RSRR 123 Road User Safety and Disadvantage – Appendix 1: Methodology

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1 Research programme

1.1 Research schedule

The project was undertaken between February 2008 and November 2010 in three phases as detailed in Table 1.1.

Table 1.1: Project programme

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2008</td>
<td>Project start up</td>
</tr>
<tr>
<td>March–April 2008</td>
<td>Casually and deprivation data analysis</td>
</tr>
<tr>
<td></td>
<td>Case study selection</td>
</tr>
<tr>
<td></td>
<td>Literature review</td>
</tr>
<tr>
<td></td>
<td>Key player interviews</td>
</tr>
<tr>
<td></td>
<td>Review of Government road safety initiatives, local transport plans (LTPs) and strategies</td>
</tr>
<tr>
<td>May–June 2008</td>
<td>Phase 1 report</td>
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<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Event</th>
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<tbody>
<tr>
<td>July–August 08</td>
<td>Phase 2 research design</td>
</tr>
<tr>
<td>September 2008 to February 2009</td>
<td>Areas 1 and 2 – Bradford, Wolverhampton</td>
</tr>
<tr>
<td></td>
<td>Area profiling</td>
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<tr>
<td></td>
<td>Agency interviews</td>
</tr>
<tr>
<td></td>
<td>Community research</td>
</tr>
<tr>
<td>April 2009</td>
<td>Phase 2 interim report (areas 1 and 2)</td>
</tr>
<tr>
<td>June–October 2009</td>
<td>Areas 3,4 and 5 – Wigan, Sunderland, Newham</td>
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<td></td>
<td>Area profiling</td>
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<tr>
<td></td>
<td>Agency interviews</td>
</tr>
<tr>
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<td>Community research</td>
</tr>
<tr>
<td>December 2009</td>
<td>Phase 2 report</td>
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<table>
<thead>
<tr>
<th>Phase 3</th>
<th>Event</th>
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<tbody>
<tr>
<td>February–March 2010</td>
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<tr>
<td>April–June 2010</td>
<td>Partnership analysis</td>
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<td>Social network analysis</td>
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<td>Affluent area case study</td>
</tr>
<tr>
<td>October 2010</td>
<td>Final study report</td>
</tr>
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</table>
2 Phase 1 methodology

2.1 Introduction

This appendix details the methodologies adopted for the Road User Safety and Disadvantage project for the Department for Transport.

2.2 Casualty and deprivation data analysis

Phase 1 of the Road User Safety and Disadvantage project required further exploration of the link between deprivation and the occurrence of road traffic casualties in England. The analysis provided confirmation of where injury inequalities occur between the most and least deprived areas of the country, and provided further evidence of the type of casualties where these differential risks occur.

Deprivation data were gathered from the Index of Multiple Deprivation (IMD) 2004, which gives a composite deprivation ranking for each census Super Output Area (SOA) in England. The IMD index combines seven deprivation indices: income deprivation; employment deprivation; health deprivation and disability; education, skills and training deprivation; barriers to housing and services; living environment deprivation; and crime. The index rankings were aggregated into deprivation deciles, with decile 1 representing the most deprived areas, and decile 10 the least.

Casualty data were taken from the police recorded accident statistics – STATS19. The data covered the most recent five years available (2002 to 2006) at the time of this analysis (2008) and included all casualties killed, seriously injured or slightly injured. Casualties of all severities were included because we disaggregated by five age bands and by road user type for each decile of deprivation. This led to the number of killed or seriously injured casualties on their own being small for the statistical modelling undertaken here. Analysis elsewhere (Edwards et al., 2008) suggests that similar relationships between injury rates and deprivation decile are found when only those killed or seriously injured are included. Analysis was undertaken by the location of the accident as well as by the resident postcode of the casualty. It should be noted that there were about half as many casualties for whom we have residence information as we have location of accident information. Despite these shortcomings, the information was considered important and useful.

Casualty rates were plotted against IMD deciles for different road-user types and age groups. This provided an understanding of the differences in the amount people travel by different modes between the least and most deprived areas and the extent to which exposure may explain differential injury risk. Trip rates were taken from Focus on Personal Travel (Department for Transport, 2005) which reports the National Travel Survey for the same period as the casualty data.

2.3 Case study identification

Casualty data for the 10% most deprived Super Output Areas (measured by the IMD score) and in local authorities in receipt of the Neighbourhood Renewal Fund were examined to identify areas that were both relatively disadvantaged and had high casualty rates. The analysis focuses on young pedestrians as it is evident that the strongest relationships between deprivation and injury risk occur among this group. This analysis was used to assist in identifying potential case studies for the second phase of the study.

Table A1.2 presents the rank order of 1 to 17-year-old pedestrian casualty rates by ward for all categories of casualty since 2002. Where wards were adjacent, these were combined. The table also indicated whether the area (local authority) had been engaged with Department for Transport road safety initiatives. Some areas had participated in the Neighbourhood Road Safety Initiative (NRSI) and some have Road Safety Partnership Grant...
Scheme funding, while others have not. Additionally, some areas participated in the Kerbcraft pilot scheme and may have continued with this in some form, while others had not.

