

CHAPTER 1 - INTRODUCTION

The one option we do not have is the fool's gold promise: that we can continue much as we are now, as long as we simply walk and cycle a little bit, slip across from car to tram and move from suburb to city.

(Brindle, 1998, p.75)

1.1 THE WIDER IMPORTANCE OF WALKING AND CYCLING AS MODES OF TRANSPORT

Traffic levels in Britain are rising every year (Transport Statistics, 2001) and this development is paralleled by increasing concern about the negative social and environmental impacts associated with it. There are increasing debates in the media, among politicians and in the general public domain about how best to halt and even reverse this process. Part of these debates centres around the issue of how to reduce demand for mobility while maintaining accessibility, which is largely a matter of coherent land-use planning strategies and will be a long term development. It will have to go hand in hand with more immediately effective approaches aimed at encouraging a modal shift away from motorised road traffic and the private car in particular.

Clearly the most suitable alternatives to travel by car are walking, cycling and public transport. The greatest potential for attracting people out of their cars is normally seen to lie with public transport (DETR, 1998a; The Scottish Office, 1998a), but as Hillman (1996) has argued, most of the growth in car use has actually been the result of modal shift from walking and cycling and it thus makes sense to promote these modes as suitable alternatives – particularly for trips under 8 kilometres. The National Travel Survey (Transport Statistics, 2001) showed that a large proportion of journeys currently made in Britain are either under 1.6km (25%) or between 1.6 and 3.2 km (18%), distances which many people say they would be prepared to walk or cycle (Ashley & Banister, 1989). A further 26% of journeys are between 3.2 and 8 km (Transport Statistics, 2001), a distance band in which many people would theoretically still be prepared to use the bike (Ashley & Banister, 1989). Thus public transport certainly has a role to play as an alternative to the car in distance bands above 3.2 and 8 km respectively but walking and cycling have much greater potential in attracting significant modal shift for shorter journeys (e.g. only 3% of trips under 3.2 km are currently made by public transport but 35% by car, Transport Statistics, 2001). Making it easier and more attractive to travel on foot and by bike will also combine well with the more long term efforts to reduce distances for personal travel (such as trips between home, work, school, shops and services).

As the current transport system is both cause and effect of a variety of political and social processes, working towards an increase of walking and cycling levels can also make important

contributions in policy areas other than transport. These will briefly be reviewed in the following sections.

1.1.1 Sustainable development

Social and environmental sustainability are the global ideals referred to in the title of this thesis and the activities of British local authorities relating to walking and cycling – the most sustainable transport modes – have the potential to contribute to the development of a more sustainable society. Although it would be beyond the scope of this text to discuss the definitions and implications of these concepts in great detail the basic idea must be outlined to set this work into its wider context.

The most commonly accepted definition of sustainable development is that introduced by the Brundtland Report *Our Common Future* (Brundtland, 1987) as being "*development that meets the need of the present generation without compromising the ability of future generations to meet their own needs*". But although the word 'sustainability' can now be found in many major government policy documents¹ policies purportedly aiming for sustainable development all too often disaggregate the concept into the separate elements of society, the economy and the environment. It must be borne in mind when looking at any policy making and implementation process, that sustainable development is not about finding the overlap between these three areas, but that they are in fact concentric, the economy being embedded in society and both being supported and ultimately limited by the environment (Levett, 1998). The same is true for any aspect of sustainable development, such as transport and it must further be remembered, that attempting to create a sustainable transport system is futile, if society as a whole is not moving in the same direction. Even if the former could be achieved, the latter does not necessarily follow, the causal chain works the other way round.

However, it is also important to bear in mind that the policies and practices, which will be examined in this thesis, exist only in the arena of political realities where the fundamental values of ecological continuation, economic viability and quality of life (both individual and collective) often compete with one another. As governmental failure to achieve the latter two objectives - or to at least work towards them - is generally more evident in the short term and impacts more directly on individuals within society, it is not surprising that policies and the activities determined by them aim to fulfil largely these latter two criteria. This is so in spite of the recognition that we not only do not have a 'do nothing' option, but that there is not even a realistic option of slowly achieving small improvements if sustainability is the goal (Brindle, 1998). But although changing public opinion, pressure groups and changing legislation in environmental matters have generally resulted in increased work on environmental plans and policies at UK local authority level (where many steps

¹ e.g. Department of Environment, Transport and the Regions (DETR), 1998a; DETR, 1998b; DETR, 1998c; DETR, 2000a

towards sustainability have to be implemented), this development has not also led to the necessary change in services and procedures or any substantive progress towards sustainability (Sparkes & Peattie, 1998).

But if truly sustainable transport is the aim of government policy - rather than the often quoted "integrated transport system" (DETR, 1998a) - a radical restructuring of the transport system will be required as it is clear that even current levels of mobility cannot sustainably be provided for (Wheeler & Lake, 1998). Policies should for example include modal share targets for all types of travel (personal, business, freight, etc.) and/or areas (e.g. urban, rural, remote), which according to current knowledge would be sustainable. They should also introduce a hierarchy of modes as well as purposes of travel which are more environmentally benign (*ibid.*). Such targets would of necessity be far more radical than existing ones - including those expected to be given in the new Local Transport Plans and Strategies. And they would put a far greater emphasis on walking and cycling than is currently the case. Such targets would be likely to be politically unpopular as they would clearly signal to all but a small minority of the population that they will have to rethink not only their mode choice but also their mobility patterns.

In the UK local authorities have the greatest direct strategic responsibility for walking and cycling and it is thus at local authority level, where policies for these modes must be implemented. This implementation process will be the subject of this study.

1.1.2 Land use

Settlement, employment and service patterns are nowadays largely determined by land use policies and these in turn have a very significant influence on people's need or desire to travel. This link between land use patterns and travel patterns has been recognised for some time, a fact which is reflected in the consideration it receives in current government thinking. Much of current government guidance material deals with the interaction between the two issues and how best to address it (see also Section 2.1.8.1 on Planning Policy Guidance (PPG) 13). Several of the English and Welsh guidance documents have been revised and in 1999 the DETR issued consultations calling for proposals relating to the redrafting of *PPG 11 Regional Planning* (DETR, 1999b) and *PPG 12 Development Plans* (DETR, 1999c). Both referred to the integrated transport white paper (DETR, 1998a), which stated that not only should different transport modes be better integrated with each other but the relevant policies and proposals should also be integrated with land use planning at the national, regional and local level.

The consultation document for PPG 11 expanded on the idea of the Regional Transport Strategy (RTS), which the government requires to be developed to give steer to Local Transport Plans² or LTPs (although the latter will often be drawn up first, an incongruency, which has attracted much criticism, see Section 2.1.8.3 on LTP and LTS). The stated aims of the RTSs include priorities on transport investment, a steer on the development of regional and sub-regional public transport and national public transport nodes, standards for off-street car parking, guidance on measures aimed at increasing transport choice and demand management (DETR, 1999a; para. 6.3). Walking and cycling were not mentioned, according to their general classification of a largely local matter. While most individual walk and cycle trips will be indeed of a local nature, it is nevertheless surprising, that it was not considered necessary to look at these modes in a regional context, e.g. to develop common standards for provision and design with the aim of encouraging more people to combine these two modes with public transport – or the private car - for medium and longer distance travel. The consultation document asked for RTSs to consider broad spatial strategies for altering the distribution of employment and housing (para 6.7) but did not require these issues to be looked at in close connection with policies for cycling and walking.

The consultation draft on revising guidance for development plans (DETR, 1999c; in the transport context the relevant plans would generally be Structure Plans or Unitary Development Plans) also conveyed the impression that walking and cycling were primarily localised issues, going so far as to relegate their relevance to town centres (para. 5.7, *ibid.*). However, it did go on to say that development plans could include - amongst others - specific policies relating to walking and cycling (para. 5.16, *ibid.*), but this was not seen as an essential requirement.

Thus although walking and cycling are not always explicitly considered in the context of land-use planning policies, the link between land-use and travel patterns in general is recognised. Decision makers aiming to halt the sprawl of urban areas and the suburbanisation of the countryside should thus not only look to move away from car-oriented land use patterns but should actively pursue policies, which consolidate and diversify land-uses in such a way that walking and cycling for personal journeys becomes increasingly more attractive and feasible. In addition, walking and cycling in themselves can also play a part in land-use planning, particularly in dense urban areas as these modes require considerably less space than the private car.

Further guidance on Transport and Planning has been issued both by the English and Scottish executives and will be reviewed together with current government transport policies (see Chapter 2, Section 2.1).

² The Scottish equivalent of the English and Welsh Local Transport Plans is the Local Transport Strategy (LTS).

1.1.3 Air quality and climate change

Although air quality and climate change are not the same issue, they are both related to emissions and motorised transport is recognised as a major (as well as the fastest growing) contributor (DETR, 1998a/d & 2000a). Under the Kyoto protocol agreed in December 1997, the UK is legally obliged to reduce its emissions of the six major greenhouse gases³ by 5.2% overall by 2012 compared to 1990 levels. The EU members subsequently agreed to take on a target of 8% and the UK even pledged 12.5%. Labour's election manifesto raised that figure to 20%, similar to that which Denmark, Austria and Germany have set themselves.

In their consultation document *UK Climate Change Programme* (DETR, Department of the Environment(DoE) for Northern Ireland, The Scottish Office & The Welsh Office, 1998) the government announced its intention to continue raising fuel duties as well as to promote more efficient vehicles, traffic demand management and modal shift (para. 131-140, *ibid.*) in an effort to meet its reduction targets in the transport sector. Proposed measures included a shift in development planning to reduce the need to travel and the dependence on the car while promoting walking, cycling and public transport. The document also pointed to the new emphasis on the clean modes, which would be expected from LTPs and LTSs. If all urban areas greater than 25 km² would adopt all available measures - such as the power for road user and work place charging - it was predicted that 13% of all savings to be made in the transport sector could be achieved through local transport measures alone (p.38, *ibid.*). It was not explained, however, how great a shift to walking and cycling for example would be required for this calculation to be accurate.

Given that many of the measures proposed, which would contribute to lower emissions, are non-statutory (buying cleaner cars, introducing lower speed limits in urban areas, restricting car access to city centres, road user charging) it is not clear how confident the government can be in actually achieving either its own voluntary or the lower legal emission reduction targets. The review (DETR, 1999d) of a related strategy, the *UK National Air Quality Strategy* (DoE, 1997) for example showed that the objective levels for particulate emissions for 2005 would be exceeded in many areas and that this would be the case even if the Transport White Paper proposals were to be fully implemented (Anon., 1999a) - which is unlikely to happen in the time remaining until the deadline, especially since much of the required legislation is not yet in place.

The link between traffic and local air quality has long been established. In 1990, the Tory government published an environment strategy entitled *This Common Inheritance* (DoT & DoE, 1990), in which it recommended to divert traffic away from congested areas and advocated an improved public transport network, as well as continued support for cycling. Walking was not

³ carbon dioxide (23%), methane (0.8%), nitrous oxide (2%), hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride - figures in brackets show the transport sector's share in national emissions

mentioned as a mode, however, as until very recently it did not feature prominently - if at all - in the minds of politicians and transport planners (Gaffron, 1998). A report entitled *Reducing Transport Emissions through Planning* (DoE & DoT, 1993), although mainly concerned with the potential for reducing CO₂ emissions, also recognised that such reduction could be achieved through planning policies, which were predominantly aimed at improving local environmental conditions and the direct impact from transport emissions. The report did not explicitly advocate prioritising planning for pedestrian and cycle access, though. This changed in the traffic advisory leaflet on *Traffic Management and Emissions* (DoT, 1996a) which recommended that the substitution of short car trips by walking and cycling should be encouraged by developing high quality facilities for these two groups (including adequate footway width, convenient crossing places with pedestrian friendly signalling and traffic calming).

A differentiation needs to be made between sustainable and clean as the latter is merely one element of the former. The - theoretical - emission free car could be considered clean, yet it would still take up road space and cause congestion, it would not help to tackle health problems related to lack of exercise and it would still pose a threat to more vulnerable road users. It must also be borne in mind, that cars which run on electrically charged batteries may not create emissions at the point of use but might do so at the point of electricity generation, depending on the generator. The role of walking and cycling in improving air quality and reducing transport based emissions should thus be seen in combination with the other advantageous aspects of these modes.

1.1.4 Health

In examining the link between transport and health, it is important not to limit the outlook to biomedical considerations but to see good health as "*a state of complete physical, mental and social well being and not merely the absence of disease and infirmity*" (World Health Organisation, 2001, p.1).

Current transport patterns affect people's health in two different ways. Firstly, people's increasing reliance on motorised travel leads to a decrease in their own level of physical activity. This development can bring about or hasten the onset of a variety of physiological conditions and diseases such as coronary heart diseases, strokes, diabetes and cancer of the colon as well as psychological disorders such as stress and depression (Pearce *et al.* 1998). Secondly, the increasing volume of motor traffic on the roads also has various direct and indirect effects on people's health including - and especially - those, who are not actually driving (Transport and Health Study Group, 1990). These include respiratory illness caused by air pollution, increasing risk and - importantly - fear of road traffic accidents, increasing cost of and decreasing access to a healthy diet (as shops and supermarkets become less accessible to those without a car), isolation through the severance of communities and social support networks (Appleyard, 1981) and noise intrusion. Significantly, the secondary effects act most strongly on vulnerable road users (children, disabled and the elderly),

poorer communities and those without access to a car - about 40% of the UK population. In the case of younger road users travel patterns are perpetuated as parents, fearing for their children's safety, do not allow them to walk or cycle, preferring instead to drive them to school, friends' homes, etc. This not only increases the number of cars on the roads and makes them less safe, thus leading to a vicious circle, it also establishes travel habits which children are likely to follow as they grow older, as Gavin Strang - the then Minister for Transport - pointed out shortly before the 1998 UK Transport White papers were published (Anon., 1998a)

The UK government has recognised these links and stated in the White Paper that *"the way we travel is making us a less healthy nation"* (DETR, 1998a, Chapter 2). In the same document it pledged to combat the transport related causes of ill health through encouraging healthy lifestyles by reducing reliance on cars, making it easier to walk and cycle and reducing noise, vibration and air pollution. The more people walk or cycle or combine these modes with public transport instead of using the car the greater an immediate reduction of these negative side effects could be achieved.

The Health Education Authority published *Transport and Health: A Briefing for Health Professionals and Local Authorities* (1998), which once again stressed the links between the two areas and suggested ways in which the two could be brought together: *"The recommended minimum level of activity for adults is to build up to 30 minutes or more of moderate activity, most days of the week. Current consensus suggests that this should be integrated into everyday life, including cycling and walking."* (p.5, *ibid.*). Cycling regularly, for example to work, has been shown to provide sufficient activity to restore and maintain fitness at a healthy level (Pearce *et al.*, 1998) and walking for half an hour every day has been described as the nearest thing to a perfect form of exercise for increasing and maintaining general health (Hillsdon & Thorogood, 1996). In recognition of these links the World Health Organisation (WHO) has produced a charter, sponsored partly by deputy prime minister John Prescott and signed by all European WHO member states, which recognises that *"Policies on transport, environment and health need to be better co-ordinated, with a view to integrating them."* (WHO Regional Office for Europe, 1999; para. 3.3). It obliges signatories to consider the cost of not affecting a shift towards the health promoting travel modes - walking and cycling - and states that transport and health strategies should aim to *"contribute towards the reduction of several common and serious diseases (notably cardiovascular diseases) and functional deterioration through substantial increases in regular physical exercise and through physically active modes of transport, notably walking and cycling"* (Annex 4, *ibid.*). The latest health white paper *Saving Lives - Our Healthier Nation* (DoH, 1999) also urged that people needed to be provided with healthy transport choices by encouraging walking and cycling and reducing the risk of injury through accident associated with these modes.

It is clear that the connection between public and individual health and transport has been made. It is also evident that policy makers know walking and cycling to be beneficial to health and that

promoting these modes and a resulting shift from motorised travel would greatly contribute to solving the health problems created by the nation's current travel patterns.

1.1.5 Social Exclusion

Current government policy papers often emphasise the connection between social exclusion and transport (DETR, 1998a; The Scottish Office, 199a8; The Scottish Office, 1999a; Social Exclusion Unit, 2000) as do social researchers (e.g. Barry, 1998; Pacione, 1995). However, a recent literature review on this subject (Gaffron *et al.*, 2001) concluded that although the link between transport and social exclusion was recognised it could not be fully appreciated in light of the relative paucity of empirical data available.

Church & Frost. (1999) argued that transport was generally a means to an end and that particularly in the context of social exclusion it was accessibility of services and facilities which mattered. The study proposed three types of processes, which would influence accessibility amongst individuals and households.

- Nature of time space organisation in households, interaction between household members and other individuals (e.g. friends and relatives) and the manner in which this affects their time-space budgets and choices relating to travel
- Nature of transport system in terms of cost, network accessibility, safety and public space
- Nature of time-space organisation of facilities and opportunities individuals are seeking to access

The nature of these processes can be expected to differ according to gender, age, cultural background, level of ability and economic circumstances but it seems clear that walking and cycling are related in particular to the second group. The two modes are cheap and widely available but their use is often affected by people's fear for their personal safety in the face of high traffic levels and worries about attack (DETR, 1999e). Making residential streets more pedestrian and cycle friendly by reducing traffic speeds and levels would also ameliorate some of the problems identified by Appleyard (1981). He found that higher volumes of traffic on residential streets were associated with a lack of social contacts between people in the neighbourhood concerned.

1.2 RELEVANCE OF THIS STUDY

Up until the end of the 1980s walking and cycling had been widely neglected in UK national transport planning policies and - if at all - were considered mostly in the context of road safety (Tolley, 1990). However, since then successive British governments have increasingly realised the need for new solutions to the growing problems of steadily rising traffic levels and the associated environmental and social degradation. In the transport white papers of 1998 the then Labour government furthermore expressed its commitment to developing an integrated transport policy

(DETR, 1998a; The Scottish Office, 1998a). In this changing political climate walking and cycling are becoming increasingly recognised as the most sustainable, clean and healthy modes and more innovative policies focussing on walking and cycling are emerging.

However, although the national policy framework for walking and cycling has always been the same for all British local authorities, there are considerable differences in policies and provisions for pedestrians and cyclists between individual authorities. This observation indicates that the formulation and implementation of such policies depends on more factors than the national policy framework and that more than an increased emphasis on walking and cycling at a national level will be needed to achieve significant improvements at the local level. It is in fact generally found that the so called implementation gap tends to be largest in situations, where policies – such as the National Cycling Strategy (DoT, 1996a) – are formulated at one level of government while their implementation relies on action taken at a lower level (Parsons, 1995). Since transport statistics for Great Britain show that overall levels of walking and cycling are declining (DETR, 1998e) and since this is not desirable in the current political, social and environmental situation it is important to examine the local policy implementation process. This process includes the translation of national policies – as far as they exist - into local policies and the implementation of such local policies into local practice. If the current decline of walking and cycling levels in Britain is to be halted and even reversed then it will be necessary to establish, how local implementation processes of walking and cycling measures can be improved. No studies currently exist which specifically examine the processes within local authorities that determine implementation success or failure.

This main contributions of this study will thus lie in two areas. Firstly the findings should provide tools which can help to improve the implementation of walking and cycling policies in local authorities. Secondly it will make a contribution to the field of practical policy implementation stud, which is a comparatively little developed area of research. The results of this study should therefore be of interest to practitioners, policy makers and researchers active in the areas in question.

1.3 AIMS OF THIS STUDY

In the context set above, the present study aims to:

- assess current policy context and goals for planning for pedestrians and cyclists as defined by UK and local government legislation, policies and guidance, e.g.
 - contribution to national road traffic reduction targets
 - contribution to national air quality targets
 - contribution to national policies relating to health, land use and sustainable development
- review the theoretical framework for implementation analysis and the applications it has found in practice

- evaluate current perceptions of and approaches to solving walking and cycling problems in UK local authorities
- investigate the parameters and variables, which influence the formulation of policies for pedestrians and cyclists and their implementation in local authorities
- develop a conceptual normative model (or models) of the structural, organisational and political requirements for the successful implementation of policies aimed at increasing the modal share of walking and cycling
- produce a set of recommendations for improving the effectiveness of walking and cycling policy implementation to which policy makers and practitioners can refer

1.4 RESEARCH QUESTIONS

The study aims listed in Section 1.3 translate into the following research questions, which can be subdivided into five categories as shown.

1. Current policy and legal framework for walking and cycling policies	<ul style="list-style-type: none"> • What importance is given walking and cycling in national government policy? • How does this translate into policy goals and targets? • Which legal obligations are placed on local authorities with respect to the two modes? • Which powers of control and implementation are available at the local level?
2. Theoretical and empirical background of implementation analysis	<ul style="list-style-type: none"> • Which theories have been developed by those describing and analysing the processes of decision making and implementation ? • Are there any existing models of particular relevance to this study? • How have existing models of implementation been applied in empirical and other case studies?
3. Local government walking and cycling policies in Britain – the status quo	<ul style="list-style-type: none"> • What provisions are local authorities making for walking and cycling, in terms of policy, administration and in terms of measures on the ground? • Are there any discrepancies between policy provision and implementation and how have they arisen? • Is there a difference between policies and provisions made for walking and those for cycling?
4. Characteristics of ‘successful’ and ‘unsuccessful’ local authorities	<ul style="list-style-type: none"> • What types of local authorities are more likely to implement measures to encourage walking and cycling (e.g. urban/rural; population size; nature of urban fabric and infrastructure)? • What conditions and processes within an authority are likely to be conducive to successful implementation of walking and cycling policies?

Table 1.1 Research questions for this study (contd.)

5. Integration of empirical findings with existing theory	<ul style="list-style-type: none"> • How do the findings of this study relate to existing implementation theory? • What are the characteristics of an ideal model or models (e.g. presence of powerful/interested individual; existing legacy of radical transport policies; certain type of departmental structure)?
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Table 1.1 Research questions for this study

1.5 GEOGRAPHICAL AND MODAL PARAMETERS OF THIS STUDY

It has been decided to limit the geographical outlook of this study to Great Britain, that is to say England, Wales and Scotland. It was felt that this natural geographical unit would allow for a comprehensive sample of the relevant local authorities while avoiding the non-transport related political factors which might influence strategic decision making in Northern Ireland and would be beyond the scope of this thesis to analyse. It is also generally difficult to obtain reliable data on travel patterns in Northern Ireland as frequent restructuring of the transport administration has resulted in fragmented data sets, which are held by a variety of different bodies.

It was further decided to consider both walking and cycling together rather than one or the other for the following reasons:

- they are both non-motorised modes of travel
- they thus share the attributes of being the most sustainable, cleanest, healthiest, cheapest and most widely available modes (see Section 1.1)
- they have for a long time been the most neglected of the main modes of travel (see Section 1.2)
- they offer an interesting opportunity for comparing the influence of national government policies on local government implementation as cycling has been covered by a major and much quoted national strategy (DoT, 1996a) while at the time of writing there is no national walking strategy for the UK

1.6 LOCAL GOVERNMENT IN GREAT BRITAIN - THE POPULATION UNDER INVESTIGATION

Since British local authorities will be the units of investigation of this study, the structure of this population shall briefly be described here. Local government in Britain exists in two essentially different forms, the single tier authorities and the two tier authorities. Together these subdivide into seven different types of authority. The single tier authorities comprise 22 Welsh Unitary Authorities (WUA), 33 London Boroughs (LB), 36 English Metropolitan Boroughs (MB), 47 English (Shire) Unitary Authorities (EUA) and 32 Scottish Unitary Authorities (SUA). These authorities are

essentially responsible for all local government functions in their area. The two tier authorities on the other hand divide responsibilities within one area between them and they are made up of 34 County Councils (CC) sharing local government responsibilities with 238 District Councils (DC). Not all of these authorities have decision making or implementation powers in all areas, though, and it has thus been decided that for the purpose of this study the District Councils will be disregarded as although they are responsible for planning decisions they have no *strategic* transport related responsibilities (O’Flaherty, 1997). The Greater London Authority established in 2000 and its executive arm *Transport for London* have the official strategic responsibility for transport in the capital. However, London Boroughs were included in the study population as they remain the highway and traffic authorities for 95% of London highways (with the exception of red routes, the main traffic arteries - Local Government Association, 2000) and are expected to publish their own Local Implementation Plans (the equivalent of LTPs). The study population will thus comprise a total of 204 authorities.

1.7 STRUCTURE OF THE THESIS

Chapter 2 will present a review of the current policy and guidance framework for walking and cycling in Britain, it will look at the tools currently available to local authority practitioners for providing for pedestrians and cyclists and it will give an overview of the relevant theories of implementation and their applicability to this study.

The methodology for this study will be presented in Chapter 3. The results of the exploratory and quantitative elements of the investigation are presented in Chapter 4 while Chapter 5 deals with qualitative results. In Chapter 6 the findings of the study are discussed in the light of the theories discussed in the literature review while Chapter 7 shows the practical implications of these findings and is structured in such a way that it can stand alone as an accessible summary for local practitioners and decision makers. Finally, Chapter 8 gives an overall summary of the results of the study and indicates important directions for future research.

CHAPTER 2 – LITERATURE REVIEW

2.1 THE CURRENT POLICY AND GUIDANCE FRAMEWORK FOR WALKING AND CYCLING IN BRITAIN

As recently as 1997, Cullingworth and Nadin stated that transport policy in the UK was in the doldrums (p.227) as what used to be an explicit policy of catering for the car had been replaced by uncertainty and doubt. However, after the general elections in May 1997, the UK government changed from a Conservative to a Labour lead administration. Transport had been one of the major campaign issues for Labour and one on which they had frequently criticised the Tory government and it was expected that this particular area would see new and different policy initiatives and strategies.

It should be noted, though, that even prior to the 1997 elections the Conservative government had begun to recognise – at least on paper – the need for a new approach to transport policy.

In 1994, *PPG 13 Transport* encouraged

local authorities to carry out their land-use policies and transport programmes in ways which help to reduce growth in the length and number of motorised journeys encourage alternative means of travel, which have less impact; and hence reduce reliance on the private car (DoE/DoT, 1994, p.1)

Also in 1994 the UK Strategy for Sustainable Development (DoE, 1994) stated that to reduce the damaging effects of transport “strategies are required [...], which will influence the rate of traffic growth” and proceeded to call for “land use policies, which will enable people and businesses...[to] meet their needs for access with less use of transport” (ibid, p.15).

