

# Assessing the Casualty Reduction Performance of Local Highway Authorities

*Although this report was commissioned by the Department for Transport, the findings and recommendations are those of the authors and do not necessarily represent the views of the DfT*

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Published by the Department for Transport.

Printed in Great Britain on material containing 75% post-consumer waste and 25% ECF pulp (cover) and 100% post-consumer waste (text).

September 2004  
ISSN 1468-9138

Product code 045RRLG02120/53.

**Road Safety Research Report No. 53**

Assessing the Casualty  
Reduction Performance of Local  
Highway Authorities

Capita Symonds

September 2004

# CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>5</b>
<b>1 INTRODUCTION</b>	<b>6</b>
<b>Background to the project</b>	6
<b>The objectives</b>	7
<b>The report</b>	7
<b>2 WHO WAS INVOLVED</b>	<b>8</b>
<b>Councils</b>	8
<b>Approach</b>	8
<b>Summary</b>	9
<b>Structure</b>	10
<b>Other organisations</b>	10
<b>Arrangements in London</b>	10
<b>Arrangements outside London</b>	11
<b>Police</b>	11
<b>Highways Agency</b>	11
<b>Assessment team</b>	12
<b>3 GATHERING THE INFORMATION</b>	<b>13</b>
<b>Methodology</b>	13
<b>Documents</b>	14
<b>Questionnaires</b>	14
<b>Visits</b>	14
<b>Follow up</b>	15
<b>Relationship with the police</b>	15
<b>Identification of casualty reduction factors</b>	15

<b>Other issues raised</b>	16
<b>Road safety groups</b>	16
<b>Positive attitudes</b>	16
<b>Skills shortage</b>	17
<b>Successful practice, unsuccessful practice and innovative solutions</b>	18
<b>4 ANALYSIS OF THE INFORMATION</b>	<b>20</b>
<b>Casualty reduction performance</b>	20
<b>Casualty reduction ranking</b>	20
<b>5 THEMES AND FINDINGS</b>	<b>23</b>
<b>Position of casualty reduction in a council’s strategy</b>	23
<b>Translation of strategy into schemes and campaigns</b>	24
<b>Added value and casualty reduction</b>	26
<b>Resourcing, empowerment, people and relationships</b>	28
<b>Management and the use of collision data</b>	31
<b>Monitoring and the evaluation of casualty reduction schemes and campaigns</b>	33
<b>6 CONCLUSIONS AND RECOMMENDATIONS</b>	<b>35</b>
<b>Conclusions</b>	35
<b>Recommendations</b>	35
<b>APPENDIX A</b>	<b>37</b>
<b>Initial letter from the Department for Transport</b>	38
<b>Questionnaires</b>	39
<b>Letter to Police Forces</b>	53
<b>APPENDIX B Performance rankings</b>	<b>54</b>
<b>APPENDIX C Assessment frameworks</b>	<b>56</b>
<b>Assessment framework – by category</b>	57
<b>Assessment framework – by theme</b>	58
<b>APPENDIX D Glossary</b>	<b>59</b>

## EXECUTIVE SUMMARY

This report relates to a study of the organisation, resources and techniques employed by a cross-sectional sample of English local highway authorities (LHAs) in their attempt to meet or better the Government's 2010 targets for casualty reduction. The study considered a range of performers (in terms of their success in reducing casualties up to the end of 2002) from each of the four different classes of LHA (county councils, unitary authorities, metropolitan district councils and London boroughs).

The main objectives of the study were to identify the difference of approach between the good performers and the others, and to issue a guide so that all LHAs could benefit from the study's findings.

The main findings of the study are as follows:

- ❑ In general, those LHAs whose strategic aims make clear reference to road safety are the better performers.
- ❑ The better performers have a culture of casualty reduction, the poorer ones do not.
- ❑ The better performing LHAs coordinate all work on the highway network, in particular schemes relating to safety and maintenance. The officers also actively seek external sponsorship to enhance low-cost initiatives usually associated with education, training and publicity (ETP).
- ❑ In the better performing LHAs, all road safety practitioners work closely together and deliver casualty reduction on an objective basis.
- ❑ The better performers use their collision databases in an appropriate way to make an objective judgement of where casualty reduction funding can be spent most effectively.
- ❑ The better performers carry out monitoring on an overall and project-by-project basis. Monitoring enables them to assess and evaluate past projects to give a beneficial input to new projects.

# 1 INTRODUCTION

## Background to the project

In March 2000 the Government published its Road Safety Strategy *Tomorrow's Roads – Safer for Everyone*. The Strategy established casualty reduction targets from a baseline figure of annual average casualties for the five-year period from 1994 to 1998. The targets, which are to be achieved by 2010, are as follows:

- ❑ Reduce all killed and seriously injured (KSI) casualties by 40%.
- ❑ Reduce child KSIs by 50%.
- ❑ Reduce the slight injury casualty rate per 100 million vehicle kilometres by 10%.

Local highway authorities (LHAs) are key partners in the delivery of the Road Safety Strategy. The vast majority of accidents occur on local roads and, consequently, the casualty reduction performance of LHAs is critical to achieving the targets.

The casualty targets cover all roads within an LHA area, including the motorway and trunk road network and for London boroughs those roads controlled by Transport for London (TfL). Casualties on roads provided and/or maintained using modern contractual arrangements, for instance Design, Build, Finance and Operate (DBFO) and Private Finance Initiative (PFI) contracts, are also attributed to the appropriate LHA.

While accepting the Government's national targets, the London boroughs also have to meet the Mayor of London's targets. These are to be achieved over the same period and concentrate on vulnerable road users. They have specific targets to reduce pedestrian, pedal cyclist and motorcyclist KSI casualties by 40%. In many ways the Mayor's targets are complementary to the Government's targets. This report will deal only with the Government targets.

This project was commissioned by the Department for Transport (DfT) and began after the targets had been in place for approximately three years in order to assess the initial performance of a sample of LHAs in England.

## The objectives

The principal objectives of the study as set out in the Research Project Specification are as follows:

- ❑ Identify the contextual, organisational, resource and technical factors, which lead to the exceptionally good, or poor, performance of an LHA in reducing casualties in its area.
- ❑ Identify good and bad practice — what is it that the best performing authorities do that the poor performers do not and vice versa.
- ❑ Recommend ways in which to disseminate best practice to all LHAs.

## The report

This report outlines the method used to assess how a sample of the 149 English LHAs deliver casualty reduction. It identifies good practice, highlights factors that are common to the better performers and suggests areas where all councils could improve their performance.

The Research Project Specification required that the consultant recommend the method of disseminating best practice. The following actions were recommended:

- ❑ A report is prepared for the DfT only where structures and practices of the individual participating LHAs are detailed to identify how such factors might influence casualty reduction.
- ❑ A variation of the DfT report is produced where coded names are substituted for the individual council names. This version will be made available to the participating authorities in order to enable a validity check to be made without overt identification of the other participants.
- ❑ A summary version of the report, *this report*, is prepared for distribution to the chief highway officers or equivalent of all LHAs. The evidence collected by the study is to be stated in general terms so that a council can readily assess its position against the best practice advice contained within this report.
- ❑ Evidence summaries are prepared showing the position of each participating LHA against the achievable standard indicated by this study. If instructed, the consultants will revisit the council to explain the rationale and to discuss the study's outcomes on an individual basis.

## 2 WHO WAS INVOLVED

### Councils

This study could not have been carried out without the assistance of 16 LHAs. The authorities were selected in order to include a range of performers in terms of success in reducing casualties up to the end of 2002. All the authorities approached agreed to help with the project but not all wanted to be identified in the final report, so all council names have been omitted. The names are not crucial to the report and its findings. Four LHAs of each type were involved, these are:

- county councils
- London borough councils
- metropolitan district councils (MDCs)
- unitary authorities.

All 16 councils originally identified readily agreed to take part, without the need to refer to a reserve list. The councils, councillors and officers consulted are thanked for their cooperation.

### *Approach*

A number of different approaches were evident within each of the four groups of LHAs. Some of them were identified as having an impact on casualty reduction and key aspects are set out in the summary below.

The MDCs are well established. Of those studied, all have the advantage of delivering casualty reduction in cooperation with adjacent MDCs through an area-wide Local Transport Plan (LTP). In all cases, the vestige of the defunct metropolitan county councils control and advise on collision database issues. The London boroughs also benefit from collaboration and cooperation with neighbouring boroughs in matters related to casualty reduction.

Owing to the larger geographic areas covered by the county councils, casualty reduction measures need to be widely distributed, and issues of local delivery and input to decision making are of high importance.

The unitary authorities are relatively new and in some cases they are only now stabilising their approach to casualty reduction. The limited number of staff can aid networking across small groups but in some cases this has resulted in low levels of experienced people.

## *Summary*

Very soon after the inception of the study it was apparent that structures within the authorities would have an impact on casualty reduction performance. A number of patterns emerged in terms of the committee structures adopted by authorities to deliver casualty reduction. Some operated area, local or neighbourhood committees; others had area panels or forums. Some effort was made to gauge the executive power of these groups.

The best performing county councils in terms of casualty reduction have forms of area committees supporting their local delivery units or area offices. Local service delivery is funded through centrally allocated budgets and areas submit bids for funding. A relatively poorly performing county council has no local committee structure in place and the casualty reduction service is provided centrally.