In identifying areas for potential case studies, the following were taken into account:

- **Geographical spread** – it may have been considered preferable to select areas drawn from throughout the country, but it is evident that the higher rates of pedestrian casualties in deprived areas are predominantly in Northern England. It was therefore appropriate that the choice of case studies reflected this, but one area in London was included.

- **Inclusion of a rural case study** – the issue of including a rural case study was raised during our interviews with road safety professionals in the scoping stage of the study. However, the evidence suggested that when considering concentrations of pedestrian casualties at a local area level they are predominantly in urban areas. Again it is appropriate that the choice of case studies reflects this. There may be a relationship between casualties and disadvantage in rural areas, but if it exists it is dispersed and does not lend itself to a case study based approach.

- **Participation in Department for Transport road safety initiatives** – it was evident that candidate areas differed in their level of engagement with Department for Transport road safety initiatives. Some areas had participated in the NRSI and some had Road Safety Partnership Grant Scheme funding, while others did not. Additionally, some areas participated in the Kerbcraft pilot scheme and may have continued with this in some form, while others did not. It was considered appropriate to include areas with differing levels of participation in these initiatives for the case studies.

- **Size of area** – some areas were considered too small to be used as case studies, with insufficient population for the research to be viable. These were excluded.

- **Area type** – the recommended areas covered a number of different regions and types of area and authority, with differing ethnicity profiles.

On this basis, five case study areas were recommended which are highlighted green in the Table 2.1.

**Table 2.1: Case study area selection**

<table>
<thead>
<tr>
<th>Ward name</th>
<th>Local authority</th>
<th>Rate of pedestrian casualties aged 1–17 per 100,000 population</th>
<th>NRSI local authority</th>
<th>RSPGS in local authority (deprivation issue)</th>
<th>Kerbcraft local authority</th>
</tr>
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<tbody>
<tr>
<td>West City</td>
<td>Newcastle upon Tyne</td>
<td>42,615</td>
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<td>Netherthorpe</td>
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<td>Dukes</td>
<td>Sefton</td>
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<td>Sunderland</td>
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<td>Bolton</td>
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<td>Y</td>
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<tr>
<td>Ward name</td>
<td>Local authority</td>
<td>Rate of pedestrian casualties aged 1–17 per 100,000 population</td>
<td>NRSI local authority</td>
<td>RSPGS in local authority (deprivation issue)</td>
<td>Kerbcraft local authority</td>
</tr>
<tr>
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<td>-----------------</td>
<td>----------------------------------------------------------------</td>
<td>----------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------</td>
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<tr>
<td>St Peter's</td>
<td>Wolverhampton</td>
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<tr>
<td>Wakefield East</td>
<td>Wakefield</td>
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<tr>
<td>Swinley</td>
<td>Wigan</td>
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<td>Ince</td>
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<tr>
<td>Central and Falinge</td>
<td>Rochdale</td>
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<td>Deighton</td>
<td>Kirklees</td>
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<tr>
<td>Derby</td>
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<td>Ashton St Peter's</td>
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<td>Talbot</td>
<td>Blackpool</td>
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<td>Bloomfield</td>
<td>Blackpool</td>
<td>7,159</td>
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<td>Y</td>
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<tr>
<td>Claremont</td>
<td>Blackpool</td>
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<td>St George's</td>
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<td>Central</td>
<td>Rotherham</td>
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<tr>
<td>Portland</td>
<td>Mansfield</td>
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<td>N</td>
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<tr>
<td>Longsight</td>
<td>Manchester</td>
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<td>Y</td>
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<tr>
<td>Hulme</td>
<td>Manchester</td>
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<tr>
<td>Ardwick</td>
<td>Manchester</td>
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<tr>
<td>Bradford</td>
<td>Manchester</td>
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<td>Y</td>
<td>N</td>
<td>Y</td>
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<tr>
<td>Stratford and New Town</td>
<td>Newham</td>
<td>9,734</td>
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<td>N</td>
</tr>
</tbody>
</table>

2.4 Literature review

The literature review integrated and updated a literature review on disadvantage and vulnerable road users carried out by Christie and Ward (2007), but widened the focus to include car drivers and motorcyclists.

International literature was searched from 1997 to February 2008, covering academic databases (e.g. OVID, PsychINFO, etc.) and Safety Lit and web searches were also conducted to identify grey literature that may not have been published in academic journals (e.g. Transport Research Laboratory, AA Foundation for Road Safety Research, Department for Transport, etc.). In addition, reference lists of identified publications were reviewed to identify other relevant articles.

2.5 Key player interviews

A series of interviews with key players in the road safety sector were undertaken to understand the perspective of different organisations on the issue of disadvantage and to inform the scope of the study. Discussions were carried
out with representatives from road safety officers and authorities, as well as charitable organisations and pressure
groups concerned with accident prevention and promoting safety. In order to consider the multi-agency context of
road safety and disadvantage, a series of interviews were also conducted with representatives from government
departments and other agencies with specific functions and responsibilities in disadvantaged areas, with deprived
groups and with children and young people. The interview guide for the road safety interviews is reproduced in Box
2.1.

