 14 on the Western side of the M25 near Heathrow Airport, which carried a maximum of 196 thousand vehicles a day. Overall the western side of the M25 (from the A1(M) to the M23) is also the busiest section of motorway in Britain, with an estimated average daily flow of 141 thousand vehicles (but 6 thousand fewer vehicles than the previous year).
- The average flow for the M25 as a whole was considerably higher than that of the next busiest motorways, the M60, M1, M27, M6 (south of the M62 junction) and M62 (east of the Pennines at junction 22).
- The M8 between Glasgow and Edinburgh was the busiest motorway in Scotland.
- The average flow on the busiest motorways increased in 2002 by 1.2 per cent, compared to the 1999-2001 average. In 2003 the rate of increase on the busiest motorway's fell to 0.8 per cent, compared to the 1999-2002 average.

Table 2.3

Motor vehicle flow for major sections of motorway network: 1999 - 2003 <sup>1,2</sup>

Motorways	Thousand vehicles per day									
	Maximum flow					Average flow				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
M1 - North of M6 junction	122	123	126	134	141	94	93	97	99	102
M1 - South of M6 junction	166	150	160	162	165	97	93	97	99	101
M2	64	62	61	63	63	52	50	52	53	52
M3	128	125	121	124	138	87	89	91	91	90
M4 - England	146	175	147	146	152	89	91	91	93	93
M5	102	103	105	109	105	69	69	72	74	75
M6 - North of M62 junction	126	126	120	121	129	58	56	57	59	58
M6 - South of M62 junction	140	139	145	147	145	98	99	100	98	101
M11	87	90	91	84	85	64	63	65	61	63
M20	110	111	123	125	126	57	59	62	65	66
M23	100	116	108	111	119	86	91	93	92	97
M25 - Eastern links from A1(M) to M23 <sup>3</sup>	131	126	133	142	150	116	116	119	121	116
M25 - Western links from A1(M) to M23	179	185	195	194	196	143	143	146	147	141
M27	106	112	112	119	123	91	90	96	100	101
M40	109	114	123	114	119	83	84	85	87	84
M42	174	174	168	176	156	85	86	88	91	85
M56	138	143	146	149	159	85	87	90	90	93
M60	174	187	169	174	169	111	110	103	112	115
M62 - East of The Pennines (junction 22)	126	130	131	135	129	90	93	95	96	99
M62 - West of The Pennines (junction 22)	122	126	131	130	118	70	70	72	74	72
A1M	94	96	90	96	97	56	56	57	59	60
M4 - Wales	102	97	101	103	109	61	61	64	66	68
M73	76	76	79	74	72	45	45	46	46	46
M74	84	77	79	85	88	30	29	30	32	32
M77	59	59	61	62	61	44	44	46	47	47
M8	153	128	133	151	167	66	66	67	69	70
M9	41	41	54	55	54	29	29	31	32	33

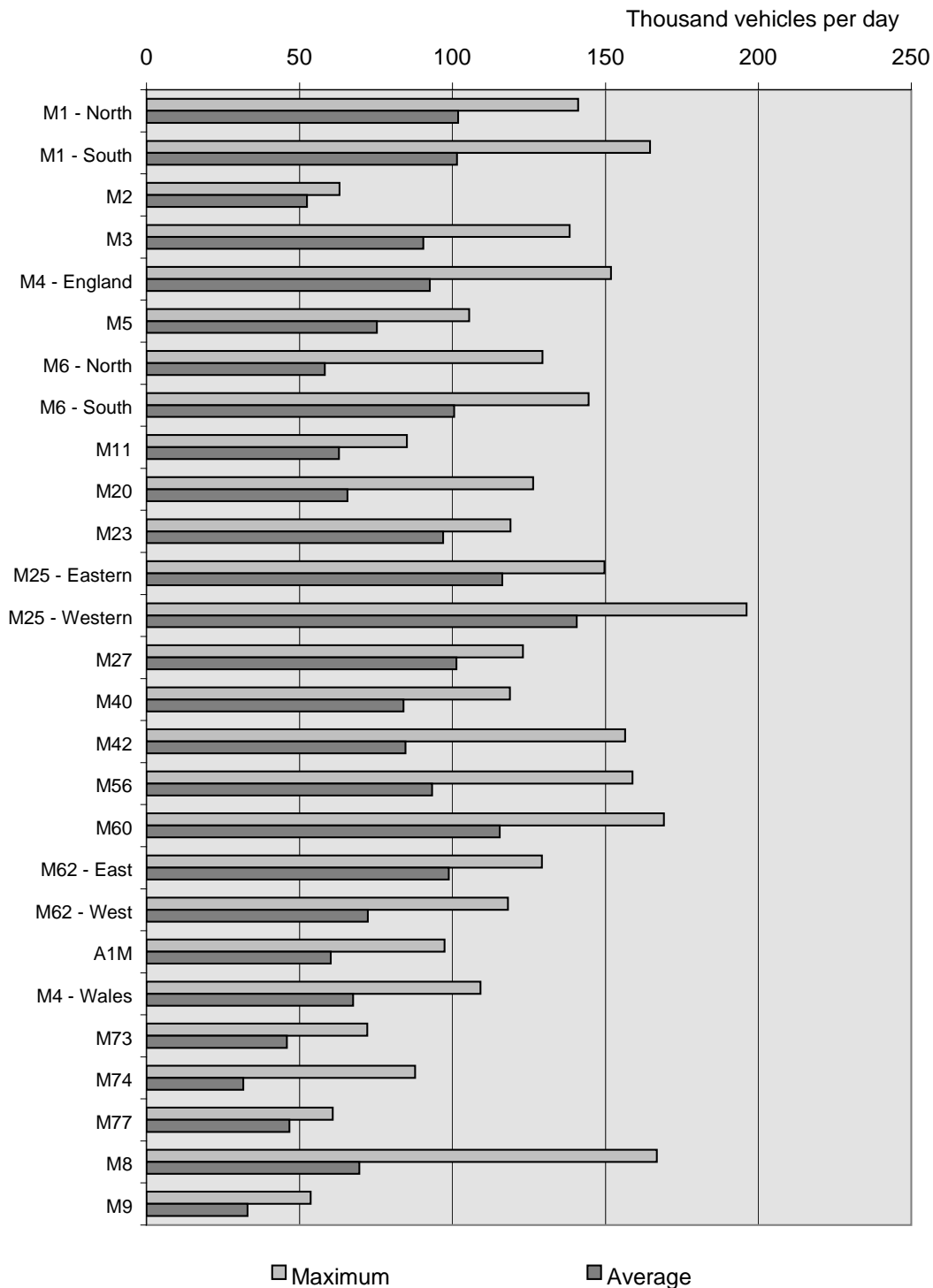
1. The calculation for the average daily flow is estimated by dividing the annual traffic estimate by the road length and the number of days in the year.

