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Compendium of Motorcycling Statistics 2006

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

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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

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INTRODUCTION

This Compendium is designed to be a comprehensive source of statistics on motorcycles and motorcycling in Great Britain, and updates the first edition published in October 2004. Similar data were previously available, but not brought together in one publication.

By drawing together different sources of information, we hope to provide a standard reference work for those with an interest in motorcycling. The Compendium comprises four parts. First we consider motorcyclists; second we look at the machines that they own; third, we consider the journeys that are made and finally, the safety of riders. For convenience, the term 'motorcycle' is used throughout as a general term to refer to any two-wheeled motor vehicle, except where the context distinguishes between motorcycles, scooters etc.

A variety of data sources have been used for this compendium. Many of the sources are within Government, but we have also included information from other reliable sources in order to give a more complete picture. Statistics in the Compendium are National Statistics unless indicated otherwise on individual tables or charts. The 'Notes' section at the back provides important additional information about some of the data sources in order to avoid having to include numerous footnotes to every table.

This publication appears on the Department for Transport's web site. It is hoped that this web version will be maintained so that, when feasible, there will be both the routine updating of existing tables or charts, and the addition of new topics if a relevant new source of data becomes available. Suggestions for new material are welcome.

Comments, suggestions and enquiries regarding this publication are welcome and can be made by e-mail to national.travelsurvey@dft.gov.uk or by telephone to 020 7944 3097.

Department for Transport Statistics divisions	(DfT)
Motor Cycle Industry Association	(MCIA)
Motorcycle Action Group (UK)	(MAG(UK))
British Motorcyclists Federation	(BMF)

Sources of further information

Each of the organisations involved in the compilation of this report have websites that can provide further information and useful contacts. These are as follows:

Department for Transport:
Departmental site is www.dft.gov.uk
Transport statistics are available by following the links from there.

Motor Cycle Industry Association:
www.mcia.co.uk

Motorcycle Action Group (UK)
www.mag-uk.org

British Motorcyclists Federation
www.bmf.co.uk

KEY FINDINGS

Motorcyclists

- 2.3% of households in Great Britain owned a motorcycle in 2004, with ownership being more common among households that also owned one or more cars.

- The number of people taking the motorcycling test fell to 78,000 in 2004/05, the second lowest level in the last seven years.

- The motorcycling test pass rate has been gradually falling since the mid-1990s and now stands at 64%. The pass rate for men is higher than for women. The pass rates for both men and women are higher than the car driving test pass rates.

Motorcycles

- There are about 1.62 million motorcycles in Great Britain, including motorcycles in other tax classes, those only licensed in summer, and those evading tax.

- The motorcycle ownership rate in 2004 was highest in the South West and lowest in Scotland. The ownership rate in Great Britain in 2004 was lower than in any main European Union country at that time, except Ireland.

- 136 thousand motorcycles were registered for the first time in 2004, fewer than in the six previous years. Scooters and sports motorcycles are the most popular types of new motorcycles.

- In 2003, a motorcycle had an average of 2.04 keepers prior to the current owner.

- In 2003, 37 of every 1,000 licensed motorcycles were stolen. Mopeds and small motorcycles were much more likely to be stolen than larger motorcycles.

- 801 thousand motorcycles went through the MOT test in 2004/05. This represents a large increase on previous years, as more mopeds and small motorcycles are being tested.

- The MOT pass rate for motorcycles had been steadily increasing over the last few years, but fell back to 79% in 2004/05. Faulty lights remain the most common cause of MOT failure.

Journeys made by motorcycle

- Motorcycle traffic has increased by an estimated 37% between 1994 and 2004. Motorcycles travelled around 5.2 billion vehicle kilometres in 2004.

- Motorcycle traffic is generally highest in the summer months and lowest in winter, although peaked in May in 2004. Motorcyclists make most journeys during the week. Large motorcycles travel further on average than smaller vehicles.

- Motorcyclists made fewer trips a week on average in 2004 than they did in 1985-1986. However, the distance travelled and the time spent travelling on those trips has increased over the same period.

- The average speed of motorcycles is similar to that of cars on all types of road. Motorcycle speeding is most common on motorways and dual carriageways.

Motorcycling safety

- Motorcyclists are at a much greater risk of death or serious injury than other road users. The relative risk of a motorcycle rider being killed or seriously injured per kilometre travelled was 46 times higher in 2004 than for car drivers.

- The overall casualty rate for motorcycles has improved; the rate for those killed or seriously injured (KSI) was 26% lower in 2004 than it was in 1994.

- The number of motorcycle riders killed or seriously injured in 2004 was 4% higher than the average for the baseline figure for 1994-98. The biggest increases took place amongst those aged below 20 or between 35 and 69.

- Over half of motorcyclist casualties occurred on A-roads. Most casualties occurred at weekends, between the hours of midday and 6pm, and mainly in the summer months of May to September.

- 1.6% of motorcyclists taking a breathalyser test in 2003 failed, compared to 2.0% of road users as a whole.

CHAPTER 1 - MOTORCYCLISTS

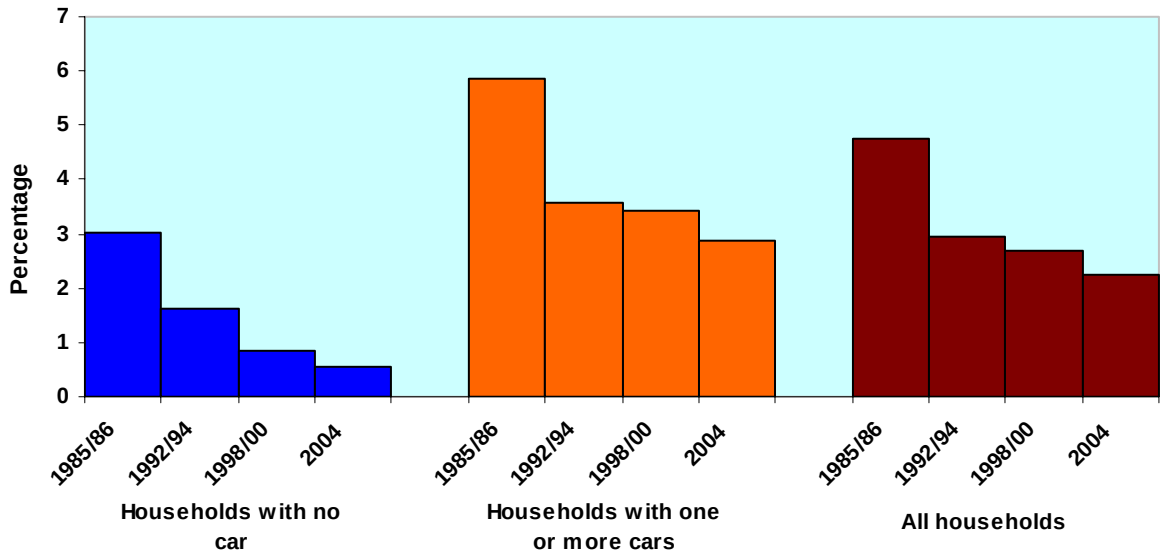
Motorcycle ownership

This section looks at the people who own or use motorcycles. It looks at the number of people taking and completing motorcycle training, levels of motorcycle ownership, what people spend on their vehicles and membership of motorcycling organisations.

The National Travel Survey (NTS) provides information on ownership of motorcycles and how this varies across the different regions of Great Britain. **Chart 1.1** shows the percentage of households in Britain with at least one motorcycle. This fell sharply between 1985/86 and 1992/94, and has continued to fall although more gradually since then.

Motorcycles are more common in households that also own at least one car. In 2004, more than five times as many households that owned cars also owned motorcycles compared to households without cars. In the mid-1980s, a household with one or more cars was around twice as likely as a household with no car to also own a motorcycle.

Chart 1.1: Motorcycle ownership: households with at least one motorcycle, Great Britain, 1985/86 - 2004



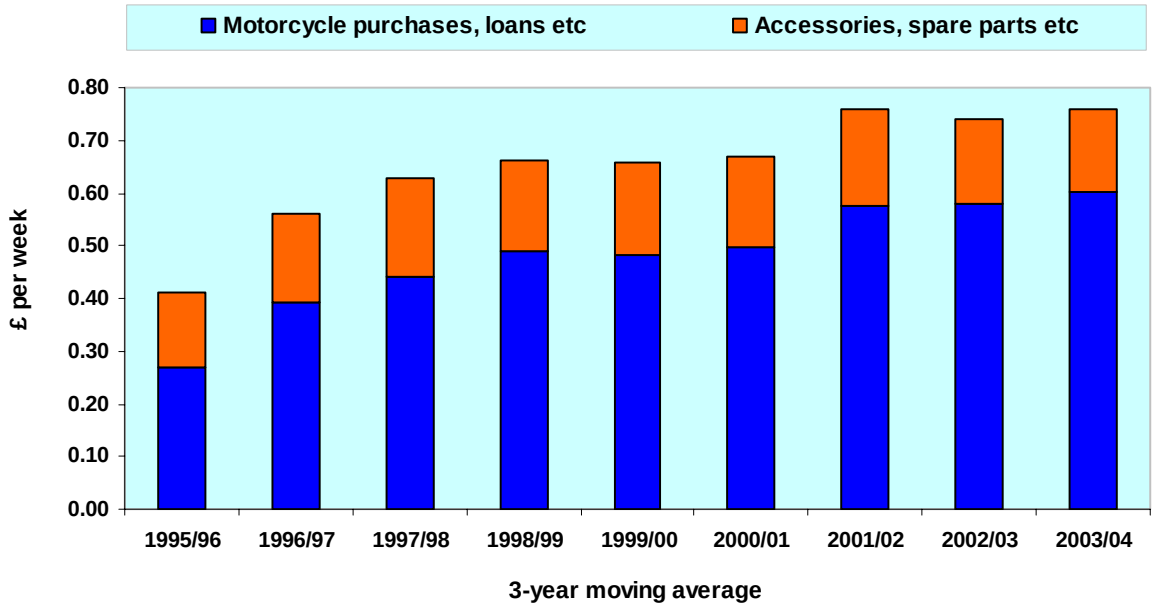
Source: National Travel Survey, DfT

Average expenditure (in current prices) per household on motorcycling has risen since 1995/96. In **Chart 1.2** the series has been shown as a 3-year moving average to eliminate erratic movements which are created annually due to the source of the data - a household survey which will pick up relatively few households with motorcycles, meaning that some of the figures used are subject to large levels of error. Average spending figures are based on the whole population - they include households that spend nothing on motorcycling.

The spending can be split into average expenditure on purchase of motorcycles and expenditure on maintenance, spare parts and accessories. Over recent years this

has been split about 3:1, although, of course, spending on purchase covers occasional large expense as opposed to more regular ongoing expenditure in the case of maintenance. Owners of motorcycles will also spend money on Vehicle Excise Duty, insurance and so on, but this cannot be distinguished as being spent on motorcycles, as opposed to other motor vehicles.

Chart 1.2: Motorcycle ownership: Average weekly spending on motorcycling, United Kingdom, 1995/96 - 2003/04



Source: The Expenditure and Food Survey, Office for National Statistics

Motorcyclists

Table 1.3 looks at the age profile of those sampled in the NTS who made at least one trip as a motorcycle rider in the survey week. Over half of motorcyclists are aged between 30 and 49. Those aged 16-19 make up 10% of all motorcyclists, despite representing an age group that spans only four single years of age.

