



Scottish Executive Central Research Unit
2001

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EXECUTIVE SUMMARY

INTRODUCTION

The Government has made a commitment to sustainable transport as part of an integrated transport strategy, encouraging a decrease in the use of cars and increasing the use of cycling as a viable mode of transport. As one element of their transportation policies, local authorities are expected to produce local cycling strategies which include the implementation of improvements to infrastructure and the initiation of traffic management measures. These can incorporate elements such as the reallocation of road space, integration of cycling with public transport modes and provision of facilities for cycle parking and the carriage of cycles.

In line with this strategy, the Scottish Executive has set an objective to increase cycling as a mode of transport for people of all ages. George Street Research was commissioned to undertake a programme of research that would explore the attitudes of drivers and cyclists towards each other in an urban context. The key objectives of the research were to look at the attitudes of different groups of road users towards each other as equal road users, to identify circumstances where conflict may occur and establish the barriers and problems to viewing others as equal road users and make recommendations to overcome these. The research was undertaken within the context of the present road infrastructure and was not intended to make recommendations based on engineering or enforcement solutions to road conflicts.

METHODOLOGY

It was agreed that the study should focus on urban rather than rural areas as these are affected by higher levels of traffic congestion and a greater concentration of cyclists, thus increasing the potential for road user conflict. After examining data on accident rates and looking at current cycling provision within Scotland's four main cities, it was decided to base the research in Edinburgh and Aberdeen. The former was chosen because of its active and long-standing policy towards the promotion of cycling and the extensive modifications that have already been made to the road network within the city. Aberdeen was chosen because of its non-central belt location and its more recent activity designed to increase provision for cyclists whilst having minimum impact on the road space set aside for other road users.

A staged approach to this programme of research was adopted. The initial stage comprised the collation of two types of information – a review of published data and meetings with staff in the transportation sections of Edinburgh and Aberdeen city councils in order to gather details of the local authorities' experiences of the implementation of cycling strategies within the context of their transport strategy. This was then followed by an extensive programme of exploratory qualitative research using group and in-depth interviews among different types of road user.

Within each city three locations, each providing examples of different road conditions in terms of the allocation of road space, were then chosen for the research. Those recruited to participate in the research were chosen as a result of their use of these specific locations. The views of all types of users of these locations were sought, including cyclists, motorcyclists

and drivers of private and commercial vehicles. A total of 42 interviews, including group discussions, paired depths and triads, were completed amongst road users.

Most of the data presented are perceptual data representing the views and attitudes of those interviewed in the course of the study. Where these views are supported by statistical data from other studies these have been included to provide context.

PERCEPTIONS OF ROAD SHARING AND PRIORITIES GIVEN TO ROAD USERS

An initial attempt was made to get drivers and cyclists to categorise themselves and other types of road users according to who had the greatest 'right of use' of the road, as this would help determine the extent to which cyclists were seen as being equal or unequal. When respondents were asked to consider their attitudes towards other road users and the priorities accorded to them, it became apparent that there are a number of criteria which are taken into account. The criteria used by respondents to help classify road user groups included concern about the environment, safety of the road user (and towards others), size of vehicle, speed of vehicle, journey purpose and whether or not the mode of travel is perceived as offering a public service. Of these, the two criteria which were of primary importance in the context of the research related to :

- the degree with which a particular road user can be considered to be 'environmentally friendly' and
- the degree of safety they are perceived to offer both to themselves and to other road users.

When these priorities are assigned to different groups of road user, **those types of transport offering a public service are perceived to have greatest priority on the road.** On this dimension, buses are generally given the highest priority by all groups of road user due to the large numbers of passengers which can be transported and the equivalent number of cars that this keeps off the road as a consequence.

Conversely, motorists are accorded least priority on the road because they are not environmentally friendly. Lorries and vans are generally perceived to be performing a necessary task and are, therefore, afforded some priority because of this.

In terms of environmental friendliness, cyclists are accorded a high level of priority. However, cyclists and motorcyclists emerged as the two groups of most vulnerable road users, and there were further sub divisions within this. For example, professional / competent cyclists were perceived to be slightly less vulnerable, whilst courier cyclists and motorcyclists were most vulnerable.

Interestingly, whilst cyclists generally regard themselves as equal to other road users, this status is not assigned to them by others.

CYCLISTS AS EQUAL ROAD USERS

Cyclists are generally not considered to deserve priority on the road by most other road users. The exception was drivers who also cycled who showed more tolerance and sympathy towards the rights of cyclists. For non cyclists, however, one bad experience of poor cycling behaviour often served to create a negative impression that extended towards all cyclists.

There are a number of factors cited by drivers which have impacted upon the prioritisation accorded to cyclists as road users. These factors include :

- a lack of regard for other road users,
- a failure to adhere to basic road safety guidelines,
- poor cycling behaviour,
- not paying road tax,
- not being able to keep up with other traffic and
- not showing courtesy to others.

While all respondents regard cyclists as the most vulnerable type of road user, criticism is widely levelled at cyclists for not consistently adhering to the law in terms of courteous and acceptable road behaviour. Instances were cited where cyclists do not use lights in the dark, do not make use of safety wear and do not consistently make use of the cycle lanes / other facilities that are provided to them. Cyclists are also reported as weaving in and out of traffic, cycling on pavements and violating traffic signals. Furthermore, for many road users, the fact that most cyclists cannot travel at an equal speed to other road users implies that they are not equal partners when it comes to sharing the same road space

In many instances, concerns about cycling behaviour are voiced because of a recognition of the vulnerability of cyclists as road users and a desire to avoid unnecessary accidents on the road.

All respondents – cyclists and non-cyclists – readily admit that the failure of a small number of cyclists to observe the basic rules of the road when cycling, contributes to a poor perception of all cyclists.

DRIVERS' ATTITUDES TO CYCLISTS

In general, drivers who do not cycle tended to view cyclists as a minority group, commanding too much by way of resources but who were clearly benefiting from significant additional provision in both Aberdeen and Edinburgh. Thus, for most drivers there is a perceived inequality between the provision made for cyclists, their needs and their contribution to the cost of this provision. This is enhanced, if anything, by the view that cyclists are a minority

group and a lack of appreciation by non-cycling drivers of the vulnerability of cyclists and the problems that poor driving behaviour can cause cyclists.

Drivers who do cycle do not hold these views and are much more tolerant and supportive of cyclists.

Whilst many groups of road user acknowledge that cyclists are a vulnerable group of road users who need to have specialist provision of some sort, the fact that cyclists are not seen to be adhering to the basic rules of the road, can reduce levels of sympathy towards cyclists. Many drivers regard cyclists as “their own worst enemy” in that they do nothing to help create more positive perceptions of cyclists in general. Cyclists also accept that the behaviour of others (and themselves admittedly) is not ideal.

CYCLISTS’ ATTITUDES TO DRIVERS

In general, cyclists have a fairly good perception of drivers and most agree that, given the large numbers of drivers on the road and the level of special cycling provision, there are relatively few incidents affecting them. In contrast with drivers’ attitudes towards cyclists, poor driving behaviour towards cyclists tends to be blamed on a minority of bad drivers rather than an assumption that all drivers exhibit bad driving behaviour from time to time. What is important is that **non-cycling road users expect cyclists to be the ones to learn how to deal with other road users and so the emphasis is placed upon cyclists obtaining the relevant information to act properly, rather than drivers doing so.**

DRIVERS’ ATTITUDES TO CYCLE SPACE

Whilst most groups of road users may have less sympathy towards cyclists than others, there appears to be a tacit acceptance of cyclists being able to make use of special road space set aside in bus lanes. Drivers are less supportive of cycle lane provision and other aspects of provision specific to cyclists such as advanced stop lines and filter lanes.

A number of factors underlie this, including the perceived dearth of cyclists in both the study cities, a lack of understanding of the rationale behind this type of provision, non use by cyclists and lack of awareness of the problems faced by cyclists.

The research findings indicate that there is a general lack of awareness and understanding on the part of most respondents towards specialist road provision. This is enhanced by inconsistencies in the road markings used for cycle provision which can be both confusing and misleading. As such, **whilst specialist provision such as cycle lanes are attributed to having promoted awareness of cyclists and increased safety levels on the road and encouraged more people to cycle, there are some criticisms that the existing provision is confusing.** At a basic level, most respondents fail to understand the difference between mandatory and discretionary provision of cycle lanes. Similarly, the regulations surrounding prohibition of some users from the bus lanes and cycle lanes are also confusing. This criticism related to inconsistency in provision at both a local and national level.

CONFLICT SITUATIONS

Given the criticisms levelled at cyclists and other road users, it is perhaps not surprising that respondents readily identify a number of types of situation where conflict can occur between road users. These include at pinch points in roads, situations where tailgating can occur (especially in bus lanes), poor driving behaviour in general and impatient or aggressive attitudes.

It is important to note, however, that **there are some conflict situations which will not be created solely by the attitude or behaviour of road users.** These include poor weather conditions, roads in a poor state of repair and inconsistencies in the operation of specialist provision and inconsistency in enforcement. Cyclists often thought drivers were unaware of these problems.

INCLUSION OF OTHER USER GROUPS IN BUS LANES

The research was required to explore attitudes towards the possibility of motorcyclists and freight drivers being allowed to use bus lanes. With regard to motorcyclists, whilst some road users cited advantages similar to those offered to cyclists, most respondents were of the opinion that cyclists, much more than motorcyclists, have the greater need to use bus lanes. A bus lane offers protection for cyclists by keeping them away from the mainstream of traffic and making them more visible.

As such, there was concern that giving motorcyclists access to bus lanes would encourage them to speed, putting others at risk. In addition, some road users were unhappy about opening up the bus lanes to any other type of road user on the basis that they may become congested, defeating the effectiveness of these in terms of improved journey speeds for existing users.

Real concerns were voiced at the possibility of other freight transport having access to bus lanes, not least of which were concerns about cycle safety.

THE IMPACT OF THE PROVISION OF INFORMATION AND INFRASTRUCTURE ON CYCLING

Overall, having ascertained the attitudes exhibited towards cyclists, it is perhaps not surprising that most respondents acknowledge that any increase in the numbers of those cycling overall is likely to be small in the absence of a greater acceptance of cyclists by other road users.

Respondents acknowledge that achieving such a culture change will take time. Whilst respondents found it difficult to assess what factors may have created positive attitudes towards cycling in some other countries, there was a general acknowledgement that without a cultural change in the United Kingdom on the part of all road users, any increase in cycling is unlikely to be huge. However, in part, this process of cultural change can be aided by the provision of information relating to road use to help change current habits.

As such, a great deal of importance is placed upon the dissemination of information to drivers and cyclists and the effect this will have on the attitudes of other road users.

In general, respondents suggested that the type of pro cycling policy followed by Edinburgh and Aberdeen city councils, incorporating the provision of features such as cycle lanes and advanced stop lines is most likely to attract latent cyclists and thus increase cycling behaviour for a small number of cyclists. It was not seen to be sufficient to encourage avid non cyclists to take up cycling. However, based on the research it would seem that **a lack of awareness and understanding** of current special provision has served to reduce existing and potential use of roads by cyclists. This was perhaps more marked in Aberdeen, where cycle provision is less obvious and cyclists feel less confident of the role being offered to them.

RECOMMENDATIONS FOR AN INFORMATION AND EDUCATION CAMPAIGN

Given this lack of awareness and understanding about current cycle provision, it is not surprising that a number of respondents **cite the need for some form of educational and informational campaign.**

In terms of the actual sources of information, most respondents participating in the qualitative research cited very few sources from which information had been or could be obtained. For most, the Highway Code was the obvious means of obtaining information about road space provision, markings and how to relate to other road users.

Only a minority of respondents, largely those who are “professional” drivers, have been made aware of changes to road provision by any means. For the majority of road users who do not drive in a professional capacity, there appear to be few sources of information regarding the specialist provision of space to different user groups. Thus most drivers rely upon experience and guesswork to identify how they should behave. Greater knowledge would aid the extent to which cyclists are assigned equal status as road users and would increase cyclists’ and potential cyclists’ confidence to use the roads.

For cyclists and drivers in both cities it is important to consider messages which should be given to various types of road users to bring about positive attitudes towards sharing road space. Key messages to both cyclists and drivers include :

- cyclists should adhere to the laws of the road
- cyclists should follow the safety code
- cyclists need to understand the needs of other road users
- cyclists should learn how to cycle in current road conditions and become competent in their use of the roads

* * *

- drivers should recognise the role of cycling
- drivers should have greater awareness of the vulnerability of cyclists

- drivers to be sympathetic towards cyclists in terms of accepting that they are different from other road users and that a more considerate and tolerant driving behaviour is required

Given the need for effective dissemination of these messages, an allied need for some form of educational campaign was identified and preferences were for a campaign which would have a broad reach across all road users and which would be hardhitting in its message(s) to road users. The most obvious channel for such a campaign is via television, albeit that respondents also mention a variety of other channels such as radio or magazine advertising, general and targeted mailshots, and provision of information in public places and at garages and cycle shops.

In addition to suggestions for an educational campaign which would address the informational gaps which currently exist, **respondents noted a need for formal training to be offered to adult and child cyclists.** Whilst many respondents noted that “informal” training from peers and parents was available to many children, there was a preference for formal training, such as that provided through schools, which could incorporate off-road and on-road lessons. This should teach sensible cycling behaviour and reinforce the importance of safety wear. Only a very small number of respondents were aware of any formal cycle training being available outside the provision that takes places at primary schools at present. There were suggestions that formal instruction should be made widely available to all cyclists with delivery perhaps via cycle groups, the police and road safety bodies. It is also possible that training offered to children via their schools could have the knock-on benefit of educating and influencing parents.

Another key issue raised by respondents as one that would help to bring about more positive attitudes towards cyclists and non-cyclists was that of **enforcement.** Comments were made to the effect that whilst cyclists are not treated by the enforcement agencies in the same manner as other road users, they are unlikely to be accepted as equal road users. As such, a number of suggestions were made by respondents as to the types of action which might improve the perceived equality of cyclists as road users. These included on the spot fines for unroadworthy cycles. There was a strong feeling that the police should enforce regulations against cyclists in the same way as other road regulations, albeit that there was an acknowledgement that this may be difficult to impose, given the myriad of demands on police time.

CHAPTER ONE

BACKGROUND TO THE STUDY

The opening chapter of this report begins by detailing the background to the research as set out in the original specification and outlines the aims and objectives of the research.

1.1 BACKGROUND

The 1999 White Paper, *“Travel Choices for Scotland”*, underlines the Government’s commitment to sustainable transport as part of an integrated transport strategy, encouraging a decrease in the use of cars and increasing the use of cycling as a viable mode of transport. Cycling is recognised as an environmentally friendly form of transport, bringing the benefits of improved health and fitness. If trends in car use are left unchecked, then it is expected that road traffic could double between 1996 and 2025¹. This could have serious negative consequences for the local economies and environments of the most congested areas.

The National Cycling Strategy, established by the UK Government in 1996, set the aims of substantially increasing the amount of cycling within ten to fifteen years. The advantages of cycling as a mode of transport are seen to include improvements to the environment, advantages to the health of the population and a reduction in congestion on the roads.

As one element of their overall transportation strategies, local authorities are expected to produce a local cycling strategy which should include the implementation of improvements to infrastructure and the initiation of traffic management measures. These would incorporate elements such as the reallocation of road space, integration of cycling with public transport modes and provision of facilities for bicycle parking and the carriage of bicycles.

Furthering the aims of the National Cycling Strategy, the UK National Cycling Forum - of which the Scottish Executive is a member - and the Scottish Cycling Forum, intend to establish a culture that favours an increase in the use of cycling for people of all ages. Figures for the number of journeys that are undertaken by cycling as a proportion of all journeys vary between just under 1%² and 4%³ depending on the source, but there is no denying that the overall proportion is low. The publication, *“Cycling into the Future”*, points out that the proportion of all journeys that are made by bicycle in Scotland is less than in Great Britain as a whole. The publication goes on to point out that the distances travelled by bicycle have been falling since the mid-1970s (and in Scotland at a faster rate than in the rest of Britain), despite an increase in bicycle ownership over the same period.

In *“Planning Advice Note: Pan 57, Transport And Planning,”* April 1999, the Scottish Office states that, *“for the foreseeable future the bulk of cycling will be on the existing road network where additional appropriate measures include provision of cycle lanes with appropriate car parking restrictions, speed and traffic reduction, and junction treatments including advanced stop lines and cycle signals”*. Thus for the time being, cyclists and motorists will be sharing the same routes to varying degrees, dependent on the provision of features such as cycle lanes.

¹ *“Cycling into the Future”*, The Scottish Office Development Department, 1996

² *op cit 1*

³ *“Travel Patterns in Scotland”*, The Scottish Office CRU, 1997

In this context, cyclists are a vulnerable group of road users and policies must be implemented to make this mode of transport safer. It is envisaged that a combination of increasing awareness of cyclists amongst motorists and safer on-road conditions will reduce the level of cycling accident risks to levels that are common in Europe. Of the total of 1,140 bicycle casualties in Scotland in 1998 (13 fatal, 197 serious and 930 causing slight injury)⁴, most were in an urban area: 43% within the boundaries of Scotland's 4 city local authorities. The cycling accident hotspots in Scotland were Edinburgh (238 accidents), Glasgow (164 accidents), Highland (63 accidents), Fife (55 accidents) and Aberdeen (54 accidents). Given that the city areas are much smaller geographically than either Highland or Fife, the concentration of accidents in built-up areas is much higher. Other data reveal the extent to which casualties are concentrated during the rush hour period. It follows that special initiatives have the potential to make a difference in these concentrated areas.

1.2 AIMS AND OBJECTIVES

As part of the Scottish Executive's objective to increase cycling as a mode of transport for people of all ages, George Street Research was commissioned, in May 2000, to undertake a programme of research which would explore the attitudes of drivers and cyclists towards each other in an urban context. The key objectives of this programme of research were defined as:

- ◆ To explore the attitudes of drivers and cyclists to each other as equal road users, to understand better the problems which exist and how to address these problems in the context of improving road safety;
- ◆ To determine any differences between the attitudes of driving non-cyclists and cycling non-drivers, and those who both drive and cycle;
- ◆ To highlight any differences in attitudes between different types of drivers including car, bus, lorry, taxi and motorcycle drivers;
- ◆ To examine the issue of motorcyclists as equal road users and the potential for sharing designated lanes with buses, taxis and cyclists and to make recommendations;
- ◆ To identify the circumstances in which road user conflicts are most likely to occur, including the use of cycle and bus lanes and (lack of) understanding of road markings and restrictions;
- ◆ To establish the main problems and barriers to viewing the other road user as an equal sharer of road space and to make recommendations on how to overcome these.

The research was undertaken within the context of the present road infrastructure and was not intended to make recommendations based on engineering or enforcement solutions to road conflicts.

This chapter has provided background information on the research. The following chapter provides details of the methodology adopted in the light of the project objectives.

⁴Road Accidents Scotland 1998

CHAPTER TWO

SUMMARY OF APPROACH

This chapter summarises the approach that was used to gather the information and the rationale for using the approach selected.

2.1 OVERVIEW

To ensure that as much information as possible was extracted from a variety of different sources, the research was conducted in two stages. The preliminary stage incorporated the collation of two types of information - firstly, a review of published data including findings from other projects in which George Street Research had previously had an involvement and, secondly, data obtained from meetings with staff in the transportation sections of Edinburgh and Aberdeen city councils. These meetings were used to gather details of the local authorities' experiences of the implementation of cycling strategies within the context of their overall transport strategy. On completion of this preliminary stage, the primary information collection stage then involved an intensive programme of group and depth interviews with different types of road users in Edinburgh and Aberdeen.

2.2 LOCATIONS FOR RESEARCH

Prior to commencing the study, discussions were held with the Scottish Executive to determine the precise locations where the research should be conducted. It was agreed that the study should focus on urban rather than rural areas as these are affected by higher levels of traffic congestion and a greater concentration of cyclists, thus, increasing the potential for road user conflict. Data on accident rates support this and so a decision was made to select two case study areas from Scotland's four city authorities.

After considering these four urban locations – namely Edinburgh, Aberdeen, Glasgow and Dundee – the decision was made to base the research in Edinburgh and Aberdeen. Edinburgh was selected as a result of its active and long-standing policy towards the promotion of cycling and the extensive modifications which had already been made to the road network within the city. Aberdeen was chosen because of its non-central belt location and its more recent activity designed to increase provision for cyclists, whilst having minimum impact on the road space set aside for other road users.

At discussions with representatives from the transportation sections of the city councils of Edinburgh and Aberdeen, detailed information on the local authorities' policy towards cycling provision in the urban areas was obtained. This is summarised at chapter 4, to help outline the context of the provision that was commented on by those taking part in the research.

Following the decision to conduct the study in Edinburgh and Aberdeen, it was agreed that three locations within each of the two cities would be targeted for the purposes of the research. These locations would provide examples of different traffic conditions in terms of how road space was allocated. As a result, Leith Walk, Marchmont Road and the Western Approach Road in Edinburgh, together with Great Northern Road, Lang Stracht and North

Deeside Road in Aberdeen, were chosen as locations of particular interest and relevance in view of their specific characteristics (details of which are given in chapter 4). Between them they provide examples of roads :

- where cyclists have space set aside for them specifically, (North Deeside Road and Marchmont Road)
- where they are accommodated in space that is shared solely with buses and taxis (Lang Stracht and Leith Walk) and
- where they have no special provision and share space with all types of vehicles (Great Northern Road (citybound) and Dundee Street).

Although off road cycle-provision was commented upon by cyclists taking part in the study, this was not a primary focus of the study.

Users of each of these roads were recruited to take part in the research. Users in rush hour periods were the key focus of the study as congestion is at its most severe and situations of conflict are most likely to occur. As such, the approach was designed to enable us to understand the rationale and effectiveness behind the approaches being used by local authorities and to collect anecdotal information relating to specific locations from a range of user groups.

2.3 SAMPLE

Following discussions with the Scottish Executive, the structure of the sample was agreed. In order to collect information from all points of view, it was agreed that a number of different types of road user should be included in the research, as detailed below:

- exclusive car drivers
- car drivers who cycle
- taxi, minicab, bus and coach drivers
- other commercial drivers
- motorcyclists (all types)
- exclusive or main cyclists ie those who cycle during busy periods
- cyclists who cycle during less busy periods.

Pedestrians and cyclists who only cycle for recreational purposes were omitted.

A total of 42 interviews, including groups, paired depths and triads, were completed amongst the above target groups. Road users were spread across all six locations in Edinburgh and Aberdeen in order to ensure that the results would be as representative and unbiased as possible and provide detailed feedback about each location. Tables 2.1 and 2.2 give a breakdown of the interview programmes in Edinburgh and Aberdeen respectively.

