Department for Transport

Road Safety Research Report No. 111

Understanding Public Attitudes to Road User Safety

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EXECUTIVE SUMMARY

Introduction

This report provides the Department for Transport (DfT) with an in-depth understanding of how the public engage with the issue of road user safety.

The research used qualitative methods and brought together the views of a wide range of adult road users. Specifically, a deliberative approach was used to explore the public's insights, perceptions and conceptualisation of road user safety and to go beyond their top of mind responses. A total of 240 participants were recruited in 4 areas across the UK (United Kingdom – Bradford, Glasgow, London, north-west Wales). In total, each area had six groups of ten participants. Group composition was based on a life-stage and attitude to road user risk. Each group was reconvened three times in the spring of 2009.

Conceptualisation of risk

Findings suggest, on the whole, respondents felt that the UK's roads are fairly safe to use for all modes of transport and are especially safe for cars. However, certain groups of road users were viewed as at greater risk – in particular younger drivers and teenage pedestrians. Motorcyclists were also perceived to be at great risk of an accident. Walking and cycling was largely felt to be less safe than driving, and this was especially true for cycling in city centres (particularly in Glasgow and London) and walking on rural roads.

Respondents conceptualised risk by a variety of strategies. For example, acceptability of risk could differ between risk to self and risk to others. Something that could be viewed as high risk to an individual but low risk to others was generally tolerated. When other individuals were affected – particularly innocent parties – this was felt to make the risk unacceptable. However, on the whole, dangers resulting from risky road user behaviour were not inherently viewed in this way. Certain participants made a further distinction whereby 'other people' could be subdivided into those directly impacted by the risk, and those indirectly impacted by the risk. Those directly impacted tend to be considered (such as the innocent party with whom the vehicle collides), whereas indirectly affected individuals (friends and family of the casualty) are less likely to be considered. The discussion also showed how respondents considered risk in terms of both the likelihood of a negative incident occurring and the perceived consequences of the incident. Hence, they believed the likelihood of an accident on an aeroplane generally to be very low, but the severity of the consequence from such an incident would be extremely high, making the overall risk seem high. Perceived control over the risk also resulted in minimising the severity of the perceived risk. Generally, road user behaviour is viewed to be largely under the control of the individual and, as such, is lower risk

than some other situations, unless volition is inhibited in some way, such as by drink or drugs.

The respondents described a number of different factors that they felt contributed to dangerous road user behaviour in general. These predominately related to factors affecting safe operation of the vehicle, including: being distracted, especially by mobile phones, failing to adjust to conditions, poor road design and maintenance, and facing peer and time pressure. A lack of driving skills was infrequently mentioned as an issue. In contrast, factors affecting safe pedestrian and cycling behaviour were largely attributed to the control of the road user, such as having poor road safety skills (not knowing where to cross the road safely), deliberately displaying violations (weaving in and out of traffic) or not wearing safety gear (visible jackets).

Drivers admitted performing risky behaviours themselves. Speeding was frequently mentioned, as was driving through amber or red lights when it would have been appropriate to stop. In all cases participants justified their behaviour based on there not being much traffic around or being under a time pressure.

The majority of respondents felt their road user safety had increased with maturity, and this was especially true for driving behaviour. A variety of reasons were cited, including: having, seeing or knowing people in accidents; a reduction in negative peer pressure; having responsibilities such as children and a job that requires driving; a growing sense of mortality; increased tolerance for others' behaviour; and a realisation that driving faster does not actually match a reduction in time taken to travel.

Participants were asked to map safe and dangerous areas. Roads that had many major 'place' functions (such as school, residential, shopping) and had heavy traffic were noted as dangerous. In addition, speeding traffic in residential areas was noted as problematic. Participants took much longer to describe areas with high road safety. These largely centred on areas with many formal crossings for pedestrians, cycle lanes for cyclists and dual carriageways for fast traffic. Overall, participants' perception of danger was linked with a lack of segregation between different road users and an increased interaction of individuals. Hence, separated traffic was seen as highly positive in terms of road user safety across all road user groups. Where this was not possible, for example in residential areas, then engineering interventions such as traffic calming were favoured.

Rural roads

Rural roads were viewed as especially dangerous by those living in rural areas. Those living in urban areas tended to note that, although rural areas required a

different type of road user skill, if you could drive in urban areas then you could drive in rural areas.

There was strong support for the use of speed humps on rural roads, especially for roads travelling through villages and towns. Other suggestions for improving road safety on rural roads included: straightening bends in the roads (although there was acknowledgement that this could increase the speeds of vehicles), improving signage preceding sharp corners, providing more passing places on narrow roads, providing extra street lighting at night, and cutting foliage more frequently. Specific campaigns targeting dangerous driving on rural roads were proposed.

Speeding was considered to be a major concern, and respondents felt that ambiguity over speed limits needs to be reduced. There was some support for adding more signage. It was perceived that rural areas had a low level of enforcement, and there was support for an increase in police presence. There was some support for average speed cameras on certain stretches of road and for reducing the national speed limit, as it was recognised that speed differential from the fastest speeds to the slowest on rural roads was a cause of danger. However, speed limits alone were felt to be ineffective for certain groups of drivers who were perceived to drive at fast speeds irrespective of the law.

There was support for education about safer driving on rural roads, especially campaigns that were reinforced in the road environment itself. For example, signs that noted how many people had died in road accidents in a certain time period or alerting drivers to dangerous stretches of road were felt to be effective in making people aware of the dangers of the road. Hence any television campaign needs to be backed up with prompts in the form of signs in the road environment itself. The recent THINK Bike campaign was noted as being successful in this format.

Social aspects of driving

It was common for participants to stress how they changed their driving depending upon the social situation and in particular whom they had in their vehicle as passengers. This was especially true for younger males, who stated they adopted a more dangerous driving style to impress friends but drove more safely with parents or younger children in the vehicle. However, peer pressure can also be positive: the older people got, the more they felt they should conform to a safe driving behaviour. This was especially true for older drivers, who felt the need to impress on others that they could drive safely despite their advancing years.

It was noted that participants found it hard to tell someone to drive safely. While this was dependent upon the relationship, on the whole it was extremely difficult for friends to tell one another directly that they believed their driving was poor or dangerous.

Different perspectives

Despite participants having multiple road user identities – from driver, to pedestrian, to cyclist and so on – their view of the road was generally limited to one identity at a time. This detachment between identities also has broader implications for the acceptance of different policy interventions. The primary view of roads was from the perception of the car driver. Roads were seen as a space for cars and, importantly, this space was viewed as competitive, particularly in urban areas, where driving was often stressful and a 'survival of the fittest' mindset prevailed.

Cyclists

Cyclists, particularly in urban roads, were viewed by drivers as one of the most unsafe road users. There were three types of cyclists described by the participants: professionals, commuters and those who ride for fun. All exhibit different riding styles – the most aggressive and those most impacting on the car driver were the 'professional' cyclist, and those with least impact and being most safe were those riding for fun and pleasure. The urgency of the journey, together with the confidence and experience of cyclists, were key factors in shaping the participants' view of the risk that cyclists pose.

Motorcyclists

Motorcycle riders were generally viewed by drivers as thrill-seekers who looked to perform dangerous behaviours for deliberate pleasure. This, coupled with the physical vulnerability and excessive speeds, meant that motorbike riding was considered by drivers one of the least safe forms of road use. Motorcyclists themselves generally saw their riding as safe and, like some drivers, although they admitted to taking risks, saw these as justifiable and calculated, based on experience and conditions of the road.

With regard to interventions aimed at improving motorcycle safety, engineering solutions were seen by drivers to be important for this group. Three main types were identified: improving the road conditions (removing potholes, using high friction surfaces at key points); performance (limiting top speed of bikes); and creating a clearly demarcated space for bikes.

In addition, education and enforcement interventions were also deemed important by all respondents. Key issues included normalising safer driving behaviours for motorcyclists and increasing awareness of bikes for motorists – particularly in relation to reducing speed limits at urban junctions, building on the current THINK! campaign.

With regard to enforcement, safer road use by motorcyclists could be achieved by reducing urban speed limits to reduce collisions, together with greater penalties for dangerous driving on bikes – examples given included weaving in and out of vehicles and switching lanes.

Generally, interventions aimed at education were more preferred by motorcyclists themselves, while those aimed at reducing the speed and manoeuvrability of bikes were preferred by other road users.

Pedestrians

Generally, the road was viewed as a space for cars. Pedestrians were seen to be encroaching on this space and, despite the fact that all participants were also pedestrians at one time or another, they were generally viewed in an antagonistic relationship with drivers.

There was little surprise at the high levels of urban pedestrian casualties, because of the vulnerable nature of being a pedestrian. Participants generally thought a successful intervention involved segregating participants from other traffic, including more roadside barriers and bridges, which echoes the wider feeling that the road space is very much dominated by motor vehicles.

An increase in the number of 20 mph zones was considered. While at first participants were concerned about the limit being too low and potentially leading to increased congestion, the likely impact on road deaths was compelling and the trade off in terms of safety, congestion and road user convenience was viewed as acceptable. The intervention was particularly supported if targeted in locations such as schools and shopping areas, rather than blanket urban coverage. Similarly, there was majority support for the implementation of traffic calming measures in urban areas to reduce speed.

Younger drivers

Younger drivers were viewed as a particular high risk group by older people. The reasons for this fall into four categories: inexperience (lack of skills); social (peer pressure to drive fast and modifying or tweaking cars to appear and sound dangerous); financial (the use of older cars that may not be in a roadworthy condition or driven without an MOT test); and distraction (playing loud music, party atmosphere in vehicles).

Interventions aimed at improving road user safety amongst younger drivers were explored by all respondents. While rational messages – such as a safe amount to drink or a speed limit to obey – were important, respondents considerd that the power of a shocking image and associated feelings of guilt that were likely to shape attitudes. Younger participants themselves felt hard-hitting adverts had positively influenced their own driving behaviour. A key issue noted for campaigns was the durability of images and influence on behaviour when actually driving. It was suggested there needed to be roadside cues to help associate and help bring to mind latent emotions.

There were a variety of other restrictions that were thought to be potentially effective for reducing deaths among young people, such as legislation to restrict: engine size, car modification, the number of passengers allowed, and permissions to drive at night.

Although this is a qualitative study, there was strong support by participants for the measures of car crushing for uninsured and unlicensed drivers. This was also seen as an effective punishment for persistently dangerous driving behaviour amongst younger drivers.

Drink driving

While at one level participants stated a very low tolerance to the acceptability of drink driving across groups, it was acknowledged that many people still drove under the influence, and participants were willing to discuss this in a group situation. Acceptability of drink driving is low, but there was bravado over having had one drink too many and managing to have driven home without accident or reprisal. This was coupled with the fact that such incidences were considered to have occurred by chance – no one set out to drink drive, but it could be the case that people got carried away and drank more than they intended. In addition, ambiguity over the exact level of alcohol that was acceptable before driving meant that individuals took their own subjective rating of ability to drink and drive.

Zero tolerance was advocated by a variety of different groups. In addition, a variety of interventions highlighted the social nature of drinking, including the idea of a 'pub bus' in rural areas that picked up at closing time and drove people back to nearby villages or with similar points made in relation to subsidised public transport in urban areas, safe places to park cars if they were to be left overnight, and a scheme where people could hand their keys to the barman, who would then pass them back if the driver passed a breathalyser test.

Shared space

Shared space is a technique where the aim is to remove any implied priority of vehicular traffic over pedestrians, often by minimising the use of signing and other traffic management measures. This concept was generally viewed negatively. Participants generally viewed the street as competitive space and favoured segregating road users. The negativity shown by participants towards shared space is not surprising, given that many had not encountered shared space schemes and believed they were commenting on an abstract concept.

Conclusion

Acceptance of proposed road user safety interventions on the whole was quite high. However, under the closer scrutiny that the deliberative approach allowed, specific issues of fairness and impact on convenience of driving were debated. The

discussions tended to shift from interventions that impact on other more dangerous drivers to how such interventions may negatively impede their own road user behaviour.

Participants often described deliberately changing their own driving behaviour to display a deliberately managed performance of behaviour for others – a process known as identity and impression management. This was most notable amongst younger drivers, especially male drivers, being influenced through peer pressure to show more risk while driving. This was noticeable in other road users too, for example older drivers tried to show a more safe performance to impress others when driving. Sometimes the impact of others resulted in less deliberate manipulation of behaviour. Moreover, there was automatic or unconscious sticking to the norms of the road – for example, keeping up with traffic rather than keeping to speed limits tended to be a behaviour individuals displayed frequently.

As shown in previous research, individuals tended to view themselves as good drivers and others as poor drivers. They often viewed messages, through campaigns, as being for other drivers and not being intended for themselves, thus distancing themselves from the message and justifying their own belief that they were safe. It is therefore suggested that future interventions make individuals explicitly believe that: 'Yes they mean me. And yes, I can do something about it.'

Overall, the strong sense of personal control over the vehicle, perceived high skill and externalisation of threats mean that drivers manage risk by adapting to immediate road conditions. There were numerous examples of this stated, from driving fast on roads where the limit was perceived to be too low for conditions, to drink driving in country roads at night with minimal traffic. Similar issues were also brought up in relation to familiar roads and the propensity to drive on autopilot.

One of the most interesting findings from the workshops was the shift in views relating to speeding interventions: specifically, average speed cameras, 20 mph zones and traffic calming. The deliberative nature of the study illustrated that, although people were initially sceptical about these interventions, with reasoned debate in the group discussions, their views changed and acceptability increased dramatically. This strongly suggests the public are now at the 'preparation stage' in terms of change and will be willing to give these interventions a go if backed up with appropriate communications and enforcement campaigns.

The concept of shared space was the least supported intervention. Despite this, the research suggests that, because of the way in which people adjust their behaviour to minimise risks, shared space designs may enable people to be more aware of other road users and also help to re-establish norms that are guided by individual judgement, conventions and protocols, rather than a reliance on rights of way and laws.

Overall, the research highlights the importance of taking into account driving identity, road culture and risk-taking when designing interventions on the ground. As well as traditional approaches, social marketing, new technologies and the novel design of space should play a role in thinking through the 3Es (Education, Enforcement and Engineering) over the coming years.

1 INTRODUCTION

This report provides the Department for Transport (DfT) with an in-depth understanding of how the public engage with the issue of road user safety.

The DfT commissioned TNS-BMRB and the Centre for Transport and Society at the University of the West of England (CTS) to examine public attitudes to road safety in the context of other attitudes, identities, lifestyle and values. The research was qualitative in nature and brought together the views of a wide range of adult road users. The project aimed both to develop the evidence base on public attitudes to road safety and to support the development of policies aimed at improving road safety. The objectives for the research were as follows:

1. To review and synthesise existing research on public attitudes to road safety to inform subsequent research components.
2. To explore public understanding, attitudes, experiences towards road safety, getting beneath 'top of mind' responses, in the wider context of attitudes, identity, motivations, values, lifestyles, life-stages and behaviour to develop a framework to improve understanding.
3. To explore how attitudes change in response to the provision of information about road safety issues and policies.
4. To consider the relationship between attitudes and behaviour and to identify and explore the barriers and incentives to behavioural change that could result in improved road safety.
5. To inform post-2010 and wider road safety policy development.
6. To make recommendations for how the findings from this research could inform a future quantitative study.

The study used a deliberative approach to engage the public in discussions around road safety and risk. These in depth techniques are viewed as overcoming some of the limitations of top down consultative styles, providing a forum for reflective and informed discussion between people with a range of views and values. The deliberative approach built on an initial literature review (Musselwhite *et al.*, 2009) on road safety undertaken by CTS. Findings from the review are summarised next, before the methodology and findings of the research are explored in detail.

1.1 Findings from the pre-stage literature review

1.1.1 Self and others

Overwhelmingly, in the critically reviewed literature there seems to be a consensus that drivers and pedestrians see themselves as competent and safe road users and that it is other people who are more risky and dangerous. Individuals see themselves as law abiding and, if they take any risks, they do so within their own judgment of safety. Hence, they freely admit to speeding safely and consider that it is other drivers who speed unsafely.

The concept of self as safe and others as dangerous may explain the reason why there are high levels of support for stricter enforcement of speed limits and harsher penalties for dealing with poor road user behaviour, because individuals view such interventions as being aimed at other road users rather than at themselves. In this regard, increasing support for speed limiters and 'black box' technology is also found.

In addition, the management of risk when driving is viewed as being in the hands of the individual, with people distancing themselves from other drivers and collisions. As noted by Flamingo International Strategic Research (2008), drivers emotionally detach themselves from collisions, even if they have been involved in them. In short, many drivers believe their own agency is high – they are in control and therefore any collision is out of their control.

More broadly, the literature highlighted that driving identity is formed through individual and group behaviour. Specifically, people on the road identify with a particular in-group, all of whom drive safely, and an out-group, all of whom drive dangerously. Such out-groups for the general public typically include white van drivers, company car drivers, young drivers, motorcyclists and school run mums.

The review recommended that the research examined how this 'distant relationship' between the self and others is formed, maintained and justified.

1.1.2 Norms

Normative pressures were described in two different ways in the review. First, social norms appear to influence road user safety behaviour through the exchanging of attitudes. Speeding, for instance, is often viewed as justifiable, because many other drivers speed. Additional heuristics or rules of thumb maintain such behaviour, with a belief that drivers will not be caught for speeding or that authorities turn a blind eye to speeding in certain areas.

Second, peer pressure is especially evident as an influence on road user behaviour for youngsters – especially through immediate passenger effects on driving

behaviour, on adolescent pedestrian behaviours and on children's cycle helmet use. However, less well researched are the effects of peer pressure at other ages and for other types of road user behaviour.

In addition, there are also gaps in research concerning who exactly the other influential groups are – is it all others, or significant groups like themselves? Related to this, it will be important to explore how car adverts, emphasising speed and aggressive driving, influence the norms of driving behaviour. How are such themes maintained by the press, television and other popular culture? How do these normative influences affect own norms and values, and what happens when normative influence from others is not consistent or is at variance with the individual's own views?

A study of the individual differences at a disaggregate level is required to understand attitudes and road user safety. Much of the work to date has ignored interesting outliers and tends to try to treat the road using community as an homogeneous group. Where research has looked for differences between groups, it tends to have used background details, such as age, gender, driving experience and socioeconomic group to show differences between attitudes. Some studies have used post-hoc categorisation (Blincoe *et al.*, 2006; Fuller *et al.*, 2008; Musselwhite, 2004a,b) based on clusters of similar attitudes or behaviours in order to explain differences. The review recommended that such a segmentation approach could have merit in targeting specific interventions and the research should examine different road user, life-stage and attitudinal groups.

1.1.3 Road user groups

The reviewed literature typically investigated the attitudes of one aspect of road user behaviour, for instance the attitudes of drivers or of pedestrians, with little regard for the concept that drivers are also pedestrians and may at other times be cyclists or motorcyclists. The research that found greater empathy towards motorcycles by car drivers who were themselves motorcyclists or had motorcyclists in their close family or friends, suggesting this theme could be taken further for other road user behaviour (Crundall *et al.*, 2008).

The review recommended that the research needed to understand road user attitudes from the perspective of an individual: specifically, how and under what contexts do individual attitudes towards road user safety vary?

Another prevailing theme from the literature was that attitudes towards road user safety seem to vary over a period of time. Older drivers have more safety orientated attitudes than younger drivers, for example. It was suggested the research addresses at what stages in life such changes take place and what might be the triggers for such changes. Research should also ascertain to what extent the attitudes are an example of changes over time or due to cohort differences.

More research is needed on a variety of road user attitudes that have not been well covered in the past. In particular, it is suggested that research is needed to examine the attitudes of pedestrians (especially adults), motorcyclists (of all ages) and cyclists (especially adults). In addition, public attitudes towards initiatives such as shared space concepts and psychological traffic calming would be useful. Links between attitudes for other concepts linked to transport and road user behaviour would similarly be of potential value to study, not least attitudes to the environment and attitudes to road user safety – do those who think green drive more safely, for example in order to save fuel? Finally, further research needs to ascertain the role of habit in maintaining some of the behaviours, in order to reveal preconscious and subconscious decisions in aberrant road user behaviour.

It was proposed that further stages to the research should aim to uncover more detail on the above areas of interest and contention. A deliberative approach was used, targeting specific individuals in workshop settings, in order to gain insight and depth of road user views in a social context.

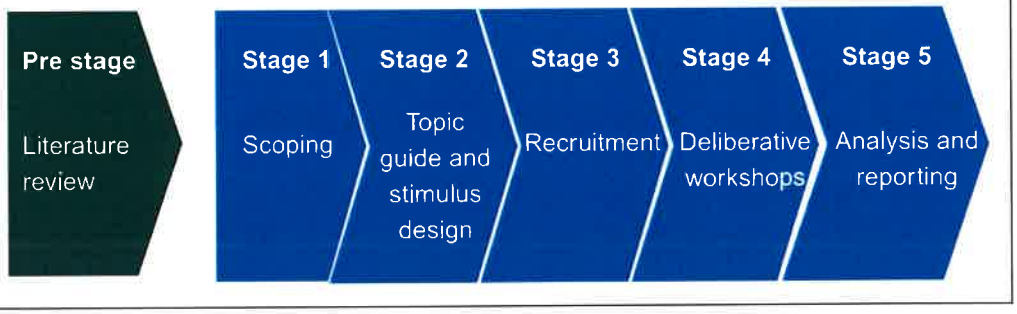
A comparison of findings from this study relative to the literature is provided in Appendix 1.

The methodology is described next.

2 METHODOLOGY

To address the objectives of the research and explore issues highlighted through the literature review, a five-stage research design was developed (see Figure 2.1).

Figure 2.1: Stages in the project



Stage 1 Scoped the issues to be addressed with the Department for Transport in response to a presentation and discussion of findings from the literature review.

Stage 2 Designed topic guides, stimulus materials and other exercises to help guide and inform discussion.

Stage 3 Involved the recruitment of members of the public to take part in the research.

Stage 4 Delivered three waves of workshops in four locations across the UK.

Stage 5 Comprised a depth analysis of the workshops and production of the final report.

A deliberative research approach was used to enable participants to discuss road safety issues in depth and engage in an informed discussion. Specifically, 240 participants were recruited in groups of ten. Participants were reconvened in three different workshops, each in turn exploring views on: risk, the relationships between different road users, and policy interventions to promote road safety.

2.1 Sample

The research engaged 240 members of the public across the following four locations in the UK:

- London;
- Bradford;
- Glasgow;
- North-west Wales (Llandudno and Wrexham).

The areas were chosen to reflect a range of socioeconomic variables as well as a mix of urban (London, Glasgow and Bradford) and rural (north-west Wales) environments. Within each area, 60 participants were recruited into one of six groups, with ten participants in each group, selected in response to gaps identified in the literature review and including different road user groups, life-stages and attitudes to risk. Specifically, in each area, the groups comprised:

Group 1: Young male drivers (YOUNG MALES)

Group 2: Those who drive for work aged 21–54. (DRIVE TO WORK)

Group 3: Those with children under the age of 16 (aged between 21 and 54) (CHILDREN IN HOUSEHOLD)

Group 4: Older people (both drivers and non-drivers aged 55+). (OVER 55s)

Group 5: Younger working people with no children yet (aged 21–34). (WORKING, NO CHILDREN)

Group 6: Individuals with different attitudes to risk. These were:

- People who predominantly take risks (Bradford).
- People who predominately do not take risks (north-west Wales).
- People who take risks when under stress (late for work etc.) (London).
- People who take risks when they think it is safe to do so (driving fast late at night etc.) (Glasgow).

Within each group, participants were also recruited to comprise a mix of car drivers, motorcycle riders, cyclists and non drivers. Each of the six groups comprised 10 participants – with a total of 60 per area.

