Department for Transport

Overview of Road Safety Statistics

Glenn Goodman
Road Safety Statistics Team
Department for Transport
glenn.goodman@dft.gsi.gov.uk

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Why are Road Safety Statistics important?

- 28,000 fatalities in the EU in 2012 – fallen by almost 50% since 2001
  - almost 30% of deaths among 15-24 year olds in the EU
- 250,000 serious injuries each year in the EU
- Recent estimate of cost of accidents in EU is €140bn
- Estimated 1.2 million deaths a year worldwide

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Overview

- Sources of data on road safety
- How they are collected
- Challenges & quality issues
- Linking sources of data
- How data are used

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Sources of data on road safety

- Police accident data (STATS19)
- Hospital admissions
- Drink Driving
- National Travel Survey of personal travel patterns
- Death Registrations
- Other possible sources:
  - Emergency services
  - Insurance data
- Related sources:
  - Census data
  - Motoring offence data

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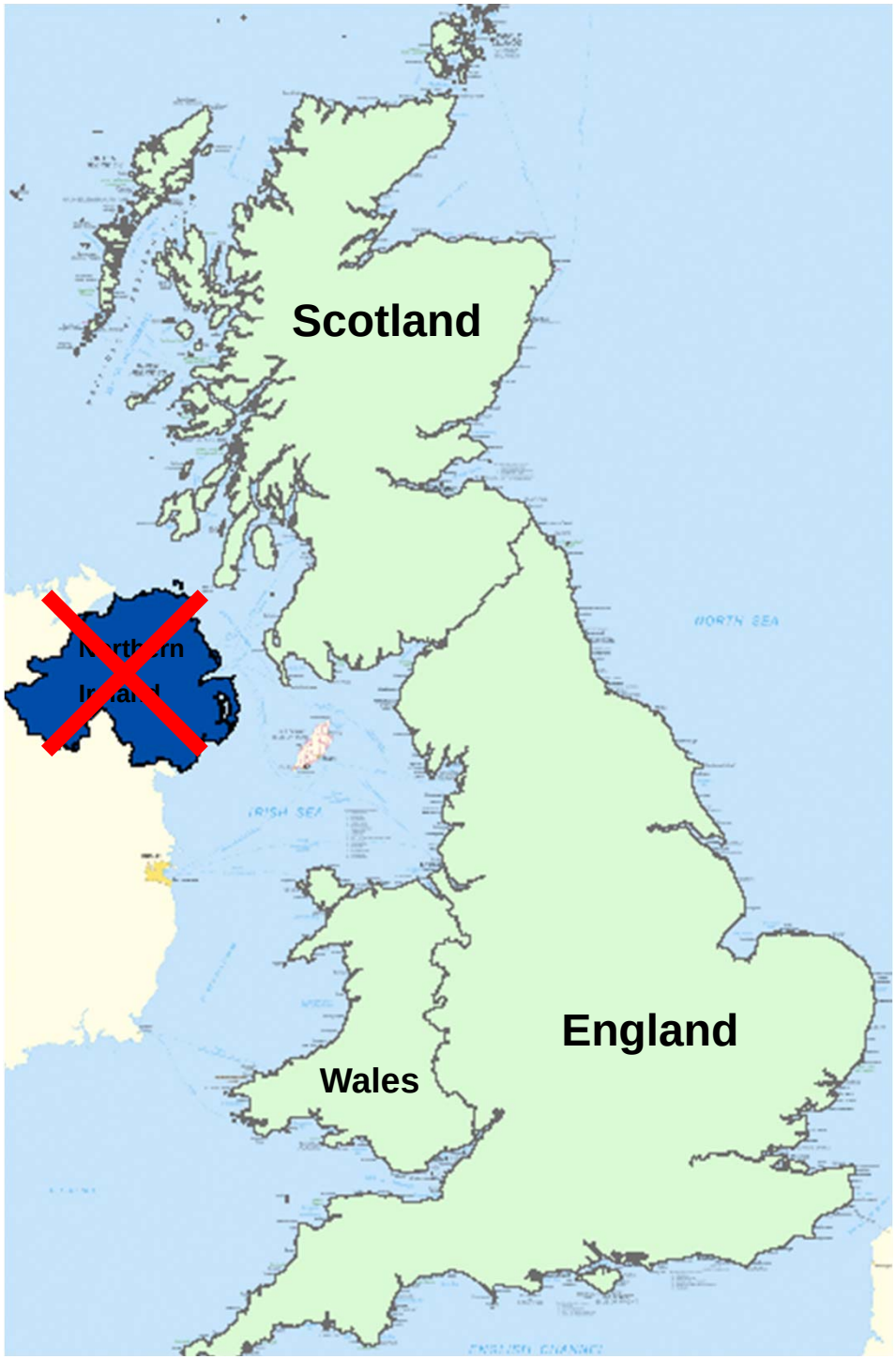
Police accident data

- Accidents in **Great Britain**, involving personal injury on the public highway, in which at least one vehicle is involved and which are reported to the police.


Scotland
Northern
Ireland
NORTH SEA
IRISH SEA
England
Wales

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Police accident data

- Accidents in **Great Britain**, involving personal injury on the public highway, in which at least one vehicle is involved and which are reported to the police.

- Does not include damage only accidents or those on private roads or car parks

- Not all accidents are reported - if insurance details have been exchanged there is no legal obligation for the police to be contacted.

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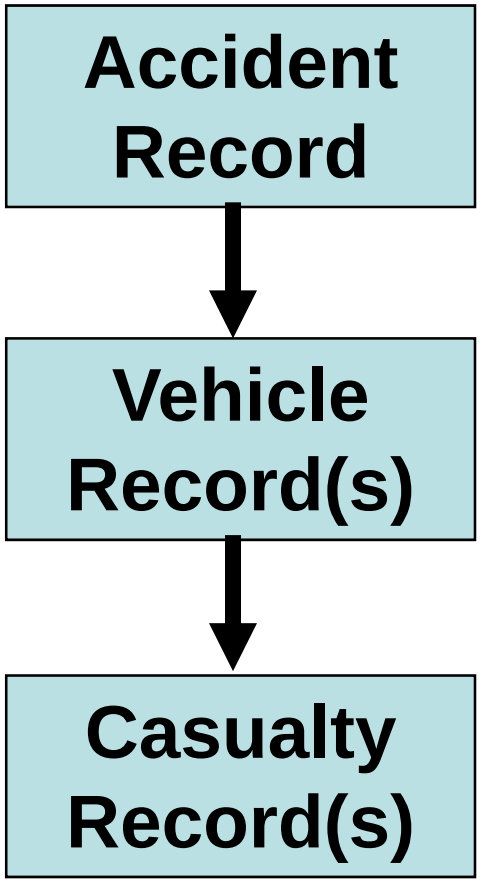
What do we collect ?

- What were the general conditions in which accidents occurred including exact location?
- Vehicle and driver details?
- How many people were injured and which road users were injured?
- What were casualties doing at the time of the accident?



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What is contributory factor data?

- Key actions and failures that led directly to the actual impact.

- They show why the accident occurred, and give clues about how it may have been prevented.

- Reflect reporting Police Officer's opinion at the time of reporting. Subsequent enquiries lead to the reporting officer changing his opinion of what contributed to the accident.

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MG NSRF/A

ACCIDENT STATISTICS

*FATAL / SERIOUS / SLIGHT

Incident URN

Other ref.

1.3 ACCIDENT REFERENCE

1.9 TIME H H M M DAY* Su M T W Th F S 1.7 DATE D D M M 2 0 Y Y

1st Road Class & No. or (Unclassified - UC) (Not Known - NK)

1st Road Name

Outside House No. or Name or Marker Post No.

at junction with / or metres N S E W * of

2nd Road Class & No. or (Unclassified - UC) (Not Known - NK)

2nd Road Name

Town

Sector /Beat No.