Two of the better performing MDCs have area panels or forums, which assist in the delivery of council services. However, one of the poorer performing MDCs has neighbourhood forums that inform area committees. In this case, geographic and organisational divisions have diluted the casualty reduction strategy and local committees have considerable autonomy. This, together with limited staff resources, has sometimes affected the delivery of appropriate schemes.

Area or neighbourhood committees are used in three of the London boroughs: one of these authorities is an above average performer, whereas the other two are below average. The actual level of services delivered by the committees varies. In some cases, the committees are wholly or very substantially responsible for the delivery of council services, while others are merely advisory. A number of other councils are considering or working towards the establishment of area committees.

Owing to the relatively small number of authorities in each group, care needs to be taken when considering the success or otherwise of area committee type structures. It should, however, be noted that the casualty reduction performance has been good in those authorities with some form of area or neighbourhood committees, panels or forums supporting local delivery of council services. This approach is most successful where local input to the decision-making process is tempered by objective data and significant strategic control from the centre.

Another element of council organisation involved the links and working relationships between all those involved in the delivery of casualty reduction. It was easier for the smaller authorities to establish these relationships with personal contact between councillors, road safety engineers (RSEs) and road safety officers (RSOs). Superficially, none of the larger authorities exhibited this close relationship between all of the parties involved in road safety. The better county councils accommodated their more widespread operations by established appropriate links to control planning and delivery of casualty reduction.

There is evidence that collaboration and cooperation with adjacent authorities has produced positive results in several cases, allowing a strategic approach to area-wide engineering. Some of the unitary authorities collaborate with adjacent councils and have a joint collision database. The MDCs and the London boroughs also have joint databases in place. There are also more formal groupings of these councils in other matters relating to casualty reduction.

### *Structure*

Owing to their independent nature, all councils tend to deliver services to suit their own demands and requirements. Some of the main features relating to the 16 participating LHAs have been summarised above. In most cases, road safety (both engineering and ETP) tends to be located within departments handling highway, development or environmental matters, although the names of these departments can vary greatly. In one council, however, recent changes have resulted in the ETP team being relocated into a different department and, consequently, separated from their road safety engineering colleagues. This was the only authority where this split had been identified by staff as potentially damaging to casualty reduction.

In comparison with the other participating LHAs, one authority has a particularly complex structure combining central and local delivery. The complexity of the structure, with several contractors, means that a close working relationship has to be maintained between all parties in order to achieve satisfactory performance.

### **Other organisations**

During the course of the study, the consultants had discussions with a number of organisations over and above the participating councils. These discussions have generally been used to clarify issues raised during meetings with the councils and to gain a general overview of the arrangements that apply in London.

The organisations approached were:

- TfL
- Some district councils and partnerships
- 11 police forces local to the LHAs who assisted with the study.

### *Arrangements in London*

In London, the arrangements for the delivery of highway services, including casualty reduction, are different to those that apply elsewhere in England. The purpose of the discussions with TfL was to establish their role and influence on road safety in the capital.

TfL is wholly responsible for the main road network throughout London and undertakes a number of other functions, including maintenance of the casualty database, provision of casualty data to the London boroughs, maintenance and operation of all traffic signals and the Safety Camera Partnership. It also has an ETP team to work on London-wide initiatives, in partnership with the boroughs.

TfL is also the funding provider for highway matters, with the boroughs bidding for funds to support initiatives on an annual basis. For this purpose, the boroughs have to submit annual Interim Local Implementation Plans and Borough Spending Plans, and more recently have also been required to provide annual Road Safety Plans. Over and above the national casualty reduction targets, the Mayor of London has introduced targets aimed at addressing some specific casualty trends within the capital. These targets, which are based on the average 1994–98 totals and are to be achieved by 2010 in common with the national targets, are:

- a 40% reduction in pedestrian KSI casualties
- a 40% reduction in pedal cyclist KSI casualties
- a 40% reduction in powered two-wheeled user KSI casualties.

The London boroughs have taken on board these additional targets and are working with TfL to ensure that they are achieved.

While the Mayor's targets are acknowledged, the boroughs' performances against these targets have not been considered within this project.

### *Arrangements outside London*

The information gained from the visits to the district councils and other local delivery units was specific to individual county councils. They provided an insight into the delivery of casualty reduction and have been included as part of the evidence in formulating the themes and findings.

### *Police*

The police have a key role to play in the delivery of the casualty reduction targets and road safety generally. Consequently, one of the questions asked of the participating councils was about their relationship with their local police force, and the enquiries made with each of the Forces was intended to establish their view on this relationship.

### *Highways Agency*

The Government has set the Highways Agency (HA) two casualty reduction targets. The target relating to slight casualties is identical to the target set for LHAs.

However, as the motorway and trunk road network is built and maintained to a higher standard and it already has a relatively low collision record, the KSI casualty reduction target for 2010 is 33% based on the five-year average for 1994 to 1998.

The HA was not contacted directly, but discussions did take place with a number of councils regarding the impact of trunk road casualties on the overall figures for the authority. Generally, the feeling was that it is important to maintain a dialogue with the HA (and their agents where appropriate) in order to ensure that casualty reduction targets are addressed in terms of the trunk road network as well as on local roads.

## **Assessment team**

The project assessment team was drawn from Capita Symonds staff based in Carlisle, Gwent and Blackburn.

The Project Manager was Andy Brown BEng(Hons), CEng, MICE, MIHT, who is an Associate at Capita Symonds in Carlisle.

The other members of the assessment team were:

- Alan Rookes IEng, AMICE, MIHT, FIHIE (Associate)
- Alan Graham BSc, CEng, MICE (Principal Consultant)
- Penny Thorpe DipHE, BEd, MIHT, MIRSO (Principal Road Safety Officer)
- Claire Waterhouse DipASM, MIRSO (Road Safety Manager)
- Kevin Nicholson IEng, MIHT (Senior Consultant).

The assessment team was supported by a number of other members of Capita staff.

The assessment team provided a wide range of skills, along with extensive experience and knowledge across the road safety sphere. In addition, some members of the team had Best Value Inspection or Quality Audit experience, which was of benefit during the study process. All are current road safety practitioners.

### 3 GATHERING THE INFORMATION

#### Methodology

The methodology used during this study can be summarised under the following broad headings:

- Selection of appropriate LHAs for inclusion in the study.
- Desk-based investigation to build up the picture of activity within each authority and to assess the background of their approach to casualty reduction.
- Visits to each of the participating councils for detailed investigation using a standardised approach.
- Supplementary visits and discussions with participating councils as necessary.
- A review of the councils' policy and strategy documents, either provided during the visits or available on their websites.
- Enquiries with a number of groups who work with participating councils.
- Identification of the factors influencing good and poor performance.
- Preparation of reports and dissemination of good practice advice.

The DfT produced the original list of councils for inclusion in the study together with a reserve list. Inclusion on this provisional list was based on a number of factors, including the following:

- Performance against the national casualty reduction targets (as indicated by the 2001 casualty statistics), with an equal number of good and poor performers being selected.
- Selection of four authorities from each of the four main council types (unitary authorities, MDCs, county councils and London boroughs).
- In some cases, matching or not dissimilar authorities.
- Ensuring a reasonable geographical spread across England.

The consultants reviewed this list and suggested a number of changes, primarily to avoid conflicts of interest.

Each nominated authority was approached directly by the DfT to establish their willingness to take part in the project. (A copy of the letter sent to each of the councils is included in Appendix A.)

### *Documents*

An overall picture was built up of each authority by researching their official documents (Local Transport Plans, Annual Progress Reports, etc.) and their internal organisational charts and budgets.

### *Questionnaires*

The assessment team devised three questionnaires, one each for the RSO, the engineer and the elected member. The engineering questionnaire also included a number of general questions. Ideally, these questionnaires should have been independently tested prior to use and, indeed, unsuccessful attempts were made to trial these documents with authorities not included in the study. After the first visit, some additional questions were included to seek the councils' opinions rather than facts. These questionnaires were used during all other visits (copies of the final versions of the questionnaires are included in Appendix A).

The questionnaires were issued prior to the visits to help the councils understand the range of issues to be covered. They were also used to elicit comment during the visit. These questionnaires were subsequently completed by the visiting assessment team and were supplemented, as necessary, with information not included within the questions by additional notes. In the majority of cases, copies of the completed questionnaires were sent to the council for their information and to ensure that the information contained therein was correct.

### *Visits*

Visits to the participating councils were arranged to suit both parties and were spread over the period from May to September 2003. During these visits, the consultants met councillors and council officers from across the road safety service in each authority. It soon became apparent that each visit would take one day to cover the full range of road safety issues. The greater complexity of casualty reduction delivery in the larger authorities sometimes stretched this limit.

Two or three members of the assessment team visited each authority. In order to ensure that a full range of road safety functions were covered, one member of the team was always a road safety ETP specialist and another member was always a road safety engineer.

There were two main visiting teams, but the people involved varied. To ensure a consistency of approach, the two 'team leaders' were jointly involved in five of the visits. Most of these were early in the study.

### *Follow up*

Subsequent to the council visits, the visiting teams made enquiries, as necessary, with the participating authorities to clarify issues and to resolve points of interest. These follow-up enquiries were made by telephone, electronically or by a supplementary visit, as appropriate.

During the council visits a number of policy and strategy documents were provided to the consultants. These documents were supplemented by a search of the authorities' websites to gather more information. This element of the study was aimed primarily at establishing where road safety fits into the authorities' structure and organisation.