<table>
<thead>
<tr>
<th>Position of organisation</th>
<th>Role of organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your organisation considered the issue of road safety amongst disadvantaged groups or in disadvantaged areas? Explore.</td>
<td></td>
</tr>
<tr>
<td>What work has been done? Is any work planned in this area (any strategy policy documents/evidence). Local Transport Plans?</td>
<td></td>
</tr>
<tr>
<td>What are the key strategy documents (seek to obtain copies).</td>
<td></td>
</tr>
</tbody>
</table>

**Casualties and disadvantaged groups**

There is some evidence of higher rates of road accident casualties associated with lower socio economic groups.
Why do you think this should be? Explore for different life stages and modes.
What are the likely factors associated with exposure to risk and injury amongst disadvantaged groups?
Explore the following:

- Poor quality road environments? Liveability?
- High speeds and volumes of traffic?
- On the streets more as pedestrians?
- Different attitudes to risk especially amongst the young?
- Children from poorer backgrounds less likely to be appropriately protected in cars?
- Income restraints – no cycle helmets, older less safe cars?
- Lack of garden or facilities for safe play?
- More limited supervision of children?
- Use of alcohol and drugs?
- Criminal and antisocial behaviour?

What are the barriers to adopting safe behaviour amongst disadvantaged groups?
What are the facilitators to adopting safe behaviour amongst disadvantaged groups?

**Casualties and disadvantaged areas**

There is some evidence of higher rates of road accident casualties associated with local disadvantaged Areas.
Why do you think this should be? Explore for different types of area, indicators of disadvantage.

Multi-agency context
Which different agencies should be involved in road safety and what should their role be?
Do agencies work together? Should this be developed? How?
What types of partnerships exist at the moment? How are these structured and who do they involve?
How are these partnerships working – what is working well and what is not?
How are linkages being made to wider partnerships – Safety Camera Partnerships, Local Strategic Partnerships and Local Area Agreements, other? What are the links to wider regeneration initiatives, partnerships and funding?

Explore the following agencies:
- Police.
- Education.
- Health.
- Employment.
- Planning and Housing.
- Regeneration.
- Youth services.
- Engineering.
- Leisure.
- Others.

Policy development
How important is road safety and disadvantage relative to other road safety issues? Should it have higher priority or not?
Should we target road safety initiatives at disadvantaged groups rather than provision that is universal? What are the advantages/disadvantages?
What policies would you want to see developed?
Is it important to involve local people in policy development on these issues? How best to do this?
Aware of any good practice initiatives or interventions with regard to deprivation?
Examples of research that establish casualty reduction effects of deprivation initiatives.

This research – case studies
What particular issues do you think should be explored in this research to develop our understanding of the reasons for higher risk amongst disadvantaged groups?
Are there any areas of where you think the case studies should be and what are the issues there?
2.6 Review of Government road safety initiatives, Local Transport Plans and road safety strategies

A desk research exercise was undertaken in March/April 2008 to provide a summary and position statement on four key government funded road safety initiatives of relevance to this study: the Neighbourhood Road Safety Initiative (NRSI); Inner City Demonstration Project; Road Safety Grant Partnership Scheme and Kerbcraft.

In addition, a selection of road safety strategies were reviewed to gain an appreciation of the extent to which highway authorities consider the issue of disadvantage. These were taken from 2006 Local Transport Plans (LTPs) as well as road safety strategies or plans from a number of authorities. The latter typically interfaced with the statutory LTPs and provide more detail of the road safety strategy for the area.

The Department for Transport first issued guidance to local highway authorities of the need to address the particular road safety problems within their disadvantaged areas in 2003, *Tackling the Road Safety Implications of Disadvantage*. Authorities in England (unless judged excellent under the Comprehensive Performance Assessment) were required to submit a statement outlining how they intended to tackle this problem in their Annual Progress Reports for that year.

In undertaking the review, we considered first and foremost whether there was any specific recognition of disadvantage. Further to this we considered whether the authority’s strategy is primarily based on resource allocation targeted at areas of higher deprivation, whether it is derived from evidence of reduced inequalities in outcomes, or whether it is aimed at certain disadvantaged groups.

A range of different plans were examined covering different types of authority and geographies. The following LTPs or road safety plans were included: North Nottinghamshire, North Lincolnshire, Redcar and Cleveland, Slough, Lancashire, Merseyside, West Midlands, Sandwell, Salford, Tower Hamlets and Hackney.
3 Phase 2 methodology

3.1 Area profiling

Demographic and socio-economic data for the case study wards were compiled to provide a profile of the local area. This involved the compilation of the following key indicators for each area:

- population;
- age profile;
- household composition;
- economic activity;
- income;
- qualifications;
- health;
- ethnicity;
- occupation group;
- social grade;
- car ownership;
- travel to work; and
- land use.