County or Borough

Parish No. or Name

1.10 Local Auth No. (if known)

1.11 Grid Reference E — N ↑

REPORTING OFFICER Name Number

BCU/Stn 1.2 Force Tel Number

1.5 Number of vehicles	
1.6 Number of casualties	

1.14 ROAD TYPE		✗
Roundabout	1	
One way street	2	
Dual carriageway	3	
Single carriageway	6	
Slip road	7	
Unknown	9	

1.15 Speed Limit (Permanent)		

1.16 JUNCTION DETAIL		✗
Not at or within 20 metres of junction	00	
Roundabout	01	
Mini roundabout	02	
T or staggered junction	03	
Slip road	05	
Crossroads	06	

1.20a PEDESTRIAN CROSSING - HUMAN CONTROL		✗
None within 50 metres	0	
Control by school crossing patrol	1	
Control by other authorised person	2	

1.20b PEDESTRIAN CROSSING - PHYSICAL FACILITIES		✗
No physical crossing facility within 50m	0	
Zebra crossing	1	
Pelican, puffin, toucan or similar non-junction pedestrian light crossing	4	
Pedestrian phase at traffic signal junction	5	
Footbridge or subway	7	
Central refuge — no other controls	8	

1.22 WEATHER		✗
Fine without high winds	1	
Raining without high winds	2	
Snowing without high winds	3	
Fine with high winds	4	

1.21 LIGHT CONDITIONS		✗
Daylight:	1	
Darkness: street lights present and lit	4	
Darkness: street lights present but unlit	5	
Darkness: no street lighting	6	
Darkness: street lighting unknown	7	

1.24 SPECIAL CONDITIONS AT SITE		✗
None	0	
Auto traffic signal out	1	
Auto traffic signal partially defective	2	
Permanent road signing or marking defective or obscured	3	
Roadworks	4	
Road surface defective	5	
Oil or diesel	6	
Mud	7	

1.25 CARRIAGEWAY HAZARDS		✗
None	0	

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The Collection Process

- Data collection process depends on co-operation between
  - police
  - local government
  - central government

- The system is jointly managed and owned by a committee comprising all three

Leicestershire County Council
Avon and Somerset
Sir y Fflint Flintshire
Hertfordshire
Birmingham City Council
CITY OF LONDON
OXFORDSHIRE COUNTY COUNCIL
MANCHESTER CITY COUNCIL
Harrow COUNCIL
London Borough of Hounslow
ISLINGTON
Hull City Council
Herefordshire Council
NORTH EAST LINCOLNSHIRE COUNCIL
West Lancashire
Northamptonshire County Council
Shropshire Council
Forest Heath District Council
Havering LONDON BOROUGH

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Overview

- Sources of data on road safety
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- Linking sources of data
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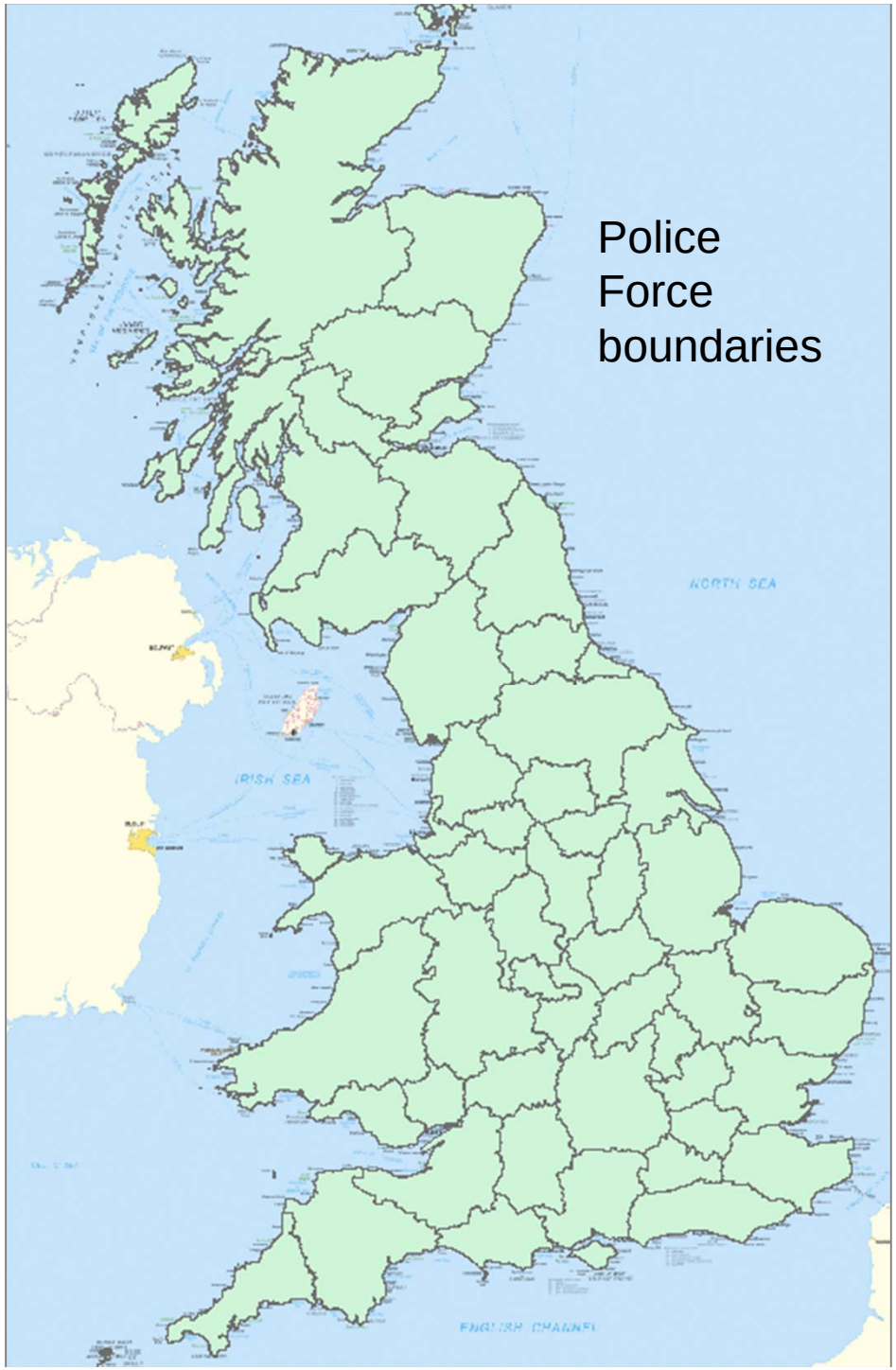
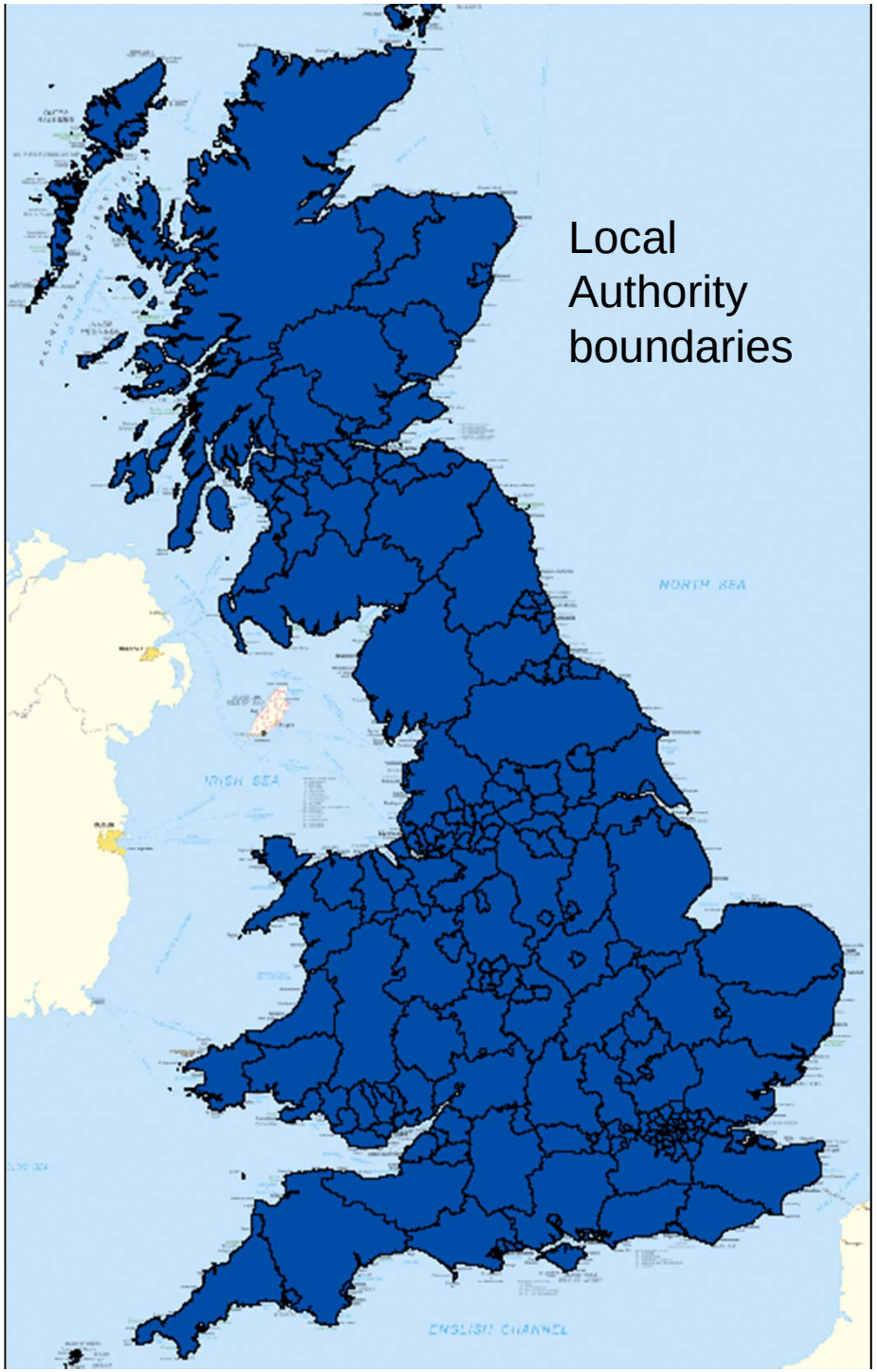
Challenges & quality issues