2. Excludes flows on slip roads and spur roads.

3. Excludes the A282 Dartford Crossing as part of the M25 for the years 1999 to 2003.

### Chart 2.3

### Comparison of motor vehicle flows for major sections of motorway network: 2003 <sup>1,2</sup>



1. Excludes flows on slip roads and spur roads.
2. The maximum flow is the highest reading for 2003.

## Section 3: Seasonal, daily and hourly fluctuations in traffic

The data in this section are solely derived from automatic counts conducted at a number of fixed sites on major and minor roads.

### Average daily traffic flows by month - 1999/2003

- Table 3.1 shows average monthly traffic flows over a five-year period from 1999 to 2003.
- The highest flows of cars on motorways and all rural roads are in July and August, although flows remained high from May to October. On urban roads there was a more even distribution of traffic flows throughout the year. On all types of road the lowest flows were in February.
- Goods vehicle traffic flows also peaked during the Summer and Autumn months for each category of road class, staying high into November, before declining during the winter months of December to February.

Table 3.1

Average daily traffic flows by month: 1999/2003 <sup>1</sup>

Index: Average daily traffic flow in month = 100

	Motorways			All rural major and minor roads		
	Cars and taxis	Goods vehicles	All motor vehicles	Cars and taxis	Goods vehicles	All motor vehicles
January	92	97	93	88	93	88
February	89	94	90	85	90	85
March	98	103	99	96	100	97
April <sup>2</sup>	100	98	99	99	97	98
May	102	102	102	104	102	104
June	101	99	101	103	99	103
July	107	104	107	111	106	110
August	110	100	108	114	104	113
September	101	101	102	105	104	105
October	105	107	105	104	109	105
November	98	104	99	97	105	98
December <sup>3</sup>	96	92	95	94	90	93
	All urban major and minor roads			All roads		
	Cars and taxis	Goods vehicles	All motor vehicles	Cars and taxis	Goods vehicles	All motor vehicles
January	98	98	97	92	97	93
February	92	94	92	89	93	89
March	102	102	102	99	102	99
April <sup>2</sup>	99	97	99	99	97	99
May	103	102	103	103	102	103
June	100	100	100	101	99	101
July	104	106	104	107	105	107
August	102	102	102	109	101	108
September	99	102	100	102	102	102
October	103	106	104	105	107	105
November	100	102	100	98	104	99
December <sup>3</sup>	97	90	97	96	92	95

1. Indices are based on average daily traffic and are not affected by the varying number of days in each month.

2. Figures affected by Easter.

3. Figures affected by Christmas.

Source: National Core Census, DfT.

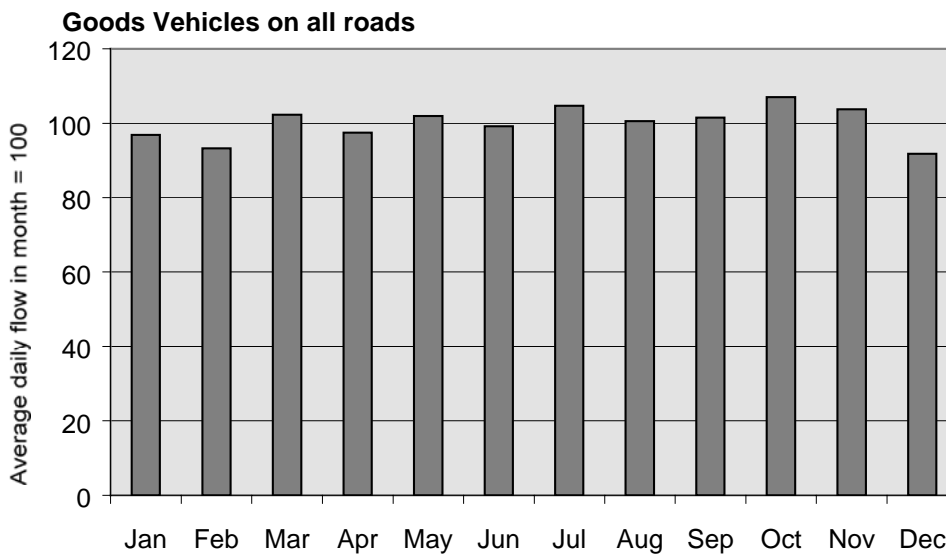
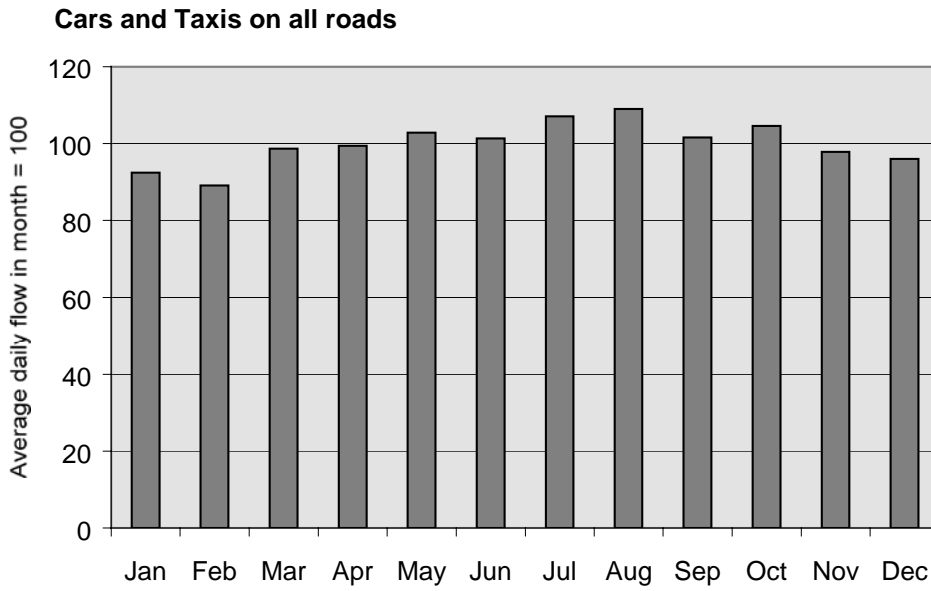
☎ 020-7944 6397

NB: Versions of this table for the years 1993 - 2002 are available for downloading from the DfT website at:

<http://www.dft.gov.uk/transport/roadtraffic>

### Chart 3.1

#### Average daily traffic flows by month: 1999 to 2003



## Traffic distribution by day of week 2003

- In table 3.2 the distribution of traffic by day of week, is the average daily pattern during 2003. The results are based on continuous automatic counting of vehicles at a small sample of sites.
- On motorways and rural roads, car traffic was 13-14 per cent higher on Fridays than on an average day, but lower than average at weekends. Car traffic on urban roads was 8 per cent higher on Fridays compared to an average day.
- Goods vehicle traffic was significantly higher during the working week on all road classes, than at the weekend.
- Car traffic on motorways is less at weekends. Goods traffic on motorways on Sundays is less than one third of the weekday level.