However, there was never any mention of targets for either an increase in walking or a decrease in growth of road traffic, not to mention an overall decrease of traffic levels. Neither were the two non-polluting modes given any particular priority, although the government’s desire to develop a more sustainable transport system was frequently mentioned.

In 1996, though, the *National Cycling Strategy* (NCS - DoT, 1996a) was published. It not only recognised the “enormous potential to increase the use of cycles in Britain” (p.1) but also acknowledged the role cycling had to play in a sustainable transport policy and set targets for increasing cycling trips (see Section 2.1.1). However, the strategy did not mention from which mode the “new” cyclists should shift. And even in this document, which brought about a significant rise in provision for cyclists and has had a lasting influence on local authorities’ thinking on cyclists (see Chapters 4 & 5), the reasons for promoting cycling were stated as follows:

Sustainable transport options are needed for both utility and leisure trips, offering practical alternatives to the private motor car. These will ensure long term economic vitality, improve environmental conditions, and safeguard public health. (p.2, ibid..)

It is hard to tell from the evidence available, whether the Conservative government and its ministries at that time recognised the need to significantly reorder policy priorities in order to build a truly sustainable transport system, but shied away from saying so outright in a bid to satisfy its voters - or whether it remained firm in the belief that ordering policy according to economic aspects was the right way forward.

Part 1 of the literature review will review the national policy and guidance framework for walking and cycling in Great Britain to establish to what extent this framework caters for the two modes and whether authorities are placed under any obligation to provide for them.

2.1.1 The National Cycling Strategy, 1996

At a time when talk about sustainability had become commonplace amongst politicians (although the concept was given different and sometimes divergent definitions, see Section 1.1.1), the bicycle was becoming a popular symbol for sustainable local transport as other European nations were prominently demonstrating that especially urban trips could be made by bike to a very large extent, if the right culture and infrastructure were promoted. Some English cities such as York and Cambridge had already achieved a high modal share of the bike and when the government published its *National Cycling Strategy* (DoT, 1996a). The strategy was set to outline “*how the status quo can be altered in favour of the bicycle*” (ibid., p.1) and to “*generate a culture change for cycling*” (ibid., p.2).

The strategy’s main objective was to achieve a doubling in cycle use – of 2% in 1996 - by 2002 and to double it again to 8% by 2012. To this end, the National Cycling Forum (NCF) was created to encourage the implementation of NCS actions, a wide involvement of relevant sectors in that process and to monitor progress through annual reports. The key strategic outputs identified as necessary in achieving the set objective were as follows:

- making places more accessible by cycle
- improving safety
- addressing road space and priority
- improving cycle parking
- tackling cycle theft
- changing attitudes
- unlocking financial resources
- directing and monitoring action

The strategy also encouraged local authorities to contribute by setting local cycling targets, which might be taken into account in future funding arrangements (ibid., par. 2.3.1) but continued to say that for some authorities numerical targets might not be appropriate and a doubling of 1996 figures

could seem impossible. This proviso clearly highlights the weakness in a national strategy of this type, which ultimately must rely mostly on local action to achieve its aims. If there is no actual obligation on the potential contributors - such as local authorities and employers - to implement all or any of the measures proposed, it is very hard for a central body such as the National Cycling Forum to do anything other than monitor their uptake and associated successes. All that can be done is to provide encouragement, support and guidance for those who wish to become active.

Such guidance appeared first of all in the shape of a model local cycling strategy included in the original NCS. This laid down desirable objectives, targets and policies which should combine to make up such a strategy and contained several helpful elements. It listed the various national and local government documents, which should be consulted and with which the policy would need to be integrated. It referred practitioners to up-to-date design guidelines for cycle facilities. It also listed the necessary elements of a programme for more cycle friendly infrastructure and a schools transport strategy and outlined how the local authority could set an example by becoming a cycle friendly employer. On the issue of funding, though, the guidance merely stated, that authorities would need to identify the necessary financial resources and prepare a budget. Although cycling is much cheaper to provide for than any of the motorised forms of transport it is unlikely that such a non-committal approach would inspire many authorities to consider any of the measures which are likely to take them beyond their existing budget in terms of revenue, capital or staff time investment. For those authorities, which already had strong support for cycling from within, the model policy could have been very helpful, though. However, a survey conducted in 2001 found, that only a small minority of authorities who had adopted a coherent strategy actually followed this model when drafting their own strategy (Lumsdon & Tolley, 2001).

Further guidance associated with the NCS followed in 1998 and 1999 and 2001 in the form of specific leaflets⁴. These provided topical guidance, action points and references for those, who would make decisions in the targeted area. Two progress reports have also been published (NCF, 1997; NCF, 1999a), which although fulfilling the National Cycling Forum's obligation to chart progress on the strategy are disappointing in one important aspect. Having established indicators of progress in the original strategy, the reports entirely failed to take these up. The second report does quote statistics on average length of cycling trips and showed a slight increase over a three

⁴ Issues for Town Planners (NCF, 1998a); Issues in Retailing (NCF, 1998b); Issues for Public Transport Planners and Operators (NCF, 1998c); Issues for Traffic Engineers and Transport Planners (National Cycling Forum, 1998d); Promoting cycling: Improving Health (NCF, 1999b); Safety Framework for Cycling (NCF, 1999c); Cycling Solutions: a guide to innovative cycling projects (NCF, 2001a); Combined bicycle and bus or coach journeys (NCF, 2001b); Model Conditions of Carriage -accommodating the bicycle on bus and coach (NCF, 2001c); Cycle Security (NCF, 2001d); Cycle Security for Cyclists (NCF, 2001e); Cycling Works! How employers can benefit from increased cycling (NCF, 2001f); Cycling Matters! Advice for cyclists and cycling groups on cycling policy (NCF, 2001g); Cycling Gains! How local authorities can benefit from increased cycling (NCF, 2001h);

year period. However, the data compared figures from 1992/94 with those for 1995/97 thus relating to a period before the NCS had actually been written.

Nevertheless, the strategy has had some marked effects. It has managed to greatly increase the profile of cycling as a mode of transport at least at local and national government level (see Chapters 4 & 5). It has inspired a number of publications such as Traffic Advisory Leaflets (TALs; relating to monitoring and auditing cycle use as well as infrastructural provisions for cyclists, published by the DETR), engineering guidelines (from the Institute of Highways and Transportation – IHT - and Sustrans). The NCS has also been followed by a number of research reports from the Transport Research Laboratory (TRL) relating to cycling & the journey to school, cycling & health, attitudes to cycling and also a general overview over *Achieving the Aims of the National Cycling Strategy* (Davies *et al.*, 1998). This report concluded, that it might be possible, to achieve the aims of the NCS, if all proposed measures were properly implemented. The overall success of the strategy would depend, however, on the degree to which traffic management and traffic reduction measures would succeed in making the roads safer for cyclists as fear of other traffic was one of the greatest deterrents especially for utility cycling. The report stressed that to achieve any significant and sustained rise in the modal share of cycling, a significant shift in the cultural perception of it would be required and this could only be achieved by making cycling very much safer, convenient and attractive. Not all of these aims can be achieved by the NCS alone. Its success will therefore depend on whether local authorities adopt its aims as part of a larger framework, which includes a real commitment to reducing motorised traffic.

2.1.2 The Road Traffic Reduction Act 1997 and Road Traffic Reduction (National Targets) Act 1998

The Road Traffic Reduction Act was passed in March 1997 and had the potential to help fulfil one of the prerequisites identified for achieving the NCS's targets: traffic reduction (the original bill had been drafted by Friends of the Earth, the Green Party and Plaid Cymru - the nationalist party of Wales, which had representation in the Westminster Parliament). Its principal aim was "*to require local authorities to prepare reports relating to the levels of road traffic in their areas and for related purposes*" (<http://www.hms.gov.uk/acts/acts1997/1997054.htm>). Under the act, local authorities were required to assess road traffic levels in their area (excluding trunk roads and motorways, for which the Secretary of the State is the traffic authority) and forecast growth in those levels. They were also asked to specify targets for either a reduction in overall levels or a reduction in growth of those levels. This distinction is significant, as it meant there were no legal requirements on any traffic authority to actually set targets for overall traffic reduction - although the original Bill had required this.

Chisholm (1997) criticised the act as lacking teeth. He pointed out that local authorities were unable to revoke or modify existing planning permissions on the basis of changed land use and transport objectives, there was no legal basis for levying taxes on workplace parking - an acknowledged contributor to peak time congestion - and authorities still had to deal with the problems created through the deregulation of public transport (namely lack of co-ordination of services and information).

The new Labour government also passed the *Road Traffic Reduction (National Targets) Act* in 1998, which placed a duty on the Secretary of State to specify national traffic reduction targets “*with the aim of reducing the adverse environmental, social and economic impacts of road traffic*” (par.. 2.1) - unless he/she considered other targets or measures more effective in achieving this aim. The 1998 Act did not take up the original reduction targets either, but it did represent a significant step forward in that it listed the potential negative effects of road traffic, which any measures suggested would have to address⁵.

Together, the two acts created a somewhat paradoxical situation, however. Local authorities were obliged to draw up LTPs/LTSs aiming for a reduction in the growth of road traffic (without having to set any targets at all if they could make a sufficiently good case against it) but did not have control over the development of the trunk road system. The interurban transport this system carries, which inevitably originates and ends on local road networks, will thus continue to contribute to local traffic but cannot be controlled through local policies. The Secretary of State on the other hand is obliged to set national targets for overall road traffic reduction but has control only over trunk roads connecting local government areas, where no more than a reduction of growth might be aimed for.

2.1.3 The Transport White Papers 1998

In their election manifesto, the Labour Party had pledged to “*safeguard our environment, and develop an integrated transport policy to fight congestion and pollution.*” A little over a year after the change in government, the newly formed Department of Environment, Transport and the Regions, the Department of Environment of Northern Ireland, the Welsh Office and the Scottish Office jointly published a consultation paper entitled *Developing an Integrated Transport Policy - An invitation to contribute* (1997). They asked for views on how a more balanced use of all transport modes might be achieved. The result of this consultation were the two transport white papers, published in July 1998, *A New Deal for Transport - Better for Everyone* (DETR, 1998a) for the UK as a whole and the complimentary *Travel Choices for Scotland* (The Scottish Office, 1998a).

⁵ the emission of gases which contribute to climate change; effects on air quality; effects on health; traffic congestion; effects on land and biodiversity; danger to other road users; negative social impacts

In the foreword to the UK White Paper, John Prescott stated that its main aim was to increase personal choice by improving the alternatives to car travel and to secure sustainable mobility in the long term. Both White Papers also promised to fill many of the gaps left by the *Road Traffic Reduction Act* by introducing legislation which would enable local authorities to introduce local road charging schemes, to levy charges on workplace parking and which would make it easier to establish mandatory 20 mph zones. Some of the relevant legislating powers were devolved to the Scottish Parliament elected in May 1999 but since Labour's former Secretary of State for Scotland, Donald Dewar, became First Minister and leader of the ruling coalition, it could be expected that the priorities originally defined by the Westminster government would be upheld by the Scottish Parliament.

In contrast to the Conservative Green Papers, these papers both recognise the fact that existing road traffic levels were not only environmentally unsustainable but also not economically viable. They saw walking and cycling as environmentally friendly modes of travel, which were readily available and could help to reduce congestion and pollution. However, perhaps unsurprisingly, the emphasis was again on choice and on making it easier to walk or cycle but the papers failed to convey the urgency, with which a partial shift to these modes would need to be brought about if targets such as the reduction of CO₂ emission by 20% by 2010 (see Chapter 1, Section 1.1.3) or those set by the NCS were to be achieved.

Like the UK paper, the Scottish one took up the NCS targets for doubling cycle use in Britain by 2002 (compared to 1996 levels) and doubling it again by 2012. The paper failed to mention, though, that while in the UK as a whole 2% of all journeys were made by bike in 1996, in Scotland that figure was only 0.8%. Clearly doubling or even quadrupling that figure would not make a significant impact on the transport system as a whole. The paper also encouraged local authorities, though, to do more to create a safer environment for cyclists as concern about road safety had been identified as one of the major deterrents for people to cycle more (The Scottish Office, 1998a, p. 45). Low cost measures such as traffic calming, traffic management and publicity campaigns were recommended as effective.

Apart from generally listing some of the measures the government would expect local authorities to implement in making walking and cycling easier, the white papers also introduced the requirement for Local Transport Plans (Local Transport Strategies in Scotland). These were to be prepared by local highway authorities and it was suggested that they might include targets for road traffic reduction, for increasing the modal share of walking and cycling and for improving local air quality - although it was left to the authorities' discretion whether or not they actually set them. This made co-ordination at a national level a difficult task.

In this context it is notable that both white papers failed to convey the importance of introducing local targets for overall road traffic reduction. This is significant in so far as any serious commitment to developing walking and cycling as alternatives to the car - particularly for the 24% of car journeys under 3.2 km and the additional 33% under 8 km (Transport Statistics, 2001) - would need to focus not only on encouraging people to walk and cycle more but on making sure that they actually drove less.

The Commons Environment, Transport and Regional Affairs Committee also criticised the UK white paper for making only half-hearted attempts at re-allocating road space away from the car towards buses, cyclists and pedestrians and for not making sufficient funding available to enable local authorities to actually implement the major changes needed to achieve the new policy goals (Anon., 1999).

2.1.4 Policies for road user charging

Although public transport is the most frequently mentioned potential beneficiary of extra revenue raised through road user charging (Cullingworth & Nadin, 1997), pedestrian and cycling measures could also be financed from this source. Both the DETR and the Scottish Executive have published consultation documents on road user charging.

Both these documents recognised that any revenue raised through road user charging should be hypothecated (par. 3.11, *Breaking the Logjam*, DETR, 1998d; APRs. 3.2.13-3.2.14, *Tackling Congestion*, The Scottish Executive, 1999a). But the documents only listed the example of public transport, although it has been said elsewhere that the government expected take-up of new charging powers to be greatest in urban centres (par. 3.14 DETR, 1998a). Considering the spatial compactness of most urban centres, it is perhaps surprising that walking and cycling were not given greater considerations as viable alternatives to the car, which could be supported.

2.1.5 Integrated Transport Bills 2000

2.1.5.1 Scotland

In early 2000, the Scottish Executive published its proposals for an integrated transport bill. The document concentrated on measures for the creation of regional transport (planning) partnerships, legislation relating to bus transport and enabling legislation for congestion charging (following the proposals made in their consultation on this issue, see previous section). No mention was made of any other measures relating directly to pedestrians and cyclists (such as for example changing road user priorities in residential areas or setting legally binding parking standards for bicycles). Neither did the proposals acknowledge the connection between transport emissions and global climate change or make any reference to the need for targets for overall road traffic reduction. Both these

issues could in theory provide added impetus for any efforts directed at increasing the modal share of walking and cycling.

2.1.5.2 England, Wales and Northern Ireland

The Westminster Transport Bill (as amended by committee) was published in April 2000 (House of Commons) and contained the following important points in relation to walking and cycling: The Bill aimed to put LTPs (see also Section 2.1.8.3) on a statutory footing (Part 2; par. 92.1 a-b, *ibid.*) and would oblige local authorities to include facilities and services for pedestrians (par. 92.2 b). It also required local authorities to have regard to any guidance concerning the content and preparation of LTPs (93.5 a-b) although that is not the same as a statutory obligation for example to prepare separate strategies for walking and cycling.

In accordance with the intentions expressed in the consultation document *Breaking the Logjam* (DETR, 1998d; see previous section) the Bill also provided local authorities with the power to introduce road user charging and workplace parking levies (Part III) with a requirement to spend the revenue on measures to improve local transport for at least the first ten years (Schedule 11 par. 7.1-7.6).

The rest of the bill dealt with new arrangements for National Air Traffic Services (Part I), changes to bus service regulations (Part II) and the Strategic Rail Authority (Part IV). As in the Scottish proposals, there were no clauses regarding traffic reduction, or enabling legislation for the creation of Home Zones, i.e. setting of mandatory 10mph speed limits and giving pedestrians and cyclists legal priority in such zones. The omission of such potentially important legislation in both documents seems at odds with the Westminster and Scottish governments' strong policy statements in favour of walking and cycling.

2.1.6 Safe(r) Routes to School, Cycle Challenge Schemes & Home Zones

2.1.6.1 Safe(r) Routes to School

In Britain the concept of creating Safe(r) Routes to Schools (enabling more children to walk and cycle safely and thus reducing car journeys) only began to receive widespread interest in 1995. Safe(r) Routes to Schools (SRtS) type projects had been implemented in continental Europe since the early 1980's, mainly as a means of reducing the number of road accidents involving children. Towns like Odense in Denmark for example managed to reduce these accidents by 85% through SRtS projects involving all schools in the town (Bradshaw *et al.*, 1998). However, 20% of all peak hour traffic in some British urban areas is involved in the school run and reducing this share could make a major contribution to achieving the governments transport policy objectives as well as improving road safety. Schools thus began to be encouraged to bid for challenge funding for

initiatives contributing to SRtS and from its inception in 1997 the DETR started to recommend SRtS projects in all its major transport policy documents as part of the measures local authorities should consider in creating a more integrated transport system.

A study commissioned by the DETR found that only 22% of Welsh and English Councils had never even considered SRtS projects. Ten percent had implemented such projects permanently, 18% had done so on a trial basis and a further 49% were either considering the idea or had already begun to contact schools (Bradshaw *et al.*, 1998). A similar study was carried out in Scotland (Derek Halden Consultancy, 1999) and this found that just over 50% of Scottish Unitary Local Authorities had started an SRtS process, with a total of 90 projects underway (but only 6 of these actually completed) and a further 40 being planned. The Scottish survey identified a lack of long term sustainability as the main problem encountered in SRtS activities. All successful schemes relied on the commitment of individual champions – who would only be available for a limited time span – and funding had often been secured for only a short period of time. However, the study found a high degree of satisfaction with those projects, which had been implemented fully or in part, and this was seen as important encouragement for future initiatives.

Furthermore, the benefits of SRTS projects are not limited to children as any effort at reducing traffic around schools and making roads safer for children will also benefit other people wishing to walk and cycle and widespread take up of the idea can help to influence the local and personal transport culture in favour of these modes. The Safe Routes idea has thus proved very successful and is the only nationwide initiative aimed primarily at making roads safer and actively encouraging people to choose walking and cycling in preference to the car.

2.1.6.2 Cycle Challenge Schemes

In 1995, parallel with the Safe Routes to School initiative, the government launched the Cycle Challenge Scheme with the aim of encouraging more cycle use for short trips. The scheme asked commercial, voluntary and public sector organisations (including local authorities) to produce innovative designs and partnerships for the promotion of cycle use. Some of the money allocated through this scheme went to schools. The DETR commissioned the TRL to monitor a selection of secondary school cycle challenge schemes (Gray *et al.*, 1998). The report did find, that the schemes had not achieved a statistically significant increase in cycle trips to school although the awareness of cycling as a mode of travel to school had increased. Another study of primary school children in Leeds also found that cycling was the most favoured way of travelling to school – with walking ranking second – while their parents concern for their safety meant that it was the least actually used mode (Dixey, 1998). However, instead of accepting parental fear as a limiting factor, it could be one of the main phenomena to be tackled in the effort of making children more independently mobile, healthier and more conscious of the benign transport choices available to them.

It should thus be noted, that it is important for central government to ensure its various efforts at decreasing car use for school travel are targeted effectively and that different projects (such as Safe(r) Routes to School and Cycle Challenge Schemes) complement each other. Guidance given out in relation to such projects should clearly state the individual advantages of each initiative and how they could best be combined.

2.1.6.3 Home Zones

The Home Zones concept is based on the Dutch *Woonerf* principle. Home Zones give pedestrians and cyclists legal priority over cars in a residential street or streets. Speed limits are 10 mph or lower (ideally walking pace) while streets are redesigned to emphasise the new priorities and to encourage people to spend time in the public and semi-public areas around their homes. The *Woonerf* concept was first introduced in the Netherlands in the late 1960's and obtained legal status there in 1976 (Hass-Klau, 1990). Germany followed closely behind, introducing a new traffic sign for *Wohnstrassen* in 1980. Austria introduced Home Zones legislation in 1983 and Denmark created 'Section 40' streets (15kph speed limit, priority for pedestrians) as early as 1978 (Children's Play Council, 1998).

The concept goes beyond traffic calming, particularly by making drivers responsible for any injuries they cause to pedestrians or cyclists and through the very low legally binding speed limits. The concept also stresses the importance of consulting and working with local residents from the outset to gain widespread acceptance and to give people a sense of ownership. In Britain, the Children's Play Council (together with other organisations) has been lobbying the government to adopt the concept into national policy and provide the necessary legislation to enable Home Zone creation at local level. The 1998 White Papers took the idea up and encouraged local authorities to pilot the concept - but without giving any new legal powers or status. In December 1998, 50 local authorities had expressed an interest in setting up Home Zones and over 230 MPs had supported a private member's bill calling for new legislation - but this failed to make it into the statute books. In January 1999, the government invited English and Welsh local authorities to submit proposals for a pilot research programme, six of which were to be selected as demonstration projects. The intention was to show, how far the Home Zones concept could be developed under existing legislation, i.e. with speed limits not below 20mph and no new legal priorities (Anon., 1999b). The move was welcomed by transport campaigners at the time although concern was expressed over the continuing lack of new legislation.

2.1.7 Inconsistencies in government policy

Despite the strong emphasis on integration in all recent government documents relating to transport, some important and perhaps surprising omissions have been found in key policy

statements. A prominent example is the white paper daughter document *From Workhorse to Thoroughbred* (DETR, 1999a), which covers England, Scotland and Wales and aims to develop a better role for bus travel. The paper recognised, that “*action on buses alone can achieve little unless it is set in context with policies for other modes of transport*” (par.1.9, *ibid.*) but subsequently made no mention of the potential for integrating public transport with either walking or cycling. No consideration was given to the importance of interchanges for either pedestrians or cyclists or the potential of combining bus and bike for longer journeys, especially in rural areas and for commuter trips.

It was of further interest to note that for example the concepts of supporting continued and sustainable economic development through transport policies or of the private car remaining one of the choices of transport mode wherever possible were mentioned in all the relevant policies. Where the co-ordination between related policies shows such an obvious breakdown, a government’s true commitment to its own stated policy or at the very least the level of communication and commitment within the relevant departments could be called into question.

The proposals for legislation facilitating integrated transport also did not reflect the full spectrum of measures, which would be needed to achieve a truly integrated transport system. From the point of view of this study it is particularly interesting that the bills (see Section 2.2.4) did not create any new statutory measures or duties which could support walking or cycling policies at the local level.

2.1.8 Planning Policy Guidance

White Papers summarise national government policies and the ideas, on which they are based. Acts of Parliament can follow these to provide the statutory instruments required to put the policies into practice. However, in many policy areas, the government publishes further and more specific guidance to lay out its objectives in greater detail and help local and planning authorities bridge the gap between policy and practice. Relevant in this context is planning policy guidance, which is published in the form of Planning Policy Guidance Notes (PPGs) by the DETR⁶ and National Planning Policy Guidelines (NPPGs) and Planning Advice Notes (PANs) by the Scottish Office. Thus *PPG 13 Transport* (DoE & DoT, 1994), *NPPG 17 Transport and Planning* (The Scottish Office Development Department, 1999a) and *PAN 57 Transport and Planning* (The Scottish Office Development Department, 1999b) need to be examined in some more detail (there is currently no Welsh planning guidance dealing with transport). The preliminary guidance issued by the DETR and the Scottish Office on the preparation of LTPs and LTSs respectively are also important, as they determine the approach local authorities take to developing their own transport policies and can determine to a large extent the weighting different transport modes are given.

⁶ the DoE in co-operation with other government departments prior to the 1997 change in government

2.1.8.1 Planning Policy Guidance 13 Transport

PPG 13 Transport (DoE & DoT, 1994) has already been mentioned as a key document, which appears to have been ahead of its time, as several subsequent government statements on transport failed to take forward the objectives expressed in it. Nevertheless, its publication marked a significant step in the government's thinking. It made very clear that slowing the rate of traffic growth was one of its major objectives, and although at the time the situation was arguably already such that traffic reduction should have been the aim, it was far removed from the “predict-and-provide” approach to road building, which had for a long time been advocated by the Conservative government. The PPG called for land-use and transport policies to be integrated and for a systematic appraisal of the traffic impact of various development proposals and their alternatives (paragraph 2.4). For the first time it also made an explicit link between walking and cycling and health promotion targets.

There were of course also several points of criticism from the point of view of integrated and sustainable transport. The PPG failed to point out the inherent difficulties local authorities would have due to little influence over an increasingly privatised public transport system and it promoted continued development of regional airports.

In 1997, the DETR commissioned a study into how local authorities were interpreting PPG 13 (Ove Arup & Partners, 1999). With regard to pedestrians and cyclists, the most significant findings were that although there was widespread acceptance of their importance, local authorities seemed to have little understanding of the potential change in modal share in any given development location and therefore of the type and scale of provisions that would be effective. It was also noted, that there were no targets for modal splits and none were required from developers. The report recommended that a new PPG should more clearly identify criteria to be considered in different development types, that more research should be undertaken into the interplay between changes in accessibility, parking standards and modal split and that local authorities should adopt targets for modal shares in their area as a basis for assessing the (likely) performance of particular developments.

A public consultation on the revision of PPG 13 (DETR, 1999f) represented a significant step forward in terms of the walking and cycling related recommendations although modal share targets as recommended by the review were again not mentioned. This consultation included calls for road space reallocations to pedestrians and cyclists, making road crossings and junctions more pedestrian and cycle friendly and using traffic calming to reduce speeds, particularly in urban residential areas, villages and near schools (paras. 54 & 57, *ibid.*). The proposals also encouraged local authorities to review existing pedestrian and cycle facilities, to identify measures which would support the creation of good quality walking and cycling networks and to ensure the design and location of new developments encouraged walking and cycling (paras. 53 & 56, *ibid.*). If these

proposals were to be carried forward to the new PPG 13 and – more importantly – if they were implemented by local authorities they could help to greatly enhance conditions for pedestrians and cyclists.

However, even the President of the Royal Town Planning Institute believed that PPGs were ‘*a hopeless confusion of firm Government policy; policy masquerading as advice; advice masquerading as policy; and advice which varies from the helpful to the confused and contradictory.*’ (Hulse, pers. comm.). It is a fundamental problem that local authorities are not bound to comply with any of the advice given in PPGs or their Scottish equivalent and that even the most appropriate advice may thus not necessarily lead to the changes envisaged.