Table 1.3: Motorcyclists: age profile, Great Britain, 2002-2004 average

	Percentage
Age group	
16-19	*10*
20-29	*10*
30-39	*27*
40-49	*25*
50-59	*17*
60+	*10*
All aged 16+	*100*

Source: National Travel Survey, DfT

Ownership rates per thousand population are shown in **Table 1.4**, together with corresponding information from MAG(UK) and BMF on membership of their organisations. Highest motorcycle ownership rates in 2002-2004 were in the South West and the East of England, and lowest in Scotland. Membership of the motorcycling organisations (in 2002) on the other hand was highest (relative to population) in the Midlands and the South East.

Table 1.4: Motorcyclists: Motorcycle ownership and membership of motorcyclist organisations by region

Rate per 1,000 population

Region	Ownership rate per 1,000 population 2002-2004	Members of MAG(UK) and BMF per 1,000 population 2002
Scotland	7.3	2.3
North East, Yorkshire & Humber	12.1	3.1
North West	9.6	1.3
West & East Midlands	14.1	4.7
East of England	17.9	3.0
London	8.8	3.0
South East	17.0	4.0
South West	17.8	2.8
Wales	10.8	1.2

The figures in this table are outside the scope of National Statistics
Sources: MAG(UK), BMF, ONS, National Travel Survey (DfT)

Motorcycle training

Table 1.5 shows the numbers passing their Compulsory Basic Training (CBT), which was brought in as a requirement for learners in late 1990. The collection of these data were discontinued after 2000. Numbers increased throughout the early 90s, peaking in 1996, before rising again after 1998. This peak in 1996 was caused by a rush to take tests before additional requirements were introduced. Previously anyone passing a test could ride any motorcycle, but from 1997, anyone under 21 was restricted to a motorcycle with a maximum power of 33 Brake Horse Power. Since then, older riders wanting to ride straight away on more powerful motorcycles have to take the test on more powerful bikes.

Table 1.5: Motorcycle training: number of people undergoing training, Great Britain, 1991-2000

Thousands/percentage

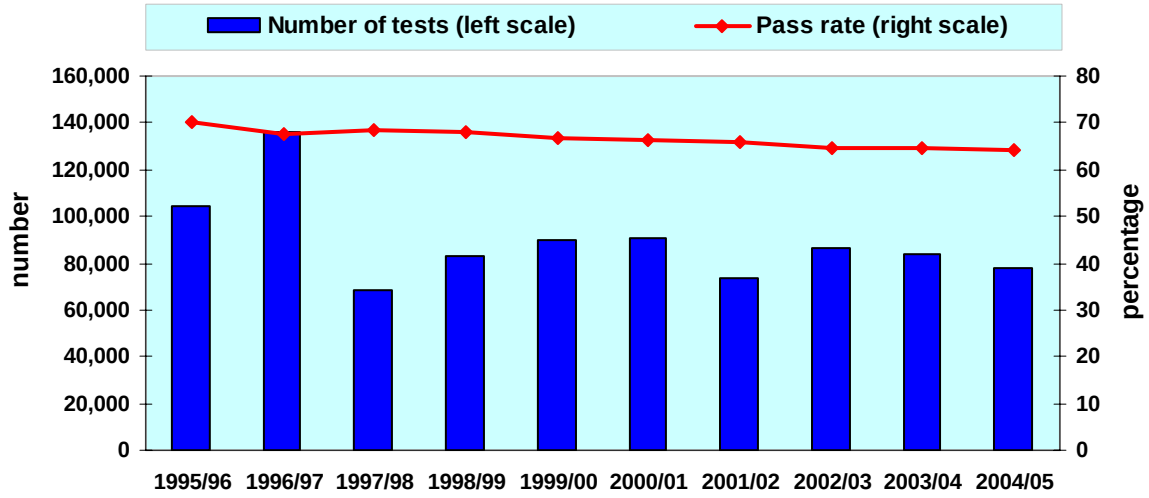
Age	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
16	20	17	16	16	17	14	15	16	18	20
17-24	31	31	31	30	31	29	22	25	28	30
25+	32	37	43	50	61	76	67	59	64	69
Total	84	85	89	96	109	120	104	100	110	119
Percentage male	*85*	*86*	*85*	*86*	*85*	*84*	*82*	*85*	*83*	*83*

The figures in this table are outside the scope of National Statistics
Source: Driving Standards Agency

As would be expected, the trends in numbers undergoing training are reflected in the numbers taking motorcycling tests. **Chart 1.6** shows more clearly the blip in the series in 1996/97.

Over the same period, pass rates in the practical test have remained reasonably steady, falling slightly in later years and also, as would be expected, dipping in 1996/97 as many riders took tests earlier than they would otherwise have done.

Chart 1.6: Motorcycle training: Number of tests and pass rate, 1995/96 - 2004/05



The data used to create this chart are outside the scope of National Statistics
Source: Driving Standards Agency

Table 1.7 shows that the pass rate in 2004/05 was highest for motorcycle riders aged under 35. Over 35, the pass rate declines for both men and women apart from a blip for females aged 56-60, where the number of people taking the test is small enough to cause large fluctuations in the pass rate. The pass rate is higher for motorcycling than for car driving tests, and the pass rate for males is higher than for females.

Table 1.7: Motorcycle training: practical test pass rates, 2004/05

Percentage

Age	Female	Male	All
<21	*58*	*65*	*62*
21-25	*57*	*69*	*64*
26-30	*56*	*70*	*63*
31-35	*55*	*70*	*62*
36-40	*52*	*68*	*59*
41-45	*47*	*63*	*54*
46-50	*46*	*54*	*50*
51-55	*44*	*54*	*49*
56-60	*51*	*50*	*51*
60+	*27*	*46*	*38*
All	*53*	*66*	*64*

The figures in this table are outside the scope of National Statistics
Source: Driving Standards Agency

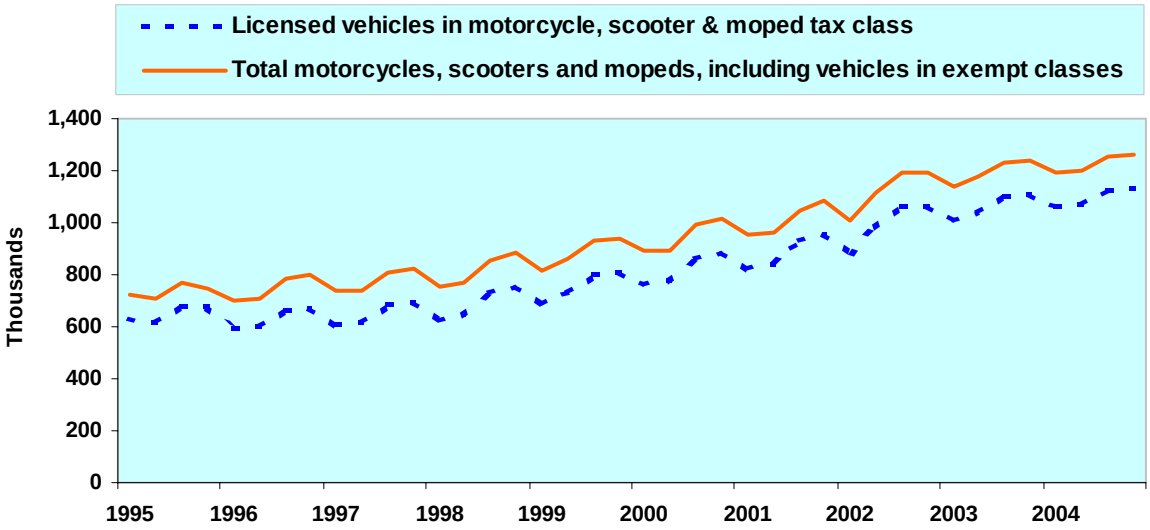
CHAPTER 2 - MOTORCYCLES

Motorcycle stock

This section looks at the machines themselves, the breakdown of licensed stock, and how this has changed over time. It also presents information on the likelihood of theft and MOT failures.

Information about the number of motorcycles in use is available from the DVLA database of licensed vehicles. Most two wheeled motor vehicles fall into the "Motorcycles, scooters and mopeds" tax class. Some, however, fall into other, exempt classes, either because they do not need a licence, or because a licence is needed but there is no charge for it. Exempt classes include Classic motorcycles (those first registered before 1973), and emergency or crown vehicles. Therefore, the total number of vehicles with the 'body type' motorcycle, scooter or moped is greater than the licensed stock in that tax class.

Chart 2.1: Motorcycle stock: Great Britain, quarterly 1995 - 2004



Source: DVLA / DfT

Chart 2.1 shows the difference between the two definitions. The dotted line represents the licensed stock in the motorcycle, scooter & moped tax class. The solid line also includes other vehicles of the same body type in exempt tax classes. The chart shows how motorcycle stock is seasonal, with stock figures dipping due to the numbers of 6 month licences that are held by those not wishing to venture out in the winter, and those with 12 month licences who request partial refunds of taxation over the winter. Over sixty thousand motorcycles are licensed in the summer months but not over winter. Also immediately clear is the increase in licensed motorcycles, with numbers rising by about 45 per cent in the last 5 years.

For the rest of this chapter, stock figures presented are for the licensed stock in the motorcycle, scooter & moped tax class, and are for the end of each year.

Table 2.2: Motorcycle stock: licensed stock by engine size, Great Britain, 1994-2004 (end year)

Thousands

Engine size, cc	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Less than 50	139	123	116	107	113	128	151	165	166	170	172
51 - 150	202	186	179	160	160	165	177	190	195	201	209
151 - 500	179	177	192	192	195	196	193	189	198	203	205
501 - 700	75	82	98	114	134	158	174	187	210	232	245
701 - 1,000	94	100	111	127	149	167	176	186	197	212	231
Over 1,000	31	35	42	53	63	75	82	92	104	116	130
Total	721	702	739	752	814	889	954	1,010	1,070	1,135	1,191
Average fleet age (years)	9.3	9.4	9.7	9.3	8.8	8.2	7.8	7.6	7.6	7.7	7.9

Note - total includes a small number of vehicles with unknown engine size
Source: DVLA / DfT

Table 2.2 shows how the composition of licensed stock has changed since 1994. Note that this is based on end-year licensed stock and therefore excludes those motorcycles being used unlicensed (see Chart 2.4) and those vehicles being used only in the summer months. Total stock had been falling until 1995 before rising again by the end of 2004 to levels last seen in the mid-1980s. The most noticeable change over time is the large increase in numbers of motorcycles with engine sizes above 500cc. In the last ten years as stock has increased, the average age of licensed stock had decreased (as numbers of new registrations increased (see table 2.7)), although this has now risen slightly again in the last two years.