A full breakdown of the expected and achieved sample is provided in Appendix 2.

2.2 Recruitment

Recruitment was undertaken through 'free find' techniques, where members of the public were approached face to face and asked to undertake a screening questionnaire to assess eligibility and ensure that designated quotas were accurately filled.

Two screening questionnaires were developed, the first to screen respondents based on demography (groups 1–5) and the second containing attitudinal questions for the risk groups (group 6).

Once recruited, respondents were sent a confirmation letter and phone call in the week leading up to each of the three workshops.

A staged incentive was used to minimise drop-out rates throughout the three waves of the research. £30 was given to respondents for wave 1, £50 for wave 2 and £100 for wave 3.

2.3 Experts in the process

In addition to members of the public, specialists from UWE's Centre for Transport and Society were also involved in each of the workshops. The role of specialists was twofold:

1. Factual information was provided by the Department for Transport, and the experts presented and contextualised the factual information to respondents to inform their understanding of road safety issues.
2. To act as a group resource, by answering respondents' questions and also assisting group deliberation.

All specialists were fully briefed on their role in the workshops and a moderator facilitated their involvement in discussions.

The Centre for Transport and Society team comprised:

- Dr Charles Musselwhite, Senior Lecturer in Traffic and Transport Psychology.
- Dr Erel Avineri, Reader in Travel Behaviour.
- Dr Eamon Fulcher, Senior Lecturer in Behavioural Psychology.
- Dr Yusak Susilo, Senior Lecturer in Transport and Spatial Planning.

2.4 Workshops

Participants were engaged in three reconvened workshops across the four areas. Workshops were held approximately three weeks apart. The first workshops were held during the evening and lasted for 2.5 hours. The final workshop was held over the course of a Saturday and lasted seven hours (see Table 2.1).

Table 2.1: Dates of the workshops			
Area	**Workshop 1**	**Workshop 2**	**Workshop 3**
Glasgow	15 and 16 April 2009	6 and 7 May 2009	30 May 2009
Bradford	15 and 16 April 2009	6 and 7 May 2009	30 May 2009
London	22 and 23 April 2009	13 and 14 May 2009	6 June 2009
North-west Wales	22 and 23 April 2009	13 and 14 May 2009	6 June 2009

Each workshop focused on a different road safety issue:

- **Workshop 1** explored **risk taking on the road** in the context of wider risk taking and norm guiding behaviours.
- **Workshop 2** explored the **relationship between different road user groups**, including car drivers, motorcyclists, cyclists and pedestrians.
- **Workshop 3** explored participants' views on **potential road safety interventions**, in terms of perceived effectiveness and fairness.

For all three workshops, topic guides and stimulus material were developed to guide and inform the discussion. As noted above, experts in transport policy were also available for participants to consult with regard to specific queries that emerged from debate. Details of the workshops are given next. Full topic guides, as well as an overview of the stimulus materials and pre-tasks, are in Section 3.

2.4.1 *Workshop 1: Risk and road safety*

The first workshop explored the relationship between identity and driver behaviour, within the context of wider risk taking. Specifically, it examined how these factors mediated attitudes to road safety – for instance views on whether and under what circumstances it is acceptable to break rules on the road. In this regard, the role of norms influencing road safety behaviour was also explored – both in terms of promoting good and poor driving. Key themes for workshop 1 are summarised in Table 2.2.

Table 2.2: Wave One key themes
• Expression and identity in transport and driver behaviour – understanding respondents' unprompted views on what transport modes mean to them.
• Public view of road user risk, including conceptualisation of risk, stereotypes, norms, situation/ context, perception of changes over time and habit and risk.
• Exploring aberrant road user behaviour and when it is acceptable to take risks/break rules.
• Exploring whether acceptability of various behaviours shifts with different road user perspectives,
• Pro-social behaviours, safer driving and road use.

Between workshops 1 and 2, participants were asked to undertake a pre-task to map local roads that they perceived to have significant road safety issues. This mapping exercise was used to inform the debate in the second workshop.

2.4.2 *Workshop 2: Place, identity and road safety*

The second workshop built on the previous discussion by exploring the relationship between place, identity and road safety. Specifically, it explored how location and driver familiarity influenced perceived risks, attitudes and ultimately behaviours on roads. The role of wider norms in influencing behaviours was also highlighted. Finally, participants considered issues on the road from different road user perspectives – this *different hats* session looked at the differences in perceived risks on the road between car drivers, motorcyclists, cyclists and pedestrians. Finally, responsibilities for safety on the road were also explored. Key themes for workshop 2 are summarised in Table 2.3.

Table 2.3: Wave Two key themes
• Exploring the influence of familiarity and location in terms of behaviour, risk perception and attitudes. For each group, a local map was produced and respondents were asked to map areas of high road user risk in red and low road risk in green and discuss reasons for their choice.
• Conformity and peer pressure, including discussing the influence of various different types of passengers and other road users on driving behaviour
• Responsibility and road safety – to address areas of responsibility for road user safety, including addressing individual road users, vehicle manufacturers, central government, local authorities and town planners, as well as education and schools.

Participants were asked to undertake a pre-task between workshops 2 and 3. For each of the six road safety groups outlined above, one participant was selected, provided with a video camera and asked to make a short video diary considering risks on the road. The video was then edited down and used as stimulus material in workshop 3.

2.4.3 *Workshop 3: Road safety interventions*

The final workshop sought to test various specific policy options and began with a presentation supplied by the Department for Transport, on potential interventions in road user safety. This included:

- Statistics highlighting key aspects of road user safety.
- Aims and proposed approach in the consultation on the post-2010 Road Safety Strategy.
- Proposed targets.

- Proposed new measures aligned with the consultation on the Post-2010 Road User Safety Strategy.

From here, participants considered the evidence and debated on the effectiveness and fairness of each road safety intervention in depth. As well as discussing information in the groups, they also completed an interactive voting session, which explored their views on interventions pre- and post-debate. Specifically, using audience engagement technology, participants were asked vote on whether they agreed or disagreed with specific road safety interventions. Questions were repeated at the end of the workshop to examine changes in views over time.

Key themes for workshop 3 are summarised in Table 2.4.

Table 2.4: Wave Three key themes
• **Road deaths of young drivers**, including improving the driving test; improving road user education from pre-school to pre-driver; addressing the issue of car seizure and crushing for young drivers committing road traffic offences such as speeding or dangerous driving.
• **Rural single carriageway roads**, including more camera enforcement; local speed limit reduction on riskier roads; reducing the national speed limit from 60 to 50 mph; publishing annual maps of high risk routes for local authorities to help in treating roads and for drivers and road users to help with road user behaviour.
• **Urban pedestrians**, including more pedestrian crossings; 20 mph areas across whole towns, residential areas, around schools, playgrounds, shops, markets; greater priority for pedestrians in towns; physical traffic calming measures; Home Zones and the Shared Space concept.
• **Motorcyclists**, including addressing urban junction collisions and reduced urban speeds; engineering solutions, such as high-friction surfaces; increased driver or rider education; and rural road incidents (improved by risk-mapping initiative and reduced speed limits).
• **Speeding**, including six points for excessive speeding; supporting introduction of average speed cameras; reduced speed limits on rural single carriageways and on residential streets; and continued THINK! campaigning.
• **Drink/drug driving** – remove breath-testing loophole; improve High Risk Offenders scheme; new drug-drive offence; streamlined process for impaired driving offence.
• **Driver education and training** – improved driving test, instructor information and training; life-long learning; minimum time for learning; and careless driving fixed penalty.
• **Address acceptability and popularity of all the measures and** prioritise key issues **for improving road user safety**. This was done by participants collectively assessing all interventions across a road user group and allocating (using stickers) whether interventions were a high, medium or low priority.

2.5 Analysis and reporting

All small group discussion sessions were digitally recorded and transcribed. Transcripts were then analysed through a technique known as 'Matrix Mapping'. Based on the topic guide, experiences of conducting the fieldwork and a preliminary

review of the data a thematic framework was constructed. The analysis then proceeded by summarising and synthesising the data according to this thematic framework.

When all the data has been sifted, it was mapped to identify features: defining concepts such as road user identity, finding associations such as attitudes to risk and road user behaviour, and providing explanations as to why views on certain interventions were likely to be held.

Our findings from the workshops are explored next.

3 FINDINGS: PUBLIC CONCEPTUALISATION OF RISK

3.1 General views on road safety

On the whole, respondents felt that the UK's roads are fairly safe to use for all modes of transport, and this was especially the case for car drivers. However, certain groups of road users were viewed as a greater risk – in particular, younger drivers and teenage pedestrians, though younger people were more likely to state that older drivers were also a risk. Spontaneously discussed in two of the Bradford groups was that driving is getting more dangerous over time, with drivers showing worse habits and becoming more aggressive.

There was broad agreement that motorcycling was dangerous as a whole, but not all motorcyclists were necessarily risky riders. Rather, the vulnerable nature of the motorbike compared to a car was noted, together with car drivers not having the skills, especially perceptual skills, to deal with motorbikes.

Walking and cycling were largely felt to be less safe than driving – this was especially true for cycling in city centres (especially in Glasgow and London) and walking on rural roads. Largely this was due to the vulnerable nature of walking and cycling and the perception of danger from vehicles. Also discussed was a lack of understanding and respect between different road users, which resulted in car drivers not understanding when pedestrians or cyclists have priority. This was a cause of safety concern for the respondents.

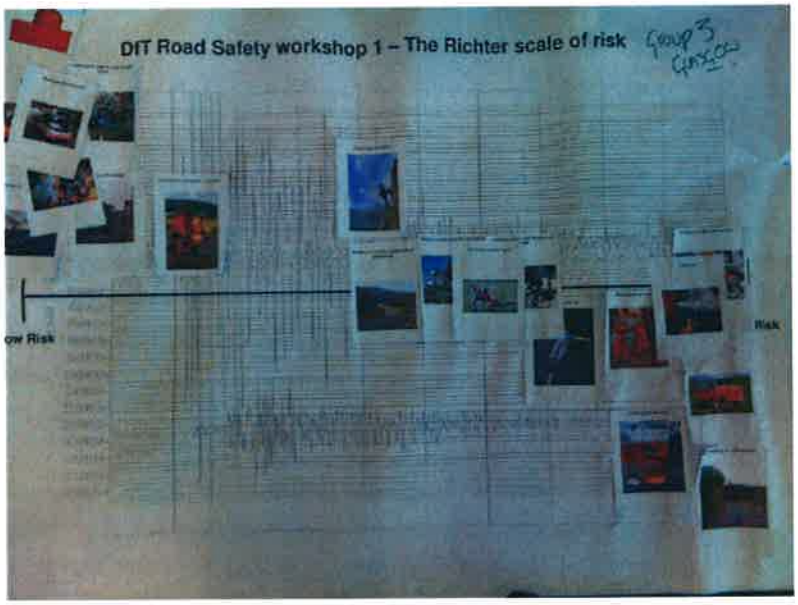
Public transport was felt to be relatively safe to travel on, although there was a discussion in two groups about the dangers of buses pulling out in front of car drivers. Amongst the 55+ age-group, there was some discussion that no transport was safe from a personal safety point of view. Other groups noted that public transport did not feel safe to travel on late at night.

Walking was noted as being particularly unsafe from a personal safety point of view in north-west Wales and also in Bradford, where respondents emphasised feeling very unsafe at night.

3.1.1 Relative impression of risk on the roads

A Richter scale of risk exercise (see Figure 3.1) was carried out in all groups, whereby a variety of behaviours were introduced to the respondents. As a group, consensus had to be reached on placing the behaviours in order of risk from low to high risk and on a scale of whether the respondents were likely to perform the behaviours or not.

Figure 3.1: Richter scale of risk exercise



Across all groups the following were usually observed:

Low risk and high likelihood to perform (in order from lowest risk):

- Reading a book.
- Getting a train from Glasgow to London.
- Bus to work (although lack of seat belts was noted by some groups making it a slightly higher risk).
- Flying.
- Car on holiday (usually low risk – though some noted higher due to unfamiliarity of roads).
- Cycle for recreation (usually low risk as assumed mostly off road and low speed).
- Pedestrian crossing (usually low risk amongst most respondents from urban areas, less agreement on the relative nature of the risk for those in rural areas who felt vulnerable when crossing at formal and informal crossings).

High risk and low likelihood to perform (in order from medium to highest risk):

- Motorcycling for leisure (generally high, as recreation associated with motorbikes tended to be viewed as testing speeds and skills).
- Cycling in rush hour (generally high risk, but depends on quality of route – off road viewed as much lower risk).

- Motorcycle to work (high risk because of the nature of going to work, which may involve being in a hurry, and habitual behaviour and negotiating rush hour traffic).
- Drink driving (on the whole agreement that it is high risk but does depend on how much someone drinks and individual tolerance levels).
- Drug driving (largely viewed as a higher risk than drink driving, especially as it is believed more difficult to detect for the police):

  'I've crashed a vehicle when I was younger after a weekend of all sorts, you know [LAUGHS]... I was talking about it the other day. We were talking about the reaction of the police because they came the next day and I couldn't even remember having the crash, my mum woke me up telling me the police were downstairs, you know. [Laughs]... And as I went downstairs it did sort of flood back. They took me up to the scene to assess the damage on the wall that I'd gone through and that was it. They never breathalysed me. They never questioned whether... I just said I fell asleep at the wheel'
  (Male, north-west Wales, children in household)
- Overtaking on blind bend (very high risk – viewed higher than drink driving, as there is even less control of what might happen):

  'You've got a chance when you're drinking and driving. You've got no chance on a blind bend.'
  (Male, north-west Wales, working, no children in household)
- Smoking (often placed as highest risk).

Less agreement was found amongst:

- Climbing (very much depends on equipment and other less predictable factors, such as wind and weather).
- Working on an oil rig (mixed between a view as high risk, dangerous work through to being heavily regulated, so not very dangerous).
- Bungee jumping (very mixed response, from very safe because of being heavily regulated, through to being very high risk).
- Walking on a country lane (mixed response. from very high risk – noted particularly by those in rural areas – to being very low risk from those in urban areas):

  'I just think rural lanes, you know, people are more likely to be hugging the sides of the road because of the width of the road so if they come around the corner and somebody's there, you know, I wouldn't like to do it.'
  (Male, north-west Wales, children in household)

'When did you last hear of somebody dying walking on a country road?'
(Male, Bradford, working, no children in household)

The exercise provided interesting insights into how respondents conceptualise risk and other aspects of road user behaviour. It highlighted that risk could differ between risk to self and risk to others. Hence, something could be viewed as high risk to an individual but low risk to others. These risks were generally tolerated.

When other individuals were affected – particularly innocent parties – this was felt to make the risk unacceptable, with respondents giving the example of passive smoking in this regard. However, dangers resulting from risky road user behaviour did not inherently get put into this category, except drink driving, drug driving and overtaking on a blind bend.

Certain participants made a further distinction whereby 'other people' could be subdivided into those directly impacted by the risk, and those indirectly impacted by the risk. Those directly impacted tend to be considered (such as the innocent party with whom the vehicle collides), whereas indirectly affected individuals (friends and family of the casualty) are less likely to be considered. Hence, participants who do not wear a seat belt believed this is OK, because it is viewed as a risk to them personally – with the wider impact on people they knew a limited influence on behaviour.

The discussion also showed how individuals considered risk in terms of both the likelihood of a negative incident occurring and the perceived consequences of the incident. Hence, they believed the likelihood of an accident on an aeroplane generally to be very low, but the severity of the consequence from such an incident would be extremely high. It has been demonstrated in other studies that people tend to be more risk averse to extreme events happening, because of this 'dread factor', but are more likely to tolerate more routine risks, such as driving (Slovic, 1997).

Overall, when participants made a decision on where the risks lay, context was key. For example, drink driving depended very much on an individual's tolerance levels, and cycling to work in rush hour is dependent on quality of roads and cycle paths as well as behaviour, attitude and skills of other drivers. In very few cases did respondents weigh up the costs of the risk against the benefits, suggesting that positive outcomes of taking the risk behaviour did not feature centrally when assessing the risk in this task.

Discussion also highlighted how differently individuals perceive risk created by them when they have control over the outcome, and risk created by others or chance factors where little control is found. Essentially, where individuals feel they have high control over the situation or the task, the perception of risk is reduced and the behaviour more likely. Generally, road user behaviour is viewed to be largely under

the control of the individual and, as such, is lower risk than some other situations, unless control is compromised in some way, such as by drink or drugs.

3.1.2 Perceptions of dangerous road user behaviour

The respondents described a number of different factors that they felt contributed to dangerous road user behaviour in general. These centred on the following aspects:

3.1.2.1 Distraction

Not focusing on the skills required to drive a vehicle as a result of being distracted, particularly by mobile phones, but also having children in the car, listening to loud music, reading billboards and road signs, looking for speed cameras, changing a CD, window shopping, putting make-up on and seeing the results of other road collisions. In addition, other aspects that centred on distraction were mentioned by respondents, including having their mind elsewhere. Discussions in particular centred on being in a hurry because of being late (especially noted by those who drive for work and those with children in household).

3.1.2.2 Failure to adjust to conditions

A lack of adjustment of driving style in relation to the environment was also highlighted – especially in terms of not adapting to changing or adverse weather. Being impaired by alcohol and illegal drugs was noted in certain groups, with tiredness and fatigue also discussed as a key issue. Eating while driving was noted to impair road user safety and was discussed in many of the groups. A minority of groups also noted that smoking and driving could be dangerous.

3.1.2.3 Poor road design and maintenance

External factors such as poor road design were discussed in an urban group, whereas the more general note on road maintenance and in particular potholes being an issue were noted by a variety of groups, especially those in rural areas.

3.1.2.4 Congestion

Congestion was noted as being a contributory issue in dangerous road user behaviour by only one group – the occasional risk takers in Glasgow.

3.1.2.5 Unfamiliarity vs. complacency

Using unfamiliar roads was noted as contributing to dangerous road use, showing that experience was key to safe road use, although one group (**north-west Wales,** 21–34-year-old young workers) did note that complacency can also contribute to poor road user behaviour.

3.1.2.6 Attitudes, personality and emotion

Attitudinal or personality factors were rarely noted, although lack of patience was noted by an older group of respondents in rural north Wales.

Emotive issues such as being stressed, upset, angry or showing road rage were discussed by groups across the board in urban and rural areas.

3.1.2.7 Peer pressure

Influence of others, resulting in individuals inappropriately showing off and behaving in a risky manner on the road, was noted by all groups but was largely discussed in terms of being more prevalent amongst younger drivers. Younger drivers also noted the influence of driving with friends as a particular cause of dangerous driving. In addition, individuals were influenced by how other people behave on the roads through norms of behaviour, with younger groups again highlighted in this regard. Computer games and the influence of films on driver behaviour were also noted as contributing to poor road user safety of others.

Driving a high-powered or new car can negatively influence driving style, an issue especially noted by younger drivers themselves. Younger drivers also noted a sense of achievement and fun with regard to driving fast and overtaking. Younger groups also mentioned driving late at night as a contributing factor to dangerous driving.

3.1.2.8 Time pressure

Time pressure was highlighted by those who drive to work and those with children in the household, with this latter group also highlighting being distracted by children in the car. Drivers aged 55 years and above did not mention any of these issues being a factor. Therefore, despite the question being generic and not about themselves directly, respondents primarily thought about this issue from their own perspective or at least from that of people similar to themselves.

3.1.2.9 Lack of skills

Lack of skills in relation to driving behaviour was only noted by one rural group of 21–34-year-old workers. Driver violations were rarely noted as contributing to danger on the roads, and speeding was only noted by one group of low risk takers in Glasgow. Driving too slowly for the conditions was noted as dangerous by only one group – the younger male driving group in Glasgow.

Although the discussion largely centred on use of vehicles, discussion on factors contributing to dangerous road use in terms of walking and cycling was also picked up. As noted, with regard to cars, factors were raised that affected the safe or skilled operation of the vehicle – including distractions, being impaired, being upset,

driving in an unusual situation. Walking and cycling, on the other hand, involved a discussion of skill problems rather than factors affecting the skill, so discussion centred on inappropriate crossing of the road, not understanding other road users, and violations such as cycling through red traffic lights. In addition, discussion on cycling also involved issues of precautions not being taken – cycling off-road when this is available, safety helmets, not having a bell, lighting and visible clothing all being noted as contributing to road safety.

3.1.3 Stereotypes and road safety

On the whole, respondents described younger drivers as key risk takers on the road, as they drive far too fast, have less experience, are over confident, more likely to want to impress their friends and become distracted by the radio. They are also less courteous, more impatient and show more disrespect. There was mixed opinion about whether they are more likely to drink drive. However, such stereotypes largely came from older groups, with younger groups stating that labels such as 'boy racer' were unfair, as they are just as likely to be good drivers. On the whole, it was felt that it was largely males, not females, that were the problem, although certain groups noted a growing number of females who were deliberately fast or dangerous drivers.

It was also discussed in certain groups that this behaviour was not just confined to driving; similar aggressive and dangerous behaviour was perceived in younger pedestrians and cyclists.

Older drivers were largely viewed as being too slow and lacking relevant knowledge, skills and experience of current road conditions. In addition, they were viewed as being a danger because of reduced reaction times. Largely this was a view held by younger participants.

Professional drivers, including taxi, lorry and delivery drivers – the so called 'white van man' – are stereotypically viewed as very dangerous and erratic.

Cyclists were also seen negatively by other respondents – being aggressive, weaving in and out of cars, running red lights and often using pavements to get to where they wanted without a thought for pedestrians. Similarly, motorcyclists were viewed negatively too by other respondents – especially with regard to speed on rural roads and weaving in and out of traffic in urban areas. These specific road user groups are discussed in more depth in Section 6.

3.2 Respondents' own driving behaviour

All groups cited that they take risks when using the road. Some of these are deliberate and some are lapses in judgement or concentration, but all come with a variety of justifications.

3.2.1 Deliberate risks

In many groups, the discussion began around speeding behaviour. On the whole, respondents admitted to deliberately speeding on occasion, but in all cases defended their decision. It was common for respondents to state they drove at a speed of their own choice that they still felt was safe – reasons for this included: feeling speed limits were too stringent or were out of date with modern technology of cars and their ability to brake more quickly; speeding when roads were empty; and speeding on motorways, which was often perceived to be of very little risk.

Other risky manoeuvres were discussed by drivers, such as inching a vehicle out into the road when turning right onto a busy main road. This was justified by the view that otherwise it would take a long time to make the manoeuvre. Running through traffic lights was also noted from simply not braking on an amber light through to admitting to deliberately going through red lights. This again was justified as taking a calculated risk – for instance, that there was little other traffic around.

Overtaking was a common risky manoeuvre and was discussed widely in relation to motorways or dual carriageways – for instance when 'other drivers were hogging a lane'. This was particularly noted by the north-west Wales groups, who often had to overtake on rural roads, particularly single carriageways, to pass slower moving traffic such as lorries or farm vehicles.

Being distracted while driving was also noted by the respondents, including daydreaming, checking self and doing make-up in the mirror, answering or using a mobile phone, map or sign reading, and eating and drinking. All such behaviours were commonly performed while driving. Other than mobile phones, all of them were seen as being only a minor risk. This contrasted with views when considering risks for other drivers, when distraction was seen as more significant.

There was admission to drink driving amongst those in the rural and London groups in particular. Reasons for such behaviour varied from being at an unusual or one-off event, such as a birthday, to more frequent drink drivers arguing that they were able to know how much drink they had had before it impaired their driving. Such behaviour generally met with disapproval from other group members.

Driving while tired was not uncommon, and a few individuals noted that they drove when they were dangerously tired. One individual stated he had crashed three times after falling asleep at the wheel. In all cases, being tired was legitimised through extenuating circumstances, including unusually long hours of work or having to drive a long distance.

