



SCOTTISH EXECUTIVE

# Statistical Bulletin

Transport Series

Trn / 2003 / 3

Published June 2003

Price £ 2.00

## Key 2002 Road Accident Statistics

### 1. Main Points

1.1 The provisional total number of people fatally injured in road accidents in Scotland in 2002 was 304: a decrease of 43 (12%) over the figure for 2001, and the lowest total since current records began more than fifty years ago.

1.2 There were 3,204 people recorded as seriously injured in road accidents in 2002, 203 (6%) fewer than in 2001, and the lowest figure since records of the numbers of serious injuries began in 1950.

1.3 There were 15,730 people recorded as slightly injured in 2002, 428 (3%) fewer than in 2001, and the lowest number since 1955.

1.4 The total number of casualties in 2002 was 19,238, which was 674 (3%) lower than in 2001, and the lowest figure since 1954.

1.5 There were 3,508 people killed or seriously injured in 2002, 27% (1,330) below the 1994-98 average of 4,838. The figure for 2002 is below the relevant indicative line, and therefore the reduction so far has been greater than would be needed to achieve the 2010 target fall of 40% by means of a constant annual percentage reduction.

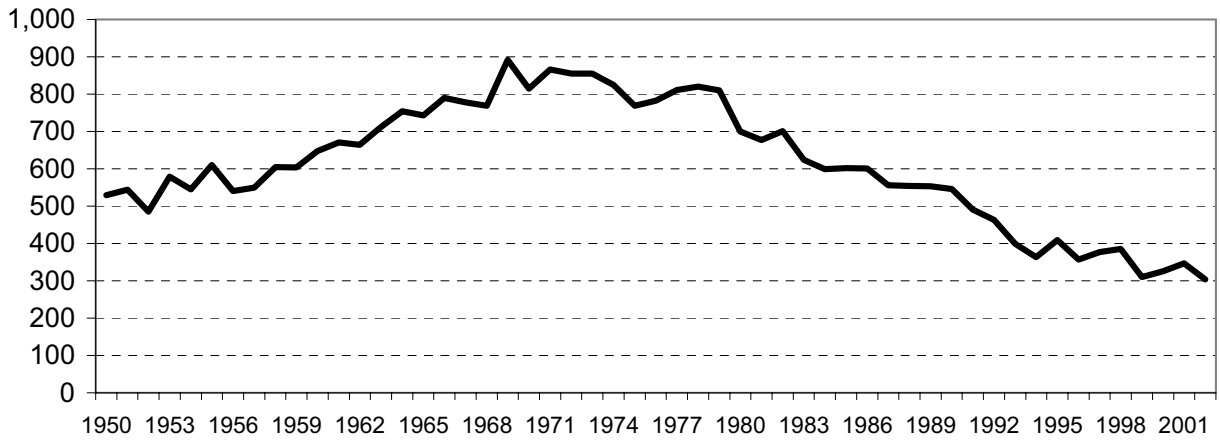
1.6 523 children were killed or seriously injured in 2002, 38% (319) below the 1994-98 average of 842. The figure for 2002 is also below the relevant indicative line, representing rapid progress towards the 2010 target of a 50% reduction.

1.7 At the time of writing, 2001 is the latest year for which there is an estimate of the total volume of traffic for Scotland as a whole. The slight casualty rate of 37.2 casualties per 100 million vehicle kilometres in 2001 was 9.7% below the 1994-98 baseline average of 41.3, so the 2010 target of a 10% reduction had almost been achieved.

1.8 Accidents on roads in non built-up areas accounted for over three-quarters of all fatalities in Scotland, compared with about two fifths of the total number of casualties, presumably because average speeds are higher on such roads.

1.9 A total of 11,806 car users were injured in road accidents in 2002, 154 of whom died (21% fewer than the previous year). There were 3,313 pedestrian casualties including 73

### Fatally injured casualties - from 1950



### Fatal & Serious casualties and Seriously injured casualties - from 1950



— Fatal & Serious casualties

— Seriously injured casualties

fatalities. Because of their greater vulnerability, 27% of all pedestrian casualties were either fatally or seriously injured, whereas only 15% of car users were killed or seriously injured.

1.10 There were 2,767 child casualties in 2002, 189 (6%) fewer than in 2001. They included 14 fatalities: 6 deaths fewer than in 2001.

## 2. Background

2.1 This bulletin presents provisional statistics of road accidents in which people were killed or injured (“injury road accidents”) in Scotland in 2002, which were extracted from the Road Accidents statistical database on 12 May 2003. The final totals for 2002, which will appear later, in “*Road Accidents Scotland 2002*”, may differ slightly from the figures given here, due to (eg) late returns and amendments. For similar reasons, the figures which appear here for 2001 and earlier years may differ slightly from those published previously.

2.2 Section 5, tables 3 - 5 and the associated charts show progress towards the casualty reduction targets for 2010. The targets are described in section 9.4. The figures for 2002 are compared with the annual averages for 1994-98, because this is the "baseline" period for the road safety targets for the year 2010. The thick black lines show the figures recorded so far, the horizontal dashed lines show the baseline averages, and the dotted lines going downwards indicate how the figures would have to fall *if* the targets for 2010 were to be achieved by means of a constant percentage reduction in each year. They imply the following reductions from the 1994-98 averages by 2002:

Killed or seriously injured:	19.7%
Child killed or seriously injured:	25.7%
Slight casualty rate (per 100 million vehicle-km):	4.4%

- therefore, any falls which are *greater* than these suggest *more rapid* progress than the relevant indicative lines.

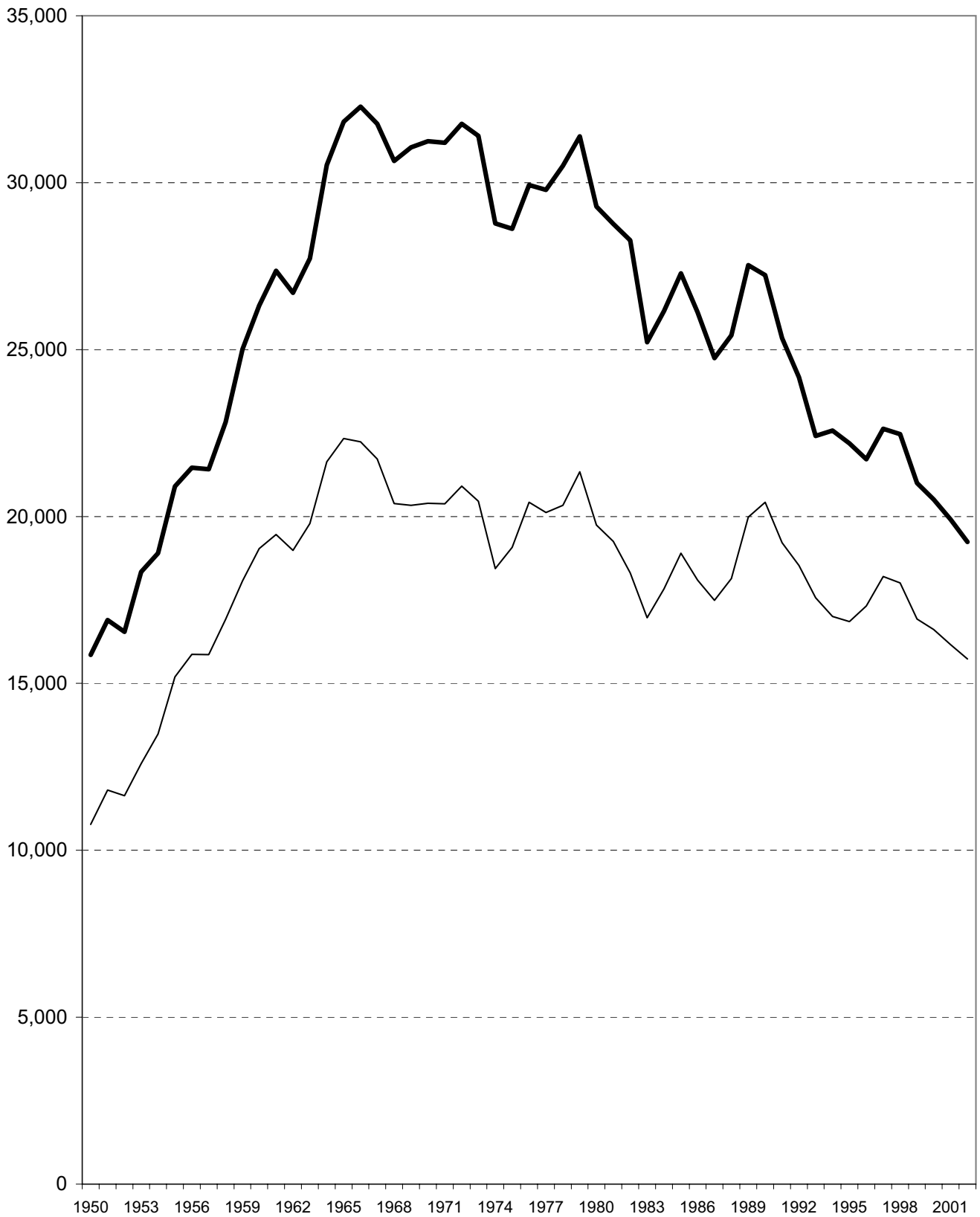
## 3. Numbers of Accidents (Table 1)