**Table 3.2**  
Traffic distribution by day of week: 2003

Index: Average day = 100

	Motorways			All rural major and minor roads		
	Cars and taxis	Goods vehicles	All motor vehicles	Cars and taxis	Goods vehicles	All motor vehicles
Monday	98	116	101	99	116	101
Tuesday	98	130	104	99	130	103
Wednesday	101	132	107	101	129	104
Thursday	102	133	108	102	132	105
Friday	114	119	115	113	122	114
Saturday	92	42	83	96	44	90
Sunday	95	30	83	89	28	81

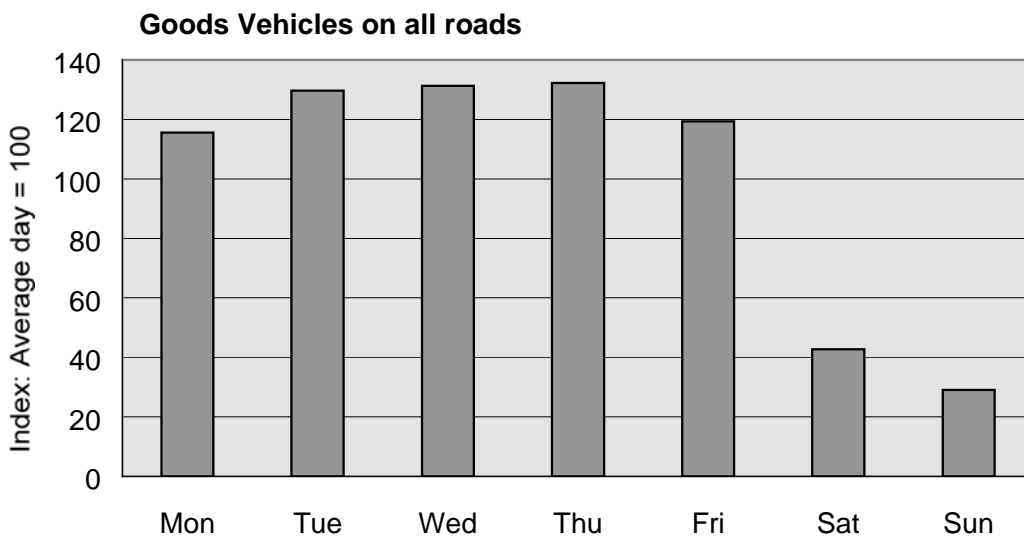
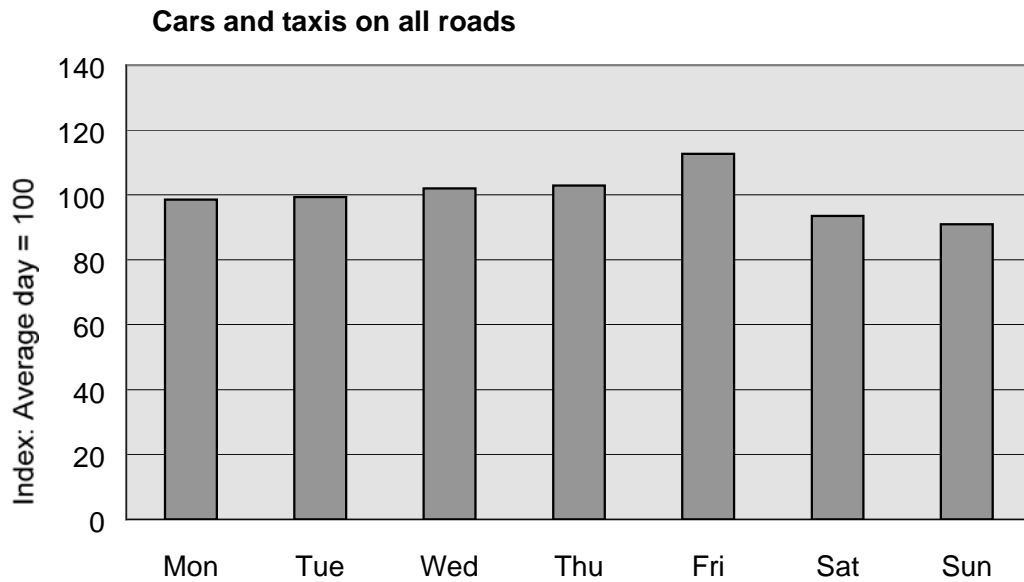
	All urban major and minor roads			All roads		
	Cars and taxis	Goods vehicles	All motor vehicles	Cars and taxis	Goods vehicles	All motor vehicles
Monday	100	116	101	99	116	101
Tuesday	104	129	106	99	130	104
Wednesday	107	130	108	102	131	107
Thursday	106	130	107	103	132	107
Friday	108	123	109	113	119	114
Saturday	96	48	93	94	43	86
Sunday	80	24	75	91	29	81

NB: Versions of this table for the years 1993 - 2002 are available for downloading from the DfT website at: <http://www.dft.gov.uk/transtat/roadtraff>

Source: National Core Census, DfT.  
☎ 020-7944 6397

### Chart 3.2

#### Average traffic distribution by day of week: 2003





## Traffic distribution by time of day 2003

- Table 3.3 shows the average hourly pattern of traffic for an average day in 2003. The results are based on continuous counting using automatic counters at a sample of sites.
- On weekdays car traffic was about 15 to 35 per cent heavier in the peak hours of the morning and afternoon than in the hours between 10 a.m. and 4 p.m.
- The pattern of car traffic throughout the day was markedly different at weekends. On Saturdays there was more traffic between 10 a.m. and 3 p.m. than at other times.
- Goods vehicle traffic during the week reached a plateau of activity between 6 a.m. and 5 p.m. tailing off as expected outside normal working hours. Compared with car traffic, goods vehicle traffic was relatively high in the early weekday morning hours. Goods traffic was much lower at the weekends.