Not wearing a seat belt was noted by a small number of individuals. On the whole, they viewed not wearing a seat belt as only a risk to themselves, not others, and hence as justifiable. Indeed, they all stated that they made other people in their

vehicle use seat belts, especially children. Commonly, they stated they had never got into the habit, or felt that wearing a seat belt was simply too uncomfortable. Two individuals also noted that wearing a seat belt could be dangerous in certain crashes, as individuals could not get out of a vehicle or had been strangled with the belt – in both cases personal examples were cited.

Risky pedestrian behaviour predominantly involved dashing or running across the road, dodging vehicles or having to wait again in the middle of the road to cross. Not waiting for the green man at a pedestrian crossing was also cited as a typical behaviour for those in urban areas. Crossing the road while drunk was also noted by the higher risk-taking groups.

Taking risks while using a motorbike typically involved overtaking and undertaking at inappropriate times.

Specific risks taken while cycling involved running red lights and going through junctions without stopping; typically this was amongst younger groups. Drink cycling was also noted as a dangerous behaviour. Those in urban areas noted cyclists using a towpath or footpath to reduce the danger from other traffic.

3.2.2 *Reasons for deliberate risks*

The most commonly cited reason for taking any risk on the road in any mode – walking, cycling, motorcycling or driving – centred on reducing journey time because of being late, whether being in a hurry or just wanting to get to work or home quickly:

> *'I do manoeuvres that the Highway Code wouldn't necessarily be happy with but if you don't, you're never going to get home.'*
> (Male, Bradford, children in household)

> *'I'm an amber gambler, if I'm in a rush, mostly if I'm in a rush. I won't do it, if I'm not in a rush, I'll just sit at the lights.'*
> (Female, London, children in household)

The need for arriving on time to school and work was often considered a higher priority than driving with less risk.

It was also stated that the risky behaviour was only displayed when the individual believed they could manage the risk – for example if the road was empty or it was early in the morning. Such behaviour was argued as a calculated decision.

Familiarity and habitual behaviour was also recognised as an influence on road users to take risks:

> *'You get complacent... About what you do every day.... just came to mind, familiarisation breeds contempt, you know, that's what we are saying really that the more use the same road, the less attention you pay on that road.'*
> (Male, north-west Wales, drive to work)

Norms of behaviour within certain contexts were said to fuel risk taking behaviour. This most cited norm was keeping up with the traffic flow. In addition, also noted by some respondents, was a need to behave in a manner that would be expected of them. The idea of 'playing up to stereotypes' was also used to legitimise risk:

> *'I've got a white van, so it's like that's the rule, isn't it? [laughs]'*
> (Male, Bradford, working, no children in household)

The influence of others often pressured drivers to take risks, particularly cars driving close behind:

> *'I find those sorts of situations [stressful], when you're being pressured from behind to make an erratic move which could end up causing something else, you know.'*
> (Male, north-west Wales, drive to work)

The influence of others was very much seen in pedestrian behaviour, where individuals stated that seeing other people take risks makes them do so. For instance, several groups noted that seeing individuals cross the road on a red man or where it is dangerous influenced them to make the same choice. Previous research suggests such an influence is key amongst adolescents, but it was a variety of groups who admitted to performing such behaviours in this research, including the oldest group.

Groups were split as to whether more or less risk is shown during the rush hour. One group definitely stated they took more risks in order to speed up the process of movement; another stated that they never took risks during rush hour, as it is so congested and dangerous with a variety of road users.

Certain respondents noted how risky behaviour was sometimes cathartic, helping them to get rid of frustrations. Driving in a risky manner was also said to be an ego boost, making participants feel better about themselves, particularly from those in younger age groups. In addition, the risk-taking group discussed how driving fast is fun, and, related, one younger male group in Glasgow also described crossing the road and dodging the traffic as fun.

3.2.3 Non-deliberate risks

It was a common theme that respondents often found themselves unintentionally speeding, particularly when they had been keeping up with traffic. In addition, participants noted that not paying attention to speed can mean that it creeps up significantly over the speed limit, particular when driving on clear roads. Though, overall, speeding as a result of not knowing the limit of the road was not cited as a key issue, on unfamiliar roads and those with variable speed limits it was a greater concern.

3.2.4 Changes in risk-taking over time

The majority of respondents felt their own driving had become safer with increasing maturity, largely because of increased driving experience, including: having, seeing or knowing people in accidents and learning from these; a reduction in negative peer pressure; having responsibilities such as children and a job that requires driving; a growing sense of mortality; increased tolerance for others' behaviour; and a realisation that driving faster does not actually match a reduction in time taken to travel. Younger drivers themselves also noted a change in their behaviour – stating that their driving behaviour generally became less risky as they got older. This was both as they mature, but also as the novelty and excitement wear off.

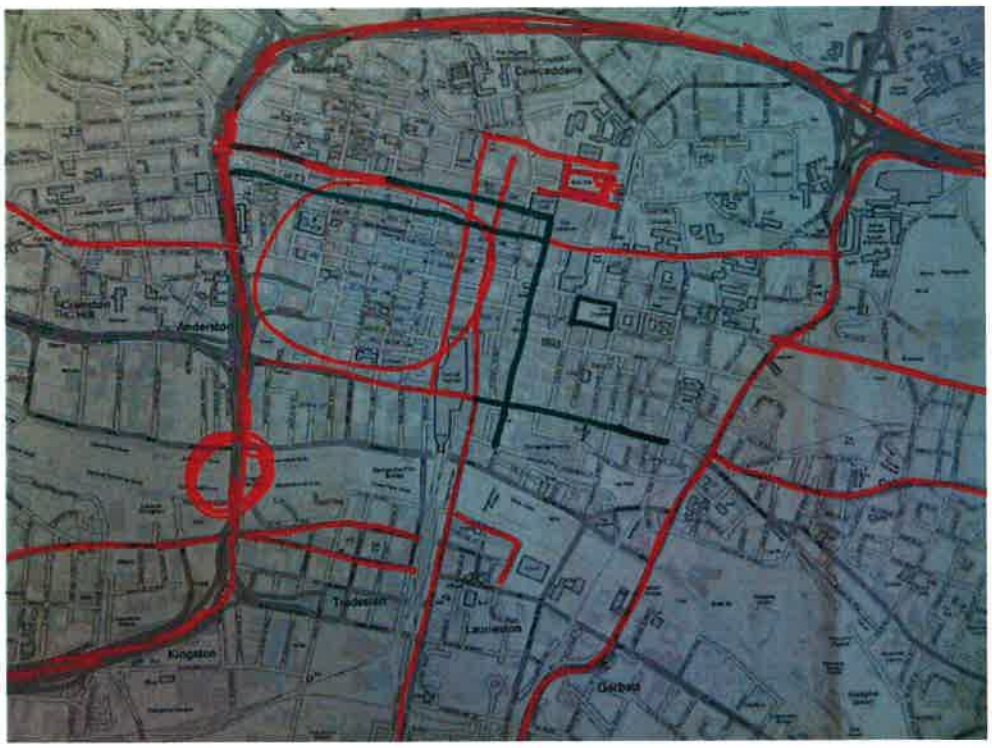
> *'I think I am better. I have calmed down a lot. I'm more aware. I used to have a moped when I was sixteen. I was hyperactive when I first started. I was here, there and everywhere, driving all day long every day. It is a new thing. But once you get used to it, it is nothing. You always feel it when you first pass, forty seems fast on a moped when you go round corners, but after you have been on the motorway and country roads, it is boring.'*
> (London, young male)

4 SPATIAL UNDERSTANDING OF RISK

4.1 Local examples of risky road user situations

As noted earlier, respondents completed a pre-task between workshops 1 and 2. The pre-task consisted of a mapping task to describe any areas of road user risk they encountered (see Figure 4.1).

Figure 4.1: **Photo of the mapping task undertaken by a Glasgow group**



The findings broadly fit two main categories – specific spatial areas of risk, and recording of aberrant road user behaviour.

4.1.1 Spatial areas of risk

Common examples of risky areas involved road user safety at junctions and roundabouts. This was a particular issue where different types of road user were interacting, such as areas of high car, cycle and pedestrian usage in city and town centres. This was compounded by larger vehicles such as delivery vehicles and buses. The location of schools, if near to a junction, was a significant issue across groups. Pedestrians were both concerned about trying to cross the road at roundabouts, as well as formal crossings being sited too close to roundabouts.

The inability of traffic lights to manage traffic flow effectively, particularly at rush hour, was a concern in certain groups. Blind spots and having obscured vision at junctions were mentioned frequently as being key areas of concern for car drivers. Tight bends at junctions also meant larger vehicles mounted pavements and had to cut across cycle lanes, which impacted on both walking and cycling. Traffic going too fast at junctions and roundabouts was also a key concern for all groups of road users.

Danger was often perceived when a number of these factors came together at once. Most of the examples come from urban groups, especially those in Bradford and Glasgow.

Busy main roads were also cited as key areas of road safety concern for cyclists and pedestrians. Cyclists often lacked room to manoeuvre and had to deal with fast or confused drivers. Pedestrians find crossing such roads extremely dangerous, and a lack of formalised pedestrian crossings was noted in many groups, especially those in the Bradford area. Examples of concern for the safety of schoolchildren came from a variety of groups, though this had more focus from the groups who had children under the age of 16 in the household. Most comments again stemmed from urban areas, but rural concerns included winding lanes with mixed traffic being very dangerous to all road users.

Residential roads were also noted as being an issue, particularly those that were long, narrow and straight, which encouraged cars to drive fast. This was compounded by problems of parking, where cars parked both sides of the road or in such a way that forced vehicles to have to use pavements in order to pass, made it dangerous for pedestrians to cross and use the street. Respondents also noted that residential roads with blind bends were dangerous:

> *'Pedestrians don't know when they can cross because there's so many blind corners. They've got a view of one way of the road but haven't got a clear view of the other way. So they can cross half way but then a car could suddenly come round the bend and they have to go back.'*
> (Female, Bradford, working, no children)

Of particular note in Bradford was a discussion on how dangerous residential areas are on main dual carriageways:

> *'My friend's house is off a dual carriageway and she's wanted to come out of her driveway, there's a bus stop right outside her house so the bus stops her view, the 40 mph road as well so she's having to judge, and obviously she's going across the pavement as well so that puts the pedestrians at risk as well.'*
> (Female, Bradford, working, no children)

A number of examples showed how the road layout can cause confusion for motorists that impacts on other road users. Poor signage and poor road markings, especially around or leading up to junctions and roundabouts, were noted as being dangerous for all road users, causing confusion and lane swapping amongst drivers. Mini-roundabouts can be dangerous, as they cause confusion for motorists, and raised roundabouts can obscure the view ahead, adding confusion. Poor road conditions can be a key problem for cyclists, and this was discussed as a particular issue in the young male group in London.

Speeding itself was seen as a key issue for road user safety. Very fast traffic near schools, in residential areas and in villages was a key issue and impacted severely on pedestrians and cyclists in particular. Where narrow roads involved high speed and a variety of users, including examples of rat-runs, this was an especially dangerous area of concern.

4.1.2 *Examples of dangerous road user behaviour*

Interestingly, examples of dangerous road user behaviour (rather than spatial analysis *per se*) came largely from north-west Wales. They involved both (a) being behind slow drivers, wanting to overtake and get home, and (b) individuals driving too fast for the weather or road conditions. A couple of examples cited poor use of signalling by another road user that could potentially have caused danger. Running red lights was observed by respondents in Glasgow and London, whereas eating while driving had been observed by respondents in north-nest Wales and London. One participant from the over-55 group in north-west Wales said they had observed youngsters playing 'chicken', egging each other on to run across a road at a busy roundabout.

4.2 Local analysis of risk hotspots

Each group was presented with a map of the local area and asked to identify key areas of safe and dangerous driving. On the whole, it was far easier for respondents to locate and cite dangerous areas than it was areas of safety.

4.2.1 *Areas of high road user risk*

Specific examples of risk included the area around bus stations in Glasgow, because of pedestrians and buses using the same space. The area around the Bradford Royal Infirmary was noted by two Bradford groups as being of high risk, because roads were narrow and residential, and people were driving around looking for parking spaces. Others in Bradford mentioned how the roads near the hospital were 'over-traffic-managed', with too many mini-roundabouts, inappropriate traffic calming measures and too many 'managed' junctions. Areas with children playing were also seen to be an area of high road user risk. In addition, slowing for speed cameras was noted as being an area with high risk, as it could cause drivers to crash into the back

of other drivers, though no one was able to cite an actual example of a crash happening in this way. Another urban problem was cars speeding up to go through traffic lights, noted both in London and Glasgow, where there were high numbers of traffic lights in a small area.

In both rural and urban areas car drivers cited roads that moved from three lanes to two, or two lanes to one, as being a key road safety issue, because drivers had to slow and merge. This was a particular issue for those in Glasgow on the motorway where it ends in the city, especially in very busy times such as the rush hour.

Cycle lanes next to bus lanes were noted as being particularly dangerous by those in Bradford with children in the household, especially very narrow cycle lanes, where they feel highly intimidated by passing buses.

Narrow fast and non-straight roads were noted as being of particular high risk to those from north-west Wales. They especially noted roads that may also have pedestrian or residential use being used as rat-runs. Speed of cars on roads was almost completely exclusively an issue for those in rural areas, including drivers speeding in residential areas and over roundabouts and at junctions.

As such, higher levels of perceived risk were generally characterised as relating to environmental factors, such as the design and engineering of the urban environment. Driver error was seen as less of a significant factor.

4.2.2 *Areas of low road user risk*

Far fewer examples of areas of low risk were noted by the respondents. Both areas with slow traffic, such as those in traffic calmed residential areas and where there are lots of pedestrian crossing and speed warning signs, and areas where traffic can go fast, such as dual carriageways, were cited. In addition, one-way streets were seen as safe by respondents in Glasgow.

For pedestrians, blocked-off streets were viewed as being very safe, because they push the traffic back onto the main roads. Pedestrian areas were noted largely as being very safe, although one group in Glasgow noted that taxis could still use parts of the pedestrian area and were a danger. Areas with lots of formalised crossings for pedestrians were also viewed as safe by certain groups.

Traffic calmed areas tended to be viewed as safe, although a view emerged throughout a variety of groups that traffic calming in poor quality estates was offset by personal safety issues from stolen cars being driven too fast.

Lower levels of perceived risk hence related to roads that were designated for one particular purpose: distinct areas for driving, and distinct areas for walking. Engineering to reduce traffic speeds was also significant in reducing risk.

4.3 Familiarity and risk taking

Each group discussed whether being on a familiar route, street or road made them drive differently from being in unfamiliar territory.

4.3.1 Familiar roads

Respondents discussed how driving on familiar roads helps them be safer road users as they are more knowledgeable about the roads, know what to expect, are able to anticipate hazards better and generally be more confident:

> *'Just confidence in knowing the road, whereas if it's like a new road then you're not sure what's coming up ahead so you don't take as many risks.'*
> (Female, north-west Wales, drive to work)

This means they are able to adjust their driving behaviour to fit their understanding of where potential risks in the road are and they are able to know key hotspots of risk and drive accordingly. However, it was also noted that familiar roads could lead to greater risk taking. Respondents described knowing what risks they felt they could take and get away with:

> *'I think if you know the roads well you can potentially take more risks.'*
> (Glasgow, group, drive to work)

Respondents noted that they were more likely to take on board 'norms' of the road, such as anticipating light changes and misusing or switching between lanes in order to get ahead of traffic, especially at busy times of the day. In addition, respondents discussed showing more risky behaviour, such as greater overtaking (especially in Glasgow), being more aggressive and driving faster (particularly those who drive to work).

> *'I used to drive all over with work, I think the nearer I got to home the faster I started going because I was more sure of the roads.'*
> (Male, Bradford, Group, Drive to work)

This led respondents to discuss if anything unusual or untoward happened then they may not be able to cope with it:

> *'maybe it does lead to accidents because the unexpected happens'*
> (Male, Bradford, drive to work)

Some cited examples of this actually leading to near accidents:

> *'There's a roundabout and nothing ever comes round that roundabout to cross over when I'm driving. And one morning I just pulled out, wasn't*

paying attention to the car coming round and I missed it by a few inches.'
(Female, Glasgow, drive to work)

It was also discussed amongst other groups that drivers in familiar settings are not thinking as much or paying as much attention:

'You don't think as much on roads that you know.'
(Female, Glasgow, working, no children in household)

'You lose your focus. You think you're home and you think that's it and then, bam, you just hit a car or something or scrape your alloys.'
(London, young male driver)

All groups were very aware of the dangers of being on auto-pilot, particularly for regular journeys, especially those undertaken for work on familiar roads:

'You probably don't pay as much attention [on roads that you know well]. You go on autopilot and then all of a sudden you're at work. You think 'Oh my God! I'm here already!'
(Female, Glasgow, working, no children in household)

'You are sort of just thinking right I have got to get there and you just, you are just in a daze aren't you?. . .Head in the clouds. You are thinking about other things but you just know where you are going and just switch off for a minute and someone could run across the road and. . . sometimes think how did I get here?; did I stop at the traffic lights.'
(Male, north-west Wales, Working, no children in household)

'Sometimes I can arrive at work and think I can't really remember the journey.'
(North-west Wales, predominate non risk taker)

It was felt that pedestrians are less likely to get complacent in familiar areas because of the anticipated dangers and potential harm due to their vulnerability,

'You are walking in an area that you know, a blind spot for drivers, you pay a bit more attention before you step across the road. You are the one who's going to be brown bread at the end of the day.'
(Male, Bradford, working, no children in household)

'You have to have eyes at the back of your head.'
(Male, Bradford, drive to work)

However, respondents did note being more complacent when crossing the road, perhaps showing higher road user risk than in an unfamiliar surrounding:

'I think if you know the area and you want to cross the road or something, you do take more risks.'
(Female, north-west Wales, children in household)

A similar argument was found throughout groups for cyclists – some stating they are less likely to get complacent and show no more risk than in a unfamiliar area, others stating they do feel they relax quite a bit and could be less attentive. Motorbike riders tended to state they broadly pay the same level of attention in familiar and unfamiliar areas, as they always have to expect the unexpected.

4.3.2 Unfamiliar roads

On the whole, respondents felt they drove much more slowly in areas they are unfamiliar with, but they were unsure whether this is any safer, as they are more likely to be distracted by looking at a map, reading a satellite navigation system or reading road signs:

'I think you'd be thinking about, oh my goodness, where's this street, where's this street, but you wouldn't be concentrating on the road. Or, did anybody see the name of that street, you know. So probably your concentration is even worse when you're in a place that you wouldn't know.'
(Male, Glasgow, risk taker)

'I don't know about being safer, you're so busy looking for the place that I don't think you're safe.'
(Glasgow, risk taker)

In addition, not knowing the local norms of the road, such as what lane should be used, was said to add to making it less safe, especially at busy junctions. In turn, behavioural aspects, such as being less confident and more nervous, can result in less safe driving. That said, overall, respondents stated that they were more alert and placed more concentration on the task than in a familiar area:

'We concentrate more, because you're thinking you don't really know were you're going so you're looking all the time and always aware of everything around you.'
(Female, Glasgow, working, no children in household)

4.4 Discussion on rural roads

4.4.1 Road user safety and rural roads

There were mixed views as to whether familiarity with rural roads resulted in better road user safety. Those who felt that familiarity led them to drive more safely and

take fewer risks on rural roads were largely from rural areas. There was a feeling amongst these respondents that, if you could drive well on rural roads, then you could drive on urban roads – with rural roads viewed as more dangerous and hence requiring a higher level of skill:

> *'On a country road there's a lot more driving involved in driving your car with the steering, brakes, accelerating, gears.'*
> (North-west Wales, working, no children in household)

Similarly, older participants in urban areas and various groups in Llandudno also noted that being able to drive on rural roads was a key skill that they learnt in the past, much of which is forgotten with increasing urbanisation:

> *'Well we are a society that uses dual carriageway, motorways an awful lot now and I think maybe we haven't got the etiquette that we should have. . ..You know, years ago we had to use these rural roads, so maybe we've forgotten how to behave on them.'*
> (Male, north-west Wales, drive to work)

Conversely, those from urban areas tended to think rural roads did not pose any extra risk and that developing driving experience in an urban area with more cars, pedestrians, traffic lights, crossings and roundabouts enabled them to drive on rural roads easily.

> *'If you can drive in a city centre you can drive in a country lane.'*
> (Female, Bradford, Working, no children in household)

They did state, however, that a problem arose when people did not adapt from urban style driving:

> *'You don't adjust your driving to suit. You're still driving as though you're on a main A road in Bradford.'*
> (Male, Bradford, children in household)

All agreed that rural roads are a particular danger for those encountering them for the first time, particularly novice drivers. In addition, rural roads can be relatively dangerous for motorcyclists and cyclists.

Speeding on rural roads was perceived as a significant safety problem. Participants stated they sped in these circumstances, as they wanted to complete long journeys as quickly as possible, and that a lack of traffic, together with fewer road users in general, meant that it was generally safe to do so.

A concern was encountering tractors and lorries. This resulted in dangerous overtaking manoeuvres on bends or with impeded view, for example. Certain groups

stated that driving too slowly can also add to dangerous road user behaviour. Rural roads were also cited as being twisty or bendy, often narrow and with poor visibility because of dense or overgrown foliage. In addition, rural roads were often associated with little space for walking or no additional space for cycling, which can be a hazard for all road users.

There were particular issues about driving at night on rural roads, with a lack of lighting and drivers not dipping headlights highlighted as dangerous. However, it was noted how driving at night on rural roads was easier if you could see the lights of the vehicles coming towards you.

A lack of police presence and of speed cameras in rural areas was also felt to allow *speeding and dangerous overtaking to take place:*

> *'I feel like I get a lease of life when I get onto a rural road, think oh I haven't got to watch out for Police and, like you say, speed cameras you think, because they're not going to be here, so I can just drive how I want.'*
> (Male, north-west Wales, drive to work)

A lack of white lines or poor signage was also cited as a problem contributing to road user safety in rural areas.

It was not always rural roads *per se* that were dangerous, but rather the nature of the journey being undertaken, particularly in terms of journey length, which may influence people to drive faster and take more risks.

> *'You sort of take your mind off the actual driving and concentrate on where you're trying to get to.'*
> (North-west Wales, drive to work)

In addition, leisure trips were associated with rural roads, and there was a feeling people would be distracted or not paying as much attention as normal. In the summer, there were often ramblers or cyclists, which added extra danger for drivers.

> *'They ride sort of like three/four berth don't they? Because they think oh it's quiet and, you know, so cycle and have a chat on the way.'*
> (North-west Wales, drive to work)

4.4.2 Improving road user safety and rural roads

A wide variety of interventions were discussed as to what might help improve road user safety on rural roads. These can be placed under the headings of education, enforcement and engineering. All three areas received support in terms of being acceptable and their impact on driving behaviour.

4.4.2.1 Engineering

There was strong support from respondents for the use of speed humps on rural roads, especially for roads travelling through villages and towns. However, rumble strips were not favoured, as they may impact on other users of the road, especially cyclists and pedestrians.

Other suggestions included straightening bends in the roads (although there was acknowledgement that this could increase the speeds of vehicles), providing more passing places on narrow roads, providing extra street lighting at night and cutting foliage more frequently.

There was less support for technologies that may take over elements of driving behaviour. For example, although there were supporters of speed limiters on vehicles, certain respondents felt that letting go of the control of a vehicle could add to the danger and cited examples of risky behaviours from lorries with limiters on trying to go as fast they could before ascending a hill or overtaking another lorry.