Table 2.3: Motorcycle stock: by Government Office region, 1994 – 2004

Thousands

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Rate per 1,000 population (2004)
North East	17	17	18	19	22	25	29	31	33	36	39	15.4
North West	65	62	66	68	75	83	91	95	100	107	112	16.4
Yorks & Humb	58	57	59	60	64	71	78	83	90	96	100	20.0
East Midlands	60	59	61	62	67	74	81	86	93	99	104	24.4
West Midlands	61	60	63	64	69	73	79	85	92	98	101	19.1
East of England	88	87	90	92	99	106	113	118	124	130	136	24.9
London	67	67	74	80	89	98	106	110	110	114	115	15.6
South West	96	92	95	96	103	110	117	124	129	137	145	28.9
South East	124	121	127	130	141	153	163	173	182	192	200	24.8
All England	636	620	652	671	728	793	856	905	955	1,008	1,052	21.1
Scotland	29	29	31	33	36	41	45	47	52	56	60	11.8
Wales	26	25	27	28	30	33	35	38	41	45	49	16.6
Region Unknown	30	28	29	21	19	22	17	20	22	25	31	
Great Britain	721	702	739	752	814	889	954	1,010	1,070	1,135	1,191	20.6

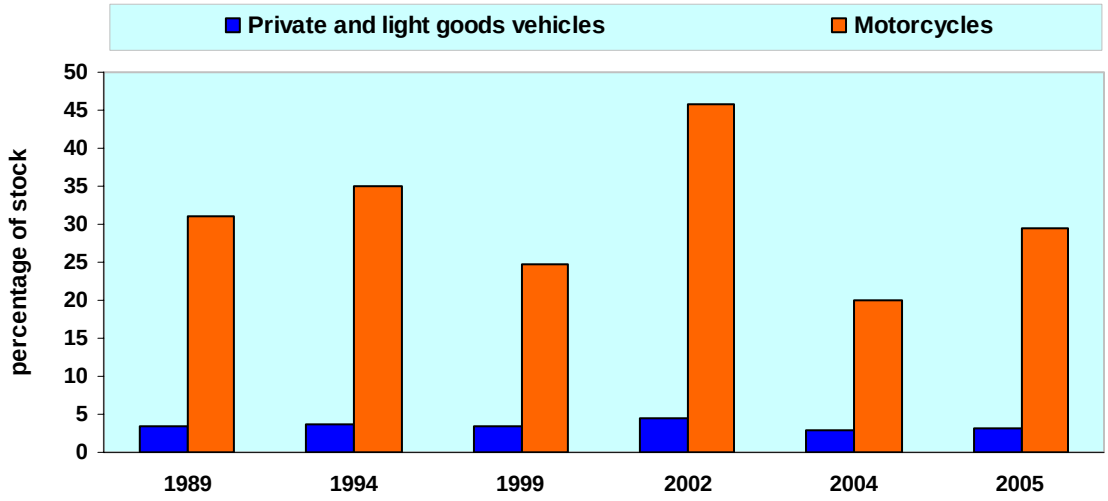
Source: DVLA / DfT

There are more motorcycles in the South East than in any other region, as shown in **Table 2.3**. However, since 1994 numbers have increased in all English regions and also in Scotland and Wales. Proportionally, the largest increase has been in the North East, with numbers more than doubling over this period.

Relative to the size of population, more motorcycles are registered to keepers in the South West than in any other region. Scotland has the lowest rate, and rates are also low in Wales, the North East and North West, possibly reflecting less suitable environments for motorcycling. Rates are also low in London, possibly reflecting the high availability of public transport

There is an additional consideration in estimating the total numbers of vehicles on the road, which is especially relevant in the case of motorcycles. Chart 2.4 shows levels of Vehicle Excise Duty evasion - the proportion of vehicles in use without tax. Evasion levels are much higher for motorcycles than for the standard Private and Light Goods (PLG) category. Due to changes in methodology, and relatively large sampling errors, 2002 data should be treated with caution. For an explanation of the Surveys and methodology please see the link in the Notes section.

Chart 2.4: Estimated Vehicle Excise Duty evasion, Great Britain, 1989 - 2005



Source: Evasion Surveys, DfT

By combining the results of the above, it is possible to come up with a reasonable estimate of the number of active motorcycles in Great Britain. At the end of 2004, there were some 1.19 million licensed vehicles in the motorcycle, scooter & moped tax class. If the level of evasion in 2004 was as found in the survey - 20 per cent - this suggests that an additional 238 thousand vehicles were using the roads without a licence. Around a further 132 thousand vehicles were in exempt tax classes, making a total of about 1.56 million. On top of this, around 60 thousand vehicles are licensed in summer, taking the summer total up to around 1.62 million.

Table 2.5 shows how the number of motorcycles varies across different countries. In 2004, there were more motorcycles (including mopeds, scooters etc) in Italy than in any other main European Union country, followed by Germany, France and Spain. Italy had more motorcycles than the USA. Between 1995 and 2004, Denmark, Portugal and the United Kingdom showed the highest percentage increases in the total number of motorcycles owned, but had relatively small numbers compared to the countries mentioned above. The United Kingdom and Irish Republic, have lower rates of motorcycle ownership than any of the main EEC countries.

Table 2.5: Motorcycle stock in different countries, 1995 and 2004

Thousands/rate

	1995	2004	Stock per 1,000 people (2004)
Great Britain	594.0	1,060	18.3
Northern Ireland	13.0 [2]	25	14.4
United Kingdom	607.0	1,085	18.2
Austria	546	612	74.6
Belgium	212 [2]	323	30.9
Denmark	58	162	30.0
Finland	159	272	51.9
France	2,289	2,462	40.7
Germany	4,184	5,530	67.0
Greece	..	970 [3]	87.6
Irish Republic	24	35	8.5
Italy	6,228	8,962 [3]	153.3
Luxembourg	28	37	81.1
Netherlands [1]	308	537	32.9
Portugal [1]	216	419	39.8
Spain [1]	1,301	1,612	37.5
Sweden	264	403	44.8
Cyprus	50	41	55.3
Czech Republic	915	757	74.0
Estonia	3	9	6.8
Hungary	157	114	11.3
Latvia	16	24	10.4
Lithuania	20	23	6.7
Malta	17	13	32.0
Poland	929	836	21.9
Slovak Republic	82	52	9.7
Slovenia	..	40	20.2
Norway	159	249	53.9
Switzerland [1]	371	583	78.6
Japan	15,587	..	..
USA	3,897	5,781	19.7

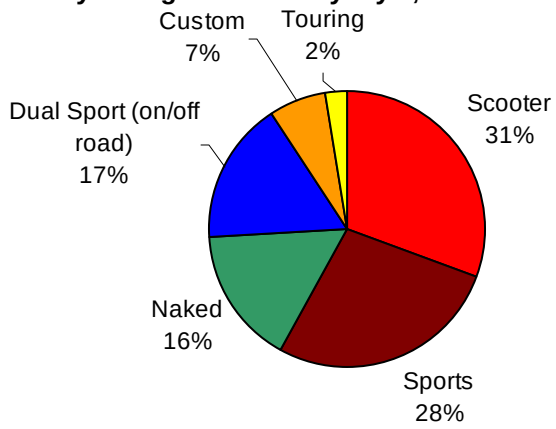
1. Excludes mopeds
2. 1996 data
3. 2003 data

The figures in this table are outside the scope of National Statistics
Source: Eurostat

New motorcycle registrations

New registrations are also of interest when building up a picture of motorcycle stocks. Chart 2.6 shows which types of motorcycles were most common amongst new registrations in 2005. This shows that Scooter style mopeds and motorcycles were very popular, accounting for over 30 per cent of registrations. Sports motorcycles also made up a large proportion of new registrations.

Chart 2.6: New motorcycle registrations: by style, United Kingdom, 2005



The data used to create this chart are outside the scope of National Statistics
Source: Motorcycle Industry Association

Table 2.7 shows the numbers of new registrations since 1994 as well as estimated numbers of motorcycles that are scrapped each year. Since 1996, new registrations have exceeded estimated scrappage, leading to the increases in stock shown earlier in Table 2.1. About 44 per cent of new registrations are for machines up to 150cc, and another 47 per cent over 500cc.

Table 2.7: New motorcycle registrations: by engine size, Great Britain, 1994 - 2004

Thousands

Engine size, cc	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
less than 50	7	7	9	13	23	36	50	46	36	35	24
51 - 150	11	11	14	13	19	29	40	44	40	39	35
151 - 500	13	14	19	23	22	19	18	16	17	17	13
501 - 700	12	15	19	30	34	37	33	31	28	28	21
701 - 1,000	16	17	21	30	36	33	30	27	27	26	23
over 1,000	7	7	11	16	16	17	16	17	19	17	19
Total	65	70	93	126	149	172	187	182	168	161	136
Estimated scrappage	88	89	57	112	88	97	122	125	108	96	79

Note - total includes those vehicles whose engine size is unknown
Source: DVLA / DfT

Of new vehicles, the most popular makes are shown in **Table 2.8**. Nine of the most popular ten models are either scooters or supersports, reflecting the pattern seen in Chart 2.6.

Table 2.8: New motorcycle registrations: Top 10 models, United Kingdom, 2005

	Manufacturer	Description	Type	Engine size (cc)
1	Honda	CBR 125 R	Supersport	124
2	Suzuki	GSXR 1000	Supersport	988
3	Kawasaki	ZX6R	Supersport	636
4	Honda	CBR 1000 RR	Supersport	998
5	BMW	R 1200 GS	Dual Sport	1170
6	Yamaha	YZF R1	Supersport	998
7	Honda	SCV 100 Lead	Scooter	102
8	Piaggio	NRG	Scooter	49
9	Honda	CBR 600 RR	Supersport	599
10	Yamaha	YZF R6	Supersport	599

The figures in this table are outside the scope of National Statistics
Source: Motorcycle Industry Association

By analysing the DVLA database, it is possible to look at the licensing histories of keepers and the number of keepers that a motorcycle has had. **Table 2.9** shows that, in general, older vehicles not surprisingly tend to have had more previous keepers. However, this is not true for motorcycles first registered before 1979 (which include 'classic' motorcycles), which tend to have had fewer previous keepers than those registered in the 1980s.

Table 2.9: Number of motorcycle previous keepers by year of registration, Great Britain, 2004

Percentage/thousands

	Number of previous keepers							
Year of first registration	0	1	2	3	4 - 5	6 - 10	More than 10	Total ('000s)
pre 1979	*46*	*17*	*10*	*7*	*10*	*9*	*2*	102
1979 - 1984	*19*	*11*	*10*	*9*	*17*	*27*	*8*	53
1985 - 1990	*10*	*10*	*11*	*12*	*22*	*30*	*5*	70
1991 - 1996	*9*	*15*	*17*	*17*	*25*	*16*	*1*	147
1997 - 1999	*17*	*24*	*23*	*17*	*15*	*3*	*0*	228
2000	*24*	*31*	*24*	*13*	*7*	*1*	*0*	103
2001	*32*	*35*	*21*	*9*	*4*	*0*	*0*	111
2002	*43*	*36*	*15*	*4*	*1*	*0*	*0*	118
2003	*56*	*33*	*8*	*2*	*0*	*0*	-	128
2004	*81*	*17*	*1*	*0*	*0*	-	-	132
Total	*34*	*24*	*15*	*10*	*10*	*6*	*1*	1,191

Source: DVLA / DfT

Motorcycle theft

Motorcycles are subject to greater levels of theft than cars. There may be a number of reasons for this. Perhaps the most important reason is that, on average, they are easier to steal. A study initiated by the Home Office examined how the risk of theft varies according to type of motorcycle, as shown in **Table 2.10**.

The risk of theft is much higher for mopeds and small-engined bikes than for larger-engined bikes. In 2003, 37 motorcycles were stolen for every thousand licensed.