3.1 *Table 1* shows the numbers of injury road accidents recorded by the police in 2002 and some earlier years. As noted earlier, the figures relate only to those accidents in which one or more people were killed or injured. Each accident is classified according to the severity of the most seriously injured casualty who was involved in it.

3.2 Following the trend of most years since 1989, the total number of injury road accidents fell. In 2002, there were 14,312 accidents in which someone was killed or injured, 3% fewer than in 2001. The number of fatal accidents in 2002 (274) was 34 (11%) less than the figure for 2001 (308), and the lowest figure since records of fatal accidents began in 1970.

3.3 The number of serious injury accidents in 2002 (2,661) fell by 176 (6%) from the figure for 2001 (2,837) to the lowest figure recorded, and the number of “slight injury” accidents in 2002 (11,377) was 2% less than the figure for 2001 (11,581) and also the lowest number recorded since the current records began in 1970.

### All casualties and Slightly injured casualties - from 1950



— All casualties      — Slightly injured casualties

## 4. Numbers of Casualties by Severity (Table 2)

### 4.1 Numbers fatally injured

*Table 2* shows that the provisional total number of people fatally injured in road accidents in Scotland in 2002 was 304. This was 43 (12%) less than the figure for 2001, and was the lowest since the current records began more than 50 years ago (information about road accident fatalities prior to 1947 is not readily available). With a few exceptions, there has been a fall in each year since 1978, and for most of that period the figures show a clear, steady long-term downward trend, particularly between 1982 and 1994. From that point, the numbers appear to have been fluctuating around a less pronounced downward trend.

### 4.2 Numbers seriously injured

There were 3,204 people recorded as seriously injured in road accidents in 2002: 203 (6%) fewer than in 2001. This is the lowest figure since records of the numbers of serious injuries began in 1950. Since the early 1980s, the long-term trend has generally been downward, although there was an apparent levelling-off when the figures for 1996, 1997 and 1998 showed very little change, all being around 4,050. However, since then it appears that the downward trend has resumed, with falls in the last 4 years.

### 4.3 Numbers slightly injured

There were 15,730 people recorded as slightly injured in 2002: 428 (3%) fewer than in 2001. This is the lowest number recorded since 1955. Between 1970 and 1990, the figures fluctuated in a range which was broadly 17,000 to 21,000. The fall between 1990 and 1995 in the number of people with slight injuries, followed by an apparent levelling-off at around 17-18,000 in each of the years from 1996 to 1999, could have been a continuation of that pattern. However, the figures for the latest four years show a fairly steady downward trend.