**Table 3.3**  
Traffic distribution by time of day on all roads: 2003

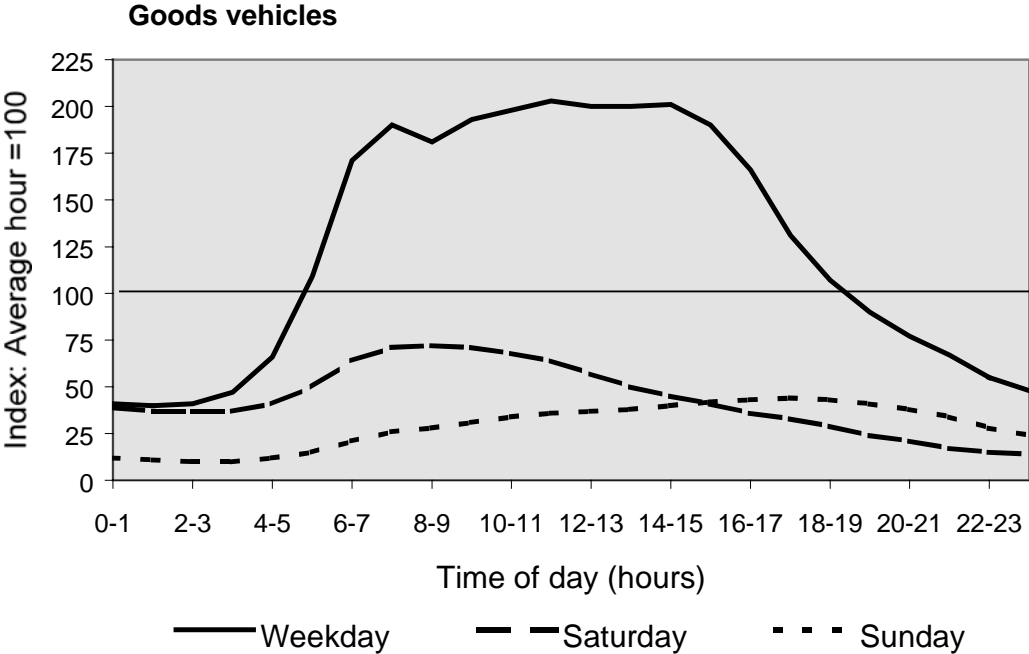
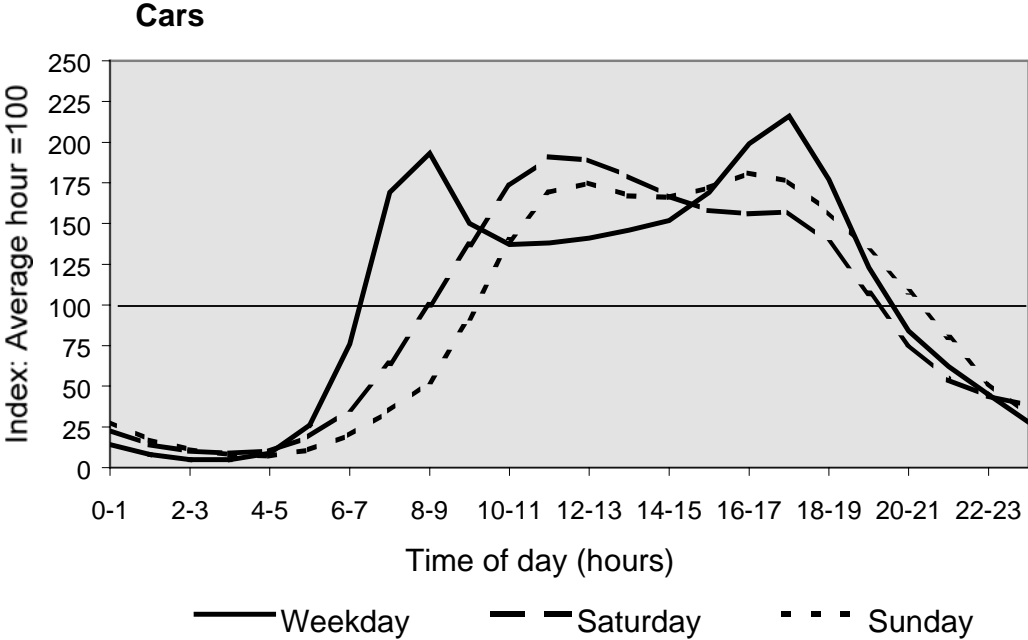
Index: Average hour in week = 100

Time of day	Cars			Goods vehicles			All vehicles		
	Week-day	Satur-day	Sun-day	Week-day	Satur-day	Sun-day	Week-day	Satur-day	Sun-day
0-1	14	23	28	41	39	12	17	25	25
1-2	8	14	17	40	37	11	12	17	16
2-3	5	10	11	41	37	10	10	14	11
3-4	5	9	8	47	37	10	10	12	8
4-5	9	10	7	66	41	12	16	14	8
5-6	26	19	11	109	50	15	37	23	12
6-7	76	36	20	171	64	21	90	41	21
7-8	169	64	35	190	71	26	174	67	34
8-9	193	100	53	181	72	28	192	97	50
9-10	150	137	92	193	71	31	158	128	83
10-11	137	173	140	198	68	34	147	157	124
11-12	138	191	169	203	64	36	149	172	149
12-13	141	189	175	200	57	37	150	169	153
13-14	146	179	167	200	50	38	155	160	147
14-15	152	167	166	201	45	40	161	149	146
15-16	169	158	172	190	41	42	174	141	152
16-17	199	156	181	166	36	43	196	139	160
17-18	216	157	176	131	33	44	203	139	156
18-19	177	138	157	107	29	43	166	122	139
19-20	123	107	133	90	24	41	117	95	118
20-21	84	76	108	77	21	38	82	67	96
21-22	62	54	80	67	17	34	61	49	72
22-23	45	44	52	55	15	28	46	40	48
23-24	28	38	32	48	14	24	30	34	30

NB: Versions of this table for the years 1993 - 2002 are available for downloading from the DfT website at: <http://www.dft.gov.uk/transtat/roadtraff>

Source: National Core Census, DfT.  
☎ 020-7944 6397

**Chart 3.3**  
**Distribution of traffic by time of day, period during**  
**the week and vehicle type: 2003**



## Section 4: Road lengths

### Road lengths by road class: 1955 - 2003

- Information about road lengths has improved because the methodology now employs a Geographic Information System, which has been used to produce better estimates back to 1993. This explains the break in the series in 1993.
- The total length of all roads in Great Britain increased by 0.2 per cent between 2002 and 2003. The length of motorways (see Chart 4.1) has increased by 8 per cent since 1993. The length of urban minor roads rose by 0.3 per cent, and rural minor roads by 0.1 since 2002.
- The total land area covered by all roads in Great Britain in 2001 is estimated to be 3,300 square kilometres.

