Transport Statistics Bulletin

Cars: Make and Model:
The Risk of Driver Injury in Great Britain:
2000 - 2004

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Printed in the United Kingdom on material containing 100% post-consumer waste.

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

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

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

Conversion factors:

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

Symbols: The following symbols have been used throughout.

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

Cars: Make and Model:
The Risk of Driver Injury in Great Britain: 2000-2004

Department for Transport

Contents

Introduction

This publication presents estimates of the risk of driver injury in popular models of car, if they are involved in a two car injury accident. **It does not address issues of primary safety and gives no information on whether or not specific makes of car have different risks of being involved in an accident.** The statistics are based on personal injury road accident data reported to the Department for Transport by police forces within Great Britain.

Secondary safety

There are two main types of safety feature in the design of motor vehicles. Primary safety features help drivers avoid accidents - for example, good tyres, lights and brakes. Secondary safety features protect people in crashes and affect the risk of injury - for example, seat belts, structural design, head restraints and airbags. This publication examines secondary safety, drawing on information about whether car drivers are injured when they are involved in a collision with another car.

The risk of driver injury in an injury accident is used as the basis for assessing the protection that a car offers its driver. The main methodological problem in comparing driver injury risk in different cars is that the risks are influenced not only by the cars' safety features, but also by the fact that different models of car may be driven by different sorts of drivers, at different speeds and under different road conditions and become involved in different types of accident. For example, some cars may be involved in more injury accidents on motorways at higher speeds simply because they do higher motorway mileage. The most important of these influences are allowed for in a modelling procedure described in Appendix 3.

The analysis relates only to accidents involving collisions between two cars in order to minimise distortions to the estimates, for example, from a particular model of car having a high proportion of collisions with very large mass vehicles such as Goods Vehicles.

The analysis is restricted to risk of injury to drivers. This is because for every injury accident it is known whether the driver of each vehicle involved is injured or uninjured. A fuller measure of secondary car safety could also include the risk of injury to front seat passengers. However, the police only record information on injured passengers, so any risk calculation would have to make assumptions about the average number of front seat passengers and this is likely to vary in different models of car. A broader measure of risk of injury in different car models would also take account of involvement in non-injury, i.e. damage only, accidents. However, this analysis is not possible because information on damage only accidents is not available.

Many factors can influence injury risk, for example, passenger compartment integrity, design of frontal energy absorbing structure, mass, and the sophistication of restraint systems, air bags and head restraints. Some of these factors may be linked to a degree and in many cases improvements can help in a variety of impacts. But, although mass can result in a safety benefit for the driver of a high mass car, it increases the risk of injury to drivers of other cars. Overall, in two car accidents, a safety rating for each model can be considered as reflecting each car colliding with a notional average car.

European New Car Assessment Programme

The European New Car Assessment Programme (Euro NCAP) carries out crash tests on new cars to provide consumer information on their performance within groups, for example, super minis. It started in 1997 and is supported by the Department for Transport, several other European countries, the European Commission and motoring and consumer organisations. Further information and test ratings can be found at www.euroncap.com.

Euro NCAP ratings are derived from performance in standardised laboratory test crashes, while the estimates in this statistical bulletin reflect what happens in actual accidents that involve some personal injury. Both provide useful information on car safety. However, their outputs are not directly comparable. The underlying focus of the Euro NCAP tests is serious and potentially fatal injuries with specific but relatively demanding crash tests for occupant protection in front and side impact. The figures in this publication cover car to car impacts for a wider range of accident type and severity with the focus on all injuries, including slight. There are other important differences that make comparison difficult, for example, the car model definition is much broader in this publication and can reflect a longer production period, during which safety improvements could have been introduced.

Table A - Risk of injury to car drivers involved in two car injury accidents by size, make and model of car

Understanding the table

Table A sets out estimates of the risk of driver injury in two car injury accidents, by size (broadly defined by length of car) and make and model of car. The estimates are based on injuries that occurred in accidents during the years 2000 to 2004 inclusive. Ratings are only published for cars first registered on or after l January 1995. The rating for all sizes of car includes those models for which results are not presented individually.

The first and fourth columns of Table A show standardised estimates of the risk of serious injury and all injury, respectively, to the driver if that make and model of car is involved in an injury crash with another car. Standardised estimates allow for the possible variation in the type of accident and driver in specific car models, so they better reflect the secondary safety features of the vehicle. The influences considered in producing standardised estimates are age and sex of driver, point of impact, and speed limit of road. Details of the adjustment process can be found in Appendix 3.

In order to avoid giving a misleading view of the relative safety of different vehicles it is necessary to consider the precision of the estimates. This is measured by confidence intervals, shown in columns two and five. The confidence interval is the range within which the true value can be expected to lie with a probability of 95 per cent. Where the sample size of a particular model is quite small, these confidence intervals can be wide. The sample size is larger for the more common car models, that account for higher mileage on the roads, and for these models the confidence interval is smaller. The narrower the confidence interval, the more certain the result.

The third and sixth columns of the table show the uncorrected estimates of risk of serious injury and all injury, respectively, i.e. before adjustment to take account of different types of accident and driver characteristics. Comparison with the standardised estimate shows that allowing for variation in the type of accidents and type of driver in specific car models does not have a great impact on the estimates. However some of the allowances are only based on approximate indicators (speed of road as an indicator for speed of accident) and it may be that the available data are not sensitive enough to pick up such effects.

Interpreting the results

The standardised estimates of the percentage of drivers injured for any particular model, and their associated confidence intervals, can be used to assess which cars in a group are significantly different from the average risk for the group. Those models with a higher than average risk of driver injury offer a lower than average level of secondary protection and vice versa.

Particular car models can be said to be statistically different (with 95 per cent probability) from their respective group average, if that average lies outside the confidence interval for the particular model. For example, in the grouping of small cars, the Mercedes A Class is statistically different from the average risk of driver injury (any injury) in small cars since the confidence interval (65 to 74 per cent) does not include the estimate of average risk in all small cars (76 per cent).

Similarly in cases such as the Toyota Yaris and the Rover Mini where confidence intervals do not overlap, the risks of injury of the models can be said to be significantly different. If they do overlap, the conclusion is less clear cut but as a general rule, the more they overlap, the more likely it is that there is no real difference in the safety afforded by two models.

The groups of car shown in Table A are essentially determined by length. Some models whose length is outside the broad categories used are grouped using other factors such as cost and likely market segment. Within each of the groups the specific model groupings of car are determined by considering production line information to ensure that the groupings consist of models with as uniform design as possible.

Table A - Risk of injury to car drivers involved in two car injury accidents by size and make/model of car: GB: 2000 to 2004

Percentage of drivers injured when involved in an injury accident [1]