### *Relationship with the police*

One of the questions posed to the councils was about their working relationship with the local police force. In order to obtain a different view, the police forces covering each of the council areas were approached, initially by letter. (A copy of the letter sent to the police forces is included in Appendix A.) The responses did not always coincide with the view given by the LHAs. Two police forces were visited and, while relationships with the appropriate councils were discussed, it also gave the consultants a general insight into the enforcement side of casualty reduction.

## **Identification of casualty reduction factors**

Many issues were highlighted during the course of the study. The primary objective of this project, however, was to identify the main factors which lead to either a good or poor performance of an LHA in reducing casualties in its area, and it was these factors which were the focus of attention. For instance, it was apparent early on in the study that the better performers had an unambiguous strategy for road safety. This and other factors were observed in a number of LHAs, and when the casualty statistics were examined for those authorities the majority were found to be better than average performers. Initially, it was not necessary to know how these common factors help to deliver the performance, just that they were common.

It was harder to identify common threads through the poorer performers, except that, in the main, they were not doing some of the things found in the better performers. The method used to assess this information will be discussed later.

## Other issues raised

Over and above the main factors highlighted by this study, there are a number of other issues worthy of mention. Details of these issues are set out in the following paragraphs.

### *Road safety groups*

In 12 of the participating councils there are either dedicated road safety groups incorporating both of the two main specialisms, or two separate teams working closely together in a co-located environment and linked directly through their management structure.

Although either a dedicated road safety group or joint working may not suit all authorities, as a general rule a combined structure ensures that both road safety specialisms have an appreciation of each other's areas of activity and can more readily work together on strategic and operational issues. Dedicated groups or joint working is consequently preferred.

### *Positive attitudes*

During the council visits, the enthusiasm for their work, their career and for road safety generally was readily apparent amongst a number of councillors and council officers. The attitude of these keen and enthusiastic members of staff appears to 'rub off' on the authority's performance and undoubtedly helps in the delivery of the casualty reduction message both within the authority and to the public.

Two RSOs from different LHAs were asked the question: 'Why are you so enthusiastic?' The answers were:

*'Because I like to work for real people and improve life overall by education.'*

And the excellent, immediate response:

*'Because I love my job.'* Followed very quickly by: *'Variety. I can be at a council meeting in the morning, on my knees in a nursery school at lunchtime and talking at a comprehensive school in the afternoon.'*

Use of the words 'like' and 'love' were notable in respect to the job. There was some evidence that this was infectious.

The examples quoted above indicated a real passion for the task in hand, but other ways of exhibiting enthusiasm were also observed. In the better larger councils, for example, there was definitely a formal approach, but they were aware that they were

doing a good job. Other, usually smaller councils were less formal, but were equally efficient and confident.

### *Skills shortage*

The generally acknowledged current national skills shortage in the transportation sector was perceived by virtually all of the participating authorities to be adversely affecting their casualty reduction performance. On more than one occasion it was stated that the volume of work was governed by staffing levels rather than by what needed to be done.

All authorities reported problems in recruiting experienced road safety engineers, but there is less of a recruitment problem on the ETP side. This perception is often at odds with staffing levels recommended by the Institution of Highways and Transportation (IHT) and the Local Authority Road Safety Officers' Association (LARSOA).

Comparisons of staffing levels with those suggested in guidance produced by LARSOA and IHT indicate that the participating LHAs tend to be under-staffed in respect of RSOs, but have more RSEs than recommended.

Conversely, dialogue with the participating authorities indicated a perception that there was a general shortage of RSEs. There could be a number of explanations for the difference between the actual numbers of RSEs employed by the councils and the authorities' perceptions, including:

- the councils' perceptions are based on a shortage of skilled, experienced RSEs, rather than the actual number of persons in the post. The LHAs have frequently been forced to fill vacancies with staff of less than desirable experience. As a result, although actual staff numbers appear to satisfy desired levels, the necessary skills base is not always available; and
- the IHT guidance was published in 1990 and may no longer be appropriate. It is understood that the guidance is currently being revised, and it is suggested that the review should take account of the information within this report.

The overall impression gained from new or reorganised authorities is that in order to have a successful system which translates road safety policy into practice, a crucial mix of factors is required, such as skills, capacity, funding, awareness of needs, and individuals who can take innovative and constructive approaches to road safety. The study revealed that a 'critical mass' of combined factors is harder to achieve in the smaller, newer LHAs, but it has been achieved in the better performing authorities.

The main trends identified from this information are as follows:

- ❑ The majority of the participating LHAs (both the better performing authorities and those not performing as well) have RSO levels below that recommended by LARSOA.
- ❑ Of those 11 authorities with low RSO levels, five are above average and six are below average performers.
- ❑ Of the five authorities with high RSO levels, three are above average and two are below average performers.
- ❑ There is no clear difference in the levels of RSO staffing provision between those better performing authorities and those who are not performing as well.
- ❑ The majority of the participating LHAs have RSE levels greater than that recommended by the IHT and no authorities have levels below that recommended.

## Successful practice, unsuccessful practice and innovative solutions

During the visits to the participating LHAs, the councils were asked to provide examples of successful and less successful casualty reduction practice from experience. They were similarly asked for examples of innovative solutions to casualty reduction problems.

The great majority of comments received were related to day-to-day issues of casualty reduction, rather than the contextual, organisational, resource and technical factors covered by this project. Most of those who commented were clearly focussed on the day-to-day delivery of casualty reduction as opposed to overall organisational issues.

The comments received covered ETP and engineering actions, along with such matters as fact sheets providing information to the public on casualty reduction and related traffic matters. These comments can be broadly split into the following seven activities:

- casualty reduction practice
- casualty reduction treatment/action
- casualty reduction information
- policy/strategy
- monitoring and evaluation
- public consultation
- other matters.

An attempt was made to group the comments received under the categories and themes developed from the other evidence collated in this project. In most cases, this proved to be impractical due to the nature of the comments received. Nevertheless, some of these comments were used to refine the category descriptions identified as common threads through the better performing LHAs.

The limited number of references covered by the activity heading 'Monitoring and evaluation' reflects the low level of involvement in these vital areas found throughout this project and detailed in greater depth in Chapter 5 'Themes and findings'.

Public consultation is seen generally as an essential element of all aspects of highway provision at this time. There is, however, only limited reference to consultation in the comments made by the participating LHAs and most of these refer to good practice advice.

While no council expressed reservations in respect of public consultation in their listed successful and unsuccessful practice points, several raised concerns during the assessment teams' visits. One of the unitary authorities referred to the adverse effects of consultation on implementing schemes within the time frame of a single year; another authority made reference to the amount of time and money involved in consultation exercises. One of the larger authorities raised concerns about the delays and increased costs associated with consultation, and also wondered if there was a lower cut-off point when consultation on small schemes becomes unnecessary or inappropriate.

## 4 ANALYSIS OF THE INFORMATION

### Casualty reduction performance

In order to assess the casualty reduction performance of the LHAs, a comparison was made between the casualty numbers needed for an authority to achieve the pro-rata national targets and achieved casualty levels. The casualty figures for the three years 2000–02 inclusive were chosen as these can be taken to reasonably represent performance between the announcement of the Government targets in March 2000 and the latest figures available (December 2002) for each LHA.

For each category of casualty (child KSI, total KSI and slight) a simple difference between the pro-rata targets and actual casualty figures was calculated and expressed as a net percentage difference. A positive value (where numbers of actual casualties are less than the target figures) indicates an overall good performance; a negative value (where numbers of actual casualties exceed the target figures) indicates an overall poor performance. It is acknowledged that this technique represents the sum of the performance since 2000 and it will not fully take account of recent improvements, but the study is concerned with past performance. The statistics from all 16 of the participating LHAs were analysed in this way, together with the statistics for the whole of England. For this report, only the England result is shown to demonstrate the technique. Appendix B illustrates the technique.

This method of analysis goes some way towards ensuring that the sizes of authorities, and thus their casualty statistics, can be compared on an even footing. Given the demographic differences in the areas under study, casualty numbers vary significantly. In order to compensate for this and to provide a fair comparison between authorities, the calculated casualty differences were condensed, or ‘normalised’, to a common casualty rate. That said, it is accepted that some bias must still occur, and that the low overall casualty figures in some of the LHAs included in the study will give a less robust statistical base than those with higher totals. Some measure of confidence in the technique was gained from the fact that the national figure, England, was placed at the centre of the distribution.

### Casualty reduction ranking

One of the main objectives of this study was to identify how good performers differed from the rest. It became apparent as the study progressed that, although the consultants observed many different ways of achieving casualty reduction, certain similarities were evident. It was considered that a categorisation of these similarities and a judgement of the intensity of their application might give an indication of the effectiveness of the authority’s delivery of casualty reduction.

Initially nine categories were identified to form the basis of the assessment. Each of them was easily identified from the questionnaires. The nine categories were as follows:

1. Is the position of road safety clearly seen in the council's overall strategy?
2. Does the organisation actively translate strategic aims into schemes or campaigns?
3. Do the road safety engineering and ETP staff work together?
4. How good are the relationships with external groups, e.g. police, schools, the public and other councils?
5. Have the staff received specialist training?
6. Are additional funds sought/obtained to support road safety or casualty reduction services?
7. Do road safety staff bring added value to their schemes and campaigns?
8. Does the entire road safety staff make use of the casualty statistics?
9. What level of monitoring and evaluation is carried out?