### 4.4 Total numbers of casualties

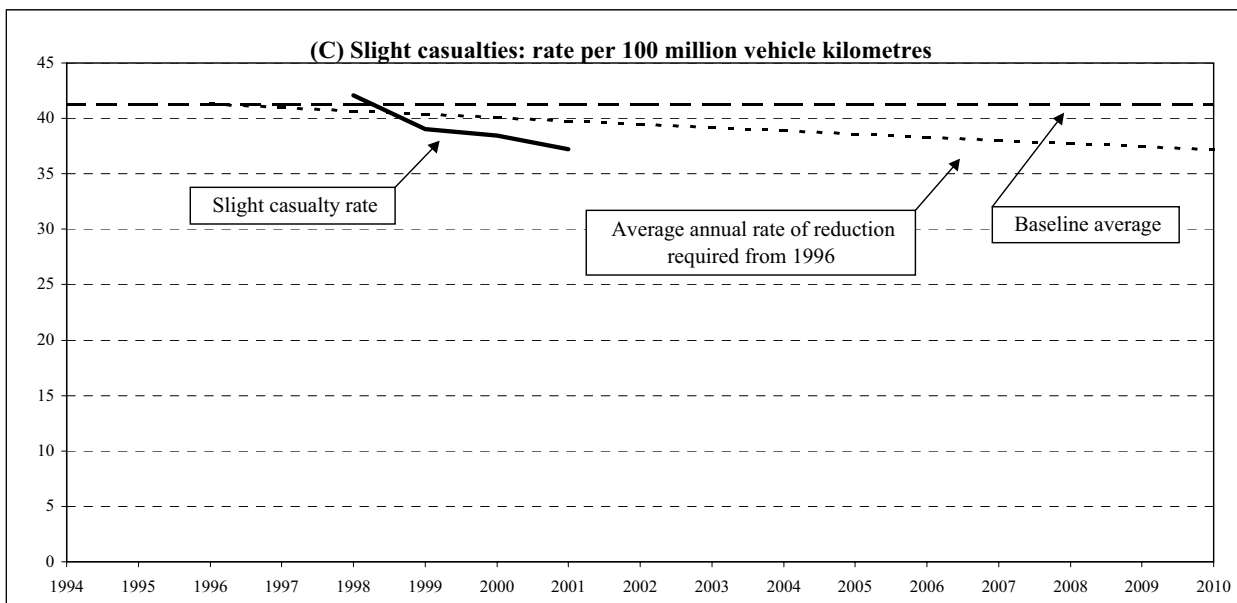
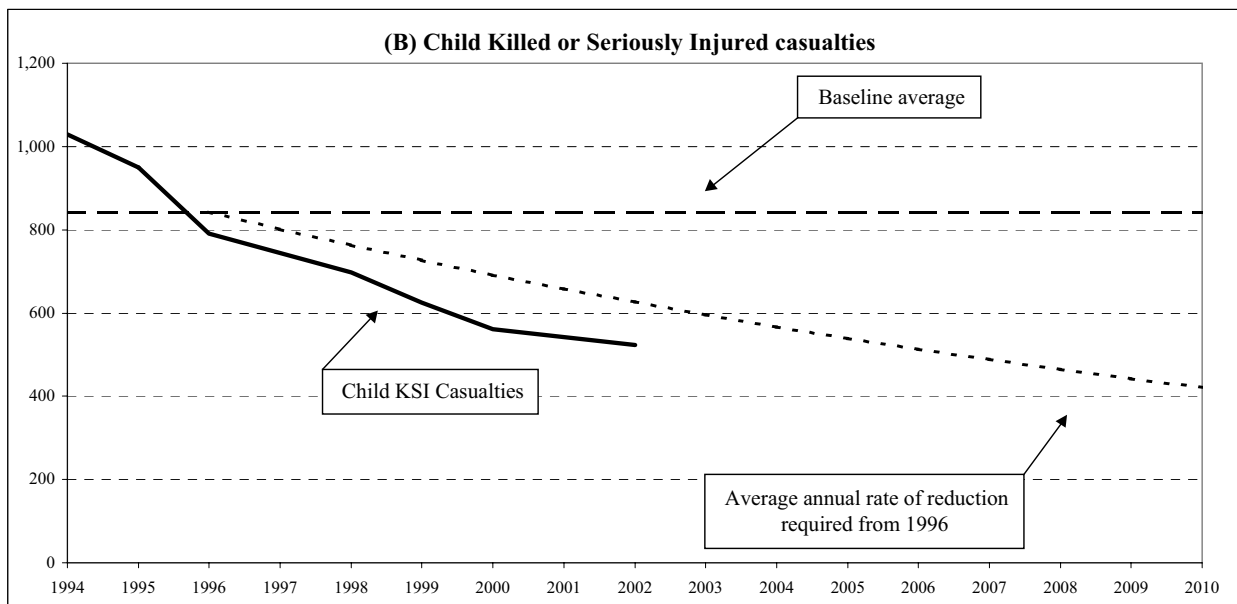
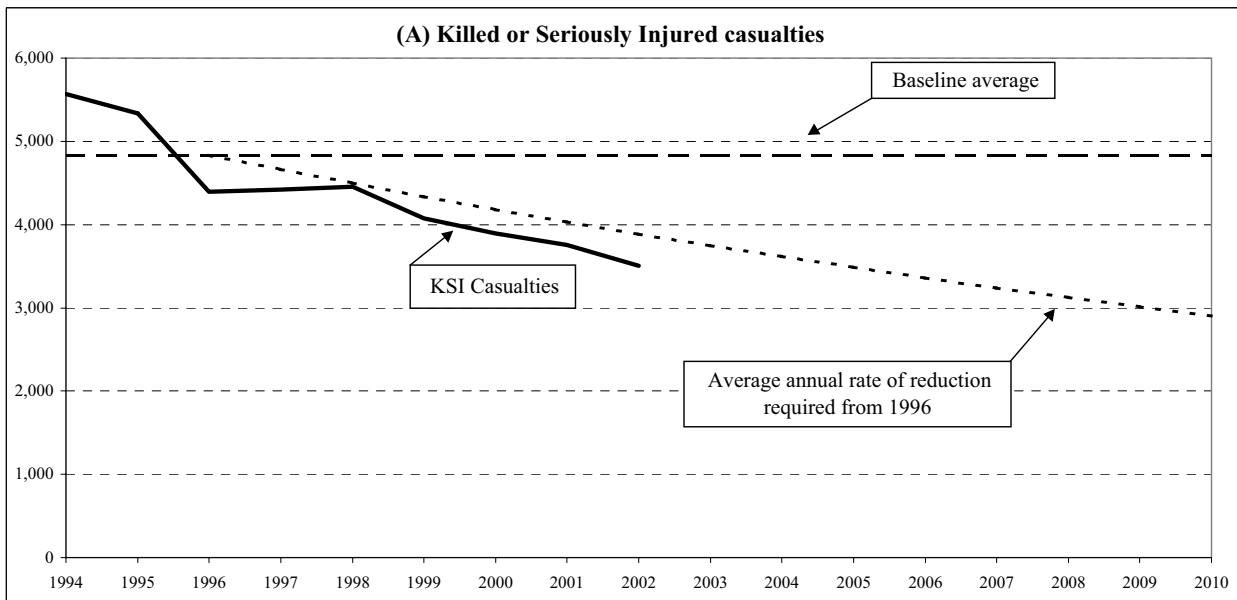
The total number of casualties (of all severities) in 2002 was 19,238, which was 674 (3%) lower than in 2001. This represented the lowest number of casualties since 1954. Between about 1970 and 1990, the figures appeared to fluctuate greatly around a general downward trend. Subsequently, the total number of casualties fell markedly from the level of the most recent "short-term" peak (which was over 27,000 in both 1989 and 1990), before appearing to level off: the figures for each of the years from 1993 to 1998 were all within 600 (3%) of the average of 22,330 for those six years. However, it appears that the downward trend has resumed: the totals for 1999 and 2000 were both under 21,000, and the figures for 2001 and 2002 were the first for almost 50 years to be below 20,000.

## 5. Progress towards the casualty reduction targets for 2010 (Tables 3-5)

### 5.1 Killed or seriously injured casualties

There were 3,508 people killed or seriously injured in 2002, 27% (1,330) below the 1994-98 average of 4,838. As noted in paragraph 2.2, the relevant "indicative line" figure for 2002 is 19.7% below the 1994-98 baseline average. Therefore, the reduction so far has been greater

**Progress towards the 2010 casualty reduction targets**



than would be needed to achieve the 2010 target fall of 40% by means of a constant annual percentage reduction, so the figure for 2002 is below the relevant indicative line. *Table 3* shows that this is also the case for most modes of transport: the percentage fall from the 1994-98 average number of killed or seriously injured (KSI) casualties is more than 19.7% for most modes of transport, and so their figures would be below their indicative lines.

About half of all the 3,508 KSI casualties in 2002 were car users. The total of 1,769 car KSI casualties in 2002 was 29% below the 1994-98 baseline average of 2,501, and therefore better than the indicative line reduction. There were 883 pedestrian KSI casualties in 2002, 36% fewer than the annual average of 1,376 for the period 1994-98. However, the number of motorcycle KSI casualties in 2002 was 457, an increase of 29% (102) from the 1994-98 average: this was the only category of road user for which the figure in 2002 was markedly above the indicative line. There were 149 pedal cycle KSI casualties, 40% below the 1994-98 average, and 141 goods vehicle user KSI casualties, 18% below the baseline average and therefore this figure was slightly above the indicative line. The numbers of KSI casualties were smaller for each of the remaining categories of road user (bus/coach: 59; others: 50).

## 5.2 Child killed or seriously injured casualties

523 children were killed or seriously injured in 2002, 38% (319) below the 1994-98 average of 842. The indicative line figure for 2002 is 25.7% below the 1994-98 average. Therefore, the figure for 2002 represents rapid progress towards the 2010 target of a 50% reduction. *Table 4* shows that, in 2002, the figures for child pedestrians and pedal cyclists were below the indicative line, but the figure for child car users is slightly above it.

About two-thirds of the 523 child killed or seriously injured (KSI) casualties in 2002 were pedestrians. The number of child pedestrian KSI casualties in 2002 was 336, 226 (40%) below the 1994-98 average of 562, and therefore better than the indicative line reduction. There were 111 child car KSI casualties in 2002, a fall of 34 (23%) from the 1994-98 average of 145, and therefore slightly above the indicative line. Child pedal cycle KSI casualties in 2002 were below the indicative line: there were 46, a reduction of 54% from the 1994-98 average of 100. As there are few child KSI casualties for other modes of transport, small fluctuations in their numbers can cause apparently large percentage changes from the 1994-98 baseline average levels - so percentage changes for them are not shown in *Table 4*.

## 5.3 Slightly injured casualties, and the slight casualty rate per 100 million vehicle kilometres

Because of the limited availability of detailed reliable road traffic estimates for Scotland, *Table 5* shows the *numbers* of slight casualties (rather than slight casualty rates) for various types of road user. The table also shows the overall total volume of traffic and the overall slight casualty rate, both of which are only available on an annual basis with effect from 1998.

At the time of writing, 2001 is the latest year for which there is an estimate of the total volume of traffic for Scotland as a whole. The slight casualty rate of 37.2 casualties per 100 million vehicle kilometres in 2001 was 9.7% below the 1994-98 baseline average of 41.3, so the 2010 target of a 10% reduction had almost been achieved.