2.1.8.2 NPPG 17 and PAN 57⁷: Transport and Planning - the Scottish equivalents of PPG 13

PPG 13 did not have a contemporary equivalent in Scotland, where the Scottish Office - and since May 1999 the Scottish Executive - issues its own guidance on land use and other planning matters. However, in early 1999, the Scottish Office published *Planning Advice Note (PAN) 57* (The Scottish Office Development Department, 1999a) and *National Planning Policy Guideline (NPPG) 17 on Transport and Planning* (The Scottish Office Development Department, 1999b) to “*develop the integrated land use and planning elements of the White Paper policy package*” (p.5, *ibid.*). Both documents reiterated the objectives of the white papers, namely to create a more integrated and environmentally friendly transport system, encouraging more sustainable land use patterns and contributing to the creation of a healthier, fairer and more inclusive society.

The two documents represented the most advanced stage to date in the maturation of transport policy from the acceptance of the general notions of sustainability over the realisation of the detrimental impacts of the existing traffic system to the search for real alternatives.

The NPPG called for a new hierarchy in the consideration of transport modes placing walking at the top, followed by cycling, public transport and lastly the private car. It recognised walking and cycling as the most sustainable forms of transport and also acknowledged that - comparatively - public transport was actually less sustainable although more efficient at carrying large numbers of people than the private car (par. 20, The Scottish Office Development Department, 1999a). This hierarchy was to be applied in the consideration of new or renewed planning applications but also in the adaptation and maintenance of existing developments (par. 18, *ibid.*).

⁷ While NPPGs are statements of government policy, PANs provide related advice on good practice and give other relevant information

However, the important links between walking and health were not made, although it had for some time been recognised that getting people to walk more would bring very considerable health benefits for the individual and save greatly on NHS costs (see Chapter 1, Section 1.1.4). The section on cycling, on the other hand, mentioned the promotion of healthier lifestyles as one of the first benefits of safe cycling facilities (par. 49). It recognised the tourist potential of cycle networks in rural areas - as well as their benefits in linking neighbouring settlements. The NPPG advocated the consideration of cycling in new developments through cycle audits and listed some important features of a cycle friendly development (such as uninterrupted routes giving easy access to employment centres, schools and other local facilities). Unfortunately, the guidance only called for either the inclusion or the provision of an opportunity for creating such networks. The question of who should ensure the actual development of the network once the potential was created was left unanswered (par. 50).

The guidance did, however, call for the provision of secure cycle parking at public transport interchanges and all major new developments, town centres and educational institutions. It even called for cycle parking to be closer to a building's entrance than the car park, an uncommon practice in the UK. This is significant as fear of theft - together with fear for personal safety - have been found to be a very common deterrent for increased cycle use, (Davies *et al.*, 1998a).

The accompanying PAN, generally intended to provide further relevant information and good practice advice, was somewhat erratic in the choice of issues covered. It missed the opportunity of providing more solid information and statistics on the potential for walking as transport and of its importance for public health. Neither did it make any reference to design guidance or good practice examples, which could help those in local authorities wishing to promote walking to back up their arguments in committees and thus help them to convert their intentions into good practice.

Similar criticism must be made of the PAN's section on providing for cycling. Although some of the information given is relevant there is not enough of it⁸. Much greater effort could have been made to point users to further best practice examples and relevant design guidance.

2.1.8.3 Guidance on walking and cycling in Local Transport Plans (LTP) and Strategies (LTS)

Three preliminary guidance documents were published to assist local authorities in the preparation of their provisional local transport plans and strategies: *Guidance on Provisional Local Transport Plans* (DETR, 1999g), *Local Transport Strategies, Preliminary Guidance* (The Scottish Office Development Department, 1999c) and *Draft Guidance on Local Transport Plans in Wales* (Welsh Office, 1999).

⁸ Such as that on the relative health benefits of cycling over the potential risk from accidents, or the example of the ScotRail initiative to facilitate accommodation of bikes on their trains for no extra charge.

A detailed review of the three documents has shown that although they covered walking and cycling more extensively than previous national policy documents, the approach taken to these two modes was still not consistent. Many authorities in England expressed concern at not being able to consult the relevant Regional Transport Strategies or some of the White Paper daughter documents which had not been published at the time (p.49-51; DETR, 1999g). It must be remembered, though, that all three departments issuing the guidance expected feedback from local authorities on its quality and that further documents were published for the preparation of the full five-year local transport plans and strategies by July 2000. Evidently, such feedback will have been shaped by the issues and priorities prevalent in any particular local authority area and those not already strong on walking and cycling or at least wishing to give improved emphasis to these modes are unlikely to criticise inadequacies in these areas.

Another problem, particularly in England and Wales, was the expected time lapse between the announcement of intended new road user and work place parking charging powers for local councils and the actual legislation enabling these. It has been suggested that many councils might hold back not only until the new legal powers had been created but until schemes had proved financially and politically successful elsewhere (Anon., 1998a). The situation in Scotland was somewhat more advanced, as the new Labour and Liberal Democrat Executive's coalition agreement had announced its intention to prioritise new legislation regarding road user charging and work place parking levies in the 1999-2004 parliamentary period. A consultation document on these issues entitled *Tackling Congestion* was published shortly after the opening of the parliament (The Scottish Executive, 1999a – see Section 2.1.4 for a review of these documents). The DETR published a similar document (DETR, 1998d) and in the *Transport Act 2000* the Westminster Government did indeed create powers for local authorities to levy both road user and work place parking charges while the parliament in Holyrood only included road user charging powers in the *Transport (Scotland) Act 2001*.

The inconsistencies and confusion between priorities could mean that cyclists and especially pedestrians (a traditionally more heterogeneous and thus less well represented group) might remain at the bottom of the policy and spending hierarchy in many LTPs and LTSs. The fact that walking strategies are not required as part of an LTS/LTP in Scotland and Wales already indicates a lack of recognition of the importance of providing well for this mode. The imbalance between walking and cycling currently found in Unitary Local Authorities' transport plans⁹ is thus likely to continue.

⁹ This thesis has shown, that in 1999, only 8% (of those who responded to a request for information, see Chapter 4, Section 4.3.3) had walking strategies, while 58% had written their own cycling strategies.

2.1.9 Guidance on provision for pedestrians and cyclists

2.1.9.1 Pedestrians

In March 2000, the DETR published *Encouraging Walking: Advice to Local Authorities* (see below for review). Before that time, national guidance dealing specifically with planning and providing for pedestrians – particularly on strategic issues – was noticeable in its absence, especially when compared to the material available dealing with cycling issues (see following section)¹⁰.

In the late 1970s the DoE and DoT jointly published *Design Bulletin 32 Residential Roads and Footpaths – Layout Considerations* (DoE & DoT, 1977). The bulletin was useful for detailed lay-out considerations giving guidance on issues such as minimum footpaths widths, kerb heights and gradients. However, it provided no advice on pedestrian provision in non-residential contexts – which is where most problems currently seem to be encountered (see Section 2.2.1.1). It also did not deal with a more strategic approach to the needs of pedestrians.

The Traffic Advisory Unit (TAU) of the DoE and subsequently the DETR has been publishing Traffic Advisory Leaflets (TALs) on local traffic management issues since 1986 and of the more than 100 leaflets produced between that year and 2000 only two dealt directly with pedestrian issues (compared to 52 on cycling): *Measures to control traffic for the benefit of residents, pedestrians and cyclists* (TAU, 1987) and *Pedestrian Crossings, Assessment and Design* (TAU, 1995)¹¹. A large number covered various aspects of traffic calming (summarised in *Traffic Calming Bibliography*, TAU 1999) and although such measures are generally also aimed at improving the pedestrian environment, their actual benefit to pedestrians is not always guaranteed (see Section 2.2.1). However, this guidance can benefit local authorities wishing to use traffic calming as part of an overall traffic management strategy aimed at enhancing walking and cycling.

Encouraging Walking (DETR, 2000b) was based on the work of an advisory group, which included members from the DETR as well as the Welsh Office, the Scottish Office and the Department of the Environment for Northern Ireland and although it was commended to all these administrations it was intended to represent English policy only (p.2, *ibid.*). One source has labelled it a rebranded version of the long awaited National Walking Strategy (Anon., 2000) although no official confirmation for this idea has been given. Until such a strategy is published, however, it must be considered possible that *Encouraging Walking* is the only national walking policy document the government will present.

¹⁰ It should be noted that this section will concentrate on guidance published or specifically recommended by governmental bodies. Other relevant publications are reviewed in Section 2.2.

¹¹ In late 2001, these had been joined by another four on Puffin Pedestrian Crossings (TAL 01/01); Monitoring Walking (TAL 06/00); a Walking Bibliography (TAL 03/00) and a Framework for a local Walking Strategy (TAL 02/00)

In comparison to the NCS, *Encouraging Walking* contained one considerable weakness: it did not set any national targets for increasing the modal share of walking. Instead, it „sets out ways in which walking can be made easier, more pleasant and safer“ (par. 1.7; DETR, 2000) and proposed that, if successful, the document would result in people walking more for certain journeys (par. 1.8; *ibid.*). At the same time it undermined these objectives, though, by stating that „none of this is going to have a major impact on total vehicle mileage, air pollution or global warming“ (par. 1.9) aiming only „in a modest way [...] to help improve the quality of all our lives“ (p.3). This is certainly a desirable aim. But it was surprising that the government did not aim to substitute walking for at least some of the 24% of car based journeys under 3.2 km¹² (Transport Statistics, 2001) since together with planning land use to reduce travel demand (mentioned in par. 3.4; DETR, 2000b) this could play an important role in reducing both vehicle mileage and car based emissions.

Encouraging Walking covered issues such as local targets for walking in LTPs (par. 2.4 – 2.7) - which were considered more useful than national targets – and the need for partnerships in forging the links between walking, land use planning, health and travel to work and school and (Chapter 2). However, the chapter gives a list of potential partners, though this contains such relatively abstract entities as central government and the motor industry.

Chapter 3 on *Practical Actions* lists a number of issues such as routes and networks, transport interchanges and road safety and Home Zones. However, the text does no more than flag up the most important points relating to these topics. And although the chapter contains good practice examples, very little detail is provided and any interested practitioner would be required to do further research to really benefit from the experiences gathered in these case studies. The document does not provide any references for such research, though, and it is unlikely that spending time on detailed enquiries would be possible or justifiable in the working reality of most local authority employees. This broad brush approach can be found throughout most of *Encouraging Walking*, which gives little advice useful for the implementation stage of any pedestrian project although it does provide some design references both in the text and in its Appendix D, the publications section. The advice given should be of greatest use to those authorities, which are only beginning to consider measures and strategies for walking. This is particularly true for Appendices A & B, which contain checklists for developing a strategic approach for walking and for the local walking environment.

It has been argued that fear of “telling people to walk” has made the government reluctant to set targets or to strongly emphasise the potential of this mode (Anon., 2000). It could also be suggested that the government’s fear of being seen as anti-car (rather than pro walking) has influenced the stance taken in this document and is making the publication of a National Walking

¹² a distance over which car engines are extremely inefficient

Strategy unlikely. *Encouraging Walking* is thus not likely to have similar impact to the NCS as it does not introduce any new or more detailed national pedestrian policies.

2.1.9.2 Safer Routes to School

Following its survey of SRtS projects in Scotland (Derek Halden Consultancy, 1999; see Section 2.1.6.1), the Scottish Executive published guidance on how to run such projects (Scottish Road Safety Campaign, 1999). The foreword states that the guidance is aimed at “*children, parents, teachers, local authorities, the police and transport operators*” (p.5) and is intended to contribute to significant improvements to “*our health, safety and social development of our children*” (ibid.). No mention is made here of either walking or cycling or the wish to increase the share of these modes - the latter issue is in fact not dealt with anywhere in the report. The only reference made to SRtS’s potential contribution to wider policy aims is the observation that “*national transport [note: not local], road safety, health, education and environmental objectives can all be supported by a well planned SRtS approach*” (p.8).

Apart from this lack of “joined up thinking”, however, the guide provides very comprehensive and useful information for anyone wishing to initiate and implement a SRtS type project. It includes various checklists and also a good guide to resource and guidance material. And although Safer Routes to School (SRtS) projects are primarily defined as road safety initiatives, pedestrians and cyclists benefit most from such activities. The guidance documents also stresses that SRtS projects should be considered long term commitments and that it is thus important to ensure that several people are involved in leading it should one key person leave. The guide further emphasises the importance of regular monitoring to identify what works and what does not.

One omission, which might significantly impede the usefulness of the guide is the lack of advice on obtaining funding sources, the relative costs of different measures and preparing budgets for SRtS initiatives. Although it is stated at one point that “*paradoxically, the budget is not really a barrier*” (p.11) this statement is not expanded upon and no indication is given of who could be expected to contribute to project costs.

2.1.9.3 Cycling

Following the publication of the National Cycling Strategy, government funded research activities became more numerous, specifically those carried out by the Transport Research Laboratory (the successor of the Transport and Roads Research Laboratory, TRRL). Partly based on the resulting TRL reports but also drawing from other sources, the government also began to publish more and more guidance materials relating specifically to cycling and cyclists through various bodies.

The NCS is progressively being complemented by publications from the National Cycling Forum, which are addressing specific sectors or issues relevant to cycling (see Table 2.1). But guidance is

also provided in the form of Transport Advisory Leaflets (TALs), which are published by the Traffic Advisory Unit and have contained cycling specific information since 1986. Until 1993, these leaflets concentrated mostly on illustrating innovatory cycle schemes but since then have contained more general technical as well as strategic advice on issues such as *Cycling in Pedestrian Areas* (TAL 9/93), *Cyclists at Road Narrowings* (TAL 1/97), *Cycle Centres* (TAL 5/98) and *Monitoring of Cycle Use* (TAL 1/99). The first cycling bibliography summarising all relevant government publications and important related material was published in September 1996 (TAL 9/96) This is updated annually and the most recent one at the time of writing is TAL 04/01 (Traffic Advisory Unit, 2001). These bibliographies provide a very useful guide for local authorities wishing to compile guidance for their planners and engineers. NCS material and TALs are also available free of charge, a further advantage in an area, which is notoriously underfunded.

- | |
|---|
| <ul style="list-style-type: none"> • Issues in Retailing, 1998 • Issues for Public Transport Planners and Operators, 1998 • Issues for Town Planners, 1998 • Issues for Traffic Engineers and Transport Planners, 1998 • Safety Framework for Cycling, 1999 • Promoting Cycling: Improving Health, 1999 |
|---|

Table 2.1 Guidance material published by the National Cycling Forum

Further guidance can be found in *Transport in the Urban Environment*, Chapter 23 (Hooper, 1997). This again deals mostly with technical issues such as engineering details of cycle tracks, roundabouts and other junctions but also lists the desirable features of cycle networks (coherence, directness, attractiveness, safety and comfort, similar to the 5 C's proposed for pedestrian networks; Taylor, 1997 see Section 2.2.1.1), and the need for cycle training and promotion. A list of relevant literature is also provided.

Two further important guidance publications are *Cycle Friendly Infrastructure* (Bicycle Association, 1996) and *Guidelines for Cycle Audit and Cycle Review* (Institute of Highways and Transportation *et al.*, 1998). They probably provide the most comprehensive technical guidance available, although some of the recommendations contained in the former have been superseded by new research. The latter is of great importance as it details procedures for auditing the cycle friendliness of both new development proposals and existing schemes and infrastructure. This is a necessary step in ensuring that pro-cycling policies are effective and that potential as well as existing problems are correctly identified.

The most comprehensive government guidance on planning for cyclists has come from the Scottish Executive (1999b) and is entitled *Cycling by Design*. It is intended as a practitioner's guide (which also invites feedback on the contents' usefulness for future revisions) and covers the following subjects:

- National Cycle Network
- Planning for the Cyclist

- Geometric Design
- Network Links
- Junctions & Crossings
- Traffic Calming and Management Schemes
- Footpaths, Footways and Areas free from Motorised Traffic
- Rural Roads
- Integration With Public Transport
- Cycle Parking
- Construction and Maintenance
- Publicity
- Trunk Road Cycle Audit System
- Legal Issues
- Interested Parties (a list of NGOs interested in cycling issues)
- Cycling Officers (a contact list for Scottish cycling officers)
- Traffic Signs
- Bibliography

The document represents a very important resource for those wishing to plan and implement facilities for cyclists. It stresses the need for embedding cycling measures into a wider strategic framework, which benefits “*the whole community*” (par. 3.9) and lists a hierarchy of approaches identified as a first stage when planning for cyclists (par. 3.11, *ibid.*).

Surprisingly, though, the document proposes a hierarchy of cycle routes (3.16), which puts long-distance routes (these should aim to carry approximately 70% of the cycle network’s total volume) above commuter routes and local routes. While presumably the authors intend to indicate, that main commuter routes should be incorporated into the long distance network, it would be easy to misinterpret this advice into advocating that 70% of cycle travel should be long distance, thus affording commuter and local travel much lower priority than should be the case. Cycling holidays and day trips currently only contribute 18% of all cycle trips made in Britain (DETR, 1998) and people are much more likely to consider cycling for journeys of under 25 minutes (Traffic Advisory Unit, 1999). However, *Cycling by Design* provides very thorough guidance in all other strategic and practical aspects of planning for cyclists including a good – if somewhat confusingly edited – bibliography. The only concern might be that the guidance is in fact so detailed that practitioners hard pressed for time and faced with many competing demands might find it impossible to follow.

A vital link in the chain leading to effective cycling policy implementation – as recognised also in *Cycling by Design* - is monitoring. The monitoring activities of most local authorities have traditionally concentrated on motor traffic and a TRL study (Emmerson *et al.*, 1999) found that where cycling is addressed, the most frequently used method is manual counting, looking either at specific or sample sites or screen lines. While these can be useful, they are mostly labour intensive and thus expensive, making it unlikely that the data collected will adequately describe an existing situation or show up all but the broadest changes. Identifying changes is particularly important, though, when testing the effectiveness of a scheme or tracking progress towards local cycling

targets, where these have been adopted. The TRL report *Guidance on Monitoring Local Cycle Use* (Davies, *et al.*, 1999), which was prepared under contract for the DETR, contains detailed advice on when monitoring should be considered, how a programme should be planned and which techniques are appropriate to which purposes. The TRL reports are summarised in TAL 1/99 *Monitoring Local Cycle Use* (Traffic Advisory Unit, 1999b), which is available free of charge unlike TRL publications.

There is thus some quite detailed guidance available to help local authorities establish the need for cycle measures with a good degree of accuracy, to construct them to a high standard and to monitor their effect on cycle flows and cycle safety in a wide variety of circumstances. It should be noted, however, that comprehensive advice on monitoring has only become available in 1999 and guidance on engineering measures, although in existence for far longer, is quite scattered with some variations in quality and coverage between publications.

2.1.10 Conclusions

This review of government policy has made clear that

- There is a large amount of policy directly and indirectly relating to transport, which local authorities should consider when drawing up local transport plans and policies for walking and cycling. As there are no summaries of all the policies relating to any particular aspect of transport, though, some might be disregarded when local policies are drafted.
- There are several national targets, some of which are legally binding, which local authorities are asked to contribute to (road traffic reduction, reduction in the emission of greenhouse gases, air quality, increase in walking and cycling). On the other hand, many aspects of national transport policy are not statutory and thus open to interpretation. The only legal obligation relating to walking and cycling placed on authorities in England is the production of strategies for these modes as part of their LTPs.
- There is a lot of guidance provided or referred to in government publications, much of which is potentially helpful. However, it is also sometimes conflicting, not always very detailed and there are no easily accessible documents, which summarise all government policy relating to e.g. walking or cycling, thus theoretically obliging practitioners to survey and make sense of all potentially relevant material themselves.

National policy provides a general steer and contains some quite detailed demands but the practical application of these policies is largely in the hands of local authorities. Although in many ways they are best placed to make the relevant decisions, there is also a danger of considerable variation

between approaches and due to the partly conflicting timing of different levels of policy making a certain confusion may mean a loss of momentum. It will thus be important to assess how different authorities across Britain approach the opportunities and problems created by current transport policy - and which basis they are starting from, as existing policies will vary widely in detail and approach. It will also be of interest to gain more detailed knowledge of the reasons for these differences, as this will help to recognise and address potential problems as well as to identify and potentially maximise inherent strengths in any authority.

The following section of this review will thus look at research describing the status quo in transport policy and planning and also research the tools, which local authorities have at their disposal and which they are using in practice.

2.2 WALKING AND CYCLING IN LOCAL AUTHORITIES – CURRENT PROBLEMS AND SOLUTIONS

It has been established, that walking and cycling are important transport modes and that this importance is increasingly - if not universally - reflected in national government policy. However, government policy has been advocating a more sustainable approach to transport planning for some time and it is important to look at the extent to which this has translated into action at local government level, since it is mostly there that changes will actually have to be implemented

In early 1999, two transport professionals were asked, whether conditions for pedestrians and cyclists in Britain had improved over the preceding ten years (Anon., 1999b). Tim Pharoah, independent consultant and author of a substantial body of literature on matters of sustainable transport felt that although the NCS had been published and there was increased investment in pedestrian and cycle oriented traffic engineering measures, these groups real needs were still being neglected in favour of accident prevention. There was still not enough funding being put into such measures to ensure the quality and standard it would be possible to attain with the latest knowledge and methods. Terence Bendixson, president of the *Pedestrians Association*, was worried that conditions were actually worsening, especially for pedestrians as the attempt to encourage more people to cycle resulted in road space being taken away from pedestrians and the two modes were forced to share movement space, which was an unhappy solution. He suggested the road user hierarchy implemented by York City Council, which places pedestrians and cyclists first in the consideration of all traffic matters was one of the most significant achievements of the 1990s.

Both agreed, that there were important measures which had not yet been tried widely enough. These included Home Zones (a concept already widely applied in continental Europe), re-timing traffic signals to give pedestrians and cyclists priority, re-allocating road space for cyclists away

from cars rather than pedestrians and enhancing the pedestrian environment by removing or resiting signage and street furniture. It was felt that serious re-balancing of road space had not actually started yet, that the predict-and-provide approach to road space provision was still alive at the local level (despite national government documents claiming the contrary) and that there was still a lack of integration in national, regional and local policy to bring about actual road traffic reduction.

The opinions voiced in this interview underline three important points. Firstly it is necessary to know, what the needs of pedestrians and cyclists are and secondly local governments must have at their disposal policy and engineering measures able to meet these needs. Thirdly neither of these two factors will suffice in bringing about a change if the measures are then not actually implemented. This section of the literature review will thus seek to answer the following questions:

- Have the needs of pedestrians and cyclists been identified?
- What measures on a policy and on an engineering level are known, that could meet these needs and have they been tried?
- What evidence is there that measures, which are known to be successful in making transport more sustainable by encouraging more walking and cycling are actually put into practice?

2.2.1 Walking

2.2.1.1 *The needs of pedestrians*

Although at the time of writing, policy papers and research seem to focus largely on cycling, there is in fact a substantial body of work identifying and discussing the needs of pedestrians. In 1963, Colin Buchanan published his influential report *Traffic in Towns* (Buchanan, 1963), in which he advocated the division of towns into environmental areas (such as city centre, residential and working type environments) and the definition of environmental quality standards for each of these. Such standards would set acceptable levels of e.g. noise, fumes and severance brought into the pedestrian environment by motorised traffic and planners would have to work towards achieving and maintaining them. Although the report had a significant effect on transport planning (Cullingworth & Nadin, 1997), it was also in many ways ahead of its time and the proposals relating to pedestrians were not among its more influential elements.

In the early seventies, the non-party organisation *Political and Economic Planning* published a study on *Personal Mobility and Transport Policy* (Hillman, Henderson & Whalley, 1973) which compared and contrasted different modes of personal travel. The study concluded, that transport planning would have to strike a balance between adequately providing for people's personal mobility needs and the

consequences of doing so and that to this end non-motorised modes and walking in particular should be prioritised. The authors pointed out, that as travel was often not an end in itself but a means of gaining access to opportunities, it would be the provision and relative location of these opportunities, which would be a strong determinant of travel patterns and modes. The study concentrated on drawing out the main requirements policy making for transport - and land use - would need to fulfil but it did not extend to recommending how this should be achieved.

In the study *Walking is Transport*, Hillman & Whalley (1979), continued their argument for the acceptance of walking as an important mode of transport, which needed to be given more consideration. They elaborated on an argument made in the previous study, namely that pedestrians are not a homogenous group, but that some sectors of society rely on walking far more heavily than others and will consequently be more affected by the neglect or otherwise of this mode of transport. They showed that in general, low paid and unskilled workers, pensioners, children and women rely more on walking than do other parts of society. The study illustrated, that those or have to walk or depend on walking made the fewest journeys, indicating that their needs were not adequately catered for but it did not define those needs in detail or give any guidance on how to meet them.

The decline of walking as a mode for personal transport in Britain continued for the next decade and in the late 80's, the National Consumer Council (NCC) conducted a study entitled *What's wrong with walking* (1987) in an attempt to establish why people walked less and less and - importantly - what would need to be done to reverse this trend. The authors found, that hazards and obstacles were a prime area of concern among members of the public. Badly maintained and cluttered pavements, a lack of pedestrian crossings¹³ and the increasing volume of motorised traffic where the most frequent unprompted response to the question of what deterred people from walking more. The NCC found in turn, that these problems had arisen from the fact that pedestrian provision was often based on inadequate information about pedestrian behaviour and that pedestrians were rarely properly consulted on what they actually wanted. Various authors have dealt with the real and perceived lack of information on walking as a mode of transport and there is widespread agreement, that this is not limited to the local authority level, where data collection and monitoring of pedestrian movements are often sketchy at best, but that the greatest potential problem lies at national level.

Until 1998, National Travel Statistics (NTS) published annually by the government did not give any information on trips under one mile (1.6 km). As Hillman & Whalley (1979) have argued, this not only conveyed the impression, that short local journeys were in fact unimportant for transport

¹³ Green phases on multistage crossings are often staggered and relatively short causing delay, or signalled crossings are wholly absent, forcing people on foot either into underpasses or dangerous crossing manoeuvres (Clark, 1998).

planners but the representation also excluded 80 % of all walking journeys from the statistics, thus making it seem a far less significant mode of travel than it actually was. Further problems are inherent in the data collection methods used for the National Travel Statistics and have been discussed in detail by Weatherall (1997). They include the fact that short walking trips (those under one mile) are only recorded on the last day of a seven day travel diary, and that for the purpose of the diary, trips are defined as „a one way course having a single main purpose“. As a result, a series of journeys on foot all under one mile individually (from home to the shops, to the doctors, to the school and back home for example) - although well over a mile in total - would not be recorded till the last day of the diary. It is likely, that this national example has influenced not only the way many transport planners think about walking but also their approach to collecting their own data on it. The skewed picture of this travel mode would thus have been perpetuated. A slight improvement can be noted since as of the 1998 edition, journeys under one mile in length are actually included in the Transport Statistics Great Britain (DETR, 1998e) but the problems in the data collection process remain.