In each case the indicator was compared with the regional and/or national average to provide a clear picture of the relative disadvantage of the study area.

In addition, the local policy context for each area was explored through desktop research of local agency strategy documents and data that may impact on road safety, transport and the community. This required the identification, interpretation and summary of key policy documents for each area, including:

- Local Transport Plan (LTP);
- Road Safety Strategy;
- Safer Community Strategy;
- Sustainable Communities Strategy;
- Local Area Agreement (LAA);
- Policing Strategy/Plan;
- Fire and Rescue Plan;
- Play Strategy;
- Physical Activity and Sports Strategy;
- Walking and Cycling Strategy;
- Children and Young People Plan;
- Safeguarding Children Plan; and
- Child Injury Prevention Strategy.

1 All data sourced from the Office for National Statistics http://neighbourhood.statistics.gov.uk/dissemination.
3.2 Local agency interviews

Interviews with representatives of local agencies were undertaken in order to develop a ‘top down’ perspective of road safety risks in disadvantaged areas. The purpose of these interviews was to explore local agencies’ input into case study areas, in terms of services and interventions aimed to address road-user safety issues, and how these operate in practice ‘on the ground’. Preliminary contact was made with the highway authority Road Safety Manager in each case and discussions were undertaken to explain the purpose of the research, obtain contacts and discuss activity in their area. Further interviews were then undertaken, where possible, with officials from the following authorities or with the following responsibilities, in each of the five study areas: Road Safety Engineering; Road Safety Education, Publicity and Training; School Travel; Police Service; Fire and Rescue Service; Safeguarding Children Board/Children’s Services/Sure Start; Primary Care Trust; Regeneration/Environmental Improvement; Leisure; Housing and Youth Offending.

The discussion guide shown in Box 3.1 was used as the basis for this element of the research.

Box 3.1: Discussion guide

| Road User Safety and Disadvantage Research |
| Phase 2 Case Studies            |
| Case Study Area:                |
| Interviewee(s) name/position:   |
| Organisation & Department:     |
| Date of interview:             |

Explain background to research and purpose of interview. Want to explore:
- activities that are being undertaken which may **directly** or **indirectly** have an influence on people’s risk of having a road accident. For example, could be a direct measure such as a seat belt wearing campaign or an indirect measure to reduce social and economic inequalities;
- the extent to which you work in partnership with other organisations in this area; and
- the extent of engagement and involvement of the community in activities.

Specify case study area (use map) and explain why focusing on this area. Describe deprivation and injury characteristics.

Policy, strategy and budgets

Policy/strategy that guides the activities being carried out.

How are resources allocated? What determines what activities are introduced and where? Explore budgets in more detail, i.e. extent to which committed based on relative deprivation, casualty records or demand.

Activities and interventions

Repeat the following for all activities and interventions carried out.

For each activity/intervention (ask each of the following where applicable):
- Describe activity/intervention (Establish schools, communities, roads, etc., where specific interventions have been put in place)
- Is it specific to this area or being implemented more widely (establish extent, e.g. district, region, etc.)?
- Has priority been given to this area over others?
- When was it implemented?
- Why was it put in place?
- How is it working in practice? What is the evidence for this?
- What are the good things about this?
- Are there any problems or difficulties?
- What have been the outcomes? Is it achieving what it set out to? Why/why not? What evidence is there of impacts/outcomes? Obtain any assessment, evaluation, anecdotal or other evidence.
- Effects of in reducing risk of road injury (1) generally, (2) specific to the case study area.

Road user safety
What do you see as the cause of road accidents in this area? Why?
Organisation’s role in reducing road accidents? (Not LA Road Safety depts) What interventions/services are you involved in?/What activities in terms of Road Safety (directly or indirectly) is your agency involved in?

Partnership working
What partnerships do your organisation participate in that address road safety?
What is your organisation’s role?
- What are the advantages of partnership working?
- What are the disadvantages?
Is it a better way of working for addressing the poorer road safety record of disadvantaged areas? Why/Why not?
What more, if anything, could be done?

Community development
Does your organisation participate in community development initiatives in this area?
What is your organisation’s role?
- What do you see as the advantages of a community led approach?
- What are the disadvantages?
Is it a better way of working for addressing the poorer road safety record of disadvantaged areas? Why/Why not?
Should more be done to support a community led approach? Explore.

Wrap up – any other points arising/observations?

All of the interviews with officials were audio-recorded and subject to analysis to provide a summary of road safety provision in disadvantaged communities through highway authorities and others involved in delivery.
3.3 Community research

The research within communities used a semi-ethnographic approach to explore why people in each of the case study areas thought the risks of accident and injury were higher in disadvantaged areas. This approach grounded the research within the local context, focusing on issues which were meaningful and tangible to local people and which were rooted in their own lifestyles and the environment in which they lived. It also allowed for a detailed insight into the experiences, behaviour and attitudes of local people to be obtained.