TABLE 2.1
Interview Schedule in Edinburgh

Edinburgh	Familiar with the following traffic conditions		
	Marchmont Rd	Leith Walk	Western Approach Road / Dundee Street
Drivers			
Exclusive car drivers	group	Paired depth/triad	group
Car drivers who cycle	Group	group	group
Taxi, minicab, bus and coach drivers	paired depth/triad	group	paired depth/triad
Other commercial drivers	paired depth/triad	Paired depth/triad	paired depth/triad
Motorcyclists (all types)	paired depth/triad	Paired depth/triad	paired depth/triad
Cyclists			
Exclusive or main cyclists/ those who cycle at busy periods	Group	group	paired depth/triad
Those who cycle at less busy periods	paired depth/triad	Paired depth/triad	paired depth/triad

TABLE 2.2
Interview Schedule in Aberdeen

Aberdeen	Familiar with the following traffic conditions		
	Lang Stracht	N Deeside Road	Great Northern Road
Drivers			
Exclusive car drivers	paired depth/triad	group	group
Car drivers who cycle	Group	group	paired depth/triad
Taxi, minicab, bus and coach drivers	Group	group	group
Other commercial drivers	paired depth/triad	Paired depth/triad	paired depth/triad
Motorcyclists (all types)	paired depth/triad	Paired depth/triad	paired depth/triad
Cyclists			
Exclusive or main cyclists/ those who cycle at busy periods	paired depth/triad	Paired depth/triad	group
Those who cycle at less busy periods	paired depth/triad	Paired depth/triad	paired depth/triad

Respondents were recruited by the usual methods of door-to-door and in-home recruitment, supplemented by the following:

- a summary of the project objectives was issued to several major employers with workplaces near to the study sites in Edinburgh and Aberdeen. Individuals who matched the criteria outlined above and who were interested in taking part in the study were invited to contact George Street Research

- transport providers such as bus companies, taxi companies and hauliers were contacted by George Street Research to ascertain whether any of their employees would be willing to take part in the interview programme
- organisations such as motorcycling clubs were similarly contacted with the aim of carrying out some recruitment amongst their membership.

Topic guides were then prepared by George Street Research and agreed with the Scottish Executive. All interviewing was conducted during September and October 2000.

A copy of the topic guides used for interviewing purposes is attached at Annex 2.

This chapter has provided details of the methodology adopted to meet the project objectives. The following chapter summarises the published data gained from the literature review undertaken at the commencement of the project.

CHAPTER THREE

REVIEW OF LITERATURE ON ATTITUDES TO SHARING ROAD SPACE

This chapter reviews published data on the use of roads by cyclists and the available information from other studies that have looked at certain aspects of sharing road space. These have been obtained from a number of published and unpublished sources. The sources providing this information included organisations such as The Scottish Executive Central Research Unit, City of Edinburgh Council and Aberdeen City Council and the Transport Research Laboratory, in addition to data held by George Street Research.

The chapter begins by looking at the benefits of cycling, and establishes levels of cycling in Scotland before suggesting a typology of cyclists. We then review reasons why people do cycle and why they do not. The latter half of this chapter looks specifically at aspects of shared use including a review of measures that can be taken to encourage cycling and the impact that special provision may have on attitudes. It also provides excerpts from studies looking at shared use between cyclists and pedestrians, a review of taxis in bus lanes carried out by Aberdeen City Council and a similar study of views on the inclusion of motorcycles in bus lanes.

3.1 BENEFITS OF CYCLING

Research has indicated that cycling is regarded as a relatively unpopular mode of transport amongst the Scottish population. However, despite this, cycling has been shown to have many beneficial aspects, a number of which were highlighted in “*Cycling into the Future.*”⁵ These include:

Environmental considerations

Cycling is environmentally friendly as the mode of transport is silent and produces no emissions. By contrast, motorised transport is noisy, while its emissions reduce air quality and add to the “greenhouse” gases contributing to global warming.

Health benefits

Scotland has a long record of poor health, much of which could be reduced if people were to take more exercise. Cycling, as either a form of transport or as a leisure activity, provides a moderate level of exercise and helps to develop cardiovascular fitness.

Low running costs

In addition, as a result of low maintenance costs and nil fuel requirement, more people can afford to cycle than to use any other transport method. Thus, cycling is seen to be a very cost efficient mode of transport for journeys of five miles or less.

Reduction in congestion on the roads.

Cycling can also reduce congestion and the journey times of other road users, particularly in urban areas. Businesses may be unwilling to be based in an area constantly beset by traffic congestion which can cause delivery and health problems and result in a negative effect on the local economy.

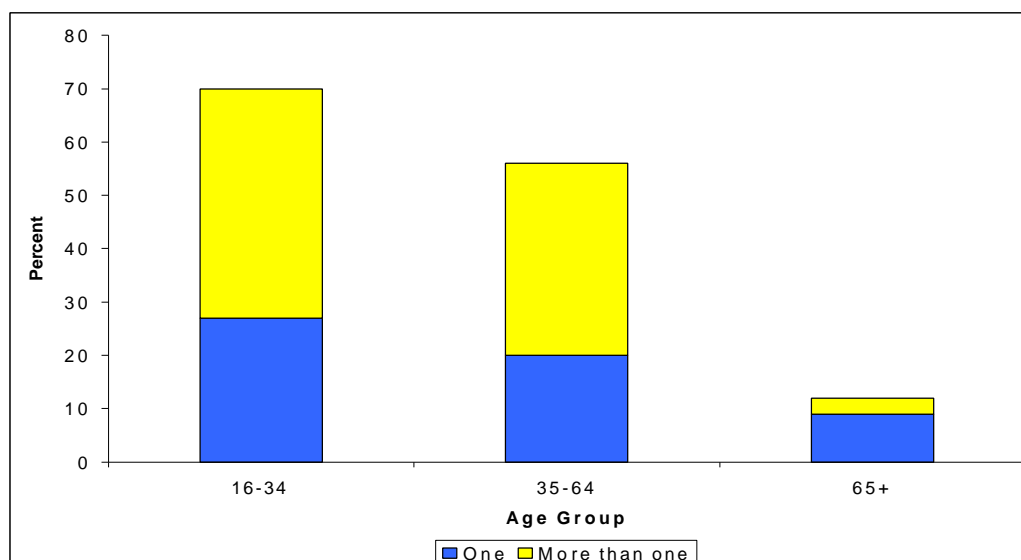
⁵ op cit 1

3.2 BICYCLE OWNERSHIP

A survey of bicycle ownership in Scotland⁶, based on a sample of 3,219 respondents, found that respondents in the younger age groups were more likely than those over 65 years old to live in a household in which a household member owned a bicycle.

CHART 3.1a

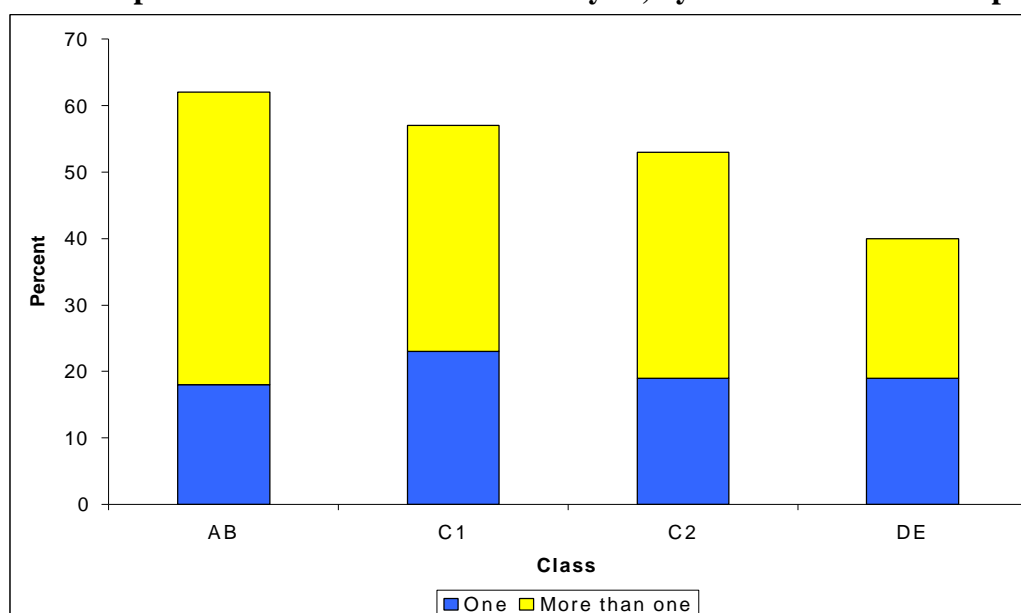
Number of People in Household Who Own a Bicycle, by Age Group



Respondents in the lower socio-economic groups were less likely to have a bicycle owner in their household than those in the other groups. This is an indication that those in the higher income groups are more likely to cycle.

CHART 3.1b

Number of People in Household Who Own a Bicycle, by Socio-economic Group



⁶ "Scottish Opinion Survey," System Three Scotland, March 1998

A 1997 report⁷ identified five principal types of cyclist (with the acknowledgement that virtually all types of people cycle). The five types identified were:

Practical cyclists - typically young, fit, male commuters. These commuters cycle to work as a matter of choice. They are motivated by cost savings and efficiency and they derive a sense of achievement from their levels of fitness.

Idealist cyclists - see the bicycle as a positive substitute to the car, in both social and ecological terms. Due to their strongly held beliefs, they are prepared to put up with the negative aspects of cycling.

Fairweather cyclists - see cycling as a leisure activity and would be unlikely to cycle to work. Typically, they only cycle on short, undemanding journeys.

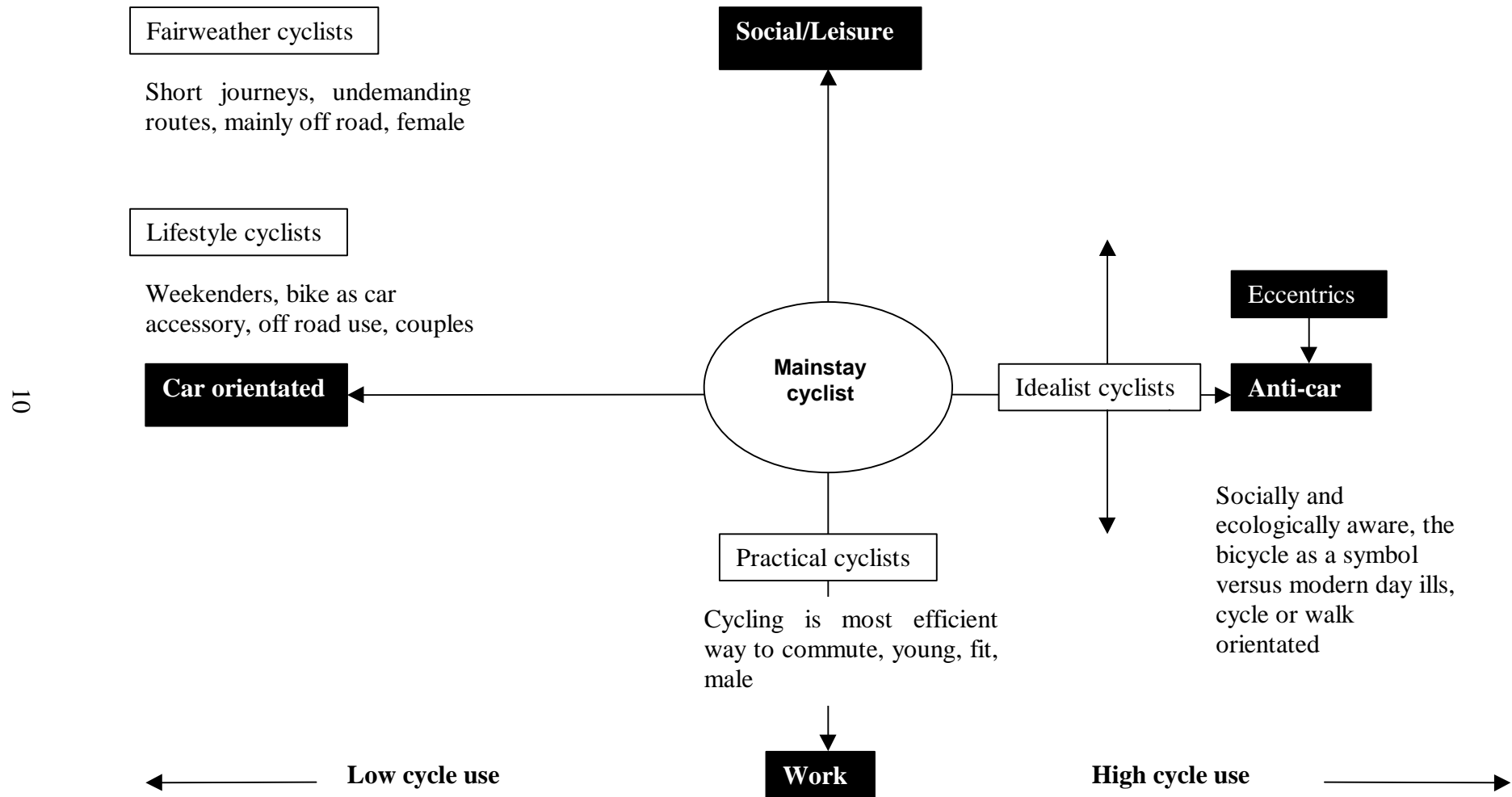
Lifestyle cyclists - see cycling as a leisure activity and participate almost exclusively in off-road mountain biking. They are generally car-orientated and regard the bicycle as merely an extension of the car. They will consider cycling for utility purposes only if its image is improved.

Mainstay cyclists - those with a limited transport choice. Mainstay cyclists will cycle regardless of the transport policies which are aimed at them. This group also includes fitness and racing cyclists.

The above categorisation classifies cyclists by their motivation to cycle. The study found *“the first four types identified are newly-emerging cyclists. They tend to cycle infrequently, or only at specific times or [for] specific purposes”* and these are the groups that may be more receptive to campaigns to increase cycling. Conversely, the report claims that mainstay cyclists will be relatively unresponsive to campaigns as they already cycle frequently and have a limited choice of transport mode. The five types of cyclist and their relative attitudes to cars, together with their types of cycle usage, are shown in the following diagram.

⁷ “Attitudes to cycling, a qualitative study and conceptual framework”, Transport Research Laboratory, Davis et al (1997)

CHART 3.2
Types of Cyclist



In summary, the research shows that people have a variety of reasons for using cycling as a mode of transport and cost is simply one among many. The demographic data refute suggestions that people may cycle simply because they cannot afford a car; indeed, those who were more likely to have higher household incomes were also those more likely to own a bicycle. Of the five types of cyclist identified by Davis et al, almost all the groups are motivated to cycle by attitudinal factors such as the thrill of cycling, maintaining and improving fitness or as a positive substitute to the car. Opportunities certainly exist to get more “lifestyle cyclists” on their bicycles as, according to Davis et al., they will consider utility cycling if the image is improved.

The following section looks more comprehensively at research undertaken into the reasons why people cycle.

3.3 REASONS WHY PEOPLE CYCLE

The Automobile Association (AA) undertook a study⁸ into cycling motorists through a series of group discussions between August and September 1992, followed by a questionnaire survey amongst 1000 motorists in October 1992. The three groups in which the AA were interested were defined as follows:

Cycling motorist	A motorist who makes specific journeys by bicycle which they might otherwise have made by car
Leisure-only cyclist	A motorist who has used a bicycle within the last two years, but does not use it as a substitute for the car
Non-cyclist	A motorist who has not used a bicycle within the last two years.

The aims of the research were to:

- ◆ consider the role of cycling as a viable mode of transport for particular journeys
- ◆ find out how to encourage more motorists to cycle, especially for those short journeys which would otherwise be made by car
- ◆ understand what measures and policies should be promoted to help cyclists, many of whom are motorists

The AA found that of those surveyed, 69% had not cycled for over 2 years, 19% were cycling motorists and 12% were leisure-only cyclists. According to the AA, *“cycling motorists are not a special breed as far as age, sex, location or social group are concerned, but they are more likely to live with other cyclists”*.

For the purposes of the research, cyclists and non-cyclists (amongst this group of motorists) were asked to give their reasons for cycling and reasons for not cycling. Cycling was stated to be:

- good exercise
- of benefit to the environment

⁸ *“Cycling Motorists: How to encourage them,”* Automobile Association Public Policy Department, 1993

- fun
- sociable
- speedier than driving
- cost efficient
- a method of transport which posed fewer parking problems.

Seventy-one percent of cycling motorists, 58% of leisure-only cyclists and 56% of non-cyclists used the word “healthy” to describe cyclists. Over two-fifths (43%) of cycling motorists and 36% of leisure cyclists perceived that cyclists were concerned with the environment, as opposed to only one in five (22%) of non-cyclists. Almost one in five (17%) of cycling motorists stated that they chose to travel by bicycle because they enjoyed cycling. Over one in ten motoring cyclists (13%) stated that they cycled for speed, as cycling could be a faster form of transport over short journeys in congested areas. One in ten respondents stated that they cycled because it was cheaper than other modes of transport, while 10% said that parking problems were reduced. Many cyclists habitually cycled with their children (27%) or with partner/friends (37%), refuting claims that cycling is a lone activity.

When compared with previous studies, the TRL⁹ research found that, “*avoiding stress and congestion, rather than getting physical exercise and saving money, now appear to be more important factors*”, as to why people take up cycling. Increasing the perceived level of safety was likely to have a positive effect on the numbers of cyclists. Noland¹⁰ (1996) found that for a perceived increase in safety of 10%, an increase in cycling of over 10% was observed. TRL found that, “*general attitudes to cycling were positive: cycling was thought of as healthy, a way to relieve stress, and a good family activity*”. The above data emphasise the importance that attitudinal and lifestyle factors play in the decision to cycle.

To summarise, the perceptions that made individuals more likely to cycle included the ability to avoid stress and congestion, positive attitudes towards the fitness and environmental benefits and an appreciation of the enjoyment that cycling can deliver. Many cyclists also mentioned the social aspects of cycling as a motivator.

3.4 REASONS WHY PEOPLE DO NOT CYCLE

Although it is important to know what factors encourage people to cycle so that more measures can be taken to persuade people to cycle, it is also important to know what factors dissuade people from cycling in the first place.

The aforementioned AA study¹¹, questioned non-cyclists as to why they did not cycle. The main reasons given for not cycling any more were as follows:

- respondents had obtained a car/motorcycle/moped (15%)
- a car/motorcycle was considered to be more convenient (13%)
- the respondent no longer owned a bicycle (13%)
- respondents considered themselves to be too old to cycle (17%)
- cycling was too much effort (16%).

⁹ op cit 7

¹⁰ "Perceived Risk and Modal Choice: Risk Compensation in Transport Systems" Accident Analysis and Prevention, Noland, RB (1996). Vol. 27, No. 4, pp 503-521, USA

¹¹ op cit 8

The AA study pointed out that even people with an enthusiasm for cycling (ie cycling motorists and leisure-cyclists, both of whom drive) gave reasons why they did not cycle more frequently.

Over two in five (41%) leisure-cyclists and over one quarter (27%) of cycling motorists stated that one of the main problems of using a bicycle was the threat of accidents. The majority of cycling motorists (54%) and half of the leisure-cyclists indicated that they were worried by traffic. A small proportion (16%) of non-cyclists cited this as a reason for not getting on a bicycle. The majority of cycling motorists (58%) and almost half (46%) of leisure-cyclists stated that they were concerned about motorists' attitudes towards them when cycling. Forty-three percent and 50% of cycling motorists and leisure cyclists respectively believed that motorists' attitudes were one of the main problems of cycling.

The deterrents to cycling identified by the aforementioned TRL study¹² were danger from traffic, concerns about personal safety, rainy weather, poor image and cycle theft. The favourable attitude of government and institutions towards car use was also mentioned. There was found to be an age dimension to the abandonment of cycling as a mode of transport, particularly among teenage girls, due to peer pressure and mockery by boys of a similar age. Other deterrents mentioned were the effort involved and the impracticality of travelling long distances or carrying heavy loads.

The deterrents to cycling, summarised by TRL, were *"time pressure, stress, aggressive driver behaviour, decline of the nuclear family, personal security fears, out of town shopping, government support for road building, car ownership and British drivers' 'disregard' for the Highway Code"*. The visions of, *"harassed, rain-soaked, exhausted individuals negotiating hills and threatened by lorries were powerful images"*.

These perceptions certainly foster a negative attitude towards cycling. However, the research found that the existence of a car culture had more to do with people's reasons for not cycling than any of the disadvantages associated with cycling, albeit that danger from other traffic was found to be the second biggest deterrent. The speed, comfort and convenience of the car appeared to cultivate exceedingly positive attitudes to the car as a mode of transport, although these factors may well be overstated in gridlocked, urban streets.

3.5 WHAT MEASURES CAN BE TAKEN TO ENCOURAGE CYCLING

The Scottish Office Development Department¹³ stated that to overcome barriers which prevent more frequent use of the bicycle *"means making cycling a safe, convenient and, not least, enjoyable form of transport."* The Scottish Office went on to state that, *"working groups, involving Scottish practitioners, are looking specifically at integrating cycling with traffic management, improving cycle security, promoting cycling and changing attitudes"*.

In contrast to attitudinal changes, the suggestions which elicited the most support from respondents during the course of the TRL study were those of reducing motor vehicle speed, better enforcement of traffic regulations, provision of secure cycle parking facilities, employer/college initiatives and provision of more information about cycle routes. Although

¹² op cit 7

¹³ op cit 1

two of these five suggestions appear to be safety / traffic related, TRL points out that improving safety on its own is not enough to persuade most people to cycle. For example, Cycle Route Demonstration Projects conducted during the 1980s showed that the construction of cycle routes did not necessarily lead to significant increases in cycle use¹⁴.

The report also found that the perception of danger from traffic among non-cyclists was often overstated.

Some of the measures could at least, in part, be implemented by changing people's attitudes to cycling. Drivers could be educated about the vulnerability and needs of cyclists, thus encouraging them to reduce their speed and give cyclists enough room to manoeuvre. Organisations could be encouraged to make the same provisions for cyclists as for cars, and non-cyclists could be made aware of special provisions made for cyclists, so reducing the perceived level of danger from other traffic.

In addition to the above, Meaton and Anderson¹⁵ undertook a study which used a "Green Journey Guide". Respondents were informed about travel patterns and were confronted with the environmental, social and financial costs of their travel behaviour. The researchers were testing the hypothesis that, *"the more people know about and understand the necessity for greener transport solutions, the more likely they are to accept them."*¹⁶ Not surprisingly, 'carrot' policies were found to be more popular than 'stick' policies. Provision of cycle paths was supported by 80% of respondents, but only 25% believed that it would change their behaviour. In the words of TRL (1997), *"the implication would seem to be that informational strategies alone are insufficient to change behaviour significantly"*.