As a result of this general lack and misrepresentation of information, the NCC report found that pedestrians were often presented with solutions, which based on the „objective“ evidence used were optimal, but in reality were not actually the most popular or even appropriate. Although the information contained in the report is of great interest, one must be aware of a potential bias created by the sampling technique used. The researchers relied on the take up of a news release from the NCC calling on the public to call and be questioned on their opinion. This approach made it very unlikely, that a random sample was obtained, as several filters acted on the sample, which were beyond the control of the researchers (which media publicised the call, who became aware of it, who decided to answer it). However, research undertaken by other organisations confirmed the NCC's findings (Rauh *et al.*, 1995a; Transport 2000, 1997) and it can thus be considered that making walking more comfortable and safer must be among the prime elements in any pedestrian friendly transport strategy.

One year after the publication of the NCC study, the European Charter of Pedestrian's Rights (Committee on the Environment, Public Health and Consumer Protection, 1988) was adopted. It not only identified essential pedestrian needs but actually enshrined them as rights, which all EU member states have a - theoretical - duty to uphold. These rights include

- *...the right to live in a healthy environment...under conditions that adequately safeguard his [sic] physical and psychological well-being. (par. I)*
- *...the right to have amenities within walking or cycling distance. (par. II)*
- *...the right to urban areas which are exclusively for his use...are not mere 'pedestrian precincts'...and also the exclusive right to connecting, short, logical and safe routes. (par. V)*

The charter goes even further in asserting that pedestrians in Europe have the right to expect, among other things

- *the fixing of speed limits and modifications to the layout of roads and junctions as a way of effectively safeguarding pedestrian and bicycle traffic* (par. VI d)
- *the banning of advertising which encourages an improper and dangerous use of the motor car;* (par. VI e)
- *an effective system of road signs whose design also takes into account the needs of the blind and the deaf;* (par. VI f)

The charter could provide a very useful guide for any government, national, regional or local, which wished to prioritise pedestrians (and also cyclists, for although this group has some specific needs not addressed in the charter, there are many overlaps between the two groups and improvements made under the charter would benefit both). Unfortunately, it does not seem to have widely influenced government thinking in Britain as over a decade later, attempts are still being made to distil pedestrian needs into an easily understandable format, which can be communicated widely. Taylor (1997) created the concept of the five C's for the walking strategy for London, five principles which describe the ideal conditions for pedestrians: connected (easy to get from place to place), convenient (direct routes), comfortable (safe and comfortable street design), convivial (friendly and interesting streetscapes) and conspicuous (well signposted routes and destinations). Although the five C's do not define pedestrian's needs (or rights) as radically as the European Charter, they, too, could serve as useful criteria for testing and amending existing as well as planned pedestrian facilities.

While the above references are to a certain extent focusing on the psychological, social and planning needs of pedestrians, other authors have concentrated more on the inherent technical and engineering requirements of walking as a mode of transport. Leake (1997) points out, that pedestrian speed needs to be taken into consideration, when designing road crossings and that networks need to be planned bearing in mind, that the average person would not consider walking more than 1.6 kilometres (one mile) between origin and destination (although 20% of walking trips in Britain are actually above that distance). He also stresses that steep hills and gradients will reduce this distance. The Institution of Highways and Transportation in its extensive manual *Transport in the Urban Environment* (1997) devoted one of the 43 chapters to pedestrians. Here planners were reminded that people walking for different purposes would exhibit different travel patterns. The route taken from a public transport interchange to an office complex for example would be more direct than the routes taken during a shopping trip on foot, which would be more random and diverse. The latter would thus require more space.

It can be seen, that the physical, psychological and technical needs of pedestrians are well defined and have been for some time. They are, in summary, comfort and a quality environment, convenience, safety, security and a degree of prioritisation over other modes which adequately

reflects the importance of walking as a mode, both for its ‘users’ and for society as a whole. Fulfilling technical requirements, such as constructing kerbs and pavements of suitable dimensions (as defined e.g. in Design Bulletin 32, DoE & DoT, 1977) is a fairly straight forward task, once appropriate dimension have been defined. However, it is important to establish, whether in addition to a knowledge of pedestrian needs (other than engineering requirements), there is also a knowledge of the measures available to meet them.

2.2.1.2 Measures for pedestrians

In the late 1970’s, when Hillman and Whalley (1979) were still arguing for walking to be accepted as an important mode of transport, guidance on pedestrian issues was mostly limited to Design Bulletin 32 *Residential Roads and Footpaths - Layout Considerations* (DoE, DoT, 1977), which although useful for detailed lay-out considerations, provided little in the way of a strategic approach to the needs of pedestrians and said nothing about actually giving pedestrians priority over motor vehicles in residential areas or anywhere else. However, in the late 1990’s the body of literature dealing with measures for pedestrians is substantially larger than 20 years ago - and has been for some time.

Pedestrianisation of city centre shopping streets was widely introduced in Britain during the late 1960’s and 70’s¹⁴ and during the 1980’s, the British government became increasingly interested in the European approach to traffic calming¹⁵. In 1982, the DoT launched the Urban Safety Project, which utilised engineering techniques to reduce accidents in residential areas. Accident reduction was observed in all five study areas (TRRL, 1988) - albeit to varying degrees - and the project helped to establish the concept of traffic calming as a viable tool in transport planning. Parallel with government research, advice increased on the different ways to calm traffic and how these could help to solve urban transport problems in general, while benefiting pedestrians in particular. Although well designed traffic calming measures will in most cases also be beneficial for cyclists, the topic will be discussed under the pedestrian heading, as it is predominantly the positive effect on those on foot, that is stressed in discussion.

It is important to realise, that the term traffic calming can have a variety of meanings, and one needs to be clear, which particular definition is being adopted when looking at research into this subject. Writing at the beginning of British interest in ‘continental style’ traffic calming, Russell & Pharoah (1990) defined it as *„the attempt to achieve calm, safe and environmentally improved conditions on streets“* through self-enforcing road engineering measures (p. 2, *ibid.*). They claimed that in certain schemes, e.g. those limited to a succession of speed control humps in one street, the environmental

¹⁴ although individual schemes had already successfully been implemented during the 1950’s (Hass-Klau, 1990, Ch.8)

¹⁵ The term was introduced to the English language relatively recently as a translation of the German word *Verkehrsberuhigung* (Hass-Klau, 1990).

improvement of reduced noise and pollution would be incidental but present nevertheless. They stressed that traffic calming always implied shifting the balance in favour of pedestrians but that it did not necessarily entail traffic reduction. They identified serious inconsistencies in the growing desire at policy level to reduce accidents by reducing driving speeds and the parallel development of ever faster, safer and more comfortable cars capable of swiftly overcoming any engineered obstacles (humps, chicanes, narrowings, etc.) put in their way to slow them down. They also expressed concern, that Britain was lacking a policy framework, into which traffic calming measures could usefully be fitted. Nowadays, that overall framework is largely in existence and Britain has also supposedly committed itself to implementing the European Charter of Pedestrians' Rights, which includes a call to ban counterproductive car advertising (if not production). To make ideals become reality, however, guidance, expertise political will and determination are required.

Research thus gradually widened in scope from individual measures (such as Design Bulletin 32, DoE & DoT, 1977) to larger policy packages, and authors began to describe these in specific contexts such as city centres or residential areas. Due to the significant advances already made in this area in continental Europe, much of the literature takes its case studies from there and uses them for comparison in assessing British examples.

A study published by TEST (1988) evaluated the effect of traffic restraint measures on the Central Business Districts in 10 European cities (only one in Britain). It tested the hypothesis that a good (i.e. traffic free or traffic reduced) physical environment was also a good economic environment. The authors concluded, that all over Europe traffic restraint and city centre pedestrianisation had led to improved visual environments, better air quality and lower noise levels. They also found that retail turnover increased on all pedestrianised streets and that outflow of residents and employees from the city centres was checked. However, a general impact on transport in the cities concerned (higher use of bicycles and public transport, stabilisation or decrease in car use) was only observed if the policies and resulting schemes covered a large enough area. The study furthermore looked at who initiated the measures studied and why. Most had been put into place by the respective city councils of which 4 were socialist, one centre, 2 right [sic] (one with a socialist mayor) and three of unknown political orientation. The reasons for opting for traffic restraint measures of any kind ranged from the 'wish to make the Central Business District more viable and competitive' (with other towns and suburban centres) over 'preserving the city centre for the common good' (communist local government of Bologna) to 'implementing city development plan policies', which prioritised walking, cycling and public transport. Although the findings suggest some connection between politics and policies, the process by which e.g. city development plans were arrived at are not described in any detail, neither does the study talk about any factors which might have helped or hindered the implementation of pedestrian and bike friendly policies.

Tolley (1989) looked at traffic calming in residential areas and evaluated the effectiveness of three different approaches. He saw traffic calming as measures, which integrated motorised traffic with other uses of the street and did not want to see such local measures confused with the policy debate on city wide traffic management. He did, however, feel that individual measures at the micro level could serve as catalysts for later action on the macro level. Tolley concluded firstly that legal measures such as speed limits on their own were not effective in either reducing speeds or accidents and secondly, that both in Germany and the Netherlands a combination of some infrastructural measures (e.g. road humps and new parking lay-outs) with the restriction or elimination of through traffic had proved the best value option. It was significantly more effective than a mere reliance on traffic diversion (through one way streets) and much cheaper than the high specification approach of the *woonerf* concept, which required complete reconstruction of entire streets.

In contrast to Tolley, Hass-Klau (1990) suggested that traffic calming could be seen both in a wide and in a restrictive sense. On the one hand the term could describe changes to horizontal and vertical road alignments for speed reduction and on the other hand it could describe an overall transport policy concept, which promoted walking, cycling and public transport as well as engineering measures in conjunction with complementary land-use policies. This last definition has now largely been replaced by the concept of integrated or sustainable transport planning and traffic calming is again generally understood to be „*the attempt to achieve calm, safe and environmentally improved conditions on roads*“ (Russel & Pharoah, 1990; Russel, 1993)

An early review of traffic calming practise in England and Wales (Beth & Pharoah, 1989) was carried out through a postal survey sent to every District and Borough Council in the two countries (a total of 380 questionnaires). The study had a 45% response rate and found that between 17 and 39%¹⁶ of local authorities in England and Wales had undertaken some form of street adaptation (the study was in fact conducted, before the term traffic calming had been established). Analysis of the responses established that although interest in street adaptation measures (e.g. pinch-points, road closures, speed humps or chicanes) was higher than had been anticipated, enthusiasm and approach varied widely among the local authorities surveyed. The authors also concluded that too little work was undertaken to evaluate the consequences of different techniques and that not enough use was made of experiences and studies from continental Europe. They consequently recommended, that the collation of European experiences and translation into a format useful for British local authorities was an urgent task.

In recognition of this lack of relevant guidance, *Environment and Transport Planning* published a guide to traffic calming (Hass-Klau *et al.*, 1992), which was intended to function on three levels. It gave

¹⁶ depending on whether *all* authorities with adaptations replied or whether the sample was representative

technical guidance on a variety of measures and techniques, it assessed traffic calming experience in Germany, Netherlands, Sweden and Denmark as well as 40 British schemes existing at the time and it provided an economic evaluation of 20 British schemes. The case studies were predominantly taken from residential areas with some also describing town centres.

The assessment of British schemes was very detailed¹⁷ looking mostly at completed schemes, what methods had been used to what effect, acceptance of the schemes and whether any post-implementation problems had been identified. The book also contains a detailed overview of literature and regulations relating to traffic calming. The authors concluded that although the body of literature was growing, traffic calming in Britain was still in its infancy and that in contrast to continental schemes, the focus was still largely on accident reduction.

The information gathered was potentially very useful to authorities looking to solve traffic problems in a particular street or area but the report did not deal with the need for an overall strategy into which such measures should be fitted if city wide changes and improvements were envisaged. It must also be noted, that the assessment process for the various schemes appears not to have been uniform (although little information on this is given), based sometimes on single site visits and what appears to have been ad hoc interviews with residents and traders, sometimes on studies carried out by the councils themselves and sometimes only on comments made by the relevant authority, which again appear not to have been based on any systematic evaluation.

The intention of the study was not to provide an insight into the process that actually made the schemes possible in the first place and consequently it contains little information on this issue. It only lists the reasons stated by English councils themselves for wishing to implement a scheme. These related primarily to accident reduction and environmental improvement while the wish to promote walking and cycling was given as a reason for only four out of the 37 schemes investigated (two of these were in York).

To facilitate a process through which British local authorities can learn from each others experiences, it is important, that evaluation of existing schemes is rigorous and that all important aspects of a scheme are considered. Brennan (1994) criticised the fact that evaluation in the UK was largely based on quantitative factors such as changes in speeds, traffic volume and accidents, mainly because these were considered objective measures of success or failure of a scheme. She reasoned that this approach was in all probability established because traffic calming in Britain had largely developed from and after the Urban Safety Study of the 80's, which was predominantly concerned with accident reduction. The second reason for the largely quantitative assessment

¹⁷ Another volume associated with this publication gave further information (Environment and Transport Planning, 1992)

techniques was seen to be the fact that central government funding was only made available to traffic calming projects aimed at accident reduction. This post implementation focus on traffic statistics to some extent mirrors the problems identified by the NCC study *What's wrong with walking* (1987). There it was found that trouble spots, particularly in relation to pedestrian activity, were often identified through numerical information, which is not only limited in its description of the actual processes at work (such as perceived rather than actual danger) but also frequently incomplete. The resulting solutions were often deemed inappropriate by those for whom they were originally intended - a fact established through qualitative interviews rather than a quantitative analysis of schemes. Brennan recommended a multi-criteria approach to assessment both of the need for measures and for completed schemes, which combined quantitative and qualitative criteria, asking for residents' perception of both. This kind of approach would help to overcome the problems identified by the NCC study and would help to ensure that traffic calming was no longer seen as a limited engineering approach but as a method which could help create a more people (rather than car) friendly environment.

Like others before her Brennan criticised that Britain had for a long time been lacking a strategic approach to traffic calming and planning but stated that by the early 90's, various towns and cities (e.g. Sheffield, Leicester and Knowsley, GM) had begun to fit schemes into larger urban regeneration initiatives with higher levels of design, quality and expense. A wider strategic approach is important not only to ensure that transport problems are tackled and solved on an appropriate scale - solving the problems of whole villages, towns or regions rather than a few streets - but also because it has been shown, that isolated measures can have a displacement effect, making adjacent areas busier, noisier and more dangerous (Mountain & Fawaz, 1992).

So far, this review has shown that by the mid nineties pedestrianisation and traffic calming had been well established in Britain, although many authors still criticised the fact, that it lagged behind other European countries in the efforts made at creating a higher quality - and not just safer - pedestrian environment. Although techniques had been developed and tested on the continent since the 1970's, British local authorities did not readily learn from these experiences and it is not quite clear, why. Hass-Klau *et al.* (1992) suggested part of the reason might lie in the fact that Britain's ideal settlement for a long time had been the village and that urban planning was strongly influenced by this (in terms of road layouts and importance placed on city centres), while in Germany, the medieval city had for over 150 years been the favoured and idealised place to live, which made the preservation and replication of medieval style town centres (with narrow, winding streets and slow traffic) an important priority. Ramsay (1990a) suggested a further reason for the traditional neglect of pedestrians was the tendency to think of people movement in the town planning context as 'transport' (suggesting arranged and mechanised travel) rather than 'travel' or 'traffic' (which would include autonomous movement such as walking). Such historical backgrounds may well provide part of the explanation but they do not fully account for the fact

that British transport policy and practice is frequently 'behind' that of continental Europe. Neither do they explain why, in common with all the frequently cited examples (e.g. Denmark, Sweden, the Netherlands or Germany), practice never seems to follow new ideals or even policies as fast as it could and when it does so implementation varies in speed and quality between different authorities in the same country.

2.2.1.3 Providing for pedestrians beyond traffic calming

Looking at more recent research, it becomes clear, that while the problems identified by the studies cited above are part of the overall picture some important pieces of the jigsaw still need to be added. Traffic calming measures are an important element of transport planning but they are by no means sufficient to either realise the rights laid out in the European Pedestrian charter or even to fulfil the 5 Cs described in Section 2.21.1. Any serious attempt to encourage more walking and even some degree of modal switch from the car to this mode will have to go further. This section will look at what other measures need to be combined to create a comfortable and safe walking environment.

Pedestrian safety has already been identified as an important area for action. This should include better maintenance of pavements (NCC, 1987; Transport 2000, 1997;), lower speed limits for motorised traffic in built up areas (Rauh *et al.*, 1995a; Hillman, 1998a; Hass-Klau *et al.*, 1992) and a variety of engineering measures, such as wider and less cluttered pavements and more convenient and pedestrian friendly crossing facilities (Transport 2000, 1997). However, a recent study by the DETR (1999e) found that very often pedestrians are not merely concerned about injury through other traffic or obstacles but that a major deterrent for many walking journeys is people's fear for their personal security. This shows that for example the separation of pedestrians routes from motorised traffic, which has frequently been advocated in the past (Rauh, *et al.* 1995; Hillman, 1998) is not in fact a good solution. While it does help to prevent collisions between pedestrians and vehicles, it also means that many routes feel deserted and thus dangerous, especially in the dark and late at night. Authorities will thus have to strike a balance between safe and attractive pedestrian routes, e.g. through parks or along green corridors, and routes which feel secure to most people at most times of day and night.

Another important improvement of pedestrian facilities in much of Britain would be enhanced convenience, which often goes hand in hand with improved safety. The references already cited define this as the provision of better and more direct crossing facilities, the re-allocation of road space for wider pavements, city centre pedestrianisation, the removal of obstacles such as excessive and uncoordinated street furniture (signs, lamp posts, litter bins, bus stops, switch boxes) and cars parked on pavements. These solutions could, however, be applied at a number of individual locations without creating a satisfactory and attractive network that would help people to walk

from their origin to destinations further away than just around the block or across the street. Both the NCC (1987) and Rauh *et al.* (1995) mentioned the importance of creating such networks although they do not deal with the process in as much detail as with the safety issue. Ramsay (1990a) discussed the requirements a successful urban pedestrian network should fulfil and the different contexts such a network might have to fit into. He suggested for example, that the needs of the three most vulnerable groups of pedestrians - children, the elderly and the disabled - should define the character, size and quality of provisions made and emphasised the need for flexible planning, which corresponded with the land use pattern in its geometry. Harman (1995) in his review of European best practice in transport planning pointed out, that the majority of urban areas already had large parts of a pedestrian system in place in the form of pavements and some separate footways. His case studies suggested that the removal of barriers to pedestrian movement (e.g. by making it easier to cross roads, especially main roads, including the re-timing of traffic signals), better pedestrian access to public transport interchanges and stops and a positive approach to providing good quality 'living' spaces rather than mere routes for movement were all important elements in the creation of a pedestrian network.

It has increasingly been realised that alongside with the need for coherent networks, land-use planning has an important role to play in dealing with transport problems of any kind, but references linking this recognition specifically to walking and examining both issues together are scarce. Hillman (1998b) concluded in a report written for Friends of the Earth that *"control of population densities and planning, particularly in relation to the scale of facilities such as schools, shops and hospitals, are the most effective means of bringing...about [a transfer from the car to walking]"* (p.34) as pedestrians normally did not cover distances greater than 3.2 km. Most current policy papers stress the importance of these links and of considering both walking and cycling when planning for land use (see Chapter 1, Section 1.1.2), but no references have been found, which deal specifically with the question of how land use planning should be conducted to place the pedestrian at the top of the transport hierarchy and what effects this would have on other modes of transport.

There is however, some recent guidance on creating pedestrian strategies, of which there were comparatively few in Britain prior to the introduction of LTSs and LTPs¹⁸ and certainly less than there were cycling strategies. One guidance document came out of the *Feet First* initiative, a network of fifteen British local authorities (co-ordinated by the charity Transport 2000), which was set up in 1991 to *"demonstrate how highway and transport planning could be used to benefit pedestrians and promote walking"* (Newby & Sloman, 1996; p.5) over a period of three years. The traffic calming pilot schemes carried out by the authorities involved were considered successful but it was recognised, that *"a few traffic calmed streets do not make a walking strategy"* (p.5) and a model strategy was included in

¹⁸ It was unknown at the time of writing how many of the first round of draft LTSs and LTPs contained a walking strategy.

a report on the project (ibid.), partly to provide interested local authorities with a more strategic approach based on the experiences made by others and partly to create momentum for the development of a National Walking Strategy. Although concise, the recommendations addressed many important issues and also included sections on the actions that were seen to be required by other concerned parties, such as the DoT, DoE, DoH, schools and developers. Unfortunately, the initiative seems not to have had the desired impact, for although a national walking strategy has been expected since April 1998, it had not been published at the time of writing (but see Section 2.1.9.1).

More detailed guidance can be found in a paper by Lumsdon and Tolley (1999), which presents techniques for creating a local pedestrian strategy, also addressing some of the technical aspects of devising and implementing such a strategy and assessing the existing potential of a pedestrian network. Such model strategies also exist for cycling, with the major difference that one of them is part of the National Cycling Strategy (DoT, 1996a) and that it lists all relevant government publications, which should be consulted for guidance, while such a comprehensive compilation for walking is currently still missing. The lack of a national strategy can be an obstacle to the local adoption and implementation of such a strategy as local actors feel that there is no national framework for their activities and that they cannot base funding claims on helping to achieve specified national targets (Ramsay, 1995a; Newby & Sloman, 1996).

2.2.1.4 Making it happen

The availability of tools and the recognition of a need for their use is of course not sufficient to improve the current situation. Political will is a necessary element in the process and one must therefore ask, how important councils, the local service providers, consider it to prioritise pedestrian needs and take action? Part of the NCC report *What's wrong with walking* (1995) was a survey of council attitudes. This found that pedestrians were often relegated to last place when there were conflicts of interest and that laws, which could help redress the balance (such as pedestrians' right of way over turning vehicles) were often enforced reluctantly, if at all. The report concluded, that although the main responsibilities for improving the situation lay with the local service providers, central government also had a role to play by ensuring, that pedestrians were properly considered in transport policies and structure plans and by guaranteeing, that sufficient funds were available to turn the plans into reality. As the critique of current policy has shown, central government has begun to provide a more pedestrian oriented steer, although approaches taken by different ministries and even within different documents from the same ministry are often confusing, if not contradictory.

The increasing attention walking and the needs of pedestrians are nevertheless receiving does seem to have had an effect on council attitudes, though. Research carried out for the *Pedestrians'*

Association (Coleman & Headicar, 1998) found that 96% of authorities defined themselves as actively seeking to promote walking but only a minority had found it possible to turn this commitment into practice. The study found, that 45% of authorities did not have and did not appear to be preparing a walking strategy and only 20% had set local targets for walking (compared to 41% who had done so for cycling; Davies *et al.*, 1999). It also revealed, that spending on pedestrian facilities had remained constant between 1992/93 and 1997/8 while maintenance budgets had fallen sharply over the same time period. It is not entirely clear, whether the two studies actually illustrated a development towards greater awareness and prioritisation of pedestrian needs or whether they in fact described two sides of the same coin, i.e. councils demonstrate good intentions but for some reason fail to follow these through with appropriate practical measures.

Either way, the Pedestrians' Association's research does point to a breakdown between intentions and practice, but although the study's authors draw their own conclusions on the possible reasons behind this (lack of incentives, need for greater duties for and guidance on funding priorities; Coleman & Headicar, 1998), authorities were not asked to identify internal or external obstacles themselves. There is little other work examining either the reasons for a failure to convert intentions into action or the distinguishing features of those cases where that transition has successfully been made.

Two possible links, which have been identified and are beginning to be addressed are the lack of vocational training specific to either walking or cycling and the difficulty professionals often have in finding out about and accessing relevant information, especially from academic sources (McClintock & Palmer, 1999). The DETR's *Joint Cycling/Walking Working Group on Professional Training and Information* is conducting a survey of transport professionals to assess the skills seen as necessary for those working towards sustainable transport and how these skills could best be conveyed. The working group is further promoting the dissemination of guidance and research via the internet. To help this, a website¹⁹ has been set up by Nottingham University in conjunction with an EU sponsored project, which collates references on walking and cycling specifically and sustainable transport in general. Information on the results of the survey and the effectiveness of the website are not currently available. It must be noted, that although the connections that have been made by the working group seem entirely plausible, they do not appear to have arisen out of a research based approach to the problem.

In fact the only British survey establishing barriers to promote walking that has so far been found in the literature was part of the *Feet First* initiative. The project co-ordinators asked the participating 15 authorities, which barriers they *perceived* to the promotion of walking (Newby & Sloman, 1996).

¹⁹ Was <http://omni.ac.uk:8099/lczhmc/bibs/sustrav>, now found under <http://www.nottingham.ac.uk/sbc/planbiblios/bibs/>

The survey asked authorities to rate the importance of nine suggested barriers and also to list any others they considered significant. By far the greatest problem identified was a perceived lack of funding, followed by lack of powers to implement measures (e.g. road tolls). Of further importance were perceived conflicts with other policies or departments (traffic restraint is seen as harmful to the local economy) and an uncertainty, whether particular policies and measures would be effective in encouraging walking. The barrier most often mentioned in answer to the open question was a difficulty to get policies through the transport planning system - which can be seen as closely related to the perceived difficulty to obtain funding. Of further importance was the perceived low profile of pedestrians and low levels of walking, opposition by traders, developers and the like and high car ownership and traffic volumes. Of these latter factors only the first one was mentioned by more than 25% of those authorities interviewed but all additional barriers that were mentioned, were consistently rated as very important.