Table 4.1a

Road length by road class: 1955 - 1993 <sup>1</sup>

Thousand kilometres												
	Major roads							Total major roads	Minor roads			All roads
	'A' roads: Non built-up			'A' roads: Built-up			Non built-up		Built-up	Total		
	Motor-way	Trunk	Principal	Total	Trunk	Principal					Total	
1955	.	..	..	..	44.9	..	..	..	..	..	257.8	302.7
1960	0.2	..	..	..	45.2	..	..	..	..	..	267.2	312.5
1965	0.6	..	..	..	45.4	..	..	..	..	..	277.6	323.6
1970	1.1	..	..	..	46.0	..	..	..	..	..	275.4	322.5
1975	2.0	..	..	32.2	..	..	14.2	48.4	..	..	281.7	330.0
1980	2.6	..	..	32.6	..	..	14.0	49.2	..	..	290.5	339.6
1985	2.8	10.6	22.4	33.0	1.7	12.4	14.1	49.9	169.7	129.1	298.8	348.7
1989	3.0	11.1	22.6	33.7	1.6	12.5	14.1	50.7	170.4	135.5	305.9	356.6
1990	3.1	11.1	22.7	33.8	1.5	12.5	14.0	50.9	170.7	136.4	307.1	358.0
1991	3.1	10.9	23.0	33.9	1.5	12.6	14.0	51.1	171.4	137.5	309.0	360.0
1992	3.1	10.9	23.0	33.9	1.4	12.6	14.0	51.0	170.6	140.6	311.2	362.3
1993	3.1	10.8	23.0	33.8	1.4	12.7	14.1	51.0	170.5	142.6	313.2	364.2

1. Prior to 1993, built-up roads are those with a speed limit of 40 mph or less (irrespective of whether there are buildings or not).

Table 4.1b

Road length by road class: 1993 - 2003

Thousand kilometres												
	Major roads							Total major roads	Minor roads			All roads
	Motor-way	'A' roads: rural			'A' roads: urban				Rural	Urban	Total	
		Trunk	Principal	Total	Trunk	Principal	Total					
1993 <sup>1</sup>	3.2	10.5	24.6	35.1	1.2	9.9	11.0	49.3	207.6	127.9	335.5	384.8
1994	3.2	10.5	24.6	35.1	1.1	9.9	11.0	49.4	207.9	128.3	336.2	385.6
1995	3.3	10.5	24.8	35.3	1.1	9.9	11.0	49.6	208.2	128.6	336.8	386.4
1996	3.3	10.6	24.6	35.2	1.1	9.9	11.0	49.5	208.5	129.0	337.5	387.0
1997	3.4	10.7	24.6	35.3	1.1	9.9	11.0	49.7	208.8	129.3	338.2	387.9
1998	3.4	10.6	24.8	35.4	1.1	9.9	11.0	49.8	209.1	129.7	338.8	388.6
1999	3.4	10.6	24.9	35.5	1.1	10.0	11.1	50.0	209.4	130.1	339.5	389.5
2000	3.5	10.6	24.9	35.5	1.1	10.0	11.1	50.1	209.7	130.4	340.2	390.2
2001	3.5	10.6 <sup>2</sup>	24.9	35.5	0.8 <sup>2</sup>	10.4	11.1	50.1	210.0	130.8	340.8	391.0
2002	3.5	9.9	25.6	35.5	0.7	10.4	11.1	50.1	210.3	131.2	341.5	391.6
2003	3.5	8.8	26.7	35.5	0.6	10.6	11.1	50.1	210.7	131.6	342.2	392.3

1. Urban roads: Major and minor roads within an urban area with a population of 10,000 or more.

These are based on the 2001 urban settlements. The definition for 'urban settlement' is in *Urban and rural area definitions: a user guide* which can be found on the ODPM web site at:

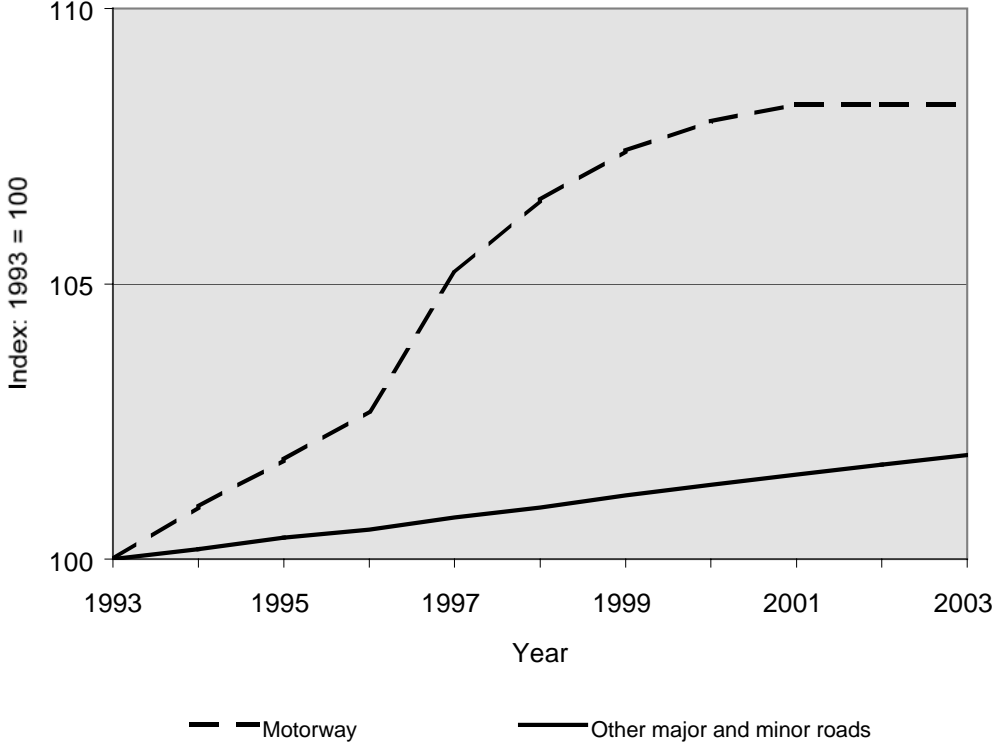
[http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_609188.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_609188.hcsp)

2. Figures for trunk and principal roads in England since 2001 are affected by the detrunking programme - see Special Note.