Car size/model [2]	Registration dates	Injury severity: Fatal or serious — Standardised estimate [3]	Fatal or serious — Confidence level [4]	Fatal or serious — Uncorrected estimate	All — Standardised estimate [3]	All — Confidence level [4]	All — Uncorrected estimate
Small / low sports							
Audi TT	1999 to 2001	5	2 - 11	4	64	55 - 71	53
BMW Z3	1996 to 2001	4	2 - 8	3	62	54 - 69	55
Ford Puma	1997 to 2001	4	3 - 7	3	72	68 - 76	70
Hyundai Coupe	1995 to 2001	7	5 - 12	5	73	67 - 78	67
Mazda MX-5	1990 to 2004	6	4 - 10	5	72	68 - 77	68
MG MGF	1995 to 2003	6	4 - 9	5	77	73 - 81	72
Toyota Celica	1990 to 2004	6	4 - 9	5	62	57 - 67	54
Toyota MR2 (90-96)	1990 to 1996	7	4 - 12	6	67	60 - 73	54
All small / low sports		6		4	69		63
Small							
Citroen AX	1990 to 1995	8	7 - 10	6	80	79 - 82	74
Citroen C3	2002 to 2004	3	1 - 7	2	72	64 - 78	69
Daewoo Matiz	1995 to 2003	10	7 - 13	8	81	77 - 84	80
Daihatsu Charade	1993 to 2003	9	5 - 15	8	73	65 - 79	65
Fiat Cinquecento	1993 to 1996	9	7 - 12	7	81	78 - 83	75
Fiat Panda	1990 to 1994	10	7 - 15	8	77	72 - 82	68
Fiat Punto (94-98)	1994 to 1998	6	5 - 7	4	76	74 - 77	69
Fiat Punto (99-03)	1999 to 2003	5	4 - 7	4	76	74 - 78	70
Fiat Seicento	1998 to 2003	8	6 - 11	6	81	77 - 84	79
Fiat Uno	1990 to 1994	8	6 - 11	7	76	73 - 79	67
Ford Fiesta	1990 to 2004	6	6 - 7	5	75	74 - 76	68
Ford Ka	1996 to 2004	5	5 - 6	4	77	75 - 78	74
Hyundai Atoz	1998 to 2000	5	3 - 10	5	84	78 - 88	78
Kia Pride	1991 to 1999	7	4 - 12	6	77	71 - 82	71
Mercedes A Class	1998 to 2004	4	2 - 7	3	70	65 - 74	63
Mini	1998 to 2003	5	3 - 9	4	68	62 - 73	63
Nissan Micra (90-92)	1990 to 1992	10	8 - 12	7	79	77 - 82	73
Nissan Micra (93-03)	1993 to 2003	8	7 - 9	6	78	77 - 79	73
Peugeot 106	1991 to 1995	8	7 - 9	6	79	78 - 81	73
Peugeot 106/Saxo	1993 to 2003	7	7 - 8	6	79	78 - 80	73
Peugeot 205	1990 to 1996	7	6 - 9	6	76	74 - 78	69
Peugeot 206	1998 to 2004	6	5 - 6	4	76	74 - 77	71
Renault 5B	1990 to 1992	8	6 - 11	6	77	73 - 80	68
Renault Clio A (91-98)	1991 to 1998	7	6 - 8	5	75	74 - 76	69
Renault CLIO B(98-04)	1998 to 2004	5	3 - 6	3	72	70 - 74	68
Rover Metro (Jan 90-Mar 90)	Jan-90 to Mar-90	8	5 - 12	6	72	67 - 77	64
Rover Metro (90-98)	1990 to 1998	7	6 - 8	6	76	75 - 77	69
Rover Mini	1990 to 2000	14	10 - 17	10	84	81 - 87	80
Suzuki Swift	1990 to 2000	10	7 - 13	7	80	77 - 83	74
Toyota Starlet	1990 to 1998	8	5 - 12	7	75	70 - 79	70
Toyota Yaris	1999 to 2004	5	4 - 8	4	74	70 - 77	72
Vauxhall Corsa (93-00)	1993 to 2000	6	6 - 7	5	76	75 - 77	71
Vauxhall Corsa (99-03)	1999 to 2003	5	4 - 6	3	74	72 - 76	67
Vauxhall Nova	1990 to 1992	9	7 - 10	6	78	76 - 80	66
Volkswagen Lupo	1999 to 2002	6	3 - 11	5	76	69 - 81	73
Volkswagen Polo/Derby	1990 to 1994	7	6 - 9	6	78	75 - 80	72
Volkswagen Polo (93-98)	1993 to 1998	6	5 - 7	5	74	72 - 75	69
Volkswagen Polo (98-04)	1998 to 2004	4	3 - 6	3	70	67 - 73	66
All small		7		6	76		71
Small / medium							
Audi A3	1996 to 2003	4	2 - 6	3	63	59 - 67	57
Citroen Xsara (97-00)	1997 to 2000	5	3 - 8	5	69	65 - 73	63
Citroen Xsara (00-03)	2000 to 2003	3	1 - 7	3	66	59 - 73	61
Citroen ZX	1991 to 1997	6	5 - 7	6	67	64 - 69	59
Daewoo Lanos	1997 to 1999	8	5 - 11	6	68	64 - 72	62
Daewoo Nexia	1995 to 1998	5	3 - 9	4	73	68 - 77	66
Fiat Bravo	1995 to 2001	5	4 - 6	4	71	69 - 73	62
Fiat Tipo	1990 to 1995	6	4 - 8	5	66	62 - 70	54
Ford Escort/Orion	1990 to 1995	6	5 - 6	4	70	69 - 71	58
Ford Escort (90-99)	1990 to 1999	5	4 - 5	4	72	71 - 73	64
Ford Focus	1998 to 2003	4	3 - 4	3	68	66 - 69	58
Honda CIVIC (pre 90-90)	pre 90 to 1990	9	6 - 13	7	73	68 - 77	59
Honda CIVIC (91-95)	1991 to 1995	7	6 - 9	5	71	68 - 74	58
Honda CIVIC (93-03)	1993 to 2003	6	5 - 7	5	72	70 - 74	64
Honda Concert	1990 to 1993	7	4 - 12	5	69	63 - 75	59
Hyundai Accent	1994 to 2002	4	3 - 6	4	73	69 - 76	66
Hyundai X2/Scout	1990 to 1995	8	5 - 13	6	73	67 - 78	64
Mazda 323 (pre 90 - 95)	pre 1990 to 1995	7	5 - 10	5	71	67 - 75	60
Mazda 323 (95-98)	1995 to 1998	6	4 - 10	5	75	71 - 79	70
Nissan Almera	1995 to 2003	4	3 - 5	3	71	68 - 73	63
Nissan Sunny (Pre 90-92)	pre 1990 to 1992	6	4 - 10	5	72	67 - 76	58
Nissan Sunny (91-95)	1991 to 1995	6	5 - 8	5	69	66 - 72	59
Peugeot 306	1993 to 2001	6	5 - 6	5	71	70 - 72	63
Peugeot 307	2001 to 2004	5	3 - 7	4	69	65 - 72	62
Peugeot 309	pre 90 to 1992	9	7 - 11	8	73	70 - 76	63
Proton 1.3/1.5	1990 to 1994	8	6 - 10	7	72	68 - 76	62
Proton Persona	1993 to 1999	5	3 - 7	4	74	70 - 78	64
Renault 19	1990 to 1995	6	4 - 7	5	71	68 - 73	59

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Car size/model [2]	Registration dates	Injury severity: Fatal or serious — Standardised estimate [3]	Fatal or serious — Confidence level [4]	Fatal or serious — Uncorrected estimate	All — Standardised estimate [3]	All — Confidence level [4]	All — Uncorrected estimate
Renault Megane	1995 to 2004	5	4 - 6	4	71	69 - 73	65
Rover 200/400	1990 to 1999	6	5 - 6	5	70	69 - 70	58
Rover 25/45	1999 to 2004	6	5 - 8	6	74	71 - 76	66
Rover Maestro	pre 90 to 1990	8	5 - 11	7	70	65 - 75	58
Seat Ibiz/Co	1992 to 2004	6	4 - 8	5	73	70 - 76	66
Seat Ibiz/Ma	1990 to 1992	5	2 - 11	3	72	65 - 79	58
Seat Leon	2000 to 2003	5	3 - 11	5	65	57 - 72	59
Skoda Fabia	2000 to 2004	5	3 - 8	5	68	62 - 72	62
Skoda Favorit	1990 to 1994	6	4 - 10	6	72	67 - 77	62
Skoda Felicia	1995 to 2000	6	4 - 8	6	75	72 - 78	68
Suzuki Baleno	1995 to 2000	4	2 - 8	3	76	69 - 81	70
Toyota Corolla	1990 to 2004	5	4 - 6	4	69	67 - 71	61
Vauxhall Astra (Pre 90-90)	pre 1990 to 1990	7	5 - 8	5	70	67 - 72	56
Vauxhall Astra (91-98)	1991 to 1998	5	5 - 6	4	71	70 - 72	62
Vauxhall Astra (98-04)	1998 to 2004	5	4 - 6	4	72	70 - 73	62
Volkswagen Beetle	1999 to 2003	4	2 - 9	3	61	53 - 69	58
Volkswagen Golf/Jet	1990 to 2004	4	4 - 5	3	68	67 - 69	58
All small / medium		6		5	70		62
Medium							
Alfa 156	2000 to 2003	3	2 - 7	3	65	59 - 71	56
Audi 80/90B	1990 to 1997	7	5 - 9	5	69	65 - 72	58
Audi A4	1995 to 2004	3	2 - 4	3	60	57 - 63	52
BMW 300A	1990 to 1991	7	5 - 10	5	66	62 - 70	54
BMW 300B	1991 to 1998	5	4 - 6	4	64	62 - 66	55
BMW 300C	1998 to 2004	3	2 - 4	2	62	59 - 65	55
Citroen BX	1990 to 1992	4	3 - 6	4	68	64 - 72	57
Citroen C5	2001 to 2003	3	1 - 7	3	64	56 - 72	57
Citroen Xantia	1993 to 2000	3	2 - 4	3	59	56 - 61	48
Daewoo Nubira	1997 to 2003	6	3 - 11	6	63	56 - 70	54
Ford Mondeo	1993 to 2004	4	4 - 5	4	65	64 - 66	55
Ford Probe	1994 to 1994	3	1 - 8	2	67	59 - 74	55
Ford Sierra/Sapphire	1990 to 1992	6	5 - 7	4	68	66 - 70	54
Honda Accord (90-93)	1990 to 1993	5	3 - 8	3	65	60 - 70	49
Honda Accord (93-98)	1993 to 1998	4	3 - 6	3	65	61 - 68	53
Honda Accord (98-03)	1998 to 2003	3	2 - 6	3	65	60 - 69	53
Honda Prelude	1990 to 1998	6	4 - 11	5	69	62 - 74	55
Hyundai Lantra	1991 to 1999	6	4 - 9	4	70	65 - 75	59
Jaguar X Type	1996 to 2003	2	1 - 5	2	42	35 - 50	37
Lexus IS200	1999 to 2003	4	2 - 9	3	54	47 - 62	46
Mazda 626 (90-92)	1990 to 1992	5	2 - 9	3	64	58 - 71	50
Mazda 626 (92-97)	1992 to 1997	3	2 - 7	3	65	60 - 71	54
Mercedes 190	pre 90 to 1993	3	1 - 6	2	67	60 - 72	55
Mercedes C Class	1993 to 2003	4	3 - 6	3	60	57 - 63	53
Mitsubishi Carisma	1995 to 2003	6	4 - 9	5	74	69 - 78	64
Nissan Bluebird	1990 to 1994	7	4 - 11	5	63	57 - 69	49
Nissan Primera	1990 to 2004	5	5 - 7	4	69	67 - 71	58
Peugeot 405	1990 to 1996	5	5 - 7	5	69	67 - 70	58
Peugeot 406	1995 to 2003	4	3 - 5	3	64	62 - 66	52
Renault 21	1990 to 1995	5	3 - 9	4	65	60 - 70	54
Renault Laguna	1994 to 2003	4	3 - 5	3	64	62 - 66	54
Rover 600	1993 to 1998	4	3 - 5	3	63	61 - 66	50
Rover Montego	1990 to 1996	4	2 - 6	3	61	56 - 66	50
Saab 9-3	1998 to 2003	3	1 - 5	3	53	47 - 59	46
Saab 900 B	1991 to 1997	2	1 - 5	2	60	54 - 66	52
Seat Toledo	1991 to 2003	5	3 - 9	4	68	62 - 74	58
Skoda Octavia	1998 to 2004	5	3 - 7	4	71	67 - 74	59
Subaru Impreza	1993 to 2001	8	6 - 11	8	68	63 - 73	57
Subaru Legacy	1990 to 2003	6	3 - 10	6	52	44 - 59	45
Toyota Avensis	1997 to 2003	5	4 - 7	4	72	70 - 74	62
Toyota Carina (90-91)	1990 to 1991	7	4 - 10	4	72	67 - 76	57
Toyota Carina (92-97)	1992 to 1997	6	4 - 9	4	74	71 - 77	60
Vauxhall Cavalier	1990 to 2003	5	5 - 6	4	68	66 - 69	55
Vauxhall Vectra	1994 to 2004	5	4 - 5	4	66	64 - 67	56
Volkswagen Passat	1990 to 2004	4	3 - 5	4	63	61 - 65	54
Volvo 400	1990 to 1996	5	4 - 7	5	68	66 - 71	57
Volvo SV40	1993 to 2004	3	2 - 4	2	64	61 - 67	56
All medium		5		4	65		54