The authors of the report concluded that the DoT would need to provide clear guidance on encouraging bids geared towards walking and foster the development of high quality examples of borough or city wide strategies to help demonstrate their viability. They further suggested that national voluntary groups and local authorities should work together to support the development of more vocal pedestrian groups at local level and that the DoT should commission research into cost-effective ways of monitoring travel patterns at local level and ensure that short journeys (under one mile) would be included in future editions of the National Travel Survey. These findings are very helpful in seeking to explain the apparent breakdown between awareness and intentions on the one hand and policies and action on the other - they do not, though, tally with the problems the government thinks need to be tackled, i.e. lack of specific training and information. However, the sample size in this survey was very small ($n=15$), it was limited to English authorities and the conditions at national level have changed somewhat since it has been conducted. There is now a recognised necessity for a more strategic approach to planning for the green modes at the local level. Considering also the government's wish to see better provision for pedestrians, its request for walking strategies to be included in LTPs and LTSs - on which future funding allocation will be based - and the apparently still pending publication of the National Walking Strategy, it would be of great interest to firmly establish the factors that help or hinder the development of such an approach. Were the findings made during the *Feet First* project representative of Britain as a whole, do they still hold true in the current policy climate or are there in fact more important factors operating at the local level? Finding the answer to these questions is essential if the translation of global ideals and national policies into local practice is to be successful.

2.2.2 Cycling

2.2.2.1 Why are cycling policies more popular than walking policies?

The most recent body of research on cycling, the needs of cyclists, the measures that can be provided for them and good practice examples is considerably larger than equivalent contemporary works on walking. The past bias against walking in the National Travel Surveys and Statistics might be considered part of the reasons behind this imbalance, although a look at the figures shows that the overall share of cycling in British transport is considerably lower than that of walking, even when trips under one mile are disregarded (39 miles and 17 trips cycled per person per year compared to 293 trips and 195 miles walked; DETR, 1998e) and this review has demonstrated, that interest in pedestrians has been high in the past. There are several other reasons for the greater attention cycling is receiving, though. Firstly, the NTSs have made short distance trips seem comparatively unimportant and cycling would consequently seem to be the most likely sustainable and cheap alternative to the car (cheap to provide for and cheap to use) for the 68% of recorded trips, which lie between 1.6 and 8 km (DTLR, 2001).

Secondly, it has been recognised, that priority areas for government action are often determined by the presence of one or several vociferous pressure or lobby groups (Monheim, 1990). This is the case for motorised traffic, since the car and lorry freight industry are economically powerful and have shaped government thinking e.g. on road building for many decades now. Pressure groups also helped to begin the debate on whether the car and road oriented policies should actually continue unchecked when in the 1970s *Friends of the Earth* and *Transport 2000* were founded, crystallising growing public concern for the environment in general and about the way the nation travelled in particular. Britain has many lobby, interest and pressure groups concerned with cycling, some are local (there are independent cycle campaign groups in almost every major city) others national (e.g. the *Cyclists' Touring Club* - now CTC, the *Bicycle Association* and *Sustrans*) while pedestrians are mostly represented through the nationally active *Pedestrians' Association* (which has few local branches) and the *Ramblers*, the latter being concerned primarily with leisure walking and rights of way issues. Thus, while almost everyone in Britain walks for some of their journeys or as part of them, pedestrians on the whole form a much more heterogeneous group than cyclists and other interest, such as that of also being a driver or a cyclist, may take precedence.

Partly because cycling in Britain is considerably less convenient than in other European countries (as a result of policy rather than necessarily climate or topography) it is much more of a lifestyle choice. In spite of 23 million bicycles being owned in the UK in 2000 (16 million more than in 1975; Davies *et al.* 1998a), total distance travelled by bike has fallen by 2 billion kilometres or one third since then (DETR, 1998e). At the beginning of the current decade it has also been estimated that 94% of all cars owned in Britain were used daily (MORI, 1990), whereas only one third of all bikes were likely to be used at least once a week (Morgan, 1987). But in spite of this obvious

underuse, cycle sales in the UK are still rising (from an average 600,000 p.a. in early 1970s to an average 2.4 million p.a. late 1990's) and this again could be part of the reason for the rising interest in cycling. Increasing sales and use would actually be of economic benefit to the cycling industry (many bike shops support and offer cycling activities for example) and although this is small in comparison to the economic force of the motor industry, it is still considerably larger than the business that can be made out of getting more people to walk to work or to their shops, which requires little special equipment, clothing or accessories. This latter connection does not appear to be supported directly by any research but in the light of the available evidence it would be a reasonable assumption.

As a result of what is probably a combination of the factors listed above, Britain has had a National Cycling Strategy since 1996, which in turn has generated considerable research interest and has led to a large number of local authorities drawing up their own local cycling strategies (23%; Oscar Faber 1999), twice as many as have a stand alone walking strategy (11%; Oxford Brooks University, 1998). It remains to be seen, whether the National Strategy for Walking, if it is ever published, will have a similar impact on the interest in pedestrian matters.

2.2.2.2 The needs of cyclists

The potential role and importance of cycling in solving transport problems and the benefits that could be derived for individuals and society from an increased use of the bike have been widely argued for some time, (Tolley, 1990; McClintock, 1992; Cleary & Hillman, 1992; Whitelegg, 1997). The publication of the NCS showed, that these arguments had been taken on board at national government level. To increase use of the bike, though, it is also important to know the specific needs of cyclists and the conditions, which need to be fulfilled to encourage more people to cycle.

A study commissioned by the German government summarised the factors, which research in Europe had found to influence cycle use (Bracher *et al.*, 1991) and which should consequently be considered by authorities wishing to improve conditions for cyclists to increase the modal share of the bike:

- social factors, individual factors, economic factors;
- traffic policy, legal framework, publicity work, traffic planning;
- dangers (including theft) and unpleasantness, journey purpose, weather, topography, natural barriers, artificial barriers;
- settlement structure size, traffic structure, population structure, cycle infrastructure

Clearly some of these factors overlap (e.g. social, individual and economic factors) or influence each other (traffic policy and cycle infrastructure), not all are of equal significance and their relative importance will vary from area to area. McClintock reviewed some of them in his book *The bicycle and city traffic* (1992) and concluded that traffic volumes and speed, social and cultural factors and official attitudes to cycling were among the more important ones. Settlement structure also has a

role to play, as land use patterns determine trip distances, which in turn influence the perceived suitability of the bike for a journey. Lastly, the convenience of travelling by car cannot easily be matched by any other mode, especially since provisions and access for it have become almost ubiquitous (Hillman & Whalley, 1983). Although factors such as weather and topography, too, are of some importance, they are more variable and less within the control of policy makers and transport planners. And even in hilly regions, routes can often be found, which avoid the steepest inclines. But knowing the important factors is of course only the first step, one must then establish how deterrents can be overcome and incentives created.

During the 1990's, most studies looking into factors, which influence cycling, have investigated why people - and motorists in particular - do not cycle more or at all. Snelson *et al.* (1993) surveyed 1000 motorists in Britain (all AA members), dividing them into three groups:

1. motorists, who cycle for some journeys that might otherwise have been made by car (cycling motorists),
2. motorists, who had used their bikes in the two years previous to the study but not as a substitute for the car (leisure-only cyclists) and
3. motorists who had not cycled at all in the previous two years (non-cyclists, 69% of the sample although 93% had learned to cycle at some point in their lives).

They found that one of the major reasons, why people had given up cycling was that they had obtained motorised means of transport (over a quarter of respondents) and 11% said danger from traffic was their main reason for not taking it up again. Of the leisure only cyclists, 41 % stated that the threat of accidents was a major problem although it stopped few of those who did cycle, especially those who did so frequently - it was seen as a problem, rather than a deterrent. Davies *et al.* (1997) also found that the danger from other traffic prevented non-cyclists to take it up again and Gardner (1998) established that traffic was what people most disliked about cycling. The problem was seen as greatest among those, who had considered cycling but were not doing so at the time of the study (53% of his sample).

Unfortunately, current statistics confirm the concerns about physical safety, as cyclists are 10 times more likely to become a road casualty for every trip taken than are people in cars and although overall, the number of cycle accidents in Britain has fallen, this is due to the general decrease in the share of this mode. The relative risk for cyclists has been increasing (Davies *et al.* 1998a, The Scottish Office, 1998b). Snelson *et al.* (1993) established, that 65% of their sample (all motorists!) agreed with the statement 'most drivers would rather there were no cyclists on the road at all' but 70% also thought that if you cycled and drove, you would become a more careful driver. Part of the problem for cyclists thus seems to be not just the attitude but also the awareness of motorists.

The AA study showed, that the second greatest problem mentioned by those motorists who did cycle were badly lit and badly maintained roads (pot holes, poor road surfaces). Surprisingly, the

study on attitudes to cycling by Davies *et al.* (1997) did not confirm this but found instead, that the convenience of the car, the effort involved in cycling and the mode's poor image were the main deterrents after danger from traffic. However, the first study was conducted by questionnaire, while in the second one, focus groups were used and this may have influenced the results, as might the fact that the sample in the first study was made up exclusively of members of the AA.

One of the aims of both studies was, though, to establish which group or groups of people could most easily be persuaded to cycle more and what would need to be done to encourage them. Snelson *et al.* (1993) found that about one third of all motorists might be persuaded to cycle more. Cycle lanes, safer roads (both in terms of maintenance and in terms of other traffic) and better weather were the main factors cited, that might encourage respondents to cycle more. The authors warned, however, that both roads and cycle paths needed to be well constructed and maintained and that the latter had to be located with travel demand in mind if they were to be well used. Traffic calming was also seen as a good measure to enhance cyclists' safety although traditionally, it has mainly been aimed at improving the pedestrian environment (see Section 2.2.1.2) and special care must be taken if cyclists are not to be endangered by ill thought out traffic calming measures. More importantly, perhaps, cyclists should not feel endangered, as statistics show that many perceived danger spots do not actually experience more accidents (Davies *et al.*, 1998a) but still contribute to the fear, which can prevent people from cycling.

Davies *et al.* (1997) identified different types of cyclists, who would respond to different measures and who could be persuaded to increase their use of the bike to varying degrees. They found that 'fair-weather' and 'lifestyle' cyclists (both terms described groups, which were mostly car oriented) mainly used their bikes in good weather, on weekends and for short, easy routes off road and that they would respond mostly to moderate leisure cycling initiatives and a raised status of the bike versus the car. 'Practical cyclists' on the other hand considered the bike as the most efficient way to commute (quicker and cheaper than the alternatives) and would be most responsive to money and time saving incentives as well as a positive attitude of employers. 'Idealist cyclists' were those, who cycled most overall (both for commuting and leisure trips) and would be most responsive to environmental arguments, restraint on car use and measures to increase safety and security. It was the 'mainstay' cyclists, who cycle an average amount and mostly due to a lack of alternatives, who would be most insensitive to any type of pro-cycling initiatives.

But research also found more indirect factors to be of importance. Firstly, it was considered important to ensure that any pro-cycling measures were not at the same time seen to be anti-car or even anti-motorist and did not suggest, that driving should be given up entirely (Davies *et al.*, 1997; Lawson & Morris, 1999). In a 1997 survey conducted by the AA, one quarter of the respondents (n=687) not merely found the idea of being forced to use their cars less unacceptable, they also - surprisingly - rejected the idea that their chosen mode of transport presented any environmental

problems. On the other hand, slightly more than half accepted that there was a problem but still would not allow themselves to be forced to change and the remainder saw a problem and also said they might accept some measures of change. Research by Stradling *et al.* (1998) also found that so-called 'pull' measures (improved alternatives, better information, flexi-time and teleworking combined with anti-car propaganda) were more acceptable to existing drivers than push measures (such as raised fuel prices, parking charges and decreased access). The authors further concluded, though, that both types of measures would help to reduce car use, but in different ways. They found that pull measures would be more popular, since people liked to feel in control and that it would thus be necessary to counteract the immense psychological benefits a car has, even as its practical advantages were gradually being eroded by worsening traffic problems. It is not known, however, which of the measures would in reality be more successful: people may not like being 'forced' out of their cars but might still shift modes and some could perhaps even come to appreciate the change, once they had been forced to make it.

It is very obvious, that cycling needs to be seen to have a higher status, as this is an important psychological factor. For some people, emphasising the link with health and fitness would achieve that. Thus public education and safety campaigns emphasising the advantages of cycling (Davies *et al.*, 1998a; Davies & Hartley, 1999) and the rights and needs of cyclists and pedestrians (Snelson *et al.*, 1993) would be helpful.

It has further been suggested, that fashion can influence the level of cycle use. Lawson (1998) showed that two in three bikes sold in Britain were mountain bikes (or ATBs), while in the Netherlands and Denmark, with their much higher cycle use, only about one in three were. While the perception of the mountain bike as a fashion item may mean that more people actually want to own a bike, this can also act as a deterrent to cycling - particularly for utility use - as people fear for the safety of their often quite expensive bikes with their many removable components. This effect would exacerbate the fear of theft already expressed by many existing and potential cyclists (Gardner, 1998; Davies *et al.*, 1998a). A further disadvantage of mountain bikes, especially in Britain, is the fact that they are normally sold without any accessories such as mudguards, carrying racks or lights. This makes them legally unroadworthy and also impractical to use for utility purposes. Lawson (1998) pointed out that bikes sold in European countries with higher cycle use normally have such accessories fitted as standard, which gives the buyer a ready to use means of transport suitable for shopping and commuting journeys as well as leisure rides. Lawson's study did not discuss cause and effect of this observation, however: whether ready to use bikes were sold more often because the demand for them was higher due to higher utility cycling levels or whether people were more likely to cycle for utility trips because the bikes they could buy in the shops were more suited to that kind of use. Similarly, current research gives no definite answer to the question, whether a higher status is conveyed on bikes and cycling once more people use them or whether more people use them because they do not perceive a loss in status through doing so. The answer

is likely to be a combination of both processes. Thus, enhanced facilities for bikes and greater awareness as well as enforcement of cyclist's rights and duties (such as for example the requirement to use lights in low visibility conditions) might encourage more people to cycle and would in turn could create a critical mass giving cyclists greater recognition, more rights and higher status.

Another factor, which would make cycling more attractive for many, would be improved opportunities for combining the bike with public transport. Most studies show, that people would not be prepared to regularly cycle journeys, which take longer than 25 minutes (time is usually more important than distance) but at the same time 60% of the UK population live within a 15 minute ride of a railway station (Traffic Advisory Unit, 1999c). Government research concludes, that many longer journeys, especially journeys to work, made by car or car and public transport could potentially be substituted by a combination of bike and public transport. The most important provision to encourage such modal substitution would be safe and sheltered bike parking facilities at railway stations (McClintock, 1992; Snelson *et al.*, 1993; Davies *et al.*, 1998; Guthrie & Gardner, 1999) as most people want to be able to leave their bikes at the station to return to on the home journey. Heated waiting facilities are of further importance, since the bike/train combination does not compare favourably to the car if cyclists have to wait for the train on cold draughty platforms (Guthrie & Gardner, 1999). Better facilities for taking bikes on public transport are also needed, with a significant increase in capacity where such facilities already exist, as many commuter trains do not have space for more than two bikes thus necessitating advance booking (*ibid.*)²⁰. Finally, safe bike parking and changing rooms at the destination (often the place of employment) are significant for those, who wish to take their bike on the train in order to allow cycling at both ends of the journey. Similar provisions could help the combination of bike and bus, although the potential for this has not been investigated in as much detail as for the bike-rail model.

It becomes clear from the studies cited above that the first steps towards higher cycle use in Britain will have to be initiated through public policy, as the obstacles currently preventing individuals from cycling more are largely out of their own control or are unlikely to be changed without some input from outside. They cannot improve facilities and they are unlikely to change their attitudes and perceptions without incentives from the outside. The most urgent improvements need to be made to cyclists' actual and perceived safety on the road, to cycling infrastructure and people's awareness and opinion of the mode. However, land use planning will also have a role to play, if the potential for cycling in Britain is to be fully explored. The general acceptable limit of 25 minutes per journey sets a cyclist's radius at about five to eight kilometres, but this is likely to be shorter for trips with heavy loads. Current land use patterns will have to be adapted but if they are made more amenable to walking - as has already been argued above - cycling will automatically also become more feasible.

²⁰ McClintock has reviewed some success stories in this area in continental Europe (1992).

Additionally Snelson *et al.* (1993) and Stradling *et al.* (1998) demonstrated that the comparative convenience of the car was a major factor influencing modal choice among those who own or have access to one. It is thus likely, that measures to support cycling will only be truly successful, if they are coupled with measures, which make driving less attractive (more expensive, less convenient)²¹.

2.2.2.3 Measures for cyclists

The development and evaluation of traffic calming in Britain has already been described above (Section 2.2.1.2). Traffic calming was originally brought to Britain to increase road safety for pedestrians and safety considerations have long been the driving force behind measures for cyclists as well. Consequently, many studies have concentrated on assessing the safety of different engineering and planning measures for cyclists but also increasingly on convenience enhancing facilities such as parking facilities.

Cycle lanes and tracks are one of the most popular measures but surprisingly do not appear to have been studied widely. One reason might be, that the vast majority of accidents involving cyclists occur at junctions, where many factors other than for example the width of the cycle lane or the colour of its surface influence the risk of collision. A study carried out in Finland (Räsänen *et al.*, 1998) found, that two way cycle tracks increase the chance of cyclists being hit by a car crossing the track at a junction as the drivers were mostly looking out for traffic coming from the left (this was in a right-hand traffic system) but that this risk could be reduced by removing sight obstacles, colouring the surface of the cycle track and installing warning signs.

Advanced stop-lines are a measure specifically designed to increase safety for cyclists by allowing them to move ahead of stationary traffic at signalled junctions. A British study (Wheeler, 1995) found these to be generally effective even without special adjustments made to the signal arrangements (e.g. giving cyclists an earlier green phase), particularly if coloured surfaces and mandatory cycle feeder lanes were used as these features minimised the encroachment by motorists.

Roundabouts are of further concern for cyclists. They are generally designed to maximise capacity and maintain momentum of motorised traffic, leading to a geometry, which is disadvantageous for cyclists especially because it allows comparatively high speed for motorised traffic. Factors such as entry path curvature, entry width, number of lanes, entry angle and visibility greatly affect accident rates (Allott & Lomax, 1991). However, other studies have found that roundabouts with a maximum diameter of 28 m can benefit cyclists, as they reduce the speed of drivers entering the junction and this was particularly true in continental Europe, where roads tend to approach the

roundabout at right angles rather than tangentially, as is often the case in Britain (McClintock, 1992; Traffic Advisory Unit, 1997a). The solution to the „roundabout problem“ depends on local conditions and could entail a - costly - redesign of the geometry or the control of entry speeds (perhaps through traffic calming measures) and priorities, peripheral cycle tracks (preferably coloured to make them more noticeable) and improved signing (McClintock, 1992).

One theme emerging from these studies is the difference between provision for pedestrians and cyclists. A pedestrian network separate from motorised traffic already exists in the form of pavements and the aim in providing for people on foot is generally to minimise encroachment by motorised traffic and create a pleasant and stimulating environment. There is on the other hand no significant separate cycling network to speak of in Britain. Generally, cyclists are expected to share the carriageway with motorised traffic rather than the pedestrian network and while neither combination is desirable, cyclists are certainly more endangered in the existing situation than pedestrians would be were cyclists permitted to share parts of the pedestrian network²². As a consequence, measures for cyclists usually aim to ensure the smoothest possible co-existence between cars and bikes rather than focusing on convenience or even attractiveness. The quality of the cycling environment in Britain is thus even more defined by safety than that for pedestrians. No studies were found, which looked primarily at ways of making cycling, including utility cycling, a pleasant and convenient experience.

However, measures to increase the convenience of cycling are being developed and adequate parking facilities are particularly important as they not only allow cyclists to park easily and within reasonable distance of e.g. shops or the railway station but also make cycle parking safer, thus reducing the risk of (and anxiety over) theft and vandalism. They furthermore help to keep bicycles out of the way of other road and pavement users. Studies of cycle parking facilities found that well designed and positioned schemes (e.g. at rail stations) were likely to encourage greater use of bikes but only if they became part of a cycling culture supported by a seamless cycling infrastructure (Sully, 1998; Traffic Advisory Unit, 1997b & 1999d).

It has long been recognised that providing special facilities for cyclists will not have much of an impact, if the overall situation is not improved (McClintock, 1992) - although this realisation is not always translated into practise. But more strategic approaches have been attempted all over Britain and these have comprised of a variety of different features. Cyclists have been excluded from certain restrictions applying to motor traffic, such as no turning regulations, road closures, one way circulation and even car free city centres. Contra flow cycle lanes are one important way of achieving such exemptions. Research has shown, that while cyclists often travel contra-flow illegally

²¹ The latter are of course the least popular with the (driving) public and therefore also with politicians.

²² Experiences in Cambridge with shared use paths have shown just that: by lowering accidents between cyclists and cars but not creating any additional incidences between cyclists and pedestrians (Wallace, 1992)

in many one way streets (Ryley & Davies, 1998), the introduction of legal contra-flow schemes increased the proportion of cyclists using them. The study also showed that good design can overcome any dangers associated with such schemes (such as cars emerging from side streets) and that they operated safely under a variety of conditions.

Allowing cyclists access to car free city centres is a further step that can make cycling a more convenient mode, and (importantly for stimulating modal shift) it can even make it more convenient than using the car. However, it is important that in such schemes potential conflicts between cyclists and pedestrians are avoided. It is possible to provide alternative routes for cyclists around pedestrian areas and it has been shown that as long as they are no more than about 25% longer than the direct route, are convenient, well signposted and safe (e.g. on bus lanes, service roads or specially designated car-free roads), they will be used by most cyclists (Davies, *et al.*, 1998b). However, where this is not possible, cyclists can be allowed into pedestrianised areas, as research has shown that actual conflict between the two modes in such situations was minimal (Trevelyan & Morgan, 1993).

Ideally, all these measures should be combined to create safe, attractive and continuous cycle networks and although an ideal situation has rarely been achieved, several attempts have been made in Britain, which comprised some of the elements described. The book *The Bicycle and City Traffic* (McClintock, 1992) reviewed a number of contemporary schemes in Britain (Nottingham, Cambridge and London) and on the continent. Nottingham is an interesting case study as it is the home of Raleigh, the oldest British bike manufacturers. It was in fact Raleigh Industries together with the City Council, who in the early 1970s commissioned a report on how to improve cycling in the city. Unfortunately, the recommendations made were considered to be too radical and it was only at the end of that decade, that further steps for cyclists were taken. These followed the government's announcement of its Innovative Cycling Scheme budget, proving once more how important national level activity can be in stimulating change at local level. According to the reviewers (McClintock *et al.*, 1992), the Nottingham experience showed the great value of consulting with local cyclists as well as other groups (such as the disabled) from the start and inviting their feedback on completed schemes to address early problems and to learn from the users. The project, which has created a good (but not continuous) network of cycle paths, was considered successful. Monitoring during various stages of completion and immediately afterwards showed that while there was no substantial increase in numbers of cyclists, the national decline in cycling during the five years of implementation was not matched. Street surveys established that the measures succeeded in making cyclists feel safer overall, thus reducing the likelihood of a future switch to the car. However, the project also showed that it was important to ensure a good translation of design intentions into quality of construction and maintenance (which was not always the case) and that adequate time should be allowed for the development of such an extensive network (the project ran four years over time). The reviewers found further, that there were several

elements missing when comparing Nottingham to schemes in Germany and the Netherlands, which was partly due to the fact, that the DoT had shown itself reluctant to allow the inclusion of detailed markings and cycle track layouts in junction arrangements or the use of red cycle aspects on signalled crossings. The authors furthermore recommended, that much better links should be established between the urban cycle network and the surrounding countryside. Projects such as the Sustrans National Cycle Network are now addressing shortcomings in this area in many towns and cities.

Other schemes such as those developed in Cambridge and London during the time of the Greater London Council and its cycle planning project team (1981-1986) are also reviewed in McClintock's book (by Wallace, 1992, and Lester, 1992, respectively). As in Nottingham experiences there showed the great value of close co-operation with cycle groups from the outset as well as the importance of political will to ensure that enough resources are dedicated and sufficient attention is paid to all relevant details. However, although all the schemes described were considered to be success stories, the figures only showed some reduction in accident statistics at certain locations and slowed or halted reduction of cycling compared to national trends. As Lester himself pointed out no measure, however well designed, will cause any increase in cycling, if a continuous network cannot be created - and that is of course particularly difficult in London. He also concluded, though, that the most important lesson learned from the London experience was that *„there were few, if any, locations, where it was not possible to install safer and pleasanter facilities for cyclists“* (p.153).

Although this is encouraging, this development lags behind countries like Germany, Denmark and the Netherlands for example, where sustained efforts on national as well as regional and local level have resulted in sometimes substantial national increases in the modal share of cycling. Germany for example achieved a national increase from 8% to 12% between 1977 and 1997 (Pucher, 1997), although local and regional cycle use varies between 30% (e.g. Münster, Erlangen), 10% (e.g. Frankfurt, Cologne and Munich) and as little as 3% in Berlin (Bracher, 1992). A more detailed discussion of possible reasons for these successes can be found in Section 2.2.2.4 below.

McClintock (1992) has suggested that in Britain much greater attention needs to be paid to the context into which cycle facilities are placed. That includes existing land use, road and travel patterns, accident statistics and other transport policies as much as the general attitude towards cycling and cyclists. He argued that among existing cyclists new measures can often be seen as tokenism in a largely car-oriented climate which might result in no more than getting bikes out of the way of motorists. The overall low cycle use in Britain also means, that the great majority of motorists have not been on a bike since childhood (93% of the population have at some time in their lives learned to ride a bike; Snelson *et al.*, 1993). This in turn results in British drivers being much less respectful of cyclists than their continental Northern European counterparts as several researchers have found that drivers, who also cycle, show a more respectful attitude and greater

awareness of the needs of cyclists in traffic (Speed, 1988; Snelson *et al.*, 1993). Making drivers more aware of cyclists when they learn to drive (perhaps even making them cycle as part of their test?) and enhancing the enforcement of laws regulating both cyclists and drivers could also help to foster greater respect. For although it is the cyclists who will sustain the more severe injuries should an accident occur, cyclists, who ride without lights or perform sudden and unsignalled changes in direction can also erode what little respect for cyclists there may be among motorists at present.

The most recent and comprehensive survey of cycling facilities in Britain has been carried out by consultants Oscar Faber on behalf of the DETR (Oscar Faber, 1999), surveying councils and other government bodies as well as firms and businesses. The researchers sent out 700 questionnaires and obtained a 35% response rate, with almost half of the public sector organisations returning a questionnaire. The project's main aim was to compile a database of cycle initiatives which would identify

- information sources;
- key contacts in local authorities, campaigning groups, central government and commerce; and
- ideas for disseminating information based on the register to promote cycling initiatives best practice. (ibid., p.1)

The resulting *Cycle Initiatives Register* gives details of 245 contacts and 266 individual cycle schemes, listing information such as type, size and location of the scheme, information on accidents and cycle flows before and after implementation and sources of funding. However, not all respondents supplied all types of information and the researchers suggested that „*the provision of most cycle initiatives is based on qualitative grounds as opposed to quantitative evaluation*“ (ibid., p. 12) meaning that most schemes were not based on numerical evaluation of an existing situation, such as accidents or cycle flows, and that very often any effects of the scheme on these parameters was not subsequently monitored. The only exceptions to this were found to be local safety schemes that were based on accident statistics and a predicted first year rate of return. Although this particular finding is somewhat disappointing, the register may well prove to be of use to practitioners who wish to access information on particular schemes.