Each member of the study team assessed how well each of the participating LHAs applied the nine items on a rising scale of 1 to 10. The questionnaires and other material from the visits assisted here, but other sources of information were also explored. These included the following:

- Appropriate officers in the local police forces.
- In the case of county councils, some district councils and/or area offices were consulted.
- In the case of London boroughs, TfL was consulted.
- Websites of all the participating LHAs.

It is important to state that the team members were not judging performance but the effectiveness of the application of these nine items. The performance of the LHAs was self-evident from the annual compilation of casualty statistics.

Naturally there could have been differences in assessment between the two main groups carrying out the work. In order to address these possible differences, calibration was based on the five LHAs where both lead team members were involved. As noted earlier, most of these LHAs were visited early in the study.

A consensus was also sought between the views of road safety engineers and road safety officers.

The consensus figure representing the level of application of each category by each of the LHAs was then entered onto an 'Assessment Framework by Categories'. This is illustrated in Appendix C. To retain anonymity, the council names and all save one score group have been removed. The Assessment Framework eased the process of identifying what the better performers were doing that the others were not.

It is highly probable that any LHA that received a high mark in most of the nine categories would be a good casualty reduction performer. However, towards the end of the data collection stage, it was apparent that not all of the nine categories were of equal importance. It was judged that a less specific and more limited set of parameters would be more appropriate to define a good performer.

Based on the accumulated information, the two lead team members combined and reduced the nine categories to six. These six themes are more equal in importance when defining good casualty reduction. They are as follows:

1. Position of casualty reduction in a council's strategy.
2. Translation of strategy into schemes and campaigns.
3. Added value and casualty reduction.
4. Resourcing, empowerment, people and relationships.
5. Management and the use of collision data.
6. Monitoring and the evaluation of casualty reduction schemes and campaigns.

It was the strength of the application of these themes against the performance of the LHAs that forms the basis of the recommendations. Appendix C 'Assessment Framework by Themes' indicates how the conversion from categories was carried out. Chapter 5 gives more details of the themes and an assessment of how the better performing LHAs incorporate them into their approach to casualty reduction.

## 5 THEMES AND FINDINGS

### Position of casualty reduction in a council's strategy

High-level acknowledgment of the role of casualty reduction is important. Where it exists, all council departments should consider how any of their activities would impact upon casualty reduction. If casualty reduction cannot be linked back to the council's Strategy, Vision or Corporate Plan it may not be fully supported.

Within the study, the better performing county councils can link road safety back to strategic documents. One of the council's corporate plans includes nine priorities, one of which is to 'Promote easier and safer travel . . .'. The same document then goes on to assign the responsibility for delivery to a named portfolio holder and divides the statement into a number of elements, including robust targets for casualty reduction.

In another example, appropriate reference is made in both the Community Strategy and Corporate Plan. Clear policy is stated at the highest level and is cascaded down through more specific documents. All of these documents are in the public arena and give specific casualty targets at set dates.

High-level acknowledgment of the importance of road safety facilitates its acceptance in other council departments. Schoolteachers can use Road Safety Resource Packs provided by RSOs as part of the Safer Routes to Schools initiative and education departments can make financial contributions to school crossing patrols.

The better performing county councils had the strongest strategic policies towards casualty reduction, but one of the smaller councils has a 'City Strategy' which features road safety as one of its '16 broad outlines'. This overarching status of road safety has enabled the city's Housing Department to fund traffic calming and safety schemes on housing estates.

Some measure of a council's strategic commitment to casualty reduction can be gauged from its website. Using search mechanisms within the website to associate 'strategy', 'vision' or 'corporate' with 'road safety' or 'casualty reduction' usually leads to a Road Safety Plan, the LTP or, for some London boroughs, the Interim Local Implementation Plan (ILIP). This does not constitute an acknowledgment of a commitment to casualty reduction at the highest level. These documents are specific to transport and the more limited elements of the council concerned with these matters. Nevertheless, those councils that state their intentions through this easily accessed mechanism are aware that they can just as easily be held to account if stated targets are not achieved.

A number of LHAs, including at least one from each of the four types, use their websites to outline their Road Safety Strategy. All of them are good performers. One of these councils applied to the DfT to include a 30% reduction in slight casualties by 2010 as part of their Local Public Service Agreement (LPSA). After discussion this was not included in the LPSA, but the council decided to put the enhanced target in place in any event.

There is evidence that some of the poorer performers are starting to include road safety in their headline documents. At least one of the poorer performing urban councils has included road safety as one of the Visions, Values and Priorities set out in its Corporate Plan. The plan applies from 2003 and could not have influenced the casualty statistics available to this study, but if the plan is translated correctly it should influence future performance.

A number of the larger authorities do not include road safety in headline documents. Strategic documentation implies that priorities lay elsewhere. Some of them do make commitments to tackle road casualties at a lower level, and this may be sufficient if the commitments are translated into schemes and campaigns.

The conclusion drawn from the study is that LHAs should include road safety as a high-level aim, preferably a strategic aim. This will establish a base from which improved casualty reduction can cascade through the authority.

*In general, those LHAs whose strategic documents made clear reference to road safety were the better performers.*

## Translation of strategy into schemes and campaigns

Quite clearly a road safety statement at a strategic level does not ensure success in casualty reduction. Indeed, as related in the previous chapter, some successful LHAs do not have road safety aims as part of their strategic documentation, but they do have published aims. The translation of the aims into road safety practice is perhaps the most important factor in achieving success.

Two of the smaller councils provided good examples of delivering intent with regard to casualty reduction. Their strategic aims were not so well stated as elsewhere, but the portfolio holders were enthusiastic. This ensured that casualty reduction remained high on the political agenda. During the consultant's visit it was clear that they have great respect for their officers. One of the councils welcomed opportunities to get involved with road safety campaigns; from the other authority councillors remained for the duration of the consultant's visit, 'just to learn'. Their enthusiasm cascades down to the practitioners who are undoubtedly keen. One of the officers is quoted early in this report. She '*loves her job*'. Both groups of officers

in turn acknowledged and appreciated the support given by their portfolio holders. This was made apparent as soon as the councillors had left the room. It was evident from the visit that this mutual aim of casualty reduction by members and officers is an important element of delivering results. However, there is a danger, particularly in these relatively small authorities, that current and immediate past performance is dependent on a few individuals. No LHA can afford to be complacent. The ethos of casualty reduction must be in place regardless of who carries out the delivery.

The two councils discussed above are not of the same authority type but they have many similarities, perhaps because they are both relatively small LHAs. The close association of the portfolio holder and the officers was evident, as was the proactive way the RSOs carried out their work. Both had contact with 100% of the councils' educational establishments. Small authorities could do worse than follow this approach to casualty reduction.

In larger LHAs it is more difficult to engender the close association of members and officers. Nevertheless, in the better performing councils there is a clear corporate culture, which links the stated strategic aims to those who deliver road safety across the organisation. There are information pathways, which ensure that the two separate road safety disciplines are aware of each other's work and the area offices share and exchange information with the central road safety teams.

One of the county councils has an interesting and effective way of delivering its strategic aims. The local committees each receive a standard annual sum to carry out works on the highway, including road safety works. However, a significant amount is held centrally and will only be released to successful bids from the areas. This ensures a degree of local autonomy while it facilitates a countywide approach to priority work.

All of the councils involved in the study stated quite clearly that casualty reduction was a priority, but they were not all equally effective in its delivery. It is, therefore, important that road safety professionals are able to inform elected members based on their understanding of the data and information available.

The study identified more than one poorer performing council where objective recommendations from officers, based on casualty statistics, were not the basis for the selection of schemes. One case in particular was very surprising. The study team was impressed by the knowledge and enthusiasm of the officers, two attributes normally associated with a successful casualty reduction authority. Further investigation identified a council where casualty reduction was not really a clear priority with councillors. In a second example the collective impression of the assessment team was a chief officer overwhelmed by day-to-day events with little time to access or reflect on the output from his casualty database.

One of the metropolitan councils caused the consultants some problems. It is undoubtedly a good performer, but it was difficult to see why. There is no mention of casualty reduction in its strategic documentation. Its aims stem from its element of the joint LTP. The council is keen on speed management, having installed interactive speed warning signs 10 years ago, and is proud of the link it established between speed limits and road hierarchy. There was little mention of casualty reduction, but it is being achieved. All other better performing LHAs talked in terms of casualty reduction.

The study identified many methods of picking up local opinion within an authority. As recounted earlier, these included local panels, local forums and local committees. The better performers used input from these local sources in a measured way, considering other information such as casualty statistics alongside the desires of the electorate and, thereby, allowing informed decision-making. The poorer performer reacted to the local input in isolation. A similarity in more than one of the poorer performers was financially autonomous local committees, who make the decision about the location of safety work. This removes the option of an authority-wide assessment of where money would be best spent. Often this was accompanied by officers who had failed to get their objective assessments across to the councillors, or, worse still, had no objective assessment to give.

A key conclusion drawn from the study is that there must be a clear understanding of the way casualty reduction is delivered within an authority. Its importance must be evident at all stages and a spirit of improvement must prevail.

This theme is the most important identified by the study. It assumes that an aim has been established, but all other themes will be introduced as necessities by an organisation with an ethos of improved casualty reduction.