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Percentage of drivers injured when involved in an injury accident [1]

Car size/model [2]	Registration dates	Injury severity: Fatal or serious — Standardised estimate [3]	Fatal or serious — Confidence level [4]	Fatal or serious — Uncorrected estimate	All — Standardised estimate [3]	All — Confidence level [4]	All — Uncorrected estimate
Large							
Audi 6/8	1994 to 2003	3	1 - 6	2	53	46 - 60	48
Audi A6	1997 to 2000	3	1 - 5	2	55	48 - 61	49
BMW 500A	Pre 90 to 1996	5	4 - 8	4	59	55 - 63	48
BMW 500B	1990 to 2003	3	2 - 5	3	54	50 - 59	47
BMW 700B	1990 to 2003	4	2 - 9	3	53	45 - 61	38
Ford Granada	1990 to 1994	7	5 - 10	6	68	64 - 71	55
Ford Scorpio	1994 to 1998	7	4 - 12	5	67	61 - 73	55
Jaguar S Type	1999 to 2004	5	2 - 9	4	49	42 - 57	38
Jaguar XJ	Pre 90 to 1998	5	3 - 7	4	56	50 - 61	43
Mercedes 200/300	1990 to 2002	4	2 - 8	3	62	56 - 69	50
Mercedes E Class	1992 to 2003	4	3 - 5	3	58	54 - 61	48
Mercedes S Class	1990 to 2002	3	1 - 6	2	56	49 - 63	43
Rover 75	1998 to 2004	3	2 - 5	3	51	46 - 56	45
Rover 800 A	1990 to 1992	3	2 - 5	2	55	51 - 60	41
Saab 9-5	1997 to 2003	3	1 - 7	3	51	43 - 60	42
Saab 9000	1990 to 1997	6	4 - 10	5	66	61 - 71	52
Vauxhall Carlton	1990 to 1997	5	3 - 8	4	65	61 - 69	54
Vauxhall Omega	1994 to 2001	4	3 - 5	3	64	61 - 67	54
Volvo 700	1990 to 1996	4	2 - 8	3	58	51 - 65	48
Volvo 800	1992 to 1996	3	2 - 6	3	62	55 - 68	52
Volvo 900	1990 to 1997	5	3 - 7	5	58	53 - 63	47
Volvo SV70	1996 to 2004	2	1 - 4	2	61	56 - 66	52
Volvo V70	1997 to 2002	4	2 - 8	3	64	57 - 71	53
All large		4		3	59		48
MPV							
Citroen Picasso	2000 to 2004	4	3 - 6	3	68	64 - 72	64
Ford Galaxy	1995 to 2003	4	2 - 6	3	57	52 - 61	51
Mitsubishi Spacewagon	1990 to 2000	6	3 - 12	4	68	60 - 74	58
Nissan Serena	1992 to 1997	4	2 - 9	4	62	55 - 68	54
Renault Espace	1990 to 2001	4	2 - 6	3	59	53 - 63	52
Renault Scenic	1996 to 2002	3	2 - 5	3	66	63 - 69	63
Citroen Synergie/Ulyssess	1995 to 2000	4	2 - 8	4	65	58 - 71	54
Toyota Previa	1990 to 1997	6	3 - 11	4	55	47 - 62	46
All MPV		4		3	62		55
Four wheel drive							
Daihatsu Fourtrack	1990 to 2000	3	1 - 6	4	50	43 - 58	45
Ford Maverick	1993 to 2003	5	2 - 10	6	55	47 - 63	49
Honda CRV	1997 to 2001	6	4 - 9	5	63	58 - 69	58
Isuzu Trooper	1990 to 2000	1	1 - 3	2	40	34 - 46	34
Jeep Cherokee	1992 to 2003	2	1 - 5	2	51	45 - 57	46
Jeep Grand Cherokee	1993 to 2001	2	1 - 5	1	41	33 - 49	33
Landrover Defender	1990 to 2002	1	1 - 3	2	33	29 - 38	26
Landrover Discovery	1990 to 2003	2	1 - 3	2	42	39 - 45	37
Landrover Freelander	1997 to 2003	3	2 - 5	3	51	47 - 55	46
Landrover Rangerover	1990 to 2002	3	2 - 5	3	43	38 - 48	35
Mercedes ML Class	1998 to 2003	1	0 - 6	1	34	27 - 42	34
Mitsubishi Shogun	1990 to 1997	2	1 - 5	2	46	41 - 52	38
Nissan Terrano	1993 to 2005	2	1 - 5	2	52	45 - 58	46
Suzuki Vitara	1990 to 2003	4	3 - 6	4	66	63 - 70	62
Toyota Land Cruiser	1990 to 2003	1	0 - 4	1	38	31 - 45	29
Toyota RAV-4	1994 to 2004	5	3 - 8	4	64	60 - 69	61
Vauxhall Frontera	1991 to 2002	3	2 - 4	3	49	45 - 53	41
All four wheel drive		3		3	48		42
All sizes		5		4	66		58

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1 These figures do not give the risk of being involved in an accident and do not include accidents in which neither driver was injured.
2 Models are listed under the current market name of the manufacturer.
3 Standard estimates corrected for age and sex of driver, point of impact and speed of road.
4 The confidence interval is the range within which the true figure lies, 95% of the time.

Charts – Relative driver protection within car size group by make and model of car

The following charts show relative driver protection for particular models of car compared to the average car in each size group. The information is derived from the standardised estimates of risk of driver injury (when involved in a two car injury accident) and the related confidence intervals from Table A. These are converted to percentages of the average for the group (see the example below) in order to compare models against the group average.

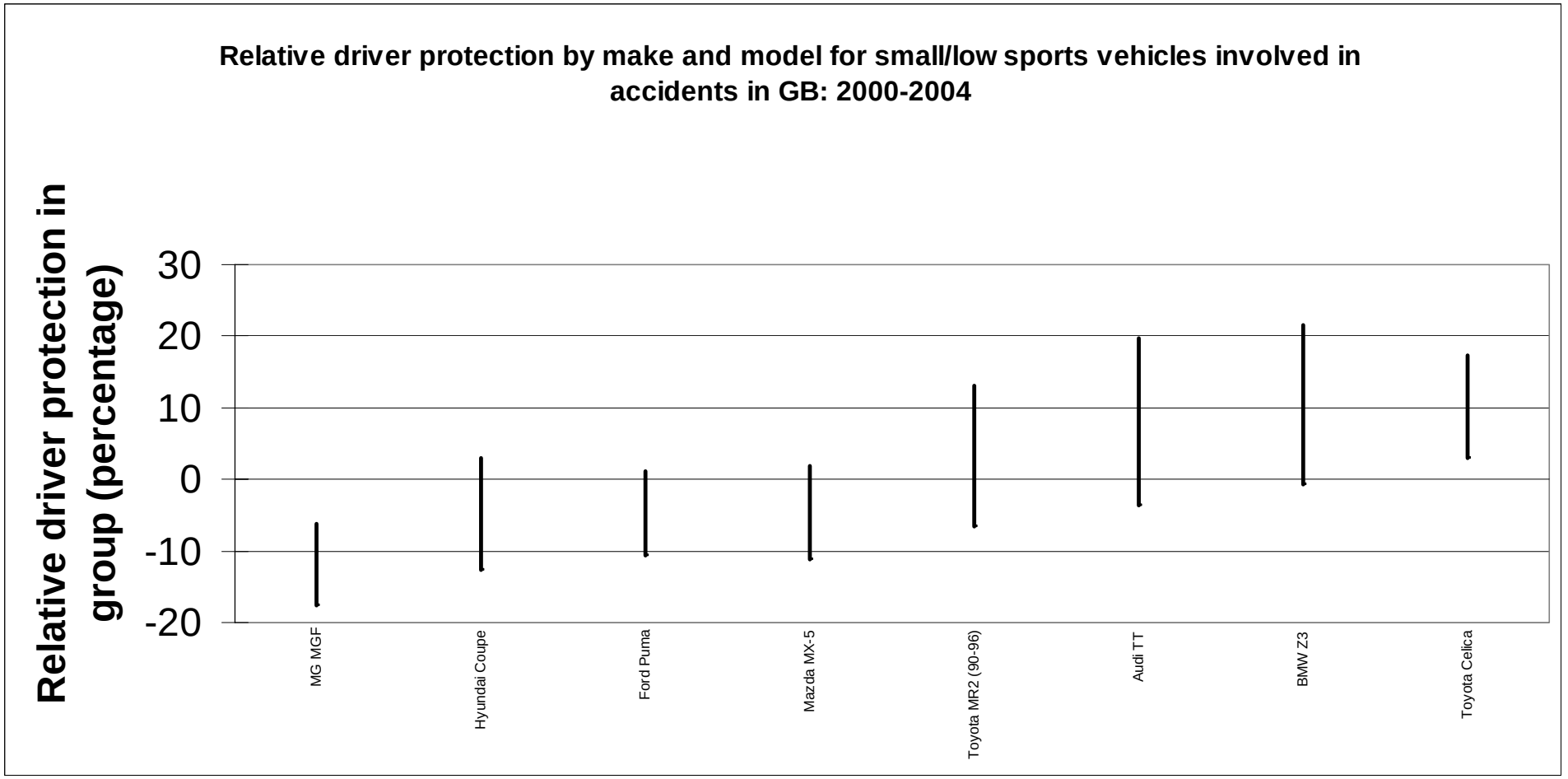
The percentages are statistical estimates and for each model, a band of values is given (rather than a single figure) reflecting the precision of the estimate for that model. The bands for each model of car give an idea of their safety relative to the whole group. A model where the range is wholly above zero (the average for the group) is above average for the group while one where the range is wholly below zero is below average. Since the confidence intervals do not overlap, the former can be said to have performed better in respect of driver protection than the latter. Where confidence intervals do overlap the conclusion is less clear as explained previously.