A qualitative study by the University of Westminster¹⁷ found that respondents believed that public transport improvements could solve traffic growth, but after being confronted with the impact of different policies, *"most accepted that restraint measures would also be needed"*.

Although cycling was generally regarded in a positive light, some images were found to have a negative effect on encouraging people to cycle. *"A variety of images and of cycling and cyclists exists, including historical, sporting and eccentric. Sporting images, such as the Tour de France, suggest cycling is particularly energetic involving unusual and complex equipment"*¹⁸. In view of this, it will be necessary to change people's perceptions of cycling by emphasising that it is not an exhausting activity and that it involves the use of a simple machine, rather than a complex machine such as a car.

The media profile of cycling was found to be lower than that of the car, in that it was rarely portrayed as an everyday activity. The TRL study (1997) found that lessons could be learned from health campaigns. The three components which were deemed to be crucial were:

- ◆ individual and social behaviour change
- ◆ organisational change

¹⁴ "Cycle Routes" Project Report 42, Transport Research Laboratory, Harland, G. & Gercans, R. (1993)

¹⁵ "Green Commuter Strategies", Travel Awareness campaigns Conference, 13 March, Department of Civil Engineering, Aston University, Birmingham, Meaton, J. & Anderson, M. (1996)

¹⁶ op cit 7

¹⁷ "Public Attitudes to Transport Policy and the Environment. An In-Depth Exploratory Study", University of Westminster, London, University of Westminster, Transport Studies Group (1996)

¹⁸ op cit 7

- ◆ environmental change

The study also found that strategies which emphasise the positive aspects of cycling were more likely to break people's dependency on the car than the strategy of confronting car use directly. Thus, to effectively encourage greater incidence of cycling, a three pronged strategy should be implemented:

- ◆ supplying information to the individual and society promoting the benefits of cycling and informing them on the costs of other forms of transport, plus a change in the attitudes other road users have towards cyclists;
- ◆ encouraging employers, colleges and other organisations to make it easier for people to cycle while giving cycling equal status with the car;
- ◆ making cycling safer, therefore reducing the biggest perceived deterrents to uptake.

3.6 IMPACT OF SPECIAL PROVISION ON ATTITUDES

This section examines the provision of measures aimed at increasing cycling levels and ascertains their impact on the attitudes of cyclists and motorists towards each other. Three types of measure are considered which all have the potential to cause conflict between the various types of road user, as detailed below:

- cycle lanes
- road narrowings
- advanced stop lines at junctions.

In the TRL study ¹⁹, it was found that, with respect to **cycle lanes**, some drivers demonstrated animosity to cyclists because they felt that they (the cyclists) were taking up 'their' road space. A conversation between three male non-cyclists went as follows:

*"I always find that they are on mountain bikes...and they are the most arrogant ***** anywhere. If there is a cycle path, then I will deliberately try to nudge their back wheel for them!...to encourage them to get over there. Well, it's okay them building paths, but what they are doing makes the roads smaller. Doing these white lines now...Well it is okay if they use them, but they don't even use them, do they?...But they give them over a quarter of a lane, or over that...It is not like it is the width of a bike, you could get a car down the damn thing. And then what happens, you come up to the junction and if they are still there, you are not allowed in that little bit".*

Not surprisingly, cycle lanes were felt by cyclists and non-cyclists to cause as many problems as they solved. This was the result of obstructions caused by parked cars, and the fact that cycle lanes seemingly undermined a cyclist's right to use any other part of the road. Some drivers who attempted to show cyclists greater consideration reported being harassed by other drivers. Better driver education was thought to be necessary.

The Transport Research Laboratory conducted research into **road narrowings and pinch points**²⁰ (points too narrow for two vehicles to pass through simultaneously). TRL found that

¹⁹ op cit 7

cyclists tended to dislike road narrowings, but they felt that the overall cycling conditions had improved due to better traffic behaviour or specific cycle facilities. Cyclists felt increased stress at road narrowings, which was also more likely in rural areas due to the higher traffic speeds involved. Cyclists felt threatened by vehicles following close behind them, or by vehicles braking sharply.

TRL found that drivers very rarely altered their overtaking behaviour at road narrowings to take account of the decrease in road width. This behaviour occurred at road narrowings with and without marked cycle lanes. When TRL monitored a variety of road narrowings, the research showed that between 67% and 100% of cars overtook a cyclist where the road was narrow. The percentage of cars overtaking did not vary according to the width of the running lane or the presence of a cycle lane.

Most cyclists stated that they took extra care at narrowings in order to improve their safety. A minority of cyclists held their line and speed, or moved into the centre of the running lane. Obviously, this is an area where conflict is possible.

At pinch points most drivers tended to wait behind cyclists. TRL theorises that, *“motor vehicles may be reluctant to overtake because they have to give way to vehicles coming in the other direction and because the pinch point extends over a short distance”*. In contrast, when a cyclist and a vehicle approached a pinch point from opposite directions, with no cycle bypass and no obvious priority, only one vehicle in the fifty-one cases observed waited for the cycle to pass. A cyclist holding his/her speed and line in this case faces obvious dangers.

It appears that many motorists have a superior attitude towards cyclists and feel that they have more right to the road, or that perhaps, due to the increased size and robustness of their vehicles, they can bully cyclists into getting their own way. Seemingly, many motorists need to be educated and encouraged to show more courtesy and patience when cyclists are in the vicinity of their vehicle.

In 1996, TRL conducted research into, *“Advanced stop lines for cyclists: The role of central cycle lane approaches and signal timings”*. TRL found that the **advanced stop lines** (ASL) could only be used when the traffic lights covering an approach road were on red. By contrast, the traffic flow on a green light inhibited and negated the use of the ASL. More conflicts at junctions, therefore, tended to occur when the cyclist reached the junction on a green light.

The main incidences of conflict occurred when cyclists going straight-ahead encountered motorists turning left, or when motorists travelling straight-ahead encountered cyclists turning right. The research found that a central cycle lane (as opposed to a near side cycle lane) was useful in positioning cyclists to the right of traffic where there was a large proportion of left-turning traffic and straight-ahead cyclists. TRL also found that right-turning cyclists tended not to use the whole length of a near side cycle lane, and as the vehicle flows increased, a near side lane was used even less. Although generally more conflict occurred when cyclists approached a junction on a green light, this was not true when cyclists were turning right and other factors could have also been at work. TRL suggests that this *“could be related to the way right-turning cyclists approach the ASL and their expectations of the signals at a junction”*.

²⁰ “Cyclists at road narrowings”, Transport Research Laboratory, 1997

In summary, this research suggests that, although infrastructure alterations to the roads with cyclist safety and motor vehicle speed reduction in mind can be of assistance to the cyclist, infrastructure solutions are not a panacea. Drivers' attitudes to, and awareness of, cyclists and vice-versa need to be addressed in order to ensure that the roads are as safe as possible for all road users and conflicts are kept to a minimum.

3.7 STUDIES ON SHARED USE OF ROADSPACE

This section examines evidence about the shared use of road space, looking at studies that have a particular relevance to this research. The following discussion focuses on work provided by Aberdeen City Council on :

- sharing with taxis
- sharing with motorcycles.

Taxis

Within the two case study areas included in this research, there is a difference in the policy followed by both Councils with regard to **the use of bus lanes by taxis**. The approach followed in Aberdeen is that taxis should only make use of these facilities when occupied by a fare-paying passenger.

In July 1999, Aberdeen City Council promoted an experimental order allowing taxis to use bus lanes under a Code of Conduct. A firm of consultants were then contracted to monitor taxi drivers' adherence to the Code of Conduct, evaluate the impact of the experimental order on bus services and other road users and assess the feasibility of making the experimental order permanent.

The behaviour of taxis was evaluated in relation to six specific issues:

- off-duty taxis in bus lanes
- taxis without fare paying passengers in bus lanes
- dropping-off and picking-up from bus lanes
- speeds limited to 20mph
- taxis not allowed to use the left turn lane to go straight ahead
- bus gate detection at Bridge of Don.

The research found that

- taxis generally adhered to the Code of Conduct,
- adherence to the Code of Conduct did not vary much between city and airport taxis and
- buses had experienced minimal negative effects as a result of the temporary order.

In addition, the Police, bus operators, Cycling and Touring Club and taxi operators did not report any major problems.

As a result, the consultants made the following recommendations:

- the temporary order permitting taxis in bus lanes should be made permanent, although monitoring should be undertaken every two to three years to determine adherence to the Code of Conduct and the effect of the permanent order on bus operations
- the Council - in conjunction with the Taxi Association – should publicise the results of the research and highlight four areas of concern:
 - taxi speed
 - use of bus lanes to pick-up or drop-off passengers
 - use of bus lanes when off duty
 - use of the Bridge of Don bus gate.
- the Council should be responsible for advising the Taxi Association that taxi behaviour would be regularly monitored and that the status of the permanent order might be reviewed at a future date
- the possibility of linking adherence to the Code of Conduct to the licensing arrangements should be further investigated
- bus operators should be encouraged to observe the 20mph limit.

Motorcycles

Related to the above research, Aberdeen City Council has given consideration to the merits of **permitting motorcycles to use bus lanes** in Aberdeen. At present motorcyclists in Aberdeen are not permitted to make use of these facilities. A study into the implications of permitting motorcycles access to the bus lanes was undertaken and a questionnaire was circulated to 150 urban authorities across Scotland and England.

The results of the mailing - which elicited an 80% response rate – can be summarised as follows:

- 86 authorities currently have bus lanes on their road network
- 38 authorities (44%) would consider allowing motorcycles to use the bus lanes in the future whereas 28 authorities (33%) would not
- 6 of the 8 Councils which currently permit motorcycles to use bus lanes indicated that good driving practices were generally observed and that the safety of other road users was not adversely affected
- none of these 8 Councils were aware of any concerns expressed by statutory bodies while data relating to accident statistics were either unavailable or showed no change.

The safety of other road users and cyclists was found to be the principal reason for not considering an exemption for motorcyclists, particularly as far as the Police and cyclist representatives were concerned. Motorcyclists were considered by those completing the questionnaires to show little regard for lane discipline and speed restrictions. In addition, they have the ability to extricate themselves rapidly from areas of congestion.

The 38 authorities where the use of bus lanes by motorcycles might be considered will only make a final decision after comprehensive trials have taken place. The decision would rest ultimately on whether other road users' safety was compromised and whether national policy guidelines were put in place.

This chapter has provided a review of the literature relating to attitudes towards sharing road space amongst different groups of road users. It reveals

- People have a variety of reasons for cycling, cost is only one of them
- Opportunities exist to encourage more cycling
- Avoiding stress and congestion are key motivating factors
- Danger from traffic, personal safety concerns, poor weather, fear of cycle theft and poor image are demotivating factors
- Various measures need to be implemented to change peoples' attitudes to cycling, including educating drivers about cyclists' vulnerability as well as infrastructure changes
- The introduction of changes such as cycle lanes and other specialist provision have the potential to enhance rather than reduce conflict
- Future changes will concentrate on on-road provision with a mix of dedicated cycle lanes and assured provision with other restricted groups of users

The following chapter provides an analysis of council policy in Edinburgh and Aberdeen, together with descriptions of the three targeted areas in each location.

CHAPTER FOUR

THE POLICY BEHIND ROAD SPACE ALLOCATION IN ABERDEEN AND EDINBURGH

This chapter provides a summary of local authority policy towards the allocation of road space for different user groups in Edinburgh and Aberdeen. It concludes with a description of the three targeted areas used for the research in each council area. A full description of local authority policy is provided in annex 3.

4.1 LOCAL AUTHORITY POLICY IN EDINBURGH AND ABERDEEN

The transport departments of both cities recognise the importance of ensuring good access to all parts of the city and providing greater choice for travel within, to and from the city. A reduction in car dependency is a key theme of both policies.

Within Edinburgh specifically, preference is being given to meeting the needs of pedestrians, cyclists, public transport users and freight / delivery services in descending order of priority, in order to continue the process of making walking, cycling and public transport more attractive alternatives to the car. In the case of car users (the lowest level of priority), preference is being given to non-commuting users over car commuters.

With regard to cycling, Lothian has the largest cycle network (600km) in the United Kingdom, while Edinburgh has the highest bicycle use of the larger Scottish cities. Although cycling has recently gained in popularity as a leisure activity, it has experienced a decline as a means of travel to work. In order to combat this decline, employers are being encouraged to adopt workplace cycling plans such as cycle allowances and showers, while the provision of secure cycle parking in all types of locations is being implemented. In addition, cyclists are generally exempted from all new road closures, one-way restrictions and banned turns, except where there is a safety case for not doing so. **As much off-road provision for cyclists has been provided as is possible and so more road space will now be taken away from other drivers.**

Within Aberdeen, there is an emphasis on reducing car dependence and facilitating more environmentally-friendly forms of transport. This will be done through a variety of means such as improved links with public transport and cycling facilities, encouraging motorcycling as a means of transport, allowing taxis priority in bus lanes, the introduction of bus lanes and maintaining an efficient public transport service. Although the private car is not seen in a negative light, it is acknowledged that the benefits of car ownership have not been experienced by all sectors of the community.

The Council's 1999 Transportation Strategy aims to encourage cycling and to double commuter cycle trips in the City by 2001, with a redoubling by 2010. **However, any changes to levels of cycling provision will not support initiatives which will have a detrimental effect on drivers by removing available road space.**

While the Council will provide cycling improvements through traffic management measures and special projects (for example, incorporation along bus priority routes and park and ride corridors), developers and employers within the City will be required to provide cycling links, on-site facilities and incentives for staff to cycle to work. Cycle tracks, cycle lanes and

increasing cycle use have recently become an established and recognisable part of the Aberdeen transport system, thus helping to improve driver awareness of cyclists.

Thus, both local authorities share the same aims to reduce car use and to promote alternative forms of transport, although the two approaches adopted differ. Specifically, Edinburgh has taken a stronger stance on reducing car use than has Aberdeen.

4.2 DESCRIPTION OF THE SIX TARGETED AREAS

The previous section provides a summary of council policy towards sharing road space in Edinburgh and Aberdeen. The following section provides a detailed description of the way in which some of these policies have been applied at each of the locations targeted for the purposes of the research. We have incorporated photographs to illustrate some of the features discussed.

To reiterate, the areas were selected in order to provide an example of different types of road space provision, as detailed in the table 4.1.

TABLE 4.1
Description of the targeted areas in Edinburgh and Aberdeen

	EDINBURGH	ABERDEEN
Dedicated cycle lanes	Marchmont Road	North Deeside Road
Bus and cycle lanes	Leith Walk (a mixture of cycle lanes and bus and cycle lanes)	Lang Stracht (a mixture of cycle lanes and bus and cycle lanes)
No provision	Western Approach Road	Great Northern Road (no provision in one direction only ie going towards the City Centre)

Dedicated cycle lanes

Marchmont Road, Edinburgh

Marchmont Road is a short stretch of road which extends from south of the city centre to a large open area called The Meadows. The Meadows was one of the first parts of the city to have dedicated off road cycle lanes.



As the photograph shows, the road contains a section of advisory cycle lane. Along most of the length of the cycle lane, parking is permitted in a separate area on the near side. There is a large gap between the kerb and cycle lane while the lane itself is not interrupted at the point where the side road joins Marchmont Road. Double yellow lines extend from the side road into the main road.

North Deeside Road, Aberdeen – photographs 1,2 and 3

North Deeside Road is a main commuter road into Aberdeen with special cycling provision.

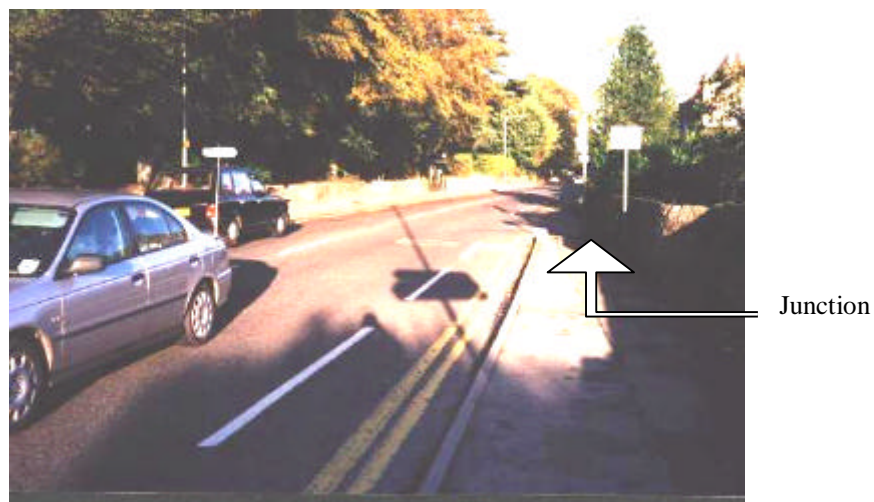
Photograph 1



Photograph 1 shows the advisory cycle lane, together with double yellow lines prohibiting waiting or parking within the cycle lane area. There are also two signs indicating the presence of a cycle lane – one painted on the road and one perpendicular.

Photograph 2 shows what happens to the advisory cycle lane at a road junction. The end of the previous cycle lane – which comes to a close immediately before the junction – can just

Photograph 2



be seen. Again, there are double yellow lines which prohibit waiting or parking within the cycle lane area.

Photograph 3 shows an advisory cycle lane which continues beyond the edge of the photograph (although it is not visible). On this occasion, there are no double yellow lines, thus permitting other vehicles to wait or park within the cycle lane area.

Photograph 3



Bus and cycle lanes

Leith Walk, Edinburgh – photographs 10 and 11

Photograph 10 shows a section of Leith Walk looking from the direction of the city centre towards Leith. On the left there can be seen a bus and cycle lane, whereas on the right there can be seen an advisory cycle lane which continues over an indented section of the road and a road junction. The presence of a stationary car in the indented section indicates that cars will be obliged to cross the cycle lane in order to enter and leave the stream of traffic.



Photograph 10

prevented from so doing by traffic appearing from the left.

The “Give Way” line at the junction indicates that traffic on the minor road should give way to traffic on the major road. The criss-cross yellow lines painted on the road in front of the junction inform drivers that they must not enter the box until their exit road or lane is clear of oncoming traffic including cyclists. However, they may enter the box if they wish to turn right and are only

The double red lines emerging from the minor road on to the major road indicate that no stopping is allowed at any time.

Photograph 11 shows a section of Leith Walk looking from Leith towards the city centre. On the left hand side can be seen an advisory cycle lane which curves out towards the middle



of the road to allow for an indented parking area. This removes road space from cyclists and reduces the area between them and other traffic.

The zigzag line in the middle of the road indicates that the area should be kept clear of parked vehicles.

The right hand side of the photograph shows a mandatory bus and cycle lane which is being

Photograph 11

used inappropriately by another type of vehicle. Again, the parked cars in the indented section will be obliged to cross the bus and cycle lane in order to enter and leave the stream of traffic.

Lang Stracht, Aberdeen – photographs 4,5 and 6

This is a commuter road which comes into the city from the west. At the city end, it has bus and cycle lanes, although some of the cycle provision becomes off road for a stretch.

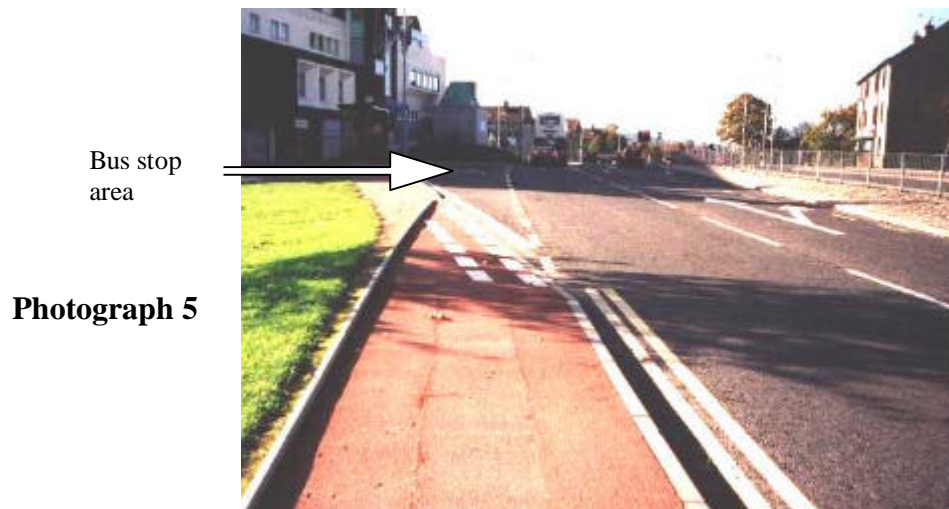
Photograph 4 depicts an advanced stop line at a set of traffic lights, together with a mandatory cycle lane which comes into operation opposite the junction.

Photograph 4



On the left hand side, the (initially advisory) cycle lane crosses a bus stop area in which a vehicle is parked. The double yellow lines indicate that no waiting or parking is allowed.

Photograph 5 shows that the pavement has been designated as a cycle lane, while the double dotted white line indicates that cyclists should give way to buses which might be entering the



bus stop area. From the photograph, it is not possible to see the point at which the cycle lane again comes into operation.

The double yellow lines again indicate that no waiting or parking is permitted.

Photograph 6 shows that part of the pavement area has been designated as a cycle lane which comes to an end at the major road junction/traffic lights. The cycle lane is indicated by



a (partly obscured) sign painted on the pavement, together with a perpendicular sign.

Again, there are double yellow lines on the roadway.

No provision

Western Approach Road, Edinburgh

Western Approach Road is a major traffic route from west of the city to the city centre. At the point where the photograph is taken, cyclists are prohibited. However, prior to this point, there is no special provision for them.

At the point of the actual junction, the road markings change from a single red line to a double red line, indicating that there is no stopping at the times shown on the sign and no stopping at any time respectively.



Just before reaching the brow of the hill, drivers are also warned to be aware of pedestrians crossing the road.

Photograph 18

Great Northern Road, Aberdeen

Great Northern Road is a busy commuter route. Due to space restrictions, a bus lane operates in one direction only – that is, leaving the city.



Photograph 9

Again, there are double yellow lines which indicate no waiting or parking at the bus stop or on the roadway.

On the left hand side of the photograph (going towards the city centre), there is no special provision for buses or cyclists although there is an indented area which allows buses to stop at the bus stop..

The information contained in this chapter sets the context for the following discussions of cyclists' and drivers' attitudes to sharing road space in Aberdeen and Edinburgh.