Table 2.10: Motorcycle theft: number and rate, Great Britain, 2003

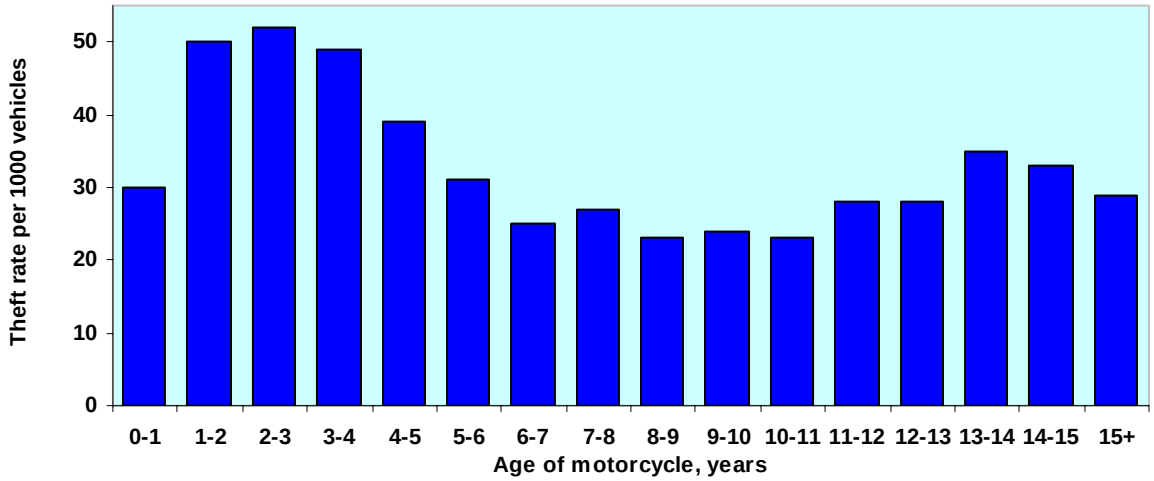
Number/rate

Type of motorcycle	Number stolen	Theft rate per 1,000 registered
Moped	12,499	89
Scooter	13,502	81
Motorcycles:		
Under 101cc	4,328	82
101-125cc	8,097	70
126-200cc	307	20
201-250cc	1,241	26
251-300cc	37	17
301-350cc	238	12
351-400cc	1,064	27
401-450cc	91	14
451-500cc	738	12
501-550cc	89	7
551-600cc	3,510	19
601-650cc	599	10
651-700cc	127	12
701-750cc	998	12
751-900cc	515	7
901-1,050cc	1,665	13
Over 1,050cc	1,122	8
All motorcycles	20,438	19
All motorcycles, mopeds and scooters	50,766	37

Source: Home Office

Inevitably the risk varies depending on other characteristics too. The risk of theft is greatest for motorcycles aged between 1 and 4 years as shown in **Chart 2.11**. Previously (in 2000) very old bikes were the least likely to be stolen (possibly due to the fact that classic bikes are more likely to be stored off-road), but now they are as likely to be stolen as other motorcycles aged 6 years and upwards.

Chart 2.11: Motorcycle theft: rate by vehicle age, Great Britain, 2003

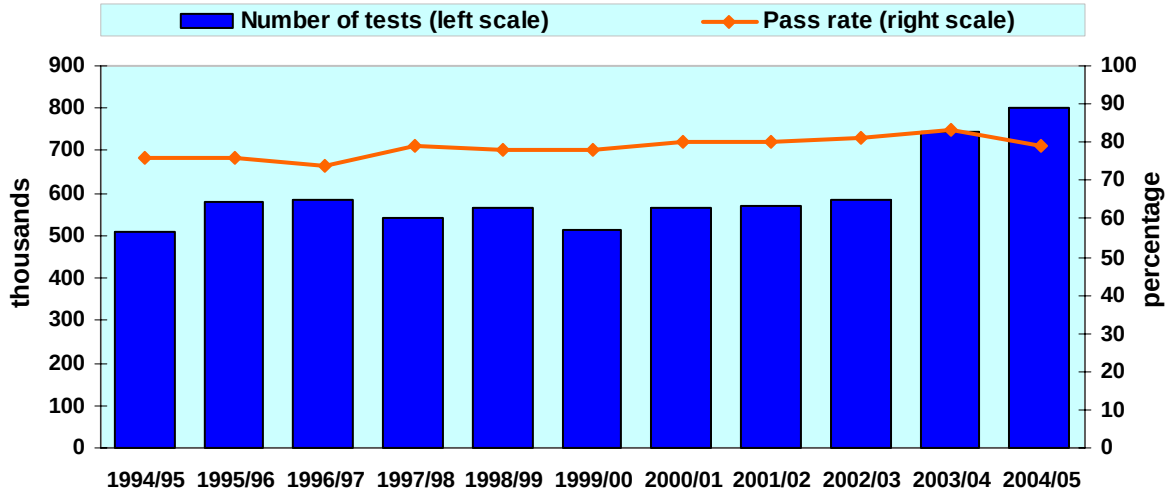


Source: Home Office

Motorcycle MOT tests

All motorcycles that are more than three years old require an annual MOT test. **Chart 2.12** shows the number of tests and the pass rate over the last ten years. The number of annual tests has fluctuated from year to year between 500 and 600 thousand tests up to 2002/03. The large increase since 2003/04 (to 800 thousand tests in 2004/05) reflects an increase in the number of vehicles with small engine capacities being tested. Over this same period, the pass rate has been increasing, from 76% in 1994/95 to 83% 2003/04, although dropped in 2004/05 to 79%.

Chart 2.12: Motorcycle MOT tests: number and pass rate, Great Britain, 1994/95 - 2004/05



The data used to create this chart are outside the scope of National Statistics
Source: VOSA

There are various reasons why a motorcycle might fail an MOT test, and the most common reasons for failure are given in **Table 2.13**. Faults with the lights have consistently been the most common reason for failure, although it is possible for vehicles to have more than one problem if they fail. All individual types of faults are less common than they were in 1995/96, which means that, since pass rates have been broadly stable, fewer motorcycles are failing with more than one fault.

Table 2.13: Motorcycle MOT tests: common causes of failure, 1995/96 - 2004/05

Percentage

	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Brakes	*8.9*	*9.3*	*7.9*	*7.4*	*8.6*	*6.5*	*6.1*	*5.7*	*5.7*	*7.1*
Steering	*10.4*	*10.1*	*8.3*	*8.9*	*9.2*	*7.9*	*6.6*	*6.7*	*6.7*	*7.4*
Lights	*12.3*	*12.6*	*10.7*	*11.4*	*11.6*	*10.1*	*9.8*	*9.5*	*9.1*	*9.5*
Tyres	*6.4*	*6.7*	*5.2*	*5.5*	*6.2*	*4.9*	*4.4*	*4.4*	*4.0*	*4.3*
Other	*10.0*	*10.3*	*7.5*	*7.2*	*5.9*	*6.4*	*6.2*	*5.8*	*5.4*	*6.2*

The figures in this table are outside the scope of National Statistics
Source: VOSA

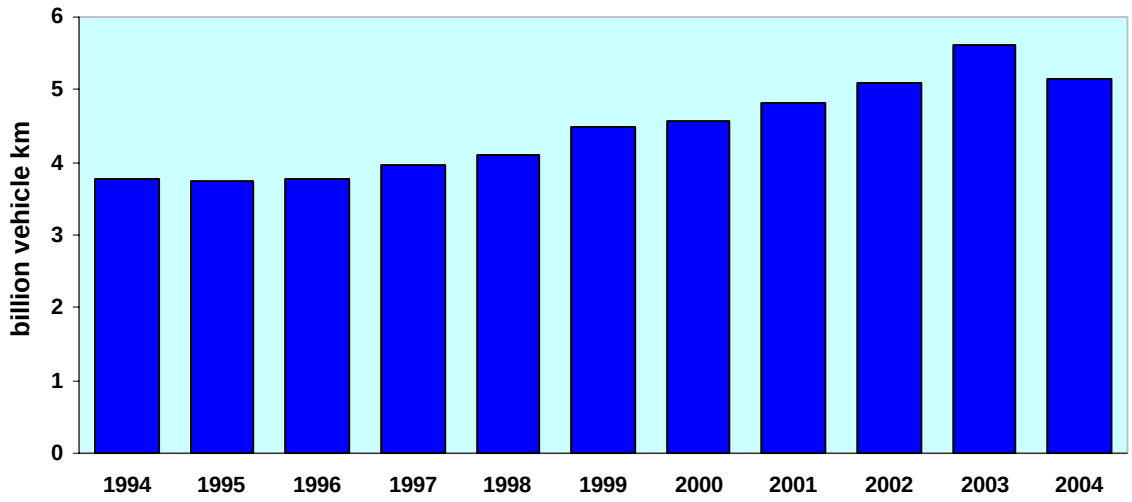
CHAPTER 3 - JOURNEYS MADE

While the previous chapters have considered motorcyclists and their vehicles, this chapter looks at the number, purpose and characteristics of journeys made.

Motorcycle traffic

Chart 3.1 shows the estimated volume of motorcycle traffic between 1994 and 2004. Over this time, motorcycle traffic rose by 37 per cent, with most of the increase occurring in the last six years. Motorcycles travelled around 5.2 billion vehicle kilometres in 2004, although this was down from 5.6 billion kilometres in 2003, when average temperatures were above average and rainfall below average in most months.

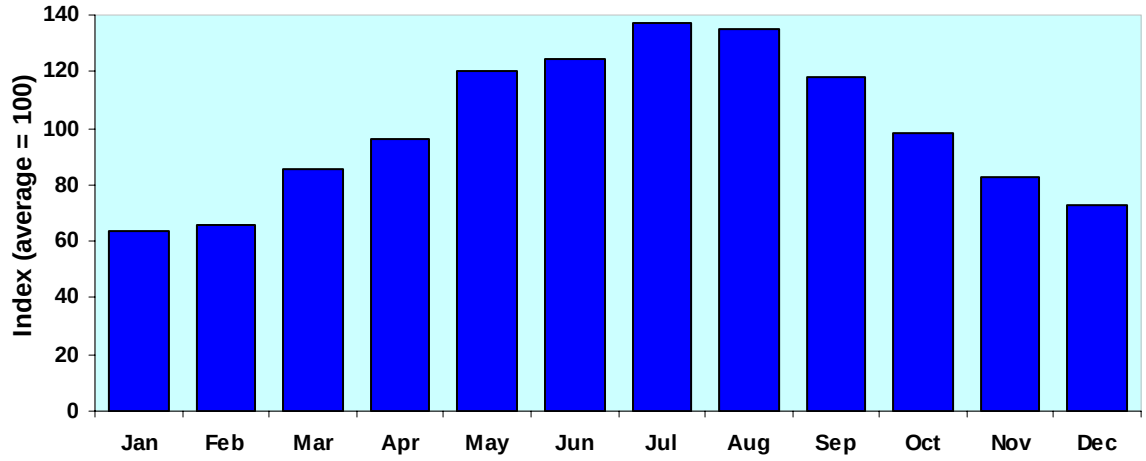
Chart 3.1: Motorcycle traffic, Great Britain, 1994-2004



Source: Traffic Surveys, DfT

Motorcycle traffic varies throughout the year. **Chart 3.2** overleaf shows how motorcycle travel is concentrated into the summer months. In the peak months of July and August, there is over twice as much motorcycling travel as there is in January or February.