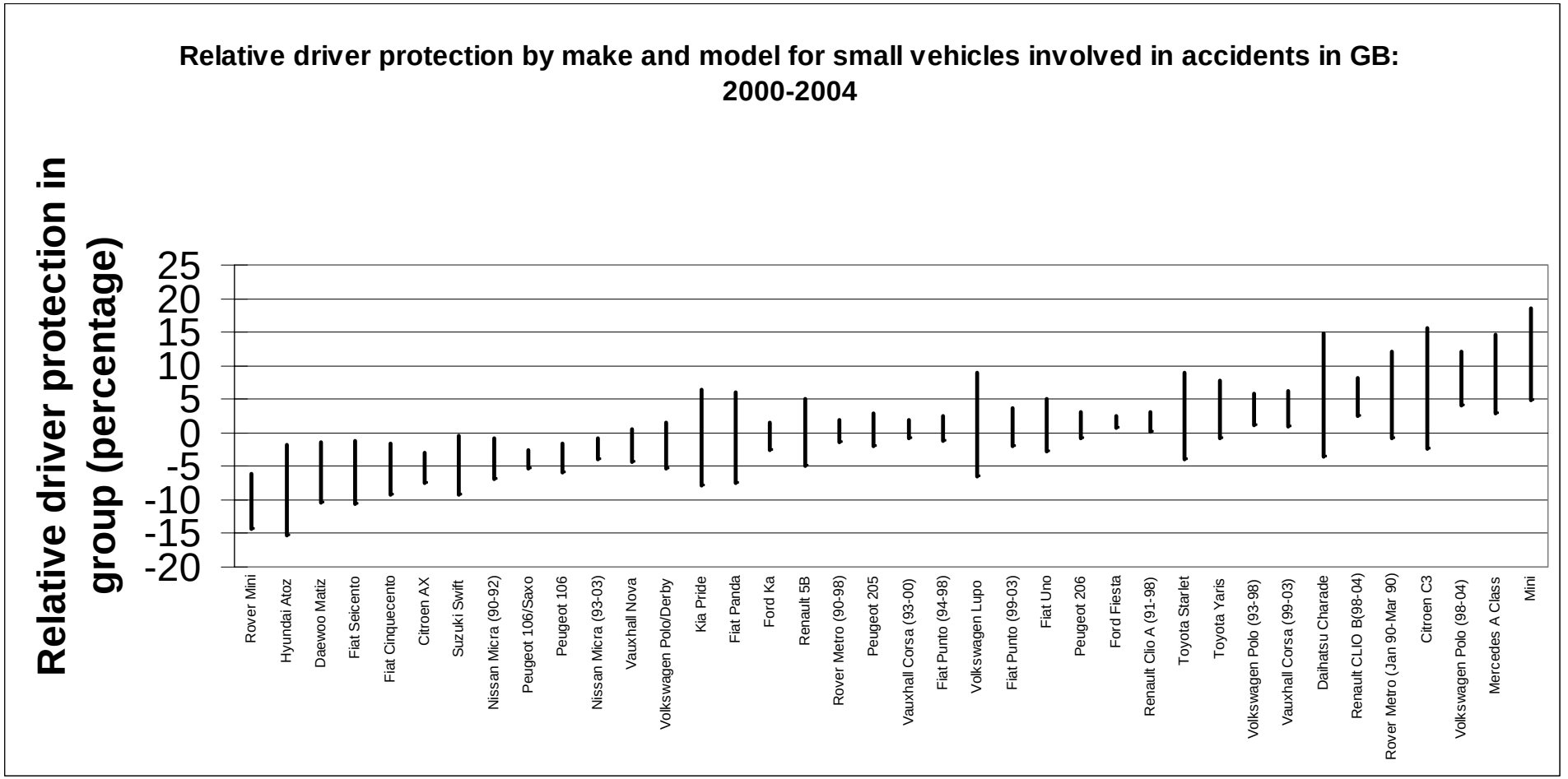
Example
An example of the calculation is given for the Citroen Xantia, a medium size car.

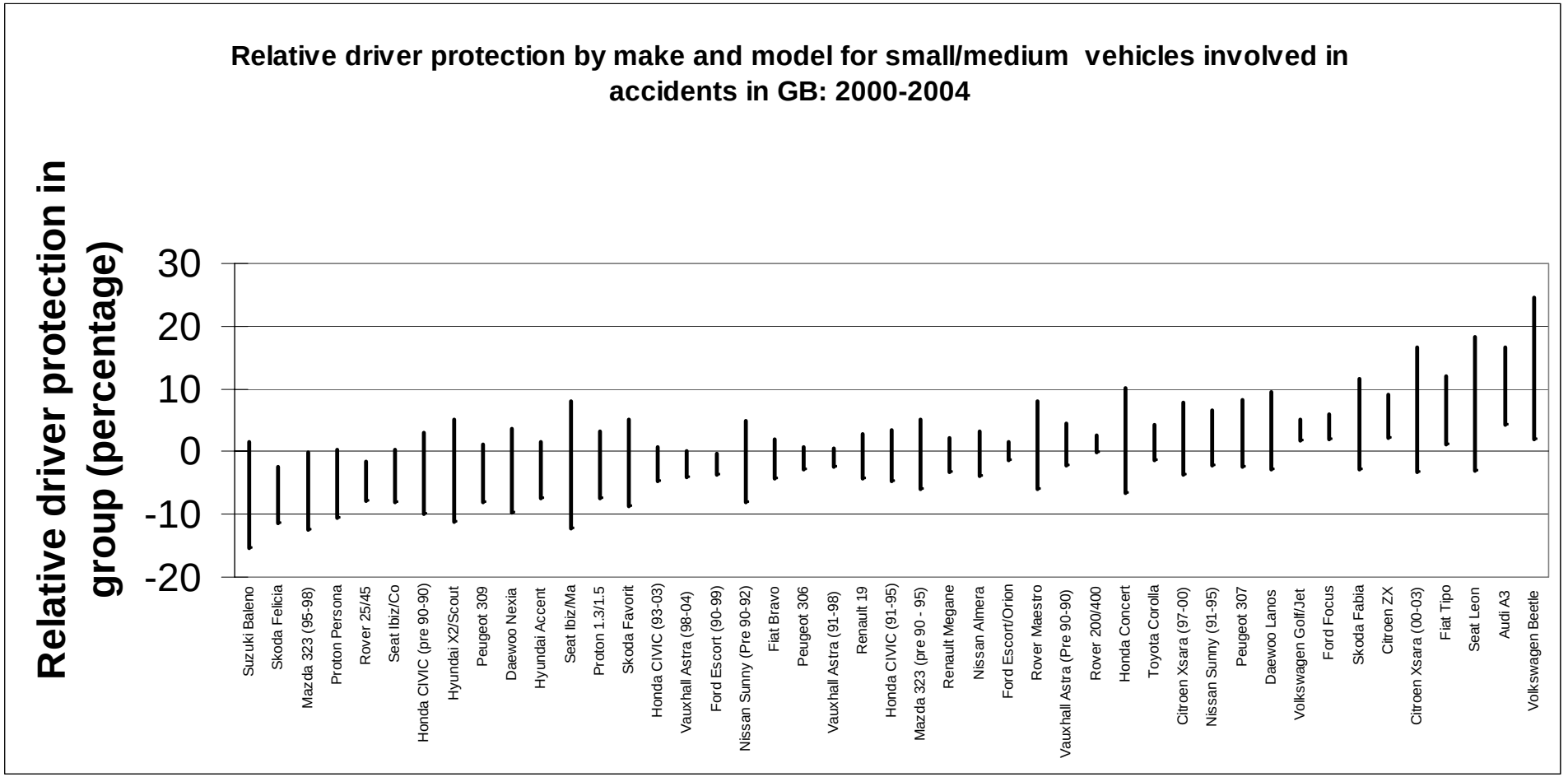
Citroen Xantia:Risk of injury, any severity, standardised estimate (per cent) = 59
Risk of injury, any severity, upper confidence limit (per cent) = 61
Risk of injury, any severity, lower confidence limit (per cent) = 56