4.4.2.2 Enforcement

There was a belief that it was rare to use speed cameras in a rural areas, and consequently there was general support for their greater deployment. Those against greater use included occasional risk takers, as they felt people simply slowed down at the site of the camera and sped up again afterwards – this group of individuals ('manipulators') has been identified in previous research with similar ideas (Corbett *et al.*, 1999; Stradling *et al.*, 2008). There was more support for average speed cameras, which were felt to be more effective at managing traffic speed.

As noted, there was a good deal of support for an increased police presence on rural roads, which was perceived by the participants to be very low. On the whole, it was felt this would not only help keep vehicles to speed limits but also encourage better driving behaviour. As was the case with speed cameras, one group – the opportunist risk takers – noted that they felt additional police presence was ineffective, as drivers just flash each other to warn of speed traps ahead.

The idea of reducing the national speed limit to 50 miles per hour (mph) was discussed and received mixed views, often within groups themselves. It was believed the speed differential between vehicles on rural roads is very high and should be reduced. One group even discussed changing it to 30 mph or 40 mph, with exceptions to 50 mph every now and then. However, it was discussed that people, especially younger drivers, would continue to drive at their own comfortable speed and that a simple change in national speed limit would make little overall difference, unless it was stringently enforced. This was viewed as unlikely.

4.4.2.3 Education

Most support came for educational measures. In particular, respondents felt that the signs that display the number of accidents that happened in this spot in the last year are very successful in making them think more about driving and help reduce their speed and take fewer risks:

> *'There's a road when we go down to my brother's, [with a sign saying] there's been so many deaths, people killed on this road and when you read that, you think right you've got to be safe.'*
> (Glasgow, drive to work)

> *'Possibly make you think what's so bad about this road and makes you take a bit more care.'*
> (Male, Bradford, children in household)

Similarly, two groups discussed the benefits of having a sign that stated where very dangerous areas are, similar to signs they had seen in Eire.

Groups, especially those in Glasgow, tended to note that they want better signage. Young males, drivers for work and those with children in the household in Glasgow all discussed wanting more signs to warn them of the dangers on rural roads. However, for the over-55 year group, it was stated that there ought to be fewer signs, as drivers become desensitised to them:

> *'Steep hill, gradient such and such, beware of bend, beware of deer, beware of risk, too many signs.'*
> (Glasgow, over 55 years)

In addition, participants from Bradford noted that signs should be more consistently placed in rural areas, with a feeling that there is some ambiguity about where they are placed:

> *'Some of the signs are misleading, there's obviously sharp turns, and half the time you couldn't get round the corner if you tried, you know a lot of it is quite misleading.'*
> (Male, Bradford, over 55 years)

Government campaigns were also discussed in a number of groups. Some felt a well-delivered campaign specifically on rural areas would be highly useful, especially as many respondents felt there are very few, if any, campaigns currently highlighting key road user safety behaviour in rural areas. However, a debate did take place in certain groups, discussing whether a campaign would be effective. For

example, it was felt it would not have much effect on younger male drivers. It was also suggested that more effect would be seen if the campaign was delivered while the respondent was driving rather than on television in the comfort of their own home away from the dangers of the road.

5 SOCIAL INFLUENCES AND RISK

5.1 Direct impact on driving behaviour and risk from others

When considering road user safety in terms of interaction between road users, the groups spent some time discussing social influences on their view of risk. The majority of respondents admitted their driving style and the amount of risk accepted depended upon type of passenger in the vehicle. It is clear that respondents felt that people are judged based on their driving and will change and adapt their style according to what passengers may think of them – a process known as 'impression management':

> *'Well when you first get a boyfriend you're like trying to drive dead like quite sensibly, and then as you get to know each other you like show off a bit... Like drive like a boy as well... Yes, with my best friend I just drive like I normally would and I'd sort of know where to drive fast and where to drive slow and things. Friends I'm not so close with I just drive like, I don't know, a bit more carefully really, because I don't know them that well, sort of like judge me for my driving. Because people do judge you from your driving, because it's like responsibility isn't it?'*
> (Female, drive to work, north-west Wales)

There were a variety of contexts in which impression management influenced behaviour, as described next.

5.1.1 Peer pressure

Overall, the concept of peer pressure was thought to be something that younger road users, especially male drivers, faced. Most respondents recognised the peer pressure element when they were younger, especially the males in the groups, describing the need to impress friends with a more aggressive, fast, risk-taking driving style. Indeed, younger groups admitted to feeling that pressure when driving:

> *'If I was driving my pals in my car well I'd obviously drive a bit faster.'*
> (Glasgow, young males)

Younger groups also admitted to this being deliberate by stating that they change their driving behaviour depending who is in the car:

> *'It depends on what type of passenger it is, right, if it's your mum, I'm driving like a granddad, when it's my mum or if it's a child in the back or whatever, you drive safely, no matter what. Whereas, if it's your friend, I'm trying to say, you might try and show off, you might just drive how you normally drive which is you might be crazy, you might be cool, but it*

depends on the passenger, that's what I think.'
(London, young males)

This situation is magnified if a passenger is drunk and the atmosphere inside the vehicle can become rowdy and distract the driver:

'If you've got, like, two friends in the back or something, yeah, you're turning over talking to them, your friend touching your music, turning it up louder and changing the track and stuff and it annoys you or whatever . . . I realise that every time I stop, I just turn around and talk, even when I'm driving, I look at the road ahead and there's nothing there, I'll just quickly turn around and say, blah blah and then turn, do you know what I'm saying?'
(London, young males)

In addition, this group discussed how peer pressure to perform risky behaviours is actually worse when peers are in separate cars, because there is a direct comparison between peers as to who can take the most risk.

Groups inclined to take great risks when driving also noted they felt 'passive pressure' from friends – a need to impress by showing a certain level of skill associated with taking a certain level of risk.

'Friends, your peer groups sometimes would push you. . . you could even do it unconsciously, like nobody is saying anything to you but you just want to impress them.'
(Male, Glasgow, risk takers)

As people move through different life stages, especially when becoming a parent, there are pressures to conform to safer driving behaviours. Older respondents stated they often felt they were being judged by others and so had to drive extra especially safely, although the pressure on the driving resulted in them often driving with increased risk.

Finally, it was noted that participants found it hard to tell someone to drive safely. While this depended upon the relationship, on the whole it was extremely difficult for friends to tell one another directly that they believed their driving was poor or dangerous.

5.1.2 *Influence of family*

Family was a significant influence on driver behaviour, with males in particular highlighting that they drove more safely if they had their girlfriend, wife or mother in the car with them:

'It's back to holding the steering wheel with both hands and radio off. I definitely pay more attention when my mother's in the car.'
(Male, Glasgow, take risks when safe to do so)

'If it's my mum or my friends mum or anyone like that, any adult that's not like me, yes, then I will drive a bit safe or more or less follow all the rules.'
(London, young males)

Nervous parents were an issue impacting on safe road use, especially those who used the 'invisible brake pedal'.

Almost all respondents stated they drove much more safely with young people in the vehicle, both with their own and other people's children:

'I'm always a wee bit more careful... especially if it's other people's children, not that I don't rate my own children but other people's children, just the thought of going and saying, "By the way I crashed my car with your wean in it."'
(Glasgow, Group 6)

Finally, while there were examples of children causing driver stress and distraction, on the whole parents were able to habituate against 'squabbles on the back seat' and continue to drive safely. It was also noted in two of the groups how children can influence their parents' behaviour, for example children saying 'slow down' or 'be careful' means the parent drives more cautiously.

6 DIFFERENT HATS

As noted earlier, an aim of the research was to examine how different road user groups view one another and relate to different road user identities – drivers, cyclist, pedestrians and motorcyclists and so on.

Overall, it should be noted that there was relatively little reflection on the relationship between different road user groups when considering road safety. Despite participants having multiple road user identities – from driver, to pedestrian, to cyclist and so on – their view of the road was generally limited to one identity at a time. While participants would describe their point of view from these identities, one identity (e.g. as a resident, I want traffic to slow down) did not inform another (e.g. as a driver, I feel it safe to drive over 30 mph in a residential area). This 'segregation' of road use, manifest in the physical design of roads, was also marked in attitudes and worldview of road users. This detachment between identities also has broader implications for the acceptance of different policy interventions.

6.1 Car drivers – the dominant perception of the road users

The primary view of roads was from the perception of the car driver. Roads were seen as a space for cars and, importantly, this space was viewed as competitive, particularly in urban areas, where driving was often stressful and a 'survival of the fittest' mindset prevailed.

Other road users were viewed as encroaching on the space of the car. There were many examples of this – from motorcycles speeding past cars and overtaking in blind spots; pedestrians stepping onto a road without due care and attention; cyclists jumping lights and pulling out into traffic. These were not just viewed as unsafe behaviours in themselves, but as exploiting and misusing space – breaking rules and norms on the use of the road.

Other car users were also a significant concern in this regard – viewed as aggressively moving into spaces in traffic unless people drove in an equally aggressive way. The competitive nature of the road generally raised levels of stress when driving and also normalised bad driver behaviour. Respondents stated they were more likely to undertake behaviours that they knew were unsocial – driving close to other drivers so that others would not try and overtake, or using the horn as a rebuke, for instance – because of negative environmental influences.

6.2 Cyclists

Cyclists, particularly on urban roads, were viewed as one of the most unsafe road users by other respondents. Participants categorised cyclists in three ways: professionals, such as couriers; those using it for travel to and from work, such as

commuters; and those using it for leisure or pleasure. Interestingly, this corresponds to cyclists types in previous research (Jensen, 1999).[1] Respectively, each of these three groups was seen to exhibit varying levels of safety on the roads.

The least safety conscious were couriers, often characterised as aggressive riders, with a greater concern for arriving at their destination than for other road users. Behaviours such as jumping traffic signals, riding across pedestrian crossings, as well as riding too fast for conditions, were significant issues. It was thought that the confidence and experience of cycle couriers led them to take excessive risks on the road – with them desensitised to risk through numerous 'near death' encounters.

Commuter cyclists were also a concern to other respondents, particularly in urban groups. During rush hour, the sheer volume of cyclists created problems in terms of use of road space – with people spilling over from cycle lanes and, in particular, cutting in and out of stationary traffic. 'Fair-weather' commuter cyclists were a particular worry, with people cycling in summer without the necessary experience to negotiate roads effectively. The fact that many commuter cyclists were rushing to and from work was also seen to precipitate risky road user behaviour. More broadly, there were also concerns around the visibility of these cyclists at night or in the rain, with people often riding without lights, helmets or wearing dark clothes.

Those riding for pleasure were generally believed to be the safest group, though this varied with age and context. Young riders were considered to be a particular risk by other respondents – with children cycling on residential roads highlighted. Older males, particularly male children, were a concern, particularly in terms of taking risks for thrill. Dangerous behaviours included doing wheelies, pulling out into traffic, cycling on pavements and 'car surfing' – where people were pulled along by holding onto the back of a moving vehicle.

Respondents highlighted cyclists as one of the most at risk, because of the lack of physical protection relative to other vehicles and their general proximity to cars on the road. In addition, the urgency of the journey, together with the confidence and experience of cyclists, were key factors in shaping participants' view of the risk to this group.

From the perspective of cyclists themselves, their visibility and awareness of other road users were primary concerns. Cyclist often travelled with the expectation that other road users had not seen them. Amongst the most dangerous behaviours were: pedestrians stepping out into stationary motor traffic when cyclists were still moving; parked cars opening their doors into the path of cyclists; and car drivers turning without indicating or without checking their mirrors.

1 Jensen (1999) categorised three types of cyclist: users of the heart (linking to our users for fun and pleasure); users of convenience (linked to our category of commuters); users of necessity (linked to our category of professional cyclists).

6.3 Motorcyclists

Motorcyclists were also perceived to be a group more likely to be at risk of accidents on the road. This was due to perceived behavioural characteristics of motorcyclists – who were viewed as 'thrill seekers' – as well as observed behaviours on the road, such as weaving between cars or riding in 'gangs' on country roads. This, coupled with the physical vulnerability and excessive speeds, meant that motorbike driving was considered one of the least safe forms of road use.

The issue of 'competitive space' emerged between car driver and motorcyclists in particular, and it was suggested that there was a lack of mutual awareness and consideration between the two groups. On the one hand, respondents reported that car drivers often neglected either to give space to or look out for motorbikes – this was a particular concern when cars suddenly switched lanes in slow moving traffic or turned right at junctions. On the other hand, respondents reported that motorcyclists often drove too fast around cars, undertook cars in nearside lanes and did not consider the blind spots of drivers. Generally, drivers were only sympathetic to motorcyclists if they rode motorcycles themselves.

Experience was also a key issue with regard to the perceived safety of motorcyclists by respondents. This was cited in relation to 'hobby riders' who go out on weekends and may own a bike that is too powerful for their level of experience. It was also noted in relation to younger motorbike riders, particularly riders of scooters, who were viewed as driving in a reckless fashion, often not wearing helmets and driving dangerously on residential roads, particularly housing estates.

Motorcyclists themselves noted how they would adapt their style of riding for the road and conditions, with certain respondents noting that they enjoyed being able to drive fast, particularly on country and rural roads, because of the excitement and sense of freedom that it gave them. They also stated that they generally drove more safely and with more awareness in city conditions (see also Broughton *et al.*, 2009).

6.4 Pedestrians

Despite the fact that all participants were also pedestrians, the latter were generally viewed in an antagonistic relationship with drivers – and again the idea of a contested and competitive space emerged. As roads were generally viewed as places for cars, pedestrians were often viewed as encroaching on this space. Indeed, many respondents struggled to respond when asked to think from a pedestrian perspective; instead, they tended to discuss pedestrians in terms of their impact on car drivers. Others acknowledged that, although they had frequently observed driver behaviour as a pedestrian and felt it to be unacceptable, they also behaved in a similar way once they were behind the wheel.

As noted earlier, the relationship between individual control and safety was important in understanding the relationship between pedestrians and car drivers – with pedestrians particularly fearful because of the lack of personal control in the event of an accident. Moreover, car driving isolated people from the perspective and experience of other road users, to the extent that relative perceptions of speed and safety were altered – a '40 mph consciousness':

> **F:** *'You do look at it differently because whilst you are driving you think I am in control of this car, when you are walking down the street you think I am not in control of that, somebody else is, and you think if anything happens there's nothing I could do to stop it.*
>
> **M:** *I was just thinking that when you are driving a car, . . . forty and thirty mile an hour zone, you don't think its travelling fast.*
>
> **M:** *But when you are walking and somebody goes past you at forty, you think oh that's fast.'*
> (North-west Wales, drive for work)

With this in mind, pedestrians were generally very attentive of vehicles. It was noted that, whereas vehicle drivers used to stop and allow pedestrians to cross the road, it was increasingly the norm to see pedestrian deference to the car – even on areas such as zebra crossings. Overall, groups of parents with young children generally were more concerned about pedestrians, and particularly younger road users.

6.5 Younger drivers

All groups acknowledged that young male drivers were a high risk group, with media coverage and high insurance premiums for young males reinforcing this perception. While it was argued in certain groups that it was unfair to label all young drivers as reckless, others (including younger drivers themselves) noted that a combination of experience, attitude and peer pressure resulted in risky road user behaviours.

There were seen to be many contextual factors that could impact on the driving behaviours of young males relative to other groups. Certain concerns related to the choice of vehicle: such as driving a car too powerful for their level of experience; modifying or tweaking cars to appear and sound dangerous; and the use of older cars that may not be in a roadworthy condition or driven without an MOT test. Others related to the level of concentration on driving, with concerns that playing loud music both distracted people and could encourage poor driving behaviour.

The symbolic role that cars played in the life of young men was also noted. This was not only in terms of the freedom and the status it conferred, but also in terms of thrill seeking and driving fast for the 'adrenaline rush'. Certain young male

participants highlighted that they were 'programmed' to drive at high speeds and were generally fearless of consequences. The glamour of driving fast, captured in films and programmes such as *Top Gear* and *Men and Motors*, was also highlighted.

As noted earlier, bravado and peer pressure were seen to have influence – with young males viewed as more competitive and tempted to 'drive to impress' more than other groups. Their immaturity was seen to make them less able to recognise the potential consequences of their action, less observant on the roads and over-confident in their own skills.

It should be noted that, when these issues were discussed by young males, in general it was reported that dangerous driving was done by friends, their peer group, or themselves at a younger age – it was not generally flagged up as a concern in terms of current behaviour. However, during more detailed discussion of road safety issues – drink driving or speeding, for instance – there was a greater recognition that participants often undertook unsafe driving behaviour and were concerned and felt guilty about it. This was almost a subconscious admission – with participants seeming to distance themselves from this view when considering driving in general.

As will be explored next, many of the interventions felt to be most effective for this group related to deconstructing this view of themselves on the road – both in terms of the identity it formed for them, but also by tapping into these more latent concerns that emerged during the group discussions.

7 INTERVENTIONS

In the final workshop, a number of potential interventions relating to DfT's road safety strategy consultation were explored. The interventions focused on one of three categories:

- Different road users: specifically reducing deaths among young males, urban pedestrians and motorcyclists,
- Different roads: specifically reducing accidents on single carriageway roads.
- Different behaviours: specifically speeding and drink and/or drug driving,

In addition, interventions aimed at driver education and training were also discussed in depth.

Each intervention was assessed in terms of its perceived effectiveness and fairness. In addition, interactive voting technology was used to gauge overall views on acceptability both prior to a post-discussion.

7.1 Reducing deaths among young males

As noted earlier, for this group in particular there appeared to be strong cultural influences on driving behaviour – with inexperience, ego, bravado and peer pressure creating pressure to drive in particular ways. As a consequence, when this group was considering road safety, there was more of a focus on emotional and symbolic interventions than for any other group.

There was a strong view that young males may only respond to extreme messages and strict penalties. The group was perceived to be very difficult to reason with and also most likely to not listen to authority. High impact interventions that send a tough message to young males were hence needed.

7.1.1 Campaigns

First, the role of education and the importance of emotional power in government campaigns was highlighted. While rational messages – such as a safe amount to drink or a speed limit to obey – were important, it was the power of a shocking image that was considered more likely to shape the attitudes. Of these respondents, participants in young male groups stated that there were a number of hard-hitting adverts that had influenced behaviour:

> **M:** *'The little kid who gets hit lying by the tree. The one who is unbreaking himself; it is kind of the reverse of a crash, it scares the hell out of me.*

M: *And the one where the kid who is everywhere when he wakes up.*

Q: *BUT DOES IT AFFECT YOUR DRIVING OR DO YOU JUST THINK "THAT'S AWFUL"?*

M: *No, the bloke . . . the one that is video recorded. He is walking back and he doesn't see the car and all you see is this car just take him out. That is the one I always think of when I am driving, just walking and he doesn't even realise, a car doing thirty or forty just smashes the hell out of him.*

M: *The advertisement with kids and stuff would make me more scared of hitting someone or getting into an accident than getting a punishment. Hurting someone else would affect me more than getting punishment.'*
(London, young males)

The adverts were described as effective not only because of the dramatic nature of the crash, but also because it was associated with strong feelings, such as guilt, remorse and long-term consequences of such actions. Being able to convey the feeling of having killed someone and the impact on the victim's family was also viewed as compelling.

A key issue noted for campaigns was the durability of images and influence on behaviour when actually driving. It was suggested there needed to be roadside cues to help associate and bring to mind latent emotions. A number of groups highlighted the need to mark scenes of road traffic deaths – such as a French campaign that uses silhouettes. Whatever the case, it was thought that they needed to be innovative approaches to communicating road safety messages when driving.

More broadly in terms of road safety education, a number of groups highlighted the need to focus on early education and increase the outreach in schools – particularly to take the glamour out of driving and to 'shock youngsters'. However, whilst the principle of this intervention was supported by younger participants, its effectiveness in practice was questioned. There was seen to be a particular difficulty connecting with pre-drivers through school outreach programmes – with young male participants stating they did not really engage with road safety campaigns in this context.

7.1.2 Enforcement

The second key area was enforcement. Whilst all groups highlighted the key role of greater punishment of aberrant driving behaviour of young people – in particular increased penalty points and a clamp-down on dangerous driving of young people by the police – it should be noted that, from the perspective of young people, penalties had to be severe and symbolic to work effectively.

In this regard, points were not always viewed as an effective deterrent, with certain younger participants highlighting they had an expectation that they were likely to get some points on their licence – particularly in relation to speeding. It only became a deterrent when individuals were at risk of losing their licence or when it added significantly to an insurance premium. In this regard, certain groups endorsed having a lower threshold for young drivers during a 'probation period' of up to two years after having passed a test – with such drivers losing their licence when getting six points. In addition, it was also argued that licences should be at risk for minor offences during this probation period, as a way to instil driver responsibility. It should be noted that these interventions were unpopular with younger groups.

Across the sessions as a whole, a majority of participants supported the measures of car crushing for uninsured and unlicensed drivers.[2] While support for the option declined during the discussion, this was mainly due to it being seen as wasteful rather than perceived as unfair to the individual. While seizure of cars was appropriate, it was argued they should be sold on for charity rather than crushed.

There was less support from those participants aged 17–20, and also those who were in education and training. There was greater support for the intervention for those participants who were retired and for those with children in household.

This intervention was also discussed in relation to a punishment for young male drivers who persistently drove in a dangerous manner. From the perspective of young males, it was seen as severe but potentially very effective deterrent – because of the symbolic nature of crushing a car and the emotional importance of vehicles to young people. In particular it was seen as a means of making 'young people learn' – in a way which other interventions may not be able to do. In this regard, there was support for car crushing for young people, as a penalty in general if maximum points were reached on a licence.

There was a variety of other restrictions that were thought to be potentially effective for reducing deaths among young people – such as restrictions on engine size and legislation to restrict car modification. Two interventions in particular were explored in depth – curfews on young drivers and reducing the number of passengers that newly qualified drivers were allowed to carry. Whilst these interventions were supported to a degree, the practicality of implementing them was thought to be a limitation. Overall, there was more support from women: social grades C2DE, those aged 35–54 and those aged over 55 years. There was less support from those aged 17–20 and those in education and training.

2 Audience voting technology was used in workshop 3 to ascertain the relative support for different policy options and examine any differences between sub-groups.

7.1.3 *Training*

The final area covered was that of the adequacy of the driving test and the concept of life-long learning. It should be noted that participants across all ages in all groups, including young males, highlighted that they saw a distinction between leaning to drive through a formal training and driving in real life. The driving test was viewed as a means to an end – in terms of getting a licence. They felt that nobody actually drove in this way in reality, and it was in the period after the test that individuals formed their true driving styles.

In terms of the adequacy of the test, groups highlighted a number of concerns in relation to it needing to cover driving in different weather conditions, as well as driving at night, on the motorway and compulsory city driving. It was also felt that people should have to clock up a minimum number of hours driving to pass the test. Certain groups argued that the use of P-plates should be compulsory for newly qualified drivers, and a minority of groups highlighted that the minimum driving age be raised to 21.

7.2 Reducing motorcycle fatalities

As noted earlier, because of the physical lack of protection and a propensity to take risks when driving, motorcyclists were seen as one of the most vulnerable groups of road users. Though anticipating traffic accident rates to be high, participants were generally shocked at the levels of fatalities in the UK, relative to total volume of bike traffic. The predominant interventions for motorcyclists focused on engineering solutions – mainly because they were seen to offer greater support for a dangerous mode of transport. In addition, education, enforcement and risk mapping were also highlighted.

7.2.1 *Engineering*

There were three main types of engineering solution that were seen to be important for this group:

Road conditions: this ranged from the maintenance of road surfaces by removing potholes through to the potential use of high-friction surfaces in areas where accidents were more likely to occur – such as at junctions (though there were concerns as to the expense involved to do this properly).