In conclusion it can be noted, that British transport practitioners have had a good level of experience in trying to cater for cyclists but that the majority of efforts have been directed at improving safety and consequently accident statistics. Although - together with personal perception of safety - the actual risk of personal injury is certainly one important factor which currently prevents cycling from featuring higher in the modal split league table, there are many others, which still need to be addressed more effectively if current plans at increasing the modal share of cycling are to come to fruition. Ensuring the creation of convenient and continuous networks with good end-of-trip facilities and concerted efforts at changing the general travel culture and attitudes to cycling in particular are of paramount importance in this context.

2.2.2.4 Policies into practice – where and how?

The growing interest in cycling nationally and internationally has not only lead to a number of studies on enhancing urban cycle use (both walking and cycling play only a very small role in the literature on rural transport) but also those, which examine cycle policy success stories, both on a micro and macro scale. Pucher (1997) looked at reasons behind the revival of cycling in urban (western) Germany, where the modal trip share rose from 8% to 12% within two decades, at a time when cycling in Britain declined dramatically (by 2 billion passenger kilometres or two thirds between 1987 and 1997 alone; DE'TR, 1998e). He found that everywhere in Europe, where various levels of government had adopted strategies to make cycling faster, safer and more convenient (i.e. Germany, Netherlands, Denmark and Switzerland) the modal share of the bike had increased, in some cases substantially, whereas it had continued to fall in countries such as Britain and France, where the needs of cyclists had been neglected. Pucher also established, that the modal share of cycling in German cities was largely dependent on the policies that had been adopted, rather than their climate, topography or size. He found a strong correlation between the size of a city's university student population and the level of cycle use. His explanation for the influence of students was twofold: firstly, students cycled more than the rest of the population and secondly, perhaps as a result of this interest, they had helped to elect local administrations, which have developed cycle friendly policies (mostly coalitions between the Social Democrats and the Greens). It is certainly true in Britain, that cities such as York and Cambridge, which have a large student population, especially relative to their size, have very strong cycling strategies and also the highest modal share in cycling (Whitelegg, 1997, Ch. 11; Wallace, 1992). There is no research, however, investigating this link or any other potential contributing factors. And even Pucher's analysis concentrated on investigating the policies and measures, which had been employed and were found to be successful rather than the processes, which had helped to link policies and action.

However, a later article by Wachs (1998) followed the trail laid down by Pucher - whose primary purpose had been to compare the situation in the US to that in Europe - and asked why a similar development to that in Germany had not occurred in the US. He took as the basis of his article Pucher's conclusion that if policies similar to those practised in Germany were to be adopted, cycling in US cities would also experience a dramatic rise in modal share. Wachs came to the conclusion, that there was not a solid enough basis of public opinion - and thus political commitment - in support of pro-cycling policies and that this was largely due to the fact, that the US had a highly car oriented economy. As a result of this, cycling policies did not have a large constituency but many vociferous opponents and headway in cycling policies had only been made where persistent and well organised lobbying groups had applied pressure. Although Wachs' conclusion supports part of the argument outlined above as an explanation for the great difference in political interest for cycling and walking, it is not wholly convincing, as Germany, too, has a large car manufacturing industry and per capita car ownership is second only to the US. Thus neither

article provides a satisfactory explanation for the great difference in cycle policies between Germany and the US and British research on this issue was also not found.

Welleman *et al.* (1995) have argued that at least part of the reason for the vast difference in cycle use between the Netherlands and the USA was that the former are a small and densely inhabited country (371 inhabitants km⁻² as opposed to 27 km⁻² in the USA; Barrata, 1998) and that there was simply not enough space to provide for the same level of car use as in the USA. It would be tempting to extend this argument by saying that because of the great population density, distances covered are usually shorter, but that would be true only on a regional scale as even in the US, 49% of urban trips are 4.8 km or less (Pucher, 1997) but only 1% of these are made by bike. Thus while a lack of space has certainly played a role in shaping the transport network in the Netherlands, Britain should see much higher cycle use if this was the main reason, as it, too, is comparatively densely populated with 242 inhabitants km⁻² (Barrata, 1998).

Welleman *et al.* (1995) also stressed that providing better facilities was not enough to make cycling a more attractive mode but that measures regulating the excesses of motorised traffic were essential, if pro-cycling policies were to succeed. Like Pharoah and Bendixson (Anon., 1999b), they emphasised the vital importance of re-dividing road space more fairly and protecting cyclists from motorised traffic.

Others have also asked the question of how cycling can be made more attractive and why it has been neglected. Knight (1999) looked at the example of New Zealand and Auckland City in particular. He pointed out, that the disadvantages of excessive car use - for the individual, for the society and for the environment - had been clear since the 1970's and that the benefits of developing walking and cycling as alternatives had not only been known since then, too, but had even been recognised at regional government level since at least 1980. Yet this recognition had made no practical difference. Knight concluded, that in New Zealand „*under a market oriented political philosophy, bureaucrats [i.e. politicians, road engineers and planners] can claim it is not their role to engineer society*“ (ibid., p.25) but that they were merely providing the facilities people wanted and what they wanted was to drive. Clearly, if a full economic cost-benefit analysis were to be applied taking into account all external as well as internal cost caused by transport, even market forces would dictate a different approach. However, Knight, too, could not point to any analysis of the reasons why bureaucracy failed to account for this in looking at alternatives to car transport. For cycling, too, the question over what determines the step from policies to practice remains unanswered.

2.2.3 Walking and cycling policies in Local Transport Plans and Strategies

The Scottish Executive published an assessment of the preliminary LTSs, which had been due for submission by Scottish local authorities in July 1999 (Hetherington, 2000; see also Section 2.2.3). This document did not provide a full overview of every LTS submitted but rather provided a summary of how well the guidelines for preliminary LTSs had been followed and where the strongest and weakest points of the submissions could be found. The author found a „*universal acceptance of the desirability of taking measures to improve opportunities for walking, cycling and [...] public transport*“ (ibid., para. 1.3) but at the same time noted that there was less clarity and consistency about the need to reduce, or curb the growth in, road traffic. This resulted in „*the weaker strategies*“ [sic.] failing to link a commitment for increasing travel on foot, by bike and by public transport with measures aimed at curbing car use (para. 2.11). The review also found a general lack of specific long term and interim targets (para. 2.18), coupled with a widespread absence of plans for quantitative appraisal of alternative plans and strategies (para. 2.14).

If the modal share of walking and cycling is to be increased, it is important not only to set targets but also to assess how various approaches would contribute to achieving these. Only with targets in place can the achievement of objectives be measured. And only through measuring progress can the effectiveness of different measures be assessed. Even those strategies, which did state targets for walking and cycling, generally did not make clear to what extent these were based on quantitative forecasting methods (para. 4.2). It is rarely useful to set targets without knowing the baseline since they may end up aiming too high or too low, both of which would be counterproductive.

However, all strategies reviewed did propose some measures for both walking and cycling (e.g. new pedestrian crossings, pedestrianisation, CCTV, better footpath maintenance, on-road cycle lanes, cycle audits and cycle storage at stations; para. 4.1). Traffic management measures were found to be covered in all submissions and generally included traffic calming and road space reallocation to cyclists and pedestrians (para. 4.27). Safe(r) Routes to Schools were also dealt with in most LTSs (para. 4.3) although Hetherington (ibid.) provided no further assessment of the quality or quantity of schemes (but see Section 2.1.6.1). Home Zones received no mention in the review but might have been included in some of the individual LTSs.

In conclusion it seems hopeful that the general awareness of a need for action may in time lead to the embedding of specific measures for pedestrians and cyclists into more strategic approaches but it remains to be seen, whether the next round of LTSs will show an improvement in this area. At the time of writing there was no similar overview of the quality of LTPs submitted in England and Wales.

2.2.4 Conclusions

Section 2.2 of this review has shown that the needs of pedestrians and cyclists have been well defined. Strategies and measures to fulfil these needs are well known and have been tried and tested - if mostly not in Britain but continental Europe - and best practice guidance and advice for both engineering measures and strategic approaches is widely available, although some of it has only been published in Britain in recent years. Together with current national policies taking a more progressive stance on the potential roles of walking and cycling, these factors should indicate a future in which local authorities will greatly increase their support for the two modes and where this support will lead to significant improvements on the ground, which will result in rising modal shares of both modes. However, the literature also shows, that national policies and good intentions within local authorities are often not sufficient to bring about actual changes. Research looking at the factors which can either cause or prevent this breakdown has been shown to be scant. Studies usually concentrated on the quality and quantity of pro walking and cycling measures which were implemented but said very little about the processes which had contributed to the conversion of policy and good intentions into practice.

If the current efforts at dealing with Britain's transport crisis at least in part by increasing the role walking and cycling play in travel patterns, then the internal processes helping or hindering the formulation and implementation of policies aimed at supporting these modes must be identified. Clearly there are factors at work, which have not yet been adequately identified. In order to address this subject adequately, it will be necessary to examine current thinking on policy implementation, particularly in relation to transport planning.

2.3 IMPLEMENTATION THEORY

Implementation theory is closely linked with theories on decision making. However, the latter is predominantly concerned with the making rather than the implementation of policy. The review of decision making theory thus provides an interesting background to the theory of implementation but it is not directly relevant to this thesis and is thus presented in Appendix A. The following sections provide an introduction to the field of implementation study and review the most prevalent implementation theories, which have been developed so far. Section 3.7 summarises the implications of this theoretical framework for the current study.

2.3.1 Introduction

Strategic success in the first instance requires an appropriate strategy, but this is not enough. It also requires that the strategy be implemented successfully (Hussey, 1995, p. 2)

The book by Hussey, from which the above quote is taken, is concerned mostly with strategy implementation in a business management context but this statement applies equally to walking and cycling policies or indeed any other type of government policy. The beginning of Hussey's statement suggests the question of whether the national strategies for pedestrians and cyclists have been appropriate to catering for these modes and increasing their share of overall travel activities. However, that is not the question asked by this study. The overall fall in walking and cycling levels in Great Britain seems to suggest that the national strategy has not been appropriate – or at least not entirely so – but on the other hand it obviously has not been inappropriate or perhaps obstructive enough to prevent successful implementation in at least some local authority areas. The literature shows, that some local authorities have been successfully providing for pedestrians and cyclists and have done so in some cases for over a decade (see Section 2.2).

As has already been argued, this observation is the starting point for the present study, which is looking at implementation at the local level. The theoretical background for this subject area has only received significant attention in the last 25 years or so – compared to the study of policy and decision-making and the analysis of policy outcomes it is thus a relatively young field of study (see also Appendix A). Ham & Hill (1984) point out that during the seventies there was recognition of a gap in the literature, a missing link between those who looked at how policy was – or could be – made and those who looked at the effects it had. Parsons (1995) also comments that „*analysts of policies tended, until the 1970s and 1980s, to bypass the impact of bureaucracy and service-providers on the effectiveness of a policy*“ (p.462) and that there was a prevailing reductionist tendency to distinguish „*between policy as politics and administration as implementation*“ (ibid.).

Early approaches to implementation analysis indeed show, that there was little recognition of implementation as an important process distinct from both policy making and policy outcome. In 1975, James E. Anderson wrote about ‘*The implementation of policy*’ in a chapter of that title in his book *Public Policy Making*. Interestingly, the only theoretical approaches offered in that chapter - which mostly lists the agencies responsible for implementing policy, the instruments they have available to them and the potential reasons for public compliance or failure thereof²³ - relate to decision making.

Another book, *Implementation of Strategic Planning* edited by Peter Lorange (1982²⁴), which like Hussey’s volume concentrates on the strategic management of businesses, further illustrates this point. Despite the title, all contributions to the book look at how approaches to strategic planning need to be modified in order to ensure successful implementation rather than dealing with ideas about how (strategic) plans are implemented. Furthermore, neither of the contributors quote any of the eminent proponents of implementation theory drawn on by other reviewers of this issue (Ham & Hill, 1984; Parsons, 1995), such as Pressman and Wildavsky (1974), whose seminal work on implementation represents the first comprehensive theoretical approach to that subject or Sabatier and Mazmanian (1989), who were among the first to study the implementation end of public policy making in detail.

As Sabatier & Mazmanian (1989) pointed out there was (and still is) rising concern about the ability of governments to deliver, even on policies, which have received considerable public backing and have been legitimately enacted into law – such as road traffic reduction in Great Britain. They proved their point through the examination of a collection of case studies, which are discussed in Section 2.4.

There is a rising tide of opinion among policy makers, as well as the general public, that sustainability, both social and environmental, is a desirable aim of public policy. This opinion extends to a broad agreement in the British population at large and among politicians of all political parties that current travel patterns in Great Britain are not sustainable, that the situation will get worse if nothing – or too little – is done and that consequently something should be done. It is a matter of both public and political debate, whether the strategies set out at the time of writing by the Labour government for reducing road traffic growth and increasing public transport use for example are actually effective. But beyond broad statements on their significant – potential - role in a sustainable transport system and the increased attention which should thus be given to walking and cycling, the making of policies for these modes and certainly their implementation are largely seen as a matter for local authorities. This is reflected in the fact that local authorities are now

²³ The book is written from a US American perspective and thus deals with the processes in that system.

²⁴ based on a seminar held in 1979

required to include sections (if not stand alone strategies) on walking and cycling in their Local Transport Plans or Strategies. This suggests, that the current study should analyse walking and cycling policy implementation at the local rather than national level.

Indeed, Sabatier & Mazmanian (1989) argued that while the substance of programmes and policies was important to implementation research, the focus lay on how well they were executed. Implementation researchers' interest in policy formulation was therefore limited to understanding how the formulation process and the resulting mandates and responsibilities enhanced or detracted from a programme's implementability. They proposed the following questions:

- How well does a statute or directive [or policy] define objectives and structure the implementation of those objectives?
- Whose responsibility is it to see the policy is implemented?
- What resources are they given?
- What impediments are placed in their path?
- What does the variety of recent implementation efforts, both good and bad, tell us about the general factors central to success or failure?

(Sabatier & Mazmanian, 1989, preface)

In the context of this study, the answer to the second question, at least from a national government perspective, is clear: the local authorities. However, it will be one of the main tasks of this study to test whether local authorities consider this answer to be equally clear cut and also to collect evidence, which will help to answer the remaining questions from Sabatier's and Mazmanian's list, which in turn relate to 4th group of research questions listed in Table 1.1 (Section 1.4).

As the other main objective of this thesis will be to devise a theoretical framework (or frameworks) for the successful implementation of walking and cycling policies, it will first of all be necessary, to look at existing implementation models and theories.

2.3.2 The top-down approach

2.3.2.1 The original theory

The top-down model was the first to be developed in response to the recognised failure of existing approaches in policy analysis to examine systematically what happens to policies at the implementation stage. The seminal work on this subject, *Implementation* by Pressman & Wildavsky (1973), was based on observations made of the efforts of the Oakland Economic Development Agency (EDA) in California to implement an economic development programme for the city, which in turn was based on a wider strategy originating at federal US government level.

One of the main conclusions of the original work was that the implementation process can only be as effective as the links between the departments and organisations involved in it and if these links

were not operating at or very near a one hundred percent level of efficiency (in terms of e.g. information dissemination, delegation of tasks, acceptance of objectives, communication and enforcement), then there was a good chance of sizeable cumulative shortfalls becoming evident at the end of the implementation chain. It was suggested that implementation could thus be subjected to mathematical modelling and analysis if one took „perfect administration“ as a starting point, much as economists used to assume perfect competition as a basis for economic models.

Good implementation would then require a good chain of command and a capacity to co-ordinate and control. The ideas of Pressman & Wildavsky were subsequently developed by other authors, who proposed a number of conditions for perfect rational implementation. Hood (1976) suggested the following basic requirements:

- that ideal implementation was a product of a unitary ‘army’-like organisation, with clear lines of authority
- that norms would be enforced and objectives given
- that people would do what they are told and asked
- that there should be perfect communication in and between units of organisation
- that there would be no pressure of time

In some ways, these requirements seem reminiscent of those laid out for a successful rational approach to decision making (see Appendix A). Leaving aside the question of whether the actual principle of top-down implementation is desirable, it is clear that in the context of local government these conditions are unlikely to ever be fulfilled, even in approximation. Gunn (1978) provided a slightly more wide ranging summary of the general state of play in terms of implementation theory and practice, setting out a framework of conditions that decision makers could theoretically aim to fulfil and that could also be used in analysing the implementation of a particular policy or programme:

1. Circumstances external to the implementing agency do not impose crippling constraints
2. Adequate time and sufficient resources are made available to the programme
3. Not only are there no constraints in terms of overall resources, but also at each stage in the implementation process the required combination of resources is actually available
4. The policy to be implemented is based on a valid theory of cause and effect
5. The relationship between cause and effect is direct and there are few, if any, intervening links
6. There is a single implementation agency which need not depend upon other agencies for success. If other agencies must be involved, the dependency relationships are minimal in number and importance
7. There is complete understanding of and agreement upon the objectives to be achieved; and these conditions persist throughout the implementation process
8. In moving towards agreed objectives it is possible to specify, in complete detail and perfect sequences, the tasks to be performed by each participant
9. There is perfect communication among and co-ordination of, the various elements or agencies involved in the programme
10. Those in authority can demand and obtain perfect obedience.

While these ‘commandments’ may in some ways appear more relative than those laid out by Hood (cf. the statements on time limitations), it is nevertheless difficult to see how they could ever be fulfilled in practice. Statement 6 will serve to demonstrate this, as it also presents a particular problem in failing to define the concept of agency. While the administrative unit this refers to will obviously differ depending on the programme under investigation, brief consideration will actually show, that the smallest unit of implementation at the local government level is probably comprised of one or two officers, who cannot on their own implement any policy, let alone entire programmes and strategies.

Local governments are composed of different departments, including transport, economic and planning departments for example, which often have different and potentially competing priorities. Individual departments are comprised of a collection of units such as roads maintenance and traffic engineering. Although these need to work closely together if walking and cycling policies are to be implemented successfully, they will often have different traditions and cultures (see also critiques of the rational decision making model, Appendix A) as well as diverging priorities.

The rational top-down model is thus essentially a prescriptive theory, which places too much emphasis on the definition of goals at the top rather than the input of workers down the line of command. This should in any case be considered more in terms of a network as it is hard to envisage a policy implementation process, which relies on a linear sequence of phases executed by a strict hierarchy of actors. Thus, it very soon became clear to implementation theorists, including Pressman & Wildavsky, that the idea of policy implementation as a rigid sequence, which went down from the top, needed to be adjusted and understood more in terms of an evolutionary sequence, which included processes of learning and adaptation.

There are however a number of mechanisms observable in current implementation procedures, to which the top-down model has some relevance. Common top-down interventions in public policy are changes in how services are to be administered (e.g. the introduction of compulsive competitive tendering for local government service provision), new arrangements for policy delivery (e.g. local government reorganisation) and the shifting of service delivery from one agency to another (e.g. the creation of health trusts for the delivery of hospital care) (Ham & Hill, 1984).

2.3.2.2 Critiques of the top-down model

One of the main criticisms levelled at the top-down model is its failure to take into account the role of actors further down the line. Their importance had been commented on as early as 1971 by Lipsky, who argued that it was important to look at interaction of bureaucrats with their clients at the service/public interface (or street level, a terminology, which led to the creation of the subsequently much referred to concept of ‘street-level bureaucrats’). Failure to do so could

simplistically be likened to considering the waiting staff in a restaurant as non-sentient robots which shuttle between the kitchen and the tables, when in fact the relationship between those who serve the food and those who eat it can be the crucial factor in determining the success of a culinary enterprise.

Lipsky later developed his idea of street-level bureaucracy further (1976, in Parsons, 1995) and concluded that those at the interface of service delivery, such as teachers and welfare workers, are often confronted with unmanageable pressures from both the public and the government, which can lead to ineffective policy implementation - as well as a public perception of the government as being inefficient. In addition to this, many street-level bureaucrats or administrative units develop coping strategies, which involve compromise and prioritisation and these decisions in turn depend on individual circumstances and the nature of pressure experiences. Such behaviour further 'distorts' policy outcomes as it gives local conditions a part in implementation not envisaged by the top-down model²⁵.

Hargrove (1975 in Zeckhauser & Leebaert, 1983) criticised the way in which the top-down approach handled the concept of policy and the policy/implementation relationship. He argued that the assumption, implementation should have – or less realistic still – would have a clearly formulated and well understood policy as its objective was dangerous. Policy could either be seen as a stance²⁶ or it could better be described as the process of turning a stance into concrete proposals. It is particularly in the latter case that policies often become controversial, even at the 'top', while policy as a stance might be adopted by politicians or other decision makers, who wish to be seen to be associated with certain important topics in the 'right' way but have no real intentions of doing anything about the question in hand²⁷ or of providing the necessary resources for others to do so. This is especially possible in a system, where policy formulation and implementation can be clearly separated (Barett & Hill, 1984), as is the case with walking and cycling policies formulated at a national level in Britain.

Contrary to the relatively clear cut principles laid down by the top-downers, it is also often the case that decisions are not taken at the policy making stage and are left to the implementation process for one or more of the following reasons (and there may be others)

²⁵ In the context of walking and cycling policies, it is interesting to ask who the street-level bureaucrats would be, since the services required are not generally delivered person to person. Would it be the traffic planners, who design new schemes at the drawing board or the road engineers, who oversee their construction or the contractors, who actually carry out the building work? The answer probably lies in the eyes of the public and who would be considered responsible in the event of conflict or failure. If the actual necessity of a scheme is called into question, the interface would more likely be with the traffic planners while badly repaired potholes might more readily be blamed on road engineers or contractors.

²⁶ such as the one that levels of walking need to be increased

²⁷ the long awaited but ultimately not published National Walking Strategy is a case in point (see Section 2.1.9)

1. Conflicts cannot be resolved during the policy making stage [e.g. whether or not road user charging is desirable in city centres nation-wide]
 2. It is regarded as necessary to let key decisions be made when all the facts are known to implementers [e.g. local targets for reducing growth in road traffic]
 3. It is believed that implementers are better equipped to make certain decisions than anyone else [e.g. which parts of a town or city centre are suitable for pedestrianisation]
 4. Little is known in advance about the actual impact of the new measures [e.g. the introduction of workplace parking charges]
 5. It is recognised that day to day decisions will have to involve negotiations and compromise with powerful groups [e.g. local traders associations, civic trusts, pedestrian and cycling pressure groups]
- (Ham & Hill, 1984, p.106)

As a consequence, Barrett & Hill (1984) describe the policy implementation process as a continuum, in which both policy formation and implementation may occur in parallel. Taking into account the relative importance of action and attitudes at ‘street-level’ – and at any other points in what should be viewed as the implementation network rather than chain – and the perception of policy as a strategy (which is open to further interpretation, refinement and even change once it has been formulated at the ‘top’) critics of the rational top-down model called for a bottom-up approach.

2.3.3 Bottom-up models and their derivatives

Critics of the top-down model generally argue that their alternative perspectives are relatively free from assumptions about cause and effect (i.e. the distinction between policy and implementation) and about hierarchical relationships or any other dynamics between actors and agencies. They stress particularly that they provide a better fit with empirical evidence, which points to the complexity of interactions between individuals and agencies seeking to enact policy, those on whom this action hinges and those whom it affects. The framework is called ‘bottom-up’ because it focuses on actors and agencies themselves and on their actions and interactions. However, there is no single accepted bottom-up model, instead different theorists have concentrated on different aspects of the implementation process and on how they consider them to differ from the view expressed in the top-down model.

Elmore (1979) proposed an alternative approach to implementation and its analysis, which he termed ‘backward mapping’. If control over human beings, who were expected to act as functional links in a chain of command, was not considered as the way forward to successful implementation, the process should instead involve a definition of success that took into account human behavioural terms. He proposed starting with a statement of the behaviour that is seen as an occasion for policy intervention, looking at the structures and procedures that had the greatest influences on that behaviour and then developing the approach to implementation backwards from there, stating for every implementation level, by what means and in which way they could exert influence and which resources would be needed. This approach implies another weakness of the

top-down model. It is argued generally, that exactly those elements of the implementation process, which the top-down approach states must be steered from above (the implementers and their actions and interactions) are actually very difficult to control (Ham & Hill, 1984) and that total control may in fact not be desirable. Those at the top may be so far removed from the level where policy is actually implemented, that it may do more harm than good to rigidly impose ideas and concepts without allowing for „local“ adaptation.

Another important concept is thus the idea of discretion. Discretion has been analysed by students of public policy in various contexts, such as social policy, administrative law, law enforcement and organisational sociology (see Parsons, 1995) and the basic concept describes the amount of freedom any public officer or body has to decide on taking certain courses of action or inaction. This leeway in the implementation process is one of the reasons why a rigid top-down implementation is so difficult to visualise in practice, other than in totalitarian systems perhaps but even there administrative bodies and individuals will have certain levels of discretion – albeit more limited ones - in their action. It has in fact been argued that discretion is a necessary element of successful implementation as there will always be variations in local circumstances to which policies need to be adapted.

Barrett & Hill (1984) further underline the relative complexity of the implementation process by pointing out that the policy-action relationship cannot usually be considered on a one-to-one basis. Firstly a variety of policies, and their outcomes, may combine to shape a particular action or behaviour – thus the fact that people choose to use their car for a certain trip over any available alternatives may be due to the fact that they consider public transport too unreliable or not convenient enough, that they see the car as cheaper than the train, that they consider the roads too busy, polluted or badly maintained for safe and pleasant cycling or that they see the distance to their destination as too far to be covered on foot. On the other hand many different actions may influence a certain policy instrument - practicalities of road user pricing may for example be influenced by a desire to reduce overall motorised travel or to redistribute all or certain categories of it in space or time (e.g. delivery vehicles, through traffic) or not to alter it at all but to raise revenue.

They go on to argue, that implementation study should not follow the liberal-democratic assumption, that policy makers have explicit goals and that they engage in a policy making process, which is clearly separable from the implementation stages and is based on the open competition between groups with conflicting interest . Neither should it swing to the other extreme, however and adopt the stance, which states that it is futile to analyse implementation in a way, which relates policy outcomes to policy goals, as the cards are stacked a certain way from the beginning. Instead, analysts of implementation must recognise, that all actors on the policy-implementation continuum have goals and values and that some of these conflict.