CHAPTER FIVE

THE RIGHTS OF OTHER ROAD USERS AND WHAT INFLUENCES VIEWS

Previous chapters have examined the specific locations chosen for inclusion in this programme of research. This chapter now examines the criteria upon which various types of road users assess the rights of other types of road user in relation to road usage and will ascertain the needs of various groups of road users on the basis of priorities which may be awarded to different types of road user.

5.1 CRITERIA USED IN ASSESSING PRIORITIES OF OTHER ROAD USERS

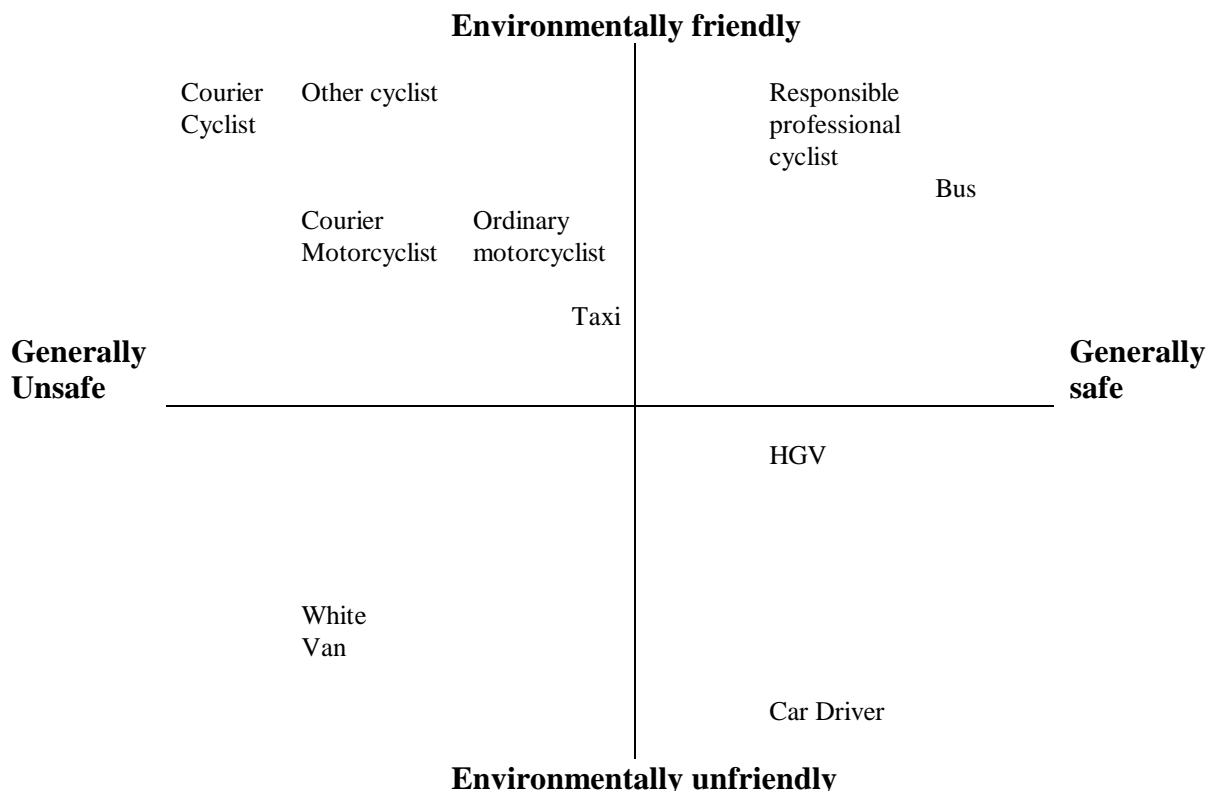
In discussions with respondents it became apparent that there are a number of criteria which are taken into account when giving consideration to road users of all types. These included the environment, safety, size of vehicle, speed of vehicle, journey purpose and whether or not a form of travel is perceived as offering a public service. However, the two criteria which were perceived to be of primary importance within the context of this research related to :

- the degree with which a particular road user can be considered to be ‘environmentally friendly’ and
- the degree of safety they are perceived to offer both to themselves and to other road users.

In the light of comments made by respondents, chart 5.1 has been developed with axes representing these two dimensions.

CHART 5.1

Image of different road user groups



Not surprisingly, cyclists are perceived to be the most environmentally friendly, albeit that their perceived levels of safety change quite considerably. There was a group defined as “responsible professional cyclists” who are considered to be very safety conscious. This group will have an understanding of how they should interact with other road users, use appropriate equipment and follow correct and courteous cycling habits which do not endanger either themselves or those around them.

“I think there are some cyclists who cycle regularly and who may belong to cycling clubs but they may also be people who have a lot of experience of cycling and who are used to travelling to work in the rush hour where there’s a lot of other traffic around. I think these are generally safety conscious and used to sharing roads with other people. You can often tell these cyclists because they do wear safety helmets and light clothing so that they can be noticed.”

(Cyclist, Edinburgh)

At the other end of the safety extreme are positioned courier cyclists who are widely perceived to be a danger both to themselves and to other road users. This is largely because of poor cycling habits which infringe upon other road users and create dangerous situations for them. The most frequently mentioned criticism was that courier cyclists would weave in and out of traffic and tend to ignore other road users in their desire to get from A to B. Whilst it is acknowledged that speed is of importance to cycling couriers because of their need to do their job as quickly as possible, their lack of consideration and courtesy towards other road users did receive a lot of criticism from other road users.

Other cyclists are positioned between the two extremes. As the following quotation from Aberdeen illustrates, bad cycling behaviour on the part of some may serve to tarnish perceptions of all cyclists.

“If there is a red light, they (cyclists) just go through it and they cycle through pedestrian crossings. And they have no patience. They are crying out for more road space and cycle lanes but they are never prepared to sit at a traffic light and wait for them to change.”

(Bus Driver, Aberdeen)

Buses, whilst considered to be moderately less environmentally friendly than cycling, are generally also seen to be safe given the relatively low speeds at which they travel. Bus drivers were also perceived to be courteous towards other road users. Many respondents believe that bus drivers have had special training in terms of ‘good behaviour’ when it comes to sharing road space. Bus travel is perceived to be more environmentally friendly than other vehicle-based road users because of its capacity to transport relatively large numbers of passengers.

“The buses should be given a priority as it is their job to carry lots of people and they can help to get more cars off the road.”

(Driver, Edinburgh)

Motorcyclists and courier motorcyclists are positioned below cyclists in terms of safety and are perceived to be less environmentally friendly than buses or cyclists. In fact, motorcyclists emerge as a very vulnerable road user group and are regarded only as safer than cyclists in

that they are slightly more visible and able to use their acceleration to remove themselves from tricky situations.

“Motorcyclists are not quite as worrying as cyclists because they have got speed to be able to keep up with the traffic but you still have the same worries about them as they are almost as vulnerable as cyclists. If you knock a motorcyclist off his bike, he will come off much worse than you.”

(Taxi Driver, Edinburgh)

The least environmentally friendly and least safe of the different categories of road user identified in the course of the research were ‘white van drivers’ who received criticism on both counts from a majority of respondents. Their driving habits were perceived to be very discourteous towards other road users and they were the group most likely to be identified as ignoring traffic regulations by driving / parking in bus and cycle lanes and driving aggressively. Like courier cyclists, criticisms were also made about their tendency to weave in and out of traffic and their non use of signals to inform other roads users about their road behaviour. One cyclist attending a group in Edinburgh referred to the “white van syndrome” which to her denoted a driver likely to display dangerous driving habits.

“There is what I have called the ‘white van syndrome’. I think that white van drivers are the worst towards cyclists. Unlike bus and taxi drivers they don’t need to have special training to be behind the wheel of their van and they seem to completely disregard other people on the road. I have been knocked off my bike before now and have had to take avoidance action with others. They completely cut you up and don’t seem to give a damn about it.”

(Cyclist, Edinburgh)

HGV drivers and car drivers are both perceived to be safer than white van drivers albeit that, of the two, car drivers are considered the least environmentally friendly. This is largely due to media / government attention on this and an awareness of the high number of cars on the road especially single occupancy vehicles. As with bus drivers, respondents generally assume that HGV drivers will have had special training in appropriate driver behaviour. Whilst there may be occasions when HGV lorries loading or unloading goods may inhibit other road users, there is generally an acknowledgement that this is a necessary part of their job and that most of this activity is accommodated in non peak hours.

5.2 THE PRIORITIES FOR DIFFERENT GROUPS OF ROAD USERS

During the course of the in-depth interviews and group discussions, respondents were shown a number of pictures of different types of road user and asked to say which, if any, of the drivers and vehicle types shown would be regarded as having the greatest right of use of the roads. The pictures shown included a motorcycle, car, van, bus, lorry, taxi and cycle and a copy of these pictures is appended in Annex 4.

In general, as the following quotation illustrates, those types of transport offering a public service are perceived to have greatest priority on the road. Of this type of road user, buses are generally given the highest priority due to the large numbers of passengers which can be transported at any one time and the equivalent number of cars that this keeps off the road as a consequence.

“I tend to go for the likes of buses (as a priority) rather than private motorists. I think that buses are for taking people to work in the morning and if a car has one person in it, I think the bus should have some sort of priority in terms of moving, getting from A to B as quickly as possible. I think buses should have priority and that’s the Greenways initiative.”

(Cyclist, Edinburgh)

Taxis, whilst generally considered to be offering a public service, receive less priority than buses because :

- of their commercial status (respondents tended to perceive buses as still being Council owned and therefore more worthy than privately owned taxis. Taxis were also seen to be less efficient conveyors of the public),
- the aggressive nature of some taxi drivers which makes other road users less tolerant of them and
- the limited number of passengers which can be carried at any one point in time.

“Taxis should be equal road users.”

“I would say they are ahead of cars because like buses, they are making a living.”

“Yes, they are providing a service.”

(Drivers, Edinburgh)

Because lorries and vans are considered to be also doing a job, they are generally perceived to be performing a necessary task and are, therefore, afforded some priority because of this. For example, it is generally assumed that delivery drivers will need to be able to deliver goods and will use loading bays whenever possible. To an extent, even in instances when lorries may be impeding other road users, this is generally seen to be acceptable behaviour, and a necessary part of the lorry driver’s job. Where irritation is caused to other road users it tends to be in instances where, for example, a van or lorry driver may have parked in a bus lane to deliver goods rather than making use of loading or parking facilities, thus causing congestion amongst other road users.

“I think you have to bear in mind that most of these lorry drivers will be trying to deliver goods in a loading bay and we all make use of the things they are delivering to shops like Tesco’s, so it is part of their job. It becomes aggravating when they don’t use loading bays that have been provided and block the traffic flow, although most of the big stores don’t really cause these problems. It’s more the little vans delivering to local shops which may cause problems, like along Corstorphine Road.”

(Taxi Driver, Edinburgh)

Importantly, in the context of this research, cyclists are generally not considered to deserve priority on the road. Whilst they are seen to be environmentally friendly, there are a number of other factors cited by respondents which impact negatively upon prioritisation of the cyclists as key road users. These factors will be covered in greater detail in the following chapter. However, in summary, these include a lack of regard for other road users, a failure to adhere to basic road safety guidelines, poor cycling behaviour, not paying road tax, not

being able to keep up with other traffic and not showing courtesy to others. Whilst many other groups of road user acknowledge that cyclists are a vulnerable group of road users who need to have specialist provision of some sort, the fact that cyclists are not seen to be adhering to the basic rules of the road can reduce levels of sympathy towards cyclists.

Nevertheless, as shown in the following quotation, it is worth noting that one or two respondents considered that cyclists deserve to have greater priority than other road users on the basis that they are very vulnerable road users.

“The way everything is going now is down to safety, so if you look at it from a safety point of view, then it goes from your most vulnerable sort of thing which would be a bike and then your motorbike and probably your taxi because he’s on the road more often.”

(Driver, Aberdeen)

Unless a motorcycle or car is seen to be providing a useful duty such as courioring goods, they are generally perceived to be a low priority group on the road given that they are not environmentally friendly and have a limited capacity to transport others. It is interesting to note that many respondents who themselves are car drivers will criticise other car drivers for making unnecessary journeys in a car whilst still justifying the journeys that they make themselves.

In summary, cyclists are accepted as the vulnerable group and recognised to be an environmentally form of transport. However, drivers do not afford them the same status as, for example, buses. This is because there are a number of other aspects of cyclists’ behaviour which affects their status as equal road users.

The following chapter will examine the attitudes of different road users towards other types of user and the way in which behaviour impacts on perceptions.

CHAPTER SIX

THE CONFLICTING DEMAND OF SHARING ROAD SPACE

Having looked at the priorities which are assigned to different types of road user, this chapter will examine the attitudes of different groups of road users towards others and the ways in which the behaviour on the road of different groups can infringe upon others. It then examines attitudes to the concept of specialist road provision for cyclists.

6.1 THE ATTITUDES OF ROAD USERS

We have already noted that differing levels of priority tend to be assigned to each group of road user based on a number of different factors such as environmental friendliness, safety on the road and the purpose for which travel is being undertaken. Underpinning this allocation of priorities are the attitudes held by road users. This section of the report will firstly examine the attitudes held by different groups of road users towards others.

Cyclists

Cyclists regard themselves as equal to other road users and support this by citing a number of advantages of cycling - both for themselves, other road users and the general public at large. For the individual cyclist, the advantages are that it is a fast and cost effective means of travel as well as providing health benefits. The advantages to other road users are that cyclists do not cause congestion and take up little space on the road. For the general public at large, cyclists do not pollute the environment.

The benefits which cyclists attribute to themselves also tend to be reinforced by the attitudes of motorcyclists who hold very similar views of cyclists. As illustrated in the following quotation, of the different groups of road user, motorcyclists tend to have the most understanding and sympathetic view towards cyclists as road users.

“There is quite a lot of direct comparison between riding a motorbike and riding a pushbike. If you are on a pushbike and then you become a motorcyclist, I think you become quite confident riding a motorcycle. You have a perception of what is happening around you and you are always looking for the traffic around you.”

(Cyclist, Aberdeen)

Other types of road user, whilst acknowledging the health and environmental benefits cited about cycling, do not offer equal status to cyclists because of a number of key factors. While all respondents regard cyclists as the most vulnerable type of road user, criticism is levelled at cyclists for not consistently adhering to the law in terms of courteous and acceptable road behaviour. Many drivers cited instances where cyclists using the roads do not use lights in the dark and do not consistently make use of the cycle lanes that are provided. Cyclists are also reported as weaving in and out of traffic, cycling on pavements and violating traffic signals. Such behaviour tends to exasperate drivers. In many instances, these concerns are voiced because of a recognition of the vulnerability of cyclists as road users and a desire to avoid unnecessary accidents on the road.

“I hate them. I am terrified that I will hit one, so I give them the widest berth ever. Sometimes you get two or three in a row and you just cannot get past them.”

(Driver, Edinburgh)

Many cyclists accept these criticisms and acknowledge that more irresponsible cyclists are responsible for creating a negative perception of all cyclists. However, it should be noted that most cyclists participating in this research, regardless of their cycling habits, admitted to one or more instances where they had been irresponsible in some of the above ways. All respondents – cyclists and non-cyclists – readily admit that failure on the part of a small number of respondents to observe the basic rules of the road when cycling will contribute to a poor perception of all cyclists. Indeed, one cyclist who frequently used the pavements in one area of Edinburgh in order to avoid traffic congestion during rush hour had actually been stopped by the police and told not to use the pavement area but has since continued to use the pavement on her way to work.

All in all, many drivers regard cyclists as “their own worst enemy” in that they do nothing to help create more positive perceptions of cyclists in general. As illustrated by the following quotation, many respondents show concerns over a lack of road sense on the part of cyclists.

“I think a lot of cyclists don’t have much road sense. Like a lot of them have just bought bikes and cycle them and haven’t actually thought about how they are supposed to stop on the road and how they are supposed to indicate.”

(Driver, Aberdeen)

The one group of cyclists most frequently criticised by other respondents (including both cyclists and non-cyclists) was that of students. Drivers in both Aberdeen and Edinburgh claimed that the student areas of each city are notably worse for encountering poor cycling behaviour. Problems identified related to the less roadworthy equipment used (and a lack of safety equipment) and lack of familiarity with the road network and normal driving conventions. One or two non-cycling respondents claimed that they try to avoid certain parts of Edinburgh and Aberdeen where there is a proliferation of students who may be exhibiting poor cycling and road behaviour.

“We get a lot of cyclists because of the university and 70% of the university students don’t ride their bikes properly.”

(Bus Driver, Aberdeen)

One further criticism of cyclists is that whilst it is recommended practice that they should make use of safety wear such as helmets and reflective clothes which can be easily seen by other road users, many fail to do so, thus helping to increase their vulnerability on the road.

“We have got to wear seatbelts in a car and they should be wearing full regalia, crash helmets and whatever. If they get knocked off their bike, their head hits the ground”

(Bus Driver, Aberdeen)

Another contributory factor to the perception of cyclists as an unequal road user relates to the speed of the vehicle. For many road users, the fact that most cyclists do not have a speed which is equal to others implies that they should not be sharing the same road space. Drivers,

therefore, differentiated between the majority of casual cyclists and those who were seen as 'professional' cyclists, able to maintain their speed despite poorer conditions.

Cyclists are the only form of road user currently making use of the roads who are not required to pay any form of road tax. For drivers, the cyclists' position as non contributors to road maintenance costs reinforces views of them as unequal road users. Many non-cyclists commented that all road users should have to pay some form of road tax because they are making use of the road. It was argued by drivers that the imposition of some form of charge would increase the status of cyclists as having a right to use the roads. Furthermore, non-cycling respondents also tend to view cyclists still as a minority group, commanding too much by way of resources and clearly benefiting in both cities from significant additional provision.

Drivers have noticed that cyclists obtain special treatment in terms of specialist road provision without fully understanding why. For example, many drivers acknowledge that buses provide a sensible means of travel in terms of the numbers of passengers which can be carried at any one point in time. (There is also a misconception on the part of drivers that buses earn revenue for local councils and contribute in some way to the local economy). In contrast, there was little appreciation by drivers of the need for advanced stop lines, for example, or of the benefit of filter lanes leading to these areas on the road.

Thus, for most drivers there is a perceived inequality between the provision made for cyclists and their contribution to the cost of this provision. This is enhanced, if anything, by the view that cyclists are a minority group and a lack of appreciation by non-cycling drivers of the vulnerability of cyclists and the problems that poor driving behaviour can cause cyclists.

"If they want to be treated as equal road users, they have got to start acting like proper road users. They can't expect to get away with bad behaviour on the road like cycling on pavements and whatever and then complain that they are not treated properly."

(Driver, Edinburgh)

Most respondents also acknowledge an ability or unwillingness on the part of the police or traffic attendants to regulate poor cycling behaviour. This is largely attributed to the fact that bikes, unlike other vehicles on the road, are not required to have any form of registration and related to this there is a perception that the regulation of cyclists would not be cost effective. Furthermore, most respondents also acknowledge that given the varying demands on the police in terms of traffic regulation and other regulatory duties, it may not be realistic or pragmatic for the police to concentrate their efforts towards cyclists.

Motorcyclists

Motorcyclists, as with cyclists, are regarded as highly vulnerable road users. However unlike cyclists, they are regarded as being on an equal par with other groups of road user, due to three key factors. First, motorcyclists, as with other motorised vehicle drivers, are required to pay road tax and are thus seen to have a financial responsibility towards a general upkeep of the roads. Second, they are required by law to pass a test and to wear safety clothing and helmets and thus are perceived to be taking responsibility for their own safety on the road and to be reducing their vulnerability when in accidents. Third, the fact that motorcyclists can

maintain similar speeds to other forms of road users lessens fears about conflict and vulnerability in traffic.

However, from the motorcyclist's point of view they see themselves as a non priority group of road users in terms of policy on the provision of road space and facilities. Criticism is levelled at a failure to provide any specialist facilities for motorcyclists specifically. For example, cycle lanes have been introduced to benefit cyclists, bus lanes for buses and so on but no specialist provision has been allowed for motorcyclists. In fact, some motorcyclists perceive that bus lanes have had a detrimental effect on their safety in that the introduction of the bus lanes has narrowed the space available for use by this group. This comment relates both to the more obvious exclusion of motorcyclists from bus and cycle lanes, but also because bus lanes themselves have narrowed the free space that used to exist between double lanes of traffic and which was used by motorcyclists when traffic was congested.

During the course of the interviews and groups, respondents were asked to give consideration to the possibility of motorcyclists being allowed to use bus lanes as an aid to decreasing their vulnerability as road users. Whilst some road users cited advantages similar to those offered to cyclists, most respondents were of the opinion that cyclists, much more than motorcyclists, have the greater need to use bus lanes.

There was concern that giving motorcyclists access to bus lanes would encourage them to speed, putting others at risk. In addition, some road users were unhappy about opening up the bus and cycle lanes to any other type of road user on the basis that they may become congested, defeating the effectiveness of these in terms of improved journey speeds for current users.

It was felt by both motorcyclists and other road users that allowing access for motorcyclists to bus lanes would not necessarily be an advantage in terms of improving journey speed or restricting weaving between the traffic by motorcyclists. As illustrated by the following quotation, there was a view expressed by some respondents that motorcyclists in bus lanes would create new problems.

"The more you have clogging up the bus lane, the more the buses come out. You cannot go into the bus lane but the bus goes in any lane and holds all the traffic up and you cannot have anyone else using it. If there were a motorcyclist in that lane, the buses would have to come out more."

(Driver, Edinburgh)

The only benefit to allowing motorcyclists to use bus lanes was from a safety point of view.

However, many motorcyclists themselves were in favour of allowing motorcycles access to bus lanes and cited examples of cities where this is already allowed. Some non-motorcyclists were disinclined from this idea on the basis that motorcycles can travel at a comparable speed to other road users (unlike cyclists) and, as such, should remain as road users within the main flow of traffic. As a compromise to this, there were suggestions that slower, smaller engined motorcycles and two-wheeled powered vehicles should be allowed access to bus lanes. An alternative would be to impose speed restrictions on traffic using bus lanes and this is referred to in the final chapter.

Driver-Cyclists

The drivers taking part in the research were divided into two distinct groupings – those who have experience of road use via other forms of transport such as cyclists or motorcyclists and those who only have experience as drivers. The research found that experience of any other form of road use tends to increase empathy and, as such, those drivers who are themselves cyclists tend to have considerable empathy and most commonality with cyclists. Their own experience as cyclists generally leads to a greater degree of patience and tolerance being shown to cyclists combined with an understanding of the problems of cyclists and a greater awareness of cyclists on the road. This was endorsed by some of the cyclists participating in this research who claimed to be able to differentiate between cycling drivers and non-cycling drivers because of the way they interacted with cyclists on the road.