*The better performers had a culture of casualty reduction: the poorer ones did not.*

## Added value and casualty reduction

Added value schemes are schemes where savings in casualties are being generated by work programmes that do not have safety as their primary purpose. Authorities should seek to take the opportunities to improve safety that are provided by all programmes of maintenance and improvement of their highway network. Projects such as bus priority or carriageway reconstruction can, if properly assessed at the planning and design stage, also produce casualty savings. It would be difficult for the road safety practitioners to ignore the advantages that added value would bring to casualty reduction.

Almost half of the LHAs claimed to have a system in place to check coincidence of maintenance and safety programmes, but only one quoted an example. This was where maintenance work funded an expensive element of a Safer Routes to School scheme.

In one of the county councils, a major review of the way casualty reduction is delivered was completed in early 2003. One of the recommendations resulting from the review was the importance of actively searching for possible links between the road maintenance and the Engineering Safety Scheme (ESS) construction programme. The practical approach to linking the programmes was still being developed at the time of the consultant's visit.

The consultants were made aware that TfL is encouraging the London boroughs to identify where structural maintenance work and ESS work coincide. Only one borough mentioned this voluntarily and it has yet to develop a method of putting it into practice. Irrespective of suggestions from TfL, the processes in another borough give RSEs the opportunity to include safety improvements in all maintenance schemes. While this does not specifically join ESS work with maintenance schemes, it is a sensible idea and will, in effect, allow a Stage 2 safety audit on all structural maintenance work.

Yet another London borough achieves some added value by insisting that highway design standards apply, even on unadopted roads. There is also a policy to obtain a road safety gain from planning applications.

Internal communication is important. More than one of the authorities would benefit from an improvement in communications. For instance, poor communication between different officers can adversely affect the coordination of any work on the highway network. In one authority, there were cases where road safety staff were not aware of what happened to their study recommendations in terms of implementation.

More imaginative ways of adding value include selling expertise and seeking sponsorship. All the examples encountered during the study involved ETP rather than engineering.

One of the two better performing county councils is fortunate in that it is the UK base for a number of international companies. It took advantage of this recently when it was successful in persuading one company to sponsor a road safety report. Another company provided facilities for a motorcycle training seminar. The other better performing county generates appreciable income from driver training. Without this funding, the ETP function would be much smaller, both in size and scope.

It is difficult for the smaller LHAs to match this level of funding, but examples of smaller scale sponsorship were identified by the study. One RSO obtained cycle

bells and lights from the local branch of a national cycle store to give to children completing their cycle training. Another authority obtained sponsorship from a locally based insurance company for a Walking Bus, and most LHAs reported good relationships with supermarkets and similar businesses who provide their car parks for events and presentations, in addition to often providing gifts and prizes.

Sponsorship is not always a good thing. One RSO related a tale of one council where external funding was matched by a reduction in ETP budget.

One of the unitary authorities employed a technique that is difficult to classify but is essentially 'added value'. If a resident approaches the council with a request for traffic management for their street or estate, they are issued with a 'design pack'. The pack contains appropriate plans and various engineering measures (with costs) that may comprise a traffic management scheme. The applicant is then responsible for obtaining a ground swell of approval and preliminary permissions for engineering measures at relatively accurate positions. If the council deem the scheme to be viable, residents are already aware of the impact of their proposals. There was no feedback on how effective the 'design pack' schemes were, but it is an effective way of involving the public in road safety.

The conclusion here is that added value has the same effect as an increase in the budget. It is important that all road safety personnel are aware of the total engineering programme so that links between different types of work are possible. It is evident that, with a little initiative, RSOs can enhance their budgets and engineers can tap public input and support into the design process.

*The better performing LHAs coordinate all work on the highway network, in particular safety and maintenance schemes. The officers also actively seek external sponsorship to enhance low-cost initiatives, usually associated with ETP.*

## **Resourcing, empowerment, people and relationships**

Ideally, this implies sufficient numbers of well-trained people with mutual respect for other road safety practitioners and enough information available to implement work on an objective basis. While all of the LHAs within the study aspire to this ideal, not surprisingly none has fully achieved this position.

Generally, there is a shortage of well-trained people. Very few LHAs expressed satisfaction with staffing levels. For many, the annual delivery of work was linked to the available staff and not to what needed to be done. This was usually due to a shortage of trained and experienced RSEs, although more than one authority was short of sufficient RSOs.

In the better performing LHAs it was found that RSEs worked closely with RSOs, the police and other groups. Cooperation gave the RSOs the opportunity to approach vulnerable groups with an explanation or instruction of how to use newly installed engineering schemes. The RSOs could advise on proposed engineering works and the engineers could assess the impact of road safety campaigns on their proposals.

In the smaller authorities it is easier to establish a relationship with the public. If this relationship is tempered with objectivity with regard to casualty reduction, it can be beneficial. The impression gained, during the visit to one of the smaller councils, was that there is strong public influence over the council's activities. This is not surprising, as the council have encouraged public participation. The authority was amongst the first to introduce serious traffic management in the late 1980s. With a great deal of public support, a process of stopping off street ends resulted in many residential cul-de-sacs. The consequent drop in traffic flows has made the streets safer to the extent that on-street cycle training is routine.

Good working relationships in the larger authorities are essential. Out of necessity the people involved in casualty reduction are widely distributed geographically. The majority of the county councils have countywide units dealing with engineering and ETP. Area-based staff undertake the delivery of ETP and road safety engineering activities. There are links to the district councils at area level and links with the police at all levels. These links are generally beneficial to road safety provision and ensure an integrated approach. It is important that sufficient direction is in place from the centre so that progress towards the 2010 targets is maintained.

The impression was gained during the visit to one of the larger LHAs that performance could improve very quickly if there was more communication. There were no obvious strong links between RSEs and ETP staff, and, as indicated earlier, no contact with those responsible for translating Accident Investigation and Prevention (AIP) studies into ESS. However, this authority was unique within this study, in that it creates the collision database from STATS19 forms and copies the result to the local police force. This is evidence of a good relationship, but the police view is not known, as they did not respond to the consultant's approach.

In general the police forces confirmed the almost universal claim by the LHAs to good mutual relationships. Indeed, one police force drew the consultant's attention to the much-improved 2002 performance of one of the LHAs that, on the basis of the 2001 statistics, was classed as poor. However, in three cases there was a significant difference between the initial view on the relationship, as expressed by the LHA and their local police force.

The police force covering one of the better performing county councils expressed some concern regarding the choice of engineering schemes and funding. The police contention was that the county council paid too much attention to 'what the public think they want' to the detriment of effectiveness in casualty reduction. In addition,

the police had reservations about the means of allocating funding to safety schemes and about the availability of reserve funding for emergency matters. It is difficult to reconcile the police view with the fact that the council is a good performer. The council has an onerous LPSA target and is likely to meet that target.

In another example, a police force covering more than one of the LHAs included in this report stated that, while relationships with all the authorities within the constabulary area are reasonable and regular meetings take place at which enforcement, education and engineering are discussed, there was a particular problem. It involved the coordination of campaigns for education and enforcement. The police relate that, after some years of trying, in vain, to get local coordination from the independently minded councils, they have now adopted the DfT calendar for enforcement campaigns. The RSO from one of the councils in the study accepted that this was the case but his council were now more amenable to cooperation.

The third case involved a dramatic increase in KSI casualties from a marginally poor performance to a very poor performance. Both the police and the LHA eventually explained this to the consultants as under-reporting of KSI figures prior to the big increase. The council acknowledges that this situation must change and, as related earlier, has recently included road safety as an item in its strategic documents.

Empowerment is also a feature of good casualty reduction performers. In one of the mid-sized councils, once the annual programme of sites to be treated received the approval of the portfolio holder, it was 'only' a technical matter to deliver the schemes. Similarly in a larger LHA, the philosophy was that if the work conforms to policy, simply get on with the job.

In the poorer performing authorities, the level of empowerment given to officers was limited. Some had problems persuading elected members that existing traffic management schemes should not be removed. While other authorities turned to the collision database only after their councillors had selected the schemes for the yearly programme.

The conclusion from this section is that there is a shortage of trained personnel, particularly RSEs. Good relationships with all parties involved with casualty reduction create an environment where the professional, data-led, judgement of officers can be heard and taken into account.

*In the better performing LHAs all road safety practitioners work closely together and deliver casualty reduction on an objective basis.*

## Management and the use of collision data

In order to reduce casualties, LHAs must first know where, when and how those casualties occur. All the LHAs included in the study have access to computer-based systems to store and retrieve collision and casualty data. As recounted earlier, more than half of the authorities share databases with adjacent councils. In addition, the London boroughs have the London Accident Analysis Unit (LAAU) to provide and validate their data, and the MDCs involved benefit in the same way from the central units established for the defunct metropolitan county councils. The same support personnel are available to carry out the more complex interrogations for output in tabular or map-based form.

The manner in which the collision databases are formed varies considerably. One of the county councils creates the database for the police and themselves from STATS19 forms. One data unit for a group of MDCs takes a validated electronic file from the police, makes further corrections and then passes the corrected file back to the police and all the local MDCs. Both of these processes ensure a consistency of reported information. Most of the other LHAs have access to electronic versions of the data that may or may not be subject to independent amendment. Finally, one of the smaller LHAs receives hard copy from the police database and has to re-key the information into their own system, costing time and introducing potential errors.

There were a number of minor issues concerning the accuracy of the data: the most frequently voiced concern being the location of the collisions from the STATS 19 data, but all of the LHAs had access to usable data.