By 2002, the indicative line has a reduction of 4.4% in the slight casualty rate. The total number of slight casualties had fallen by 10%, which is faster than this, and the figures for most of the road user categories had also fallen more rapidly than the indicative line.

Almost two-thirds of slight casualties in 2002 were car users. The total number of car user slight casualties in 2002 was 10,037, 8% below the 1994-98 average of 10,859, and therefore better than the slight casualty rate's indicative line fall of 4.4%. There were 2,430 pedestrian slight casualties, 19% fewer than the 1994-98 average of 3,009, a reduction much better than that of the indicative line for the slight casualty rate. Bus and coach user slight casualties totalled 801 in 2002, 12% fewer than the 1994-98 average, and the number of pedal cyclist slight casualties (679) was 34% below the baseline average. However, motorcyclist slight casualties (707 in 2002), were 22% above the 1994-98 average and goods vehicle user slight casualties (618) were 6% more than the baseline average.

## **6. Casualties by Type of Road (Table 6)**

6.1 In 2002, “non built-up” roads (see the definition in section 9.3) accounted for about two-fifths of the total number of casualties (41%: 7,847 out of 19,238). However, presumably because average speeds are higher on non built-up roads than elsewhere, they accounted for just over three-quarters of fatal injuries (76%: 230 out of 304) and for over half of the total number of fatal and serious injuries combined (52%: 1,807 out of 3,508).

6.2 Compared with the 1994-98 average, the fall in the total number of casualties has been greater for “built-up” roads (16%) than for non built-up roads (11%). The difference between the two types of road is greater when one compares the falls from the 1994-98 averages for the numbers killed (down by 36% for built-up roads compared with 13% for non built-up) and for the numbers fatally or seriously injured (falls of 31% for built up roads and 24% for non-built up roads).

## **7. Casualties by Mode of Transport (Table 6)**

### **7.1 Car users**

A total of 11,806 car users were injured in road accidents, representing just over three-fifths of all casualties (61%: 11,806 out of 19,238). Of these people, a total of 1,769 were either fatally or seriously injured, 154 of whom died. Non built-up roads accounted for a little over half of all car user casualties (53%: 6,272 out of 11,806). Presumably because average speeds are higher on non built-up roads, they accounted for much higher percentages of the total numbers of car users who were fatally injured (91%: 140 out of 154) or were fatally or seriously injured (72%: 1,279 out of 1,769).

The number of car user fatalities in 2002 was 21% lower than in 2001, and was 26% below the 1994-98 average level. The number who were fatally or seriously injured fell by 9% from 2001, and the total number of casualties (of all severities) was 4% less than in the previous year. The total number of car user casualties in 2002 was 12% below the 1994-98 average.

## 7.2 Pedestrians

There were 3,313 pedestrian casualties in 2002: over a sixth of all casualties (17%: 3,313 out of 19,238). Of these, 883 were fatally or seriously injured (73 died). Presumably because of the greater vulnerability of pedestrians, 27% of pedestrian casualties were fatally or seriously injured (883 out of 3,313) compared with 15% of all car users (1,769 out of 11,806). About 95% of pedestrian casualties occurred on built-up roads (3,140 out of 3,313). Perhaps because of higher average speeds on non built-up roads, 45% of the pedestrian casualties on such roads were serious injuries or fatalities (78 out of 173) compared with 26% on built-up roads (805 out of 3,140).

## 7.3 Other casualties

Together, all other modes of transport accounted for a fifth (21%) of casualties in 2002 (4,119 out of 19,238) and for a similar proportion of the total number of fatal and serious injuries (24%: 856 out of 3,508). In 2002 there were 1,164 motor cycle casualties, (1% fewer than 2001 but 24% above the 1994-98 average), of whom 457 (39%) suffered fatal or serious injuries (46 died). A total of 860 bus and coach users were injured, of whom 59 suffered serious injuries (none were killed) - these low proportions presumably being due to the greater protection of their passengers by buses and coaches. The number of bus and coach user casualties rose by 4% in 2002, but was 15% below the 1994-98 average level. There were 828 pedal cyclist casualties in 2002, (10% fewer than in 2001 and 35% below the 1994-98 average level), including 149 (18%) fatal or serious injuries (8 died).

# 8. **Child Casualties (Table 7)**

## 8.1 Child casualties

There were 2,767 child casualties in 2002, representing about a seventh of the total number of casualties of all ages (14%: 2,767 out of 19,238). Of the child casualties, 523 were fatalities or serious injuries, of whom 14 died. This was 6 deaths fewer than in 2001; the total number of child casualties fell by 189 (6%). These numbers were all considerably below the 1994-98 average levels: the number of casualties was 28% lower, the number of deaths was about half of the 1994-98 average level and the number of killed or seriously injured was 38% below the 1994-98 average level.

## 8.2 Child pedestrians

There were 1,308 child pedestrian casualties in 2002. They accounted for 39% of all pedestrian casualties of all ages (1,308 out of 3,313). Of the child pedestrian casualties, 336 were fatalities or serious injuries (12 died). The number of fatalities was 2 fewer than in 2001, and the total number of fatal and serious injuries was 5% lower than in 2001. The figures were considerably below the corresponding 1994-98 averages: the number of fatal and serious child pedestrian casualties and the overall number of child pedestrian casualties were, respectively, 40% and 33% below the 1994-98 average level.

## 8.3 Children in cars

In 2002, there were 929 child casualties in cars, 8% of the total number of car user casualties

of all ages (929 out of 11,806). Of the child casualties in cars, 111 were fatalities or serious injuries (2 died). While the total number of child car user fatalities and serious injuries was 23% below the 1994-98 average, the total number of child car user casualties (of all severities) was only 15% lower than the 1994-98 average.

#### 8.4 Other child casualties

In 2002, there were 276 child pedal cycle casualties (33% of the total of 828 pedal cycle casualties of all ages), 165 child bus and coach user casualties (19% of the total of 860 of all ages) and 89 other child casualties. The child pedal cycle casualties included 46 serious injuries, but no deaths. The total number of child pedal cycle casualties in 2002 was 49% below the 1994-98 average, and the total number of child bus and coach user casualties was 9% below the 1994-98 average.

### 9. Sources and definitions

#### 9.1 The sources of the data

The statistics in this bulletin were compiled from returns made by police forces, which cover all accidents in which a vehicle is involved that occur on roads (including footways) and result in personal injury, if they become known to the police. The vehicle need not be moving, and need not be in collision - for example, the returns include accidents involving people alighting from buses. "Damage only" accidents are not included in this definition.

#### 9.2 The definition of "severity"

For the purposes of the Road Accidents statistical returns:

a ***fatal injury*** is one which causes death less than 30 days after the accident;

a ***fatal accident*** is an accident in which at least one person is fatally injured;

a ***serious injury*** is one which does *not* cause death less than 30 days after the accident, *and* which is in one (or more) of the following categories:

- (a) an injury for which a person is detained in hospital as an in-patient
- or* (b) any of the following injuries (whether or not the person is detained in hospital): fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock requiring treatment
- or* (c) any injury causing death 30 or more days after the accident;

a ***serious accident*** is one in which at least one person is seriously injured, but no-one suffers a fatal injury;

a ***slight injury*** is any injury which is neither "fatal" nor "serious" - for example, a sprain, bruise or cut which is not judged to be severe, or slight shock requiring roadside attention;

a ***slight accident*** is one in which at least one person suffers "slight" injuries, but no-one is seriously injured, or fatally injured;

Over the years, improvements in vehicle design, and the provision and use of additional safety features, together with changes in the law (eg on the fitting and wearing of seatbelts), will have all helped to reduce the severity of the injuries suffered in some accidents. Road safety measures should also have reduced the levels of injuries sustained - for example, if traffic calming schemes reduce average speeds and hence reduce the speeds at which collisions occur. In addition, the distinction between “serious” and “slight” injuries could be affected by factors such as changes in hospitals’ admission policies. For example, all else being equal, the number of “serious injury” cases would rise, and the number of “slight injury” cases would fall, if it became standard procedure for a hospital to keep in overnight, for precautionary reasons, casualties with a particular type of injury (section 2.3 of the 1995 bulletin explained that part of the increase in “serious injury” cases in 1994 was due to hospitals admitting more child casualties for overnight observation). There could also be changes in hospitals’ procedures that would reduce the numbers of “serious injury” cases. In addition, there is anecdotal evidence that changes in procedures for assigning severity codes may affect the categorisation of injuries. For example, different severity codes might be assigned by a police officer who was at the scene of an accident and by a clerk who bases the code on a police officer’s written description of the accident. Therefore, it is possible that some of the changes shown in the figures for “serious injuries” and “slight injuries” may be affected by changes in administrative practices, which may have altered the proportion of accidents which is categorised as “serious”.