“Because I cycle as well, I probably take more notice of cyclists.”
(Driver-cyclist, Edinburgh)

“I think you have got to put yourself in their point of view and imagine what it is like trying to drive a big van when you can’t see out of the sides and stuff.”
(Driver-cyclist, Aberdeen)

In general, cyclists have a fairly good perception of drivers and most agree that, given the large numbers of drivers on the road and the level of special cycling provision, there are relatively few incidents affecting them. In contrast to drivers’ attitudes towards cyclists, poor driving behaviour towards cyclists tends to be blamed on a minority of bad drivers rather than an assumption that all drivers exhibit bad driving behaviour from time to time.

Taxi drivers

Taxi drivers are perceived to be one of the least considerate groups of road users. Criticisms were made in relation to a lack of courtesy towards other road users, a tendency to disregard road regulations (particularly in relation to no stopping areas where there are double yellow or red lines) and sometimes a failure to signal to other road users their intentions. There is a modicum of tolerance towards taxi drivers from other road users in an acceptance that taxi drivers will sometimes find it necessary to flout road regulations such as doing a U-turn in a prohibited place in order to pick up a customer. But, in the main, taxi drivers are perceived to flout road regulations more than is necessary.

From the taxi drivers’ point of view, it is generally the customer who is blamed for encouraging the flouting of regulations. Most claim that it is necessary to do this from time to time to carry out their job properly and speedily.

Freight drivers

Van drivers generally received the greatest amount of criticism from other road users, particularly cyclists. As illustrated by a quotation in the previous chapter, one Edinburgh respondent commented on “the white van syndrome” by which she meant a complete lack of concern and courtesy for all other road users. As such van drivers were characterised as being aggressive and showing a complete disregard for parking regulations in particular.

Whilst there is an acceptance on the part of some that taxi drivers will sometimes have to flout road regulations in order to carry out their job, this tolerance is not generally accorded to van drivers.

The views of van drivers themselves is that they are the group of road users who have been affected most adversely by the bus and cycle lanes. They are (in theory) excluded from bus lanes and, therefore, cannot benefit from faster travel during peak periods. They are also prohibited from using some roads or access points to roads which may impact on their capacity to deliver goods to customers. The provision of loading and unloading points was reported as having been restricted or not always being in a suitable or convenient location. Whilst some courier and delivery vans are criticised for stopping illegally in order to deliver or collect goods, most respondents acknowledge that this activity tends to affect traffic for only a brief period of time and thus the inconvenience caused is minimal. Van drivers taking orders for goods and tradesmen, on the other hand, are criticised for the length of time they may cause inconvenience to road users when loading or unloading goods. Some van drivers and tradesmen in Edinburgh reported being unable to service certain areas or tender for work because of the traffic regime and the difficulty in finding suitable parking and this was directly attributable to kerbside space being allocated to other road users.

One additional point which respondents were asked to give consideration to was that of allowing freight drivers to use bus lanes. However, all respondents felt disinclined to allow yet another different group of road user to have access to bus lanes for driving purposes. In fact, cyclists seemed quite fearful of the idea, and all groups thought that this might encourage greater use of the city centres during normal working hours by these drivers. If a choice had to be given to either motorcyclists or freight drivers having access to bus lanes, the former would be the preferred choice.

In summary, road users whose job involves them in driving in some form of 'professional' capacity (with the exception of van drivers) are generally considered to be more sympathetic to cyclists. As the following quotations illustrate, bus drivers and lorry drivers are generally considered to treat cyclists better than some other types of road user.

"I find bus drivers are quite reasonable. Taxi drivers are ok but can be bad for their driving sometimes. Car drivers – the more close you are to them (in a sideways direction), the more likely you are to be cut up by them. Lorry drivers are usually ok although sometimes they may cut you up if they are a bit close to you."

(Cyclist, Aberdeen)

"I think that some bus drivers have some sort of training on how to treat cyclists and other road users, although that said, I generally find in Edinburgh that LRT bus drivers are usually ok and First Bus drivers are pretty bad. They tend to ignore you on the road and I have been almost knocked off my bike by a First Bus driver. I would assume that bus drivers and taxi drivers are given some sort of training about other road users."

(Cyclist, Edinburgh)

6.2 INFRINGEMENT OF OTHER ROAD USERS SPACE

Having ascertained the priorities which are accorded to different groups of road user and attitudes towards each other, it is important to understand the ways in which conflict situations can occur and the ways in which conflict can be minimised. The following section of this report examines conflict situations and the final chapter assesses recommendations on how to address this.

Conflict Caused by Cyclists

A number of criticisms were levelled at cyclists in terms of the ways in which they can cause conflict situations on the road. We noted earlier that drivers tend to assume that cyclists should moderate road behaviour and be more aware of other road users and this is very clear when we examine the specific conflict situations outlined below.

Criticisms levelled at cyclists tend to fall into three broad categories – cycling behaviour, cycling maintenance and safety and lack of adherence to specialist provision.

First, in terms of **specialist provision**, cyclists were criticised for not using the cycle space which is allotted to them. Cycling on pavements is seen to increase danger to other vulnerable groups and to cyclists themselves when cyclists then rejoin the road. Similarly, it was felt that a small number of cyclists show a preference for cycling in the main road space rather than using cycle lanes. Again, this is seen as contributing to dangerous situations for both cyclists and non-cyclists. Other road users showed little understanding of why cyclists might not be able to or want to use their allocated space.

Second, in terms of **cycling behaviour**, criticism was levelled at some cyclists for weaving through traffic or tailgating other traffic, particularly in bus lanes. Cyclists who pull out suddenly in front of other traffic, who endeavour to overtake other traffic or who wobble whilst cycling also contribute to a lack of safety. In the same way that some cyclists will ignore specialist provision such as bus lanes, some also tend to ignore traffic lights or other types of regulation, some do not signal their intentions to other road users and some will undertake other road users or misjudge turnings.

Third, we noted in an earlier chapter that **safety** is an important dimension for an assessment of priorities which are accorded to road users and a number of safety aspects of cycling were mentioned by respondents. Not using safety gear is seen as contributing to cyclists' vulnerability on the road. A lack of lights on many bikes, particularly those belonging to students, was a particular problem at this time of year. Poor bicycle maintenance was also seen as a contributory factor to cyclists' vulnerability. Again, motorists in particular commented on the requirements they had to meet in terms of gaining a driving licence, having a MOT, valid road tax and insurance as improving levels of car safety and showing their responsibility as road users and queried the lack of equivalent regulations for cyclists.

Conflict Caused by Drivers

Some of the criticisms levelled towards cyclists are also true of drivers. Driving too closely to cyclists or tailgating, misjudging turns, pulling out in front of cyclists when there is not enough space to do so in safety are some of the aspects of poor driving behaviour reported by cyclists as being exhibited by some drivers.

Instances were also cited where drivers park inconsiderately or where they ignore cyclists on the road at junctions or at turnings. At most of the group discussions among cyclists, at least one respondent would have personal or anecdotal experience of another cyclist being knocked off a bicycle by a driver who had either misjudged their distance from a junction or who had awarded themselves priority at a junction even though the cyclist had right of way.

Finally, some drivers were criticised for their impatient and aggressive attitude towards cyclists or simply because their speed is too fast, particularly in situations when there are many road users around.

6.3 CONFLICT POINTS

Having examined the types of conflict which can be caused by both cyclists and drivers, it is important to understand the types of situation where conflict between road users can occur in order to develop messages which can encourage the better sharing of road space. Respondents were asked to suggest the different types of situation where conflict between the different road users is likely to occur.

Inevitably, considerable conflict between cyclists and drivers is likely to occur at times such as rush hour or when dropping or collecting children from school. Most respondents, regardless of their status as cyclists or non-cyclists, admitted to occasions when they may be aggressive towards other road users or when stress may lead to poor judgement as a road user. Likewise, inexperience on the part of a cyclist or driver can lead to inconsiderate road behaviour.

There are some conflict situations which will not be created solely by the attitude or behaviour of road users. As the following quotation shows, there is a need for a realisation on the part of non-cyclists that poor weather can cause cyclists problems on the roads. Similarly, roads which are in a poor state of repair may cause cyclists or drivers to swerve, for example, in trying to avoid a drain or a part of a road which may be in disrepair.

“On wet days, they (drivers) don’t realise a bike can’t stop whereas on a wet day a car can. Bikes just don’t work when it is wet no matter how good they are and you just can’t stop suddenly when it is raining heavily.”

(Cyclist, Aberdeen)

In addition, respondents cited instances where inconsistency of regulations or of specialist provision can cause conflict between road users. For example, in instances where a cycle lane may come to an end and force cyclists to move into the same stream of traffic as other road users, or at pinch points on roads or at roundabouts.

Finally, inconsistency of enforcement on the part of the police can lead to conflict between road users. As noted earlier, cyclists are not accorded the same priorities as other road users in part because of the lack of regulation on the part of the police. It is interesting to note that most non-cyclists participating in this research, whilst accepting on a pragmatic basis that it may not be cost effective for police enforcement against bad cycling behaviour, would like to see some sort of regulation being imposed. Even some cyclists participating in the research admitted that until regulations for cyclists are imposed by the police or other enforcement agencies, there is little hope of improving cycling behaviour on the part of some and

enhancing the status of cyclists. Ways in which enforcement could be imposed will be discussed in the final chapter of this report. As the following quotation suggests, the fact that cycling is being encouraged is perceived by some other road users as an indication that enforcement should also be taken seriously.

“It is not serious because they have given way to cyclists, they have made the cycle lanes, so they should be enforcing the cyclist. They are encouraging cyclists on the road but they are not enforcing the rules and regulations of the Highway Code to the cyclists.”

(Bus Driver, Aberdeen)

6.4 ATTITUDES TOWARD SPECIALIST ROAD PROVISION TOWARDS CYCLING

Cyclists generally regard the specialist provision which has been made available in Aberdeen and Edinburgh to be along the lines of “something is better than nothing.” Anecdotally, it would seem that since the introduction of the special provision for cyclists there have been increases overall in the number of trips made by cyclists. More widely, the provision has indicated to drivers that cyclists are an important group of road users.

However, most cyclists expressed a desire for more specialist provision for cyclists and, in an ideal world, they would like cycle lanes solely for cyclists along all major routes as well as more minor routes. Respondents in Edinburgh who have had specialist provision for a longer time than their counterparts in Aberdeen generally appear to consider that the provision in place may have helped increase the numbers of those using bikes and the numbers of those considering using bikes in the future. However, most respondents acknowledge that any increase in the numbers of those cycling overall is likely to be very small in the absence of a cultural change leading to greater acceptance of cyclists from other road users.

Whilst specialist provision such as cycle lanes are attributed as having promoted awareness of cyclists and are perceived to have increased safety levels on the road and encouraged more people to cycle, there are still some criticisms that the existing provision is confusing.

Coupled with the confusion over existing provision, it is also possible that a lack of knowledge about specialist provision and the ways in which this can impact on road use may be reducing the numbers of individuals who might choose to cycle. Alongside this, it is also possible that enforcement (by all parties) is seen to have a role in improving both the behaviour of all road users and as something which may contribute to an increase in the numbers of cyclists likely to cycle on roads in the future.

In summary, in order to bring about the cultural change which can lead to a greater number of different types of road user sharing roads in harmony, there is a need to understand how attitudes currently impact on behaviour.

The following chapter examines the attitudes of road users towards certain types of specialist provision and chapter eight will then look at ways in which road users can be informed and educated about sharing road space.

CHAPTER 7

ATTITUDES TOWARDS ROAD PROVISION FOR CYCLISTS AMONG DIFFERENT TYPES OF ROAD USERS

This chapter looks at attitudes to specific types of road provision for cyclists and provides the views of road users to this provision. It begins by looking at the way in which the provision is signified to drivers and cyclists, focusing on road markings and other signage. It then looks in detail at attitudes to bus and cycle lanes, advanced stop lines and filter lanes, pinch points, roundabouts, parking provision and crossover points. The discussion of these features was aided by the use of photographs showing examples of on road provision.

7.1 IDENTIFICATION OF SPECIAL PROVISION

There were two main channels by which road users become aware that space has been set aside for cyclists – markings on the road and kerbside signage.

Road Markings

In general, respondents emphasised the importance of road markings in that they tend not to read signage relating to road use which is at road sides. Respondents in Edinburgh and Aberdeen reported that there were inconsistencies in the road markings used for cycle provision and that this was both confusing and misleading. Due to budgetary constraints, many of the cycle and bus lanes in Aberdeen were denoted only by painted markings on the road – it was rare for any of the surfaces to be coloured. This effectively led to many drivers in Aberdeen believing that they could ignore these markings, or failing to notice them at all. Coloured road surfaces were much more obvious to all user groups and created a stronger impression that the space was set aside for a specific purpose.

This was evident when drivers were asked to look at illustrations of advisory and mandatory cycle lanes and to compare them with cycle lanes with which they were familiar. Where the road surface was coloured, drivers accepted that this indicated an area from which they were prohibited, regardless of the nature of the white line used. Where the road surface was not different from the rest of the road, it led some to conclude that they could access the area, as necessary.

As such, the distinction between mandatory and advisory cycle lanes was particularly unclear, with respondents tending to be guided by the colour of the road rather than by the broken or solid line. As one respondent explained:

“I don’t think that 1% of cyclists and 1 in 10,000 motorists would know the difference.”

(Driver-cyclist, Edinburgh)

In effect this meant that most advisory cycle lanes tended to be treated as mandatory by drivers and they would avoid driving in them when possible.

“If they (the mandatory cycle lanes) are there, (you should) use them because I would say the majority of motorists won’t drive in them.”

(Taxi driver, Edinburgh)

The exception was as far as parking was concerned and this was a problem frequently cited by cyclists in both Aberdeen and Edinburgh.

In Edinburgh, some confusion also arose because the use of colouring on road surfaces varied. In some instances the coloured surface continued across road junctions and other danger points, in some places it was applied only at the danger points and in other instances it stopped at the road junctions. As we shall see later, the general preference amongst cyclists was for these danger points to be highlighted by hatching on the road surface.

One other point made by drivers in Edinburgh and Aberdeen related to the use of different colours for bus lanes between the two cities. Aberdeen drivers were not familiar with the green surface common in Edinburgh and assumed that this must apply to some other type of regulation. Edinburgh drivers also commented on the use of green for bus lanes and recognised that this could cause problems for visitors driving in the city.

Signage

From previous comments drivers appeared not to pay a great deal of attention to the roadside signage used for bus and cycle lanes. Problems cited were lack of visibility and time to read the signs and it was suggested that signs painted on the road were more likely to be noticed.

This lack of awareness led to confusion in terms of how cycle and bus lanes should be used, in particular in the case of the regulations surrounding bus lanes and Greenways in Edinburgh. Many instances were cited where drivers did not appreciate that some bus lanes operated in peak hours only. The overall result of the lack of understanding was unnecessary congestion, unwitting infringement of the regulations or aggressive behaviour.

“People would have less trouble understanding which bits are which – if they were like that all the time, and didn’t change every hour of the day.”
(Taxi driver, Edinburgh)

“Bus lanes themselves though – do you find that people are quite ignorant of the times that they can drive in them?”

“That is because the times are different.”
(Driver-cyclists, Aberdeen)

On reflection, most drivers would prefer standardisation of the hours at which bus lanes operated on a nationwide basis, while the preference would be for bus lanes to operate at peak hours only. Bus drivers, however, commented that there was a need for greater variation in the selection of the peak hours covered; specifically it was reported that on Fridays different hours should be applied.

7.2 BUS AND CYCLE LANES

In general, drivers were in favour of the principle of dedicated bus lanes as they permitted traffic in the other lanes to flow more freely. Underlying this was an element of conditioning and an implication that drivers had accepted the arguments assigning preferential treatment to

public transport. The use of these lanes by taxis and bicycles was accepted by default, in that it made sense to allow these modes of transport access to this space ensuring that it was well used.

This support was not held with respect to cycle lanes. Drivers perceived the level of special provision for cyclists to be more than adequate already given the number of cyclists on the road and their status as non road-tax payers.

In general taxi drivers found the bus lanes useful, albeit with reservations. The bus lanes were only used by taxi drivers when the outside lane was congested and so most taxis would stay within the main flow of traffic outside rush hours. In rush hour, taxis tended to make use of both lanes, lane hopping to gain the maximum advantage through the traffic. Another advantage afforded by the bus lanes to taxi drivers was that they could pick up and set down passengers more easily without impeding other vehicles, particularly during periods of heavy congestion such as the rush hour.

However, despite this general support, some negative feedback on bus lanes was received from both drivers and cyclists. Bus drivers and others stated that they became log-jammed in the bus lanes, particularly when dealing with large numbers of passengers who required advice regarding fares and destinations in a tourist area such as Princes Street. This specific criticism only applied to city centre locations; on other stretches of road, the spacing of the bus stops prevented this type of delay. In the city centre this situation would be partially rectified by the re-introduction of bus conductors, thus “freeing up” the drivers to concentrate on driving.

Another problem reported by bus drivers was that they were often obliged to “leap frog” cyclists who were moving too slowly in the bus lanes. In addition, cyclists tended to undertake buses on the inside without first checking whether the bus was about to stop.

Conversely, cyclists commented that they were forced out into the main stream of traffic in order to overtake slow-moving buses and that bus drivers also cut out from bus stops without first checking whether a cyclist was in the process of overtaking them. In addition, cyclists felt pressurised by bus drivers who “tail-gated” them or left too little space between the two vehicles.

Both bus drivers and cyclists commented that they felt trapped in the bus and cycle lanes by other drivers who would not let them enter the main stream of traffic. In fact bus drivers reported that drivers’ attitudes to allowing buses to pull out had hardened since the introduction of dedicated bus lanes.

One problem specific to provision in Princes Street in Edinburgh was that buses and bicycles were still required to share the same space on the left of the road, when the right lanes heading towards Leith Walk were largely free of traffic.

“With Princes Street, they should actually move the cycle lane away from the pavement and actually next to the central reservation. There's no point in having a cycle lane in Princes Street, because there's either a bus or a van or something parked in it, first thing in the morning”.

(Driver-cyclist, Edinburgh)

Thus, although in favour of this type of provision, shared use between buses, taxis and bicycles was not without its problems.

The other negative comments in relation to bus and cycle lanes referred to their general state of cleanliness and repair. In addition to natural debris such as leaves, the lanes became blocked by manufactured debris such as litter and diesel oil which posed a particular danger to cyclists. On many occasions, potholes and other defects were also left unrepaired or “botched up”, exposing road users and their vehicles to possible injury and damage from uneven surfaces.

In general, drivers were of the opinion that they should adhere to cycle lane provision when provided. They could appreciate that the facilities were there for a specific purpose, the ultimate aims of which were to improve road safety, reduce congestion and provide a healthy and cleaner environment.

7.3 COMMENTS ON OTHER SPECIAL PROVISION AFFECTING CYCLISTS

Advanced Stop Lines

Advanced stop lines have been introduced recently within Edinburgh and Aberdeen. An example of a road with this feature is shown at Annex 5.

With regard to advanced stop lines, the research found that respondents held mixed views on their effectiveness. Most road users adhered to these restrictions without fully understanding their purpose, while a few chose to ignore them.

Both cyclists and drivers stated that advanced stop lines had the potential to promote dangerous driving habits, in that they placed a slow road user in front of one with a greater capacity for speed. Indeed, two drivers stated that they regarded bicycles at advanced stop lines as a challenge to be overtaken as soon as possible.

“It’s just general psychology of the drivers getting used to the idea of the box being there, and to their driving accordingly.”

(Driver, Edinburgh)

As indicated in this quote, drivers also needed to be educated as to the purpose of the advanced stop lines.

A solution to the above problem was proposed by one respondent who suggested that traffic lights should be timed for cyclists, thus allowing them a sufficient time delay to extricate themselves from the advanced stop line area.

Another problem with the use of the advanced stop lines arose where traffic was trying to go in different directions.

“We are stopped at the lights. They come up the inside lane – and we indicate to turn and they don’t.”

(Driver, Edinburgh)

Both drivers and cyclists needed to be more aware of the presence and intentions of others to avoid these situations.

The use of filter lanes approaching advanced stop lines was one of the mechanisms provided to help resolve these conflicts. They were introduced in Aberdeen and Edinburgh relatively recently and cyclists generally had found them to be useful. Specific problems identified were:

- when the traffic lights changed as cyclists were approaching the advanced stop lines. The result was that the cyclists could be stranded
- when drivers encroached upon the filter lanes
- lack of advance signage telling drivers and cyclists that these lanes had been introduced

Pinch Points

As was the case with advanced stop lines, some drivers felt that “pinch points” also provided an opportunity to “race” with cyclists. Although other drivers claimed that they showed courtesy and consideration towards cyclists in that they allowed the cyclists to precede them through the “pinch points”, cyclists stated that drivers would frequently speed through in front of them from either direction, with a possible risk of collision or accident.

The most dangerous types of pinch points were those where the road narrowed from both sides forcing cyclists into the path of on-coming traffic. Where road narrowing only affected one side of the road, this gave some indication of which users had precedence.

Roundabouts

Roundabouts were particularly problematic for cyclists and there were many instances where cyclists abandoned their bicycles and walked around them. Drivers were also extremely sympathetic towards cyclists at roundabouts and tried to give them as much space as possible.

The bigger the roundabout, the greater the problem. The roundabout at the top of Leith Walk was stated to be a particular hazard as cyclists found it difficult to build up sufficient speed and momentum when travelling uphill towards the city centre. In consequence, Leith Walk itself was described as one location where it was imperative to have a cycle lane on the roundabout, as the current provision was less than adequate. As one user commented :

“The Council in Edinburgh gives buses priority – there is a double bus lane at the top of Leith Walk (at Picardy Place) , while everybody else is down to one lane. They’re trying to force everyone on to buses. It’s some great social engineering experiment where you’re all going to be in the same sort of environment for twenty minutes a day”.

(Driver – cyclist, Edinburgh)

Crossover Points and Parking

As referred to earlier, conflict occurred where cyclists had their space impeded by other vehicles turning left or trying to park. In Edinburgh, various approaches had been used to try and resolve this and some examples of these are shown at Annex 5.

In one of these pictures (photograph 21) a separate space is provided for parking and the cycle lane runs to the right of it. However, this was not regarded as ideal as it required drivers to cross over the lane to enter and leave the parking area. More importantly, cyclists were fearful that drivers would open their doors without first checking that the cycle lane was clear. For this provision to be acceptable, more space should be left for the parking area, so that doors do not have to open across the cycle lane.

In photograph 13, the cycle lane lies between two lanes of traffic, with the left lane used for traffic turning left. Drivers are required to cross the cycle lane to get into this filter lane to turn left and to cross it in the other direction from the side junction. Drivers were less supportive of this type of provision than cyclists, and both groups acknowledged that it could cause problems and would take some time to get used to.