Group average for medium cars: Risk of injury, any severity (per cent) = 65

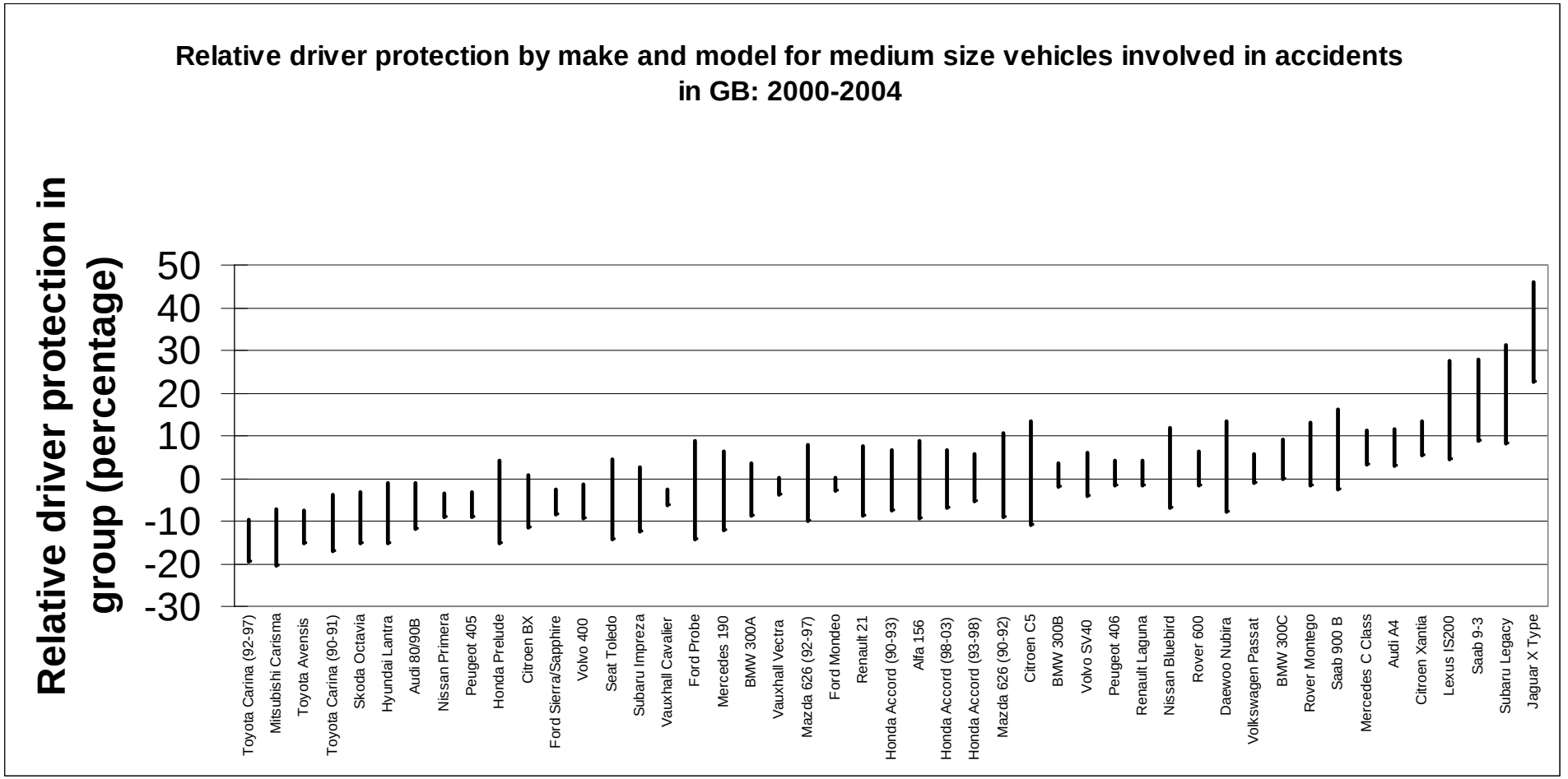
So the risk of injury to a driver of a Citroen Xantia, if involved in a crash with another car, lies between 56 per cent and 61 per cent, compared with the average risk for medium cars of 65 per cent. Expressed as an index, with the group average as 100, the relative risk for the Citroen Xantia is between 86 and 94. That is, the Citroen Xantia gives between 6 and 14 per cent better driver protection than the average medium car when it is involved in a two car injury accident.

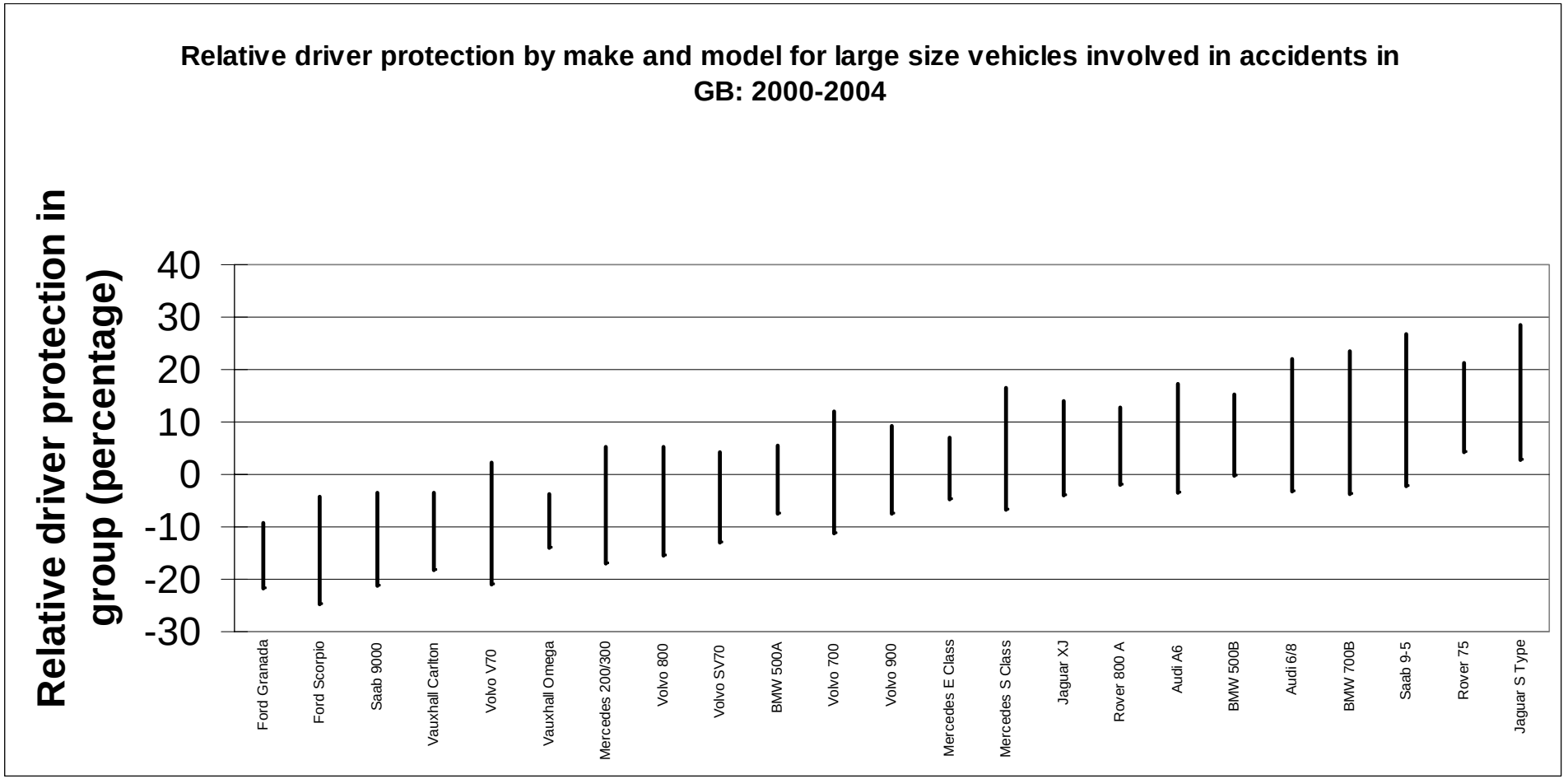

Relative driver protection by make and model for small/low sports vehicles involved in accidents in GB: 2000-2004
Relative driver protection in group (percentage)
30
20
10
0
-10
-20
MG MGF
Hyundai Coupe
Ford Puma
Mazda MX-5
Toyota MR2 (90-96)
Audi TT
BMW Z3
Toyota Celica