- Not all accidents reported – estimated two thirds of non-fatal casualties not reported

- Difference in training and experience between different officers and forces


Police
Force
boundaries
NORTH SEA
IRISH SEA
ENGLISH CHANNEL


Local
Authority
boundaries
NORTH SEA
IRISH SEA
ENGLISH CHANNEL

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Challenges & quality issues

- Not all accidents reported – estimated two thirds of non-fatal casualties not reported
- Difference in training and experience between different officers and forces
- Incorrect inputs – e.g. Location reference difficulties
- Time consuming
- Police not medically qualified and so possibility that the severity of injury reported is incorrect

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Validation

Data collected by the Police

Transfer by, post/ telephone/electronic to Processing Unit

Processed and validated by Police/Local Authority

E-mail

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Analysis and Publication

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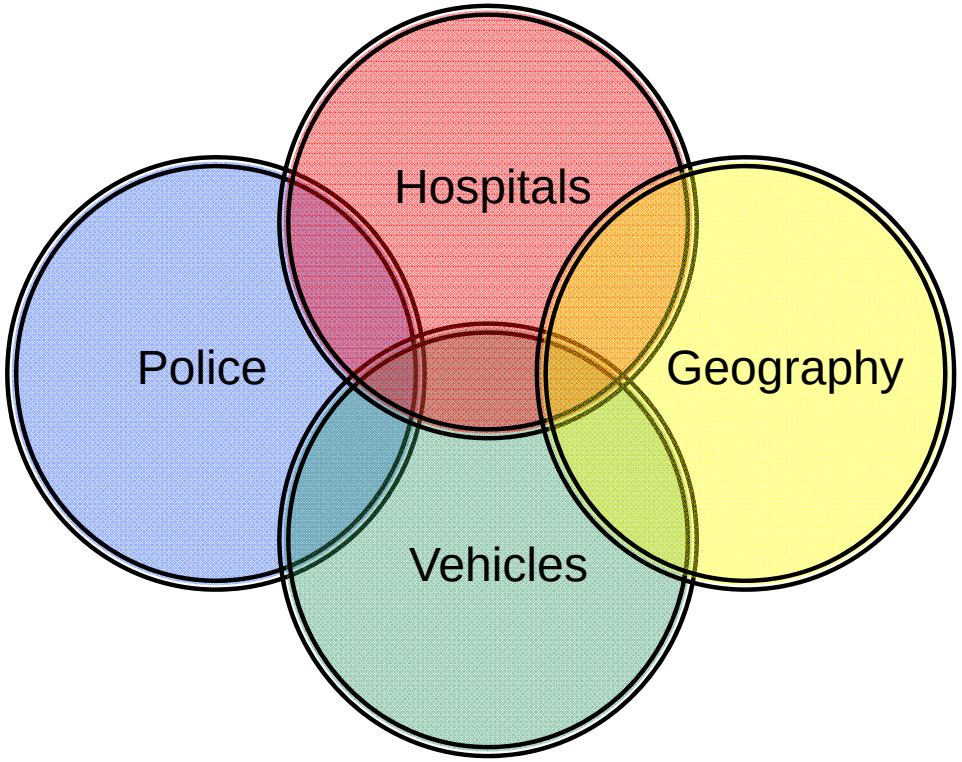

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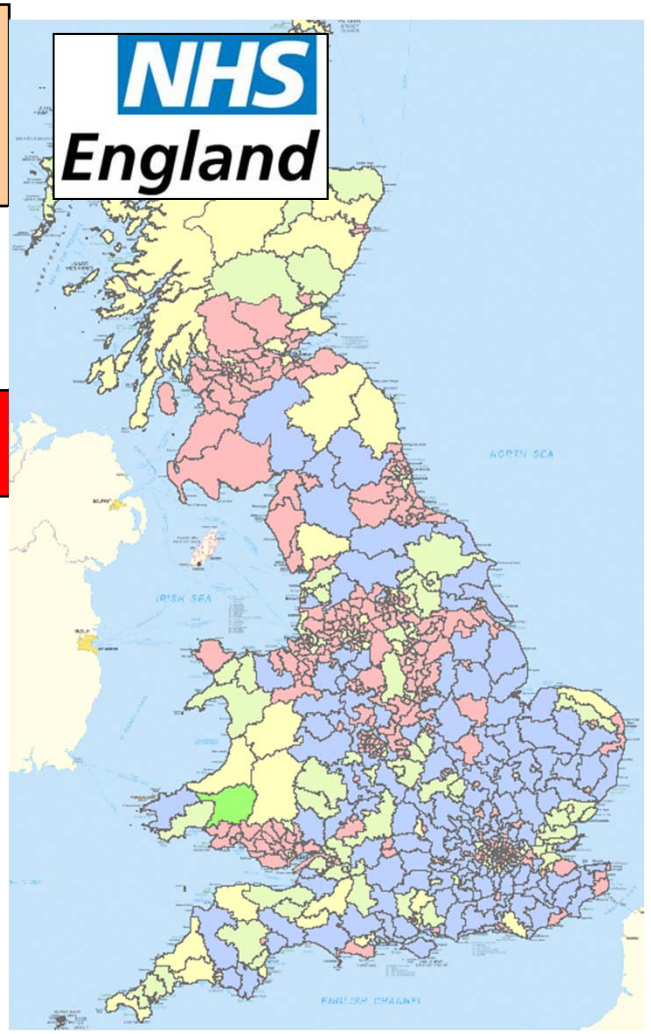
Linkage or use of other data sources to add value or reduce burden.

Hospital Admission Statistics

Vehicle Registration Data

Police Data

Geographically derived variables



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Hospital Admissions

NHS England

- The Hospital Admissions database allows us to identify all hospitalised casualties resulting from road traffic accidents.

- Should include all serious injuries from Police data.

- There is no unique identifier between Hospital data and Police data – however linking the data sources is still possible.

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Matching Hospital and Police records

- Match data using common variables (such as age, gender, date and location) – almost 50% of serious casualties are matched.
- Hospital ICD-10 codes converted to Abbreviated Injury Scale scores.
- MAIS3+ is an internationally agreed threshold for ‘serious’ injuries
- Problems – incorrect or incomplete matching.