### 9.3 Some other definitions

**Built-up roads:** accidents which occur on “built-up” roads are those which occur on roads which have speed limits of up to 40 miles per hour (*ignoring* temporary speed limits on roads for which the normal speed limit is over 40mph). Therefore, an accident on a motorway in an urban area would *not* be counted as occurring on a “built-up” road, because the speed limit on the motorway is 70mph. An accident on a stretch of motorway with a temporary speed limit of 30mph would *not* be counted as occurring on a “built-up” road, because the normal speed limit is 70mph.

**Children:** people under 16 years old.

**Pedestrians:** includes people riding toy cycles on the footway; people pushing or pulling bicycles or other vehicles; people leading or herding animals; occupants of prams or wheelchairs; people who alight safely from vehicles and are subsequently injured.

### 9.4 The targets for reducing road accident casualties by the year 2010

In March 2000, the UK Government, the Scottish Executive and the National Assembly for Wales announced a new national road safety strategy and casualty reduction targets for 2010. These new targets were introduced to focus on achieving a further substantial improvement in road safety over the next ten years, with particular emphasis on child casualties. The new targets, which are given in the document "*Tomorrow's roads - safer for everyone*", are based on the annual average casualty levels over the period 1994 to 1998. By 2010 it is hoped that there will be, compared with the average for 1994-98:

- a 40% reduction in the number of people killed or seriously injured in road accidents.
- a 50% reduction in the number of children killed or seriously injured; and
- a 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.

## 9.5 The calculation of the “indicative lines” shown in the graphs

One way of assessing progress towards these targets is to compare actual casualty numbers in each year with an indicative line that starts at the baseline figure in 1996 and falls, by a constant percentage reduction in each subsequent year, to the target for 2010. This is the approach adopted by the GB Road Safety Advisory Panel. The indicative line starts at the baseline figure in 1996 because that is the middle year of the 1994-98 "baseline" period. Other approaches could have been used: there are many ways of producing lines that indicate how casualty numbers might fall fairly steadily to the targets for 2010 - for example, the indicative lines could have started at the actual levels for the year 2000 (as that was the year in which the targets were adopted), and fallen in straight lines to the targets for 2010.

As the method adopted to produce the indicative lines involves a constant percentage reduction in each year, the lines are not straight. This is due to the "compounding over the years" effect of constant annual percentage reductions: each year's fall in an indicative line's figure is calculated by applying a constant percentage reduction to the line's number of casualties in the previous year (which reduces each year, so the falls between one year and the next get smaller and smaller). To two decimal places, the falls are: 3.58% p.a. for killed or seriously injured casualties; 4.83% p.a. for child killed or seriously injured casualties; and 0.75% p.a. for the slight casualty rate.

More statistics relating to the new targets appear in "*Road Accidents Scotland*". A table on page 42 of "*Road Accidents Scotland 2001*" shows the percentages of the baseline averages in each year which are represented by each of the indicative lines.

**Table 1 Injury Road Accidents by Severity**

	Fatal injury	Serious injury	Fatal and Serious	Slight injury	All Severities
1970	758	7,860	8,618	13,515	22,133
1975	699	6,912	7,611	13,041	20,652
1980	644	7,218	7,862	13,926	21,788
1985	550	6,507	7,057	13,587	20,644
1990	491	5,237	5,728	14,443	20,171
1995	361	4,071	4,432	12,102	16,534
1996	316	3,315	3,631	12,442	16,073
1997	340	3,312	3,652	12,994	16,646
1998	339	3,318	3,657	12,862	16,519
1999	285	3,209	3,494	11,922	15,416
2000	297	3,006	3,303	11,817	15,120
2001	308	2,837	3,145	11,581	14,726
2002 <i>prov.</i>	274	2,661	2,935	11,377	14,312

**Table 2 Casualties by Severity**

	Fatal injury	Serious injury	Fatal and Serious	Slight injury	All Severities
1950	529	4,553	5,082	10,774	15,856
1955	610	5,096	5,706	15,193	20,899
1960	648	6,632	7,280	19,035	26,315
1965	743	8,744	9,487	22,340	31,827
1970	815	10,027	10,842	20,398	31,240
1975	769	8,779	9,548	19,073	28,621
1980	700	8,839	9,539	19,747	29,286
1985	602	7,786	8,388	18,899	27,287
1986	601	7,422	8,023	18,094	26,117
1987	556	6,707	7,263	17,485	24,748
1988	554	6,732	7,286	18,139	25,425
1989	553	6,998	7,551	19,981	27,532
1990	546	6,252	6,798	20,430	27,228
1991	491	5,638	6,129	19,217	25,346
1992	463	5,176	5,639	18,534	24,173
1993	399	4,454	4,853	17,562	22,415
1994	363	5,208	5,571	17,002	22,573
1995	409	4,930	5,339	16,855	22,194
1996	357	4,041	4,398	17,318	21,716
1997	377	4,047	4,424	18,205	22,629
1998	385	4,072	4,457	18,010	22,467
1999	310	3,765	4,075	16,928	21,003
2000	326	3,567	3,893	16,615	20,508
2001	347	3,407	3,754	16,158	19,912
2002 <i>prov.</i>	304	3,204	3,508	15,730	19,238
<i>1994 - 1998 average</i>	<i>378</i>	<i>4,460</i>	<i>4,838</i>	<i>17,478</i>	<i>22,316</i>
<u>2002 percentage change:</u>					
on 2001	-12%	-6%	-7%	-3%	-3%
on 94-98 average	-20%	-28%	-27%	-10%	-14%

**NB:** 1. Some figures for 2001 and earlier years may have been revised slightly from those published previously due to late returns, or due to late corrections being made to returns that had been received earlier.

2. Although records of the numbers of "serious injury" and "slight injury" casualties began in 1950, records of the numbers of injury road accidents did not begin until 1970.

