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## **Theme 5: Statistical Analysis, Accident Causation and Policy Monitoring**

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Projects in this theme include statistical surveys and analysis of existing data; in-depth investigation of road traffic accidents; research into the factors which contribute to accidents and development of countermeasures to reduce casualties. They also include research into the effectiveness of policy measures.

### **Road safety strategy beyond 2010: A scoping study (Road safety research report No.105) (1 Mb)**

This report follows on from a presentation given to Department for Transport delegates at a meeting on 8 November 2007. It brings together and expands on inputs from those presenting papers at that meeting. The work reported on draws together research across some of the core disciplines related to road safety. It does not report on any new research.

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21 April 2009

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### **A poor way to die: social deprivation and road traffic fatalities (314 kb)**

A sample of 893 fatal vehicle occupant cases was considered, from 10 UK police forces, from the years 1994-2005 inclusive. Each case was summarised on a database that included the main objective features (such as time and place), a summary narrative, a sketch plan and a list of explanatory factors. Each case was then assigned an Index of Multiple Deprivation (IMD) score based on the postcode/address of the primary fatality, and these scores were separated into IMD quintiles.

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## **Contribution of local safety schemes to casualty reduction - Findings (Report No.108) (467 kb)**

Findings are based primarily on systematic results from 22 local highway authorities, which consider the before and after casualty or collision records at locations of 408 highway safety engineering schemes built in 04/05. Programmes for 07/08 were also analysed to assess potential changes in performance and constitution. This summary report presents the findings of the study, together with recommendations for further improving the value for money offered by road safety engineering programmes.

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## **Contribution of local safety schemes to casualty reduction - Final Report (Report No.108) (790 kb)**

Findings are based primarily on systematic results from 22 local highway authorities, which consider the before and after casualty or collision records at locations of 408 highway safety engineering schemes built in 04/05. Programmes for 07/08 were also analysed to assess potential changes in performance and constitution. This summary report presents the findings of the study, together with recommendations for further improving the value for money offered by road safety engineering programmes.

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## **Post-2010 casualty forecasting (Road safety web publication No.8) (563 kb)**

This report presents the outcome of research that has been carried out by the Transport Research Laboratory to assist the Department to prepare for the post-2010 casualty reduction strategy. It shows how the numbers of casualties in 2020 and 2030 have been forecast, taking account of likely future developments in travel by road and in road safety, and presents the forecasts that have been prepared.

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## **The relationship between speed and car driver injury severity (Road safety web publication No.9) (287 kb)**

This project explored the relationship between speed and injury severity for seat-belted car drivers in impacts with other cars. The results were compared to a recent paper by Wramborg (2005), which also presented the relationship between speed and injury severity. Information on fatally and seriously injured

drivers from the Co-operative Crash Injury Study (CCIS) and slightly injured drivers from the On the Spot (OTS) study were combined.

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## **Strapping yarns: why people do not wear seatbelts ( Road Safety Report No. 98) (833 kb)**

The project provides a better understanding of the usage of and attitudes towards seat belts among the population at large. The first phase of the work programme investigated who does and who does not wear a seat belt, on what occasions and began to describe why. The second phase of the research programme involved a qualitative series of workshops with members of the public. The third phase of the project quantified the key findings of phases 1 and 2 with a questionnaire survey of 2,000 people.

Published:  
03 November 2008

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## **Analysis of the On the Spot (OTS) Road Accident Database (No.80) (1 Mb)**

This document details the technical strategy and findings of the analysis of OTS data undertaken, and provides recommendations on how these findings can be used to inform the formation of road safety policy.

Published:  
04 February 2008

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## **The UK On The Spot accident data collection study - Phase II report (No.73) (3 Mb)**

The aim of this study is to provide a uniquely valuable information resource concerning real-world road accidents. The study provides the data to enable the development of evidence-led innovative policy and countermeasures to reduce road traffic casualties

Published:  
04 February 2008

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## **Fatal injuries to car occupants: analysis of health and population data (No.77) (153 kb)**

The aims of the study are to investigate the extent to which trends can be explained in terms of changes in the injuries that lead to fatalities and the health services' response to them, and the current distribution of fatalities among socio-economic classes.

Published:

26 February 2007

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## **Trends in fatal car-occupant accidents (No.76) (265 kb)**

The aim of this study was to gain a better understanding of the trends and circumstances of fatal accidents by reviewing existing data on road traffic fatalities and by identifying potential countermeasures.

Published:

26 February 2007

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## **Fatal vehicle-occupant collisions: an in-depth study (No.75) (441 kb)**

The aim of this research project is to provide an understanding of trends in fatal casualties and the circumstances of fatal accidents.

Published:

26 February 2007

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## **Company vehicle incident reporting and recording (CoVIR) (No.31)**

This project is about the reporting, investigation and recording of accidents involving company vehicles, which are a major cost area in terms of both human life and money.

Published:

13 June 2003

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## **Review of the contributory factors system (No. 43) (212 kb)**

This report analyses how a national trial of a form designed to collect information on contributory factors to road accidents worked and recommends that such a form be included in the STATS19 road accident data collection suite.

Published:

30 March 2004

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## **In-depth study of motorcycle accidents (No 54) (421 kb)**

The results of an in-depth accident causation study of 1790 road accidents involving motorcycles. The analysis was undertaken using police files from Midland police forces covering the years of 1997-2002.

Published:

22 February 2005

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## **An in-depth study of work-related road traffic accidents (No 58) (332 kb)**

Road traffic accidents whilst at work are the single largest cause of occupational fatality in the United Kingdom.

Published:

22 August 2005

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## **On The Spot (OTS) accident data collection study (No 59) (981 kb)**

Development and implementation of the UK on the spot accident collection study - phase 1.

Published:

15 November 2005

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## **Contributory factors to road accidents (169 kb)**

Analyses data on factors for road accidents collected between 1999 and 2002. Examines how results might be used in injury accidents and presents examples of how the data can be used with other information on road accidents.

Published:  
30 September 2004

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## **Excessive speed as a contributory factor to personal injury road accidents (135 kb)**

This article gives the results of detailed analyses of the excessive speed contributory factor from data collected under a trial specification from 1999 and 2002.

Published:  
30 September 2004

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## **Under-reporting of road casualties: Phase 1 (No 69) (327 kb)**

Road Safety Research Report No.69.

Published:  
23 June 2006

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## **Road accidents casualties: comparison - STATS19 and Hospital Episode Statistics (1 Mb)**

Road accidents casualties: a comparison of STATS19 data with Hospital Episode Statistics. (Related Document to: Under-reporting of road casualties: Phase 1).

Published:  
23 June 2006

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**For related documents, pages and internet links, see the column on the right.**