Performance: potentially limiting the top speed of bikes through manufacturing restrictions and also increasing the protection that bikes could afford in an accident

Space: demarcating a clear space for motorbikes on dangerous roads, such as a dedicated lane – such as was the case on certain roads in China.

Despite these solutions being generally supported, there was concern that they may be potentially unpopular with bike riders – reducing the speed of bikes and the thrill of driving on the road. Certain motorcyclists highlighted that the key problem was with poor car drivers rather than with their own proficiency on a bike. Political acceptability, as well as cost, is thus likely to an issue for these interventions.

7.2.2 *Education and enforcement*

In addition to engineering, education and enforcement interventions were also deemed important. These were aimed at two main areas: normalising safer driving behaviours for motorcyclists, and increasing awareness of bikes for motorists – particularly in relation to reducing speed limits at urban junctions. It was noted that, while campaigns to increase awareness of motorbikes had been memorable, particularly the recent THINK Bike campaign, there were still considerable concerns as to the visibility of bikes on the road. Indeed, certain groups advocated that it should be compulsory for cyclists to drive with their lights on and wear reflectors on helmets or other luminous clothing.

As noted earlier, a significant concern was the lack of mutual awareness and consideration between motorcyclists and car drivers. In this regard, any future campaign could also be aimed at the need to share the road: for motorcyclists to address dangerous driving and for drivers to be reminded to be vigilant for bikes.

Tied to this, intensive education and training was supported for motorcyclists – particularly for younger bike drivers on 50 cc bikes. It was suggested that young or novice drivers should be made to use L plates for two years after compulsory basic training. As well as driving proficiency, training could also address more attitudinal and emotional aspects of riding, including how to control impulses to speed and how to resist the adrenaline rush and take fewer risks.

With regard to enforcement, a key issue explored was the potential of urban speed limits to reduce collisions, together with greater penalties for perceived dangerous driving on bikes – such as weaving in and out of vehicles and switching lanes. Whilst such measures were thought to be effective, again they were believed to be unpopular with bike riders, as they would limit the perceived convenience and freedom of owning a motorbike. Indeed, while other road users disapproved of these perceived dangerous behaviours, they were the norm for motorcyclists – described by one London motorcyclist as 'the bikers' code'.

With regard to the greater use of speed cameras to enforce vehicle speeds at junctions, this was advocated particularly if the money raised was hypothecated for other engineering solutions, such as road surfacing. Notwithstanding this, certain groups felt that visibility in urban areas, rather than excessive speed, was a bigger cause of motorbike accidents.

7.2.3 *Risk mapping*

Finally, the idea of risk mapping and reduced speed limits on rural roads was seen as potentially effective – particularly as certain motorcyclists highlighted that they changed their driving behaviours and increased speed and took greater risks on these roads. However, there were concerns as to whether general publication of high risk routes would be effective, and that specific roads would need to be highlighted when driving through the location (e.g. by static message board or sign or symbol). Information could also be fed into satellite navigation systems to mediate actual behaviour. This issue is explored in more depth in the next section.

7.3 Rural single carriageways

In most cases respondents were initially surprised when presented with the high casualty rate on rural roads, particularly in relation to the relatively low figures for motorways.

It was assumed that motorways would see more serious incidents than rural single carriageways – this was usually ascribed to greater volume of traffic combined with a higher speed limit.

On reflection, respondents highlighted a variety of issues on rural roads, with hazards including:

- Narrow and often winding single carriageways, with traffic in both directions potentially travelling at high speed.
- Confusion over the speed limit on rural roads, with ambiguity as to whether it was 60 or 70 miles per hour.
- Limited visibility, such as blind corners, hidden exits, lack of lighting and scarcity of cats' eyes for night driving, high/overgrown hedges and so on.
- The inconsistent maintenance and repair of rural roads was seen as a contributory factor, with a perception that urban roads are given higher priority.
- Lack of speed cameras and police enforcement on rural single carriageways. Particularly when paired with a lower volume of traffic and a 60 mph speed limit; these factors were seen as creating a set of conditions that encourage speeding.

The inconsistency and unpredictability of rural roads were a common theme, and certain groups highlighted that many drivers were unfamiliar with the appropriate driving style for rural single carriageways.

Over the course of discussion, respondents spontaneously suggested a wide range of potential interventions to increase road safety on rural roads. These are highlighted next, together with specific interventions considered by the Department for

Transport in its post-2010 ten-year road user safety strategy consultation document (Department for Transport, 2008) – namely a reduced national speed limit; lowering speed limits on specific high risk rural roads; and the publication of risk maps.

7.3.1 Improved visibility and highlighting hazards

Respondents suggested improving visibility by reducing the height of fences, hedges and other foliage where appropriate. It was felt that landowners had a responsibility to maintain their boundaries and ensure that, where possible, livestock does not stray onto roads.

> *'If you can't see what's around the corners, you don't really know what speed to take it at, you know, apart from going at 10 mph around everywhere.'*
> (Bradford, young males)

Particularly sharp bends could also be preceded by rumble strips on the road surface and/or warning signs counting down the distance, as found on motorways. Provision of convex mirrors at concealed entrances would allow drivers to pull out safely. Some felt that rural single carriageways currently offer few opportunities to overtake slower traffic; it was felt that this caused frustration and prompted risk taking – as such, more passing places should provided to assist traffic flow.

> *'They can't wait, can they? Somebody's doing 40 mph and they want to get somewhere, they'll have a go and overtake anyway, won't they? And these cars are so quick today, they can come whipping in and out, can't they? So they take a chance.'*
> (Male, north-west Wales, working, no children in household)

Overall, emphasis was placed on highlighting fixed hazards for road users and opening up the road user space.

7.3.2 Clearer speed limits and enforcement

As noted above, there was a good deal of ambiguity as to the speed limit on single carriageway roads – with certain respondents confusing it with the national speed limited for motorways. As such, calls for better signposting of speed limits on rural roads was common, and it was suggested that the generic 60 mph speed limit could be replaced by variable speed limits on different roads, decided at a local level. As well as making the speed limit clear and explicit, respondents suggested an increased use of electronic signs to remind drivers of their actual speed. There was also support for signage displaying casualty figures at the roadside to highlight particularly hazardous stretches.

Average speed cameras, while slightly unpopular in a rural context, were seen as a reliable way to reduce speeding. It was acknowledged that the sheer number of rural single carriageways covering huge distances presented a significant problem for police enforcement activities. Discussion of lowering the national speed limit often prompted the response that any reduction would be largely ineffective without sufficient enforcement:

> **M:** *'I don't think that would work. People probably would do 60 mph, at a push you would do that on rural roads but you are not going to change to that.*
>
> **F:** *I think more presence of traffic police to, let you know they are in the area and rather than just putting it down to 50, because people will do 70 if the road is empty. But if they think the traffic police are out..'*
> (Glasgow, children in household)

When it came to the popularity and acceptability of a reduced speed limit, it was felt that this would hinge on a clear rationale being given:

> *'It would be nice to know what the statistics are, you know, in that reduction of like 10 mph, I think if people were informed that that reduction was going to mean that, you know, so many less people were killed on that stretch, I really don't think people would be that bothered by it.'*
> (Female, London, drive to work)

7.3.3 Education, information provision and risk mapping

Provision of information on the hazards of rural roads could be provided while individuals are learning to drive, through theory and direct experience of rural roads with an instructor. It was also argued that the driving test itself could also include a specific rural element. More broadly, future THINK! campaign communications could also address the issue of rural driving hazards.

When risk mapping was discussed in more detail, it was generally a very popular idea, particularly when presented in relation to formal law making and other interventions to improve road safety.

Support was very high across sub-groups, with the exception of those not in employment, education or training (NEET), where support was less high.

However, this support may be an artefact of a desire to have fewer regulations on the road rather than a belief that risk mapping would be effective. In discussions, respondents had little confidence that local authorities would make use of risk maps in addressing problem areas. As noted earlier, there was seen to be little benefit in

publishing risk maps unless they were easily available and practical to use. Many said they wouldn't make the effort to seek the information out, but if risk information were included in mainstream road maps and satellite navigation systems their usage might increase. Specifically, respondents named services such as Google Maps and the AA's website/journey planner.

> *'It's got to be the things that you're going to use anyway, rather than making it a separate thing you have to go and find...'*
> (Female, Glasgow, working, no children in household)

7.4 Drink and drug driving

While at one level there was stated to be a very low tolerance to the acceptability of drink driving across groups, it was acknowledged that many people still drove under the influence. A significant proportion of respondents admitted to drink driving in the groups. Although this was often met with disapproval, it often prompted other stories of similar experiences from other members of the group. Hence, while overt drink driving was seen negatively, the willingness of people to discuss their stories suggests it is more socially acceptable than it would first appear. This is particularly the case if the result was a successful incidence of drink driving (for example, 'I managed to drink drive and lived to tell the tale' by not being caught by the police or having an accident or even a near miss). Drink driving was viewed as wrong only when the final result is an accident or being caught, so to have done it and survived is seen overtly as wrong but borderline permissible. This is further strengthened by individuals stating that they perform such behaviour as a one-off event. The primary reason for this was that people did generally not set out with the intention to drink and drive, but rather after a couple of drinks were more likely to end up staying out and drinking more than they planned – certain groups acknowledged the role of peer pressure in this. It was believed that people generally thought they could get away with drink driving and saw the chances of being caught as low.

While the social acceptability of drink driving had undoubtedly decreased over the past few decades, norms were relative and related to context. For instance, certain participants, particularly in rural areas, argued that it was al right to drink and drive if the journey was short, there were few cars on the road and there were limited or costly alternative transport options. The general availability of drink and the social nature of 'going to the pub' were also cited as key factors – with groups viewing drink driving as an example of a wider problem of alcohol consumption in society.

In relation to drug driving, it was also argued that the chances of getting caught were very low, given there were no current roadside tests. The predominant discussion of drug driving focused on cannabis use, rather than harder drugs. Certain groups, for instance in London, highlighted that it was relatively normal within particular peer groups to smoke cannabis and drive.

There was low awareness of the statistics around the road traffic accidents caused through drink and drug driving – with groups both over- and under-estimating values relative to official records.

There was also significant uncertainly as to what constituted being over the alcohol limit, and the unit system was thought to be very unclear. Not being able to distinguish the alcohol content of different drinks was also viewed as an issue. People often relied on more subjective measures such as 'whether they felt alright to drive' and also took into account factors such as body size and alcohol tolerance. Given this, a significant and diverse proportion of groups (over 55 years Bradford and London; 21–34 Glasgow and London; Glasgow, working, no children in household; rural male drivers; risk takers; non-risk takers) advocated a zero alcohol limit for drivers – though there were also concerns that such an initiative would not be supported nationally.

Given the social stigma of drink and drug driving, increased penalties and enforcement were perceived as acceptable, relative to other dangerous driving behaviours. Participants also did not know the precise nature of current penalties for drink or drug driving, though they generally believed these would involve the loss of licence and a fine.

In addition to enforcement, it was also argued that it is important to try to assist people make better choices about drink driving, by tackling the broader factors that precipitated the behaviour. This included the lack of alternative transport and the 'one for the road' culture. Certain groups highlighted the idea of a 'pub bus' in rural areas, which picked up at closing time and drove people back to nearby villages, or with similar points made in relation to subsidised public transport in urban areas. There also needed to be safe places to park cars if they were to be left overnight. It was also argued that people could hand their keys in to the barman, who would then hand them back if the driver passed a breathalyser test. There was also the potential for the community police officers to undertake spot checks outside pubs.

In terms of specific interventions, removing drink driving loopholes was supported – it was generally seen as commonsense and non contentious. An 'on the spot' breath test was viewed as fairer and harder to avoid for offenders – though minor concerns were raised that it would not deter heavy drinkers from drink driving and would more likely penalise people who had had a few glasses of wine with a meal and driven home. The reliability of breath tests was also questioned in this regard. Certain groups also highlighted the use of in-car technology that would cut the engine out if you were driving erratically – or the need to blow into a breathalyser before the car could start.

In terms of drug driving, the idea of developing a test and creating a specific offence was also strongly supported – with participants shocked and surprised that both of these issues had not been addressed by government previously. There was a general

view that similar or more severe penalties should be brought in for recreational drugs as for drink driving. Despite the support for greater enforcement for drug driving, it was also noted that police officers needed to exercise their judgement, not abuse their powers and overly inconvenience drivers, particularly if they fell within social groups relatively more likely to have taken drugs.

However, it was also viewed that any drug driving offence would need to be zero tolerance – as it may be politically difficult to set a drug driving limit. There were hence concerns as to whether such an offence would be practical to implement, given the time that drugs stayed in people's systems, and the need to base laws on proportionality and impairment.

In addition to recreational drugs, certain groups (particularly the over-55s) were both concerned and uncertain around the effect of taking prescription drugs and driving – particularly the dosages that may make people unsafe. While there was believed to be a difference between prescription and recreational drugs, it was also argued that both should carry equal penalties if people were unfit to drive.

With regard to the high-risk offender's scheme, though awareness of the scheme was low, the concept was generally viewed as a good idea. There was thought to be a need for counselling and education for people who had been previously banned. While participants noted the need to support such groups, they were also keen to ensure that penalties were more severe if they were caught again – and could include car crushing, naming and shaming, as well as a driving ban. It was also argued that persistent offenders should be jailed.

Finally, a new THINK! campaign targeted at drink and drug drivers was also supported – with participants viewing that there had been little in the way of government messages around drug driving (which campaign has subsequently commenced). It was noted that taking drugs was very different socially from drinking, and this would need to be conveyed in any message. Moreover, different social mores associated with different type of drugs, together with the relatively small number of individuals driving under the influence, meant that messages would need to be targeted carefully.

While the THINK! drink driving campaign had high recognition amongst participants and was stated to be effective, it was noted that there were still a significant number of people who committed such offences. As such, any national campaign should be joined up with local interventions.

7.5 Urban pedestrians

Respondents generally felt that the casualty figures for urban pedestrians were not particularly surprising and were accounted for by a higher volume of pedestrians and vehicles sharing urban roads, thus making casualties to some extent inevitable.

'It's simply the volume of traffic and volume of people.'
(Male, London, 55+ age group)

Certain respondents also pointed out the sheer vulnerability of pedestrians compared to other road users. More surprising was the higher prevalence of young pedestrian casualties in deprived areas – which was argued as being due to a lack of parental supervision and a culture of playing in the streets. Certain respondents also pointed to the lack of safe places for children to play, particularly for those without a garden or yard at home.

F: *'Because they're allowed on the streets, there's no parental control. We've just had a young kiddie killed yesterday in Bradford, playing out on the street, three years old, but she shouldn't have been out on the street. That happens quite a lot and to me it's just common sense.*

M: *It's not the child's fault, it's the parents'.'*
(Bradford, 55+ age group)

A number of important similarities between pedestrians and drivers were also highlighted in relation to road safety. The issue of distractions was raised and seen as just as problematic for pedestrians crossing roads as for drivers; in particular, mobile phones and personal stereos were felt to reduce concentration and awareness of other road users. In others instances, it was felt that pedestrians had a confrontational and arrogant approach to crossing the roads.

'There's a certain arrogance with pedestrians, especially young ones, they'll step out, they know you'll stop whether you like it or not.'
(Male, London, working, no children in household)

It was also pointed out that pedestrians are no exception in tending to seek the fastest, most convenient route rather than the safest. This was coupled with a perceived lack of safe crossing points on many busy routes. One respondent's video ethnography highlighted an extremely busy London road that offered few safe options for pedestrians wishing to cross. Several suggested interventions such as more roadside barriers, bridges and so on, aimed predominantly at limiting pedestrian movement and keeping them off the roads. This echoes the wider feeling that the road space is very much dominated by motor vehicles. To address this, greater priority for pedestrians in town centres was supported. In particular, increased pedestrianisation of town centres or giving pedestrians higher priority in shopping precincts were both popular, provided there no major impact on traffic flow. Support for pedestrianisation was greater amongst women, those with kids in household and those aged 35–54, and particularly amongst those who were retired. There was less support from C2DEs, NEETs and those aged 17–20.

Three other policy interventions areas were examined in depth, including: the installation of more pedestrian crossings and physical traffic calming measures; reducing urban speed limits to 20 mph; and the concept of shared space. Each had different levels of support.

Engineering solutions such as greater numbers of pedestrian crossings varied in their acceptability. The building of more crossing points was felt to be ineffective unless accompanied by education measures to change pedestrian behaviour. Certain groups were critical of pedestrian bridges as being inaccessible for those with limited mobility or young children, while underpasses were felt to be intimidating and attract crime. Traffic calming measures such as speed bumps were also criticised for damaging vehicles and disturbing local residents.

The introduction of jaywalking as an offence was suggested to encourage less risk taking and the use of crossings. The need for better education to address the poor road sense of children and responsibilities of parents was also cited:

> *'There's a lot of emphasis put on driving and like they say, there's not enough emphasis put on pedestrians, like the Green Cross Code and specifically towards young children and parents, saying look, you don't step off the pavement, you must stay on the pavement.'*
> (Male, Bradford, no children in household)

Of all the interventions discussed, reducing speed limits to 20 mph in residential areas had the greatest increase in support after debate. It should be noted that there was less support among male drivers, those C2DE and those aged 17–20. Whilst at first participants were concerned about the limit being too low and potentially leading to increased congestion, evidence provided on the likely impact on road deaths was compelling and the trade-off in terms of safety, congestion and road user convenience was viewed as acceptable. The intervention was particularly supported if targeted in locations such as schools and shopping areas rather than blanket urban coverage. To be effective, the intervention also needed adequate enforcement. While certain groups were concerned that the intervention may precipitate increased risk taking among cyclists and pedestrians because of an increased sense of personal safety, overall the majority of participants welcomed this move.

Generally, there was an acceptance that traffic calming measures did make roads safer – with support increasing after debating evidence over the course of the day.

Finally, the concept of shared space was discussed. Most individuals supported the principle of sharing the road space with other users and cited examples in which they were sharing space already, such as pedestrian crossings and raised surfaces for pedestrians. The workshop discussed a particular type of shared space where kerbs are omitted, often referred to as a shared surface. The groups were presented with a

definition of shared surfaces produced by the Commission for Architecture and the Built Environment (CABE):

> 'A design feature, which can be used in shared space. A shared surface features no demarcation of users by level. It may be uniform or differentiated by texture, colour or by the placement of street furniture. In a street with a shared surface, demarcation is absent and pedestrians and vehicles share the same surface. There are no kerbs. Shared surface schemes aim to encourage low vehicle speeds, create an environment in which pedestrians can walk or stop and chat without feeling intimidated by motor traffic, make it easier for people to move around and promote social interaction.' (CABE, 2008).

While shared surfaces were the least popular intervention, this response is not unexpected. Shared surfaces are often perceived as counter-intuitive in terms of safety to people unaware of how such schemes operate in practice.

Support for shared space was particularly low from those aged 21–34 and those in education and training. It had greater support from those aged 35–54, those aged over 55 years and those with children in household.

Overall, respondents were unconvinced that such a system could work in the UK and were confused as to what the system would look like in practice. As one Glasgow participant stated: 'Oh my god – that would be disastrous.'

Specific concerns related to:

- How the transition would be made from normal roads to a shared space area.
- What would stop shared space becoming a 'free for all'.
- What about vulnerable pedestrians, would there still be pavements?
- How would people know how to behave, how would it be signposted and explained?

Several groups went as far as to say that shared space as a concept was incompatible with the driving culture on UK roads. It was felt that drivers would inevitably dominate the space, and just a small non-conforming minority would be enough to undermine the system.

Certain respondents were less opposed to the idea of shared space but felt they would have to see the system in action and be given more information to make a decision.

The negativity shown by participants towards the shared space concept is not surprising, given that many had not encountered such a shared space in the UK, so

that discussion was of an abstract idea. Indeed, participants' understanding of shared space was fraught with misperceptions, with some people believing it would be implemented across all roads. In addition, their mindset in increasing road user safety is one that is firmly rooted in increasing the segregation of road users and allowing the dominance of the car to continue.

7.6 Inappropriate speed

Discussion of interventions to combat speeding began by looking at some of the facts given in the presentation – including that speed was a contributory factor in 25% of all road related deaths.

This was felt to be a surprisingly low figure, with an expectation that more road casualties would be directly attributable to speed. Respondents often wanted to know more about the statistics – for example, it was asked if the number of speeding offences was consistent across different age groups. A Bradford group also made a distinction between speed as the cause of an accident itself and speed as a complicating factor. An accident could be caused by a number of other factors, and high speed would simply increase the risk of serious injury or death.

Personal judgement was a major factor in speeding. Many respondents admitted that they had exceeded the speed limit; however, this did not necessarily mean they felt they had been travelling too fast for the conditions. As such, some element of speeding was taken for granted, with many drawing a distinction between socially acceptable and 'gross' speeding. There was a widespread belief across all areas that police would tolerate speeds up to 10% over the official limit on a given road.

Given reasons for speeding included:

- Being in a rush/time pressure.
- Anger, stress and emotion. Particularly connected to congestion and urban driving.
- Thrill seeking (largely ascribed to younger drivers and those with a particularly risk-taking personality).
- Boredom, particularly on long journeys.
- Lapses in concentration (unintentional speeding).

An important stimulus for speeding and increased risk taking was the frustration caused by congestion. It was felt to lead to increased risk taking and speed in urban areas but also to have a knock-on effect in rural areas, as drivers increased their speed following the frustration of congested roads.

'Congestion is a major reason why they speed. You're caught in congestion, you get a clear road and you speed to try and make up time.'
(Male, London, Group 3)

As already discussed, speed limits were not held to be rigid absolutes, and drivers often trusted their own judgement when deciding on the appropriate speed for the road. When asked whether it was more important to stick to the speed limit or match the speed of surrounding traffic, responses were mixed.

Sticking to the speed limit was more of a priority for those aged over 55 years and those from BME communities. Matching the speed of vehicles was more of a priority for those aged 21–34 and those with children in household, as well as those not in education or employment.

Participants, on the whole, were marginally more likely to state they would match the flow of traffic rather than conform to the speed limit. This trend was most pronounced in north Wales, the most rural of the four locations.

Interventions to tackle speeding again raised the issue of the need to balance safety and practicality.

'It's trying to strike a happy balance isn't it, between safety and allowing everyone to go about their business.'
(Male, Bradford, Group 2)

As such, some respondents were reluctant to reduce speed limits, particularly on rural roads. Instead, it was felt that more enforcement was needed of the existing speed limits. Several respondents felt that modern cars are more capable at high speeds, even going as far as to say they were designed for speed.

'The trouble is modern cars don't really like going that slowly anyway do they?'
(Male, London, Group 4)

Specific interventions considered comprised: a harsher six-point penalty for 'gross speeding'; reduced speed limits on rural single carriageways and residential streets; and continued communications and education through the THINK! campaigns.

A major problem centred on agreeing a definition of (dangerous) 'gross' speeding before considering interventions to tackle it. Many called for a more nuanced approach to enforcement. Such an approach would see police taking more account of the individual context of the event, time of day, road conditions, traffic levels, and perhaps most importantly differentiating between those just over the limit and those committing more serious infractions. While there was certainly support in theory for

harsher penalties in extreme cases, the exact level at which speeding became 'gross speeding' was widely disputed.

Speed cameras were often deeply unpopular while noted for their effectiveness. Average speed cameras were seen as more effective than their single shot counterparts. It was often pointed out that fixed speed cameras tend to encourage drivers to slow down briefly and then accelerate again. However, average speed cameras were seen as harder to manipulate and as encouraging smoother, more consistent driving. In this regard, there was support for their deployment, which markedly increased over the course of the discussion.

It should be noted that support for average speed cameras was related to age group, with support rising with increasing age Those from BME communities also were more likely to support this intervention.