The research with local residents focused on exploring the following topics:

- attitudes and behaviour, including lifestyles and culture, and travel needs (both temporal and spatial);
- transport modes and resources, including access to cars and management of car costs, walking, cycling and other travel behaviour; and
- the street context, including temporal and spatial dimensions of risk areas, and activities on, and the use of, streets.

There were four main stages to the research process (see Figure 3.1). In all the case study areas, the Centre for Research in Social Policy (CRSP) conducted group discussions with the key actors and local residents. A key element of the research was the flexibility of the approach. This meant that the exact ways in which information was gathered varied according to the priorities highlighted by residents within the case study areas. This meant that, depending on the issues highlighted by residents, some in-depth interviews were carried out and/or additional observations were conducted.

**Group discussions with key actors** – key actors are local people who are active in the local community either through their paid work, voluntary work, or through participation in community groups and activities. Their recruitment varied in each case study area. Some were recruited through local community organisations, some through contacts in local authorities such as neighbourhood co-ordinators, and some through local ward councillors. One of their main roles in the research was to provide a guided route into the local community and provide advice on how best to access local groups. Discussions with key actors at the start of the research process also provided an early overview of the local area in terms of the main issues of concern for different groups within the community and local road safety risks. The key actor groups have included a range of participants, such as local councillors, school governors, community police officers, youth and community workers, local business people and residents.

**Group discussions with residents** within each case study area – four group discussions were held with local residents. The composition of the groups were organised around four life-course stages to reflect the changes in people’s travel needs and experiences as they move across the life-course, as well as changes in casualty rates across the life-course:

- parents of primary aged school children;
- young people aged 16-21 (including young drivers);
- secondary school children; and
- primary school children.
Figure 3.1: Phase 2 community research methodology

**Group discussions with key actors**

**Group discussions with residents**

- Parents
- Young people (age 16–21)
- Secondary school children
- Primary school children

**In-depth interviews with residents/observations**

**Group discussion with key actors**

**Group discussions with parents** – these focus group discussions explored parents’ perceptions of risk in their neighbourhoods, including the causes of risk and specific locations of risk. How parents and their children travelled about and the places they went to were also explored. Factors affecting their ability to protect their children from risk, such as constraints and commitments in relation to their jobs and caring responsibilities, were a key focus of these groups. The groups also covered parents’ views and behaviour as car drivers and passengers, including views on speed limits, seat belts and child car seats. How their children learnt about road safety was also addressed. Parents were recruited from community groups, such as mother and toddler groups, and schools.

**Group discussions with young people** – these discussions explored young people’s perceptions of risk and experiences of road safety issues, both as pedestrians and car drivers or passengers. The groups explored the types of journey young people made and their mode of transport. The groups also include specific questions about buying a car and learning to drive, covering issues such as the driving test, MOT requirements, use of seat belts and mobile phones, and speed limits. The influence of peers was also explored. Young people were recruited from youth centres, organisations and colleges, often with the help of youth and community workers.

**Group discussions with secondary school children** – these groups explored perceptions of road safety in their neighbourhood and the salience of road safety issues to secondary school children.
Discussions also explored their journeys to and from school, including mode of travel and behaviour in relation to crossing roads and using buses; activities and travel outside of school; and perceptions of risk associated with these journeys, either as pedestrians or car passengers. The influence of family and peers on children’s attitudes towards road safety and their behaviour on the streets was also covered. Rooted in this context were questions about specific risk issues, such as texting and crossing roads, and not wearing seat belts. Secondary school children were recruited via youth clubs, with the groups taking place at youth centres and schools, and with groups taking place both within and after school hours.

**Group work with primary school children** – as with the other groups, research with primary school children has investigated their travel behaviour, experience of road safety incidents, perceptions of risks, and knowledge of and attitudes towards road safety. The issues covered include: travel to and from school; activities outside school; modes of transport and who children travel with; where and how children cross roads; and safety when travelling by car. The research sought to understand the influence of schools and parents on children’s perceptions of risks, their understanding of road safety and travel behaviour. Access to primary school children was obtained via local schools, with the groups taking place on school premises during school hours.

**Group techniques** – within the groups a range of techniques were employed to engage the interests of participants and to stimulate discussion. In particular, techniques that stimulate discussion among children and young people were employed:

- **Mapping** – used in groups with key actors, parents and older children, the groups are presented with large-scale street maps of their ward. The groups were asked to annotate the maps and identify important local areas, such as schools, parks, shops, mosques and community centres, and to identify road safety ‘hot spots’. These exercises, and the discussions that arose from them, provided an understanding of the local community in relation to where people went, how they travelled about their local area and local road safety issues, and provided a context for subsequent discussions. For example, the maps enable participants to highlight issues such as parking problems, difficulties crossing roads and areas of speeding traffic.

- **Ranking exercises** – participants were asked to write on post-it notes the types of behaviour or issues that they consider to cause road safety problems. Participants were then asked to rank these in order of importance.