Some authorities feel that they have little control over some parts of the road network contributing to their casualty statistics. Representatives of the counties made little comment on the HA operating within their geographic boundaries, but it was apparent that there were stronger feelings within the London boroughs with regard to TfL. Two of the boroughs pointed out that they had lost road safety staff to TfL and the initial year-by-year casualty statistics given to the consultants by another borough excluded TfL roads. All of the boroughs claimed that the majority of casualty hot spots lay on TfL roads. The visit to TfL indicated that they were aware of these problems. They too had to meet both the Government and the Mayor of London's targets, and they were gearing up to help the poorer performers. The imminent (mid-2003) introduction of a new, online collision database was part of this process.

Half of the LHAs now include a bias towards numbers of casualties rather than collisions when identifying potential study sites, probably following the lead given in the national targets. However, where KSI casualties are low and it is difficult to identify patterns, some LHAs have made a conscious decision to retain a collision-based priority system. Other LHAs will need to consider this in the light of their own circumstances. Officers at one of the London boroughs with low overall

casualties admitted that they go through a 'hot spot process' only to attract funding. Area work, traffic calming with controlled parking and extension of the cycle network are the current mainstays of their casualty reduction.

All of the LHAs, except the one referred to above, stated that they had some ranking system or an intervention level to highlight the most beneficial sites for further investigation. However, the assessment team had trouble identifying the exact nature of this for one of the councils. Not all the LHAs had an equivalent system for route studies. If mass action work, such as the installation of skid-resistant surfacing on the approach to all pedestrian crossings in an area, is undertaken, it is rarely on the basis of objective assessment. Traffic management considerations were universally the main factor in area or zone work.

The majority of the authorities claimed to be data led, although direct contact with the collision databases by non-road safety staff was something of a rarity. The London boroughs, the MDCs and some of the counties' area offices tend to rely on paper or electronic lists from their respective centralised suppliers. There was a more 'hands on' approach in the use of collision databases from unitary authorities and the central units of county councils. There were two exceptions to this: at one of the county councils, the council's consultants provided the direct access to the database; at one of the smaller LHAs, the authority is recovering from lengthy problems with their database. Neither of these authorities is classed as a good performer.

Most of the better performers were perceived to be casualty or collision data led. In another good performer, speed was a recurring theme in the selection of sites. Even one of the poorer performers was data led, but the officers had not managed to transmit this to the elected members.

Some of the other authorities were more inclined to react to suggestions from a variety of sources without a proper check of the information held in their databases.

The use of collision data by RSOs varied. Most were aware of general trends within the authority, but only two, mid-range LHAs indicated specific use with regard to the Safer Routes to School initiative.

The straightforward conclusion from this section is that the core of any plan to reduce casualties is understanding the collision data system. This should identify particular concentrations of casualties, either by location or type, and this, in turn, will determine either where detailed studies should take place or what form ETP campaigns should take.

*The better performers use their collision databases in an appropriate way to make an objective judgement of where casualty reduction funding can be spent most effectively.*

## **Monitoring and the evaluation of casualty reduction schemes and campaigns**

Monitoring is important if progress against overall targets is to be gauged. Monitoring is essential if the performance of individual schemes is to be assessed. Without monitoring, unsuccessful, or even dangerous, schemes will go undetected. Evaluation can only take place if thorough monitoring is undertaken.

The better authorities do carry out monitoring, and, in some cases, the results are made easily available to the public. Two of the LHAs, one mid-range and the other small, produce excellent road safety plans that look forward and back. They both show overall progress towards the authority's targets as well as before and after comparisons of completed engineering schemes. Future schemes are also detailed with predicted, resultant casualty savings. The better of these plans, the best seen by the study, also includes an evaluation of the relative success of various engineering measures and goes into some detail of past and future ETP campaigns. Readers of these plans are left in no doubt as to what the authorities have done and what they intend to do with regard to casualty reduction.

Road safety reports from two other LHAs were also made available to the consultants. These were not as good as those referred to above. Neither contained much information about past performance and there was no information relating specifically to past campaigns or the performance of completed schemes. The major part of both of these reports concentrated on aspirations and future plans.

There is, of course, no requirement to publish the level of detail given above, but to be successful any LHA must be aware, on a scheme or campaign level, of how effective its previous work has been. The better performers have a strict three-year before and after monitoring regime in place for engineering schemes, and the best counties evaluate on a scheme and programme basis. Triggered by Best Value considerations, two councils, one a good performer the other not, completed major reviews of how they delivered casualty reduction in early 2003.

The best example of engineering monitoring was seen at one of the mid-sized authorities. Engineers monitor schemes every year for three years and then check on progress at six and nine years as well. There is no fund-raising reason to go beyond three years of monitoring, but schemes do not 'know' that they are three years old and there is no reason to suppose that they do not go on working. The engineers at this authority do not need to suppose. They know.

ETP campaigns are also monitored by this LHA. Feedback sheets and questionnaires are used to assess all training activities, along with records of dropouts and pass rates from cycle training. In addition, travel plan activities are monitored on an annual basis by monitoring changes in travel patterns and the authority's overall casualty performance is viewed to determine the overall effect of the road safety package. The evaluation of this feedback leads, where appropriate, to changes to campaigns, as demonstrated by the method of presenting their drugs and driving campaign, which was modified to address comments received.

Many authorities expressed concerns about monitoring ETP campaigns. It is a fact that assessing ETP work is less straightforward than engineering work. The two best performing county councils undertake evaluations of ETP programmes with forms, records and verbal feedback. However, another county council provided the best example of ETP monitoring. They employed consultants to assess the effectiveness of a campaign using a highly coloured bus. People were asked a range of questions to assess how well the message on the bus had been understood. These ranged from 'Did you notice the bus?' through 'Who sponsored the bus?' and 'What did the message say?' to 'Have you changed as a result of the campaign?' The RSO was able to draw useful conclusions from the monitoring exercise.

At least one of the councils has changed its engineering approach to casualty reduction as a direct result of monitoring. By using their collision database it was established that long Route Action Studies (RAS) did not give the predicted collision savings after implementation, so they are no longer considered. This may or may not be true of all RAS work, but staff at this council know that it is not appropriate to their area and, as a consequence, a higher level of funding is available for other engineering work. This highlights another merit of monitoring; it allows an authority to tailor its approach to what works in its area. It is unlikely that all techniques that are effective in a sparsely populated county would achieve similar results in a county near London, let alone in an MDC or a London borough. Monitoring allows an authority to determine what works for them.

In general, the poorer performers carry out only minimal monitoring. Often by rote and often for fund-raising reasons only. The opportunity to learn from experience is too easily lost with this approach.

The conclusion from this section is that monitoring is neither optional nor an additional chore to be carried out once schemes and campaigns are complete. It is essential. It will indicate what works and what does not.

*The better performers carry out monitoring on an overall and project-by-project basis. Monitoring enables them to assess and evaluate past projects to provide a beneficial input to new projects.*

## 6 CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

LHAs have a key role to play if the Government's casualty reduction targets are to be achieved. Many of the road traffic accident casualties killed or injured in England are involved in collisions on roads managed by LHAs and consequently these authorities are important contributors to achieving the targets.

All LHAs are independent of each other and, consequently, they generally tend to undertake their duties and functions differently. This project has reviewed the casualty reduction practices of 16 LHAs in England and has sought to identify the factors that have led to good, or poorer, performance.

During the course of the project, many factors have been identified. These factors have been explored by various means to establish the more significant points, which are commended to LHAs as best practice guidance. The overall conclusions identified by this project are as follows:

- ❑ In general, those LHAs whose strategic aims make clear reference to road safety are the better performers.
- ❑ The better performers have a culture of casualty reduction: the poorer ones do not.
- ❑ The better performing LHAs coordinate all work on the highway network, in particular schemes relating to safety and maintenance. The officers also actively seek external sponsorship to enhance low-cost initiatives usually associated with ETP.
- ❑ In the better performing LHAs all road safety practitioners work closely together and deliver casualty reduction on an objective basis.
- ❑ The better performers use their collision databases in an appropriate way to make an objective judgement of where casualty reduction funding can be spent most effectively.
- ❑ The better performers carry out monitoring on an overall and project-by-project basis. Monitoring enables them to assess and evaluate past projects to provide a beneficial input to new projects.

### Recommendations

There is evidence that all LHAs involved in the study, to a greater or lesser degree, can improve their casualty reduction performance. In this light, they could benefit

from guidance issued on the basis of the findings of this study. Such guidance should include those factors which are employed to produce better performances, extracted as best practice, principally from the better performers within this study. Reference should also be made to those practices that have not been so successful in reducing casualties in order that these may be avoided.

By way of feedback, each participating LHA should be given the opportunity to discuss the findings of the report on a one-to-one basis in the format of a follow-up meeting.

*Recommendation*

- Each of the participating authorities should be invited to discuss the findings of the report on a one-to-one basis.

In order to disseminate best practice, written guidance should be produced and distributed to all LHAs.

*Recommendation*

- A good practice guide on casualty reduction should be produced for issue to all LHAs. The guide should also be available on a more widespread basis, particularly to those organisations involved in road safety.

*Recommendation*

- A series of presentations should be arranged to pass on the findings of the study and to promote the lessons in good practice.

## **APPENDIX A**

**Initial Letter from the Department for Transport,  
Questionnaires and letter to police forces**

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21 March 2003

### **Assessing the Casualty Reduction Performance of Local Highway Authorities**

I am writing to tell you about work being undertaken by the Department on assessing the casualty reduction performance of Local Highway Authorities. By sharing good practice, we hope to raise the standard of performance across the Local Highway Authority community towards that of the best.