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Drink Driving

- Police roadside breath tests
- Coroners blood tests – investigation of cause of death
- Failed a roadside breath test by registering over **35** micrograms of alcohol per 100 millilitres of breath

OR

- Died and was subsequently found to have more than **80** milligrams of alcohol per 100 millilitres of blood.
- Drink drive figures are estimates to take account of missing data.

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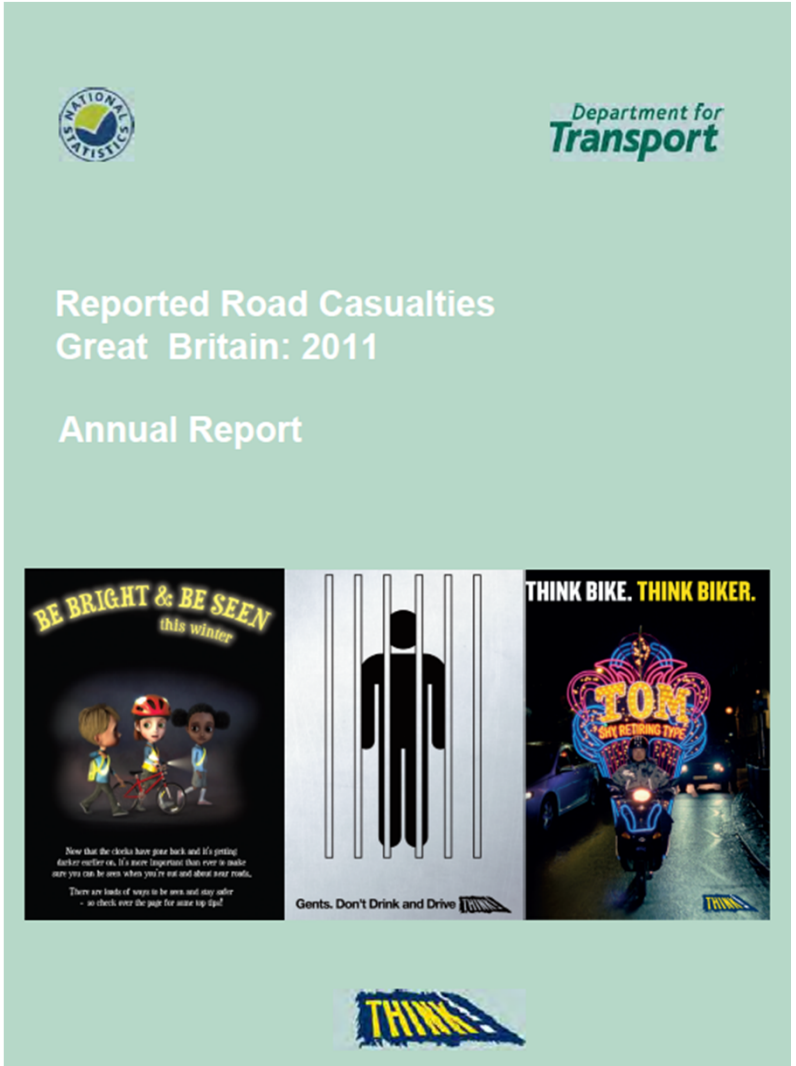

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How are the data used?

- Developing and monitoring road safety legislation and policy at local, national, and international levels, including monitoring indicators.
- Improvements in road safety infrastructure (Highway authorities)
- Education, training and publicity (Government e.g. Think! Campaign)
- Vehicle safety improvements (Government and vehicle manufacturers)
- Targeting enforcement (Police)
- Inform public debate on road safety (researchers, lobby groups, media, public)
- Parliamentary Questions
- European Commission, CARE and IRTAD

Reported Road Casualties in Great Britain: Main Results 2011

Statistical Release

28 June 2012

RESPONSIBLE STATISTICIAN:
Pat Kilbey

FURTHER INFORMATION

Media Enquiries:
020 7944 6898
Public Enquiries:
020 7944 6595
Roadacc.stats@dft.gsi.gov.uk

Reported Roa Britain: Main I

This publication presents 2011 on public roads (inc became known to the po

Figures are derived from police. These collect deta covering the circumstanc vehicles involved. The re and to the Department fo

Figures for deaths refer t caused death within 30 d

Summary statistics are p analysis of 2011 casualty

The key findings from t

- The annual number of the police has increas 1,901 in 2011. This is
- The number of people also increased by 2 pe first annual increase s
- The total number of ca and fatalities) in road Britain in 2011 continu 2010 to 203,950 in 20
- Total reported child ca by 0.5 per cent in 201 or seriously injured als 2011, from 2,502 in 20
- Vehicle traffic levels a The overall casualty ra billion vehicle miles co miles, compared to 68 2010 but the killed or billion vehicle miles.

Reported Road Casualties in Great Britain: 2011 Annual Report

Statistical Release

27 September 2012

RESPONSIBLE STATISTICIAN:
Pat Kilbey

FURTHER INFORMATION

Media Enquiries:
020 7944 6898
Public Enquiries:
020 7944 6595
roadacc.stats@dft.gsi.gov.uk

Reported Road Britain: 2011 Ar

The Reported Road Casua Report: 2011 presents deta published in June 2012) ab accidents, including the typ casualties and factors whic detailed tables there are si specific road safety topics.

Most of the statistics in the accidents reported to the p mortality, survey and hospi and traffic data to provide a

The key findings from th

- In 2011, there were a tot road accidents reported There were 1,901 people and 23,122 were serious increased slightly (0.2 pe
- The number of fatalities 22 per for bus and coach per cent for pedal cyclist and 6 per cent respectiv
- In 2011, it is estimated 9 casualties) occurred whe alcohol limit. The provisi been killed in drink drive fatalities).
- The rate per billion vehic accidents and the rate of 2011 were both 15 per c fatalities alone, the 2011
- *Failed to look properly* w contributory factor and w reported to the police in
- In 2011, the economic w estimated to be around £

Reported Road Casualties in Great Britain: Quarterly Provisional Estimates Q3 2012

Statistical Release

7 February 2013

RESPONSIBLE STATISTICIAN:
Daryl Lloyd

FURTHER INFORMATION

Media Enquiries:
020 7944 6898
Public Enquiries:
020 7944 6595
Roadacc.stats@dft.gsi.gov.uk

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Reported Road Casualties in Great Britain: Quarterly Provisional Estimates 2012 Q3

Reported Road Casualties in Great Britain: Quarterly Provisional Estimates is a series providing estimates of personal-injury road accidents on public accidents (including footways) and their casualties which became known to the police within 30 days. This publication contains statistics for the year ending September 2012.

These estimates are published to allow emerging trends to be monitored between the publications of annual figures. A note on methodology can be found at: http://assets.dft.gov.uk/statistics/series/road-accidents-and-safety/methodology-note-quarterly-estimates.pdf.
Estimates are based on information reported to the Department for Transport 15 weeks after the end of the latest quarter. For this release figures are based on information available on 23rd January 2013.

The key findings from the Quarterly Provisional Estimates 2012 Q3 include:

- For reported road accidents in the year ending September 2012, there were 1,760 fatalities, a 7 per cent drop from the year ending September 2011 figure (1,883). However, the number of people killed or seriously injured rose to 24,860, a 2 per cent increase compared with the year ending September 2011 figure (24,473).
- Both pedestrian and all road user child KSIs (ages 0-15) fell by 1 per cent between the years ending September 2011 and 2012.
- The number of fatal accidents on major roads (motorways and A roads) fell by 9 per cent and the number of fatal or serious accidents fell by 2 per cent. However, fatal and serious accidents rose by 5 per cent on minor roads
- There were a total number of 197,730 casualties from 146,980 accidents in the year ending September 2012. These figures represent a 3 per cent fall from the year ending September 2011 for both casualties (from 204,211) and accidents (from 151,162).
- In comparison, motor vehicle traffic levels rose by 0.2 per cent compared with 12 month period ending September 2011.