Source: National Roads Database, DfT.  
☎ 020-7944 3095

Chart 4.1

Growth in road lengths by road class: 1993 to 2003



## Road lengths by country and Government Office Region: 2003

- Motorways accounted for less than 1 per cent of the total road length in Great Britain in 2003. In England, the regions with the lowest proportion of motorway relative to total road length within the region, were the North East, London and Wales, all with 0.4 per cent. The highest proportion of motorway was 1.7 per cent, in the North West.
- In England and Wales major roads (excluding motorways) accounted for about 11 and 13 per cent, respectively, of total road length. However, in Scotland, major roads comprised 17 per cent of total road length.
- The proportion of urban roads ranges from 97 per cent in London to 22 per cent in the South West, Wales and Scotland.
- Scotland has the greatest length of road per head of population and London the least (see Chart 4.2).

Table 4.2  
Road lengths by country and Government Office Region: 2003

	Kilometres											
	Major roads								Minor roads			All Roads
	Motor -way	Rural - 'A' roads			Urban - 'A' roads			Total major roads	Rural	Urban	Total	
	Trunk	Principal	Total	Trunk	Principal	Total						
North East	58	360	898	1,257	45	449	494	1,809	7,492	6,832	14,323	16,132
North West <sup>1</sup>	640	500	1,822	2,322	72	1,601	1,673	4,634	13,394	18,741	32,135	36,769
Yorkshire and												
The Humber	365	410	1,815	2,225	41	1,042	1,083	3,673	15,389	12,697	28,085	31,758
East Midlands	194	622	2,517	3,139	53	641	694	4,026	18,246	8,987	27,233	31,259
West Midlands	386	515	1,907	2,422	83	1,015	1,097	3,905	16,088	12,443	28,531	32,437
East England	264	735	2,336	3,071	44	780	823	4,158	24,204	11,060	35,264	39,422
London	60	0	62	62	0	1,654	1,654	1,776	280	12,654	12,934	14,709
South East	655	633	3,134	3,767	47	1,404	1,451	5,874	22,790	18,923	41,713	47,587
South West	327	788	3,440	4,228	37	663	700	5,255	34,129	10,241	44,370	49,625
England <sup>2</sup>	2,949	4,562	17,931	22,493	420	9,248	9,668	35,110	152,011	112,577	264,589	299,698
Wales	141	1,499	2,134	3,632	48	495	543	4,317	22,085	6,730	28,815	33,133
Scotland	386	2,717	6,674	9,392	95	809	904	10,682	36,560	12,248	48,808	59,490
Great Britain	3,476	8,777	26,739	35,517	563	10,553	11,116	50,109	210,656	131,556	342,212	392,321

1. Includes Merseyside.

2. Figures for trunk and principal roads in England since 2001 are affected by the detrunking programme - see Special Note.

NB: Versions of this table for the years 1993 - 2002 are available for downloading from the DfT website at:

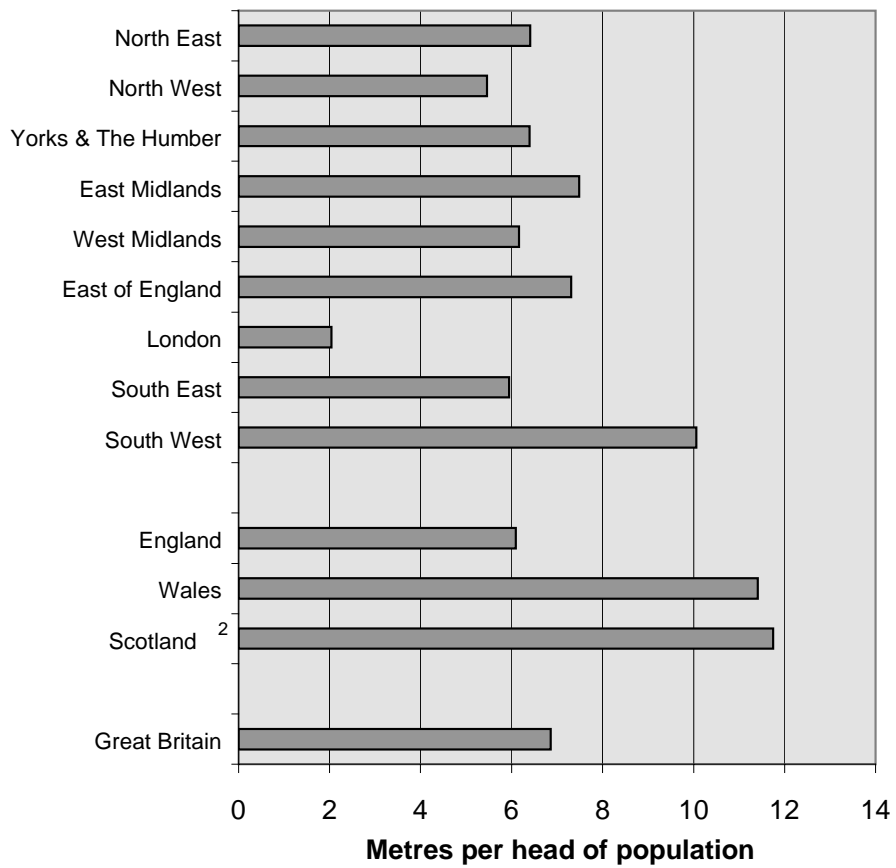
Source: National Roads Database, DfT.

020 - 7944 3095

<http://www.dft.gov.uk/transtat/roadtraff>

## Chart 4.2

### Road lengths per head of population: 2003 <sup>1</sup>



1. Population data is for mid-2001 using the ONS 2001 Census data for England and Wales.
2. 2001 population data using the Scottish Executive census data for 2001.

## Section 5: Goods vehicles

### Goods vehicle traffic by axle configuration and road class: 2003

- This section contains information on heavy goods vehicle traffic flows that are integral to the transport headline sustainable development indicator, showing the relationship between the trends in goods vehicle kilometres and the growth in GDP and thus monitors the road transport intensity of the economy. For more information, see *Focus on Freight* published by the Department for Transport in 2003.
- Rigid 2-axle goods vehicles are the most common type of lorry on British roads and accounted for 41 per cent of all goods vehicle traffic in 2003.
- The largest goods vehicles, articulated goods vehicles with 6 or more axles, accounted for 18 per cent of all goods vehicle traffic in 2003. Traffic of 5-axled articulated goods vehicles fell by 2 per cent between 2002 and 2003, whilst traffic of 6-axled articulated goods vehicles rose by 4 per cent over the same period.
- 23 per cent of rigid goods vehicle traffic, but only 3 per cent of articulated traffic, were on minor roads. For motorways, the corresponding figures were 28 per cent for rigid and 49 per cent for articulated vehicles. This reflects the different purposes for which the two vehicle types are used - rigid goods vehicles are typically for local deliveries (e.g. building materials), articulated goods vehicles primarily for long distance haulage (e.g. distribution of manufactured goods).