As you will be aware, the great majority of accidents occur on those local roads under the direct control of local highway authorities and we recognise the important contribution of local highway authorities in delivering the casualty reduction targets set in the Government's Road Safety Strategy. The Department has issued guidance, such as the "Road Safety Good Practice Guide" which was published in June 2001. However, there are many underlying factors that may affect local highway authorities achieving casualty reduction. We have therefore employed Capita Infrastructure Consultancy to explore the issues in more depth through interaction with sixteen local highway authorities, which have been selected to represent a broad range of performance and types of authority.

We would be pleased if your authority would be willing to join this study. Generic lessons learnt through Capita's involvement with the selected authorities will be disseminated to the local highway authority community. We will not, however, be publishing the names of individual authorities and the findings will not be used to inform the Government's performance assessment. I hope this will help encourage you to participate.

In the next week, Capita will telephone you and ask whether your authority would be interested in being involved in this valuable research. In the meantime, if you would like any further details about the study, please contact Louisa Daniels ([louisa.daniels@dft.gsi.gov.uk](mailto:louisa.daniels@dft.gsi.gov.uk)) or Ian Drummond ([ian.drummond@dft.gsi.gov.uk](mailto:ian.drummond@dft.gsi.gov.uk)).

**Sandy Bishop**

**Assessing the Casualty Reduction  
Performance of  
Local Highway Authorities**

**CAPITA**  
INFRASTRUCTURE

# Assessing the Casualty Reduction Performance of Local Highway Authorities

## 1 Road Safety Policy

### General Section

1.1 What are the Council's road safety policies?	
1.2 Where are these published?	
1.3 Is there a Council commitment to Casualty Reduction?	
1.4 How is this commitment reflected in your strategy and policies?	
1.5 Is there a mechanism to check progress on this commitment?	
1.6 How are members of staff made aware of this commitment?	

## 2 Casualty Reduction Strategy

In March 2000 the Government published its casualty reduction targets for 2010 in "Tomorrows' Roads – Safer for Everyone". Linked to a base line of the average of the casualties in the years from 1994 to 1998, they are:		
40% reduction in Killed or Seriously Injured (KSI) casualties.	50% reduction in KSI child casualties.	10% reduction in slight injury casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.
2.1 Are these your targets?		
2.2 Do you think you are on target?		

<b>2.3</b> What strategies have you put in place to meet these targets?	
<b>2.4</b> Do you have interim targets?	

### 3 Budgets

		2000/01	2001/02	2002/03	
				Amount	Ring Fenced?
<b>3.1</b> What was the overall Council Budget in these years?					
<b>3.2</b> What was the total Road Safety Budget - ETP, Engineering, etc.?					
Split by..	<b>3.3</b> Studies				
	<b>3.4</b> Engineering Safety Schemes (ESS)				
	<b>3.5</b> Monitoring				
	<b>3.6</b> Education, training & publicity (ETP)				
	<b>3.7</b> Safer ways to schools				
	<b>3.8</b> Other				

<b>3.9</b> Are safer routes to school led by safety or modal shift?	
<b>3.10</b> How would you spend additional funding?	

#### 4 Staffing

4.1 What is the total full time equivalent office staff working for the authority?	
4.2 How many of these could be classed as full time equivalent road safety engineering staff?	
4.3 How many of these could be classed as full time equivalent road safety officers or others involved in ETP?	
4.4 How many other full time equivalent road safety staff?	
4.5 Does this level of staffing deliver the safety plan?	

4.6 Is there a dedicated road safety group?		4.7 If not, what links are there between engineering and ETP?	
4.8 Are there any staff recruitment problems?			
4.9 What links are there between any of your road safety staff and the Police?			

#### 5 Background

5.1 What is the total length of road within the Authority?		5.2 What is the length of road under the direct control of the Authority?	
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5.3 What is the total population of the Authority?	
5.4 What is the scale of social deprivation in the Authority?	

## Engineering

### 6 Accident Data

6.1 Where is the main access point to the database?		6.2 Are both Engineering and Road Safety Staff familiar with the data?	
6.3 Who supplies your data?			
6.4 What is your assessment of the accuracy of the source data?			
6.5 What are the most frequent and/or important errors?			
6.6 How do you validate your data?			
6.7 How is your data stored?		6.8 What software is used?	
6.9 How do you interrogate your data?			
6.10 How do you present your data for road safety funding?			
6.11 Do you employ specific resources to handle accident data?			
6.12 Do you use a Geographical Information System (GIS) to interpret and/or present accident data?			
6.13 How often do you interrogate this data?			

**7 Accident/Casualty Records for all roads in your Council area**

	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>7.1</b> Total number of PI accidents									
<b>7.2</b> Total number of KSI casualties									
<b>7.3</b> Total number of child (under 16) KSI casualties									
<b>7.4</b> Total number of slight casualties									

<b>7.5</b> What do you think has influenced any trends in the figures shown above?	
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**8 Road Safety Engineering Studies**

<b>8.1</b> How are the locations of road safety studies identified?		<b>8.2</b> Do Casualty Reduction targets influence safety study selection?	
<b>8.3</b> How are the studies ranked?			
<b>8.4</b> What safety engineering training do personnel involved in studies receive?			
<b>What are your intervention levels for ....</b>			
<b>8.5</b> Single site studies			
<b>8.6</b> Route studies			
<b>8.7</b> Mass action studies.			
<b>8.8</b> Area or Zone studies			

<b>8.9</b> Other road safety studies	
<b>8.10</b> How many of these “identified studies” have yet to be carried out?	
<b>8.11</b> What innovative solutions have you produced?	

<b>8.12</b> Apart from safety studies, are there any other sources of schemes primarily aimed at safety engineering?		<b>8.13</b> If so how are schemes identified and ranked?	
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### 9 Road Safety Engineering Schemes

How are they.....	<b>9.1</b> Identified?	
	<b>9.2</b> Ranked?	
	<b>9.3</b> Monitored?	
	<b>9.4</b> Evaluated?	

<b>9.5</b> Do all studies result in road safety engineering schemes?		<b>9.6</b> How many completed studies have yet to be converted into schemes?	
<b>9.7</b> Where safety related schemes are identified by other means, how many are outstanding?			
<b>9.8</b> What types of scheme do you find are particularly successful?			
<b>9.9</b> Do you record safety scheme data in a national, regional or local database?		<b>9.10</b> If you do, which system do you use?	
		<b>9.11</b> What factors would determine entry of a scheme to that database?	
<b>9.12</b> Are Safety Audits carried out?		<b>9.13</b> What type of schemes is subject to Safety Audit?	

### 10 Accident Prevention Measures

<b>10.1</b> Does the Council operate any other accident prevention techniques?			
<b>10.2</b> What contribution do other Council Departments make to improve road safety?		<b>10.3</b> How do they contribute?	
<b>10.4</b> Have you any examples of partnership working with other Departments or outside bodies?			

### 11 Reporting Progress on Road Safety

<b>11.1</b> Has any of the Council’s road safety work been reported in specialist publications?		
<b>11.2</b> How do you publicise your Road Safety Targets?		
<b>11.3</b> Do you produce an annual report on road safety?		
If you do, what topics are covered?	<b>11.4</b> Engineering?	
	<b>11.5</b> ETP?	
	<b>11.6</b> A summary of the previous year?	
	<b>11.7</b> Projections of work for future years?	

### 12 Examples – Good and Bad

<b>12.1</b> We would welcome examples of good and bad Road Safety practice from your experience	
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# ASSESSING THE CASUALTY REDUCTION PERFORMANCE OF LOCAL HIGHWAY AUTHORITIES

## ROAD SAFETY EDUCATION, TRAINING AND PUBLICITY (Version4)

### ETP 1. SCHOOLS

1.1 How many of the following educational establishments are in your area (including independents)?	
Primary schools	
Middle schools	
Secondary schools	

Tertiary collages	
Uni/higher education	
Other (please specify)	

1.2 Which (if any) do you NOT have contact with	and why?

1.3 What is the approximate number in each school cohort (year) in the authority?	
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1.4 Is there much cross-border transfer of pupils between authorities? (% if possible)	
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**ETP 2. ACTIVITIES**

2.1 Which of these schemes are you <b>actively</b> involved with (in last 24 months)			
Child cycle training		% of cohort trained per year	
Regular school presentations			
Children's Traffic Club		% annual take up	
Practical pedestrian Training		% of cohort trained per year	
Walk to School Week		Number of schools	
School Travel Plan encouragement		Number of schools	
Loan of resources			
Junior RSO		Number of schools	
Crucial Crew/Junior Citizen		% of cohort per year	
Theatre in Education		Number of performances per year	
Ignition (BSM)		Number of schools	
Skill for Life (DSA)		number of schools	
Other Pre Driver initiatives			
Teacher training (INSET)			
Adult/teenage cycle training		number trained per year	
CBT			
BikeSafe			
ScooterSafe			
Pass Plus			
Advanced Driving			
Driver Improvement Scheme/Speed Awareness			
Child car seat loans			
Cheap cycle helmets			
Older drivers e.g. SAGE/Car Confidence			
Other older road user scheme			
Radio advertising			
Paid adverts in local media			
Bus backs/interiors adverts			
Healthy Schools Initiative		Number of schools	
Agenda 21			

<p>2.2 What other proactive schemes or campaigns, not mentioned above, have you been involved with in the last 24 months? (brief synopsis please)</p> <p>Please indicate on the lists above, which sections or departments of the authority, or outside organisations, were partners in the activity/ies.</p>	
<p>2.3 Are there any other statutory or voluntary groups that you have worked in partnership with, that are not mentioned above?</p>	

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2.4 How do you evaluate the effectiveness of your activities?