Ongoing THINK! campaigns on TV and radio also enjoyed strong support from many respondents. In particular, it was suggested that strongly emotional messages were more effective and that adverts lose their impact over time – a greater variety of adverts on a wider range of topics would therefore be welcome.

> *'I think it's just keeping it fresh and changing the adverts regularly so that people don't. . .the shock factor remains rather than people just kind of getting used to seeing it.'*
> (Female, London, Group 3)

7.7 Basic driving standards

Discussion of basic driving standards centred on two key aspects of the presentation: collisions among novice drivers, and the number of deaths attributed to careless or dangerous driving. The handouts framed the issue with the following key facts:

- One in five newly qualified drivers has some kind of collision in the first six months of qualifying.
- In 2007, careless or dangerous driving contributed to at least 400 road deaths.

These statistics were not seen as particularly surprising, the level of novice driver collisions in particular. However, the issue of what constituted careless driving and how it could be differentiated from dangerous driving proved far more controversial.

> **Q:** *'. . . driving that falls below what would be expected of a competent and careful driver.*
>
> **M:** *Define what a competent and careful driver is.'*
> (North-west Wales, drive to work)

While there was a lack of consensus, in general participants felt that dangerous driving was purposive and explicitly linked to inappropriately high speed and aggression; careless driving, on the other hand, could be put down to simple lapses in concentration, the effects of familiarity, and distractions inside or outside the vehicle.

Discussion of potential interventions focused on improvements to the learning and testing regime for drivers, the concept of life-long learning, and the introduction of fixed penalty notices for careless driving.

Suggested improvements to the driving test included:

- Expanding the learning and testing process to include a greater range of roads and weather conditions.
- Accompanied motorway driving with an instructor.
- Change the format of the test so that candidates are given a final destination to reach, driving at their own discretion rather than being directed.
- Increased pre-driver education and allowing the theory test to be taken earlier. A particular focus on the responsibilities that come with being a driver and the consequences of careless/dangerous driving.

> *'I think it's about training people to take responsibility, because these are the consequences of your actions if you don't.'*
> (Male, London, Group 4)

The idea of requiring learner drivers to complete a mandatory number of hours was discussed in depth and was voted on in the groups – it was supported by of the majority of participants.

There was less support on the need for minimum number of supervised driving hours for learner drivers by those aged 17–20 years, those in education and training and NEETs. There was more support by women and by those aged over 55 years.

There were a number of other interventions highlighted, including: increasing the minimum age for drivers; police drivers could run track days for young novices; and the development of short, intensive driving courses to complement the formal test.

The period immediately after passing the driving test was also discussed. It was pointed out that novice drivers are often nervous or overconfident and prone to mistakes in these early days. A sense of overconfidence and complacency was seen as the root of much risk taking among novices; it was even felt that near misses and crashes early on were part of the learning process.

M: *'I think it's like, you know, nature, just to think that aww, it'll never happen to us, isn't it?*

F: *True, yes...*

M: *Until it actually does happen or you have a close call and then you pay a bit more attention to it.'*
(North-west Wales, children in household)

While respondents could often suggest a number of potential improvements to the driving test, they were far more resistant to interventions targeted at more experienced drivers. Specifically, many objected to the cost implications to the individual of paying for re-tests or refresher lessons. More generally, life-long learning was seen as an unnecessary inconvenience – the problem was felt to be irresponsible younger/novice drivers.

'We are not a high risk group. We are looking at the young people here.'
(Male, London, working, no children in household)

Some suggested that life-long learning would be more attractive if it were incentivised in some way, either through lower insurance premiums or reduced taxation. In this way drivers could be encouraged to attend refresher courses or learn more advanced driving skills with a direct financial benefit.

The proposed introduction of fixed penalty notices for careless driving proved the most controversial. It was seen as a significant challenge simply to define accurately what constituted careless driving and make the public aware of this. Respondents felt that a loose definition of careless driving could lead to the penalty notices being implemented inconsistently or even maliciously by police. Furthermore, the fixed penalty notice was seen as unfair in that it would have a much greater impact on those with low incomes while failing to influence the behaviour of the wealthy.

7.8 Road safety overall

When considering which behaviours the Department of Transport should focus on, key concerns expressed by these respondents were drink driving and excessive speed.

Excessive speed was a greater issue for those aged over 55 years – this group were the most likely to have changed their vote during debate. Careless driving was more an issues for those aged 17–20 years. This group were the least likely to have changed their view on priorities for DfT.

It is worthwhile noting that careless and dangerous driving was a key concern prior to the debate – on a par with drink driving. As highlighted above, this is likely to be with issues in the definition and enforcement of careless driving, rather than its social acceptability *per se*.

Finally, when groups reviewed the interventions collectively, the majority of these were supported: interventions aimed at reducing speeding (20 mph zones; average speed cameras and traffic calming) were much more supported after debate on the day, and that the concept of shared space (perceived in the abstract) was not generally favoured. Our conclusions are described next.

8 CONCLUSIONS

Overall, there was conditional support for the majority of potential interventions highlighted through the road safety strategy consultation. On the one hand, there was approval for the principles of road safety and the need to tackle high risk groups in new ways. On the other hand, when specific interventions were explored in depth, participants became concerned around perceived fairness and were also concerned about the ultimate impact on driving convenience. Indeed, the discussion moved from acceptability of the principle to concern over the detail.

Table 8.1 presents a summary of key differences between groups of respondents identified throughout the report. There are key differences between the way rural and urban road users view risks on the road, with rural risk takers mentioning many more dangerous road user behaviours, including speeding and drink driving, being a problem in their locality. Young males and high-risk takers note similar influences on their road user behaviour, including negative peer influence (either direct or indirect) and socio-emotive response to displaying risk, including sense of achievement and fun shown for speeding and taking risks. Those with children and those working are more likely to have aspects of their life affecting their road user behaviour, most notably being under time pressure. Older drivers mentioned they are under pressure to drive more safely to prove they are good drivers, and low risk takers continually mentioned speeding as a key problem in terms of road user safety (other groups were much less likely to mention speeding in terms of danger). Opportunistic risk takers tended to feel enforcement was pointless, as it had limited effect, probably noting their own behaviour with police and speed cameras in slowing down for the police or camera and then speeding up afterwards.

From reviewing the findings, five conclusions emerge that will be of use in developing the DfT's strategy over the coming years. These are summarised under the following themes:

- Identity management and norms.
- Risk perception and the risk thermostat.
- Education, communication and social marketing opportunities.
- Enforce when fair and effective.
- Re-engineering space.

Each will now be explored.

Table 8.1: Summary of difference in road user safety conceptualisation between different groups of respondents.	
Group	**Road user safety conceptualisation**
Urban	Walking and cycling a specific problem. Walking on rural roads was viewed as relatively low risk. Poor road design and layout was seen to influence dangerous road behaviour. Mixed traffic movement and place functions key to danger. Cars speeding up to go through traffic lights a specific problem (especially Glasgow and London). Urban roads are seen as most difficult to drive on – if you can drive on urban roads, you can drive on rural roads.
Rural	Walking on rural roads is viewed as high risk. Poor road maintenance seen to influence poor road user safety. Overtaking is a common risky behaviour. Drink driving more likely to be admitted to. Fast, non-straight roads a key problem. Speed of cars a key problem. Rural roads are viewed as more dangerous – if you can drive on rural roads, you can drive on urban roads. More likely to agree with the statement, 'match the flow of traffic' rather than 'stick to speed limit'
Young males	Drive more dangerously when with friends. Feel peer pressure to drive with more risk. Also most likely to admit to changing behaviour to suit who is in the car, e.g. slower for parents, faster for friends. Driving high powered or new car negatively influences driving. Sense of achievement and fun associated with taking risks and overtaking. Driving at night contributes to poor road safety. Driving fast and dangerously is an ego boost. Hard-hitting adverts with shock tactics that also show guilt and remorse were said by participants themselves to have an effect on the driving of this group. Don't really engage with school-based road safety education. Expect to get points on licence – points not a specific deterrent.
High risk takers	View driving fast as fun. Mention feeling passive pressure from friends. Admit to taking more risks when driving than other groups when discussing specific issues such as drink driving and speeding.
Children under 16 in household	Often in a hurry and feel that being in a hurry to get somewhere negatively affects driving behaviour. Safety of school children is a frequently mentioned concern.
Workers	Being in a hurry to get somewhere negatively affects driving behaviour.
Older people	Feel pressure to drive more safely to prove their capability in terms of driving skill. Perceive rural roads as being more dangerous.
Low risk takers	Only group to explicitly and consistently mention speeding drivers being dangerous.
Opportunistic risk takers	Enforcement measures are not any use. as people slow down and speed up afterwards. Hence greater enforcement has limited effect.

8.1 Identity and impression management and norms

The research demonstrates that all drivers are affected by the wider environment and exhibit identity management under certain conditions, though this is most pronounced in young people.

These influences can be explicitly and consciously adapted to, such as driving to impress a passenger, or more unconscious behaviour to fit in with the wider driving environment – such as matching the speed of surrounding traffic. Time pressure was one of the most significant factors influencing road user behaviour.

Normative influences are powerful and can influence behaviour even when not consistent with an individual's own views. There were numerous examples of people feeling pressured to drive in certain ways in order to fit in or progress their journey – for instance having to drive aggressively at rush hour to avoid being 'cut up' or to get home on time.

Overall, identity was strongly linked with in-groups of good drivers with whom people associated and out-groups of poor drivers, who are a risk on the road and are perceived as 'others'.

While in-group drivers do exhibit aberrant behaviour, risk is viewed as controlled in these circumstances. with speeding or running a light, for instance, viewed as a calculated risk. Poor driving behaviour is thus excused and legitimated.

Out-groups are convenient 'others' that road risk can be blamed on – from white van man to school mums. The conceptualisation such of road user groups was localised in terms of life stage, environment and experience – imagined in terms of specific differences to the individual: for instance other road users (such as motorcyclists versus cars); other age groups (the boy racer versus the Sunday driver); and other skill sets (those driving for work versus the novice driver).

The concept of self as safe and others as dangerous has far-reaching consequences for the effectiveness of interventions. A campaign targeted at revealing the danger in the road may have limited impact if the public have shifted the danger away from themselves. Essentially, people may view such campaigns as not speaking to them, but to other more dangerous drivers. Indeed, campaigns that target one high-risk group (e.g. young male drivers, white van man) driving dangerously may result in individuals justifying their own risky behaviour if the group is part of the individual's out-group. For example, individuals believe: 'There is danger on the road, but it is others, not me. The dangerous driver in the ad is not me.' In short, people need to be able to think: 'Yes. they mean me. And, yes, I can do something about it.'

To do this, there is a need to reflect on real experiences, life needs and motivations of drivers. There may be opportunities to play on perceived in-group and out-group identities, to develop messages that connect to drivers by disrupting typical category norms of road safety (for instance young males; drinkers) and highlight the ways different groups drive dangerously. We explore further issues with regard to communications and social marketing below.

Moreover, the dominant view and ownership of the road was that of the car driver. Identity, risk perception and the acceptability of road safety interventions were fundamentally tied to this view – all mediated through the eyes of the motorists. Reflection on needs and priorities of other road users was generally not considered by those behind the wheel. This was reinforced by the design and engineering of roads. The implications for road engineering interventions are also described below.

A final issue with regard to norms and identity management was the difficulty people had encouraging good driving behaviour amongst their peer group – finding it hard to tell people to slow down or be more mindful of other traffic. However, it was easy to encourage the thrill of risky behaviours – particularly for younger male drivers. Making it easy to be bad presents a real challenge to ideas of promoting pro-social driving.

Campaigns that look at the collective responsibility of road users and that highlight the 'reciprocity norm' – where people are helped by others do the same – could provide a different tack from traditional government communications that have relied on guilt and fear to motivate. It has been widely demonstrated in advertising that feeling good provides strong motivations for behaviour change. A campaign that made good driving fun, easy and popular and potentially included an element linking it to more environmental aspects (saving the planet and saving money), though not directly addressing road safety *per se*, would begin to address broader underlying concerns with regard to aggression and stress on the roads, which mar the driving experience of many (particularly urban) drivers.

8.2 Risk perceptions and the risk thermostat

The research highlighted that risk perception and risk management played a key role in both mediating and being able to understand driving behaviours. Attitudes to risk were also locally and geographically situated – for instance, there were big differences between urban and rural views on risky roads.

There were many instances of perceived acceptable risk-taking behaviours, ranging from 'safe speeding' to 'safe drink driving'.

Overall, the acceptability of risk was viewed as follows:

- The perception of those who are affected, with greater tolerance for personal risks (however, the impact on those indirectly affected was less likely to be taken into account).
- The perceived relationship between likelihood and consequence of the risk, with people tolerating routine risks – and people believed driving to be a routine risk.
- Conditioning factors, such as the state of the road and other environmental factors.
- Perceived agency, with greater risk being undertaken with greater perceived individual control.

Overall, participants thought they were skilful drivers. It is noteworthy that road safety issues from a driving perspective were perceived as arising from factors that influenced skill, such as distractions, time pressure and peer pressure.

This contrasted strongly with other road users, with pedestrians and cyclists viewed as having specific skill problems – for instance: inappropriate use of crossing the road; not understanding other road users; and violations such as not using traffic lights.

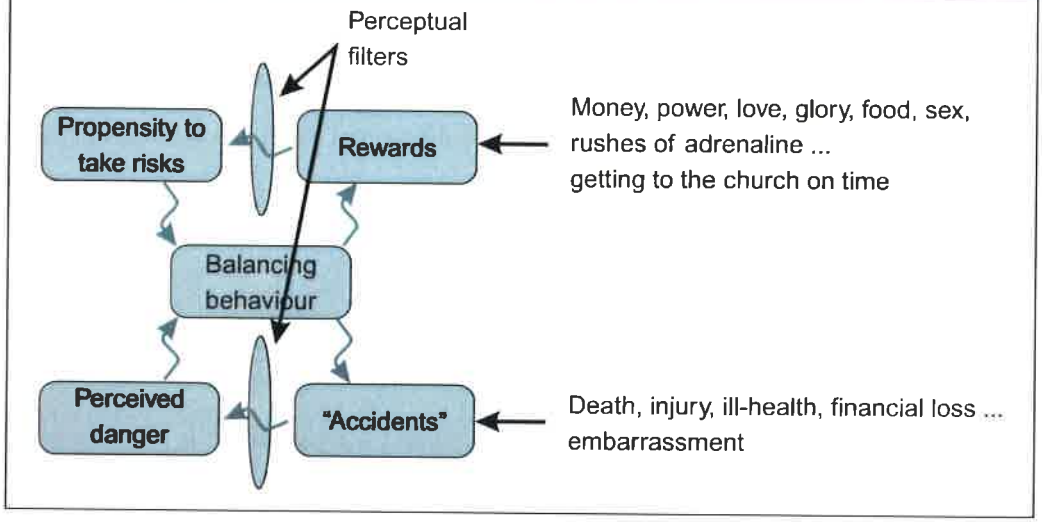
Overall, this strong sense of personal agency, perceived high skill and externalisation of threats means that drivers manage risk by compensating for environmental cues through balancing behaviours.

Numerous examples of this were stated, from driving fast on roads where the limit was perceived to be too low for conditions, to drink driving on country roads at night with minimal traffic. Similar issues were also brought up in relation to familiar roads and the propensity to drive on autopilot. Conversely, the more risky a place seemed, the more people generally adapted and drove safely. Risk was noted as higher where different types of road user were interacting, such as areas of high car, cycle and pedestrian usage, for example in city and town centres.

The idea of risk compensation has been described by John Adams (1995) and similarly risk homeostasis by Ganton Wilde (2001). Adams' 'risk thermostat' highlights that risks are culturally constructed. Importantly, risky behaviour is balanced through different perceptual filters that mediate individual views on rewards and accidents (see Figure 8.1).

As Figure 8.1 illustrates, if the risk is perceived to be reduced in some way – fewer cars on the road, or a wide open road space, for instance – people will compensate through a balancing behaviour such as driving faster, until the level of risk returns to what people were originally comfortable with.

Figure 8.1: **The risk thermostat (from Adams, 1995)**



In short, if people don't believe an accident is likely, they will try and get more reward – such as 'getting to the church on time'.

Whilst these ideas have previously been controversial in their implications for road safety measures, particularly in terms of seat belt legislation, they can provide insight into considering the potential effectiveness of shared space interventions. Making people more conscious of other road users and risk may have a significant impact on accidents – as the driver's perceptual filters highlight more risk. This will be reviewed in more depth below.

8.3 Education, communication and social marketing opportunities

There were a variety of opportunities for education and communication campaigns highlighted throughout the discussion – from looking at collective road user behaviour to highlighting the risks on rural roads – which were seen as potentially more effective if backed up with other interventions on the ground, such as enforcement. Also discussed in depth was the need to focus emotive communication campaigns at young males to change behaviours, with opportunities for novel ways to reinforce messages through roadside initiatives.

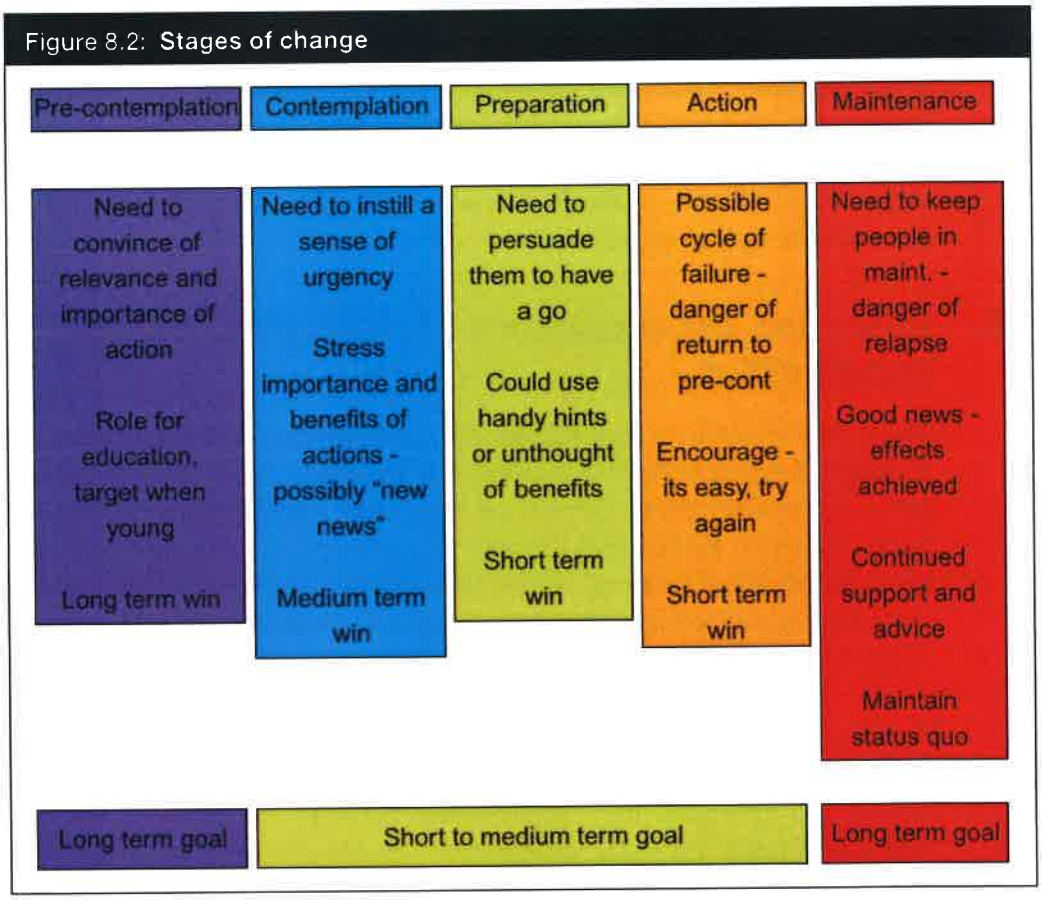
For the purpose of the conclusions, we will focus on three areas that represent: different norms associated with them; different levels of acceptability and perceived reward; and (related to these factors) different levels of communications activity over recent years. These are: drug driving; speeding in urban and residential areas; and drink driving.

These in turn can be viewed in terms of a 'stages of change' model – developed by James Prochaska and Carlo DiClemente (1984). The model highlights that behaviour change does not happen in one step; rather that people progress through different stages as they prepare to change. The stages are:

- Precontemplation (not yet acknowledging that there is a problem behaviour that needs to be changed).
- Contemplation (acknowledging that there is a problem but not yet ready or sure of wanting to make a change).
- Preparation/determination (getting ready to change).
- Action (changing behaviour).
- Maintenance (maintaining the behaviour change/relapse is a problem here).

Underlying this classification is the insight that people at different stages have different needs, which should be reflected in communication strategies (see Figure 8.2).

Figure 8.2: Stages of change



Though the stages of change model is usually used to examine behaviours and segment the population in relation to a single issue or intervention, in this instance we have used it to explore differences in the majority opinion across three different types of road safety concern.

8.3.1 Drug driving

In this regard, novel campaigning issues such as drug driving can be viewed at the pre-contemplation stage. This is not to say that people condoned drug driving or though it was safe – rather that for those groups who did take drugs and drive, the social and peer group norms governing behaviours were permissive. Cannabis smokers therefore stated that it was not frowned upon to drive home stoned, in the same way as drink driving was viewed as socially unacceptable.

There is a need to understand where and why people drug drive, in order to target the hooks and messages that can guide behaviours effectively. The social mores were different for different drugs and were distinct from drink driving. Communications will hence need to be targeted separately, and further research undertaken with target groups to understand motivators and barriers to change. Any national campaign should be joined up with local enforcement interventions on the ground.

8.3.2 Speeding

One of the most interesting findings from the workshops was the shift in views after deliberation in relation to speeding interventions. The deliberative nature of the study illustrated that, although people were initially sceptical about these interventions, with reasoned debate their views changed and acceptability increased. This increase in support was only seen for speeding interventions, with other initiatives either maintaining levels of support or decreasing during the course of discussion.

This strongly suggests that participants have arrived at the 'preparation stage' in terms of change and will be willing to give these interventions a go if it is backed up with appropriate communications and enforcement campaigns. Graphic adverts, such as the 'Kill your speed' not a child' campaign, were stated to have affected views on speeding in certain areas. National campaigns that emphasise this emotive message, tailored with more local initiatives highlighting more rational messages on the local impact on road casualty and coupled with enforcement that was seen to control fairly behaviour (such as average speeds), may provide the best success.

8.3.3 Drink driving

Drink driving campaigns have worked well over recent decades to change views on social acceptability – with older respondents in the workshops highlighting that

public views had markedly changed on this issue. Despite the social undesirability of drink driving, there were a significant number of participants who admitted to drink driving on occasion, and there was a feeling that it was more socially acceptable to drink drive than would outwardly be perceived, especially if it was successful (i.e. not having been caught by police and not resulting in an accident or near miss) and could be justified as a one-off.

Whilst behaviour maintenance through enforcements and other communications is still required, one of the ideas raised in the workshop was about tackling some of the broader factors that influenced people to drink and drive. This approach owes more to social marketing than to social communications and is characterised by factors including:

- Customer orientation: it moves the communication agenda away from a focus on the message and the expertise of those behind it, to consider the audience's point of view.
- Emphasis on overcoming barriers: it focuses on understanding why the target 'consumer' is not currently adopting the behaviour and then finding ways to overcome any behavioural, practical or financial barriers that are identified.
- Flexibility: social marketing can be applied to people within the target audience at different stages of awareness and responsiveness in relation to an issue or behaviour.