- **Drawing exercises** – used in groups with younger children. Participants were asked to make a number of drawings, such as:
  - a cartoon strip of how they get to school;
  - a drawing of the front of their school and the street outside their school; and
  - a drawing of going out to play at weekends.

  The children could also use props (provided by the researchers), such as toy cars and people, as well as toy road signs, to illustrate their drawings. The researchers asked the children about their drawings to provide an insight into their activities, behaviour and perceptions of risk.

- **Vignettes/scenarios** – vignettes about the risks of imaginary others were sometimes used with children to explore attitudes, values and behaviour sensitively. Vignettes and scenarios were also used with parents and young people to explore their attitudes and values by describing an imaginary ‘other’ in various situations and contexts, including ‘risky’ situations.

- **Individual/household interviews** – depending on the outcome of the key actor group discussions, and the issues identified as important, individual interviews were conducted within the community. These interviews had two purposes. The first, to enable those residents who were harder to reach (such those who would be unable or unwilling to participate in a group discussion) to take part in the research. The second, to follow-up with some group discussion participants on issues in more detail.

  For example, in Bradford the researchers wanted to explore in more depth the relationship between ethnicity and road safety. Household interviews were then conducted with the help of a local community centre and worker who offered help with finding and introducing participants and who offered assistance with translating the discussions. The individual interviews expanded and
supplemented findings from the focus groups and, in particular, focused on exploring the relationship between road-user safety risks and these individuals' lifestyles, their private attitudes, and their transport use and resources (e.g. access to a car and management of car maintenance costs).

- **Observations** – CRSP's main role in the research was to seek local residents' views about road safety within their neighbourhood. However, during the course of the research it became apparent that interviews and group discussions alone were not able to capture some of the more sensitive topics around road safety – particularly among ethnic minority residents. Interviews and discussions were useful techniques for exploring attitudes to, for example, seat belts and car booster seats. However, these methods alone were inadequate for answering questions about what people actually do, in other words their behaviour with regard to these issues.

In each case study area, CRSP researchers spent time walking about the community in the areas identified as particularly hazardous by the key actors and other residents. This included spending time observing the behaviour of children and adults at junctions, roundabouts, roads and streets around schools and mosques, and observing traffic and driver behaviour such as parking. This enabled researchers to build up a fuller understanding of the issues that affect communities more generally, such as poor housing, litter and poorly maintained cars, while simultaneously providing examples of where and when different road behaviours are likely to occur. As such it allowed the researchers to illustrate findings (generated through analysed groupwork/interviews) with observed examples.
4 Phase 3 methodology

4.1 Partnership analysis

Two examples of partnership working were selected for detailed investigation. The first was an example of a wider forum set up by the Council Road Safety Department to engage with politicians, other departments, other agencies and the wider community. The second was a delivery group established within the framework of a statutory Crime and Disorder Partnership. These two examples provided contrasting examples of joint working arrangements.

A mixed methods approach was applied, involving:

- content analysis of meeting agenda and minutes, and identification of partnership governance arrangements;
- interviews with partnership members; and
- a social network analysis (SNA) was undertaken in parallel and the results of the two work streams were integrated.

4.1.1 Meeting agenda and minutes content analysis

All available meeting minutes and agendas for partnership meetings that had occurred within the previous three years were obtained, as well as any documented terms of reference and details of governance arrangements. These documents were subject to content analysis, applying the framework shown in Box 4.1.

Box 4.1: Content analysis framework

Objectives
To understand how the partnership operates
To establish if partnership working is likely to contribute to partnership objectives

Level of association
Networking
Co-operation
Collaboration
Integration

Level of working/relationships
Structured/formal statutory higher level
Less structured more informal lower level
Informal ad-hoc
Formal

Leadership
Strong leadership
Weak leadership, not the right members
Membership
Interested committed members – the right people, champions
Not the right people

Continuity

Aligned to organisation’s objectives, funding, structure, culture
Fully aligned, effective ‘buy in’
Can be adapted
Not aligned

4.1.2 Partnership member interviews
The interview guide in Box 4.2 was used for the interviews with partner members. Eleven interviews were undertaken in total, all with partners outside of the local highway authority road safety departments.

Box 4.2: Partnership members interview
(To be audio recorded)

Name
Organisation
Dept

Organisations commitment to the Delivery Group
1. How did your organisation get involved in the Partnership?
2. How important is it that your organisation is represented on the Partnership? Probe for why
3. How many people sit on this Group?
4. Which other agencies are involved? Who are the representatives?
5. How does the work of the Safer Roads Steering Group contribute to the objectives of your organisation?
6. Does this work fit with the corporate strategy of your organisation? In what ways?

Contribution/involvement in the Delivery Group
7. What is your understanding of the Safer Roads Steering Group objectives?
8. What is your role and responsibility within the group?
9. How do you think you contribute to the aims of the Safer Roads Steering Group?
10. To what extent are you able to commit time to the Safer Roads Steering Group as part of your job? Probe for: (1) to attend the meetings; (2) any other work that arises outside of the meetings.
11. Do you have any other restrictions on getting involved?
12. Do you have to report back to your organisation on your activities with the Group?
13. What about your wider/organisation role – to what extent does it conflict/fit in with the Group’s objectives?