**Table 3 Fatal and serious casualties by mode of transport**

	Pede- strian	Pedal cycle	Motor cycle	Car	Bus/ coach	Goods <sup>1</sup>	Other <sup>2</sup>	All road users
1994-98 ave	1,376	249	355	2,501	96	172	89	4,838
1994	1,647	316	353	2,804	150	211	90	5,571
1995	1,587	292	395	2,653	105	211	96	5,339
1996	1,279	216	300	2,293	96	137	77	4,398
1997	1,211	210	358	2,365	55	136	89	4,424
1998	1,156	210	371	2,390	76	163	91	4,457
1999	1,143	189	431	2,004	83	144	81	4,075
2000	996	176	474	1,979	80	121	67	3,893
2001	917	171	454	1,949	62	129	72	3,754
2002 prov.	883	149	457	1,769	59	141	50	3,508
<u>2002 percentage change:</u>								
on 2001	-4%	-13%	1%	-9%	-5%	9%	-31%	-7%
on 94-98 ave	-36%	-40%	29%	-29%	-39%	-18%	-44%	-27%

**Table 4 Child fatal and serious casualties by mode of transport**

	Pede- strian	Pedal cycle	Motor cycle	Car	Bus/ coach	Goods <sup>1</sup>	Other <sup>2</sup>	All road users
1994-98 ave	562	100	6	145	11	8	10	842
1994	674	144	6	161	24	12	8	1,029
1995	638	113	7	153	9	13	17	950
1996	540	100	4	118	15	3	10	790
1997	505	78	4	138	3	7	10	745
1998	455	64	8	153	6	6	6	698
1999	430	69	5	108	2	2	9	625
2000	378	65	7	94	7	5	5	561
2001	353	56	7	109	5	6	7	543
2002 prov.	336	46	7	111	9	7	7	523
<u>2002 percentage change:</u>								
on 2001	-5%	-18%	*	2%	*	*	*	-4%
on 94-98 ave	-40%	-54%	*	-23%	*	*	*	-38%

**Table 5 Slight casualties by mode of transport**

	Pede- strian	Pedal cycle	Motor cycle	Car	Bus/ coach	Goods <sup>1</sup>	Other <sup>2</sup>	All road users	Traffic <sup>3</sup>	Slight casualty rate
								<i>numbers</i>	<i>mill veh-km</i>	<i>per 100 mill veh-km</i>
1994-98 ave	3,009	1,034	580	10,859	912	583	501	17,478	42,364	41.26
1994	3,083	1,068	577	10,123	1,084	669	398	17,002	..	..
1995	3,048	1,031	576	10,321	802	579	498	16,855	..	..
1996	3,047	1,081	550	10,740	902	499	499	17,318	..	..
1997	2,944	1,062	590	11,669	886	525	529	18,205	..	..
1998	2,921	930	605	11,444	887	643	580	18,010	42,775	42.10
1999	2,620	828	594	10,902	841	609	534	16,928	43,338	39.06
2000	2,606	706	654	10,672	854	541	582	16,615	43,208	38.45
2001	2,490	747	723	10,340	763	596	499	16,158	43,382	37.25
2002 prov.	2,430	679	707	10,037	801	618	458	15,730	..	..
<u>2002 percentage change:</u>										
on 2001	-2%	-9%	-2%	-3%	5%	4%	-8%	-3%		
on 94-98 ave	-19%	-34%	22%	-8%	-12%	6%	-9%	-10%		

\* A percentage change is not shown if the denominator is 50 or fewer.

1. Light goods vehicles and heavy goods vehicles.

2. Taxis, minibuses and other modes of transport

3. There are no reliable estimates of the volume of traffic on minor roads in Scotland for individual years pre-1998, because the method used then to estimate total traffic volumes was designed only to produce reliable estimates for GB as a whole. The Scottish components of the traffic estimates for GB for each of the years have been used to produce the estimated annual average for Scotland for 1994 to 1998.

Table 6 Casualties by built-up and non built-up roads, mode of transport and severity

Mode of Transport	Built-up roads			Non built-up roads			All roads		
	Fatal	Fatal & Serious	All	Fatal	Fatal & Serious	All	Fatal	Fatal & Serious	All
<b>Pedestrian</b>									
1994-98 average	72	1,256	4,165	32	120	219	104	1,376	4,385
2000	49	910	3,434	23	86	168	72	996	3,602
2001	50	834	3,248	25	83	159	75	917	3,407
2002 prov.	49	805	3,140	24	78	173	73	883	3,313
% change on 2001	*	-3%	-3%	*	-6%	9%	-3%	-4%	-3%
on 94-98 average	-32%	-36%	-25%	*	-35%	-21%	-30%	-36%	-24%
<b>Pedal cycle</b>									
1994-98 average	4	196	1,130	6	53	153	11	249	1,283
2000	6	138	788	6	38	94	12	176	882
2001	4	127	794	6	44	124	10	171	918
2002 prov.	0	122	727	8	27	101	8	149	828
% change on 2001	*	-4%	-8%	*	*	-19%	*	-13%	-10%
on 94-98 average	*	-38%	-36%	*	-49%	-34%	*	-40%	-35%
<b>Motor cycle</b>									
1994-98 average	5	148	509	26	207	426	31	355	935
2000	8	188	586	32	286	542	40	474	1,128
2001	7	160	612	42	294	565	49	454	1,177
2002 prov.	8	183	629	38	274	535	46	457	1,164
% change on 2001	*	14%	3%	*	-7%	-5%	*	1%	-1%
on 94-98 average	*	24%	24%	*	32%	26%	*	29%	24%
<b>Car</b>									
1994-98 average	28	718	6,236	181	1,783	7,125	209	2,501	13,360
2000	30	521	5,970	152	1,458	6,681	182	1,979	12,651
2001	32	538	5,728	162	1,411	6,561	194	1,949	12,289
2002 prov.	14	490	5,534	140	1,279	6,272	154	1,769	11,806
% change on 2001	*	-9%	-3%	-14%	-9%	-4%	-21%	-9%	-4%
on 94-98 average	*	-32%	-11%	-23%	-28%	-12%	-26%	-29%	-12%
<b>Bus/Coach</b>									
1994-98 average	2	75	835	1	21	174	3	96	1,009
2000	1	68	810	0	12	124	1	80	934
2001	0	51	709	0	11	116	0	62	825
2002 prov.	0	53	783	0	6	77	0	59	860
% change on 2001	*	4%	10%	*	*	-34%	*	-5%	4%
on 94-98 average	*	-30%	-6%	*	*	-56%	*	-39%	-15%
<b>Other modes of transport</b>									
1994-98 average	3	81	607	17	179	737	20	260	1,344
2000	3	58	650	16	130	661	19	188	1,311
2001	2	52	607	17	149	689	19	201	1,296
2002 prov.	3	48	578	20	143	689	23	191	1,267
% change on 2001	*	-8%	-5%	*	-4%	0%	*	-5%	-2%
on 94-98 average	*	-41%	-5%	*	-20%	-7%	*	-27%	-6%
<b>All casualties</b>									
1994-98 average	115	2,474	13,481	263	2,364	8,834	378	4,838	22,316
2000	97	1,883	12,238	229	2,010	8,270	326	3,893	20,508
2001	95	1,762	11,698	252	1,992	8,214	347	3,754	19,912
2002 prov.	74	1,701	11,391	230	1,807	7,847	304	3,508	19,238
% change on 2001	-22%	-3%	-3%	-9%	-9%	-4%	-12%	-7%	-3%
on 94-98 average	-36%	-31%	-16%	-13%	-24%	-11%	-20%	-27%	-14%

\* indicates that a percentage change is not shown because the denominator is 50 or fewer

**NB:** Some figures for 2001 and earlier years may have been revised slightly from those published previously due to late returns, or due to late corrections being made to returns that had been received earlier.