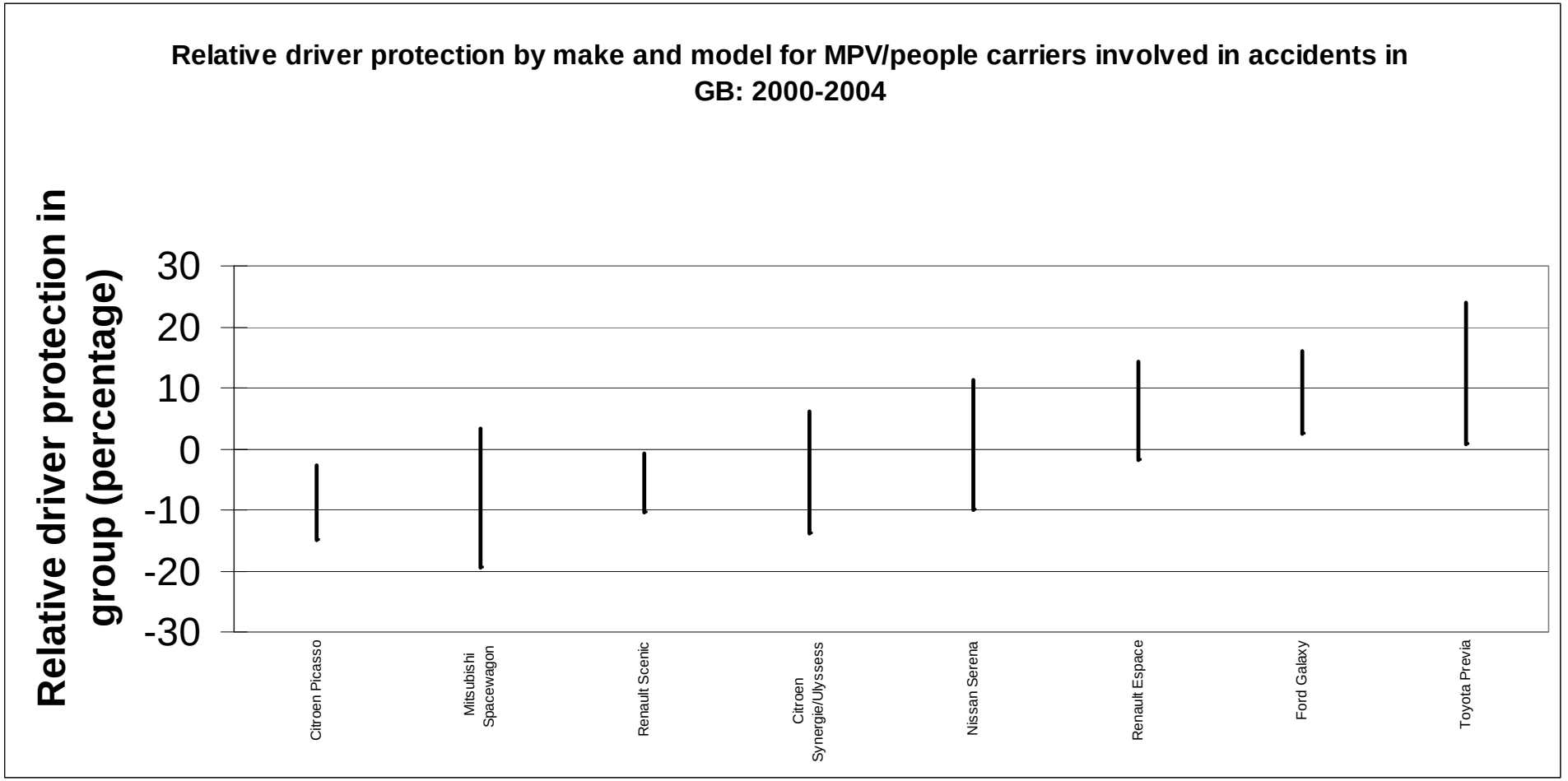

Relative driver protection by make and model for small vehicles involved in accidents in GB: 2000-2004
Relative driver protection in group (percentage)
25
20
15
10
5
0
-5
-10
-15
-20
Rover Mini
Hyundai Atoz
Daewoo Matiz
Fiat Seicento
Fiat Cinquecento
Citroen AX
Suzuki Swift
Nissan Micra (90-92)
Peugeot 106/Saxo
Peugeot 106
Nissan Micra (93-03)
Vauxhall Nova
Volkswagen Polo/Derby
Kia Pride
Fiat Panda
Ford Ka
Renault 5B
Rover Metro (90-98)
Peugeot 205
Vauxhall Corsa (93-00)
Fiat Punto (94-98)
Volkswagen Lupo
Fiat Punto (99-03)
Fiat Uno
Peugeot 206
Ford Fiesta
Renault Clio A (91-98)
Toyota Starlet
Toyota Yaris
Volkswagen Polo (93-98)
Vauxhall Corsa (99-03)
Daihatsu Charade
Renault CLIO B(98-04)
Rover Metro (Jan 90-Mar 90)
Citroen C3
Volkswagen Polo (98-04)
Mercedes A Class
Mini


Relative driver protection by make and model for small/medium vehicles involved in accidents in GB: 2000-2004
Relative driver protection in group (percentage)
30
20
10
0
-10
-20
Suzuki Baleno
Skoda Felicia
Mazda 323 (95-98)
Proton Persona
Rover 25/45
Seat Ibiz/Co
Honda CIVIC (pre 90-90)
Hyundai X2/Scout
Peugeot 309
Daewoo Nexia
Hyundai Accent
Seat Ibiz/Ma
Proton 1.3/1.5
Skoda Favorit
Honda CIVIC (93-03)
Vauxhall Astra (98-04)
Ford Escort (90-99)
Nissan Sunny (Pre 90-92)
Fiat Bravo
Peugeot 306
Vauxhall Astra (91-98)
Renault 19
Honda CIVIC (91-95)
Mazda 323 (pre 90 - 95)
Renault Megane
Nissan Almera
Ford Escort/Orion
Rover Maestro
Vauxhall Astra (Pre 90-90)
Rover 200/400
Honda Concert
Toyota Corolla
Citroen Xsara (97-00)
Nissan Sunny (91-95)
Peugeot 307
Daewoo Lanos
Volkswagen Golf/Jet
Ford Focus
Skoda Fabia
Citroen ZX
Citroen Xsara (00-03)
Fiat Tipo
Seat Leon
Audi A3
Volkswagen Beetle

Relative driver protection by make and model for medium size vehicles involved in accidents in GB: 2000-2004




Relative driver protection by make and model for large size vehicles involved in accidents in GB: 2000-2004
Relative driver protection in group (percentage)
40
30
20
10
0
-10
-20
-30
Ford Granada
Ford Scorpio
Saab 9000
Vauxhall Carlton
Volvo V70
Vauxhall Omega
Mercedes 200/300
Volvo 800
Volvo SV70
BMW 500A
Volvo 700
Volvo 900
Mercedes E Class
Mercedes S Class
Jaguar XJ
Rover 800 A
Audi A6
BMW 500B
Audi 6/8
BMW 700B
Saab 9-5
Rover 75
Jaguar S Type


Relative driver protection by make and model for MPV/people carriers involved in accidents in GB: 2000-2004
Relative driver protection in group (percentage)
30
20
10
0
-10
-20
-30
Citroen Picasso
Mitsubishi Spacewagon
Renault Scenic
Citroen Synergie/Ulyssess
Nissan Serena
Renault Espace
Ford Galaxy
Toyota Previa

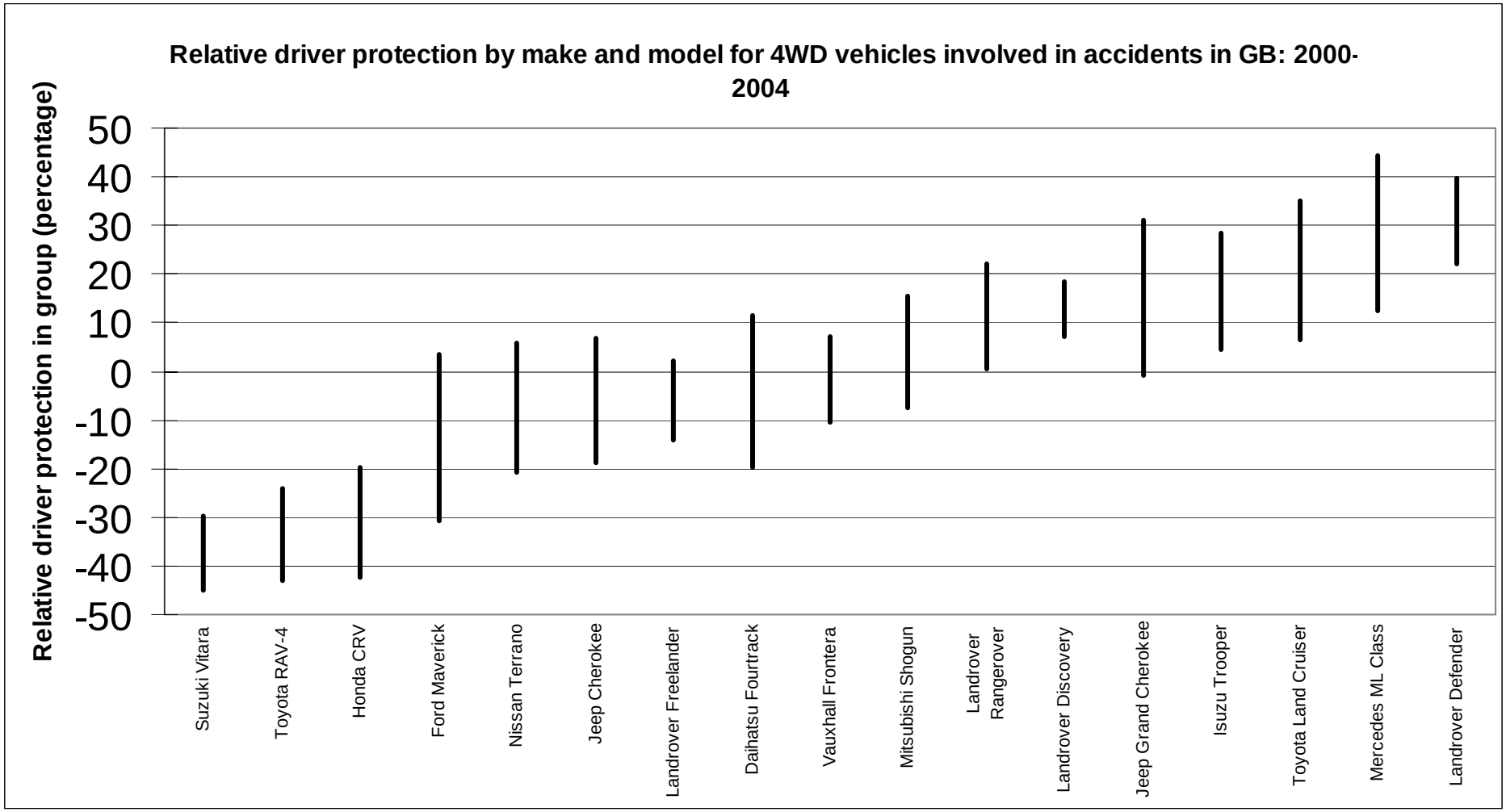

Relative driver protection by make and model for 4WD vehicles involved in accidents in GB: 2000-2004
Relative driver protection in group (percentage)
50
40
30
20
10
0
-10
-20
-30
-40
-50
Suzuki Vitara
Toyota RAV-4
Honda CRV
Ford Maverick
Nissan Terrano
Jeep Cherokee
Landrover Freelander
Daihatsu Fourtrack
Vauxhall Frontera
Mitsubishi Shogun
Landrover Rangerover
Landrover Discovery
Jeep Grand Cherokee
Isuzu Trooper
Toyota Land Cruiser
Mercedes ML Class
Landrover Defender

Table B – Risk of injury to drivers involved in two car injury accidents by various factors

The effects of various accident characteristics on the risk of driver injury, when a particular car model is involved in a two car injury accident, are shown in Table B. The rates shown relate to the average specific effects of those factors in injury accidents, after allowing for the influences of variations in the other factors listed. For example, the risks of injury tabulated for different sizes of car have been adjusted to allow for differences in the age and sex of their drivers. Further explanation of the model used is given in Appendix 3.

Of the factors considered, those having the most influence on the risk of a fatal or serious injury when involved in an injury accident are the speed limit of the road, the first point of impact and the size of the car. Severe injuries are most likely to occur in accidents on 60 mph roads, where the risk of death or serious injury to the driver is more than three times higher than on a 20 or 30 mph road. The risk of a fatal or serious injury is lower for an accident on a 70 mph road than on a 60 mph road, which is perhaps a reflection of the improved segregation of traffic on multi-carriageway roads.

A driver is about three times more likely to be killed or seriously injured in a frontal or side impact collision than if their car is hit from behind. However a rear impact is more likely to result in slight injury. Small car drivers are the most likely to be injured.

Age of the driver does not have a large influence on the overall risk of injury when involved in an accident, although there is increased susceptibility to death or serious injury in the over 55 age group. Women are less likely to be killed, but more likely to be injured when involved in a two car injury accident than men.