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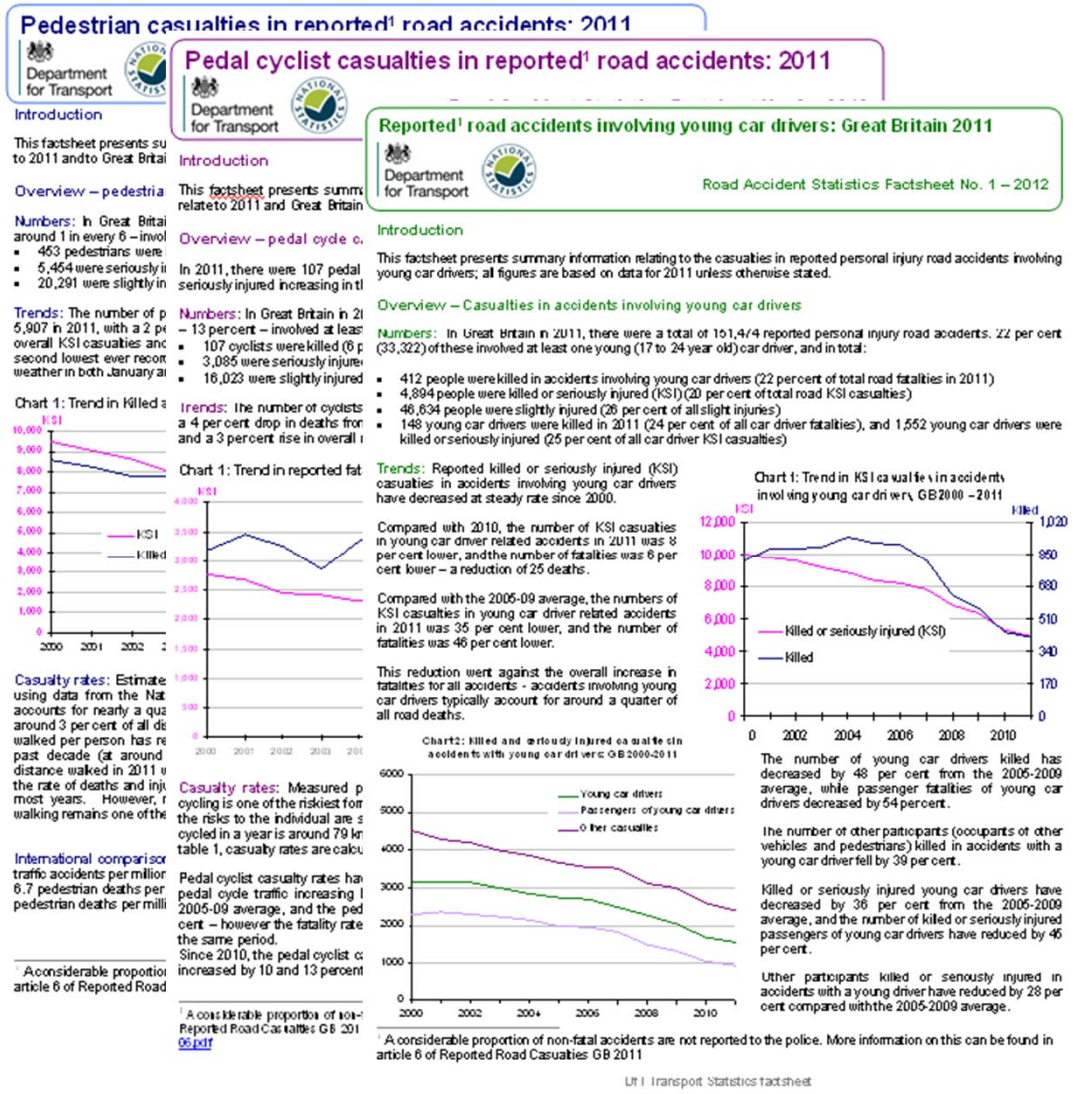
Factsheets

Several topics including:

- Pedestrians
- Pedal cyclists
- Young drivers
- Motorcyclists
- Elderly drivers



Pedestrian casualties in reported[1] road accidents: 2011

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Introduction

This factsheet presents su
to 2011 and to Great Britai

Overview – pedestria

Numbers: In Great Britai
around 1 in every 6 – invol
- 453 pedestrians were
- 5,454 were seriously i
- 20,291 were slightly in

Trends: The number of p
5,907 in 2011, with a 2 pe
overall KSI casualties and
second lowest ever recor
weather in both January a

Chart 1: Trend in Killed a

Casualty rates: Estimate
using data from the Nat
accounts for nearly a qua
around 3 per cent of all di
walked per person has re
past decade (at around
distance walked in 2011 w
the rate of deaths and inju
most years. However, r
walking remains one of the

International comparisor
traffic accidents per million
6.7 pedestrian deaths per
pedestrian deaths per milli

[1] A considerable proportio
article 6 of Reported Road

Pedal cyclist casualties in reported[1] road accidents: 2011

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Introduction

This factsheet presents summ
related to 2011 and Great Britain

Overview – pedal cycle c

In 2011, there were 107 pedal
seriously injured increasing in t

Numbers: In Great Britain in 2
– 13 per cent – involved at leas
- 107 cyclists were killed (6 p
- 3,085 were seriously injure
- 16,023 were slightly injured

Trends: The number of cyclists
a 4 per cent drop in deaths fro
and a 3 per cent rise in overall

Chart 1: Trend in reported fat

Casualty rates: Measured p
cycling is one of the riskiest for
the risks to the individual are s
cycled in a year is around 79 k
table 1, casualty rates are calcu

Pedal cyclist casualty rates ha
pedal cycle traffic increasing
2005-09 average, and the ped
cent – however the fatality rate
the same period.
Since 2010, the pedal cyclist c
increased by 10 and 13 percent

[1] A considerable proportion of non-
Reported Road Casualties GB 201
06.pdf

Reported[1] road accidents involving young car drivers: Great Britain 2011

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Road Accident Statistics Factsheet No. 1 – 2012

Introduction

This factsheet presents summary information relating to the casualties in reported personal injury road accidents involving young car drivers; all figures are based on data for 2011 unless otherwise stated.

Overview – Casualties in accidents involving young car drivers

Numbers: In Great Britain in 2011, there were a total of 151,474 reported personal injury road accidents. 22 per cent (33,322) of these involved at least one young (17 to 24 year old) car driver, and in total:

- 412 people were killed in accidents involving young car drivers (22 per cent of total road fatalities in 2011)
- 4,894 people were killed or seriously injured (KSI) (20 per cent of total road KSI casualties)
- 46,634 people were slightly injured (26 per cent of all slight injuries)
- 148 young car drivers were killed in 2011 (24 per cent of all car driver fatalities), and 1,552 young car drivers were killed or seriously injured (25 per cent of all car driver KSI casualties)

Trends: Reported killed or seriously injured (KSI) casualties in accidents involving young car drivers have decreased at steady rate since 2000.

Compared with 2010, the number of KSI casualties in young car driver related accidents in 2011 was 8 per cent lower, and the number of fatalities was 6 per cent lower – a reduction of 25 deaths.

Compared with the 2005-09 average, the numbers of KSI casualties in young car driver related accidents in 2011 was 35 per cent lower, and the number of fatalities was 46 per cent lower.

This reduction went against the overall increase in fatalities for all accidents - accidents involving young car drivers typically account for around a quarter of all road deaths.

Chart 1: Trend in KSI casualties in accidents involving young car drivers, GB 2000 – 2011

Chart 2: Killed and seriously injured casualties in accidents with young car drivers GB 2000-2011

The number of young car drivers killed has decreased by 48 per cent from the 2005-2009 average, while passenger fatalities of young car drivers decreased by 54 per cent.

The number of other participants (occupants of other vehicles and pedestrians) killed in accidents with a young car driver fell by 39 per cent.

Killed or seriously injured young car drivers have decreased by 36 per cent from the 2005-2009 average, and the number of killed or seriously injured passengers of young car drivers have reduced by 46 per cent.

Other participants killed or seriously injured in accidents with a young driver have reduced by 28 per cent compared with the 2005-2009 average.