Sharing information and networking
14. Who sets the agenda for the partnership?
15. What information do you share through the Partnership? How is this done?
16. How important is this to you? How do you use the information?

REPEAT FOR OTHER INFORMATION

17. Who are the key people in the partnership? Why?
18. How important is networking through the Group to you? Why is this important/not important?
19. Are there any non-member individuals or agencies who should be represented on the Partnership but aren’t?
20. Is there a mechanism for nominating new members to this partnership?
21. How do you hear about new members to this partnership?

Delivering specific activities
22. Can you give an example of a specific activity that you have been involved in through the Partnership?
23. Has this been undertaken jointly with other Partnership members (who?) or independently?
24. How has the Partnership worked together to deliver this?
25. What are the advantages of doing this through this partnership? What have been the disadvantages?
26. Could this have happened without the Group? Why/why not?

REPEAT FOR OTHER ACTIVITIES

Strengths/limitations of the Partnership
27. Do you think the Partnership is effective?
28. What has it achieved?
29. What do you see as the main strengths?
30. Are there any problems or limitations with the way the Group works? How might these be overcome?
31. Are there any other organisations that you think should be represented on this Group? How would that make a difference?

Road safety and disadvantage
32. Have any of the activities of the Group been particularly focused on improving road safety in disadvantaged areas or amongst disadvantaged groups? Probe for what has worked/what hasn’t and why?
33. To what extent is working in partnership important for delivering interventions in disadvantaged areas or for disadvantaged groups or does it apply equally to all areas/groups? Why/why not? PROBE FULLY

34. What are the advantages of working in partnership to deliver intervention in disadvantaged areas in particular? What are the disadvantages? PROBE FULLY

35. Can you think of an example of something that you feel would be a good idea to improve road safety in disadvantaged areas that would need to be delivered in partnership but could not be delivered by individual organisations? Why does this need to be in partnership. How would it work? What would be the advantages? What would be the problems? EXPLORE FULLY

Community engagement

Community engagement can be defined as consulting with local people, finding out their local needs and getting them involved in planning and delivering interventions that meet these needs.

36. Thinking about community engagement in this way, have you had any experience of doing this or trying to do this? (through the Partnership or outside)

37. Tell us about your experience?

38. What were the positive things about this experience?

39. What obstacles did you encounter? (If no experience What obstacles do you think you would encounter? What do you think might work?)

40. What support do you think you would need if required to deliver something with strong community involvement?

Summing up

41. Do you have any other issues that you would like to raise about the Partnership?

4.1.3 Interviews with policy officials

In addition, an interview was undertaken with a policy official within each local authority with responsibility for corporate strategic issues. The interview guide shown in Box 4.3 was used as the basis for these discussions.

Box 4.3: Interview corporate

**LAA/National Indicators**

1. What was the process for selection of National Indicators for inclusion in the LAA?
2. What would be the mechanism for changing, or including other NIs, in the LAA?
3. Road Safety Indicators

*NI 47 People killed and seriously injured in road traffic accidents*

*NI 48 Children killed and seriously injured in road traffic accidents*

How did NI 48 come to be included in the LAA? Why not NI 48?

4. How does achievement of a target indicator affect funding (Performance Reward Grant)?
5. What influence does the inclusion of an NI in the LAA have?
6. How does the inclusion of a road safety target in the LAA affect policy, strategy and interventions for the Council?

7. How does the exclusion of a road safety target in the LAA affect policy, strategy and operations for others in the LSP?

8. What would it mean to this policy area if it was excluded from the LAA?

Community Strategy

9. What was the process for determining priorities in the Community Strategy? (Bradford Vision)

10. How important is it that an issue is identified and included in a corporate strategy such as the Community Strategy for it to be given attention? What happens if it is not included?

11. How much influence does the Community Strategy have on local authority departmental plans and activities?

12. How much influence does the Community Strategy have on Partner’s plans and activities?

13. What would be the mechanism for achieving high priority for road safety at a strategic level? How is this best achieved?

14. Are there likely to be any changes going forward under a new government?

Safer Communities Strategy (Crime and Disorder)

15. How do the Safer Communities Partnership and the Community Strategy fit together?

16. What was the process for determining priorities of the Safer Communities Partnership?

4.2 Social Network Analysis

The Social Network Analysis was carried out by sending questionnaires to members of both the partnerships. The questionnaires asked for information about the respondent (e.g. which agency they represented, whether they had a specific role in the group and how long they had been a representative); about their relationships to other members of the group (e.g. they were asked to name up to five group members who were the most important for the respondents’ road safety duties and how often they contacted them); and they also listed up to three people who were not members of the group, but who they contacted regularly about road safety matters.