Table B - Risk of injury to drivers involved in two car injury accidents by various factors: GB: 2000 to 2004

Risk of injury is measured by the percentage of drivers injured when involved in a two car injury accident[1]			
Factor	**Risk of fatal injury (per cent)**	**Risk of fatal or serious injury (per cent)**	**Risk of injury, any severity (per cent)**
Speed limit of road (mph)			
20 or 30	0.1	3	64
40 or 50	0.6	5	64
60	2.0	11	73
70	1.2	5	59
Sex of driver			
Male	0.4	4	58
Female	0.2	4	75
Age of driver (years)			
17-24	0.3	4	64
25-34	0.2	4	66
35-54	0.3	4	66
55 or more	0.7	6	66
Size group of car			
Small/sports	0.5	4	63
Small	0.5	5	74
Small/medium	0.4	4	64
Medium	0.5	4	61
Large	0.4	4	53
MPV	<0.01	4	62
Four Wheel Drive	<0.01	2	42
First point of impact			
Front	0.4	6	53
Back	0.1	2	86
Offside	0.7	6	69
Nearside	1.1	5	68
All accidents	0.3	5	66

1 These figures do not give the risk of being involved in an accident and do not include accidents in which neither driver was injured.

Appendix 1 - Background

By agreement between the Department for Transport and police forces throughout Great Britain, details are recorded of all road accidents involving personal injury that are reported to the police. Since January 1989, the registration marks of all motor vehicles involved in those accidents have been recorded. By linking these with data held by DVLA, a range of extra information about the vehicles can be obtained.

It is not possible to link all vehicles involved in road injury accidents with vehicle registration data at DVLA. Details of foreign, diplomatic and military vehicles and those with trade plates are not held at DVLA. In addition, registration marks are generally unavailable for vehicles that leave the scene of an accident and some registration marks that appear to have a valid format prove untraceable. Over the period 2000 to 2004, it was possible to link approximately 76 per cent of vehicles.

The number of two car accidents analysed to produce the tables in this report is lower than the number recorded in the Department's annual publication '*Road Casualties Great Britain*'. One reason is that in order to be included in the analysis in this report it is necessary to have the vehicle registration data of both cars involved. Also to ensure that cars are being compared on as even a basis as possible, a narrower definition of car is used and accidents involving parked cars are excluded. In addition the analysis is restricted to accidents in which one or both of the drivers was injured. The resultant data set contains approximately 67 per cent of the two car accidents published in *Road Casualties Great Britain (RCGB).*

Any bias due to missing data is unlikely to significantly influence the ratings. Tests were conducted to check that the final data set is typical of all two car collisions in terms of driver and accident characteristics. The results, shown below, demonstrate that in terms of driver sex, driver age and speed limit of road the data set used in the secondary safety analysis in this report is broadly representative.

Percentage of two car accidents by accident/driver type: GB: 2000-2004

	Reported in RCGB	**Data set used for analysis in this publication**
Speed limit of road		
20-39 mph	63	59
40-59 mph	12	13
60-69 mph	18	21
70 mph	7	7
Driver sex		
Male	61	58
Female	34	42
Untraced	5	-
Driver age		
17-24	19	21
25-34	24	26
35-54	33	37
55+	14	16
Untraced	10	-

Appendix 2 - Definitions

The statistics relate to accidents involving cars resulting in personal injury on public roads, including footways, which became known to the police within 30 days of occurrence. Figures for fatalities refer to persons who sustained injuries causing death within 30 days of the accident.

Accident severity Severity of an accident is determined by the severity of the most severely injured casualty. That is fatal, where one or more persons involved in the accident were killed; serious, where one or more persons involved were seriously injured but no-one killed; or slight, where one or more persons involved were slightly injured but no-one killed or seriously injured.

Car Excludes purpose-built taxis, car derived vans, minibuses and motor caravans.

Size Not formally defined but arranged so that the consumer can recognise standard groups. As an approximate guide, cars in the small group are generally between 140 and 150 inches, those in the small/medium group are between 155 and 165 inches, those in the medium group between 170 and 180 inches, and those in the large group over 180 inches. MPVs (multi purpose vehicles) and Four Wheel Drive vehicles are included as additional groups. The allocation of a particular model to a size group does not imply that the model meets any formal classification or standard.

Appendix 3 - Explanatory notes to statistical modelling

The risk of injury to a driver involved in an accident clearly depends on a range of factors. Table B shows that the age and sex of driver, the speed of road and point of impact can all affect the risk of injury. Valid comparisons of the inherent secondary safety records of different models of car are therefore complicated. Some models of car will be driven on roads or in such a way that if they are involved in an accident, it is more likely to be an accident in which there is a low risk of driver injury. Other models will be involved in a greater proportion of accidents in which there is a higher risk of driver injury. Such variations will tend to produce apparent differences in the secondary safety record of different models unless some allowance is made.

In order to isolate individual influences, statistical modelling has been used, which works by assuming that the risk of injury depends on a number of factors. The models look at the influences on the logarithm of the odds of injury, sometimes called the logit function, rather than directly at the influences on the proportion of accidents resulting in injury. This technique, known as logistic regression or logistic analysis, allows the influences on the risk of injury to be isolated and treated independently of each other . Unfortunately, the resulting factors are difficult to interpret by a non-specialist readership, so they have therefore been used to calculate standardised estimates of the percentage of drivers injured. Effectively, these indicate what proportion of drivers would be injured if each model of car were driven by drivers with similar characteristics and involved in the same types of accidents.

The reliability of the result for a model of car in Table A depends on the number of recorded accident involvements of that model. Only those models exceeding the threshold of 150 involvements are included.

Statistical model used for each injury severity risk in Table A:

$$Y_{jklmn} = \mu + B_j + C_k + D_l + E_m + M_n + \sum_{jklmn}$$

where $Y_{jklmn} = \text{Log}_e [P_{jklmn} / (1 - P_{jklmn})]$
and $P_{jklmn} = n_{jklmn} / N_{jklmn}$
where N_{jklmn} = Number of drivers in group $_{jklmn}$
and n_{jklmn} = Number of injured drivers in group $_{jklmn}$

and where the effects are represented by:

μ	Overall mean	B_j	Speed limit of road
C_k	First point of impact	D_l	Sex of driver
E_m	Age group of driver	M_n	Effect for model of car
$\sum$	Error term		

Statistical model used for each injury severity risk in Table B:

$$Y_{jklmn} = \mu + A_i + B_j + C_k + D_l + E_m + M_n + \sum_{jklmn}$$

where the effects are represented as above and by:

A_i	Size of car

Appendix 4 - Sample sizes

Car size and model	Registration dates			Sample size (no. of involvements [1])
Small/sports				
Audi TT	1999	to	2001	176
BMW Z3	1996	to	2001	188
Ford Puma	1997	to	2001	554
Hyundai Coupe	1995	to	2001	300
Mazda MX-5	1990	to	2004	460
MG MGF	1995	to	2003	478
Toyota Celica	1990	to	2004	445
Toyota MR2 (90-96)	1990	to	1996	203
Small				
Citroen AX	1990	to	1995	2,262
Citroen C3	2002	to	2004	201
Daewoo Matiz	1995	to	2003	547
Daihatsu Charade	1993	to	2003	163
Fiat Cinquecento	1993	to	1996	751
Fiat Panda	1990	to	1994	260
Fiat Punto (94-98)	1994	to	1998	3,996
Fiat Punto (99-03)	1999	to	2003	1,595
Fiat Seicento	1998	to	2003	490
Fiat Uno	1990	to	1994	818
Ford Fiesta	1990	to	2004	18,990
Ford Ka	1996	to	2004	3,322
Hyundai Atoz	1998	to	2000	207
Kia Pride	1991	to	1999	238
Mercedes A Class	1998	to	2004	478
Mini	1998	to	2003	357
Nissan Micra (90-92)	1990	to	1992	1,273
Nissan Micra (93-03)	1993	to	2003	5,174
Peugeot 106	1991	to	1995	2,553
Peugeot 106/Saxo	1993	to	2003	6,858
Peugeot 205	1990	to	1996	2,211
Peugeot 206	1998	to	2004	3,848
Renault 5B	1990	to	1992	523
Renault Clio A (91-98)	1991	to	1998	6,452
Renault Clio B(98-04)	1998	to	2004	1,887
Rover Metro (Jan 90-Mar 90)	Jan-90	to	Mar-90	353
Rover Metro (90-98)	1990	to	1998	4,775
Rover Mini	1990	to	2000	514
Suzuki Swift	1990	to	2000	580
Toyota Starlet	1990	to	1998	342
Toyota Yaris	1999	to	2004	833
Vauxhall Corsa (93-00)	1993	to	2000	8,360
Vauxhall Corsa (99-03)	1999	to	2003	2,123
Vauxhall Nova	1990	to	1992	1,933
Volkswagen Lupo	1999	to	2002	209