**Table 5.1**  
**Goods vehicle traffic by axle configuration and road class: 2003**

	Billion vehicle kilometres								
	Rigid by number of axles				Articulated by number of axles				All
	2	3	4 or more	Total	3 and 4	5	6 or more	Total	
<b>Motorways</b>	3.29	0.45	0.40	4.14	1.07	3.70	2.61	7.39	11.54
<b>Rural 'A' roads:</b>									
Trunk <sup>1</sup>	1.92	0.33	0.30	2.55	0.50	1.43	1.31	3.24	5.79
Principal	2.04	0.37	0.36	2.77	0.32	0.64	0.58	1.54	4.32
<b>All rural 'A' roads</b>	3.96	0.70	0.66	5.32	0.83	2.07	1.89	4.78	10.10
<b>Urban 'A' roads:</b>									
Trunk <sup>1</sup>	0.17	0.03	0.03	0.23	0.03	0.09	0.08	0.20	0.43
Principal	1.50	0.21	0.21	1.92	0.15	0.25	0.22	0.62	2.54
<b>All urban 'A' roads</b>	1.67	0.24	0.24	2.15	0.18	0.34	0.30	0.82	2.97
<b>All major roads <sup>2</sup></b>	8.92	1.39	1.30	11.62	2.08	6.11	4.80	12.99	24.61
<b>Minor roads</b>									
Rural	1.26	0.25	0.16	1.67	0.07	0.07	0.11	0.24	1.91
Urban	1.50	0.19	0.09	1.78	0.04	0.04	0.08	0.17	1.95
<b>All minor roads</b>	2.77	0.44	0.25	3.45	0.11	0.11	0.19	0.41	3.86
<b>All roads</b>	11.69	1.83	1.55	15.07	2.19	6.22	4.99	13.40	28.47

1. Figures for trunk and principal roads in England since 2001 are affected by the detrunking programme - see Special Note.

2. Includes motorways, urban and rural 'A' roads.

Source: National Road Traffic Survey, DfT.

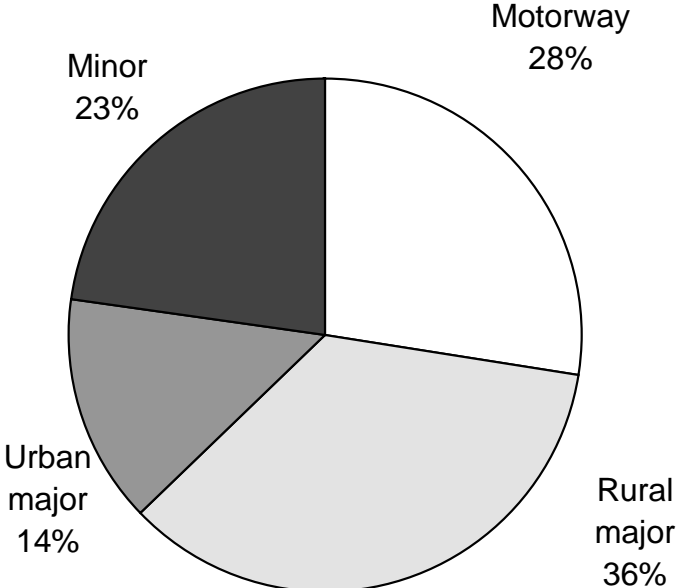
☎ 020-7944 3095

NB: Version of this table for the years 1993 - 2002 are available for downloading from the DfT website at:

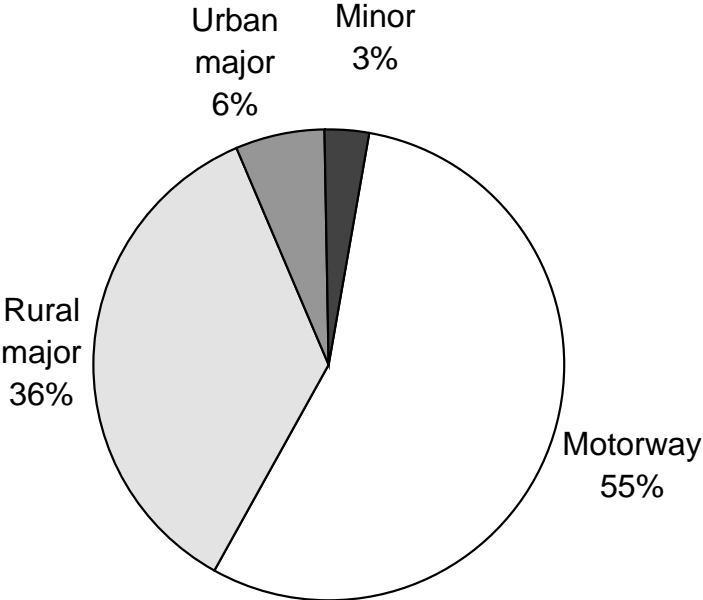
<http://www.dft.gov.uk/transtat/roadtraff>

**Chart 5.1**  
**Goods vehicle traffic by road class: 2003**

**Rigid goods vehicles**



**Articulated goods vehicles**



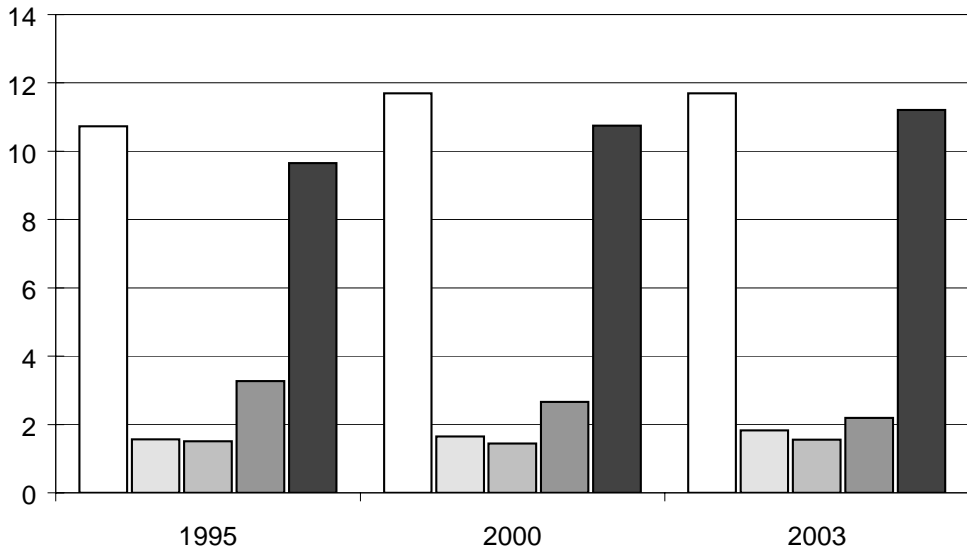
□ Motorway   □ Rural major   □ Urban major   ■ Minor