Chart 3.2: Motorcycle traffic: by month, Great Britain, 2000-2004 combined data

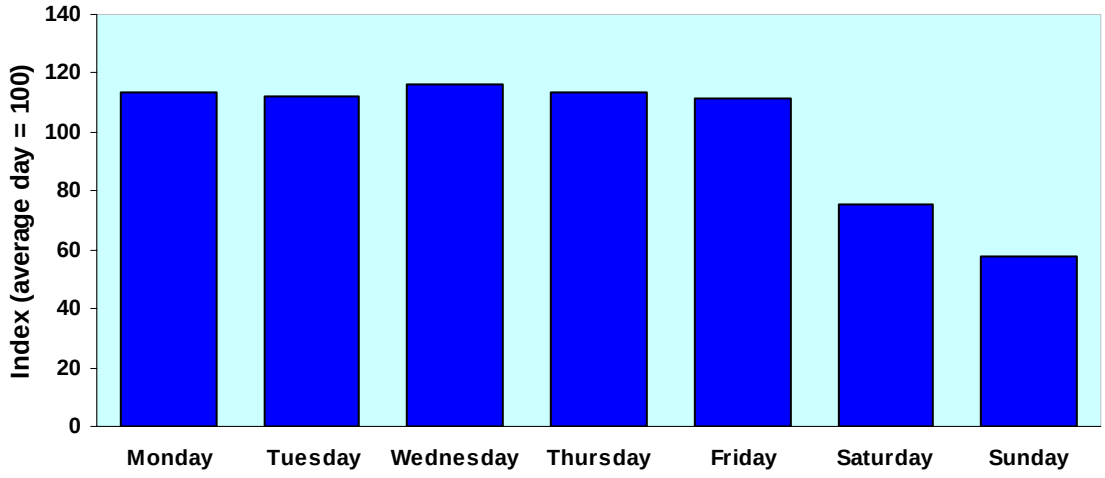


Source: Traffic Surveys, DfT

Motorcycle travel

The number of trips made varies from day to day. **Chart 3.3** shows that on weekdays more trips are made than on weekends, reflecting the way in which many people use motorcycles regularly to get to and from work. Trips are evenly spread out across Monday to Friday with no significant differences.

Chart 3.3: Motorcycle travel: trips by day of the week, Great Britain, 2002-2004 combined data



Source: National Travel Survey, DfT

The total traffic generated comes from the accumulation of individual trips and it is possible to look at the characteristics of these trips. The majority of trips are for work, business or education purposes and these trips account for over half of motorcycling mileage, as shown in **Table 3.4a**. The equivalent information for car drivers is shown for comparison in **Table 3.4b**.

Nearly two thirds of motorcycle trips are for work, business and education purposes, compared with under 30 per cent of car trips. Motorcycle trips for these purposes tend to be shorter than car trips. For other purposes, average motorcycle trip lengths are the same as car drivers for visiting friends; almost twice as long for other leisure purposes; and shorter for shopping trips. More trips per week are made by car drivers than by motorcycle riders for all purposes except work, business and education.

Table 3.4a: Motorcycle travel: number and length of trips by purpose, Great Britain, 2002-2004 combined data

Trips per rider per week/miles

	Work, business and education	Shopping	Other personal and escort	Visit friends	Other leisure	All trips
Trips per rider per week	5.1	0.7	0.5	0.9	0.7	8.0
Percentage of trips	*64*	*9*	*6*	*11*	*9*	*100*
Average trip length	9.5	4.3	9.2	10.6	24.9	10.5
Miles per rider per week	48.9	3.0	4.7	9.6	17.7	84.0

Source: National Travel Survey, DfT

Table 3.4b: Car travel: number and length of trips by purpose, Great Britain, 2002-2004 combined data

Trips per driver per week/miles/number

	Work, business and education	Shopping	Other personal and escort	Visit friends	Other leisure	All trips
Trips per driver per week	4.7	3.3	4.5	2.3	1.6	16.4
Percentage of trips	*29*	*20*	*27*	*14*	*10*	*100*
Average trip length	11.5	5.2	5.0	10.6	12.8	8.4
Miles per driver per week	53.8	17.5	22.5	23.9	20.5	138.2

Source: National Travel Survey, DfT

Table 3.5 shows how the number of motorcycling trips made has changed over time. Trips have become longer over time, but fewer trips are made, both in total and as a percentage of all trips. The amount of time people spend travelling by motorcycle has increased since 1985/86, but makes up a smaller proportion of time spent travelling overall.

Table 3.5: Motorcycle travel: trends, Great Britain, 1985/86 - 2004

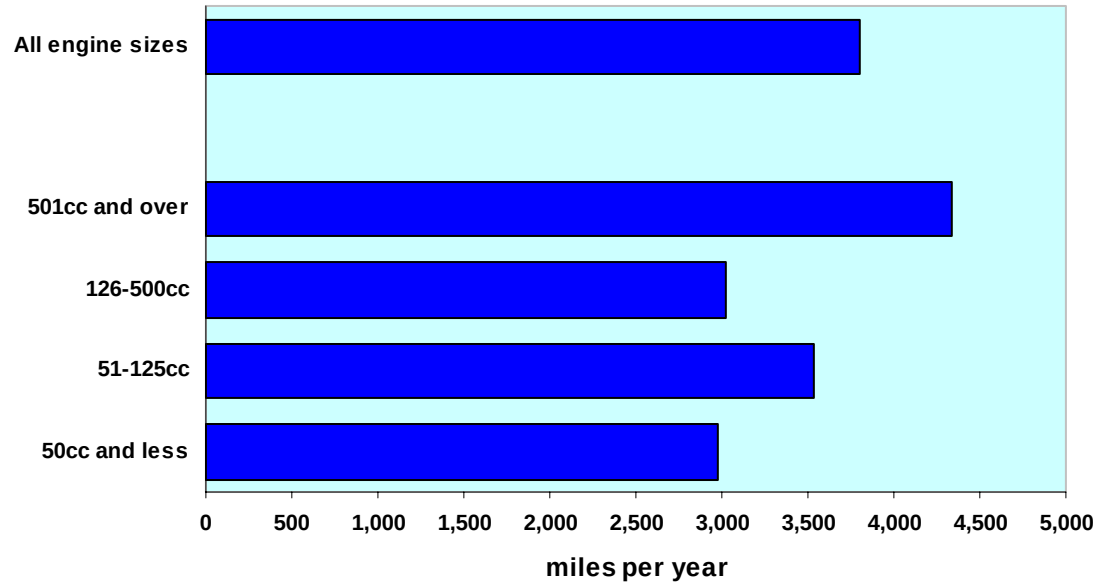
Trips/miles/hours

	1985/86	1992/94	1998/00	2002	2003	2004
Trips per rider per week	11.2	9.7	8.4	7.6	8.5	7.8
As a percentage of all trips	*45*	*39*	*35*	*36*	*39*	*36*
Distance travelled per rider per week	62.9	66.6	76.4	73.9	88.8	88.9
As a percentage of total distance travelled	*44*	*37*	*41*	*36*	*45*	*40*
Time spent travelling per week	3.1	3.0	3.3	2.8	3.4	3.5
As a percentage of total travelling time	*43*	*37*	*38*	*34*	*42*	*38*

Source: National Travel Survey, DfT

Average motorcycle mileage will vary according to the type of trips that are made. This is also reflected in the size of the engine. Larger motorcycles will generally have higher average mileages than smaller bikes, as shown in **Chart 3.6**.

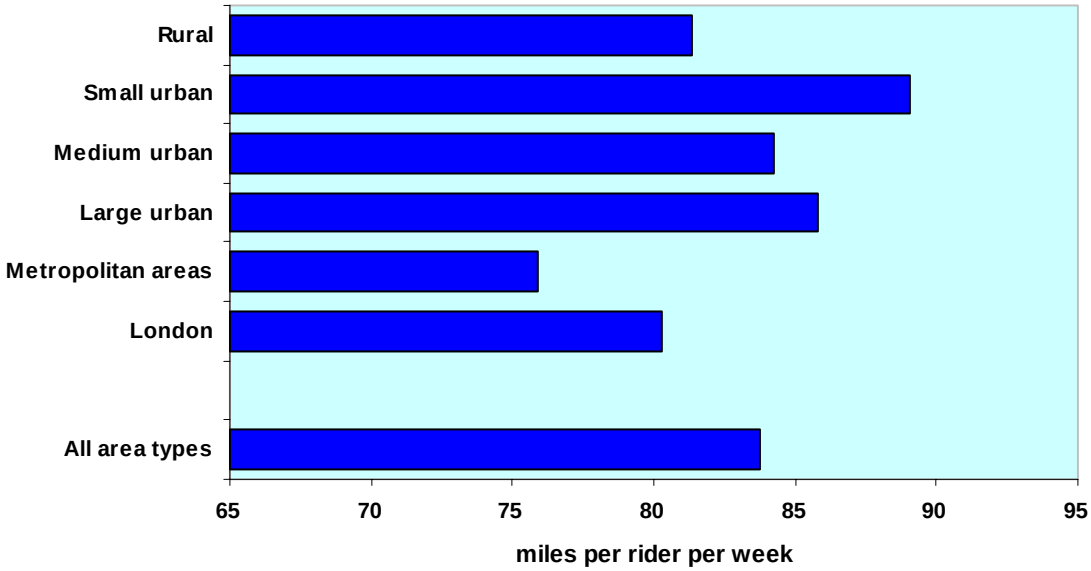
Chart 3.6: Motorcycle travel: annual distance travelled by engine size, Great Britain, 2002-2004 combined data



Source: *National Travel Survey, DfT*

Average distance travelled per rider also varies between the types of areas in which the owner lives, as shown by **Chart 3.7**. Motorcycle mileage is highest for residents of small urban areas, and lowest for former metropolitan built-up areas. The average trip length is 10.5 miles, but again, varies by area type, ranging from 8.9 miles in London to 11.2 miles in small urban areas.

Chart 3.7: Motorcycle travel: distance travelled by area type, Great Britain, 2002-2004 combined data



Source: National Travel Survey, DfT

Table 3.8 considers the extent to which motorcyclists travel faster than the speed limit at free-flowing locations during their journeys. About a quarter of motorcyclists exceed the speed limit by more than 10mph on motorways and dual carriageways, while around one in ten exceed the limit by more than 10mph on other roads. Average motorcycle speeds are generally similar to or slightly higher than average car speeds on the same types of road.