[1] A considerable proportion of non-fatal accidents are not reported to the police. More information on this can be found in article 6 of Reported Road Casualties GB 2011

DfT Transport Statistics factsheet

1

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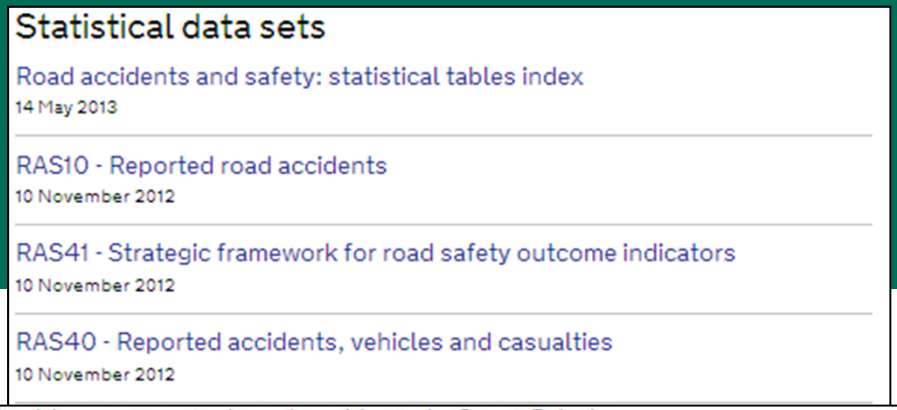
Overview of Tables

- Approximately 170 tables produced each year

- Structured so that each different output level tables are grouped:
  - Accidents
  - Vehicles
  - Casualties
  - Contributory Factors

  etc.



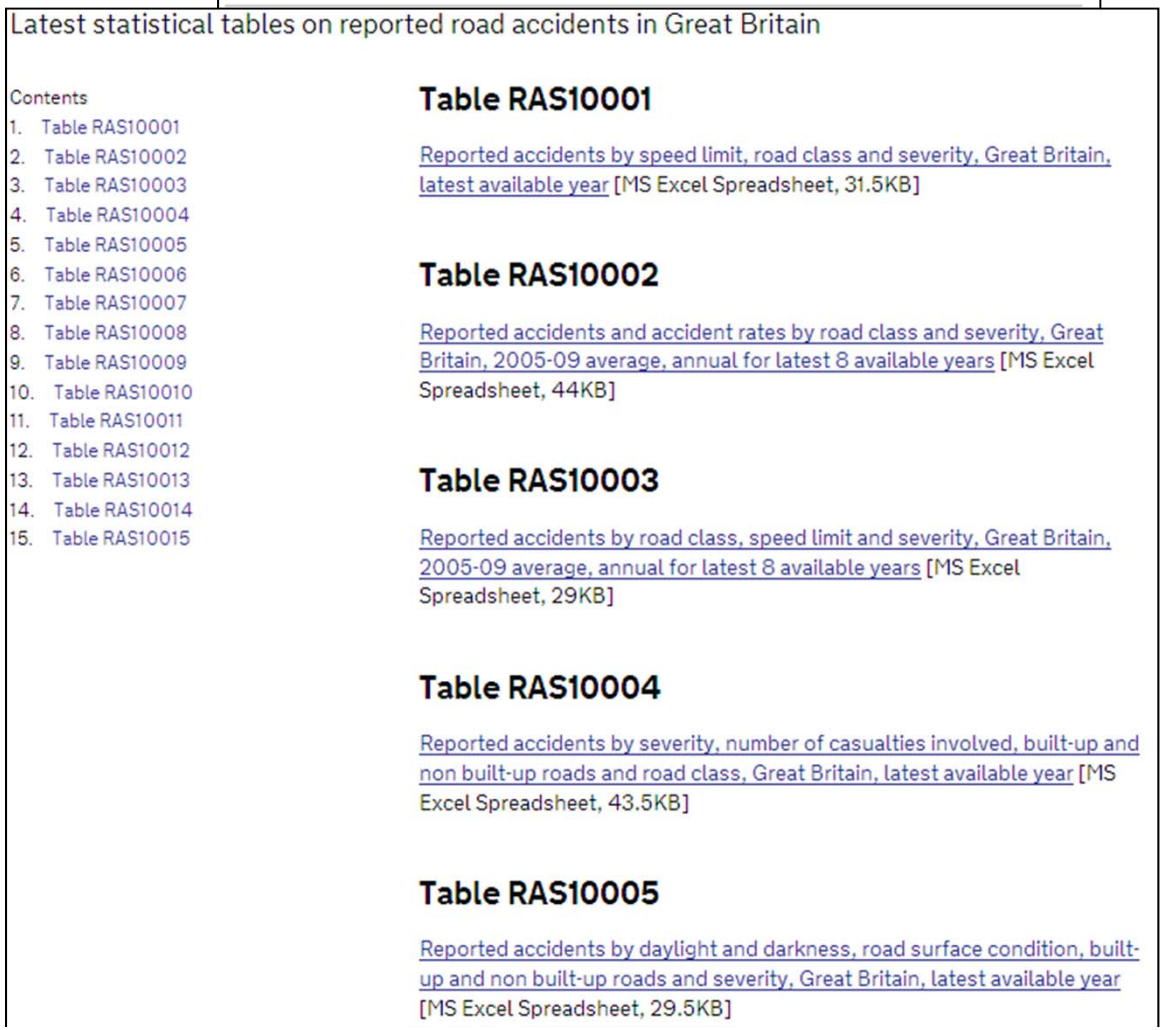
Statistical data sets

Road accidents and safety: statistical tables index
14 May 2013

RAS10 - Reported road accidents
10 November 2012

RAS41 - Strategic framework for road safety outcome indicators
10 November 2012

RAS40 - Reported accidents, vehicles and casualties
10 November 2012



Latest statistical tables on reported road accidents in Great Britain

Contents

1. Table RAS10001
2. Table RAS10002
3. Table RAS10003
4. Table RAS10004
5. Table RAS10005
6. Table RAS10006
7. Table RAS10007
8. Table RAS10008
9. Table RAS10009
10. Table RAS10010
11. Table RAS10011
12. Table RAS10012
13. Table RAS10013
14. Table RAS10014
15. Table RAS10015

Table RAS10001

Reported accidents by speed limit, road class and severity, Great Britain, latest available year [MS Excel Spreadsheet, 31.5KB]

Table RAS10002

Reported accidents and accident rates by road class and severity, Great Britain, 2005-09 average, annual for latest 8 available years [MS Excel Spreadsheet, 44KB]

Table RAS10003

Reported accidents by road class, speed limit and severity, Great Britain, 2005-09 average, annual for latest 8 available years [MS Excel Spreadsheet, 29KB]

Table RAS10004

Reported accidents by severity, number of casualties involved, built-up and non built-up roads and road class, Great Britain, latest available year [MS Excel Spreadsheet, 43.5KB]

Table RAS10005

Reported accidents by daylight and darkness, road surface condition, built-up and non built-up roads and severity, Great Britain, latest available year [MS Excel Spreadsheet, 29.5KB]

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Access to individual records

- Data availability - available at:

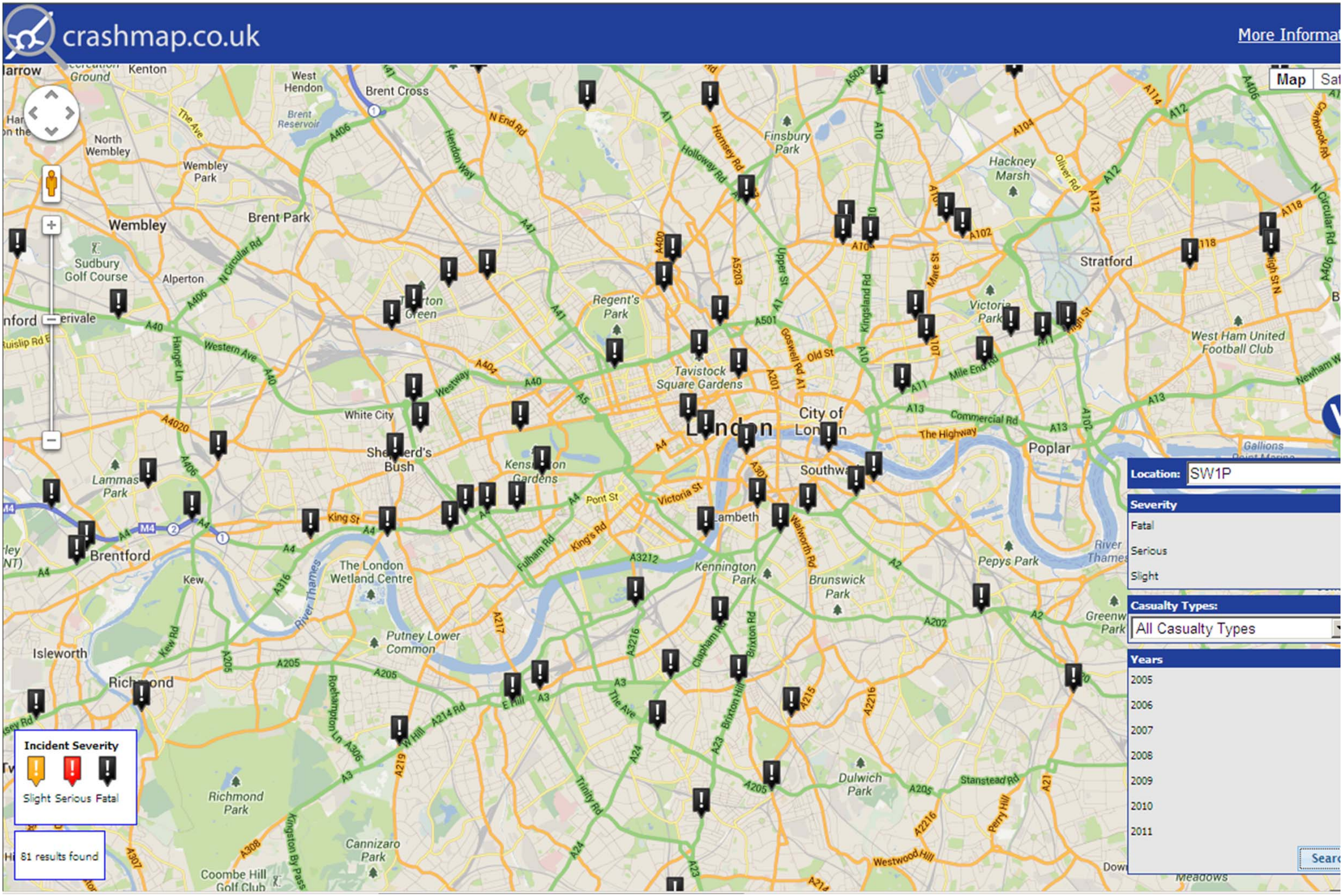
http://data.gov.uk/dataset/road-accidents-safety-data(2005-2011)

http://discover.ukdataservice.ac.uk/ (1979-2011)

  - Police data with, postcodes, Vehicle Registration Mark, breath test, contributory factor data removed, and ages banded

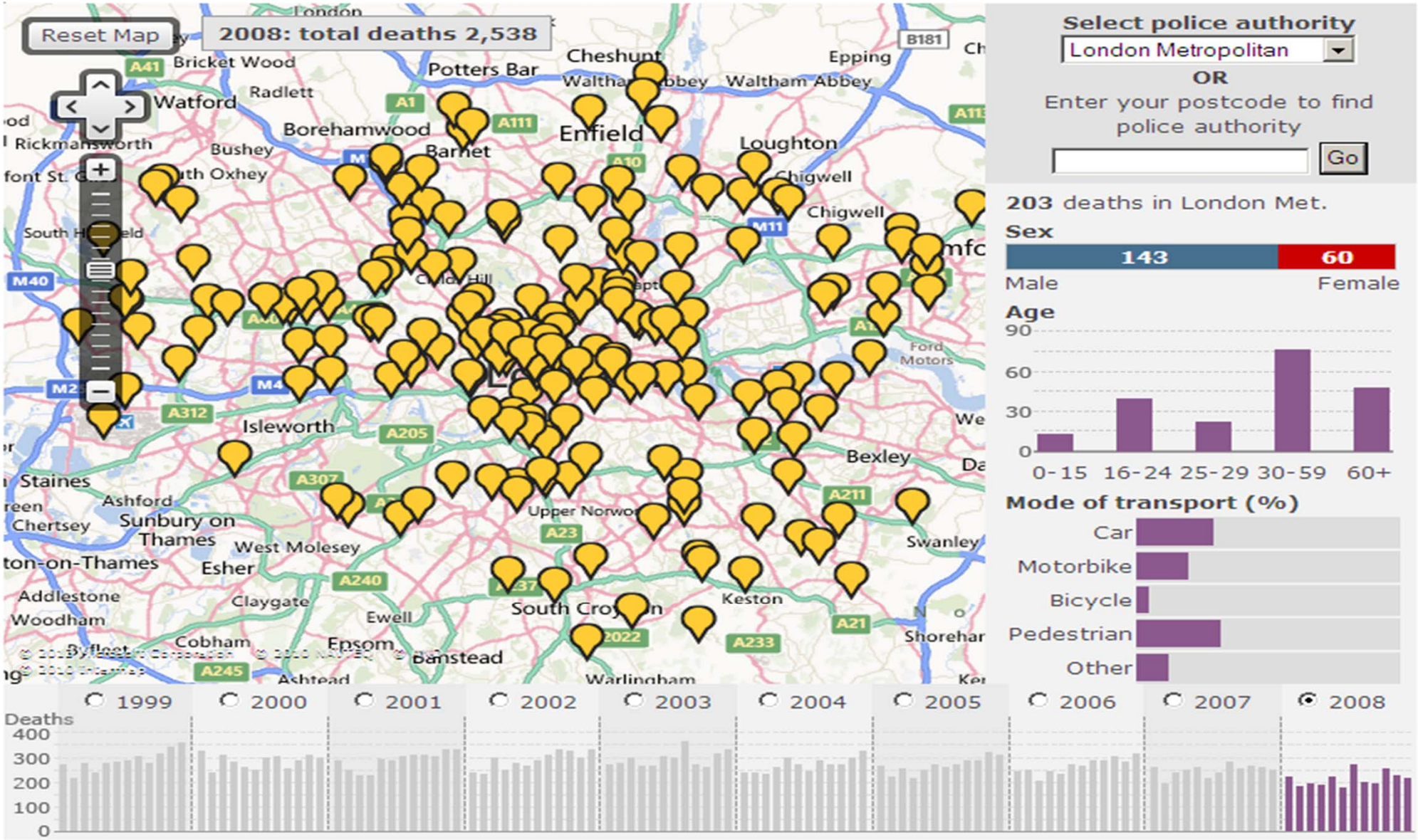
Reference	Casualty Class	Sex	Postcode	Vehicle Reg.	Breath Test	Driver Age
01BS00004	9	2	SW100DX	AB12 CDE	2	49
01BS00005	3	1	W3 3RR	A123 BCD	3	49
01BS00006	9	1	W11 2BD	AB12 CDE	3	51
01BS00006	3	2	E2 7NF	A123 BCD	3	30
01BS00007	3	1	W2 0DZ	AB12 CDE	3	31

Acc_Index	Casualty_ Class	Sex_of_ Casualty	Age_Band_ of_Casualty	Casualty_ Type	Casualty_Home _Area_Type
201101BS70001	3	2	5	0	1
201101BS70002	1	1	6	3	1
201101BS70003	3	1	8	0	1
201101BS70005	2	1	9	8	1
201101BS70005	2	1	4	9	-1
201101BS70005	2	1	4	9	1


crashmap.co.uk
More Informat
Map
Location: SW1P
Severity
Fatal
Serious
Slight
Casualty Types:
All Casualty Types
Years
2005
2006
2007
2008
2009
2010
2011
Incident Severity
Slight Serious Fatal
81 results found
London
City of London
Wembley
Brent Park
Brent Cross
West Hendon
Finsbury Park
Hackney Marsh
Stratford
Victoria Park
West Ham United Football Club
Poplar
Regent's Park
Tavistock Square Gardens
White City
Shepherd's Bush
Kensington Gardens
Southwark
Lambeth
Kennington Park
Brunswick Park
Pepys Park
Brentford
Kew
The London Wetland Centre
Putney Lower Common
Isleworth
Richmond
Richmond Park
Dulwich Park
Cannizaro Park
Coombe Hill Golf Club
Sudbury Golf Course
Alperton
North Wembley
Wembley Park
Lammas Park
Meadows