Car size and model	Registration dates			Sample size (no. of involvements [1])
Volkswagen Polo/Derby	1990	to	1994	1,088
Volkswagen Polo (93-98)	1993	to	1998	2,779
Volkswagen Polo (98-04)	1998	to	2004	978
Small/medium				
Audi A3	1996	to	2003	582
Citroen Xsara (97-00)	1997	to	2000	550
Citroen Xsara (00-03)	2000	to	2003	206
Citroen ZX	1991	to	1997	1,681
Daewoo Lanos	1997	to	1999	506
Daewoo Nexia	1995	to	1998	398
Fiat Bravo	1995	to	2001	1,789
Fiat Tipo	1990	to	1995	671
Ford Escort/Orion	1990	to	1995	10,482
Ford Escort (90-99)	1990	to	1999	6,779
Ford Focus	1998	to	2003	4,943
Honda CIVIC (pre 90-90)	pre 90	to	1990	397
Honda CIVIC (91-95)	1991	to	1995	1,138
Honda CIVIC (93-03)	1993	to	2003	2,303
Honda Concert	1990	to	1993	271
Hyundai Accent	1994	to	2002	855
Hyundai X2/Scout	1990	to	1995	250
Mazda 323 (pre 90 - 95)	pre 1990	to	1995	607
Mazda 323 (95-98)	1995	to	1998	426
Nissan Almera	1995	to	2003	1,440
Nissan Sunny (Pre 90-92)	pre 1990	to	1992	419
Nissan Sunny (91-95)	1991	to	1995	962
Peugeot 306	1993	to	2001	6,039
Peugeot 307	2001	to	2004	677
Peugeot 309	pre 90	to	1992	773
Proton 1.3/1.5	1990	to	1994	622
Proton Persona	1993	to	1999	525
Renault 19	1990	to	1995	1,390
Renault Megane	1995	to	2004	2,554
Rover 200/400	1990	to	1999	12,002
Rover 25/45	1999	to	2004	1,611
Rover Maestro	pre 90	to	1990	365
Seat Ibiz/Co	1992	to	2004	961
Seat Ibiz/Ma	1990	to	1992	163
Seat Leon	2000	to	2003	175
Skoda Fabia	2000	to	2004	372
Skoda Favorit	1990	to	1994	364
Skoda Felicia	1995	to	2000	743
Suzuki Baleno	1995	to	2000	213
Toyota Corolla	1990	to	2004	2,420
Vauxhall Astra (Pre 90-90)	pre 1990	to	1990	1,672
Vauxhall Astra (91-98)	1991	to	1998	8,520

Car size and model	Registration dates			Sample size (no. of involvements [1])
Vauxhall Astra (98-04)	1998	to	2004	4,155
Volkswagen Beetle	1999	to	2003	185
Volkswagen Golf/Jet	1990	to	2004	7,840
Medium				
Alfa 156	2000	to	2003	286
Audi 80/90B	1990	to	1997	789
Audi A4	1995	to	2004	1,444
BMW 300A	1990	to	1991	659
BMW 300B	1991	to	1998	3,197
BMW 300C	1998	to	2004	1,206
Citroen BX	1990	to	1992	570
Citroen C5	2001	to	2003	164
Citroen Xantia	1993	to	2000	1,690
Daewoo Nubira	1997	to	2003	221
Ford Mondeo	1993	to	2004	11,011
Ford Probe	1994	to	1994	175
Ford Sierra/Sapphire	1990	to	1992	2,743
Honda Accord (90-93)	1990	to	1993	513
Honda Accord (93-98)	1993	to	1998	797
Honda Accord (98-03)	1998	to	2003	528
Honda Prelude	1990	to	1998	254
Hyundai Lantra	1991	to	1999	419
Jaguar X Type	1996	to	2003	208
Lexus IS200	1999	to	2003	214
Mazda 626 (90-92)	1990	to	1992	267
Mazda 626 (92-97)	1992	to	1997	328
Mercedes 190	pre 90	to	1993	272
Mercedes C Class	1993	to	2003	1,762
Mitsubishi Carisma	1995	to	2003	429
Nissan Bluebird	1990	to	1994	279
Nissan Primera	1990	to	2004	2,852
Peugeot 405	1990	to	1996	2,773
Peugeot 406	1995	to	2003	3,112
Renault 21	1990	to	1995	362
Renault Laguna	1994	to	2003	2,861
Rover 600	1993	to	1998	1,654
Rover Montego	1990	to	1996	482
Saab 9-3	1998	to	2003	329
Saab 900 B	1991	to	1997	303
Seat Toledo	1991	to	2003	258
Skoda Octavia	1998	to	2004	566
Subaru Impreza	1993	to	2001	387
Subaru Legacy	1990	to	2003	215
Toyota Avensis	1997	to	2003	1,427
Toyota Carina (90-91)	1990	to	1991	482
Toyota Carina (92-97)	1992	to	1997	775
Vauxhall Cavalier	1990	to	2003	8,584
Vauxhall Vectra	1994	to	2004	6,257
Volkswagen Passat	1990	to	2004	2,202
Volvo 400	1990	to	1996	1,477
Volvo SV40	1993	to	2004	970

Car size and model	Registration dates			Sample size (no. of involvements [1])
Large				
Audi 6/8	1994	to	2003	213
Audi A6	1997	to	2000	307
BMW 500A	Pre 90	to	1996	794
BMW 500B	1990	to	2003	582
BMW 700B	1990	to	2003	205
Ford Granada	1990	to	1994	716
Ford Scorpio	1994	to	1998	272
Jaguar S Type	1999	to	2004	221
Jaguar XJ	Pre 90	to	1998	425
Mercedes 200/300	1990	to	2002	263
Mercedes E Class	1992	to	2003	992
Mercedes S Class	1990	to	2002	259
Rover 75	1998	to	2004	476
Rover 800 A	1990	to	1992	676
Saab 9-5	1997	to	2003	161
Saab 9000	1990	to	1997	365
Vauxhall Carlton	1990	to	1997	540
Vauxhall Omega	1994	to	2001	1,187
Volvo 700	1990	to	1996	242
Volvo 800	1992	to	1996	301
Volvo 900	1990	to	1997	465
Volvo SV70	1996	to	2004	429
Volvo V70 B	1997	to	2002	212
MPV				
Citroen Picasso	2000	to	2004	656
Ford Galaxy	1995	to	2003	662
Mitsubishi Spacewagon	1990	to	2000	185
Nissan Serena	1992	to	1997	244
Renault Espace	1990	to	2001	443
Renault Scenic	1996	to	2002	1,177
Citroen Synergie/Ulyssess	1995	to	2000	245
Toyota Previa	1990	to	1997	229
Four Wheel Drive				
Daihatsu Fourtrack	1990	to	2000	193
Ford Maverick	1993	to	2003	165
Honda CRV	1997	to	2001	361
Isuzu Trooper	1990	to	2000	338
Jeep Cherokee	1992	to	2003	322
Jeep Grand Cherokee	1993	to	2001	211
Landrover Defender	1990	to	2002	605
Landrover Discovery	1990	to	2003	1,578
Landrover Freelander	1997	to	2003	783
Landrover Rangerover	1990	to	2002	458
Mercedes ML Class	1998	to	2003	182
Mitsubishi Shogun	1990	to	1997	416
Nissan Terrano	1993	to	2005	269
Suzuki Vitara	1990	to	2003	764
Toyota Land Cruiser	1990	to	2003	251
Toyota RAV-4	1994	to	2004	519
Vauxhall Frontera	1991	to	2002	661

Car size and model	Registration dates	Sample size (no. of involvements [1])

1 The number of involvements stated in this table includes two car accidents where at least one driver was injured. It does not represent all accidents involving the given model. These figures do not give the risk of a given car make and model being involved in an accident.

Scottish Executive

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Transport Across Scotland: some SHS results for parts of Scotland	£2
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Travel by Scottish Residents: some NTS results	£2
Bus and Coach Statistics	£2
Road Accidents Scotland	£10
Key Road Accidents Statistics	£2

(SHS = Scottish Household Survey; NTS = National Travel Survey)

General enquires on Scottish Transport Statistics:
Transport Statistics Branch, Scottish Executive
Victoria Quay, Edinburgh EH6 6QQ
Phone: +44 (0) 131-244 7255
Fax: +44 (0) 131-244 7281
E-mail: transtat@scotland.gsi.gov.uk
Internet: www.scotland.gov.uk/transtat

These publications are available, payment with orders, from: Scottish Executive Publication Sales
Blackwell's Bookshop, 53 South Bridge, Edinburgh EH11YS
Phone: +44 0131 622 8283 *Fax:* +44 0131 557 8149

National Assembly for Wales – Cynulliad Cenedlaethol Cymru

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2004 Road Accidents: Wales	£13
Welsh Transport Statistics 2005	£13

Other publications with transport topics

Digest of Welsh Local Area Statistics 2004	£22
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These publications are available from:
Central Support Unit, Statistical Directorate, Welsh Assembly Government, Cathays Park, Cathays, Cardiff CF10 3NQ

Telephone: +44 (0) 29-2082 5054
E-mail: stats.pubs@wales.gov.uk
Internet: www.wales.gov.uk

Northern Ireland Transport Statistics

Available from;
Central Statistics and Research Branch
Department of the Environment, Clarence Court,
10-18 Adelaide Street, Belfast BT2 8GB
Tel: +44 (0)28 9054 0801
E-mail: csrb@drdni.gov.uk
Internet: http://csrb.drdni.gov.uk

Transport Statistics Users Group

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

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

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

- 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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Assistant Inclusion Manager
Strategy and Service Development
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Email: nina.webster@tube.tfl.gov.uk

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.

Transport Statistics Publications (as at October 2006)

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(Transport Statistics Reports - priced)

Obtainable from:
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Publications no longer produced by Transport Statistics, which have transferred to other Government Departments:
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Journey Times Survey: Inner & Central London: 2001
Traffic Speeds in Central and Outer London: 1999
Traffic Speeds in Inner London: 1998
(From the dates given, future editions of the above publications produced by Transport for London - Contact ☎ +44 (0)20 7941 4266 for details)
National Rail Trends (replaced Bulletin of Rail Statistics)
(From Q1 2005/06 editions of this quarterly bulletin are produced by the Office of Rail Regulation –
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NOTE: Prior to 1997, many of the Transport Statistics Bulletins were published as HMSO publications. Enquiries about back issues, or transport publications in general, should be made to Transport Statistics, 2/17, Great Minster House, 76 Marsham Street, London SW1P 4DR. Great Britain. ☎ +44 (020) 7944 4846.

DfT: Transport Statistics Publications

(Transport Statistics Bulletins - free)
Obtainable from:
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2/17
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London
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Annual Bulletins – produced by Transport Statistics
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National Road Maintenance Condition Survey
Public Transport Statistics: GB
Regional Transport Statistics
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Survey of Van Activity
Sea Passenger Statistics
Traffic Speeds on English Trunk Roads (Biennial)
Traffic Speeds in English Urban Areas (Biennial)
Transport Trends
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See also the Transport Statistics web site at: -
http://www.dft.gov.uk/transtat