Table 3.8: Motorcycle travel: Speed distributions by type of road, Great Britain, 2005

Percentage

	Speed limit				
	70 mph		60 mph	40 mph	30 mph
	Motorways	Dual carriageway	Single carriageway	Urban roads	Urban roads
Percentage exceeding speed limit by **up to 10mph**	32	30	14	26	38
Percentage exceeding speed limit by **more than 10mph**	27	25	9	8	11
Average motorcycle speed (mph)	72	71	51	37	30
Average car speed (mph)	71	69	49	36	30

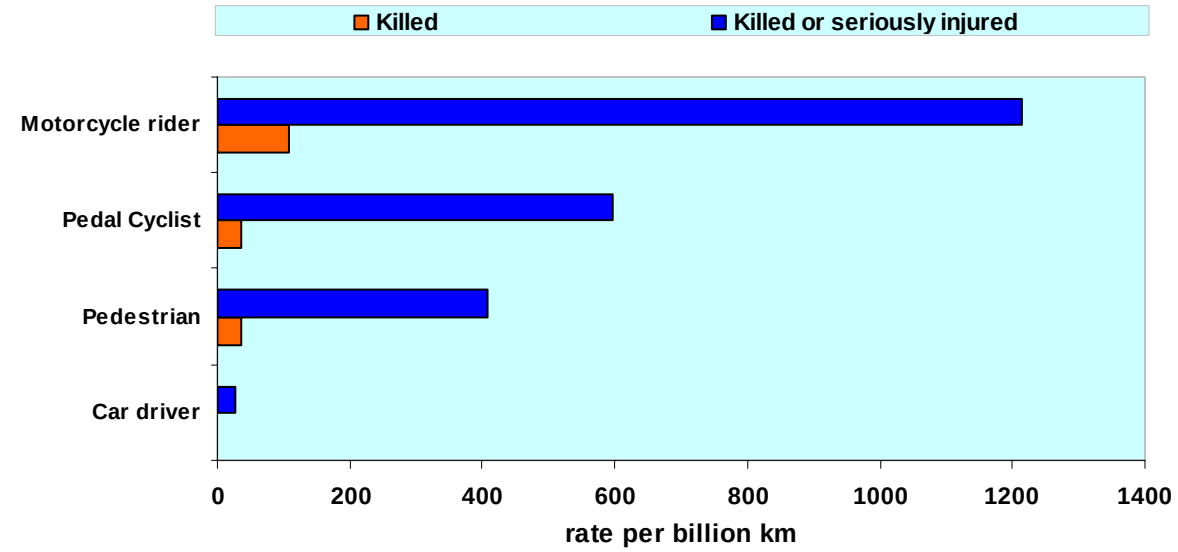
Source: Traffic Surveys, DfT

CHAPTER 4 - MOTORCYCLING SAFETY

Road casualties

Motorcyclists are at a much greater risk of serious injury than other road users. **Chart 4.1** shows how the relative risk of being killed or seriously injured (KSI) per kilometre travelled is more than twice that for pedal cyclists - the next highest risk group - and 46 times that for car drivers.

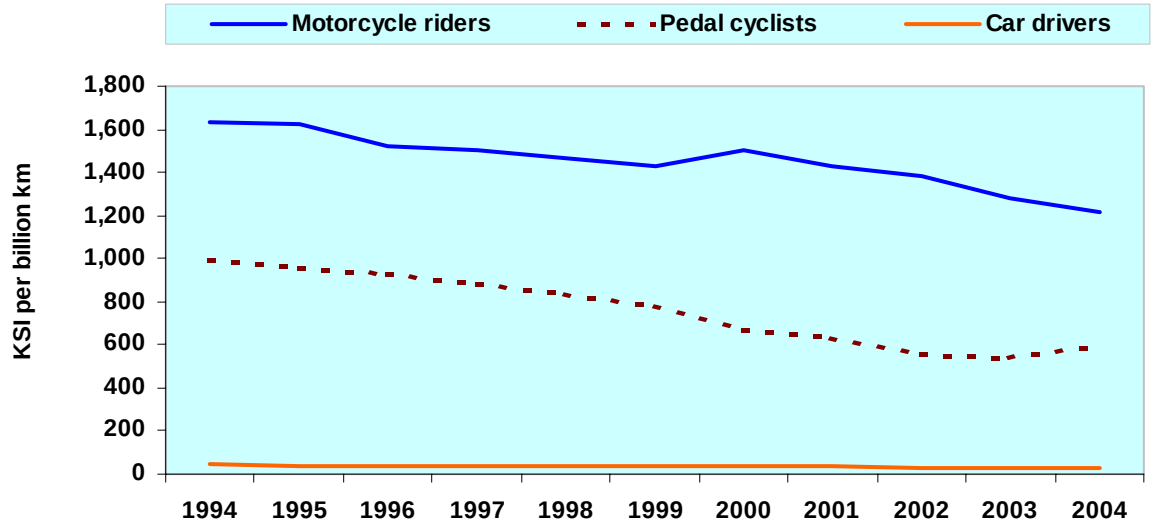
Chart 4.1: Road casualties: relative risk of different forms of transport, Great Britain, 2004



Source: Road Accident Statistics, DfT

Chart 4.2 shows how KSI casualty rates have changed between 1994 and 2004. There has been a general improvement in the KSI casualty rate for all road-user types. The rate for motorcycle riders is now 26 per cent lower than in 1994, although this represents less of a fall than for car drivers or pedal cyclists.

Chart 4.2: Road casualties: KSI rates by type of rider/driver, Great Britain, 1994-2004



Source: Road Accident Statistics, DfT

Motorcyclist casualties

Over six and a half thousand motorcycle riders and passengers were killed or seriously injured in 2004. **Table 4.3** shows how these are distributed by broad class of vehicle and the age of the casualty. The majority of KSIs involve larger motorcycles; although accidents involving younger riders aged 16-19 tend to be on motorcycles with smaller engines. This pattern is repeated for slight injuries, of which there were almost 19 thousand recorded in 2004.

Table 4.3: Motorcyclist casualties: injuries by type of vehicle and age of casualty, Great Britain, 2004

Number

	Killed or seriously injured			Slight injury		
	Mopeds	Motorcycle < 125cc	Motorcycle 125cc+	Mopeds	Motorcycle < 125cc	Motorcycle 125cc+
Under 16	35	39	47	99	120	94
16-19	511	559	203	2,739	2,048	496
20-29	92	428	998	498	1,604	2,213
30-39	66	233	1,479	316	963	3,011
40-49	29	109	1,035	156	407	2,256
50-59	28	67	409	89	176	892
60-69	9	37	107	40	70	219
70 and over	10	13	15	21	43	38
Total (inc. age unknown)	792	1,509	4,347	4,027	5,557	9,409

Source: Road Accident Statistics, DfT

Although casualty rates have been falling, as shown in Chart 4.2, motorcycle traffic has grown at such a rate in recent years (Chart 3.1) that the total number of motorcyclist casualties has been rising over the last 10 years, although it fell in 2004. This is shown in **Table 4.4**, which also shows how casualty numbers of riders are distributed by age. Also shown is the 1994-1998 average, which is the baseline for the Government's casualty reduction target. Compared to the 1994-1998 average, the 2004 figures are 4 per cent higher for all riders killed or seriously injured, 109 per cent higher for riders aged 16 and 57 per cent higher for those aged 40 to 49.

Table 4.4: Motorcyclist casualties: KSI by age and totals by sex, Great Britain, 1994-2004

Number

	1994-98 average	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Under 16	55	61	60	64	50	39	54	69	69	76	79	72
16	190	189	203	195	187	178	204	257	298	333	343	397
17	270	308	250	270	253	268	256	304	331	341	394	361
18	200	227	223	179	192	180	214	250	272	251	265	242
19	170	218	205	152	144	133	164	216	190	205	213	200
20 to 24	964	1,222	1,107	911	825	756	759	773	760	875	814	750
25 to 29	1,180	1,279	1,207	1,139	1,163	1,111	1,090	1,094	969	864	818	672
30 to 34	995	904	982	956	1,086	1,047	1,162	1,177	1,157	1,092	1,027	832
35 to 39	651	515	551	635	703	851	924	1,024	1,001	1,059	1,024	868
40 to 49	709	634	669	679	750	815	949	987	1,053	1,206	1,327	1,116
50 to 59	336	324	331	291	345	389	412	450	505	467	576	480
60 to 69	128	130	147	124	129	109	113	128	115	122	167	148
70 and over	56	64	58	58	56	42	50	44	31	36	47	37
Male riders	5,590	5,695	5,651	5,348	5,597	5,657	6,074	6,496	6,474	6,618	6,775	5,889
Female riders	398	474	437	369	361	348	368	388	405	403	430	365
All age groups (inc. age & gender unknown)	5,988	6,172	6,088	5,717	5,959	6,005	6,443	6,885	6,883	7,030	7,205	6,255

Source: Road Accident Statistics, DfT

Table 4.5 shows the number of motorcyclists (riders and passengers) killed or seriously injured on different road classes. Over half of the motorcycle KSI casualties in 2004 were on A-roads, a total of 3,360, which is slightly less than the 1994-1998 average. On motorways the numbers of motorcyclists killed or seriously injured fell in 2004 to 116 which is 10 per cent above the 1994-1998 baseline average.

Table 4.5: Motorcyclist casualties: KSI by road class, Great Britain, 1994-2004

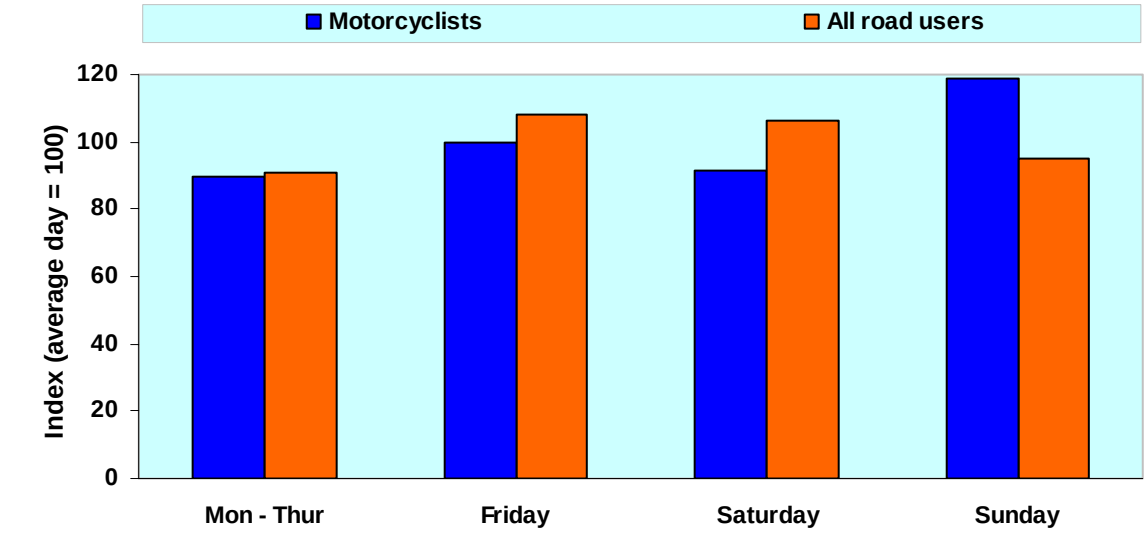
Number

	1994-98 average	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Urban roads:												
A roads	1,676	1,696	1,724	1,623	1,681	1,657	1,759	1,911	1,920	1,948	1,886	1,688
B roads	410	475	431	363	397	386	397	435	461	455	453	396
Other roads	1,275	1,472	1,292	1,270	1,166	1,175	1,272	1,408	1,467	1,541	1,542	1,440
All urban roads	3,362	3,643	3,447	3,256	3,244	3,218	3,428	3,754	3,848	3,944	3,881	3,524
Rural roads:												
A roads	1,684	1,595	1,661	1,600	1,764	1,802	1,934	1,960	1,935	1,952	2,108	1,672
B roads	563	563	585	515	577	577	593	668	645	631	701	625
Other roads	746	734	789	750	740	715	753	791	706	806	791	709
All rural roads	2,993	2,892	3,035	2,865	3,081	3,094	3,280	3,419	3,286	3,389	3,600	3,006
Total												
Motorways	106	113	117	77	112	110	148	149	139	160	164	116
A roads	3,369	3,303	3,395	3,229	3,450	3,469	3,715	3,903	3,868	3,904	3,998	3,360
B roads	976	1,040	1,018	880	976	966	1,000	1,112	1,112	1,087	1,154	1,023
Other roads	2,024	2,210	2,085	2,022	1,908	1,897	2,045	2,210	2,186	2,349	2,336	2,149

Source: Road Accident Statistics, DfT

The profile of injury accidents by day of the week for motorcyclists is different from the pattern for all road users. Whilst relatively more KSI injuries take place on Fridays and Saturdays for all road users, this is not true of motorcyclists. **Chart 4.6** shows that the peak number of injuries for motorcyclists (riders and passengers) is on Sundays. Note that the least traffic by motorcyclists is on Sundays (Chart 3.3).