In summary, cycling respondents were generally in favour of dedicated cycle lanes, but commented that the use of ‘filter lanes’ was a possible source of danger as a dual-purpose cycle and filter lane could put both cyclists and drivers at risk. Drivers and cyclists generally believed that there should be clearer markings warning road users of the dangers at cross over points such as these.

In general, respondents felt that the needs of commercial drivers and taxis were not taken into account when road space provision was being allocated. It was suggested that time and parking restrictions for all vehicles should be standardised and that specific times of the day (or night) should be dedicated to the loading and unloading of lorries. This would help to reduce congestion and illegal parking, as had been proved in some European countries. Similarly, taxi drivers suggested that they should be allocated dedicated pick-up and drop-off points in order to reduce the necessity of their intruding into bus and cycle lanes.

7.4 FUTURE CHANGES

As far as future cycling provision was concerned, cyclists and drivers expressed a number of preferences. Whilst these preferences have been suggested by respondents as their “ideal”, there was also an acknowledgement that some measures may be difficult to introduce given the logistics of budgets, manpower levels and the difficulty of enforcement.

- Passing places on uphill stretches (such as Leith Walk) would enable faster vehicles to overtake and thus reduce the possibility of obstruction or conflict. If these were to be incorporated on the pavement there would be a necessity for lower kerbs which would allow cyclists to remain seated while moving from one level to the other.
- Green lights at advanced stop lines, similar to those used at toucan crossings, would allow cyclists to move away from traffic lights without becoming a hindrance to other road users.

- Chevrons and “Give Way” signs would also reduce the possibility of accidents at crossing points.
- Better enforcement of parking restrictions in cycle or bus lanes would remove a large number of “rogue” vehicles. This would enable cyclists to remain in the cycle lane and not move out into the stream of traffic to bypass the obstruction. It is acknowledged that this may require significant change to current practice and investment and would need such measures as the provision of cameras in buses and the decriminalisation of parking in urban areas.
- Clearer and standardised road markings – both at key points and throughout the UK – would reduce confusion and misunderstanding.
- Coloured road space would be preferable to line markings or perpendicular signs, as it had more of a visual impact.
- Roundabouts in particular were considered to be a source of danger which required immediate remedial action. Cyclists risked being “sandwiched” between rows of larger and more powerful vehicles and this could only be resolved by dedicating specific areas of road space. The alternative would be to remove roundabouts altogether and introduce straighter and more continuous routes without breaks in the cycle lanes.
- Cyclists also expressed preference for complete segregation from other road users, both on roadways and on pavement routes.
- The need for safe and secure parking for bicycles and motorcycles was also expressed. This was particularly relevant in the case of women cyclists who might feel intimidated by unlit and unsupervised areas. It was also a significant problem in more affluent areas where the parking of bicycles was perceived as unacceptable to residents and business owners.

Finally, there was a general acknowledgement that cyclists - and particularly students – would benefit from training in road sense and behaviour. In addition, it was suggested that bicycles should undergo roadworthiness testing to ensure that they were not a potential hazard to their riders and other road users. It was also recommended that bicycles should be registered to conform with other vehicles and that cyclists should be obliged to become insured.

As revealed in this and earlier chapters, the effect of providing special space and changing road layouts in favour of cyclists has been to increase interest in cycling. However, the new provision is not without its problems and many are still learning how to deal with these changes.

As the next chapter reveals, this learning is being achieved more by guesswork and experience than by more formal means.

CHAPTER EIGHT

EDUCATING AND INFORMING ROAD USERS ABOUT SHARING ROAD SPACE

Having ascertained the attitudes of road users and identified the lack of understanding by drivers of much of the specialist road provision provided for cyclists, this chapter examines the ways in which individuals are provided with information relating to road use. It also looks at the ways in which this information can impact upon road behaviour. The chapter then identifies gaps in terms of information provision and information channels that could be used. The final chapter of this report then provides recommendations relating to more effective methods of sharing road space.

8.1 EXISTING INFORMATION SOURCES

For a majority of respondents, attitudes towards other road users tend to be based upon their own personal experiences and so, for example, respondents who only have experience of driving a car tend to be less sympathetic and less understanding towards non car drivers.

For many drivers, their attitudes to cyclists tends to be most influenced by bad cycling behaviour. Interestingly, non-cycling road users expect cyclists to be the ones to learn how to deal with other road users and so the emphasis is placed upon cyclists obtaining the relevant information to act properly, rather than drivers doing so. However, as the following verbatim quote illustrates, one or two drivers also acknowledge the need to be educated about cycling behaviour.

*“The conflict (between cyclists and drivers) is just through under education.
We don’t know the cycle rules, unlike the cyclist who should.”*

(Driver, Edinburgh)

In terms of actual sources of information, most respondents participating in the qualitative research cited very few sources from which information had been or could be obtained. Many respondents cited the Highway Code as the most obvious means of obtaining information about road space provision, markings and how to relate to other road users. However, as illustrated in the following quote, the drawback to the Highway Code is that this is generally only used when people are learning to drive and will not be referred to as a source of information in relation to any changes noticed in road space allocation.

“I think you need a more higher profile campaign. People read the Highway Code when they are going for their test and then they throw it in the bucket.”

(Bus Driver, Aberdeen)

On this basis many road users are likely to make extremely limited use of the Highway Code as a source of information. Whilst all respondents in Edinburgh had readily noticed the Greenways and cycle lanes when they were introduced, it is perhaps not surprising to find that many were unclear as to the specifics of their operation. As illustrated by the following driver, changes to road provision can come as a surprise to road users.

“I know that junction at the back of Forest Row there, that just appeared with no warning to anybody about what was happening. People just find these changes on a Monday morning.”

(Driver, Edinburgh)

Furthermore, whilst respondents readily admit to an unclear understanding of many recently introduced features, they had not concerned themselves in seeking out information in order to clarify their understanding. For example, many respondents participating in this research were aware of Advanced Stop Lines but unaware of their precise purpose or the implication of the provision of this space for cyclists.

“I got a row off a cyclist for stopping in the box but it was the first time I’d come across one and I didn’t know what it was for.”

(Driver, Edinburgh)

Some road users were aware of a few of the signs offering an explanation of road features at certain places on the road where these features have been introduced. However, most respondents claim not to have time to read these signs when they are travelling and this can be attributed to three key reasons. First, for motorised road users, the speed with which they may be passing informational signs may not offer enough time to digest the information provided. Second, most drivers acknowledge the difficulties of driving today and the many aspects of driving which have to be monitored. This does not allow for additional time to be spent gathering information from road signs. Thirdly, as much of this signage is on the kerbside, it can be obscured by other vehicles in the nearside lanes. This particularly applies to signs relating to the bus lanes / Greenways.

Those respondents most quickly aware of any introduction of specialist provision on the roads are those who drive in a professional capacity such as bus drivers or taxi drivers. These groups are often provided with information relating to changes in road use via their workplace. For example, bus drivers in Edinburgh were provided with information relating to Greenways when they were introduced, as recounted in the following quotation.

“We were told about the new regulations which were coming in so that when they started we had a pretty good understanding of how they affected us. But I don’t know how your average driver in the street would have got this information.”

(Taxi Driver, Edinburgh)

One or two Edinburgh based respondents had a vague recollection of some information being provided, through a door drop, in relation to changes to road provision, but were unable to recall the information provided. Most respondents had no recall of information being provided in this way.

For those many road users who do not drive in a professional capacity, there appear to be few sources of information regarding the specialist provision of space to different user groups. One or two respondents referred to articles which had appeared in local papers and which provided information relating to changes in road use but commented that these articles had not really been intended as a source of information on how road changes would impact upon road users. As such, this source of information was not generally considered to be very satisfactory in terms of the amount of information provided.

For a small number of respondents, a significant increase in their understanding of certain types of provision had occurred in the light of a prosecution for an offence such as parking in a loading bay or driving in a bus lane at times when this was prohibited.

In general, very few respondents were able to cite information sources which are widely available to them and which would provide detail on specialist road space provision for different types of road user.

In addition to a general lack of easy-to-access information, there is also some criticism from respondents regarding the inconsistency of provision and the inconsistency of regulations for specialist provision at both a local and national level. Respondents in Edinburgh pointed to the Greenways as an example of inconsistency in that some Greenways in Edinburgh operate on a 24 hour basis whilst others only operate during peak hours. This serves not only to cause confusion over the use of Greenways but can also serve to inhibit expected patterns of road use. Some road users who are used to not driving on the 24 hour Greenway do not use the peak hour Greenway outwith peak hours as there is an assumption that this will be governed by the same regulations as the 24 hour Greenway. In these instances, the flow of traffic during non peak hours will be slowed through lack of use of the Greenway. The following quotation from a bus driver in Aberdeen illustrates the confusion which can be experienced due to a lack of consistency in specialist road provision.

“There is no uniformity. Lang Stracht is 24 hours, King Street has got set times and Union Street has set times and it is confusing to us, so you can imagine how the general public are feeling.”

(Bus Driver, Aberdeen)

As the following quotation emphasises, there can also be differences in the application of specialist provision in different cities and this can also cause confusion to the road user. Whilst many drivers in Edinburgh are now used to having cycle lanes on major roads in and around the city, drivers from Aberdeen, where specialist road provision for cyclists is much more recent and less obvious, have a far less clear understanding of cycle lanes and their purpose.

“In other parts of the country there are different rules and regulations. In Glasgow, there are no signs to tell you what times, so you have to assume that they are enforceable at all times and so therefore you are not allowed in them. But I don’t know whether that is the case or not but there are certainly no things to tell you, so you just presume that are enforceable at all times.”

(Taxi Driver, Edinburgh)

8.2 GAPS IN ROADSIDE INFORMATION PROVISION

We have noted that in general there is a lack of readily available information for the road user which enhances uncertainty arising from the varied types of road markings and regulations. As such, many respondents find it difficult to identify specific gaps in information provision and simply note that there is a general need for a much higher level of information and education.

One way in which information is provided is through the markings on, and by, the roads but as already noted, whilst some respondents were conscious of signs available by the side of the road which give an explanation as to how specialist road provision will operate, most respondents acknowledge that they will ignore these signs. On this basis, roadside signage does not appear to be particularly effective as a source of information.

Whilst many road users applaud the use of colours to emphasise different parts of the road, that were set aside for a special purpose, concern was expressed that there is inconsistency in the colours used and that this in turn can lead to confusion on the part of many road users. For most respondents participating in this research, red appears to be the preferred colour to use as this will be most readily noticed – the colour generally is associated with danger and implies a need to be careful. There was an acknowledgement from most respondents that they are more likely to notice a marked cycle lane where the cycle space has been painted red than one which is marked only by a broken or solid white line. For example, this was of particular importance when filter lanes are marked in the centre of roads to allow cycles to pull out into other traffic in order to turn right. There was a suggestion from some respondents that all cycle lanes should be coloured red and where this is not common practice (for example in Aberdeen) it often caused some debate amongst group respondents about which roads did have cycle lanes.

“I think it helps where they have coloured the road as well as having the lines as markings. I’m not sure why but I think if the road is red, it stands out more as something you have to take notice off. Like, red is for danger and a red road shows that you have to be looking out for something, so you take more care. Whether you like cycle lanes or not, the ones that are painted red stand out much more than others that aren’t painted red.”

(Cyclist, Edinburgh)

There was also confusion on the part of some respondents regarding the use of double red lines and double yellow lines at road sides and many queried the difference between the two. It tended to be assumed that double red lines implied a stronger regulation but no one present at the groups or depth interviews could confirm or deny this. The following quotation from respondents in Aberdeen illustrates the confusion around the use of double red lines.

“The red line – is that a tow away zone?”

“Now that’s just to restrict the parking isn’t it?”

“Isn’t that yellow (lines) ?”

“You get towed away on a red line.”

“We don’t have red lines here.”

“I am sure that the red line was that you get lifted away, towed away.”

(Drivers, Aberdeen)

So, there is a general preference for the colour red to be used on roads as an indicator of specialist road provision and to indicate a need to take care of other road users. Nevertheless, respondents in Edinburgh had become used to green bus lanes and appear to be happy with

the use of the colour green to denote a bus route. It was accepted, however, that this would cause confusion to visitors to the city.

Similarly, in instances where cyclists may meet traffic crossing their space (buses leaving stops, vehicles leaving parking areas, or joining from a side road), there was a preference for using box markings or hatching. This would help alert cyclists to the dangers from other vehicles and would serve to draw drivers attention to the fact that other traffic was likely to be using this space. This type of hatching is usually recognised by drivers as a warning to keep out where possible.

To sum up, inconsistencies in the regulations governing different types of specialist road provision can lead to confusion on the part of road users. Many respondents, across all types of road user, cited a need for consistency over a number of aspects of road use, namely :

- Times of operation of bus lanes and Greenways
- Use of colour to emphasise road markings
- Make all cycle lanes mandatory rather than advisory, other than instances where road users may be parking a vehicle.

8.3 INFORMATION AND EDUCATION

For many respondents participating in this research, there was a need for a cultural change and greater appreciation of the role of cyclists within Scottish cities, on the part of all road users. In part this process can be aided by the provision of information relating to road use to help change current road use habits.

A number of the respondents taking part in the research had experience of cycling abroad. Positive comments were made in relation to the specialist provision available for cyclists in countries such as Holland, France, Norway or Belgium where relatively large numbers in the population make frequent use of bicycle as a means of travel.

“In France there is a cycle awareness and motorists generally are a lot more considerate than they are here. Possibly more motorists have cycling experience and are aware of the problems of cyclists and I think they can appreciate the other’s problems.”

(Cyclist, Aberdeen)

“I have just got back from holiday in Norway and over there they have got the road for cars and a road inside for pedestrians and cyclists. They have got big crash barriers separating the two. I was just amazed at how many people cycled over there. It was about one hundred times more people than you see here.”

(Driver-cyclist, Aberdeen)

Whilst respondents found it difficult to assess what factors may have created positive attitudes towards cycling in some other countries, there was a general acknowledgement that a cultural change in the UK is a necessary part of the education which is needed. Most

respondents appear to believe that continued specialist provision will only have a limited impact on the numbers of individuals cycling within Scotland in the absence of this cultural change. However, in the meantime, the continued introduction of specialist provision is seen to be one of the ways in which cycling can be encouraged.

This will not be sufficient in itself and factors such as, lack of tolerance from other road users and the sheer volume of traffic on many roads, serve to dissuade individuals from cycling. For example, respondents participating in this research who are themselves parents claimed a desire for their children to learn how to ride a bicycle. However, most will only allow their children to cycle on non busy local roads close to the family home because of a fear of the danger posed by other road users. Some respondents referred to a lack of availability of formal training for cyclists and the need for the introduction of both off and on road training for cyclists to take account of the busier traffic conditions and different types of provision currently available for cyclists. This will be covered in greater detail in the final chapter of this report.

In general, respondents suggested that the type of pro cycling policy followed by Edinburgh and Aberdeen City Councils, incorporating the provision of features such as cycle lanes, advanced stop lines and off road provision, is most likely to attract latent cyclists. It was not seen to be sufficient to encourage avid non-cyclists to take up cycling.

However, based on the research it would seem that a lack of awareness and understanding of current special provision can serve to reduce existing and potential use of roads by cyclists. This was perhaps more marked in Aberdeen, where cycle provision is less obvious and cyclists feel less confident of the role being offered to them.

8.4 INFORMATION CHANNELS

Respondents were asked also to provide suggestions as to the ways in which information could be disseminated to road users.

Not surprisingly, given the proportion of road users to whom information and key messages need to be delivered, respondents tended to focus on communication channels which would have a broad ranging reach, both in terms of the type of transportation used, lifestyle and demographic discriminators such as age or sex.

As such, the communication channel perceived to have the widest possible reach is that of television advertising. Regardless of the key message(s) being put across in advertising, most respondents also considered the need for these messages to be put across in a hard hitting manner. Respondents referred to the past successes of “Clunk, Clink, Every Trip,” “Think once, think twice,” and the more recent “Foolsspeed” campaigns. As the following discussion between two respondents emphasises, a generic advertising campaign would be welcomed.

“They need an advertising campaign like the drink driving one at Christmas.”

“Yes, years ago you never wore a seatbelt and now you must.”

“There is that advert about a passenger that kills a driver by going into the back of her seat. They need to show something like that, what could happen to you on a bike.”

(Driver, Edinburgh)

Television was suggested as the medium most likely to reach large numbers of the population and hence was seen to be most suitable for drivers. However, some respondents identified a range of other channels including advertising on the back of buses (especially for bus and taxi drivers and cyclists) or in magazines and on radio. One respondent referred to a recent advertising campaign which he had noticed on the back of a bus which referred to accidents involving pedestrians and vehicles. Reference was made to the strapline which was something along the lines of “one ton of metal, 12 stone of person” and provided a strong message about the vulnerability of pedestrians and the need for drivers to take care.

Aside from advertising campaigns which are perceived to offer the benefit of providing information to a broad range of individuals, some of whom may not currently be road users, respondents also mentioned a number of other communication channels which could be used to target specific groups of road user.

A number of respondents pointed to the Highway Code as a source of information for drivers on the basis that when learning to drive it is incumbent on an individual to familiarise themselves with the information provided in the Highway Code. However, most drivers participating in the research freely admitted that, once having passed their driving test, they no longer used the Highway Code as a source of information on any changes to road use or legislation. Furthermore, only one or two cyclists participating in the research claimed to have ever used the Highway Code as a source of information.

Whilst the Highway Code does contain sections entitled “Rules for cyclists” and “Rules for motorcyclists” as well as other sections which contain information relating to all vehicles, most respondents were unaware if there were sections which might be aimed at non drivers or other vulnerable road users such as pedestrians. Furthermore, we noted in an earlier section of this report that most road users were unaware of the difference between mandatory and discretionary cycle lane markings. The section of the Highway Code (The Stationery Office 1999) relating to cyclists specifically does not distinguish between these two types of cycle lane.

Other potential sources of information suggested by a small number of respondents included information being made available through petrol stations and cycle shops. The former will be used by drivers of most motorised vehicles and the latter by anyone purchasing a new bicycle or parts for a bicycle. In fact bicycle shops were frequently mentioned by cyclists as a source of information about cycle paths, cycling groups and general cycle safety information and are an obvious channel to reach cyclists.

Many respondents claimed a dislike of direct mail shots and said that anything delivered to their home was likely to be discarded. But as illustrated in the following quotation, a small number of respondents suggested that information could be included with mail shots to members from motoring organisations such as the AA or other types of organisations such as DVLC which may be sending information to drivers on an annual basis.

“They should give out a new booklet for cyclists and drivers. It could even be posted through every household. At the end of the day, it is like health things and then everyone would know what they are for.”

(Driver, Edinburgh)

Regardless of their personal preferences about direct mail, most respondents claimed that information arriving with a reminder to renew vehicle tax would be likely to be read. The perception appears to be that a “serious” mailing such as the notification of car tax implies that any other information contained in the same envelope is likely to be of a serious nature. A further benefit of this approach is that it would disseminate information to a relatively large audience.

In line with this latter suggestion, council tax mailings or commercial and business mailings were also suggested as a means of disseminating information to households and businesses. However, this would be more appropriate in terms of educating people about the Council’s actions and rationale underlying road space allocation. Thus the tone of the message would be different.

One further suggestion was that information could be provided in public places such as libraries, doctors’ surgeries or local council offices. The one key disadvantage cited for this channel was that it would not be as targeted or effective in putting across information to the relevant audiences. However, libraries and other public sources are perceived to be credible sources for the provision of public information.

In summary, there is a need for an informational campaign targeted at drivers and cyclists. Specific messages are provided in the following chapter. These informational messages need to be placed in the context of other changes as discussed in the final chapter also.

CHAPTER NINE

RECOMMENDATIONS FOR ROAD SHARING

Previous chapters in this report have examined attitudes towards specialist provision for cyclists and the attitudes of different groups of road users towards sharing road space with others. The research has identified a need for an informational campaign targeted at both drivers and cyclists. This final chapter summarises the key findings and provides recommendations for key messages which need to be communicated to road users to help create a positive and harmonious approach to sharing road space in the future.

9.1 KEY FINDINGS

- Attitudes towards the significance and importance of other types of road users differ according to a number of factors which include environmental impact, safety, whether the type of transport offers any form of public service and the purpose of travel
- Whilst cyclists are regarded as being vulnerable as a group, the majority are perceived to be relatively safe in their use of the road. A minority are criticised for a lack of regard for other road users, for failing to adhere to basic road safety guidelines, for poor cycling behaviour and for not consistently adhering to the law in terms of courteous and acceptable road behaviour
- In general, many drivers regard cyclists as “their own worst enemy” in that they breach the road code regularly and for little real benefit - simply because they can - and this does nothing to help create more positive perceptions of cyclists
- On most dimensions, cyclists are accorded a low priority as road users because of a number of key factors including their low speed of travel, their non payment of road tax, and lack of registration and insurance
- Enforcement agencies are criticised for the lack of enforcement of proper cycling behaviour although it is acknowledged that this must be a relatively low priority for these agencies
- Overall, drivers tend to view cyclists as a minority group which commands too much by way of resources, particularly given that they do not contribute any form of road tax
- There is awareness of special road provision being accorded to cyclists but a general lack of awareness regarding the operation, purpose and regulations surrounding different types of provision. As shown in the desk research, the perception of danger to cyclists from road traffic is often overstated. This suggests that an increase in awareness of specialist cycling provision may help to reduce fears of danger from other road users
- There is a general lack of available information in relation to specialist road provision and respondents cite a need for some sort of educational and informational campaign which will address the informational gaps which currently exist

9.2 KEY MESSAGES FOR CYCLISTS

Four key messages for cyclists were suggested by respondents and these relate, in the main, to issues surrounding road safety and cycling behaviour.

First, **a need for cyclists to adhere to the laws of the road**. Many cyclists and non-cyclists claimed that cyclists will not be taken seriously as road users until such time as they show a regard for the regulations surrounding road use and a full regard for the rights of other road users. Unless cyclists are seen to be respecting the road and the rights of other road users, the rights of the cyclists will not be respected by other groups. Related to this, a need was defined **for cyclists to follow the safety code** both in terms of cycling behaviour and ensuring the road worthiness of their bicycle.

Third, and in relation to road sharing habits, we noted earlier that cyclists are expected to **understand the needs of other road users** and many respondents cited a need for cyclists to give way to other road users where appropriate to do so. Fourth, and related to this, a need was defined **for cyclists to learn how to cycle in current road conditions** and to be competent in their use of the roads.

9.3 KEY MESSAGES FOR DRIVERS

In line with messages for cyclists, messages to drivers included safety elements as well as a need for an increased awareness of cyclists as road users.