### Chart 5.2

### Goods vehicle traffic by axle configuration: 1995 to 2003

Billion vehicle kilometres



- Rigid 2 axles
- Rigid 3 axles
- Rigid 4 or more axles
- Articulated 3 and 4 axles
- Articulated 5 or more axles

## Average vehicle weights: 2003

- Although 6-axle articulated goods vehicles are 70 per cent heavier than rigid 4-axle goods vehicles on average, they are responsible for about the same amount of road-wear per vehicle. Also 5-axle articulated goods vehicles cause less road-wear than rigid 4-axle goods vehicles even though they are heavier.
- The results are based on a survey of 16 weigh-in-motion stations located on motorways and trunk roads.

**Table 5.2**

### Average vehicle weights and standard axles on motorways and trunk roads: 2003

Billion vehicle kilometres / tonnes / standard axles			
Axle Configuration	Traffic on motorways and trunk roads (billion <sup>1</sup> vehicle kms)	Average gross vehicle weight (tonnes)	Average road wear factor per vehicle (standard axles) <sup>2</sup>
<b>Rigid vehicles:</b>			
2 axles (mostly cars)	146.8 <sup>3</sup>	1.9 <sup>4</sup>	0.04 <sup>4</sup>
3 axles	0.8	16.1 <sup>5</sup>	1.50 <sup>5</sup>
4 axles	0.7	21.5	2.36
<b>Articulated vehicles:</b>			
3 and 4 axles	1.6	17.7	0.57
5 axles	5.2	23.1	1.83
6 axles	4.0	31.3	2.35

1. Figures for trunk and principal roads in England since 2001 are affected by the detrunking programme - see Special Note.

2. Ratio of the average road wear to the road wear caused by a 'standard axle' vehicle weighing 8.16 tonnes.

3. Includes cars, taxis, light goods vehicles and all buses and coaches.

4. Includes all vehicles with 2 axles.

5. Includes all vehicles with 3 axles.

Source: Weigh-in-  
Motion-Survey, DfT  
☎ 020-7944 6574

NB: Versions of this table for the years 1996 - 2002 are available for downloading from the DfT website at:

<http://www.dft.gov.uk/transtat/roadtraff>

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### South East:

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## UNITARY AUTHORITIES: Wales

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South Lanarkshire  
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Eilean Siar (formerly Western Isles)

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## Contact points for further information concerning road traffic:

The following topics are all accessible via the following web site hyperlinks:

[Road lengths](#): ☎ 020 7944 3095

[Private motoring](#): ☎ 020 7944 3097

[Traffic forecasts](#): ☎ 020 7944 6198

[Traffic speeds](#): ☎ 020 7944 6395

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[Motor vehicle licensing](#): ☎ 020 7944 3077

[Expenditure on roads](#): ☎ 020 7944 3092

[Environmental statistics](#): ☎ 020 7944 3077

## Scottish Executive

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SHS Travel Diary results	£2
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Road Accidents Scotland	£10
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(SHS = Scottish Household Survey; NTS = National Travel Survey)

*General enquires on Scottish Transport Statistics:*  
Scottish Executive Development Department, ASD  
Transport Statistics Branch, Victoria Quay,  
Edinburgh EH6 6QQ

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*Fax:* +44 (0) 131-244 0888  
*E-mail:* transtat@scotland.gov.uk  
*Internet:* www.scotland.gov.uk/transtat

*These publications are available, payment with orders, from: The Stationery Office Bookshop*  
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Central Support Unit, Statistical Directorate,  
Welsh Assembly Government, Cathays Park,  
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*Telephone:* +44 (0) 29-2082 5054  
*E-mail:* stats.pubs@wales.gov.uk  
*Internet:* www.wales.gov.uk

## Northern Ireland Transport Statistics

*Available from:*

Central Statistics and Research Branch  
Department of the Environment, Clarence Court,  
10-18 Adelaide Street, Belfast BT2 8GB

*Tel:* +44 (0) 2890540801  
*E-mail:* csrb@drdni.gov.uk  
*Internet:* http://csrb.drdni.gov.uk

## Transport Statistics Users Group

The Transport Statistics Users Group (TSUG) was set up in 1985 as a result of an initiative by the Statistics Users Council and the Chartered Institute of Transport (now known as The Institute of Logistics and Transport). From its inception it has had strong links with the Department for Transport. The aims of the Group are:

- to identify problems in the collection, provision, use and understanding of transport statistics, and to discuss solutions with the responsible authorities;
- to provide a forum for the exchange of views and information between users and providers of transport statistics;
- to encourage the proper use of statistics through publicity and education.

The Group holds regular seminars on topical subjects connected with the provision and/or use of transport statistics. Recent seminars have included:

- Transport Statistics on the internet
- Aviation Statistics
- Parking Statistics
- Transport and social exclusion
- National Travel Survey User Consultation
- Transport Information Needs of the North of England
- How did you get to the Millennium Dome?

A newsletter is sent to all members about four times a year. Corporate membership of the Group is £50, personal membership £22.50, and student membership £10. For further details please contact:

Mr Fred Hitchins  
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Field House, 72 Oldfield Road  
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*☎ 020 8481-8832*  
*Fax: 020 8783-3691*  
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*Web: www.irn-research.com/tsug.html*

or

Mr Peter Norgate  
Chairman TSUG  
Mott MacDonald, Transportation & Planning  
St Anne House, 20-26 Wellesley Road  
Croydon CR9 2RL

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*Fax: 020 8681-5706*  
*Email: pjn@mm-croy.mottmac.com*

The TSUG has contributed to the production of the *Transport Year Book 2001*. This contains information on sources from Governmental and non-governmental organisations, including some European sources. One copy is supplied free to TSUG members. Non-members can purchase a copy from The Stationery Office (TSO) for £40.

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