Due to data protection issues, these questionnaires were sent to the leaders of the two group and the leaders distributed them to the group members, who were asked to return them to the research team by e-mail. Non-response was followed up on several occasions in both partnerships. The response rates in both groups were around 50%.²

The information from the questionnaires was processed to produce visual representations of the relationship information collected using Pajek.³

The Social Network Analysis questionnaire is reproduced below.

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² In the forum, six out of twelve questionnaires were returned; in the task group, six out of ten were returned
³ Pajek is a Social Network Analysis programme developed by Vladimir Batagelj and Andrej Mrvar.
Road Safety Partnership Networks Questionnaire

This questionnaire is part of a tranche of research being conducted for the Department for Transport (DfT) by the Centre for Research in Social Policy (CRSP), at Loughborough University, and Aecom. The research is exploring the link between disadvantage and road user safety. We are particularly interested in why more children and young people from disadvantaged areas are being killed and seriously injured compared with those from more affluent areas. As part of this research, we want to find out more about how road safety partnerships are operating and what lessons can be learned for improving road safety in disadvantaged areas. This questionnaire asks a series of questions about the people you communicate with to carry out your road safety role.

We would like to emphasise that the purpose of the questionnaire is to help us understand how the partnership is functioning overall and not to evaluate the effectiveness of individuals. We need your name and the names of others purely to carry out the analysis. While it might be possible for you to work out the identity of some individuals in your area, we will protect your confidentiality by using a pseudonym for each area and will not be making any individual’s name public in reports or publications.

The questionnaire should take approximately ten minutes to complete.

If you have any questions about the research, please do not hesitate to contact
Liz Sutton on 01509 223679 (E.A.Sutton@lboro.ac.uk)
or
Jacqueline Beckhelling on 01509 223376 (J.Beckhelling@lboro.ac.uk)

Once completed, please return your questionnaire by email to
Nicola Selby at N.A.Selby@lboro.ac.uk
1 Which agency, group or organisation do you represent on the road safety delivery group?

a If you represent a large organisation, e.g. the local authority, please specify which team or unit you work for.

2 Do you have a specific role in the road safety partnership?

☐ Yes
☐ No

a If so, could you briefly specify what this role is?

3 How many years have you been a representative on the road safety delivery group?
4. Please name up to five people from within the road safety delivery group who you consider to be most important in your road safety duties.

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5. For each person named in Question 4, please indicate how often you usually contact them.

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<th>Person</th>
<th>At least once a day</th>
<th>At least once a week but not daily</th>
<th>At least once a month but not once every week</th>
<th>Rarely</th>
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For each person named in Question 4, please respond to the following statements:

a  I am able to ask them for information.

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<th>Strongly agree</th>
<th>Agree</th>
<th>Neither</th>
<th>Disagree</th>
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b  I am able to ask them for advice.

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c  I find them accessible and available when I look for information or advice.

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7 In a typical month, how much time do you spend on road safety delivery group duties?
- [ ] Up to five hours
- [ ] At least five but less than 10 hours
- [ ] At least 10 but less than 15 hours
- [ ] At least 15 but less than 20 hours
- [ ] At least 20 hours

8 Please respond to the following statement:
I have sufficient time to attend meetings and carry out my road safety delivery group role.

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither
- [ ] Disagree
- [ ] Strongly disagree

9 Do you have regular contact with anyone outside the road safety Partnership in relation to road safety issues?
- [ ] Yes
- [ ] No

10 If yes, please name up to three external people, and the agencies they represent, that you are in regular contact with.

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11 Please write your name below

[Blank space for name]

Thank you for taking the time to complete this questionnaire
4.3 Affluent area case study

4.3.1 Area selection

The study required the identification of a ward with high child pedestrian accident rates from an affluent area (i.e. one with a low IMD score) for comparison with the relatively disadvantaged case studies undertaken in Phase 2 of the project. The selection replicated the method applied at the previous. First we identified the number of child (age 0–17) pedestrian accidents by Super Output Area (SOA) in which the accident happened in the period 2002–06 from STATS19 data. We used the population aged 0–17 from 2001 Census data to determine the rate of child pedestrian accidents per resident aged 0–17 for the period 2002–06 for each SOA in the country. We then matched these rates with the IMD score and rank for each SOA.

Whereas the selection of case studies in deprived areas identified SOAs with high child pedestrian casualty rates with IMD scores in the top decile, in this case we identified SOAs with high child pedestrian casualty rates with IMD scores in the bottom three deciles. We also performed a similar exercise using accident data aggregated to ward level, with IMD scores being averaged from SOA level to ward level, in order to determine wards where there were generally high levels of child pedestrian accidents at both SOA and ward level.

On the basis of this analysis, we identified Bridge ward in Maidstone as a suitable candidate for the affluent case study area with higher child pedestrian accident rates and in the bottom decile of deprivation. There were 2,481 child pedestrian accidents per 100,000 residents aged 1–17 between 2002 and 2006.

4.3.2 Community research

The community research in the affluent case study area repeated the methodology adopted in Phase 2.
5 References