There were two main areas that were suggested: one was addressing environmental and situational factors, such as provision for a 'pub bus' to take people home. A similar approach has worked well in other areas, such as the Road Crew initiative in Wisconsin. Rather than asking people not to drink, or not to drive, Road Crew provides a service solution that picks up customers at their home, drives them around all evening from bar to bar and then delivers them home. The initiative has had a significant impact on road safety (see www.nsms.org.uk/public/CSView.aspx?casestudy=64).

The second highlighted area that communications could address is the 'one for the road' culture – based on the insight that even low levels of alcohol consumption can influence an individual's resolve, and consequently behaviour, regarding drink driving. In this regard, a campaign was run in Northern Ireland under the 'Never Ever Drink and Drive' banner – using TV, in-bar mechanics, bus backs and radio to project the message 'on the road' and narrate powerful, emotionally involving storylines relevant to younger men. The campaign was very effective (associated with a 35% reduction in road deaths), and elements could be used more broadly across the UK. It should be noted that a number of groups felt there should be a blanket ban on drink driving, because of the ambiguity of current laws and the problems of only having one drink, noted above.

8.3.4 *Training*

Finally, education in terms of formal training was highlighted, though this was mainly acceptable when targeted at learner or novice drivers. The idea of a minimum number of supervised driving sessions was favoured. A bigger issue is in the period just after passing the driving test, when young males in particular acknowledged they developed their 'true driving styles'.

As a result of the perceived barriers of cost and inconvenience, there was only limited support for life-long learning, unless this was incentivised in some way – for instance, the training could be voluntary but offer the potential for reduced insurance premiums for those taking part.

8.4 Enforcement

At one level, enforcement interventions were relatively uncontentious, particularly in regard to aberrant behaviours such as drink driving, drug driving and speeding. This was undoubtedly due to the identities that people formed on the road, viewing themselves as good drivers, in control of risks, while they viewed others as exhibiting poor driving behaviour.

However, at a deeper level, there was a paradox to enforcement. If people were caught when they were only doing a little bit over the speed limit or had an extra glass of wine at dinner, there was a strong sense of annoyance and injustice. It is viewed as something everyone does and the individual involved as unlucky.

The idea of fairness in enforcement was key here. There were two potential ways this could be developed. The first, as noted above, was the idea of blanket control and enforcement – such as the use of average speed cameras or zero tolerance with regard to drink driving. These did not discriminate and forced all drivers and traffic to conform to particular behaviours.

A second, more complex view around was the idea of discretion, flexibility and proportionality in enforcement. For instance, distinctions were made in the groups between normal and gross or dangerous speeding – each could be policed in particular ways, with discretion given depending on circumstances.

Moreover, there was a strong view that some technically illegal driving behaviour was legitimate, provided it was right for the conditions. In this regard, the idea was welcomed of variable speed limits on roads that could take account of environmental factors. This may include reducing speed limits near accident hotspots or under certain conditions (at night or when it is raining, for instance). Such signs could be backed up with appropriate messages to validate them (such as the number of deaths on the road or school ahead). Conversely, speed limits could be increased where there is good visibility or adequate space to drive.

It was also argued that control over the speed of traffic could be set locally rather than nationally, because blanket approaches were viewed as ineffectual. In this regard, risk mapping and other information activities were strongly supported. Support for authorities taking such practical initiatives, rather than making new laws, was very much higher than all other interventions. It was highlighted that advances in in-car technology may make the prospect of active communication and responsiveness to environmental factors much more sophisticated in the coming years, though this was not explored in detail in the workshop. The acceptability of such initiatives would likely be very high.

8.5 Re-engineering space

Engineering interventions were considered in two main ways during the discussions, each with very different views on acceptability. The first related to an increasing focus on defining and demarcating space for different road user groups – such as the development of cycle lanes, distinct lanes for motorbikes, and particularly in terms of pedestrianised areas. As noted above, there was reasonably strong support for the idea that pedestrians should take priority over vehicles in town centres, together with support for associated traffic calming systems. These systems are enforced by rules and regulations that control the use of space and also reinforce the isolation of different road user groups from one another – an issue that has wider problems in terms of the perception and mediation of risk, as noted above.

The second option is the concept of 'shared space', where the aim is to remove any implied priority of vehicular traffic over pedestrians, often by minimising the use of signing and other traffic management measures. This was by far the least supported of all interventions – with support decreasing after debate. Key concerns included its perceived incompatibility with UK driving culture and the potential that a small non-conforming minority would be enough to undermine the system.

Despite this, it is the very fact that people have such a traditional and fixed view of the road space, where all road users have their own demarcated space, allowing the car to continue its domination of the space, that the concept of shared space can be effective. Familiarity made drivers complacent and prone to lapses in concentration. Participants stated that they generally concentrated more in busy or unfamiliar environments, particularly those with multiple road users. The shock of a new way of designing space may not only enable people concentrate on roads more effectively, but also help to re-establish norms that are guided by individual judgement, conventions and protocols, rather than a reliance on rights of way and laws, which builds on the concepts outlined in theory underpinning the shared space concept (Engwicht, 1999; Hamilton-Baillie and Jones, 2005). Given the view that authorities should place less reliance on laws and more reliance on information, despite opposition there may be opportunities to trial such initiatives.

These interventions are most likely to be undertaken in areas with a place rather than a link function – such as a residential roads or busy towns centres with pedestrian and car users. Such initiatives could also provide an opportunity to begin to link road safety initiatives into wider environmental concerns, providing scope for people to think about alternative transport uses other than the car.

Overall, any intervention that the DfT examines will require understanding the wider implications on driving identity, road culture and risk taking. The strategy provides an ideal opportunity to examine these issues through fresh eyes. As well as traditional approaches, social marketing, new technologies and the novel design of space may play a role in thinking through the 3Es over the coming years.

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APPENDIX 1
How findings compare to the literature on road user safety

Overall, the road environment is not viewed as an especially risky environment. That said, despite continual reduction in injury collisions over the past ten years, the general impression amongst the public is that the roads are getting more dangerous, which concurs with previous research (for example Angle *et al.*, 2007). The road environment was seen as particularly dangerous for motorcyclists, which concurs with previous research (Department for Transport, 2008b). However, this research suggests that the public accept that it is the vulnerability of motorcyclists, and often car drivers not having the skills to deal with motorcyclists, rather than the motorcyclists' skill, attitude or behaviour as key to their danger, which shows the public attitude coming into line with academic research argument (Crundall *et al.*, 2008; Elliott *et al.*, 2007). Walking and cycling were largely thought to be less safe than driving, especially cycling in city centres and walking on rural roads. Previous research has found the public to view walking as the safest mode of transport, yet 55% of the public continue to believe traffic is a significant danger for pedestrians, and this is increased for those who live in towns and cities (77%) and on rural through roads (63%) (Department for Transport, 2008b). A major barrier to cycling is the perceived lack of safety, especially in towns and cities.

Further research into differences of how conceptualisations of risk are formed for car drivers, compared with those for walking or cycling, is suggested. This research found that the public attribute risky driving behaviour to a number of factors impacting on skill, such as time pressure, distractions, alcohol, drugs, poor road quality and congestion, rather than a skill deficit *per se*. However, when describing road user risk shown by pedestrians or cyclists, the respondents were more likely to attribute risky behaviour to poor use of skills. Previous research has not really found such a distinction.

Emotive issues, such as being late, lost or stressed, were seen to impact negatively on individuals' driving behaviour. In addition, it was common for respondents to talk about taking 'calculated risks' where they had weighed up the road environment and made a judgement on the level of accepted risk for themselves. Hence, individuals drove faster than the speed limit late at night when roads were empty, or increased speeds when the roads were dry, for instance. These were two categories identified by Musselwhite (2006) and were further explored by Fuller *et al.* (2008a). Further investigation is needed into how either of these might be mitigated. For example, the growing use of satellite navigation systems may reduce the stress of getting lost, and the use of mobile phones (hands-free) means individuals can phone ahead to reduce the stress of being late. Calculated risk taking is linked to a level of individual

rational logic, and further investigation is needed into how such logic is formed amongst individuals.

It was common for respondents to admit to 'speeding', although, in line with previous research, definitions of 'speeding' varied from 'going over the speed limit' to 'excessive speed for the conditions' (which could be as much as 10 mph or more over the speed limit before speeding was defined). Previous research shows speeding behaviour is highly prevalent – DfT (2009b) official figures suggest around 49% of drivers speed in residential areas, and other figures based on self-reported data are higher – 88% of drivers admit to driving over the speed limit in the year prior to the survey (Brake, 2004) and 85% admit to exceeding speed limits on occasion (Silcock *et al.*, 1999). In reality, the same drivers were taken on an hour's recorded driving, and 98% of the drivers were observed to drive over the speed limit at least once (Silcock *et al.*, 1999).

It was common for respondents to state that they drove at a speed of their own choice that they still felt was safe – reasons for this included: feeling speed limits were too stringent or were out of date with modern technology of cars and their ability to brake more quickly; speeding when roads were empty; and speeding on motorways, which was often perceived to be of very little risk. The speed limit being too stringent or low as a reason for speeding has been found in previous research (see Fuller *et al.*, 2008a; Holder, unpublished). The notion that speeding is OK when individuals have calculated it as being OK, such as when roads are empty, concurs with a 'calculated risk taker' (Fuller *et al.*, 2008b; Musselwhite, 2006). Respondents quite often talked about driving at a speed similar to other traffic on the roads, rather than picking their own speed or sticking to the speed limit. This normative influence on speed has been well documented in previous research (Fuller *et al.*, 2008b; Fuller *et al.*, 2008a; Fylan *et al.*, 2006; Holder, unpublished; Silcock *et al.*, 1999; Stradling and Campbell, 2003).

Drink driving was perceived as being a high-risk behaviour and generally was perceived negatively, at least at an overt, conscious level by the public. Previous research suggests that drink driving is usually perceived negatively amongst the public and stringent penalties for it are advocated (see Angle *et al.*, 2007; Cauzard, 2003; Holder, unpublished). Despite, road incidents as a result of drink driving falling over the past 20 years (Department for Transport, 2009a), there is an indication that the prevalence of drink driving continues to be quite high (see Higginson, 2005). Similarly, this research found that many individuals admitted to believing they may well have driven over the legal blood-alcohol limit in the previous year or so and were willing to admit this in a group situation, perhaps showing there is at least some tolerance of the behaviour amongst the public. There seemed little difference between ages or groups with regard to this admission. This interesting finding obviously requires further investigation at a deliberative group level.

Previous research suggests that, on the whole, older drivers have less risky attitudes to road user safety (Angle *et al.*, 2007) and are more supportive of interventions aimed at improving road user safety (Stradling and Campbell, 2003). This translates into behaviour with older drivers (age 50 years and over) displaying fewer violations with regard to driver behaviour, especially aggressive violations, suggesting that deliberate risky behaviour is far less prevalent amongst this age group (Parker *et al.*, 2000). This research found similar results – the majority of respondents felt their own driving had become safer with increasing maturity, largely because of increased driving experience, responsibility, a reduction in negative influence from others and a realisation that driving faster does not actually match a reduction in time taken to travel. Hence, it seems that differences in road user safety attitude and behaviour between younger and older drivers are linked to changes within people over time, not to a cohort difference, although further longitudinal research would be required to confirm this.

Spatial conceptualisations of risk show that non-ambiguous and simple environments are perceived as safer for all road users, because increasing conflict between users causes an increase in risk. However, there is an admission that familiarity can lead to an increase in dangerous road user behaviour. An emerging theory examining the relationship between familiarity, certainty and road safety suggests that an increase in familiarity and certainty only benefits drivers at the expense of other road users. Engwicht (1999, 2006) suggests that the dominance of the motor vehicle and the associated problems are part of a negatively perpetual system. He proposes that streets have been planned and developed in such a way that levels of uncertainty and intrigue have been reduced. This has been done to increase road user safety through enhancing predictability of the road environment, which largely benefits motorists. Hence, the predictable nature of a street, with its minimum stopping distances, standardised road signs and marking, means that vehicles are able to drive at a faster speed. This in turn means residents retreat into their private residences, rather than venture onto the streets and in turn are more likely to use vehicles. In turn, this means that roads then have to be designed to accommodate such increases. Engwicht (1999, 2006) claims that the system must be addressed by means of better design of streets through increasing levels of intrigue and uncertainty for users, which as this research suggests is unlikely to be very popular, as the public are largely viewing the road environment in terms of drivers of vehicles, rather than pedestrians or residents, and as such see roads and streets as movement corridors rather than places.

The majority of respondents admitted their driving style and the amount of risk accepted depended upon the type of passenger in the vehicle. It is clear respondents felt that people are judged based on their driving and that they will change and adapt their style according to what passengers may think of them – a process known as 'impression management'. Overall, the concept of peer pressure was though to be something that younger road users, especially male drivers, faced. Most people recognised the 'peer pressure' element when they were younger, especially the

males in the groups, describing the need to impress friends with a more aggressive, fast, risk-taking driving style. Indeed, younger groups admitted to feeling that pressure when driving

Younger people also admitted to this being deliberate by stating that they change their driving behaviour depending on who is in the car. This concurs with much previous research (Silcock *et al.*, 1999; Thomas *et al.*, 2007) However, this research builds on previous research by showing that peer pressure is prevalent in two additional settings. First, it is in place when the environment in the car is akin to a party atmosphere, with drunken passengers who not only distract the driver but create a party atmosphere, which negatively influences driver behaviour. Second, this research suggests that individuals who have a strong desire to impression-manage continue to feel peer pressure even when it is not physically present in terms of a passenger actually being there.

This research also suggests that driving behaviour is also modified for older drivers depending upon the passengers present. Individuals continue to drive more recklessly alone, which concurs with previous research (Fuller *et al.*, 2008b; Fuller *et al.*, 2008a). This has implications for the way people view road user safety – they feel a sense of direct responsibility to passengers, but not for themselves. However, the consideration of potential collision with other people, or the consequence of their accident on their family and friends, are not typically considered.

Previous research has largely studied road user safety from the perspective of one type of road user, usually from the viewpoint of a car driver (see Musselwhite *et al.*, 2009). This research tried to get different perspectives and attempted to get individuals to 'wear different hats'. Interestingly, this was a very difficult task. Almost all drivers viewed road user safety from the perspective of a driver, even if they used other modes. This shows the depth of identity individuals have with 'being a driver' when discussing road user safety and it must be taken into account when developing interventions that aim to increase empathy with other road users.

This research suggests educational interventions are important in road user safety. Participants mentioned that hard-hitting messages that involved emotion and showed the aftermath of tragedy, rather than being gory, were influential. This research also suggests that the immediacy and context of the message is vital in effective behaviour change, and people cited 'THINK Bike' signs and 'Number killed on road' signs, in addition to radio adverts, as being highly effective in changing behaviour. This builds on previous research, which suggested radio as a good medium for education, primarily because people listen to the radio whilst driving, whereas TV adverts are remote from the driving task (Silcock *et al.*, 1999).

The research found that, on the whole, the public felt the driving test did not adequately prepare people for driving alone (especially in terms of motorway driving, parking and overtaking) and supported a number of changes to the learning

and test process. Similar levels of support have been found in previous research (see Brake, 2005; Christmas, 2007; Emmerson, 2008; RAC, 2007). This research built on this by examining life-long learning and found little overall agreement on how this might occur, with the majority suggesting formalised learning and testing would be inappropriate.

Using deliberative research methods allows individuals time to reflect on their driving behaviour. There is a growing body of research suggesting that the most positive effect on attitudes and behaviour seems to come from group discussions on driver behaviour that emphasise interaction between road users, reflection on habitual and subconscious behaviour, which reduces habitual behaviour by raising into the conscious habitual behaviours (McKenna and Poulter, 2008; Dorn and Brown, 2003;, Fylan *et al.*, 2006; Musselwhite, 2004). In addition, such group discussion should highlight internal inconsistencies (including cognitive dissonance), emphasise norms, introduce emotive content and a reflection on attitudes, values and beliefs. Hence, it would be expected that individuals taking part in deliberative research should become more conscious of the driving behaviour. This research found that, coupled with greater focus on road user behaviour, attitudes shifted towards being more safety orientated, especially with regard to speeding, which was viewed as more of an issue following a debate on the subject. In line with this, some of the speed reduction interventions gain higher levels of acceptability. For example, support for 20 mph zones and average speed cameras increased dramatically following discussion of the issue.

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APPENDIX 2
Sample details

Expected (black) and achieved (red) sample detail.

Table A2.1: London

Group	Gender	SEG	Employment status	Age	Ethnicity	Children in household aged under 10 years	Car driver	Motor-cyclist	Non driver	Cyclist	Total
1	M: 10 (7) F: 0 (0)	ABC1: 5 4 C2DE: 5 3	Employed: ≥2 3 Education/Training: ≥2 3 NEET: ≥2 1 Retired: 0 0	17–20: 10 7 21–34: 0 0 35–54: 0 0 55+: 0 0	White: 6 5 BME: 4 2	Yes: 0 0 No: 10 7	Yes: ≥8 7 No: ≥1 0	Yes: ≥2 1 No: ≥5 6	Yes: 0 0 No:10 7	Yes: ≥2 2 No: ≥5 5	10 7
2	M: 5 5 F: 5 6	ABC1: 5 7 C2DE: 5 4	Employed: 10 11 Education/Training: 0 0 NEET: 0 0 Retired: 0 0	17–20: ≥0 0 21–34: ≥3 5 35–54: ≥3 4 55+: ≥2 2	White: 6 3 BME: 4 8	Yes: ≥5 6 No: ≥2 5	Yes: 10 10 No: 0 1	Yes: ≥1 1 No: ≥5 10	Yes: 0 1 No: 10 10	Yes:≥1 4 No: ≥5 7	10 11
3	M: 5 3 F: 5 5	ABC1: 5 5 C2DE: 5 3	Employed:≥3 7 Education/Training: ≥1 0 NEET: ≥1 1 Retired: 0 0	17–20:≥0 0 21–34:≥4 4 35–54:≥4 4 55+: 0 0	White: 6 4 BME: 4 4	Yes: 10 8 No: 0 0	Yes: ≥7 7 No: ≥1 1	Yes: ≥2 1 No: ≥5 7	Yes: 3 1 No: 7 8	Yes: ≥2 3 No: ≥5 5	10 8
4	M: 5 4 F: 5 6	ABC1: 5 6 C2DE: 5 5	Employed: 0 0 Education/Training: 0 0 NEET: 0 0 Retired: 10 10	17–20: 0 0 21–34: 0 0 35–54: 0 0 55+: 10 10	White: 6 5 BME: 4 5	Yes: 0 0 No: 10 10	Yes: ≥ 6 7 No: ≥ 3 3	Yes: ≥1 0 No: ≥5 10	Yes: 5 3 No: 5 7	Yes: ≥1 2 No: ≥7 8	10 10
5	M: 5 6 F: 5 3	ABC1: 5 4 C2DE: 5 5	Employed: 10 8 Education/Training: 0 1 NEET: 0 0 Retired: 0 0	17–20: 0 0 21–34: 10 9 35–54: 0 0 55+: 0 0	White: 6 5 BME: 4 4	Yes: 0 0 No: 10 9	Yes: ≥ 7 6 No: ≥ 1 3	Yes: ≥2 2 No: ≥5 7	Yes: 3 3 No: 7 6	Yes: ≥2 2 No: ≥5 7	10 9
6*	M: 5 4 F: 5 4	ABC1: 5 6 C2DE: 5 2	Employed: ≥2 5 Education/Training: ≥2 1 NEET: ≥2 2 Retired: ≥1 0	17–20: 1 0 21–34: 3 3 35–54: 3 4 55+: 2 1	White: 7 4 BME: 3 4	Yes: ≥2 3 No: ≥2 5	Yes: ≥ 8 8	Yes: ≥2 1	Yes: 0 0 No: 10 8	Yes: ≥1 5	10 8

Table A2.2 **Bradford**

Group	Gender	SEG	Employment status	Age	Ethnicity	Children in household aged under 10 years	Car driver	Motor-cyclist	Non driver	Cyclist	Total
1	M: 10 (9) F: 0	ABC1: 4 (4) C2DE: 6 (5)	Employed: ≥2 (2) Education/Training: ≥2 (3) NEET: ≥2 (3) Retired: 0	17–20: 10 (9) 21–34: 0 35–54: 0 55+: 0	White: 7 (7) BME: 3 (2)	Yes: 0 No: 10 (9)	Yes: ≥8 (7) No: ≥1 (2)	Yes: ≥2 (1) No: ≥5	Yes: 0 No: 10	Yes: ≥2 (2) No: ≥5	10 (9)
2	M: 5 (4) F: 5 (5)	ABC1: 4 (5) C2DE: 6 (4)	Employed: 10 (10) Education/Training: 0 NEET: 0 Retired: 0	17–20: ≥0 21–34: ≥3 (5) 35–54: ≥3 (2) 55+: ≥2 (2)	White: 7 (8) BME: 3 (1)	Yes: ≥5 (5) No: ≥2 (4)	Yes: 10 (9) No: 0	Yes: ≥1 (1) No: ≥5	Yes: 0 No: 10	Yes: ≥1 (1) No: ≥5	10 (9)
3	M: 5 (5) F: 5 (4)	ABC1: 4 (3) C2DE: 6 (6)	Employed: ≥3 (5) Education/Training: ≥1 (2) NEET: ≥1 (1) Retired: 0	17–20: ≥0 21–34: ≥4 (3) 35–54: ≥4 (6) 55+: 0	White: 7 (5) BME: 3 (4)	Yes: 10 (10) No: 0	Yes: ≥7 (9) No: ≥1	Yes: ≥2 (1) No: ≥5	Yes: 3 No: 7 (9)	Yes: ≥2 (2) No: ≥5	10 (9)
4	M: 5 (6) F: 5 (4)	ABC1: 4 (4) C2DE: 6 (6)	Employed: 0 (2) Education/Training: 0 NEET: 0 Retired: 10 (8)	17–20: 0 21–34: 0 35–54: 0 (2) 55+: 10 (8)	White: 7 (8) BME: 3 (2)	Yes: 0 No: 10 (10)	Yes: ≥6 (9) No: ≥3 (1)	Yes: ≥1 (1) No: ≥5	Yes: 5 (1) No: 5 (9)	Yes: ≥1 (4) No: ≥7	10 (10)
5	M: 5 (3) F: 5 (8)	ABC1: 4 (8) C2DE: 6 (3)	Employed: 10 (10) Education/Training: 0 NEET: 0 (1) Retired: 0	17–20: 0 21–34: 10 (10) 35–54: 0 (1) 55+: 0	White: 7 (10) BME: 3 (1)	Yes: 0 No: 10 (11)	Yes: ≥7 (10) No: ≥1 (1)	Yes: ≥2 No: ≥5	Yes: 3 (1) No: 7 (10)	Yes: ≥2 (1) No: ≥5	10 (11)
6*	M: 5 F: 5	ABC1: 5 C2DE: 5	Employed: ≥2 Education/Training: ≥2 NEET: ≥2 Retired: ≥2	17–20: 1 21–34: 1 35–54: 4 55+: 4	White: 9 BME: 1	Yes: ≥2 No: ≥2	Yes: ≥8	Yes: ≥1	Yes: 0 No: 10	Yes: ≥1	10