**Table 7 Child casualties by built-up and non built-up roads, mode of transport and severity**

Mode of Transport	Built-up roads			Non built-up roads			All roads		
	Fatal	Fatal & Serious	All	Fatal	Fatal & Serious	All	Fatal	Fatal & Serious	All
<b>Pedestrian</b>									
1994-98 average	11	532	1,886	5	31	52	17	562	1,938
2000	10	364	1,452	3	14	34	13	378	1,486
2001	12	342	1,467	2	11	20	14	353	1,487
2002 prov.	9	313	1,265	3	23	43	12	336	1,308
% change on 2001	*	-8%	-14%	*	*	*	*	-5%	-12%
on 94-98 average	*	-41%	-33%	*	*	-17%	*	-40%	-33%
<b>Pedal cycle</b>									
1994-98 average	2	86	497	1	14	40	3	100	537
2000	3	58	310	1	7	20	4	65	330
2001	4	50	283	0	6	26	4	56	309
2002 prov.	0	40	251	0	6	25	0	46	276
% change on 2001	*	*	-11%	*	*	*	*	-18%	-11%
on 94-98 average	*	-53%	-49%	*	*	*	*	-54%	-49%
<b>Car</b>									
1994-98 average	2	50	541	7	94	553	8	145	1,094
2000	0	17	487	4	77	478	4	94	965
2001	0	29	475	2	80	473	2	109	948
2002 prov.	0	24	401	2	87	528	2	111	929
% change on 2001	*	*	-16%	*	9%	12%	*	2%	-2%
on 94-98 average	*	-52%	-26%	*	-8%	-5%	*	-23%	-15%
<b>Bus/Coach</b>									
1994-98 average	1	9	137	0	3	44	1	11	181
2000	0	6	119	0	1	18	0	7	137
2001	0	5	108	0	0	27	0	5	135
2002 prov.	0	7	145	0	2	20	0	9	165
% change on 2001	*	*	34%	*	*	*	*	*	22%
on 94-98 average	*	*	6%	*	*	*	*	*	-9%
<b>Other</b>									
1994-98 average	0	12	49	1	12	53	1	24	102
2000	0	10	43	0	7	39	0	17	82
2001	0	9	45	0	11	32	0	20	77
2002 prov.	0	12	46	0	9	43	0	21	89
% change on 2001	*	*	*	*	*	*	*	*	16%
on 94-98 average	*	*	*	*	*	-19%	*	*	-13%
<b>All child casualties</b>									
1994-98 average	16	689	3,109	14	153	742	30	842	3,852
2000	13	455	2,411	8	106	589	21	561	3,000
2001	16	435	2,378	4	108	578	20	543	2,956
2002 prov.	9	396	2,108	5	127	659	14	523	2,767
% change on 2001	*	-9%	-11%	*	18%	14%	*	-4%	-6%
on 94-98 average	*	-43%	-32%	*	-17%	-11%	*	-38%	-28%

\* indicates that a percentage change is not shown because the denominator is 50 or fewer

**NB:** Some figures for 2001 and earlier years may have been revised slightly from those published previously due to late returns, or due to late corrections being made to returns that had been received earlier.

## **Scottish Executive Transport Statistics publications**

**Scottish Transport Statistics** starts with a Summary, which describes the trends for each mode of transport over the past ten years, and provides comparisons of some key statistics with the equivalent figures for Great Britain. This is followed by chapters on Road transport vehicles, Bus and coach travel, Road freight, Toll bridges, Road network, Road traffic, Injury road accidents, Rail services, Air transport, Water transport, Finance and Personal and cross-modal travel. Each chapter consists of groups of tables on that topic, together with some comments on points shown in the tables, and some notes on the definitions and sources of the statistics. The final section provides some longer-term historical series.

*Latest edition:* provides figures up to 2001, in general (in some cases, the latest available figures relate to a different period, such as the calendar year 2000, the financial year 2000-01 or the financial year 2001-02); published in August 2002

*Published Annually* Price: £ 10.00 ISBN 0 7559 0475 3

**Household Transport: some Scottish Household Survey results** provides information about the transport facilities available to private households, and about some travel by household members. Topics covered include: the availability of cars for private use; estimated household expenditure on fuel for motor vehicles; people's possession of driving licences and their frequency of driving; people's frequency of walking and cycling; people's frequency of travel in the evening and how safe they feel from crime while doing so; travel to work (including reasons for method used and reasons for not using public transport); travel to school (including reasons for mode choice and reasons for not using public transport); adults with limited mobility and adults with Orange or Blue Badges. Earlier editions covered some other topics as well as some (but not all) of these topics.

*Latest edition:* gives figures for 2001, and a few for 1999 and 2000; published in December 2002.

*Published Annually* Price: £ 2.00 ISBN 0 7559 3494 6

**Transport across Scotland: some Scottish Household Survey results for parts of Scotland** provides information about the transport facilities available to private households, and about some travel by household members, for parts of Scotland. Statistics are provided for each Council area, and for each category of an urban / rural classification that was developed for analysing the results of the SHS. The topics covered include: the accessibility and frequency of bus services; people's views on the convenience of public transport, the availability for private use of motor vehicles, cars and company cars; people's possession of driving licences and frequency of driving; people's frequency of walking and cycling; the usual method of travel to work; whether people work from home; whether car commuters could use public transport; where people who drive to work park; and travel to school.

*Latest (and only) edition:* provides figures for 1999/2000; published in December 2001

*Published Biennially* Price: £ 2.00 ISBN 0 7559 3287 0

**Scottish Household Survey Travel Diary results** provides information about the journeys made by adults living in private households. The topics covered include the means of transport used by different types of people, the purposes for which people travel, the distances that they go, the times of day at which trips start, the duration of journeys, and the days of the week on which people travel. The information about the person's travel is analysed in conjunction with information from questions about the household as a whole. The latest edition of the bulletin includes, for the first time, some results for individual local authorities.

*Latest edition:* gives figures for 2001, and a few for 1999 and 2000; published in February 2003

*Published Annually* Price: £ 2.00 ISBN 0 7559 2317 0

**Travel by Scottish residents: some National Travel Survey results** provides information about trends in the average number of journeys and average distance travelled per person per year, and the average length of journey, by the main mode of travel and by the purpose of the journey. It also provides information about travel patterns by age-group, by sex, by socio-economic group, by working status, by household income quintile and by whether or not the household has a car.

*Latest edition:* provides figures up to the three year period 1998/2000; published in April 2002

*Published Triennially* Price: £ 2.00 ISBN 0 7559 2198 4

**Bus and Coach Statistics** provides information about the trends in bus and coach services in Scotland, and some related Scottish Household Survey (SHS) results. The statistics of bus and coach services include: the distances travelled by vehicles and the numbers of bus passenger journeys; fare indices; passenger receipts; public transport support and concessionary fare reimbursement; operating costs; vehicle stock and staffing. The SHS statistics include: the accessibility and frequency of bus services; views on the quality of public transport; travel to work by bus and the possible use of public transport by those who travel to work by car or van; reasons for not using buses more often; the frequency of travelling by bus in the evenings and how safe from crime passengers feel; and the proportion of adults' journeys which are made by bus. There are estimates of local bus service vehicle kilometres and passenger journeys for the former Regions of Scotland, and some of the SHS results are provided for individual Council areas. There are also some results from the bus passenger satisfaction survey.

*Latest edition:* provides figures up to the 2001-02 financial year (bus and coach services) and SHS statistics for 2001, and some earlier years; published in March 2003

*Published Annually Price: £ 2.00 ISBN 0 7559 3537 3*

**Road Accidents Scotland** starts with a Summary section, which shows the main trends in the numbers of road accidents and casualties in the past ten years. This is followed by a Commentary which includes descriptions of the longer-term trends in the numbers of road accidents and casualties, more detailed analyses of the numbers of accidents, motorists and casualties, and comparisons of the Scottish figures with those of other countries. The next part provides information on, and the figures which relate to, the casualty reduction targets for 2010. This is followed by groups of tables on Accidents, Accident costs, Vehicles involved, Drivers and riders, Drivers breath tested, Drink-drive accidents and casualties, and Casualties. Finally, there are a number of annexes, including a calendar of events affecting road traffic and road safety, notes on the collection of road accident statistics, definitions of various terms, and other information.

*Latest edition:* provides figures up to 2001; published in December 2002

*Published Annually Price: £ 10.00 ISBN 0 7559 0639 X*

**Key Road Accidents Statistics** gives the number of accidents, casualties by severity, casualties by type of road, casualties by mode of transport, and child casualties, including trends in recent years and progress towards the casualty reduction targets for the year 2010.