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2.5 What further activities/schemes/campaigns are you planning or would like to implement?

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2.6 What, if anything, is holding you back?

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2.7 If a member of the public contacted you for information on a road safety topic, for example, their nearest CBT provider or information on child car seats, how do you respond?

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2.8 Is information about the ETP service available on the Internet?

Dedicated site

Page/s on authority site

Other


2.9 Are any ETP staff involved with safety audits?

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### ETP 3. MANAGEMENT

3.1 Of which of these organisations are you/the authority a member? Any others?			
Travelwise		BRAKE	
RoSPA		LARSOA (ALBRSO)	
ANDISP		IRSO	
		IAM	

3.2 How do you make elected members aware of your activities?

3.3 Before embarking on a new scheme or campaign, at what level is the final go-ahead given?

3.4 Does the authority have a road safety policy for it's employees? (possibly in H&S policy) Brief details please.

Please indicate the numbers of ETP staff with the following professional qualifications	
Degree	
Phase 3 (MANCAT)	
Phase 2 (BITER/RoSPA etc.)	
Phase 1 (in-house)	
Road Safety NVQ	
Other (please specify)	

### ETP 4. SCHOOL CROSSING PATROLS

4.1 Do you administer the School Crossing Patrol Service? (if not please ignore the following questions)	
4.2 How many patrol sites do you have?	

4.3 How many vacancies?	
4.4 How many full-time equivalent members of staff manage the SCP service?	
4.5 Have you adopted the LARSOA guidelines (2002 draft version)?	

**ETP 5. GOOD PRACTICE**

5.1 We would welcome examples of good and bad Road Safety practice from your experience
1.
2.
3.
4.

## **DfT Assessing the casualty reduction performance of local highway authorities**

### **Councillor questions**

1. Within your council's structure where does responsibility for casualty reduction and road safety rest?
2. What other responsibilities does the Cabinet member have and how does road safety fit within those responsibilities?
3. How do you and your colleagues view casualty reduction/road safety within the whole range of council responsibilities?
4. Does the council have any specific road safety policies or practices that could be considered as best practice for use elsewhere?
5. Not all policies or practices prove to be successful when rolled-out. Have the council had to abandon any road safety policies or practices due to public reaction or experience?
6. If the council was given a substantial sum of money for casualty reduction/road safety purposes, where do you think this money should be directed?  
How does this match with the council's greatest areas of concern?
7. How would you view advice and guidance from the Government on how your road safety service should operate, and, if offered, would you seek to modify your council practices?

Chief Constable

Dear Sir

**Assessing the Casualty Reduction Performance of Local Highway Authorities**

Capita Infrastructure Consultancy has been commissioned by the Department for Transport to undertake an assessment of the casualty reduction performance of Local Highway Authorities. The intention of the project is to gather information on good and bad practices from a number of Authorities across England and consequently provide advice for all highway authorities on good practice.

The initial stages of the assessment have now been completed and 16 Local Highway Authorities (4 County Councils, 4 London Borough Councils, 4 Unitary Authorities and 4 Metropolitan Borough Councils) have been visited. The visits have included a comprehensive assessment of the authorities' policies, performance and practices and one of the questions asked relates to the links between yourselves and their Road Safety Engineering and Education teams.

As part of the second stage of the project we are following up some of the discussions and, in particular, would appreciate the Police view on your links with the participating highway authorities.

Within your Police Force's area, Council have been involved in this study. In view of the nature of the study we will not be publishing the names of the individual authorities and I would ask that you do not divulge the names of these Councils to any party.

In particular, we are looking for details of any formal and informal liaisons with the above Council on road safety issues and any operational and practical links you may have with their Road Safety Engineering and Education teams.

If you wish to discuss this matter in greater detail, please do not hesitate to contact me on 01633 463364, e-mail address: [alan.rookes@capita.co.uk](mailto:alan.rookes@capita.co.uk) or at the address detailed above. If you would prefer I would be quite happy to make arrangements to visit your offices and discuss matters face-to-face. In the next week, I will telephone you and ask whether you would be interested in providing views for this valuable research.

Thank you in anticipation of your cooperation.

Yours Faithfully

Alan Rookes  
Principal Road Safety Engineer

## **APPENDIX B**

### **Performance rankings**

## Performance Rankings

NET DIFFERENCE RANKED NET DIFFERENCE

	CHILD KSI CASUALTIES				TOTAL KSI CASUALTIES				SLIGHT CASUALTIES			
	Year				Year				Year			
	2000	2001	2002	2010	2000	2001	2002	2010	2000	2001	2002	2010
Multiplier	0	1	2	10	0	1	2	10	0	1	2	10
Authority 1	TARGET											
	ACTUAL											
	DIFFERENCE											
Authority ...	TARGET											
	ACTUAL											
	DIFFERENCE											
Authority 16	TARGET											
	ACTUAL											
	DIFFERENCE											
England	TARGET	5,729	5,442.55	5,156.1	2,665	40,815	39,182.4	37,549.8	24,489	23,951.2	23,713.4	21,777.3
	ACTUAL	4,417	4,242	3,883	36,866	36,092	34,251	249,855	244,595	234,683		
	DIFFERENCE	1,312.0	1,200.6	1,273.1	0.86	1,919.0	4,090.4	3,296.8	0.30	-7,884.0	-5,034.8	-2,418.4

The "Difference" figure is the pro-rata target minus the actual.

For each of the casualty targets, the **ratio cell** is the sum of the differences divided by the actual 2000 level.

The example 0.92 against England is the sum of these ratios.

2.59

2.08

1.76

1.65

1.63

1.59

0.97

0.92

England

0.88

0.72

0.50

0.40

0.22

0.02

-0.92

-0.93

-1.34

0.92 England

# APPENDIX C

## Assessment frameworks

**Assessment Framework  
Combined Assessment**

Assessment Framework by Categories	Example of scoring for transfer to Themes	Individual Local Highway Authorities identified here
1) Clear Strategy 2) Good Organisation 3) RS Staff Liaison 4) People Relationships 5) Staff Training 6) Other Income Sources 7) Added Value 8) Use of Statistics 9) Monitoring	9 6 7 7 7 8 7 7 7	Assessment of each category for each Local Highway Authority

- 1) Clear Strategy
  - 2) Good Organisation
  - 3) RS Staff Liaison
  - 4) People Relationships
  - 5) Staff Training
  - 6) Other Income Sources
  - 7) Added Value
  - 8) Use of Statistic
  - 9) Monitoring
- Is the position of road safety clearly seen in the council's overall strategy?  
 Does the organisation actively translate strategic aims into schemes or campaigns?  
 Do RS Engineering and ETP staff work together?  
 How good are the relationships with external groups, e.g. Police, Schools, public and other Councils?  
 Do staff receive specialist training?  
 Are additional funds sought/obtained to support RS/CR services?  
 Do road safety staff bring added value to their schemes and campaigns  
 Do all the road safety staff make use of the casualty statistics?  
 What level of monitoring and evaluation is carried out?

**Assessment Framework**

<b>Assessment Framework by Themes</b>	Example of scoring for Transfer from Categories	Individual Local Highway Authorities identified here
Council Strategy	9	
Translation of Strategy	6	
Management of data	7	
Monitoring & Evaluation	7	
Resources and Relationships	7	
Enhancement	7	Theme assessments based on category assessments for each LHA

Council Strategy	<b>Category to Theme</b>
Translation of Strategy	[(1)*100% +(2)*10%]/11
Management of data	[(2)]
Monitoring & Evaluation	[(2)*10%+(6)*100%+(9)*10%]/12
Resources and Relationships	[(9)]
Enhancement	[(3)*100%+(4)*100%+(5)*100%]/30
	[(2)*10%+(6)*100%+(7)*100%]/21

# APPENDIX D

## Glossary

<b>APR</b>	Annual Progress Report (of the LTP)
<b>DBFO</b>	Design, Build, Finance and Operate
<b>DfT</b>	Department for Transport
<b>ESS</b>	Engineering Safety Scheme
<b>ETP</b>	Education, training and publicity
<b>ILIP</b>	Interim Local Implementation Plan (London borough funding document. For the purpose of this report the LTP for LBs)
<b>KSI</b>	Killed or seriously injured (casualty)
<b>LAAU</b>	London Accident Analysis Unit
<b>LARSOA</b>	Local Authority Road Safety Officers' Association
<b>LB</b>	London borough (one of four types of LHA)
<b>LHA</b>	Local highway authority (149 English local authorities with responsibility for at least some of the highways in their geographic area)
<b>LPSA</b>	Local Public Service Agreement
<b>LTP</b>	Local Transport Plan
<b>MDC</b>	Metropolitan district council (one of four types of LHA)
<b>PFI</b>	Private Finance Initiative
<b>RSE</b>	Road safety engineer
<b>RSO</b>	Road safety officer
<b>SCP</b>	School crossing patrol
<b>TfL</b>	Transport for London
<b>UA</b>	Unitary authority (one of four types of LHA)