Bardach (1977) developed a view of implementation as a game, which was played by actors interested in maximising their own power and control, and which was structured through conflict bargaining and persuasion under conditions of uncertainty. Contrary to top-down models – which may also recognise that these processes occur – this particular bottom-up perspective does not consider them as dysfunctional or requiring control. Instead the model recognises that the political process does not end, when a policy has been formed or a law passed. This perspective shows that there are no clear boundaries between politics and bureaucracy, and between the decision making process and the delivery of those decisions. Parsons (1995) thus described implementation as „*simply another form of politics which takes place within the domain of unelected power*“ (p.470). In considering the influence of power, reviewers argue that the dual ideas of non-decision making and the ‘third dimension of power’ (see Appendix A) have great relevance to the analysis of implementation, although they recognise, that these hidden processes are much harder to describe empirically than the more overt conflicts and resulting negotiations and bargaining behaviour.

Both the top-down model and several derivatives of the bottom-up model have a linear perspective of implementation – although they start at opposite ends. A more complex model is the action model (Lewis & Flynn, 1978 & 1979). This model sees implementers as actors, who are constrained both by the world outside their organisations and by their institutional context. As a result, policy objectives are rarely the guide to action but instead actions

- result from the resolution of conflicts between two [or more?] sets of priorities and policy areas;
- may precede the formulations of a procedure for dealing with similar cases in future and therefore the policy or
- may result from what is feasible in the circumstances rather than the fulfilment of the original objectives.

(Lewis & Flynn, 1978, p.5)

Some elements of this definition of action are reminiscent of the measure for good policy proposed in the *successive limited comparison approach* to policy making as defined by the incrementalists of decision making theory (see Appendix A) – which may serve as a further illustration of the point made earlier that implementation and policy making should not be treated as two distinct processes.

2.3.4 Intra-organisational processes

The ‘action-based’ approach mentioned in the previous section emphasises that analysts need to consider how groups and individuals act within organisations and also how organisations interact with other more or less powerful organisations (national government, local government, subunits within these, non-governmental organisations, business lobbies, etc.). Elmore (1978) also considered the understanding of organisations essential to implementation study, and thus investigated the process of implementation from the perspective of the four main bodies of

organisational theory – *systems management theory*, the *bureaucratic process model*, the *organisational development model* and the *conflict and bargaining model*. His purpose was not so much to set the different approaches off against one another but to clarify the different organisational assumptions they made and the different emphases they placed on features of the implementation process. He considered the major appeal of his approach to be the fact that each model contained a common sense explanation for implementation failures, highlighting that neither was necessarily right or wrong but that each served its own purpose when considering the implementation process. The four models will be useful not only to illustrate Elmore's ideas but also to provide a brief overview of the major strands of organisational theory.

Elmore firstly considered implementation from the *systems management* perspective. Bureaucratic organisations – and thus local governments – are built around the need to gain maximum efficiency from a division of labour, which is usually structured in a hierarchy of superiors and subordinates. The underlying normative assumption of this approach is that organisations and their managers display rational, goal directed and value-maximising behaviour. Organisations are seen as problem solving systems dependent on hierarchical control in which goals are translated into action through a deliberate step-wise process. But the systems approach does also allow for discretion at subordinate decision making levels by holding sub-units responsible for a certain level of output but giving subunit managers discretion on deciding how to achieve it.

Thus while people higher up in the hierarchy are more likely to have to deal with a variety of issues and tasks, the specifics of which they delegate to others, their source of power is likely to be hierarchical authority in most cases. Officers lower down in the hierarchy on the other hand are likely to deal with more discreet tasks and areas, in which they have particular and often quite specific expertise. Ham & Hill (1984) therefore suggest, that a lot of intra-organisational conflicts arise between hierarchical authority and expert authority.

There is usually an attempt to guarantee efficiency and prevent – some – conflict through regulations but, as Merton (1968) points out, these must not become too rigid. There must be room for individually tailored approaches, discretion in other words, which has already been argued to be an important element of successful implementation.

Elmore's (1978) evaluation of the systems management model concentrates on the fact that it is largely normative and primarily useful for directing attention to the mechanisms, which policy-makers and high level administrators have for structuring and controlling the behaviour of subordinates. However, its weakness lies in the assumption that all those involved in the implementation process share a common understanding of policy goals and values as well as the fact that in order to work in reality, participants need to all share the norms of the model.

The second organisational model is concerned with the *bureaucratic process* which centres around the concepts of discretion and routine. This model has been derived mostly from studies describing the delivery of routine services by 'street-level bureaucrats' (see also Section 2.3.3) – such as law enforcement and social services - and the interaction between routine and discretion. Their role is seen as one, which is subject to tensions and conflict of interest relating to firstly the client orientation and secondly the organisational orientation of these actors, who are at the interface. But the model further states that the position at the boundary is the source of the relative power of these actors as both those above them in the hierarchy as well as the clients rely on them for the delivery of services and for feedback on the process itself. The bureaucratic model places great emphasis on discretion and this is considered to increase further down the hierarchy.

However, street-level bureaucrats are also considered vulnerable to attack from either side and they thus create routines - for example in the shape of 'professional practice' – which guard against the erosion of their autonomy (Barrett & Hill, 1984). Thus individuals and organisational sub-units manage the space they have created through discretion with the aim of maximising their position and influence within the organisation, routine being one of the tools for such maximisation. The job of administration or superior individuals and units is simply to manage discretion (Elmore, 1978).

While the systems management approach assumes that the tools of management can be used to control the behaviour of subordinates, the bureaucratic process model assumes an active resistance to change within organisations, which must somehow be dealt with but is essentially a potential obstacle to effective implementation. This in turn depends on whether the forces of routine and discretion operate for or against any given policy.

Elmore (1978) considers the major advantage of the *bureaucratic process model* that it forces analysts (an policy makers) to consider the impact of new policies on the daily routines of people who deliver the service as these routines have generally been contrived precisely to buffer against changes, stress and uncertainties. Thus failing to account for routine in policy implementation can lead to serious shortcomings. However, the model offers very little normative advice. It only goes as far as to state that while discretion and routine cannot be eliminated, they should be monitored and can be directed by rewarding those sub-units or individuals, which most closely conform to the defined objectives.

Barrett & Hill (1984) argue that this model does not take sufficient account of individuals as self-responsible and independent adults or of the way groups and individuals interact in the provision of routine services. These factors are more closely investigated by the *organisational development* the *conflict and bargaining* models.

Individuals have often been seen as means to the ends for which the organisation exists (Ham & Hill, 1984) but most individuals resist being reduced in such a way. Instead they act as individual personalities with values, belief systems, links and responsibilities that go beyond their function for the organisation. The same is true for formal or informal groupings within the organisation, which implies that the working of the organisation itself will be influenced by factors, which lie outside the sphere of its own function. While the networks, which would emerge upon close examination of the values and connections of every individual would be too complex to map in detail, it is nevertheless important to bear in mind that individual components of any administrative system or organisation cannot be assumed to be deciding and acting in a way, which is purely based on the rationality of that system or organisation. It would thus not be appropriate to merely chart the hierarchical and departmental structures of a local government for example and assume that such a map would provide an accurate reflection of how their organisation works.

The *organisational development model* instead stipulates that organisations should function to satisfy the basic psychological and social needs of individuals (for autonomy, for control over their work, for participation in decision making) and that by necessity implementation then becomes a process of consensus building and accommodation between different organisational units. This idea is based on the experience, that individuals at the delivery end of an organisation resent having their expertise and ability to choose the best course of action questioned by those ‘higher-up’²⁸.

The organisational development approach sees a need to devolve substantial amounts of planning and decision making to groups at lower organisation levels and stresses that the capacity to implement originates at the bottom, not at the top (Elmore, 1978). Thus organisations are considered to rely on individual motivation and commitment and the interaction and mutual support of people working together. If these conditions are not fulfilled, it is argued, the organisation is very unlikely to be able to implement any policy effectively. Implementers need to have a direct personal stake in the success of any form of change and thus need to be involved in the process from the beginning²⁹.

The most pertinent criticism of this model, particularly as a prescriptive approach, is that it systematically ignores the politics of power and conflict, which many consider to play a large part in any organisation (Elmore, 1978; Barrett & Hill, 1984; Ham & Hill, 1984; Parsons, 1995). This problem is dealt with in the *conflict and bargaining model*.

²⁸ The systems management and bureaucratic process models on the other hand both reinforce the belief that those at the bottom of the hierarchy are less competent decision makers than those at the top, thus policy is made at the top and implemented at the bottom.

²⁹ n.b.: It could be interesting to examine from this perspective a situation in which the implementers belief in the goals of an organisation but not in the way these are being pursued.

The model describes the way people interact and try to gain power and resources or exert influence through either explicit or tacit negotiation and bargaining. Elmore (1978) argued that the acknowledgement of conflict also implied the acknowledgement of dependency. Neither party involved has the option to simply withdraw from the process as they would then lose the ability to gain something of value to them. The model assumes that it is in the interest of all involved to preserve the bargaining arena. The outcome of implementation through bargaining is seldom optimal and success can only be judged relative to the aims or interests of one particular group while it is rare that any participant unit is actually satisfied with the result. It should be remembered, though, that only a certain degree of conflict can occur, before the concept of a coherent organisation becomes meaningless (some might of course argue that this is exactly what occurs in local government).

However, the conflict and bargaining approach does provide a conceptual approach to implementation, which does not assume the existence of hierarchical control, predictable bureaucratic routines or a need for consensus and common commitment as a prerequisite for progress. It provides the insight, that parties involved in a programme need not agree on anything except to bargain and according to Elmore (1978) this makes it a very powerful descriptive device. But he also recognises this main tenet as a great weakness, since it does not allow for an objective definition of success or failure, looking as it does for no more than relative advantages gained in the bargaining process. Rationalists have criticised it as providing a conceptual excuse for confusion and unguided policy drift as well as the acceptance of results, which actually satisfy no-one.

In summary, the four organisational concepts all have a bearing on implementation analysis since – as Elmore (1978) correctly observed – they all relate to different elements of the dynamics, which shape organisational decision making. A purely or predominantly descriptive model is no more or less valuable than a prescriptive one. It is as important to analyse empirical evidence as it is to develop ideals according to which inefficient implementation processes can be improved. This discussion once again underlines the point, though, that it is not sufficient to pick one approach and expect it to serve well as both a descriptive and normative tool in any given situation.

Furthermore, it must be remembered, that the determinants of intra-organisational structure and processes are multi-dimensional. They depend on internal factors such as committee and department structure, dominant political and administrative groupings and affiliations of individuals within and outside the organisation as much as they do on outside conditions, such as social structure, political climate, economic environment and professional cultures (Greenwood *et al.*, 1975).

2.3.5 Inter-organisational dynamics

Parsons (1995) therefore points out that implementation studies must not lose sight of the fact, that implementation is a process, which usually involves a multiplicity of organisations and that analysts must thus also look at how organisations relate to each other.

He outlines firstly the power and resource based approach, which states that inter-organisational dynamics are shaped by dependencies. If organisation A has control of certain resources (e.g. information, personnel, money) on which organisation B depends and which it cannot secure elsewhere, then A gains power over B.

Another model outlined by Parsons (*ibid.*) is that of organisational exchange. It states that organisations work together in order to achieve common goals and interaction is thus not structured by power dependence but by mutual interest and therefore voluntary. However, neither of these approaches would seem to be sufficient in the context of this study. It is instead suggested here that implementation analysis relating to local government in Great Britain should for the purpose take into consideration both power and mutual interest based inter-organisational dynamics. It has already been argued for example, that in Great Britain, the national government largely depends on local authorities to implement any policies relating to walking and cycling formulated at national level, while local authorities depend on funding for related implementation measures to come from the national government.

The relationship between local authorities and national government could thus contain elements of both mutual interest and power based relationships, which work both ways.

2.3.6 Policy types

A further factor, which adds complexity to implementation study and which is ignored in many of the rational approaches is the fact that policies differ in their complexity and in the potential for conflict that they carry (Barrett & Hill, 1984; Ham & Hill, 1984; Parsons, 1995). Various authors have attempted to provide categories for the classification of policies and there is some debate as to whether it is actually possible to provide a fully satisfactory and all encompassing policy classification system. One, which is frequently referred to, though was developed by Lowi (1964) and it shall be summarised here to illustrate the point.

Lowi originally suggested three types of policies and later added a fourth (Lowi, 1972):

- Distributive policies: the distribution of new resources
- Redistributive policies: changing the distribution of existing resources
- Regulatory policies: the regulation and control of activities
- Constituent policies: the setting-up or reorganisation of institutions

He suggested, that distributive policies for example carried less potential for conflict than redistributive ones and were thus more likely to be implemented. However, policies could also be classified according to how complex they are, who they impact on, how many people or groups they affect or how much expertise is required to understand their implications.

A further important distinction in the context of this thesis is that between *substantive* and *symbolic policy*. As for example Winter (1990), Nakamura (1990) have pointed out, it is not unusual for policies to be adopted for symbolic reasons. Such policies can come into being out of a desire to tackle problems, which are seen as significant but are intractable and the policies are thus often based on insufficient causal theory (meaning that in effect they fail to address the root causes of the problems they are intended to address). In other cases, policies might simply be adopted to fulfil a demand for action by appearing to act – even if no real desire to act exists. However, Nakamura (1990) also pointed out, that most policies contain a mixture of substantive and symbolic policy goals and that these two forms are connected by a continuum rather than being divided by a clear distinction.

Barrett & Hill (1984) suggested that instead of attempting to find one particular policy typology, which enables satisfactory distinction between policies with high and low conflict potential, it is more important to simply bear in mind that policy type will have an impact on the implementation process. An appropriate classification for the issues at hand may emerge during the analysis of empirical data. One factor, which would seem important is whether or not there are any statutory means at any level of implementation to ensure compliance by either implementing bodies or the public, as such means can play an important role in the success of policy implementation (see also Section 2.4 on case studies).

2.3.7 Conclusions - towards a theoretical framework for analysis?

Sabatier and Mazmanian (1989) suggested a synthesis of the top-down and bottom-up approaches, which combined the best features of each into a new approach. They proposed that this approach should first of all focus on longer time spans (e.g. 10-20 years), as the short term perspectives adopted by most implementation researchers did not pick up processes such as policy learning and adaptation, which took time to manifest themselves. They summarised their proposed new framework as follows:

...the synthesis adopts the bottom-uppers' unit of analysis – a whole variety of public and private actors involved in a policy problem – as well as their concern with understanding the perspectives and strategies of all major categories of actors (not simply programme proponents). It then combines this starting point with top-downers' concerns with the manner in which socio-economic conditions and legal instruments constrain behaviour. It applies this synthesised perspective to the analysis of policy change over periods of a decade or more. [...] Finally, the synthesis adopts the intellectual style (or methodological perspective) of many top-downers in its willingness to utilise fairly abstract theoretical constructs and to operate from an admittedly simplified portrait of reality. It is primarily concerned with theory construction rather than with providing guidelines for practitioners or detailed portraits of particular situations. (ibid., p. 304-305)

Although Sabatier and Mazmanian's synthesised framework may well have applicability in some areas of implementation research, it is clearly not appropriate for this study, which explicitly aims to synthesise its findings into guidelines or practical action frameworks for practitioners and wants to provide a detailed description of the implementation of walking and cycling policies in Britain.

In addition, several researchers have questioned whether the top-down/bottom-up dichotomy has really been helpful in structuring the implementation discussion. Smith & May (1980) suggested that the debate is in fact an artificial one because firstly it confused the relationship between 'is' and 'ought' (or descriptive and prescriptive approaches) and secondly it lacked an adequate concept of what was actually required for policy makers or administrators to act in accordance with any set of decision making rules. Smith & May thus argued that

the problem is not to reconcile the differences between contrasting rational and incremental models, nor to construct some third alternative, which combines the strongest features of each. The problem is to relate the two in the sense of spelling out the relationship between the social realities with which each is concerned. (ibid., p.156)

They called for better accounts of the impact of policy makers' ideologies and the nature of decision making upon the conduct and outcomes of the various stages of the policy process.

Michael Hill (1997) further pointed out that while the choice of any particular approach implied value judgements about the questions it asked, different approaches might be appropriate in different policy contexts. He used the example of the introduction of poll-tax in the 1980s. Local authorities were obliged to comply with the policy requirements and the policy objectives were quite specific. Implementation problems could thus be analysed in a fairly traditional top-down way, looking at the difficulties the objectives imposed at the local level.

Hill's second example was the introduction of the national curriculum under the 1988 Education Act, where the objectives were much broader. The legislation did little more than prescribe broad subjects for inclusion (e.g. Maths, English, Science, etc.), leaving considerable latitude at the level of schools and even individual teachers on the choice of topical emphasis and approaches to teaching. In this case, implementation was very much a question of developing and elaborating initial policy frameworks further down the line.

Hill used British pollution control as an example for his third category of situations, in which it should either be stated that the implementation process *is* the policy making process or it should be admitted, that the distinction is meaningless. The policy consisted mostly of the concept of employing 'best practicable means' to reach ambient air quality targets and thus relied mostly on an agreement between the regulator and the regulatee to define both the means of pollution reduction and the individual targets for it.

A further important consideration in the case of walking and cycling policies is that there is neither a statutory duty for local authorities to take any particular action in this area (as opposed to the poll-tax example) nor are there any legal means of enforcing compliance among the target group (as is theoretically the case in pollution control).

Elmore (1978) further stressed that models were always simplifications of reality and that no single model could adequately capture the full complexity of the implementation process. Other reviewers of implementation theory also generally suggest that there is no single framework for implementation analysis, which sufficiently addresses all the elements identified as important (such as the role of hierarchies and power distribution, the parallelism of policy making and implementation, the role of 'street-level' bureaucrats, inter and intra-organisational dynamics, the influence of different policy types and the influence of the policy context; e.g. Goggin *et al.*, 1990; Winter, 1990; Yanow, 1990). Instead the consensus is that a variety of approaches may need to be taken into account.

Ham & Hill (1985) suggested, that implementation analysis needed to operate on various levels, giving consideration to the social economic and political contexts, within which problems were approached. They advised the implementation analyst to ask questions about the role of the state in contemporary society and the distribution of power between different groups in society. In their estimation, a fully integrated approach to implementation research would need to focus on three different but connected levels, the micro level of decision making within an organisation, the middle range analysis of policy formulation and the macro analysis of political systems. They suggested that the links between these levels were particularly difficult to examine and that interorganisational analysis needed to be part of the approach to implementation study³⁰.

Parsons (1995) on the other hand agreed with the conclusion Gareth Morgan developed in his study of organisational theory (e.g. 1986, 1993). Morgan took the view that the analysis of complex issues such as policy implementation should not be constrained by a vain quest for the synthesis of different models into one omnivalent approach but should instead be characterised by critical and creative thinking, utilising approaches suggested by other theorists as appropriate but bearing in mind that they were characterised by differences, partiality and the incompleteness of human knowledge and discourse. It is important to remember that the answers one finds depend on the questions which are asked.

Generally, researchers in the field will have to rely on a synthesis of thorough study of the theoretical framework of implementation analysis, careful judgement of the applicability of

³⁰ Although such a comprehensive approach could provide important insights, it is beyond the scope and resources of this thesis.

different approaches in their particular area and the conclusions they draw from their own data. In this context it is vital to clearly identify the aims of any research project and it will be helpful to refer to a proposition made by Sabatier and Mazmanian (1989). They argued that there was no point for analysts to suggest that the successful implementation of a particular policy or programme required the changing of longstanding cultural values, if practitioners were looking for practical information on changes, which it was possible to bring about through present action. Such an emphasis on recommendations, which can be put into practice within a realistic time frame and are appropriate to the actors involved will be central to this thesis.

This review of theoretical implementation literature thus leads to the conclusion that at the present time implementation research should not favour any particular model from the outset. Instead the data gathered should allow an assessment of the relative importance and applicability of the approaches and processes discussed so far while at the same time making it possible to detect dynamics and factors peculiar to values and institutions involved in the issue at hand.

A useful framework for such an open approach was provided by Winter (1990). While he has criticised the notable absence of theory accumulation – as opposed to competition – in implementation study, he also concluded that our systematic knowledge of implementation was too limited to attempt the formulation of a wider theory. Instead he suggested a very general model of the variables involved in the implementation process (see Figure 2.1 below), which encompasses the various elements of implementation identified in this review. Winter also argued, that the process of policy formation could significantly influence the implementation process since

...policies are very rarely made in a rational way, and therefore the actual character of the policy formation process may be very important to explain why some policies are impossible or difficult to implement from the outset. p.24

He therefore included various aspects of the policy formation process in his model.

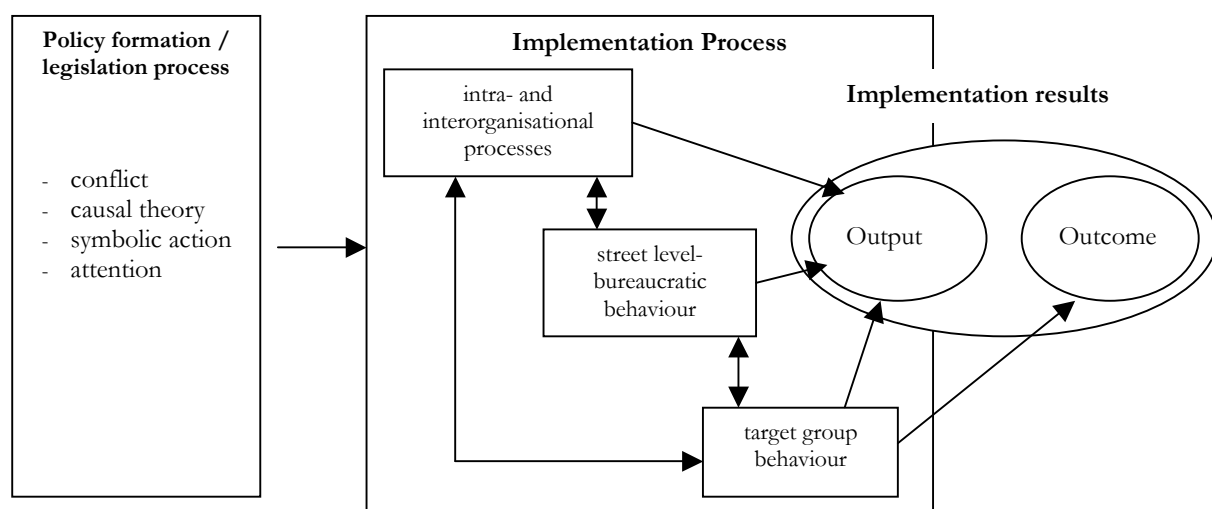


Figure 2.1 The implementation process and determinants of the implementation result (from Winter, 1990)

Drawing on other analyses of policy formation and decision making (see also Appendix A) he argued that successful implementation would be less likely, the more conflict was involved in the policy formulation process as key actors might accept unpalatable policy goals and objectives in exchange for weak implementation structures. Secondly, Winter pointed out (in accord with e.g. Sabatier and Mazmanian, 1989) that successful implementation was more likely if policies were based on valid causal theories about the origin of the problems they were supposed to solve. Thirdly, it was important to assess, whether policies had been adopted more to demonstrate a willingness to act than to actually affect some change since policies adopted for symbolic reasons were much less likely to be implemented (see also Section 2.3.6). Lastly, successful implementation would be more likely if the policy received sustained attention by its proponents during the formulation process, especially, if the policy was part of a larger package, other elements of which might take priority. Evidently, these four elements of the policy formulation process are to some degree intertwined but they can serve as a useful categorisation for analysis.

The importance of *intra- and interorganisational processes* and *street level bureaucrat behaviour* have already been discussed but it is interesting to note that most implementation theorists have paid little attention to the influence of *target group behaviour* as an independent – or even dependent - variable. Clearly, it may not be independent or only partly so, but it should nevertheless be expected that diverging characteristics of different sections of the target group will influence the way they respond to actions taken during policy implementation as well as the way, in which they might influence the process. In the context of this study – where the target group in most walking and cycling policies appears to be no more closely defined than ‘the population’ – the target group might be subdivided by characteristics such as car-ownership, the nature of the infrastructure and facilities surrounding their homes, their status of employment, their gender and age.

Winter also made the important distinction between policy *outputs* and policy *outcomes*. While policy outputs of walking and cycling policies might include the number of new pedestrian crossings or cycle stands, policy outcomes would be increased levels of use of these facilities, a rise in modal share in general or even reduced occurrence and severity of accidents. Clearly, outputs are an important but not sufficient element of implementation success.

However, the relationships Winter indicates between the different determinants of implementation results are mostly linear. The model does not for example include the idea of parallelism between policy making and implementation nor the general concept of an implementation network, in which all elements are in some way connected. Therefore, while it is intended to use Winter’s categorisation of variables as an initial guideline for a theoretical integration of the data collected during this study, the author will draw her own conclusions about the relationships between these and their appropriateness in describing the observations made.

2.4 CASE STUDIES OF POLICY IMPLEMENTATION

The previous sections have discussed theoretical approaches to implementation analysis and it would be of particular interest to establish, how these theories have informed empirical studies of implementation. It was found that some authors have gathered data and interpreted it largely outside any particular theoretical framework, drawing conclusions which are pertinent only to the context of their own study, while others have attempted to test the value of theoretical models against actual processes or have evaluated these processes on the basis of certain theories.

However, this author has found a dearth of implementation studies focussing on walking and cycling or even transport policies in general and this is particularly true for studies which go further than analysing the output of the policy process by investigating the process itself, as is the intention in this study. Others have come to the same conclusion, for example Stefan Bratzel, author of a study on environmentally oriented local transport policy in Germany, Switzerland and the Netherlands (Bratzel, 1999):

The analysis of transport-related political activities in municipalities largely breaks new conceptual ground. Although there are numerous findings about political-administrative systems in local authorities, local transport policy has hardly ever been the focus. (ibid, p.11)

A review of a selection of empirical implementation studies not related to transport is, however, presented in Appendix B as the more generic findings relating to organisational structures, potential implementation barriers and methodological issues provided some useful guidance for this investigation. Two of the rare examples of transport related implementation studies are reviewed in the following.

2.4.1 USA - Reducing vehicle emissions

In their book on *Implementation and Public Policy* Sabatier and Mazmanian (1989) reviewed one case of statute implementation in the transport field. Although unlike the current study it dealt with the implementation of a legal statute, several parallels can be drawn between the efforts of the US government in the 1970's to control car based emissions and those of the British government to increase the amount of walking and cycling.