Cyclists would like **drivers to recognise the role of cycling** and to accept it as a sensible means of travel for both health and environmental benefits. There is a desire **for a greater awareness of the vulnerability of cyclists** in terms of blind spots, at road turnings and junctions. This is allied to a need for drivers to be sympathetic towards cyclists in terms of **accepting that they are different from other road users** and that a more considerate and tolerant driving behaviour is required.

As such, there was a general view expressed by cyclists that drivers need to be made more aware of cycling hazards in terms of the weather, the condition of roads and other road users. The following quotation illustrates the dangers of cycling in terms of heavy traffic and bad weather conditions.

“I am worried about myself. Lots of people in London got killed by big lorries. When they go past they make the bike unsteady, plus you have got the added disadvantage of the bit where you are cycling is really in bad condition. There are lots of potholes and you can get quite unstable there. For example, the other night when I cycled home, it was raining pretty hard. Well, if there is a pothole under the water you wouldn’t be able to see it You are so vulnerable when large traffic goes past.”

(Cyclist, Aberdeen)

As there was a general lack of awareness of the specific nature of the current cycling policies on the part of either Aberdeen or Edinburgh Councils, it is perhaps not surprising that there was a perceived need for drivers to understand these. These policies will be more acceptable if they are expressed in terms of the benefits for other road users as well as the general public.

9.4 KEY MESSAGES TO INCREASE LEVELS OF CYCLING

In order to increase levels of cycling and numbers of cyclists, it is important to bear in mind that different messages are likely to appeal to different types of existing cyclist and potential cyclist. For example, the desk research identified a number of benefits of cycling including environmental considerations, health benefits, low running costs and reductions in congestion on the roads. The five different groups of cyclists identified by the Transport Research Laboratory²¹ (practical, idealist, fairweather, lifestyle and mainstay) are likely to be receptive to different messages. For example, messages pertaining to the health benefits of cycling are most likely to appeal to idealist cyclists and practical cyclists. For lifestyle cyclists and potential cyclists, the sociability and fun of cycling or a reduction in stress may be the key messages to put across.

One additional factor identified by the desk research and respondents is a need to improve the image of cycling. Some non-cyclists readily focus on negative perceptions of cycling such as personal safety and poor weather. For others, exposure to specific cycling events such as the Tour de France may create an image of a sport which requires particularly high energy levels. Again, it is important that messages can be put across which can emphasise a more positive image of cycling or that cycling need not be an exhausting activity.

A minority of the respondents participating in the research suggested that a change in image may have already started to a small extent. For many respondents, there was a perception of increased numbers of cyclists on the road. However, it was also acknowledged that this change has a long way to go.

9.5 RECOMMENDATIONS FOR FUTURE ROAD SHARING

We noted in the last chapter a need for effective dissemination of information in relation to sharing road space and this is likely to play a fundamental part in helping to bring about a cultural change in attitudes and a consequent increase in cycling activity in Scotland's cities.

Other than suggestions for hard hitting advertising campaigns across a range of different informational channels, a number of further suggestions were made by respondents during the course of the research.

Cycle Training

A number of respondents referred to a need for some form of formalised cycling training to be made available to both children at school and to adults. There was some knowledge of the 'cycling proficiency' type of scheme, operating in primary schools, but this was not available to all children. Nor was it viewed as likely to give sufficient skills for the road conditions that might be encountered in Edinburgh or Aberdeen today.

²¹ op cit 7

Similarly, some respondents identified a need for some form of formal training to be made available for adults to learn sensible cycling behaviour and, once again, no respondents were able to confirm whether any form of training is currently available.

“I had to sit a CBT which is compulsory basic training. I think there should be the same for cyclists. They should have like theory tests as well for cycling, the way that a driver has to do it. You’ve got like a choice of a thousand questions to know now and if you’ve got a knowledge like that it’s always going to be something extra that is going to help.”

(Driver, Aberdeen)

In addition to teaching individuals about the necessary skills for cycling to help create an awareness of specialist road provision and its implications for road users, formalised cycling training is also perceived to play another key role in that it can reinforce the importance of safety wear for cyclists. This is particularly important given that the present climate recommends the use of safety wear but does not require this as a regulation. As the following quotation shows, there were suggestions from some respondents that there should be regulations surrounding the use of safety wear for cyclists.

“In Australia it is compulsory to wear helmets when you’re cycling and I think they should introduce something like that over here. It would help to improve safety for cyclists and if everyone had to wear one, no-one would worry about looking like a prat because they would all be wearing one.”

(Cyclist, Edinburgh)

What is important to bear in mind is that a lack of formal training has the potential to impact on future cycling behaviour in two key respects. First, it is likely to inhibit cycling on major or busy roads on the part of many cyclists who may feel they do not have the necessary skills to cycle safely on roads. Second, when such cyclists do venture onto the roads this implies they will not have the necessary cycling skills or understanding and awareness of on-road provision to be competent in the company of other road users. One parent attending a group in Edinburgh commented that

“Our school wants our children to cycle down to school every day now and I won’t allow mine because where we stay there are major roads, very busy. It is too dangerous.”

(Driver, Edinburgh)

The Use of Enforcement

We commented earlier that the issue of enforcement is one which impacts upon road users’ views of cyclists in general. There is a pragmatic acceptance on the part of drivers that there is a need for enforcement agencies to approach enforcement in a cost effective manner. But comments were also made to indicate that whilst cyclists are not treated in the same manner as other road users, they are unlikely to be accepted as equal road users. As such, a number of suggestions were made by respondents as to the types of action which might improve the perceived equality of cyclists as road users. These included the registration of bicycles, which was seen as a prerequisite if the police were to enforce regulations surrounding cycling behaviour.

It should also be borne in mind that whilst most respondents cite a need for effective enforcement of cycling behaviour as an aid to more positive attitudes towards road sharing, one or two respondents also noted a need for enforcement more widely across all types of specialist provision. Many of the Aberdeen respondents commented on the difficulties of travel in Aberdeen because of a failure on the part of individuals to take note of specialist provision. Examples were cited where car drivers or delivery vans park in bus lanes during prohibited times which can lead to buses having to stop on the main carriageway to pick up or drop off passengers.

“I think the trouble on Great Northern Road is that there is so many roads coming off it that there is always traffic cutting in, so the bus is always trying to get out of their lane into the other lane to get round that traffic and to get round parked cars and stuff.”

(Driver, Aberdeen)

Similarly, some respondents in Edinburgh commented on the need for better enforcement of all of the regulations which have been introduced in the city. Whilst many respondents acknowledge the sense of some of the restrictions, there is an impression that many road users deliberately ignore these restrictions as they do not support the reasoning behind the introduction of particular restrictions. As suggested by the desk research, the enforcement of traffic regulations and a reduction in motor vehicle speed would go some way to helping to encourage cycling. Similarly, a view of respondents participating in the qualitative research was that better enforcement of parking restrictions in cycle or bus lanes would remove a large number of “rogue” vehicles.

Respondents did acknowledge that it might be impractical to attempt to introduce some form of registration or insurance for cyclists. However, the concept of some form of police campaign, along the lines of the Christmas drink driving campaigns was welcomed by drivers, or a targeting week when cyclists can be issued with on-the-spot fines. Furthermore, some cyclists acknowledged that action of this sort may go some way to improving cycling behaviour on the roads and improving the credibility of cyclists as equal road users. The suggestion of small on-the-spot fines was also welcomed by some respondents, particularly those non-cyclists who have been involved in conflict situations with cyclists due to the cyclist behaving incorrectly. For example, there were suggestions that fines should be imposed for a failure to use front and rear lights during the hours of darkness, or for riding a bike which was unroadworthy. The following quotations summarise some of the key criticisms to have emerged in relation to cyclists.

“We (drivers) have to pay to be on the road. We would get pulled up if we had no lights but they don’t. We would get pulled up if a bit of your car was hanging off. They should be made to wear helmets. If you did knock someone over, you would be devastated. The police should have some jurisdiction over them.”

(Driver, Edinburgh)

“When you consider it as a driver, we all have to know the Highway Code and you gain your road sense, but as a cyclist, you just buy a bike and away you go. There are no rules for them And coming up on the pavement too. If you are on a main road, and someone is walking out of a side road, you

wouldn't expect a cyclist to be on the pavement and they seem to be able to do that as well."

(Driver, Edinburgh)

Future Cycling Provision

Overall, the research shows that there was a preference on the part of cyclists for complete segregation from other users, both on roadways and on pavement routes. However, given that this is not possible in many instances, most road users appreciated that sharing road space will continue to be prevalent. As such, a number of suggestions were made in order to make the roads as safe as possible for road users and these were as follows.

- Passing places on uphill stretches of road which would enable faster vehicles to overtake cyclists and thus reduce the possibility of obstruction or conflict
- Green lights at advanced stop lines, similar to those used at toucan crossings, which would allow cyclists to move away from traffic lights prior to other road users
- Chevrons and "Give Way" signs to reduce the possibility of accidents at crossing points
- Clearer and standardised road markings throughout the UK to reduce confusion or misunderstanding and consistent use of coloured road space in preference to line markings or signage as this has a greater visual impact
- Dedicating specific areas of roundabouts as "cyclist only" space to reduce the possibility of danger and conflict
- Ensuring safe and secure parking for cycles and motorcycles, particularly in unlit and unsupervised areas
- Road worthiness testing for cycles to ensure that they are not a potential hazard to their riders or other road users. There were also suggestions from some that cycles could be registered to conform with other vehicles and that cyclists could be insured in the same way as other road users

The Role of the Employer

Whilst a change in the image of cycling and a change in attitudes towards cycling are likely to be of paramount importance in increasing levels of cycling and numbers of cyclists, the desk research has also referred to the role which an employer can play in terms of encouraging cycling - such as the provision of secure cycle parking and washing facilities for staff. Within the context of Edinburgh in particular, there was a belief that many employers with office premises in the city discouraged the parking of bicycles against railings outside their buildings. Whilst employer actions may not be a prime motivator for many potential cyclists, there may be a small minority for whom some form of support by an employer may encourage cycling.

In summary there are a number of factors that are likely to help increase cycling and in combination these will help to bring about changes in attitudes and culture. There is no single change that is likely to be effective in isolation.

Finally, one of the specific objectives for this research was “to examine the issue of motorcyclists as equal road users and the potential for sharing designated lanes with buses, taxis and cyclists and to make recommendations”. Bearing in mind the advantages and disadvantages cited by respondents, we would not recommend allowing motorcycles to use bus lanes in Edinburgh and Aberdeen, unless there were some form of restriction on the size or speed of vehicle using the bus lane. There is a perception that if motorcyclists were allowed unrestricted access to bus lanes, this would have a detrimental effect on cyclists and serve to make them feel less safe on the road. For most respondents, the fact that motorcyclists can maintain similar speeds to other motorised road users, suggests that travelling in the main stream of traffic is best for motorcyclists.

ANNEX 1

Number Of Pedal Cycle Casualties In Road Accidents 1998

Council	Severity of Casualty			
	Fatal	Serious	Slight	All
Aberdeen City	0	8	46	54
Aberdeenshire	0	8	24	32
Angus	0	7	13	20
Argyll & Bute	1	5	14	20
Clackmannanshire	0	1	7	8
Dumfries & Galloway	1	8	15	24
Dundee City	0	10	21	31
East Ayrshire	0	1	13	14
East Dunbartonshire	0	3	14	17
East Lothian	0	2	10	12
East Renfrewshire	0	0	17	17
Edinburgh, City of	1	19	218	238
Eilean Sair, Comhairle nan	0	3	1	4
Falkirk	1	4	26	31
Fife	1	13	41	55
Glasgow, City of	0	28	136	164
Highland	1	14	48	63
Inverclyde	0	3	9	12
Midlothian	1	2	17	20
Moray	1	2	12	15
North Ayrshire	0	8	25	33
North Lanarkshire	1	12	26	39
Orkney Islands	0	0	4	4
Perth & Kinross	0	4	17	21
Renfrewshire	0	3	24	27
Scottish Borders	0	2	15	17
Shetland Islands	0	1	3	4
South Ayrshire	0	4	16	20
South Lanarkshire	1	3	33	37
Stirling	2	7	14	23
West Dunbartonshire	1	6	27	34
West Lothian	0	6	24	30
All	13	197	930	1140

Source: Road Accidents Scotland

ANNEX 2

Sharing Road Space – Motorists Topic Guide

(Covers exclusive car drivers, car drivers who also cycle and motorcyclists, but excludes commercial drivers)

The following question areas have been developed to provide a framework for discussion. All topic areas of relevance should be covered at some point in the discussion but should be addressed in an order that facilitates easy and relaxed conversation. There should be opportunities for respondents to raise new or different issues that they consider significant to the core subjects.

- In what circumstances does the respondent share the designated (NAMED) road space with other road users (cyclists, buses, lorries, taxis, minicabs, motorcyclists), probing on allocation of space to each type of road user on the route, type of journey (to work / during leisure time / other), time of journey and type(s) of road travelled on? Views on the priority given to different groups and perceived rationale for this. Views on the aims and effectiveness of this distribution. Problems encountered by different types of road user in this locale, probe for problems from the viewpoint of cyclists, buses, lorries, car drivers, taxis, minicabs, motorcyclists etc;
- General awareness of cycle lanes / bus lanes / road markings giving priorities to certain vehicles in the city; to what extent have any / all of these been noticed by respondents? Views on whether or not they are a good / bad idea, together with reasons, has too much or too little space been allocated for cycle lanes etc., do respondents know the difference between a mandatory and an advisory cycle lane and the difference in the road markings. (USE STIMULUS MATERIAL ON ROAD MARKINGS).
- Spontaneous and prompted - what do respondents understand about the use of cycle lanes / bus and cycle lanes, probing on times of day regulations apply, whether or not other road users are prohibited from using this road space, which restrictions apply along the NAMED road space;

- Do cyclists always use cycle facilities where they are provided, should they? Do other drivers impinge on road space set aside for cyclists;
- How does the respondent view other road users (cyclists, buses, lorries, taxis, minicabs, motorcyclists) and do these views change according to the driving situation; Who has the most right to use the road. Does respondent view other road users as road users of equal status to themselves? Reasons why / why not, who should have right of use on the roads? (STIMULUS MATERIAL: PICTURES OF VEHICLES TO BE RANKED IN ORDER. BUBBLE DIAGRAMS, ON WHAT THE CYCLIST THINKS, AND THE DRIVER THINKS) Do respondents cycle, if so, do respondents feel that this makes a difference to their attitudes towards cyclists;
- Do respondents understand why special provision is made for cyclists, suggestions as to how to improve road sharing for the future, How do respondents feel about the idea of allowing motorcyclists access into bus / cycle lanes;
- In what circumstances are other road users most / least likely to cause aggravation, probing on time of travel, reason for journey, speed of travel, how crowded is the road, whether there is a cycle / bus lane, does the road narrow, do respondents overtake cyclists at road narrowings, does it cause problems, cyclists turning right etc. What types of conflicts occur; (STIMULUS MATERIAL: DIFFERENT ROAD LAYOUTS WITH CYCLE LANES, PINCH POINTS etc.)
- To what extent should cyclists / motorcyclists / motorists / taxis/ buses etc. be given priority on certain parts of the road, and why / why not, probe on cycle / bus lanes, advanced stop lines for cyclists, road narrowings, approaching pinch points. Ask about situation where motorist and cyclist approach a pinch point from opposite directions with no obvious right of way, past research shows that motorists will hardly ever give way, why;
- What attitude do respondents believe that the council has towards motorists / motorcyclists / and cyclists (e.g. does the council appear to favour any party), reasons;

- Generally, what attitude do respondents feel that the police have towards drivers / motorcyclists / and cyclists? (e.g. do the police appear to favour any party). Generally, what attitude do respondents feel that the police have towards car drivers, buses, taxis, lorries, cyclists and motorcyclists? Do respondents feel that the law is enforced equally for all road users;
- How do respondents feel that cyclists behave on the road;
- Would respondents consider cycling (if they do not), why/why not, are they deterred from cycling in any way, if they are deterred what deters them and to what extent, what would encourage respondent to cycle;
- What are the problems (tangible and intangible) caused by road sharing and to what extent could / should these be overcome (probing on sudden loss of cycle lanes / speed of motorised traffic / slowness of cyclists / lack of understanding between road users / awareness (or lack of awareness) of regulation surrounding separate lanes / amount of motorised traffic on roads / lack of respect from other road users etc), do respondents take special care when vulnerable road users are likely to be in close proximity, are respondents aware of any road hazards particular to cycling;
- Awareness of road safety initiatives aimed at reducing accidents to cyclists (any experience of travelling abroad e.g. Netherlands where cycling is a standard form of travel and more emphasis is placed on prioritising the cyclists needs); are these alternative systems good / bad, together with reasons. What is needed in Scotland;
- What does the respondent understand about regulations surrounding road usage and from what sources does this information come, probing on cycling proficiency test, car drivers test, Highway Code, any other sources of information;
- What are respondents views on incorporating a section on vulnerable road users in the Highway Code, how would respondents raise awareness of vulnerable road users;

- What will make drivers more understanding towards cyclists? What will make drivers think better of cyclists? What messages should be sent to drivers? What messages should be sent to cyclists? How should information be distributed? (e.g. TV, newspapers, cinema, magazines, posters, radio, Highway Code, door drops, Internet, others?)

Topic Guide – Cyclists

(Covers exclusive cyclists and those who both cycle and drive)

The following question areas have been developed to provide a framework for discussion. All topic areas of relevance should be covered at some point in the discussion but should be addressed in an order that facilitates easy and relaxed conversation. There should be opportunities for respondents to raise new or different issues that they consider significant to the core subjects

- In what circumstances does the respondent share the designated (NAMED) road space with other road users (cars, lorries, buses, motorcyclists), probing on allocation of space to each type of road user on the route, probing on type of journey (to work / during leisure time / other), time of journey and type(s) of road travelled on? Views on the priority given to different groups and perceived rationale for this. Views on the aims and the effectiveness of this distribution. Problems encountered by different types of road user in this locale, probe for problems from the viewpoint of cyclists, buses, lorries, car drivers, taxis, minicabs, motorcyclists etc.
- General awareness of cycle lanes / bus lanes / road markings giving priorities to certain vehicles in the city; to what extent have any / all of these been noticed by respondents? Views on whether or not they are a good / bad idea, together with reasons, has too much or too little space been allocated for cycle lanes etc., do respondents know the difference between a mandatory and an advisory cycle lane and the difference in the road markings. (USE STIMULUS MATERIAL ON ROAD MARKINGS).
- Spontaneous and prompted - what do respondents understand about the use of cycle lanes / bus and cycle lanes, probing on times of day regulations apply, whether or not other road users are prohibited from using this road space, do respondents feel safe in the dedicated road space and is it an improvement, is there any difference in the levels of safety each offers, which restrictions apply along the NAMED road space;

- How does the respondent view other road users (commercial drivers, car drivers, motorcyclists, other cyclists) and do these views change according to the driving situation; Who has the most right to use the road? Does the respondent view other road users as road users of equal status to themselves? Reasons why / why not, who should have right of use on the roads? (STIMULUS MATERIAL: PICTURES OF VEHICLES TO BE RANKED IN ORDER. BUBBLE DIAGRAMS ON WHAT THE CYCLIST THINKS, AND THE DRIVER THINKS). To what extent should cyclists / motorcyclists / motorists be given priority on certain parts of the road, and why / why not; Do respondents drive, if so, do respondents feel that this makes a difference to their attitudes towards drivers; How do respondents feel about the idea of allowing motorcyclists access to bus / cycle lanes;
- Do respondents understand why special provision is made for cyclists, suggestions as to how to improve road sharing for the future. How do respondents feel about the idea of allowing motorcyclists access into bus / cycle lanes;
- In what circumstances are other road users most / least likely to cause aggravation, probing on time of travel, reason for journey, speed of travel, how crowded is the road, whether there is a cycle / bus lane, does the road narrow, do motorists overtake cyclists at road narrowings, does it cause problems, problems with motorists turning left, trouble turning right etc. What types of conflict occur; (STIMULUS MATERIAL: DIFFERENT ROAD LAYOUTS WITH CYCLE LANES, PINCH POINTS etc.)
- How do respondents feel about off-road cycle facilities, do they feel reduced in importance if they have to use them, do respondents feel that cycle facilities undermine their right to use the roads;
- What attitude do respondents believe that the council has towards cyclists, motorists and motorcyclists (e.g. does the council appear to favour any party), reasons;
- Generally, what attitude do respondents feel that the police have towards cyclists, motorists and motorcyclists (e.g. do the police appear to favour any party)? Have you

had any experiences with the police as a cyclist? Generally, what attitude do respondents feel that the police have towards car drivers, buses, taxis, lorries, cyclists and motorcyclists? Do respondents feel that the law is enforced equally for all road users;

- How do respondents feel that motorists behave on the road;
- What are the problems (tangible and intangible) caused by road sharing and to what extent could / should these be overcome (probing on sudden loss of cycle lanes / speed of motorised traffic / slowness of cyclists / lack of understanding / awareness of regulation surrounding separate lanes / amount of motorised traffic on roads / lack of respect from other road users etc). What other road hazards are there that affect cyclists in particular;
- Are respondents deterred from cycling in any way, if they are deterred what deters them and to what extent, how can motorists improve road conditions for cyclists;
- Awareness of road safety initiatives aimed at reducing accidents to cyclists (any experience of travelling abroad e.g. Netherlands where cycling is a standard form of travel and more emphasis is placed on prioritising the cyclists needs); are these alternative systems good / bad, together with reasons. What is needed in Scotland;
- What does the respondent understand about regulations surrounding road usage and from what sources does this information come, probing on cycling proficiency test, car drivers test, Highway Code, PSV/HGV test, any other sources of information;
- What information and key messages should be communicated for the future, what are respondents views on incorporating a section on vulnerable road users (as in cyclists and motorcyclists) in the Highway Code, how would respondents raise awareness of vulnerable road users;
- What will make drivers more understanding towards cyclists? What will make drivers think better of cyclists? What messages should be sent to drivers? What

messages should be sent to cyclists? How should information be distributed? (e.g. TV, newspapers, cinema, magazines, posters, radio, Highway Code, door drops, Internet, others?)