Crash: Death on Britain's roads

Overview | In graphics | **Crash map**



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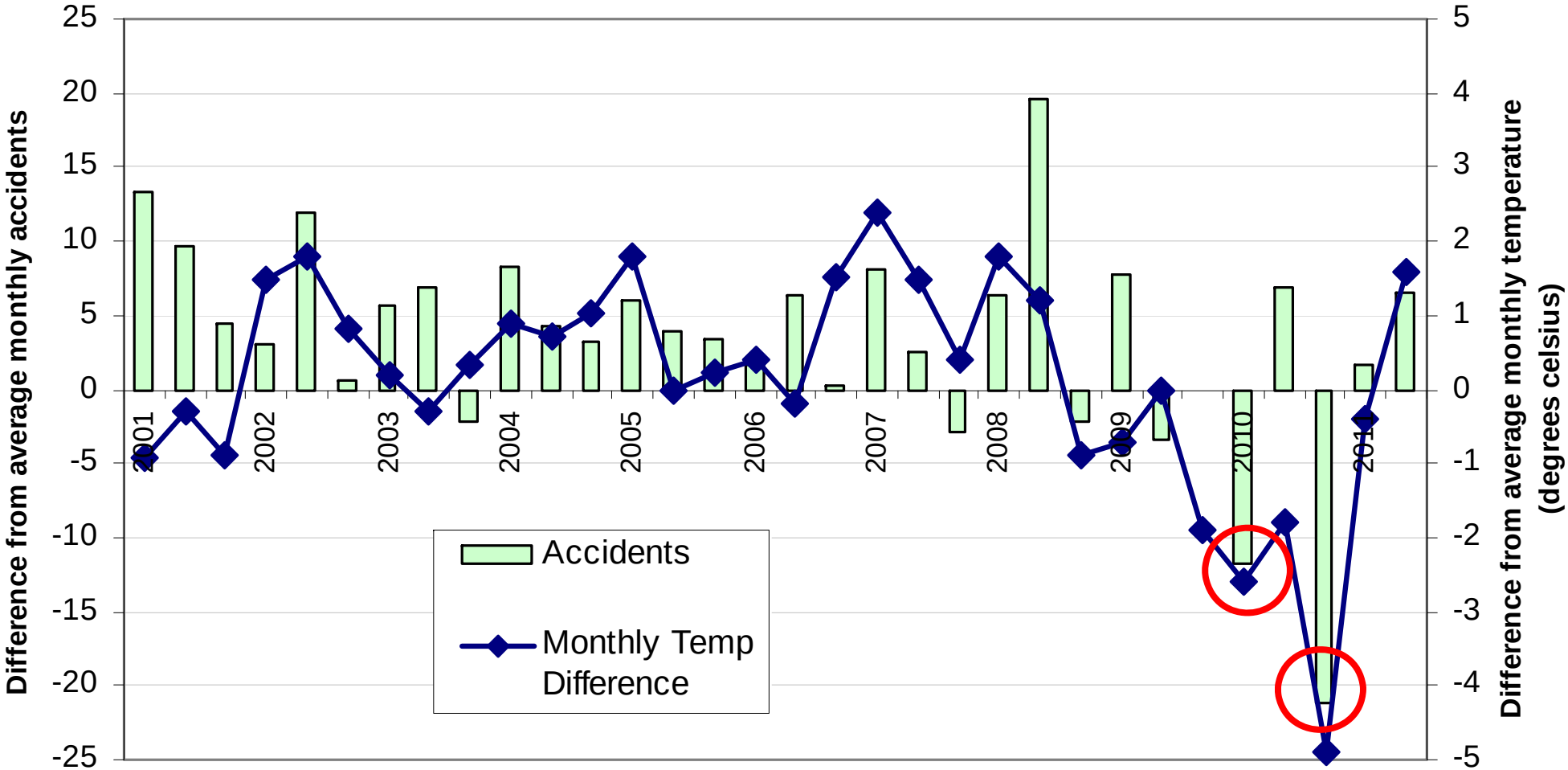
Internal Use

- Weather – Extreme Winter events



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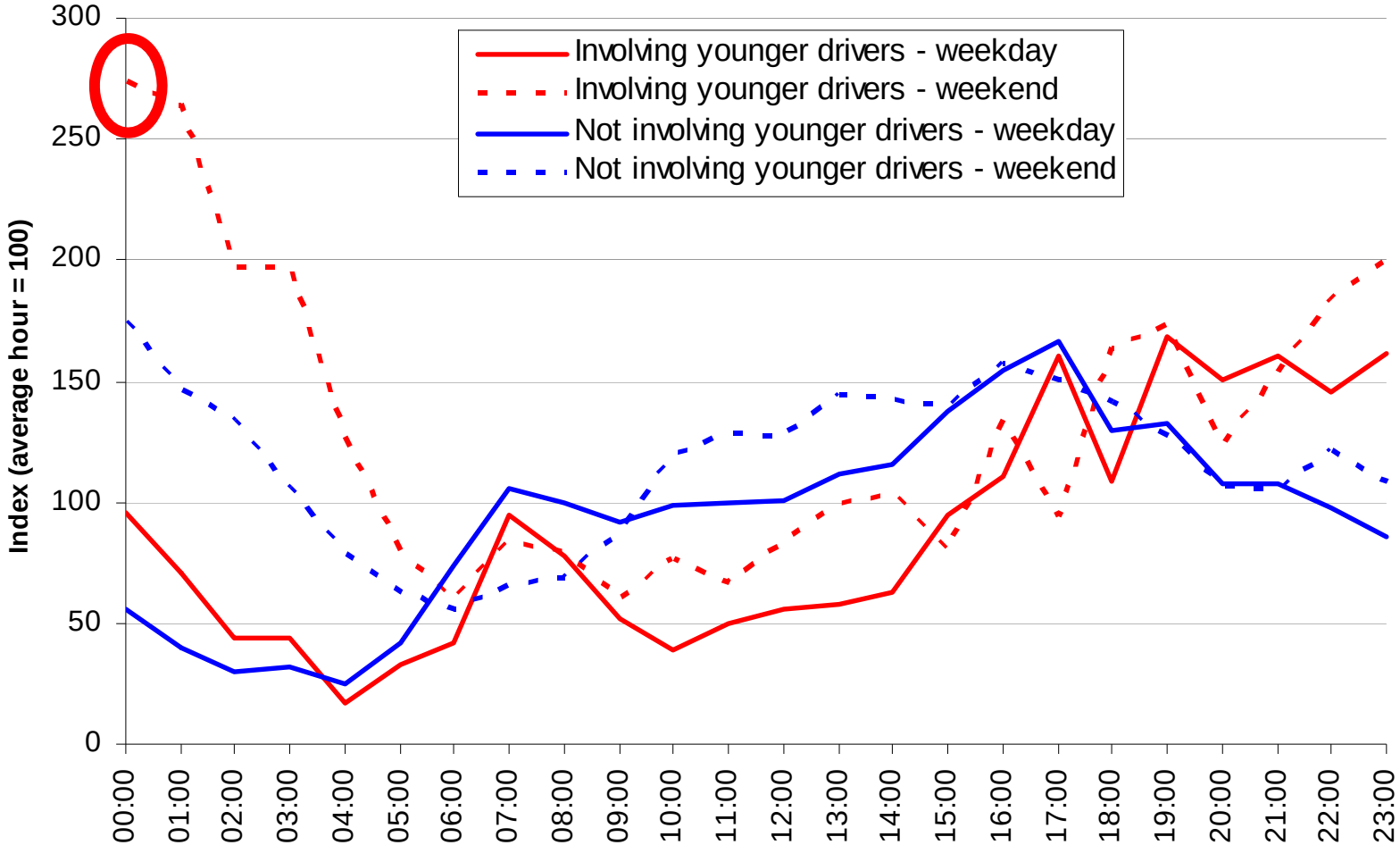
Young Drivers

- Fatalities by time of day



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Contact details

- Website: https://www.gov.uk/government/organisations/department-for-transport/series/road-accidents-and-safety-statistics

- Email:

  roadacc.stats@dft.gsi.gov.uk

  or

  glenn.goodman@dft.gsi.gov.uk

Questions?