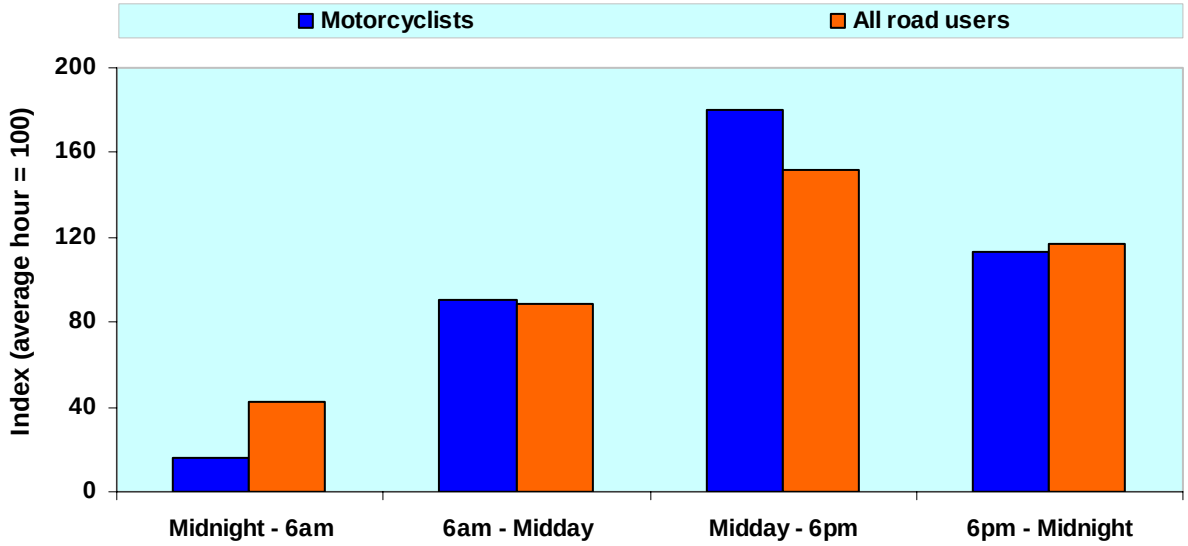
Chart 4.6: Motorcycle casualties: KSI by day of week (indexed), Great Britain, 2004



Source: Road Accidents Statistics, DfT

Similarly, we can see from **Chart 4.7** that there are differences in the profile of accidents involving motorcycle KSIs according to the time of day. There are relatively fewer KSIs involving motorcyclists during the night (between 6pm and 6am), than for all road users. However during the day, and particularly between noon and 6pm, the rate of deaths or serious injuries is higher for motorcyclists than for all road users.

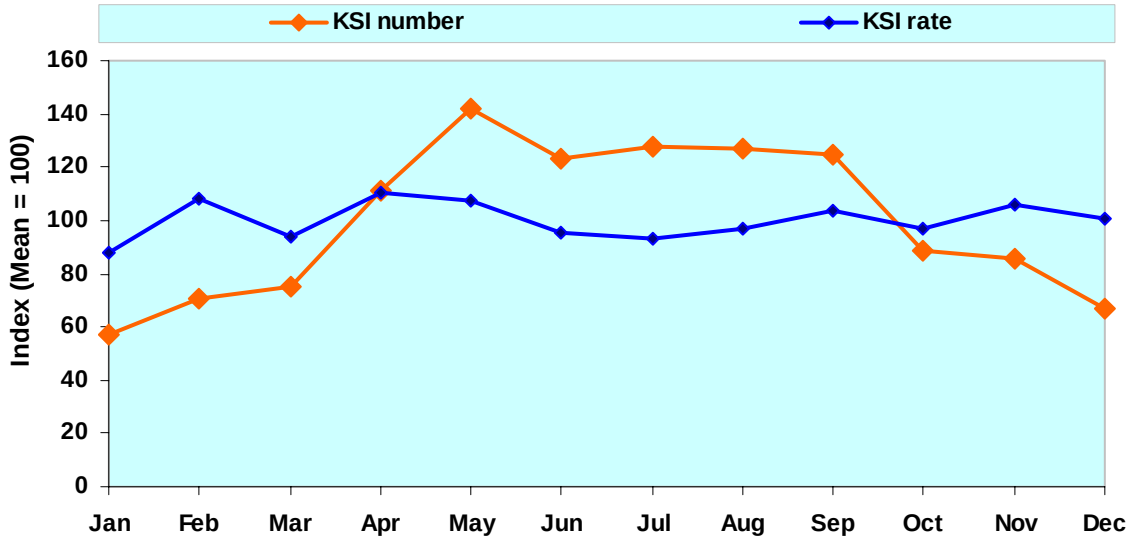
Chart 4.7: Motorcycle casualties: KSI by time of day (indexed), Great Britain, 2004



Source: Road Accident Statistics, DfT

Casualty numbers also vary by time of year. The number of KSI casualties amongst motorcyclists is generally at its highest during the summer months, June to September, although in 2004 May was higher. However since motorcyclist traffic volume is highest during these months the rate of casualties can be lower than it is at other times of the year. This is shown in **Chart 4.8**. In 2003 the KSI casualty rate was highest in April.

Chart 4.8: Motorcyclist casualties: KSI number and rate by month of year (indexed), Great Britain, 2004



Source: Road Accident Statistics, DfT

The most common type of accident resulting in motorcycle user casualties is one that also involves a car. The next most frequent are accidents involving no other vehicle or a pedestrian, as shown in **Table 4.9** for riders only. These are also the types of accidents most likely to result in motorcycle users being killed or seriously injured.

Table 4.9: Motorcyclist casualties: by severity, type of accident and other party involved in accident with the motorcycle, Great Britain, 2004

Number

	Motorcyclist casualties		Motorcyclist KSIs	
	Motorcycles	Mopeds	Motorcycles	Mopeds
Two vehicle accidents				
Pedal Cycle	108	34	17	5
Moped	53	87	6	14
Motorcycle	332	51	98	7
Car	12,258	3,249	2,951	482
Bus or Coach	165	34	44	7
LGV	769	156	213	36
HGV	346	59	121	12
Other vehicle	236	62	66	9
Single vehicle accidents				
Pedestrians	257	73	38	13
No other involvment	3,494	664	1,323	134
All accidents	18,018	4,469	4,877	719

Source: Road Accidents Statistics, DfT

Breath tests

Table 4.10 shows that the percentage of motorcyclists who failed breathalyser tests in 2004 was lower than for all road users. Of the 26,857 motorcyclists involved in injury accidents, about 46 per cent were tested and there were 423 failures. Failure rates were highest among 20 to 24 year-olds mirroring the situation for all road users.

Table 4.10: Motorcyclist breath tests and failure rates, England and Wales, 2004

Number/percentage

	All motorcyclists			Percentage failure	
	Number involved in accidents	Number tested	Number of failures	Motorcyclists	All road users (inc. motor-cyclists)
Under 17	2,799	1,249	28	*1.0*	*0.9*
17-19	4,216	2,067	86	*2.0*	*3.0*
20-24	3,172	1,563	87	*2.7*	*3.8*
25-29	2,759	1,327	56	*2.0*	*2.9*
30-34	3,206	1,521	49	*1.5*	*2.3*
35-39	3,113	1,479	44	*1.4*	*1.9*
40-49	4,150	2,043	52	*1.3*	*1.8*
50-59	1,707	770	14	*0.8*	*1.2*
60-69	512	260	4	*0.8*	*0.7*
70 and over	146	63	0	*0.0*	*0.6*
Age not reported	1,077	80	3	*0.3*	*0.5*
All ages	26,857	12,422	423	*1.6*	*2.0*

Source: Road Accident Statistics, DfT

NOTES ON TABLES AND CHARTS

In order to avoid numerous footnotes to the tables in this publication, the following describes background information and, where necessary, definitions that are important to the interpretation of the tables and charts. Where possible, this includes guidance on where further information is available.

Chapter 1 - Motorcyclists

Chart 1.1
Information on motorcycle ownership comes from the National Travel Survey (NTS). This is a survey of households that collects information on personal travel. Although the survey runs every year, because the number of motorcyclists is limited, it is necessary to combine data from more than one year in order to get enough reliable information. More information on the NTS can be found at:
www.dft.gov.uk/transtat/personaltravel

Chart 1.2
Information on household expenditure is collected in the Expenditure and Food Survey, run by the Office for National Statistics. Households complete a diary of their expenditure and this is then split into various classifications. Because of the nature of the survey, the majority of households will have no expenditure on motorcycling and those that do have motorcycling expenditure represent only a small sample size. Results shown here are therefore only broadly indicative and annual changes cannot be thought of as significant. More information on the EFS can be found at
http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=361&More=Y

Table 1.3
This table is also based on data from the NTS - see Chart 1.1 for more details. In this table, a motorcyclist is defined as anyone who made one or more trips as a motorcycle rider during the week they kept a travel diary.

Table 1.4
This is derived from membership data from the MAG(UK) and BMF, and data from the NTS. There are some definitional differences in the regions, meaning that the figures given for membership do not perfectly represent all of the standard Government Office Regions. However, for many of the regions, there is a perfect fit and for the others, estimates have been made to minimise the discrepancies.

Table 1.5, Chart 1.6 and Table 1.7
The Driving Standards Agency (DSA) collect data on numbers of people taking different types of driving test and also on numbers of people undergoing motorcycle training. Numbers peaked for training and for the number of tests in 1996 since many learners were trying to pass tests before additional requirements were introduced in 1997. Data are no longer collected in the same format, so at present it is not possible to provide figures for years later than 2000 for Table 1.5, although it is hoped that this can be amended or updated in due course.

Chapter 2 - Motorcycles

Chart 2.1 and Tables 2.2 & 2.3
Information for the chart and tables come from the Driver and Vehicle Licensing Agency (DVLA) database of registered vehicles. Many different vehicle details are held in the DVLA database, including engine size and postcode of the vehicle keeper and these variables are used in tables 2.3 and 2.4 respectively (postcodes are mapped onto Government Office Regions to enable the latter breakdown).