Table A2.3 Rural north Wales

Group	Gender	SEG	Employment status	Age	Ethnicity	Children in household aged under 10 years	Car driver	Motor-cyclist	Non driver	Cyclist	Total
1	M: 10 (8) F: 0 (0)	ABC1: 4 (3) C2DE: 6 (5)	Employed: ≥2 (5) Education/Training: ≥2 (1) NEET: ≥2 (2) Retired: 0	17–20: 10 (8) 21–34: 0 35–54: 0 55+: 0	White: 10 (8) BME: 0	Yes: 0 No: 10 (10)	Yes: ≥8 (8) No: ≥1 (0)	Yes: ≥2 (2) No: ≥5 (6)	Yes: 0 (0) No: 10 (8)	Yes: ≥2 (3) No: ≥5 (5)	10 8
2	M: 5 (5) F: 5 (5)	ABC1: 4 (4) C2DE: 6 (6)	Employed: 10 (10) Education/Training: 0 NEET: 0 Retired: 0	17–20: ≥0 21–34: ≥3 (3) 35–54: ≥3 (5) 55+: ≥2 (2)	White: 10 (10) BME: 0	Yes: ≥ 5 (7) No: ≥2 (3)	Yes: 10 (10) No: 0	Yes: ≥1 (1) No: ≥5 (9)	Yes: 0 (0) No: 10 (10)	Yes: ≥1 (1) No: ≥5 (9)	10 10
3	M: 5 (5) F: 5 (6)	ABC1: 4 (4) C2DE: 6 (7)	Employed: ≥3 (11) Education/Training: ≥1 NEET: ≥1 Retired: 0	17–20: ≥0 21–34: ≥4 (4) 35–54: ≥4 (7) 55+: 0	White: 10 (11) BME: 0	Yes: 10 (11) No: 0	Yes: ≥7 (10) No: ≥1 (1)	Yes: ≥2 (2) No: ≥5 (9)	Yes: 3 (1) No: 7 (10)	Yes: ≥2 (1) No: ≥5 (10)	10 11
4	M: 5 (4) F: 5 (5)	ABC1: 4 (2) C2DE: 6 (7)	Employed: 0 Education/Training: 0 NEET: 0 Retired: 10 (9)	17–20: 0 21–34: 0 35–54: 0 55+: 10 (9)	White: 10 (9) BME: 0	Yes: 0 No: 10 (9)	Yes: ≥6 (5) No: ≥3 (4)	Yes: ≥1 (1) No: ≥5 (8)	Yes: 5 (5) No: 5 (4)	Yes: ≥1 (2) No: ≥7 (7)	10 9
5	M: 5 (6) F: 5 (3)	ABC1: 4 (6) C2DE: 6 (3)	Employed: 10 (9) Education/Training: 0 NEET: 0 Retired: 0	17–20: 0 21–34: 10 (9) 35–54: 0 55+: 0	White: 10 (9) BME: 0	Yes: 0 No: 10 (9)	Yes: ≥7 (6) No: ≥1 (3)	Yes: ≥2 (2) No: ≥5 (7)	Yes: 3 (3) No: 7 (6)	Yes: ≥2 (3) No: ≥5 (6)	10 9
6*	M: 5 (3) F: 5 (7)	ABC1: 5 (7) C2DE: 5 (3)	Employed: ≥2 (7) Education/Training: ≥2 (2) NEET: ≥2 (0) Retired: ≥2 (1)	17–20: 1 (3) 21–34: 1 (2) 35–54: 4 (2) 55+: 4 (3)	White: 9 (10) BME: 1 (0)	Yes: ≥2 (3) No: ≥2 (7)	Yes: ≥8 (9)	Yes: ≥1 (1)	Yes: 0 (1) No: 10 (9)	Yes: ≥1 (3)	10 10

Table A2.4 **Glasgow**

Group	Gender	SEG	Employment status	Age	Ethnicity	Children in household aged under 10 years	Car driver	Motor-cyclist	Non driver	Cyclist	Total
1	M: 10 10 F: 0 0	ABC1: 4 4 C2DE: 6 6	Employed: ≥2 4 Education/Training: ≥2 4 NEET: ≥2 2 Retired: 0	17–20: 10 10 21–34: 0 35–54: 0 55+: 0	White: 8 8 BME: 2 2	Yes: 0 No: 10 10	Yes: ≥8 10 No: ≥1 0	Yes: ≥2 2 No: ≥5 8	Yes: 0 0 No: 10 10	Yes: ≥2 4 No: ≥5 6	10 10
2	M: 5 5 F: 5 5	ABC1: 4 4 C2DE: 6 6	Employed: 10 10 Education/Training: 0 NEET: 0 Retired: 0	17–20: ≥0 21–34: ≥3 4 35–54: ≥3 4 55+: ≥2 2	White: 8 8 BME: 2 2	Yes: ≥5 5 No: ≥2 5	Yes: 10 10 No: 0 0	Yes: ≥1 1 No: ≥5 9	Yes: 0 0 No: 10 10	Yes: ≥1 4 No: ≥5 6	10 10
3	M: 5 5 F: 5 5	ABC1: 4 4 C2DE: 6 6	Employed: ≥3 3 Education/Training: ≥1 2 NEET: ≥1 1 Retired: 0	17–20: ≥0 21–34: ≥4 5 35–54: ≥4 5 55+: 0	White: 8 8 BME: 2 2	Yes: 10 10 No: 0 0	Yes: ≥7 7 No: ≥1 3	Yes: ≥2 2 No: ≥5 8	Yes: 3 3 No: 7 7	Yes: ≥2 5 No: ≥5 5	10 10
4	M: 5 5 F: 5 5	ABC1: 4 4 C2DE: 6 6	Employed: 0 Education/Training: 0 NEET: 0 Retired: 10 10	17–20: 0 21–34: 0 35–54: 0 55+: 10 10	White: 8 8 BME: 2 2	Yes: 0 No: 10 10	Yes: ≥6 4 No: ≥3 6	Yes: ≥1 0 No: ≥5 9	Yes: 5 5 No: 5 5	Yes: ≥1 3 No: ≥7 7	10 10
5	M: 5 5 F: 5 5	ABC1: 4 4 C2DE: 6 6	Employed: 10 10 Education/Training: 0 NEET: 0 Retired: 0	17–20: 0 21–34: 10 10 35–54: 0 55+: 0	White: 8 8 BME: 2 2	Yes: 0 0 No: 10 10	Yes: ≥7 7 No: ≥1 3	Yes: ≥2 2 No: ≥5 8	Yes: 3 3 No: 7 7	Yes: ≥2 4 No: ≥5 6	10 10
6*	M: 5 4 F: 5 6	ABC1: 5 5 C2DE: 5 5	Employed: ≥2 4 Education/Training: ≥2 2 NEET: ≥2 2 Retired: ≥2 2	17–20: 1 0 21–34: 1 2 35–54: 4 4 55+: 4 4	White: 9 8 BME: 1 2	Yes: ≥2 2 No: ≥2 8	Yes: ≥8 10	Yes: ≥1 1	Yes: 0 0 No: 10 10	Yes: ≥1 2	10 10

APPENDIX 3
Topic guides

Table A3.1: **DfT road safety workshop 1: topic guide**

Time	Session and aims	Topic areas	Tools/Stimulus material
6.30pm	*Session 1: Welcome and introduction* Introduce study aims	Overview of study Survey on behaviours and attitudes to road safety. General questions on various transport modes and corresponding attitudes and behaviours.	Paper survey
6.40pm	*Session 2: Expression and identity in transport* Warm up group Understand people's unprompted views on what transport modes mean to them.	Introduce participants to one another. Ice breaker: How many different forms of transport have you used in the last fortnight? (5 mins) Day to day, how do you prefer to get around and why? Can you tell us how you <u>feel</u> about the different ways you travel? Spontaneous then probe on: • Driving/being driven. • Motorcycles. • Cycling (on the roads). • Walking. • Public transport (bus, train, tube, tram). Take each in turn and probe around: • Feelings of independence and control. • Status symbols/social desirability. • Passion/excitement. • Practicality/convenience. • Disconnect between idea and reality. • Negatives and frustrations. • Safety (Is this a consideration?).	
7.05pm	*Session 3: Views on risk* Conceptualisation of risk Stereotypes Norms	Relative to other things, how important is road safety? Do you see the roads as risky? Who or what do you believe are the main causes road accidents? • Others/self Do you take risks on the road? • What were the benefits of taking the risk? • What could have gone wrong? • Why do you take the risks you do? • When do you take such risks? • What stops you taking more risks? Who takes risks? Who takes risks on the road? As a pedestrian, cyclists, motorcyclist or car driver? Do your friends and family take risks?	

(*continued*)

Table A3.1: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material
	Situation/context	Do you always take the same level of risk or is it dependent on the situation and context? Have you always taken a similar level of risk?	
	Perception of changes over time	What in life changes yours/people's perception of risk? • Continuum/chronological • Triggers/specific events (e.g. accident involvement or witness)/life stages (e.g. becoming a parent/getting a job).	Pen pictures
	Habit and risk taking	Do you think you are always aware that you are taking risks? Where does transport sit in terms of a risky behaviour? Is it different from other types of risky behaviour and why?	
		Richter scale of risk exercise. Placing various risky behaviours on a continuum. (See Appendix 3)	The Richter Scale of Risk. Then to place it on a risk line relative to other behaviours?
7.40pm	*Break*		

7.55pm	*Session 4: Aberrant behaviours and different hats*
	Exploring aberrant road user behaviour and when it is acceptable to take risks/break rules.
	Does the acceptability of various behaviours shift with different road user perspectives?
		What sort of things do you think encourage bad or dangerous road use? (Write up on flip chart.)
		Considering the following behaviours, how acceptable or unacceptable are they? (Try to get an idea of the degrees of unacceptability.)
		Is ever ok to do them/have you done them?
		What do you think the penalties associated with them are/are they appropriate? Why do you think this?
		Do your views on these behaviours change from different perspectives? (e.g. as a motorcyclist but also as a pedestrian/ resident)
		Imagine you are a motorcyclist/pedestrian/ resident/car driver what are your views on the following?
		[group to work in pairs, each speaking from a different perspective]
		• Speeding:
		  • Urban roads.
		  • Rural roads.
		  • Motorways.
		• Drink/drug driving.
		• Driving tired.
		• Distractions:
		  • Mobile phones.
		  • Satellite navigation.
		  • Smoking.
		  • Eating.
		  • Billboards (and other external factors).
			Pen portraits

(*continued*)

Table A3.1: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material

8.20pm	*Pro-social and safer driving and road user behaviour*	What makes a good driver/cyclist/ motorcyclist/pedestrian?
		[group to work in pairs, each speaking from a different perspective]
		• What stops you taking more risks?
		  • Fear of accident.
		  • Fear of penalty.
		Describe a situation of when you feel you have been a safe road user.
		• Why did you behave the way you did?
		• How often does this happen?
		• Why did you feel safe?
		What would encourage you to be a safer road user? [relate to previous discussion on aberrant behaviours] (see beginning of session 4)
		• Other driver behaviour.
		• Better education.
		• Technical/engineering solutions.
		• Enforcement penalties.
		And thinking about other drivers? [use pen portraits]
		• Other driver behaviour.
		• Better education.
		• Technical/engineering solutions.
		• Enforcement penalties.
			Pen portraits

8.50pm	*Session 5: Feedback and voting* To understand which issues influenced views To track impact of discussion on views To explain what happens next	Feedback Repeat survey to track views post discussion. Brief respondents on pre-task for workshop 2.	Materials to distribute for W2 pre-task.
9.00pm	Ends		

Table A3.2 **DfT road safety workshop 2: topic guide**

Time	Session and aims	Topic areas	Tools/Stimulus material
6.30pm	*Session 1: Welcome and introduction* Brief feedback from workshop 1.	Feedback from workshop 1.	
6.45pm	*Session 2: Different hats and the importance of location* Exploring the influence of familiarity and location in terms of behaviour, risk perception and attitudes.	Discuss road safety diaries. Either invite participants to 'tell their story' or moderator to explain with help from participant. Local area map exercise (give participants 10–15 mins to discuss and draw on the map before bringing the group together to discuss): • Where are the high/low risk areas. Why are they low/high risk? What makes them this way? • Are these areas high risk for all road users or just a particular group -drivers/pedestrians/ cyclists etc? [encourage respondents to think of safety from different road user perspectives] • Do we behave differently on roads we know? Probe: • Habit. • Autopilot. • Does familiarity lead us to take more or less risks? • Are we more or less cautious when driving in an unfamiliar environment? Thinking about driving on rural roads: • What causes unsafe driving behaviour? [probe familiarity/lack of pedestrians/other traffic/boredom/need to get somewhere quickly] • What would be more likely to improve driving behaviours in rural areas? [probe on penalties, education, government advertising, technical/engineering solutions] What are your views on the effectiveness of road safety campaigns? On rural road and in general?	Participants to use different coloured pens to denote which areas are high risk and which are low risk on a local area map
7.40pm	Break		
7.50pm	*Session 3: Conformity and peer pressure* Discussing the influence of various passengers and other road users on driving behaviour.	Have you ever noticed someone else's behaviour change when they have someone else in the car? Why do you think they drove differently, how did they change? How does your behaviour on the roads change from when you drive alone compared to when you are: • Driving with children/parents/family as passengers? • Driving with friends as passengers? • Driving with work colleagues?	Could use thanking other drivers by waving to start discussion here

(*continued*)

Table A3.2: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material
		Do you ever feel that you have been forced to do something you wouldn't normally do by a passenger or another road user? When on a fast moving road, is it more important to stick to the speed limit or match the speed of the vehicles around you? Are there unwritten rules of the road that are more important/useful to follow than the Highway Code? • What are these? • Why are they important useful? • Are people who don't follow these rules acting unsafely? How effective do you believe training and driving tests are? Is there a need to refresh skills to maintain a licence? When/how often? What are participants' views on life-long learning outside of the formal test?	
8.25pm	*Session 4: Responsibility and road safety*	Thinking about discussion to date, where do you feel responsibility lies for road safety? • Individual road users. • Vehicle manufacturers. • Central government. • Local authorities and town planners. • Education/schools. Why do you say this? Are there any others? What role does each group play in making the roads safe? How do they work together? Do they ever work against each other (e.g. vehicle manufacturers produce some very fast cars, town planners create some frustrating road layouts)? What more could and should each group be doing?/If there's one thing each group should do to improve road safety what should this be?	Ranking exercise: Write the five groups on the left on a flip chart and get participants to rank them from 1 to 5.
8.45pm	*Session 5: Feedback and next steps* To explain what happens next	Highlight next workshop.	Materials to distribute for W3 pre-task.
9.00pm	Ends		

Table A3.3 **DfT Road safety workshop 3: topic guide**

Time	Session and aims	Topic areas	Tools/Stimulus material
10.15am Whole group	*Session 1: Welcome and introduction* Canvass individuals' unprompted views for tracking.	Welcome Explain structure of day. IML voting on behaviours and attitudes to road safety. General questions on various transport modes and corresponding attitudes and behaviours.	IML interactive voting
10.30 Whole group	*Session 2: DfT presentation delivered by UWE expert providing evidence on road safety issues*	Presentation will focus on: • Young male deaths. • Rural single carriageways. • Urban pedestrians. • Motorcyclists. • Speeding • Drink/drug driving. • Careless driving.	Presentation by UWE
11.10 Breakout Groups	*Session 3: Road deaths males 18–30*	Group introductions. Mod to ask group if anyone has noticed any road safety issues since they last met. Ask them to explain it. Explain that for the next 1 and 3/4 hours we are going to talk about some of the issues raised in the presentation. Were participants aware that young men were disproportionately more likely to die on the road? Is this surprising or not? What are their reasons for saying this? Why do they think young men are more likely to be killed on British roads? Probe: • Lack of experience. • Enjoy the risk/thrill. • Peer pressure issues. • Choice of vehicle. Thinking about the discussions to date, what sort of schemes do you feel will be effective for this group? [Note spontaneous answers on flip chart and reintroduce in final prioritisation exercise.] The following are interventions that DfT are considering: How effective to you feel each will be and why? • Improve: driving test; instructor information and training; life long learning [within this discuss skill training and impact of greater skills on confidence and attitudes]. • Improve road user education from pre-school to pre-driver. • Car seizure and crushing; part. for young males committing road traffic offences such as speeding/dangerous driving or for driving uninsured or unlicensed. Do you think the measures will be politically popular? Probe on who they will be popular/ unpopular with. Does this/should this affect the ability of the government to introduce them? Why/why not?	Prompt cards with key facts and interventions

(*continued*)

Table A3.3: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material
11.40	*Session 4: Rural single carriageway roads*	Were participants aware that drivers were more likely to be killed while driving on rural roads? Are the statistics surprising or not? What are their reasons for saying this? Why do they think drivers are more likely to be killed on rural roads? Probe: • Unfamiliar with the roads. • Driving too fast for the conditions. • Auto-pilot/habit. • Boredom/distractions. Thinking about the discussions to date, what sort of schemes do you feel will be effective for rural roads? [Note spontaneous answers on flip chart and reintroduce in final prioritisation exercise.] The following are interventions that DfT are considering: How effective to you feel each will be and why? • Reduce national speed limit on single carriageways from 60 to 50 mph. • Adopt lower speed limits on high risk rural roads. • Publish annual maps of high risk routes for local authorities to help in treating roads. Also for drivers and road users to help with road user behaviour. Do you think the measures will be politically popular? Probe on who they will be popular/ unpopular with. Does this/should this affect the ability of the government to introduce them? Why/why not?	Prompt cards with key facts and interventions
12.00	*Comfort break*		
12.05 Breakout groups	*Session 5: Urban pedestrians*	Were participants aware that pedestrians and cyclists were more likely to be injured or killed on urban roads? Are the statistics surprising or not? What are their reasons for saying this? Why do they think pedestrians and cyclists are more likely to be killed in urban areas. Probe: • Prevalence. • Volume of traffic. • Distractions. • More likely to take risks? Why? Were you aware that pedestrians in deprived areas were at a higher risk than other areas? Why do you think this is? Thinking about the discussions to date, what sort of schemes do you feel will be effective for urban pedestrians and cyclists? [Note spontaneous answers on flip chart and reintroduce in final prioritisation exercise.]	

(*continued*)

Table A3.3: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material
		The following are interventions that DfT are considering: How effective to you feel each will be and why? • More crossings. • Streets of primarily residential nature should be 20 mph. • 20 mph areas across all urban areas. • 20 mph areas around schools, playgrounds, shops, markets. • Greater priority for pedestrians in towns. • Physical traffic calming measures. • Home Zones. • Shared space concept. Do you think the measures will be politically popular? Probe on who they will be popular/ unpopular with. Does this/should this affect the ability of the government to introduce them? Why/why not?	Prompt cards with key facts and interventions
12.30 Breakout groups	*Session 6: Motorcyclists*	Were participants aware that Motorcyclists were disproportionately likely to be killed on the roads? Are the statistics surprising or not? What are their reasons for saying this? Why do they think motorcyclists are so much more likely to be killed on the roads? Probe: • Exposure. • Speed/risk-taking. • Car drivers not seeing them/not giving them enough room. Thinking about the discussions to date, what sort of schemes do you feel will be effective for urban pedestrians and cyclists? [Note spontaneous answers on flip chart and reintroduce in final prioritisation exercise.] The following are interventions that DfT are considering: How effective to you feel each will be and why? • Urban junction collisions – reduced urban speeds. • Better engineering solutions, such as high friction surfaces. • Better driver or rider education. • Rural road incidents – improved by risk-mapping initiative and reduced speed limits. Do you think the measures will be politically popular? Probe on who they will be popular/ unpopular with. Does this/should this affect the ability of the government to introduce them? Why/why not?	Prompt cards with key facts and interventions
12.50	*Lunch*		
1.30pm Whole Group	*Session 7: Video diaries*	Presentation of participants' video diaries. Recap on some of the issues from earlier.	

(*continued*)

Table A3.3: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material
1.50pm Breakout groups	*Session 8: Speeding*	Were you aware that excessive or inappropriate speed was responsible for 25% of deaths on the road? Are the statistics surprising or not? What are their reasons for saying this? Why do they think road users use inappropriate or excessive speeds? Probe: • Thrill. • Time. • Peer pressure. • Other drivers exerting pressure. Thinking about the discussions to date, what sort of schemes do you feel will be effective for urban pedestrians and cyclists? [Note spontaneous answers on flip chart and reintroduce in final prioritisation exercise.] The following are interventions that DfT are considering: How effective to you feel each will be and why? • Six points for gross speeding; supporting introduction of average speed cameras. • Reduced speed limits in on rural single carriageways and on residential streets to send important signal on appropriate speeds. • Continued THINK! campaigning Do you think the measures will be politically popular? Probe on who they will be popular/ unpopular with. Does this/should this affect the ability of the government to introduce them? Why/why not?	Prompt cards with key facts and interventions
2.10pm Breakout groups	*Session 9: Drink and drug driving*	Were you aware of how many fatal road accidents involved at least one driver who was over the drink drive limit? Are the statistics surprising or not? What are their reasons for saying this? What about driving under the influence of drugs? Why do they think road users are driving under the influence of drink/drugs? Probe: • Lack of public transport. • Laziness. • Cost. • Peer pressure. • Thrill. Thinking about the discussions to date, what sort of schemes do you feel will be effective for urban pedestrians and cyclists? [Note spontaneous answers on flip chart and reintroduce in final prioritisation exercise.]	

(*continued*)

Table A3.3: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material
		The following are interventions that DfT are considering: How effective do you feel each will be and why? • Drink drive – remove breath-testing loophole. • Improve High Risk Offenders scheme. • Drug drive – new drug drive offence; streamlined process. for impaired driving offence • Substantial THINK! campaign. Do you think the measures will be politically popular? Probe on who they will be popular/ unpopular with. Does this/should this affect the ability of the government to introduce them? Why/why not?	Prompt cards with key facts and interventions
2.30pm	Break		
2.40pm Breakout groups	*Session 10: Basic driving standards*	Were you aware of how many accidents/deaths are caused by careless driving and a lack of basic driving standards? Are the statistics surprising or not? What are their reasons for saying this? Why do they think road users drive carelessly? Probe: • Boredom. • Autopilot. • Rushing/time. Why do they think there is a lack of basic driving standards? Is there? Thinking about the discussions to date, what sort of schemes do you feel will be effective for urban pedestrians and cyclists? [Note spontaneous answers on flip chart and reintroduce in final prioritisation exercise.] The following are interventions that DfT are considering: How effective to you feel each will be and why? • Improved driving test, learning, instructor information and training, life-long learning, minimum time for learning. [Probe whether this is different for male group in first session] • Careless driving fixed penalty. Do you think the measures will be politically popular? Probe on who they will be popular/ unpopular with. Does this/should this affect the ability of the government to introduce them? Why/why not?	

(*continued*)

Table A3.3: (*continued*)

Time	Session and aims	Topic areas	Tools/Stimulus material
3.00pm	*Session 11: Prioritisation exercise*	Split the group into three and hand out a chart and stickers. The chart details some of the interventions we have been discussing throughout the course of the day split by the 7 'at risk' groups. The stickers represent DfT's available resources that it can dedicate to road safety issues (this can be cash or other resources, however they prefer to think about it). Green stickers are worth 1 and red stickers are worth 2. Groups need to decide where to spend their resources, where the priorities are. They can only spend one sticker in each intervention but can spend multiple stickers in each group. They also need to decide which interventions need the most resources and therefore get the red stickers. However, participants can spend resources on their own ideas (flipchart notes from earlier sessions). Write these in the boxes below and stick either a green or red sticker there. Give groups 10 minutes to decide. Then feed back to the group on how they decided to spend their stickers. Finally spend five minutes and get the whole group to work together to come up with three topline messages on road safety for the DfT. This can be based on everything from all three workshops. Moderator to write up on flipchart and to present to the plenary in the next session.	Prioritisation exercise
3.25 Whole group	*Session 12: Feedback and voting* To understand which issues influenced views To track impact of discussion on views To explain what happens next	Feedback – What key messages do groups want to give to the DfT? Repeat interactive voting to track views post-discussion. Explain how respondents' views will be used and what happens next.	IML voting on key tracking questions
4.00pm	Ends		