*Latest edition:* provides figures up to 2002; published in June 2003

*Published Annually Price: £ 2.00 ISBN 0 7559 3558 6*

Copies of these publications may be purchased from:

The Stationery Office Bookshop  
71 Lothian Road EDINBURGH EH3 9AZ  
Tel: (0131) 228 4181 FAX: (0131) 622 7017

Cheques (made payable to "The Stationery Office Limited") should be sent with orders.

Transport Statistics publications may be found on the Scottish Executive Website: Go to

**<http://www.scotland.gov.uk/stats/land.htm>**

and click on the link, in the middle of the screen, labelled "Transport, Travel and Tourism".

Then, scroll through the list of publications to find the one(s) of interest. You should be able to "copy and paste" numbers from the tables in the Web versions into your own spreadsheets.

**Enquiries for more information on Transport Statistics** should be addressed to:

Scott Brand  
Transport Statistics branch  
Scottish Executive  
Victoria Quay  
EDINBURGH EH6 6QQ  
Tel: 0131 244 7255 FAX: 0131 244 0888  
E-mail: [transtat@scotland.gsi.gov.uk](mailto:transtat@scotland.gsi.gov.uk)

# SCOTTISH EXECUTIVE STATISTICAL SERVICES

## Our aim

The aim of the Statistical Service is to provide relevant and reliable statistical information, analysis and advice that meet the needs of government, business and the people of Scotland.

## Our Objectives

### 1. To ensure that all statistics work is relevant to meeting user needs by

- Improving the range of statistics and analysis we produce for users inside and outside of government (including for key cross cutting policy areas such as the economy, social justice, area regeneration, equality and rural issues)
- Reviewing and where practicable improving timeliness.
- Providing more statistics disaggregated by age, gender, ethnicity and other characteristics.
- Developing more data for small areas through the Neighbourhood Statistics project
- Maintaining comparability of statistics across the UK.

### 2. To make better use of our statistics by

- Contributing more directly to policy processes inside and where possible outside government. These include community planning, performance information, measurement of government targets, better policy making and modernising government objectives.
- Improving access to and presentation of data and analysis, through better use of the Web, improved publications and improved systems for holding and accessing background data.
- Improving the advice provided on statistics to Ministers and senior management within the Executive.

### 3. To develop the reliability and integrity of official statistics by

- Assuring and improving quality as an integral part of data collection and analysis and through regular reviews in line with National Statistics quality strategy.
- Developing statistical methods, systems and classifications
- Maintaining and promoting integrity through implementation of the National Statistics Code of Practice and related protocols.

### 4. To ensure the efficient and effective delivery of statistics products and services by

- Making full use of all sources including administrative sources.
- Minimising the burden on data providers through Survey Monitoring & Advice
- Ensuring value for money.
- Employing staff with the necessary skills and ensuring development of expertise amongst existing staff.
- Ensuring effective use of Information and Communications Technology.
- Managing, promoting and upholding the integrity of the statistics profession.

### 5. To plan effectively and work together by

- Producing and implementing an annual Scottish Executive Statistics Plan.
- Developing more co-ordinated working arrangements with other analytical services in and out of the Executive.
- Working with the rest of the Government Statistical Service to develop joint approaches/solutions where appropriate.
- Improving the involvement of users and providers, working on a partnership basis wherever possible.

## This is a National Statistics publication

This is a National Statistics publication. It has been produced to high professional standards set out in the National Statistics Code of Practice and Release Practice Protocol.

[http://www.statistics.gov.uk/about\\_nslcop/default.asp](http://www.statistics.gov.uk/about_nslcop/default.asp)

These statistics undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

Details of pre-release access will be provided in the Scottish Executive Statistics Website under 'Forthcoming Releases'

## Correspondence and enquiries

Enquiries on Transport Statistics should be addressed to:

Scott Brand  
ASD: Transport Statistics Branch  
Scottish Executive Development Department  
Victoria Quay  
Edinburgh EH6 6QQ  
Telephone (0131) 244 7255; Fax: (0131) 244 0888  
e-mail: transtat@scotland.gsi.gov.uk

General enquiries on Scottish Executive statistics can be addressed to:

Kevin Meenan  
Central Statistics Unit  
Scottish Executive  
4 Floor East Rear, St Andrews House  
EDINBURGH EH1 3DG  
Telephone: (0131) 244 0442; Fax: (0131) 244 0335  
e-mail: statistics.enquiries@scotland.gsi.gov.uk

Advice on specific areas of Scottish Executive statistical work can be obtained from staff at the telephone numbers given below:

### Scottish Executive Statistics contacts

Schools – qualifications	(0131) 244 0313
Schools – pupils and teachers	(0131) 244 0309
Further and Higher Education	(0141) 242 0273
The Economy	(0131) 244 2234
Labour market	(0141) 242 5446
Business	(0141) 242 5446
Income, Tax and Benefits	(0131) 244 2583
Local government finance	(0131) 244 7033
Environment, planning & local government staffing	(0131) 244 0445
Equality	(0131) 244 0442
Housing	(0131) 244 7236
Transport	(0131) 244 7255
Health	(0131) 244 3432
Community Care	(0131) 244 3777
Social Justice	(0131) 244 0442
Scottish Executive personnel	(0131) 244 3926
Agricultural census and labour force	(0131) 244 6150
Fisheries	(0131) 244 6441
Courts and law	(0131) 244 2227
Recorded crime and prisons	(0131) 244 2225

### Other contacts for Scottish statistics

Forestry Commission	(0131) 314 6337
The Scottish Funding Councils for Higher and Further Education	(0131) 313 6575
General Register Office for Scotland - Vital statistics and publications - Population statistics, census statistics or digital boundary products	(0131) 314 4243  (0131) 314 4254

For **general enquiries about National Statistics** in the United Kingdom Government contact the National Statistics Public Enquiry Service on **020 7533 5888**  
minicom: 01633 812399  
Email: info@statistics.gov.uk  
Fax: 01633 652747  
Letters: room DG/18, 1 Drummond Gate,  
LONDON SW1V 2QQ

You can also find National Statistics on the internet - go to **www.statistics.gov.uk**

Current staff names, e-mail addresses and the publications listed below as well as a range of other statistical publications can be found on the Scottish Executive Web site at **www.scotland.gov.uk/stats**.

Further information on the General Register Office for Scotland is available on the website **www.gro-scotland.gov.uk**

### Most recent Statistical Publications relating to Transport and Travel

Ref no.	Title	Last published	Price
	Scottish Transport Statistics	August 2002	£ 10.00
	Road Accidents Scotland	December 2002	£ 10.00
Trn / 2003 / 3	Key Road Accident Statistics	June 2003	£ 2.00
Trn / 2002 / 6	Household Transport: some Scottish Household Survey results	December 2002	£ 2.00
Trn / 2001 / 4	Transport across Scotland: some Scottish Household Survey results for parts of Scotland	December 2001	£ 2.00
Trn / 2003 / 1	Scottish Household Survey Travel Diary results	February 2003	£ 2.00
Trn / 2002 / 3	Travel by Scottish residents: some National Travel Survey results	April 2002	£ 2.00
Trn / 2003 / 2	Bus and Coach Statistics	March 2003	£ 2.00

Additional copies of these publications may be purchased from **Scottish Executive Publication Sales, The Stationery Office Bookshop, 71 Lothian Road, Edinburgh, EH3 9AZ**, Telephone: (0131) 228 4181, Fax: (0131) 622 7017. Cheques should be made payable to 'The Stationery Office Limited'.

### Complaints and suggestions

If you are not satisfied with our service, please write to the Chief Statistician, Mr Rob Wishart, 4 Floor East Rear, St Andrews House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail rob.wishart@scotland.gov.uk. We also welcome any comments or suggestions that would help us to improve our standards of service.

ISSN 1351 3869  
ISBN 0 7559 3558 6

Price £ 2.00

Crown Copyright  
Brief extracts from the Crown Copyright material in this publication may be reproduced provided the source is fully acknowledged.