Chart 2.4
DfT periodically carries out surveys of Vehicle Excise Duty evasion. These are carried out by collecting registration marks of vehicles in traffic and comparing these against the data held at DVLA to determine whether or not the vehicle is licensed at the time at which it is seen. Further details of this survey are at:
http://www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=16194&l=3

Table 2.5
The definition covers the tax class of motorcycles, scooters and mopeds and includes any two-wheeled road motor vehicle with or without side-car, including motor scooter, or three-wheeled road motor vehicle not exceeding 400kg unladen weight. All such vehicles with a cylinder capacity of 50cc or over are included, as are those under 50cc which do not meet the definition of moped. It also includes those vehicles defined as being mopeds - two- or three-wheeled road vehicles fitted with an engine having a cylinder capacity of less than 50cc and a maximum authorised design speed in accordance with national regulations. The population figures used to derive rates come from the Organisation for Economic Co-operation and Development (OECD). Figures for Greece and Italy are for 2003 rather than 2004.

Chart 2.6
The DVLA database contains information on the make, model and engine size of a newly registered vehicle, but does not include a classification that says what broad type of motorcycle it is. Alternative sources of data maintained by industry associations do not use quite the same definitions as the DVLA database, but they can at times be more flexible. Chart 2.6 comes from the Motorcycle Industry Association (MCIA) classification of new motorcycle registrations, which indicates the type of bike. A final distinction is that the MCIA figures should include only new motorcycles being registered in the UK for the first time, while DVLA figures in other tables will include all motorcycles being registered for the first time in GB, even if the vehicle is not new. The categories are formed as follows:

- **Scooter** includes Motorcycle Scooters and Moped Scooters
- **Sports** includes Sports, Supersports and Sport Mopeds
- **Naked** includes Naked and Naked Mopeds
- **Dual sport (on/off road)** includes Adventure Sport and Trail / Enduro
- The **Custom** and **Touring** categories include just these types of motorcycle.

Further details are available at:
http://www.mcia.co.uk/S%5FPublic/scontent.asp?sc=X7

Table 2.7

Within the DVLA database described above is the date of first registration. From this it is possible to extract all vehicles registered for the first time in a particular year and each vehicle will come with the associated variables such as engine size, postcode and so on as described above. By looking at the change in total stock from one year to the next and also at the number of newly registered vehicles, it is also possible to make an estimate of the number of vehicles that are scrapped in every year. This estimate is a lot higher than the number officially notified as being scrapped.

Table 2.8

The MCIA collects details of new registrations and compiles listings of the most popular models in different categories of motorcycle. More detail is available from MCIA.

Table 2.9

The DVLA data includes many different variables. Some of these are recorded when the vehicle is first registered, while others are updated when new licensing transactions occur during the course of the vehicle's life. One variable that is updated is the number of keepers that a vehicle has previously had and this is used for this analysis.

Table 2.10 - 2.11

A Home Office led project looked at the relative likelihood of theft of different types of motorcycle. This was based on comparing reports of thefts from police records against stock details from DVLA data. Further details of the study and relative ratings of different types / makes are available at:
http://www.crimereduction.gov.uk/vehiclecrime54.htm

Chart 2.12, Table 2.13

The Vehicle and Operator Services Agency (VOSA) administers the MOT vehicle testing scheme and collects data on the results of tests. A 2 per cent sample of all tests has been the basis on which vehicle testing statistics have been compiled. Computerisation of the MOT system has begun and will ensure a greater level of detail and accuracy. This gives a 95% confidence interval of +/- 0.8%.

Chapter 3 - Journeys made

Chart 3.1

The total volume of traffic on the road network in Great Britain is measured in vehicle kilometres. The traffic for each year relates to the public road network in place in that year. Thus growth over time is the product of any change in the network (kilometres) and the change in traffic flow (vehicles). For each link of the major road network, the Department produces estimates of annual average daily flow (AADF) and annual average weekday flow (AAWF). They are produced using 12-hour manual data counts from a large number of sites and traffic profiles derived from automatic counters at about 190 sites. Further details on this and other aspects of traffic data are at:
http://www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=7389&l=3

Chart 3.2

Because of the small number of motorcycles counted during DfT's traffic surveys, the data in chart 3.2 had to be aggregated to get a reliable breakdown by month. The data are aggregated over the years 2000 to 2004.

Chart 3.3 – 3.7

These charts and tables are all based on the NTS – see text for Chart 1.1 above. Due to the relatively small number of households with motorcycles in the sample, some of the results have been aggregated over a number of years. Chart 3.3, Table 3.4 and Charts 3.6 and 3.7 are based on results averaged over the years 2002 to 2004, but this still gives a relatively small sample size, and results should therefore be regarded as indicative of travel habits and interpreted with caution.

Table 3.8

DfT collects data from Automatic Traffic Counters. As well as counting vehicles, these also measure the speed of vehicles as they pass over the counter. The counters tend to be located at free-flowing locations, away from junctions, hills, bends or any other factor that might slow traffic down. They are therefore more a reflection of the speeds at which drivers choose to travel if they are not constrained (for example, by congestion) and are not representative of typical speeds throughout a journey. The counters can distinguish between different types of vehicle and this table summarises results for motorcycles. Further comprehensive information on spot speeds is available at:
http://www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=15699&l=3

Chapter 4 - Motorcycle safety

For the purpose of these statistics, an accident is counted where there is an injury, (whether to the motorcycle rider, passenger or other party), and where the accident is reported to and recorded by the police. The abbreviation "KSI" refers to casualties who are killed or seriously injured, and therefore excludes slight injuries. Throughout the chapter, any reference to "motorcycles" includes motorcycle combinations, mopeds and scooters unless otherwise specified.

For further information on road accident statistics, including the annual publication *Road Casualties Great Britain* (which includes the data Chapter 4 is based on), see: http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/divisionhomepage/037791.hcsp

Tables 4.3, 4.5 and Charts 4.6, 4.7 and 4.8
Casualty figures are for riders and passengers of motorcycles.

Table 4.4
Casualty figures are for motorcycle riders only.

Table 4.9
Casualty figures are for motorcycle riders only. Mopeds are defined as two-wheeled motor vehicles with an engine capacity of not over 50 cc and either

(a) having a new registration prefix or a registration suffix that is S or later, a maximum design speed of 30 mph, a kerbside weight not exceeding 250 kg and an index plate identifying them as mopeds; or
(b) with an earlier suffix and equipped with pedals.

Motorcycles are two-wheeled motor vehicles that are *not* mopeds.

Table 4.10
Breath test failures include those who refuse to provide a breath sample.

CALENDAR OF EVENTS

The following section outlines some of the events and legislation that have affected motorcycling in the UK. In some cases, these can be important in interpreting data presented in this publication.

1880s Motorcycles invented

1902 First Triumph Produced.

1905 21,521 machines registered in Britain.

1916 150,000 motorcycles registered in Britain.

1920 More than 200 marques available.

1924 Over 500,000 machines registered for use.

1930 Highest ever total number of motorcyclist fatalities, with 1,832 killed.

1934 Speed limits introduced.

1935 Cats eyes introduced.

1938 New registrations slump to 30,093

1960 Learner riders restricted to motorcycles under 250cc.

1961 MOT Test for motorcycles older than 10 years introduced.

1967 MOT Test threshold reduced to 3 years.

1973 Safety-helmets made compulsory for powered two wheeled vehicles.

1987 Motorcycles first used after 1/4/87 to have brake system approved by UN/ECE regulation 13.05.

1987 BSI stamped aftermarket exhausts made compulsory.

1987 Crash helmet visors required to comply with BSI standards.

1988 EC makes draft proposal for separate licence for motorcycles over 400cc.

1990 Compulsory Basic Training (CBT) is introduced, part one test abolished.

1990 EC Type Approval directive proposed.

1991 EC licence directive becomes EC law without 400cc limit.

1991 EC proposes 100 bhp maximum power output from motorcycles.

1992 EC Type Approval directive becomes EU law.

1993 EU proposes so-called ‘Multi Directive’. Contains a large number of proposals including an 80-decibel upper PTW noise limit, PTW modification limits and emission limits (Full details available from MCI).

1995 UK implements stage one of EU directive 87/56 and reduces maximum noise limit to 82 decibels.

1996 UK implements EU licence directive. 2 year 33 bhp restriction for newly qualified riders. Direct access test introduced (January).

1997 EU Multi Directive becomes European law. New emission limits introduced and maximum noise limit set at 80 decibels due for Europe-wide implementation in July 1999 (January).

1997 Labour win the General Election. The DoT becomes the DETR and consults on an integrated transport policy (May-July).

1997 First fully inclusive Meeting between Government, industry and motorcycle groups to discuss transport policy (November).

1998 Statutory Off-Road Notification introduced to combat VED evasion and improved quality of DVLA data (January).

1998 Publication of the integrated transport White Paper. Motorcycles recognised as alternative mode for the first time. Advisory Group for Motorcycles announced (July).

1998 Meeting between MCI, motorcycling interests and Government held at invitation of the DETR to discuss road safety strategies. DETR acknowledges that rider-led initiatives are more likely to be successful than blanket safety legislation. Bikesafe 2000 acknowledged as example of best practice (August).

1998 Motorcycle licence consultation published. Government agrees to review legislation that bans learner riders from motorcycling for a year if they fail to pass their test within two years of receiving their provisional licence (September).

1998 First ‘contact’ meeting of the Advisory Group at DETR (December).

1999 Governmental Advisory Group on Motorcycling is established. Created by the DETR and chaired by Ministers, this group draws together Government and representatives from the motorcycle community to consider policy developments and options for future action.

1999 Ad-hoc motorcycling forum established by the Scottish Office. Scottish guidance recognises the motorcycling option.

1999 Draft Local Transport Plans (LTPs) show that over 100 local authorities are considering options for positive motorcycling policies.

2000 Full DETR guidance on Local Transport Plans considers a positive approach to motorcycles in local transport planning.

2000 The Government's road safety review proposes an action plan, which receives cross-motorcycle community support. Car drivers to continue to have the right to ride a moped with a full car licence once 'familiarisation' training has been taken.

2000 Leaded petrol is withdrawn.

2000 Touch Screen Theory Test is introduced in January.

2000 Sandwell Motorcycle Strategy Published in March.

2001 National Motorcycle Strategy Promised is for 2003.

2001 London congestion charging introduced (motorcycles exempted).

2002 Motorcycle Vehicle Excise Duty categories are expanded.

2002 DTLR publishes its motorcycle parking advisory leaflet.

2003 Home Office publishes its first motorcycle theft index.

2004 Introduction of Continuous Licensing and Harmonised Registration Certificates to combat VED evasion, vehicle fraud and improve quality of DVLA data.

2004 First Compendium of Motorcycling statistics published

2004 European Road Assessment Programme analysis of the contribution to motorcycle risk posed by highway infrastructure

2005 Publication of the Government's Motorcycle Strategy

2005 Publication of IHIE Guidelines for Motorcycling

2006 Publication of the EU-funded Guidelines for PTE-safer road design in Europe following IHIE guidelines

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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:

- Road Transport and the Environment
- Cycling Statistics
- Urban Transport Bench Marking
- National Travel Survey
- Ports and Maritime Statistics
- Rail Safety Statistics and Risk Models

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:

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The TSUG has contributed to the production of the *Transport Yearbook 2006*. 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.

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