Topic Guide – Commercial Drivers' Topic Guide

(Covers taxi, minicab, bus, coach and other commercial drivers)

The following question areas have been developed to provide a framework for discussion. All topic areas of relevance should be covered at some point in the discussion but should be addressed in an order that facilitates easy and relaxed conversation. There should be opportunities for respondents to raise new or different issues that they consider significant to the core subjects

- Respondents views on the priority given to different groups (car drivers, buses, taxis/cabs, lorries, cyclists) on the designated (NAMED) route and perceived rationale for this, views on the aims of the regulations and their effectiveness, problems encountered by different types of road user in this locale, probe for problems from the viewpoint of cyclists, buses, lorries, taxis, motorcyclists, car drivers etc.;
- General awareness of cycle lanes / bus lanes / road markings giving priorities to certain vehicles in the city; to what extent have any / all of these been noticed by respondents; views on whether or not they are a good / bad idea, together with reasons, has too much / too little space been allocated for cycle/bus/goods vehicle lanes, do respondents know the difference between a mandatory and an advisory cycle lane and the difference in the road markings. (USE STIMILUS MATERIAL ON ROAD MARKINGS)
- Spontaneous and prompted - what do respondents understand about the use of cycle lanes / combined bus & cycle lanes, probing on times of day regulations apply, whether or not other road users are prohibited from using this road space, extent to which this provision has affected them, the effect of mixing taxis, buses and cyclists in a designated space. Which restrictions apply along the NAMED road space;
- Do cyclists always use cycle facilities where they are provided, should they? Do other drivers impinge on the road space set aside for cyclists;

- How does the respondent view other road users (cyclists, buses, lorries, taxis, minicabs, motorcyclists etc.) and do these views change according to the driving situation? Who has the most right to use the road. Does respondent view other road users as road users of equal status to themselves? Reasons why / why not, who should have right of use on the roads? (STIMULUS MATERIAL : PICTURES OF VEHICLES TO BE RANKED IN ORDER. BUBBLE DIAGRAMS, ON WHAT THE CYCLIST THINKS AND WHAT THE DRIVER THINKS)
- Do respondents understand why special provision is made for cyclists, suggestions as to how to improve road sharing for the future, How do respondents feel about the idea of allowing motorcyclists access to bus / cycle lanes
- In what circumstances are other road users most / least likely to cause aggravation, probing on time of travel, reason for journey, speed of travel, how crowded is the road, whether there is a cycle / bus lane, does the road narrow, do respondents overtake cyclists at road narrowings, does it cause problems, cyclists turning right etc. What types of conflicts occur; (STIMULUS MATERIAL: DIFFERENT ROAD LAYOUTS WITH CYCLE LANES, PINCH POINTS etc.)
- To what extent should cyclists / motorcyclists / car drivers / commercial drivers be given priority on certain parts of the road, and why / why not, probe on cycle / bus lanes, advanced stop lines for cyclists, road narrowings, approaching pinch points, focus on motorist and cyclist approaching a pinch point from opposite directions with no obvious right of way, past research shows that motorists will hardly ever give way, why;
- What attitude do respondents believe that the council has towards commercial drivers, car drivers, cyclists and motorcyclists (e.g. does the council appear to favour any party), reasons;
- Generally, what attitude do respondents feel that the police have towards car drivers, buses, taxis, lorries, cyclists and motorcyclists? Do respondents feel that the law is enforced equally for all road users;

- How do respondents feel that cyclists behave on the road;
- What are the problems (tangible and intangible) caused by road sharing and to what extent could / should these be overcome (probing on cyclists / motorcyclists weaving in and out of traffic / sudden loss of cycle lanes / speed of motorised traffic / slowness of cyclists / lack of understanding / awareness of regulation surrounding separate lanes / amount of motorised traffic on roads / lack of respect from other road users etc), do respondents take special care when vulnerable road users are likely to be in close proximity, are respondents aware of any road hazards particular to cycling;
- Awareness of road safety initiatives aimed at reducing accidents to cyclists (any experience of travelling abroad e.g. Netherlands where cycling is a standard form of travel and more emphasis is placed on prioritising the cyclists needs); are these alternative systems good / bad, together with reasons. What is needed in Scotland;
- What does the respondent understand about regulations surrounding road usage and from what sources does this information come, probing on PSV/HGV test, driving test, any other sources of information, do respondents receive information on cyclists as part of the training course for their job;
- what are respondents views on incorporating a section on vulnerable road users in the Highway Code, how would respondents raise awareness of vulnerable road users;
- What will make drivers more understanding towards cyclists? What will make drivers think better of cyclists? What messages should be sent to drivers? What messages should be sent to cyclists? How should information be distributed? (e.g. TV, newspapers, cinema, magazines, posters, radio, Highway Code, door drops, Internet, others?)

ANNEX 3

LOCAL AUTHORITY POLICY IN EDINBURGH

At present there is seen to be an ever increasing dependence on the car as a mode of transport, caused by the concentration of investment on motorists' needs. To counteract this, the aim of the City of Edinburgh Council is to concentrate transport investments on measures which will increase road safety and decrease car use, thus resulting in a reduction in accidents, congestion and pollution.

The Local Transport Strategy in Edinburgh is centred around creating better choices for travel within, to and from the city with a reduced dependence on the car as the principal mode of transport. Transport is one of the factors which has a marked effect on the economic and social development of Edinburgh and every effort is being made to reduce traffic congestion and pollution, thus improving the quality of life for the residents of the city.

As much off-road provision for cyclists as possible has been achieved and more road space will now be taken away from other drivers, while freight and motorcyclists are excluded from special bus and cycle lanes. As "*Edinburgh's Transport Choices*", published by the City of Edinburgh Council, indicates:

"Edinburgh should be a city with a transport system which is accessible to all and serves all. Edinburgh's transport system should contribute to better health, safety and quality of life, with particular consideration for vulnerable people such as children, and elderly and disabled people; it should be a true Citizen's Network. The transport system should support a strong, sustainable local economy."

"People should be able to meet their day to day needs within short distances that can easily be undertaken on foot, by bicycle, or by public transport. Choice should be available for all journeys within the city. The city should develop and grow in a compact form that minimises the need for travel, especially by car."

Since 1994, The City of Edinburgh Council (formerly Lothian Regional Council) has been implementing the moving FORWARD transport strategy. This aims to reduce private car use by offering viable alternatives, to increase the amount of road space available for these other modes of transport and to minimise commuter parking in new developments. The strategy has begun to have a positive effect in that Greenways (Edinburgh's bus lanes) have increased the number of bus journeys, cycle use has grown and pedestrians feel less intimidated by other road users. However, the strategy is now in the process of being updated and improved to combat the problems of rising car use and the resultant congestion and pollution.

Based on Government Policy and the aims of the City Strategy, the Council's Local Transport Strategy current objectives are as follows:

- to improve safety for all road and transport users
- to reduce the environmental impacts of travel
- to support the local economy
- to promote better health and fitness

- to reduce social exclusion
- to maximise the role of streets as places to meet and play.

Despite a transport capital budget of £11million in 1999-2000, many areas of expenditure are currently underfunded. These shortfalls include routine maintenance of the road network and slow progress on initiatives such as safer routes to school, 20mph speed limits and cycle and pedestrian schemes.

The Local Transport Strategy details the Council's policies for the period up to 2020, subject to the availability of funding. The principal objectives, relevant to this report, are as detailed below.

Walking and Cycling

The Strategy outlined five main objectives in relation to walking and cycling:

- to prioritise improvements to the walking environment to create a network of key pedestrian routes into the city and district centres
- to develop further the on and off road cycle network – for example, by introducing “toucan” crossings and redeveloping disused railway lines respectively
- to install advanced stop lines at all possible signalled junctions by 2004
- to ensure that allocation of road space to pedestrians and cyclists reflects transport policy objectives
- to install better cycle parking on-street and at public transport interchanges

Walking is still by far the most popular mode of transport in Lothian, with more journeys of less than three miles being made on foot than by any other means.

With regard to cycling, Lothian has the largest cycle network (600km) in the United Kingdom, while Edinburgh has the highest bicycle use of the larger Scottish cities. Although cycling has recently gained in popularity as a leisure activity, it has experienced a decline as a means of travel to work. In order to combat this decline, employers are being encouraged to adopt workplace cycling plans such as cycle allowances and showers, while the provision of secure cycle parking in all types of locations is being implemented. In addition, cyclists are generally exempted from all new road closures, one-way restrictions and banned turns, except where there is a safety case for not doing so.

Motorcycles

The long term objective with regard to motorcycles is to continue to monitor provision for motorcyclists in the city centre and to improve parking provision for motorcycles, both on-street and in new developments.

In comparison with cars, motorcycles require less road space (whether moving or parked) and are not obliged to wait in queues of stationary traffic. However, despite the fact that more recent models are fitted with lean burn engines, there remains some dispute as to whether motorcycles are more environmentally beneficial than cars.

The Council recognises the role motorcycles have to play in providing an effective and individual mode of transport, although it is concerned about the question of motorcycle safety. This is particularly relevant in the case of pedestrians and cyclists as it is difficult for these groups to predict the speed and movement of a motorcycle. In consequence, the Council will continue to exclude motorcycles from bus lanes.

Taxis

The Council also intends to develop a comprehensive policy statement dealing with the role of taxis. This will cover all relevant issues including the potential of taxis, and other demand responsive services, to provide public transport services at times and places of low demand. Taxicard will remain as an important part of the Council's policy although levels of demand may change as buses become more accessible to people with mobility problems.

To date, taxis have been granted unrestricted access to bus lanes. However, they are not regarded as being as environmentally friendly as buses in view of their high emission rates per passenger mile, particularly at times of "empty running".

Public Transport

With regard to public transport, the objectives of the Council are as follows:

- to establish two park and ride sites
- to implement additional Greenways or similar bus corridors
- to develop a crossrail scheme
- to establish a system of on-bus cameras to enforce bus lanes and parking
- to improve local bus services, especially during weekends and evenings (in the longer term).

Initiatives such as the "Traveline" public information service will be continued and developed. In addition, efforts will be made to work closely with bus operators to improve the image, ease of use, quality and reliability of buses to attract passengers back to this mode of transport.

Freight

Freight movements, particularly by heavy goods vehicles (HGV's), have a negative impact on the quality of life in Edinburgh and other cities in view of the noise, congestion, pollution, accidents and anxiety which they create. In addition, they impose substantial costs on the maintenance and upgrading of the road infrastructure.

In order to tackle these problems, Edinburgh's freight strategy will be developed in conjunction with industry to ensure that the economy continues to expand without having a detrimental effect on the environment and quality of life in Scotland.

The principal elements of the strategy are as follows:

- to encourage Edinburgh-based companies to adopt sustainable freight transport practices and to eliminate superfluous journeys and “empty running”
- to ensure rail access to key industrial sites
- to ensure that the long-term development of Edinburgh’s economy is supported
- to promote the use of cleaner and quieter road freight vehicles
- to acknowledge the needs of road freight users within the context of the broader transport policies
- to ensure that major new areas of freight generation are connected to the rail network or appropriate parts of the road network.

To meet these objectives in the short term, the Council will:

- designate a network of strategic and feeder roads for freight movements
- collate and disseminate information on “best practice” in all aspects of freight transport in partnership with the Freight Transport Association
- undertake a comprehensive review of parking and loading requirements and restrictions on major arterial roads and prioritise areas for action
- liaise with the rail, shipping and ferry companies to identify existing flows which could transfer from the road network to these alternatives.

In the medium to long term, the Council will also:

- continue to implement the prioritised programme to rationalise parking and loading restrictions
- assess the demand for the establishment of an urban transshipment centre
- facilitate the development of an intermodal freight terminal in conjunction with the private sector
- explore measures to reduce the volume of traffic generated by using private cars for “home delivery”.

In summary, preference is being given to meeting the needs of pedestrians, cyclists, public transport users and freight / delivery services in descending order of priority, in order to continue the process of making walking, cycling and public transport more attractive alternatives to the car. In the case of car users (the lowest level of priority), preference is being given to non-commuting users over car commuters.

LOCAL AUTHORITY POLICY IN ABERDEEN

A Road Safety Plan is produced every three years for Aberdeen City Council with assistance from Grampian Police and Grampian Health Board. The Plan for 2000/2002 indicates that the Council has beaten nationally set targets – and its own target - by achieving a significant reduction in the number of accidents on the streets of Aberdeen in 1999.

The overall aims of the current Plan are as follows:

- to highlight the scale of the road safety problem in Aberdeen City
- to identify initiatives to help reduce the conflict between pedestrians and traffic, with particular reference to vulnerable groups such as children, the elderly and cyclists
- to encourage all road users to take responsibility for improving road safety

- to inform individuals and organisations of the planned progress towards improving road safety
- to achieve fewer than 400 injury accidents in Aberdeen by 2010 (more difficult to achieve than the national target as it includes **all** injury accidents, however slight).

The DETR publication, *“Tomorrow’s Roads – Safer for Everyone”*, produced in 2000, stresses the importance of reducing road accidents, particularly those involving vulnerable road users. Comparison of the proportions of casualties by road user groups in Aberdeen in 1999 and 1997 shows that the percentage of vulnerable road users – for example, pedestrians, cyclists and motorcyclists – has decreased from 44% in 1997 to 34% in 1999. However, despite this reduction in numbers, over 200 vulnerable road users were still injured in the City in 1999.²²

The Government’s White Papers stress the need to ensure social inclusion and the right of all citizens to enjoy good air quality. The January 1999 Transportation Strategy for Aberdeen – which was slightly amended in October 2000 - goes some way to addressing these issues and provides a local policy background to develop the City’s transportation needs.

Although the private car is not seen in a negative light, it is acknowledged that the mobility and freedom provided by increasing levels of car ownership have benefited only some sectors of the community. Approximately one third of households in Aberdeen do not have access to a car, while a fall in the number of people using bus services has produced a rise in fares and the withdrawal of services. These factors have a particularly unwelcome effect on vulnerable groups such as children, the elderly and those with disabilities or illnesses which are susceptible to poor air quality.

At present, levels of congestion in Aberdeen are lower than in many other cities. However, it is anticipated that by 2016 many roads in the City will be seriously congested for much of the day if traffic growth continues at its present rate. This has resulted in the development of new practices for managing traffic, rather than an attempt to resolve the situation by increasing road capacity which, in turn, encourages greater car use.

The principal themes of the Transportation Strategy are as follows:

- to locate new developments such as offices and homes in close proximity
- to encourage people to travel by bus, bicycle or on foot for short trips or journeys to the city centre
- to introduce acceptable alternatives to the car for long distance journeys
- to increase public awareness of problems that will arise if preventative action is not taken.

As is the case in Edinburgh, there is a determination to balance the demands of a vibrant economy with minimal impact on the environment. The targets outlined in the Strategy emphasise the desirability of reducing single occupancy car trips in favour of more “sustainable” measures, although these will only be effective if the measures are adopted as an integrated package. However, provided that sufficient funding is available, it should be possible to reduce total vehicle mileage by 20% compared with current levels – a reduction of 30% compared with the projected 2011 figure.

²² *“Road Safety Plan 2000/2002”* – Aberdeen City Council

As stated by “A Transportation Strategy for Aberdeen”, published by Aberdeen City Council 1999:

“The development of transport strategy in Aberdeen City will recognise the sustainability objective of preserving and enhancing our environmental quality for future generations. Through an emphasis on reducing car dependence and facilitating more environmentally-friendly forms of transport, strategies for sustainable transport in Aberdeen will aim to reconcile the various demands of society, the economy and the environment by:

- *meeting the accessibility and safety needs of the community*
- *supporting economic activity and growth*
- *minimising the local and global environmental and resource impacts of transport and providing environmental benefits where possible.”*

Walking and Cycling

One element of the Council’s policy is to promote walking as a healthy and sustainable activity – either for recreation purposes or to travel to school, work or nearby shops. Only 14% of Aberdeen residents (14,000 individuals) chose to walk to work in 1991 in spite of the fact that two-thirds of workers lived within four kilometres of their place of work.

Pedestrians are seen to be a vital component of the overall transportation system and, as such, greater significance will be attached to their needs. Improved links with public transport and cycling facilities will encourage combined journeys, while the wishes of those with disabilities will be taken into account. In addition, other road users will be required to demonstrate a greater awareness of pedestrians, while residential “zones” will include 20mph restrictions and traffic calming measures.

Aberdeen City Council’s 1999 Transportation Strategy also aims both to encourage cycling and to double commuter cycle trips in the City by 2001, with a redoubling by 2010. In addition, there is a range of targets to meet the National Target of doubling cycle usage by 2002 and again by 2012. However, any changes to levels of cycling provision will not support initiatives which will have a detrimental effect on drivers by removing available road space.

As cycling forms an integral part of the Transportation Strategy, a separate Cycling Strategy has been produced to promote this mode of transport as a means of travel to work and school and for undertaking short or recreational journeys. While the Council will provide cycling improvements through traffic management measures and special projects (for example, incorporation along bus priority routes and park and ride corridors), developers and employers within the City will be required to provide cycling links, on-site facilities and incentives for staff to cycle to work.

One in three Aberdeen residents currently has access to a bicycle, while there are more bicycles than cars in the City. The Council has acknowledged that it will be necessary to permit shared use of paths and footways in locations where on road facilities are unsafe and pedestrian flows are low, although pedestrian safety will remain paramount. Cycling training – a combination of practical and theoretical work under the supervision of local Road Safety

Officers - is also being offered to every primary school in the Grampian Police Force area for children aged ten years and over. Finally, cycle tracks, cycle lanes and increasing cycle use have recently become an established and recognisable part of the Aberdeen transport system, thus helping to improve driver awareness of cyclists.

Motorcycles

The Transportation Strategy also seeks to reduce motorcycle casualties in the City whilst promoting motorcycling (including motorcycles and other powered, two-wheeled vehicles) as a relatively environmentally friendly form of transport. From the early 1980's, there was a reduction of 62% in injury accidents involving motorcyclists in Aberdeen, in conjunction with a reduction in motorcycle use. However, this decrease reached a plateau after 1995, and may now indeed suffer a reverse as a result of the increase in popularity of motorcycling.

In the opinion of Aberdeen City Council, there is no need or justification for motorcyclists to be permitted use of bus lanes or cycleways. However, in order to encourage motorcycling as a mode of transport, the Council will increase the provision of free parking for motorcycles in on street and off street locations and will require developers to provide secure parking facilities. Junctions will also be designed to offer safer conditions for motorcyclists.

Taxis

The 850 licensed taxis within Aberdeen carry approximately eight million passengers per year and provide employment for 1,500 drivers. They are of particular benefit to business travellers and people with mobility problems and provide an effective alternative when public transport is not available.

However, despite that fact that taxis may help to reduce the demand for car ownership, they produce 70% more carbon dioxide per passenger mile than private cars due to "empty running". As a result, the Council has conducted a 12-month trial to avoid congestion by allowing taxis priority within bus lanes, while the possibility of providing further taxi ranks and taxi priority routes is being considered in traffic management arrangements.

Public Transport

"*A Transportation Strategy for Aberdeen*" also states that, in 1991, 21% of journeys to work in Aberdeen were made by bus – a decrease of 30% from the early 1960's.

Buses use less energy per passenger mile than private cars, carrying the passenger equivalent of thirty cars in one seventh of the road space. Bus lanes are now being introduced to give greater priority to buses over other road users - particularly on congested routes – while long stay commuter parking in the City Centre is being discouraged. Ideally, passengers should be offered a "seamless" journey from departure to arrival, in order to provide an effective alternative to the car. However, the prime consideration must be to ensure that the minimum levels recommended in the public transport service standards will maintain a good and efficient service.

Freight

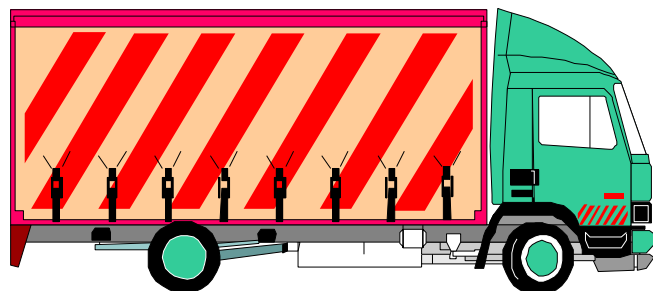
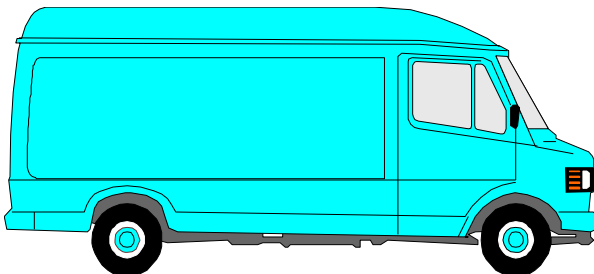
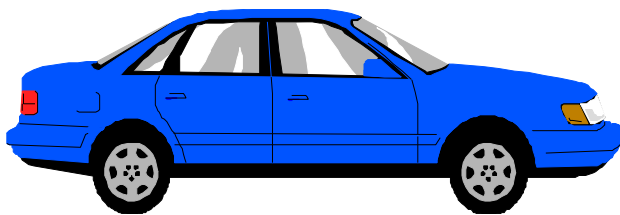
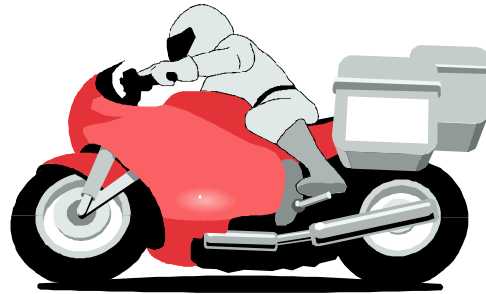
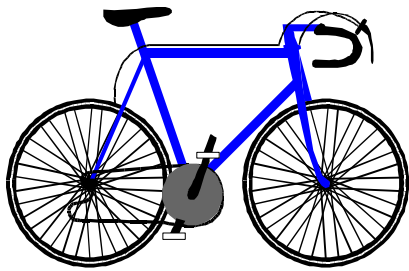
Aberdeen's location has resulted in a growth in road haulage with heavy goods vehicles (HGVs) accounting for approximately 11% of all traffic on trunk roads into and out of the area. As a result, freight operators have proposed the development of a Western Peripheral Route which would remove much of the through-traffic from Aberdeen.

Although road freight is important to the local economy, there are concerns regarding safety and environmental issues, particularly in inner city locations or areas where there is pedestrian priority. The Council and local businesses are, therefore, working with the freight industry to develop a "Delivering the Goods" initiative which will resolve potential conflicts in terms of delivery times and methods. Factors being considered include dedicated bus/lorry lanes, the size and number of HGVs servicing the City, co-ordination between hauliers to reduce "empty running" and the needs of deliveries as opposed to pedestrian priorities.

Thus both local authorities share the same aim to reduce car use and promote alternative forms of transport, although the approaches used differ. More specifically, Edinburgh has taken a stronger stance to reduce car use than Aberdeen. The following section indicates how these policies have been translated to the roads in practice.

ANNEX 4

Transport Mode Prompt Material



ANNEX 5

Photograph 3



Photograph 13



Photograph 21