Both efforts have been brought about by the problems associated with ever increasing use of the private car, which span a variety of policy areas (including the increasing consumption of fossil fuels and the resultant emissions of pollutants as well as reductions in air quality, which together with lack of exercise lead to decreasing public health among other things). Both policy approaches face the difficulty of attempting to change a widely engrained behavioural pattern (that of travelling

by private car), which is supported by a network of facilities that developed over a period of many decades. And finally both policies can be and have been seen as threatening the interests of two very strong lobby groups: motorists and the automobile industry.

In the United States, it was decided that for several reasons it would be too difficult and complex an undertaking to significantly reduce the amount of miles that were being driven by people in their cars. The implementation of the Clean Air Act was the responsibility of pollution control units while car miles travelled related to land use patterns and the availability of public transport among other factors. These issues are under the jurisdiction of housing, land use and transportation agencies. Consequently, the only way of reducing car based emissions and the resultant air quality problems was seen to be the introduction of more fuel efficient cars, which would rely on US manufacturers producing such cars (the vast majority of private vehicles driven in the USA at the time were also manufactured there). Having failed to make any discernible progress through voluntary schemes, the federal government opted for the legal path and stipulated in the *1970 Federal Clean Air Amendments* that all new cars would have to show 90% reduced emissions of carbon monoxide and hydrocarbons by 1975 and of nitrous oxide by 1976. The government was aware that the necessary technology to achieve these reductions was not available at the time but felt that legal requirements would enforce the required research and development. The *1970 Clean Air Amendments* further established the general goal of protecting and promoting the health and productivity of the nation's population by enhancing and protecting air quality standards and stipulated that these should relate not only to the requirements of healthy adults but also of more susceptible populations (e.g. children or those suffering from respiratory diseases).

During the seven years following the amendments, deadlines were repeatedly put back and improvements in ambient air quality (the primary aim of the legislation) were rather modest. The *Clean Air Act* was finally amended again in 1977 (a year after the final deadline for reductions) by

- relaxing the required reductions in nitrogen oxide to 75% of 1971 levels
- postponing the timetable for ultimate reductions until the 1981 model year and
- postponing the deadline for ambient air quality standards from 1977 to 1982 (and 1987 in very severely polluted areas)

Sabatier & Mazmanian considered these developments a good example of a strategic retreat from stringent objectives³¹. Due to this obvious slippage it became even clearer, that the more complicated task of reducing vehicle miles travelled would also have to be tackled. This should have been planned for in the beginning, since the manufacture of new reduced emission cars would of course not have any effect on in-use cars and the meeting of ambient air quality standards would thus rely heavily on reducing the amount of car based travel. In the mid-seventies the Environmental Protection Agency (EPA) therefore required twenty urban areas to submit

transportation control plans (TCPs), showing how they would contribute to meeting air quality objectives. Sabatier & Mazmanian termed the resulting processes “*a case study of the problems created by a poorly structured implementation plan*”. Some measures suggested in the 1970 amendments, such as reserved public transport and car-pooling highway lanes, were criticised for causing undue inconvenience to motorists without any discernible effect on air quality as well as displacing traffic to less suitable routes. Other measures originally considered, such as petrol rationing and a federal requirement for states to introduce parking restrictions were rejected due to their anticipated political unpopularity. The implementation of TCPs very much relied on the willingness of states to adopt the necessary measures and on the co-operation of several agencies as the EPA had no sanctions available to force compliance from states. The status of TCPs was eroded further by several court rulings handed down in 1975, which questioned the EPA's right to legally compel state and local governments to implement the transportation control measures it had developed.

The biggest problem was however thought to have been the way the proposed measures threatened deeply held public values, a conflict which was not addressed properly by the agencies involved.

The trends in car based emissions between 1970 and 1977 clearly reflected the implementation problems: Hydrocarbon emission decreased slightly nation-wide but both nitrous oxide and carbon monoxide emissions rose during that period. The reason for these trends were mostly the periodic relaxation of deadlines and emissions standards for new cars combined with the complete failure to reduce or even stabilise the number of vehicle miles travelled. This actually rose by 30% during the period³².

Sabatier & Mazmanian concluded that the six variables they identified for testing the various elements of a case study (in this case reducing emissions from new cars and vehicle miles travelled) showed a good fit with the problems identified in their study of the *1970 Clean Air Act Amendments*.

- they found an inherent weakness in the underlying theory and technology (the required technological developments for new cars took longer than anticipated by the program, reducing carbon monoxide and hydrocarbon emissions actually led to increased nitrous oxide levels)
- the required research and development were inadequately funded by the EPA
- the implementation system was poorly integrated, containing a large number of “veto points” (points of potential non-compliance)
- the EPA had no effective sanctions or incentives at their disposal to bring non-compliants into line (e.g. states, local governments, car manufacturers)
- the EPA failed to obtain legal authority from Congress to implement some of the potentially more effective measures

³¹ It can be expected that a similar fate will befall the modal share targets of the National Cycling Strategy in Britain, which, although relatively high profile are not even legally binding.

³² These findings are in line with conclusions drawn by David Banister (1997) on the link between transport and air quality in the UK. He warned that – even if implemented properly – traffic management improvements do not necessarily lead to air quality benefits and that all good intentions to reduce car based emissions “*will come to nothing if the continual growth in car-based travel is not reduced and possibly reversed*” (ibid., p. 95).

The authors also identified the inherent problems of the target groups through their own system of criteria, namely the magnitude of change that was required and how it could have been brought about. Automobile companies, used to relative autonomy in matters of manufacturing procedure, would have been caused considerable extra research and development costs and would have been required to introduce major changes in production techniques and the sourcing of supplies. For motorists to substantially reduce the amount of miles they travelled would have required major adaptations in their transportation habits (and probably their mobility requirements) and the long-term acceptance of denser housing patterns, in other words a complete reversal of two major trends in American society after the war. Furthermore, motorists represented about 50 % of the population – a very large constituency - which was dispersed throughout a substantial percentage of legislative districts.

While Sabatier & Mazmanian managed to prove in their study the usefulness of their conceptual framework for identifying retrospectively some causes of relative implementation success or failure, though, it appears very difficult to deduce from their work how these difficulties can be overcome. Clearly causal theories underlying a programme could in theory be better researched but some crucial factors such as the size or degree of dispersion of the target group are inherent in certain policies and cannot be altered short of abandoning the policy altogether. Unfortunately, Sabatier & Mazmanian offered no advice on how to deal with such problems, even if they were identified at the beginning of an implementation process. A potentially important point in the study at hand is the non-compliance of local governments with national policy but Sabatier & Mazmanian go no further than noting the lack of incentives and sanctions available to the highest implementing authority. They treat all the organisations involved in the process as unified wholes (Congress, the EPA, states, local governments, car manufacturers) and while this might have been acceptable in the context of their own study, they could have pointed out that the processes determining the behaviour of these bodies were also potentially important and might thus merit closer attention from students of implementation.

2.4.2 Great Britain - Cycle Routes in Portsmouth

In the mid 1970's the English City of Portsmouth decided to construct 6.3 km of experimental cycle routes serving two main commuting corridors with 4 km associated link roads. The initiative was based on previous discussions within the city council on how better to provide for bicycle commuters and eventually came to fruition when the government sponsored Transport and Road Research Laboratory (TRRL, subsequently renamed the Transport Research Laboratory, TRL) offered to carry 50% of the hardware and publicity cost as at the time the laboratory was seeking an opportunity of studying cycle routes.

The project was reviewed on behalf of the TRRL by Quenault & Head (1977). However, their report does not set out to investigate the organisational or political processes involved in the implementation. Instead, the authors looked in detail at the lay-out and signposting of the cycle routes, the costs involved as well as the publicity generated to promote the new facilities. They also looked at some of the problems, which were encountered during this first British experiment in providing for cyclists on the existing carriageway on such a scale.

However, from the point of view of the implementation analyst, the project could be judged a success as the routes were implemented as intended (policy output) and did succeed in attracting substantial numbers of users (policy outcome). The report also lists some factors, which might have been instrumental in ensuring the implementation of the routes. The decision to construct the cycle routes was taken at the same governmental level that would be charged with its implementation and was not a response to policy made 'higher up', i.e. at national level. This might have ensured a higher level of commitment. Also, the objectives of the project were very clearly defined and relatively small scale. While their success would rely partly on public acceptance, actual implementation did not depend on effecting behavioural changes (since the objective was not explicitly to raise cycling levels, merely to provide for cyclists). Separate working groups were established to oversee both the implementation process itself and the publicity programme aimed at informing as many local residents and road users as possible (both motorists and cyclists) of the imminent changes and their potential benefits. This crucial work was thus not left to an existing officer or unit, who might already have been struggling with the demands on their time.

While these observations are interesting in themselves, it is questionable if they could be directly transferred to the implementation of local walking and cycling policies in general. Firstly, this study looks at the implementation of policy, which at least in principle originates (or is at least also dealt with) at a higher level of decision making. Secondly, the study looked at one very specific project, which in general would constitute only one element of an overall policy package. This study will thus have to investigate policy implementation at a wider scale than was the case in Quenault & Head's study.

2.4.3 Conclusions

The selection of case studies presented in this section (and in Appendix B) provides an overview over the variety of different connections researchers have made between theoretical frameworks and practical observation as well as the different approaches taken to the latter.

Sabatier & Mazmanian (1989) reacted to the top-down / bottom up debate in implementation theory by proposing what they described as a synthesis of the two approaches: they conceptualised the variables, which they considered to have an impact on implementation and then distilled from

these six requirements which they saw as essential to satisfactory policy implementation. They went on to test the descriptive powers of these variables against a variety of case studies in the United States, all of which related to statutory expressions of policy and all of which looked at the implementation of federal statutes in state or local governments. However, they restricted their investigations to paper-based reviews of policy outcomes and did not study implementation related decision making within the organisations involved in the processes under review. Their research did make important points about the potential success of national policy programmes at local level, though – namely

- that it is important for policy objectives to be well defined and to be based on a sound understanding of the underlying causes of the perceived problem (see also Winter's model, Section 2.3.7),
- that policies with large and dispersed target groups are more difficult to implement (both organisationally and politically - see also Winter's model, Section 2.3.7) and
- that national policies, which do not receive strong backing from top politicians as well as adequate funding are likely to fall by the wayside in the process of prioritisation, which inevitable occurs at lower government levels.

The study of the implementation of the Fluoride Mouth Rinse Programme (Scheirer & Griffith, 1990; Appendix B) showed the importance of asking the right questions and choosing appropriate analytical tools to evaluate the data collected in any implementation study.

There was also widespread agreement between researchers in the field, that decisions makers are in need of better guidance on how to implement certain policies and that due to the great diversity of policy areas and circumstances, this was unlikely to take the form of one framework to fit all. Developing a framework specific to the implementation of walking and cycling policies in Great Britain will thus be a useful and valid contribution to the work of local authority decision makers at all levels.

2.5 SUMMARY OF THE LITERATURE REVIEW AND IMPLICATIONS FOR THIS STUDY

2.5.1 Research questions answered

The literature review has served to answer the first two groups of research questions and parts of the questions in Group 3 as listed in Table 1.1, Chapter 1. These are:

Group 1: Current policy and legal framework for walking and cycling policies

- What importance is given walking and cycling in national government policy?
- How does this translate into policy goals and targets?
- What legal obligations are local authorities under with respect to the two modes?
- What powers of control and implementation are available at the local level?

Group 2: Theoretical and empirical background of implementation analysis

- Which theories have been developed by those describing and analysing the processes of decision making and implementation ?
- Are there any existing models of particular relevance to this study?
- How have existing models of implementation been applied in empirical and other case studies?

Group 3: Local government walking and cycling policies in Britain – the status quo

- What provisions are local authorities making for walking and cycling, both in terms of policy and in terms of measures on the ground?
- Are there any discrepancies between policies and implementation?

2.5.1.1 Current policy and legal framework for walking and cycling policies

The review has shown that the two modes have been receiving increasing attention in policy and guidance papers issued by the national government and that local governments are also increasingly being urged to include policies to cater for these two modes in their Local Transport Plans and Strategies (see Section 2.1.8.3). However, the guidance framework has been shown to lack coherence, especially as walking and cycling policies should make important links with policy areas other than transport (Section 2.1.7). The literature available does not provide easily accessible advice for local practitioners on all the issues involved in catering for the two modes. This is an important gap, particularly since work in local government often requires rigorous prioritisation of work time and budgets and decision makers and officers cannot reasonably be expected to adopt a comprehensive approach to surveying the relevant literature. It was also found that since the publication of the National Cycling Strategy in 1996 considerably more government policy statements and publications have been devoted to that mode than to walking (Section 2.2.2.1). As the long awaited sister document to the NCS, the National Strategy for Walking, had still not been published by early 2002, this imbalance looks likely to be perpetuated.

The strong bias found in favour of cycling policies was perhaps all the more surprising as the review of current research clearly showed a substantial body of knowledge on the needs of both pedestrians and cyclists and how best to provide for them (see Section 2.2). In addition there are numerous examples – mostly from continental Europe – of the successful application of that knowledge in both small and large scale pedestrian and cycling strategies (Section 2.2).

Overall the review has made clear that local government practitioners can claim good national support for local walking and cycling policies - at least on paper – and that the strategic and engineering tools to convert these policies into effective action are well known, if not well used (see Sections 2.2.1.4 and 2.2.2.4).

2.5.1.2 Theoretical and empirical background of implementation analysis

A review of the theoretical basis of decision making analysis (see Appendix A) served to evaluate the alternative underlying concepts available for practical study of implementation. Decision making is an important part of implementation and while the literature did not yield any universally accepted theories directly applicable to this study, it did serve to highlight the importance of considering the political and social context of decision making.

The review of implementation theories in Section 2.3 showed that no significant new approaches to the subject have emerged over the past decade or so and that the debate has instead centred on refinement and on combining the most relevant features of two different perspectives, which were developed during the 1970s. Richard Elmore noted that „*most implementation research is case study*“ (1979, p. 601) and this statement still holds true at the beginning of the 21st century. As Elmore has commented further (ibid.), the fact in itself is neither good nor bad but it does present decision makers with the problem of frequently being criticised for not thinking sufficiently about the implementation process when developing policy while not being offered much concrete guidance on how to ‘mend their ways’. It seems clear from the debate in the literature that one reason for this lack of prescriptive advice is the great diversity of factors, which can influence decision making and implementation and the resulting wide variety of theoretical approaches. Another problem was found to be the variation in policy types and contexts, which makes it impossible to provide an universally applicable framework for implementation.

Lastly, the literature review (see Section 2.4 and Appendix B) looked at studies, which have employed implementation theory in the analysis of case studies or which have used case studies to develop implementation models. The review showed, that normative and descriptive approaches were very rarely clearly separated and that it was much more common for researchers to start with a certain model as a guide for their enquiry, which was then adapted in the light of the evidence gathered. The review also showed that walking and cycling policies have not been investigated with the tools of implementation analysis. Most case studies, which do have a strong theoretical element, focus on subject areas other than transport and furthermore concentrate on policies with a statutory element, i.e. those with which either local administrations or the public or both are theoretically obliged to comply. Importantly, this is not the case with national walking and cycling policies in Great Britain. Those studies, which investigate the implementation of non-statutory policies and strategies were found not to have a strong theoretical element.

2.5.1.3 Local government walking and cycling policies in Britain – the status quo

The literature review has provided some information on the current level and quality of walking and cycling policy implementation (see Section 2.2). The literature available indicates, that policies

formulated at national level do not in themselves provide sufficient impetus for successful implementation at the local level. It was also found, though, that there are no studies looking at the connection between local policies for walking and cycling and their implementation (e.g. is the adoption of a local policy framework equivalent to its successful implementation?). This link will thus be further investigated as part of this study.

2.5.2 Implications for this study

The literature review has provided the framework for further stages of research and has highlighted the need in particular to concentrate on the following issues:

- How do local walking and cycling policies in British local authorities currently translate into practice through the process of implementation?
- Are the determinants of implementation results as summarised by Winter (1990, see Figure 2.1, Section 2.3.7) reflected by the findings and do they relate to each other in the ways she has suggested?
- Is the success of local policy implementation related to the level of statutory requirements attached to those policies (in other words would statutory duties linked to national walking and cycling policies enhance the level and quality of local implementation of these policies?)
- What advice can be given to local authority decision makers and practitioners to enable them to identify and overcome potential barriers to the implementation of walking and cycling policies?
- Are any changes needed at national level if local policy implementation is to be successful?

Since it is becoming less and less possible to ignore the problems related to transport and since the search for solutions is thus very high up on the political agenda it is important that practitioners and policy makers can benefit from research which provides guidance not only on what they should do but also shows how they can achieve it. Consequently, the current study will use a variety of analytical tools to evaluate the status quo of walking and cycling policy implementation in Great Britain. It will go on to use the results obtained for developing recommendations for practitioners in the field, which will be disseminated as widely as possible to the relevant bodies.

As it will be necessary to survey British local authorities both as comprehensively as possible *and* in some detail, postal questionnaires will be the most efficient method of collecting the main body of quantitative data (see also Chapter 3, Section 3.2). However, it will also be necessary to study some issues identified through the questionnaire in greater depths and representative case studies of successful and unsuccessful examples of policy implementation will be identified through the questionnaires (covering different types of local authority in terms of organisational, geographic and economical structure) and will then be investigated through personal interviews with local actors and document studies of current walking and cycling policies. The following chapter will further explain the methodologies selected and their underlying rationale.

CHAPTER 3 - METHODOLOGY

“Research, like diplomacy, is the art of the possible” (Quinn Patton, 1990, p.13)

3.1 INTRODUCTION

The literature review has served to assess the current British policy and legal context for walking and cycling policies. It has also established an overview over the current theoretical framework for decision making and implementation analysis as well as its applications in practice (research question groups 1 & 2, Table 1.1, Chapter 1).

The data collection will need to address the following research questions:

Group 3: Local government walking and cycling policies in Britain

- What provisions are local authorities making for walking and cycling in terms of policy, administration and in terms of measures on the ground?
- Are there any discrepancies between policy provision and implementation and how have they arisen?

Group 4: Characteristics of ‘successful’ and ‘unsuccessful’ local authorities

- What types of local authorities are more likely to implement measures to encourage walking and cycling (e.g. urban/rural; population size; nature of urban fabric and infrastructure)?
- What conditions and processes within an authority are likely to be conducive to successful implementation of walking and cycling policies?

This chapter will explain the methods chosen for answering these questions as well as the reasoning underlying these choices.

3.2 QUALITATIVE OR QUANTITATIVE METHODS?

This study focuses on the policy side of the transport research arena and the methodologies will thus be chosen from the field of social sciences. Such methods are generally divided into quantitative and qualitative approaches. Quantitative methods are usually considered to have arisen from a positivist attitude, one which considers the methods used in the natural sciences to be applicable in social research. The data collection methods used result in numerical data which can be analysed statistically and is considered to be “hard” and “reliable” (Bryman, 1988) in the sense that it has been collected using rigorous and replicable procedures and could easily be checked by another investigator. The processes involved are predominantly deductive. Quantitative methods answer descriptive questions such as “when?”, “where?”, “how many?” and “how often?”. Any method, which yields numerical data (such as how many local authorities employ walking officers

or how often they refer to national guidance documents on walking and cycling) is considered to be quantitative.

Qualitative methods on the other hand produce data, which does not lend itself to statistical and deductive analysis but is instead processed through analytic induction: researchers collect data, formulate hypotheses based on the data, test these hypotheses using the data and then attempt to develop theory (Frankfort-Nachmias & Nachmias, 1996). These methods focus on describing situations and processes from the perspective of the subjects, not the researchers (Chadwick *et al.*, 1984). Data generated is generally more in depth and detailed but by necessity covers a smaller number of cases (Bryman, 1988; Quinn Patton, 1990). Qualitative methods investigate perceptions and processes rather than facts and answer explanatory questions such as “why?” and “how?”.

The discussion in the literature of quantitative and qualitative methods often conveys the impression that the two are mutually exclusive versions of a research paradigm (Bryman, 1988). However, many authors now agree that the distinction between the two approaches is not as clear cut as has sometimes been suggested and that it can indeed be beneficial to combine both types of methods within one research project (e.g. Hakim, 1987; Dunkerley, 1988; Yin, 1989; Bryman, 1988).

The classification of research questions shown in Table 3.1 below show that a combination of qualitative and quantitative methods will be needed to meet the aims of this research.

	Descriptive or exploratory question?	Quantitative or qualitative data needed?
<ul style="list-style-type: none"> What provisions are local authorities making for walking and cycling, in terms of policy, administration and in terms of measures on the ground? 	<i>descriptive</i> (answered in part through literature review)	<i>quantitative</i>
<ul style="list-style-type: none"> Are there any discrepancies between policy provision and implementation... 	<i>descriptive</i>	<i>quantitative</i>
<ul style="list-style-type: none"> ...and how have they arisen? 	<i>exploratory</i>	<i>qualitative</i>
<ul style="list-style-type: none"> Is there a difference between policies and provisions made for walking and those for cycling? 	<i>descriptive</i>	<i>quantitative</i>
<ul style="list-style-type: none"> What types of local authorities are more likely to implement measures to encourage walking and cycling (e.g. urban/rural; population size; nature of urban fabric and infrastructure)? 	<i>descriptive</i>	<i>quantitative</i>
<ul style="list-style-type: none"> What conditions and processes within an authority are likely to be conducive to successful implementation of walking and cycling policies? 	<i>both</i>	<i>both</i>

Table 3.1 Classification of research questions

It was thus decided to use a questionnaire survey – informed by preliminary focus groups – to answer the descriptive questions and to use the information thus gathered to choose case studies for exploring the explanatory questions (see Section 3.4). The following sections will discuss the methods for data collection and the analysis of results in more detail

3.3 CHOOSING THE SAMPLE

Social research often investigates large populations (such as all inhabitants of Edinburgh in 2000 or all doctors in Great Britain), which due to constraining factors (such as time, money, person power) usually requires the researchers to choose a sample – or sub population - which is considered to be representative of the larger group (e.g. Hakim, 1987; Frankfort-Nachmias & Nachmias, 1996).

For the statistical analysis of quantitative data it is generally desirable to aim for the largest possible sample size as the likelihood of detecting statistically significant differences between either experimental and control populations (Lipsey, 1998) or between different groups within the sample (Chadwick *et al.*, 1984) increases greatly with a larger sample size. Thus Chadwick *et al.* (ibid.) recommend the selection of at least 200 cases, while they quote other conventions as setting the minimum at 30 or 100 respectively (p.68). The more characteristics are to be studied and compared, the larger the sample generally needs to be as it will become subdivided during analysis. Various formulae are available to calculate ideal sample sizes for certain types of investigation.

In the case of qualitative analysis it is much more difficult to find any recommendations concerning ideal sample sizes as this is considered to depend greatly on the cases selected and the characteristics of the individual researcher. As Michael Quinn Patton says

The validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information-richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size.

(Quinn Patton, 1990, p.185)

As the total population under investigation was already relatively small (n=204) it was considered possible to conduct a full quantitative survey of British local authorities, the results of which would inform the selection of cases (see Section 4.3) for more in-depth qualitative investigation.

It was then necessary to decide who within each local authority should be approached during the data collection. Looking at recent investigations of walking and cycling related policies it was found that surveys had been addressed to the following groups:

- Coleman & Headicar (1998) - survey of local authority policies and provision for walking and cycling: the chief planning officer (it was expected that surveys would be passed on to more appropriate personnel)
- Bradshaw *et al.* (1998) – survey of local authority Safer Routes to School type projects and green transport plans: environmental co-ordinators, Travel Wise officers or other officers identified through exploratory telephone calls
- Oscar Faber (1999) – survey for compilation of cycle initiatives register: target audience not specified beyond “local authorities”
- Derek Halden Consultancy (1999) – review of Safer Routes to School in Scotland: target audience not specified beyond “Scottish Unitary Councils”

This comparative lack of information on which particular officers or positions within a local authority were targeted by previous researchers is likely to be a product of the following factors. Firstly, it is extremely difficult to obtain contact lists for any specific group of local government posts throughout all of Great Britain. Contact addresses for local authorities can be obtained from the Municipal Yearbook (Municipal Journal, 2000) for example but this publication only contains named contacts for heads of department and many councils either have no dedicated Department of Transport or did not supply the relevant information. A contact list compiled from that source would thus contain people at similar levels of seniority but with slightly or even widely different areas of responsibility (e.g. head of transport, head of planning, head of city development). Further enquiry established that neither the DETR nor the Local Government Association were able to supply a list of heads of transport or their equivalent while the Convention of Scottish Local Authorities did supply such a list containing contact names for all 32 Scottish Unitary Local Authorities.

However, even within the 32 Scottish ULA’s the names of posts considered to be relevant contacts for transport matters differed and this pointed to a further difficulty in surveying British local authorities: there is no universal departmental structure to be referred to and posts existing in one authority do not necessarily exist in another or they are known under a different title. It was thus decided that the most appropriate Heads of Department as listed in the Municipal Yearbook (Municipal Journal, 2000) should be the original points of contact for the data collection.

3.4 METHODS USED IN THIS STUDY

The following sections will discuss the rationale underlying the methods chosen for this study and explain in detail the approaches taken to collecting and analysing the data (while the results of this analysis will be presented in subsequent chapters).

3.4.1 Focus Groups

Social research is often considered to consist of three stages: exploratory, descriptive and explanatory. Thus, in order to *explore* the issues which would need to be *described* through the survey

data and to confirm the importance of issues identified through the literature it was decided to conduct exploratory group interviews or focus groups (see Section 4.1) and to use this initial qualitative data to inform the subsequent enquiry.

Focus group interviews have traditionally been used in marketing research in recognition of the fact that many consumer choices are made in a social context (Quinn Patton, 1987). They have been described as

a structured group process used to obtain detailed information about a particular topic...particularly useful for exploring attitudes and feelings and to draw out precise issues that may be unknown to the researcher
(Iowa State University Extension, 1997)

Some sources caution that focus groups do not generally yield quantitative information (Baseline Consortium, no date; Nielsen, 1997) while others recommend coding transcripts to allow counting instances of key words or concepts (Iowa State University Extension, 1997). There is general agreement, however, that focus group data can be used as a basis for generating hypotheses for further evaluation and that it can make questionnaires and other techniques more language and issue sensitive. They are further considered to be of particular use when there are few or no reliable and valid measures for obtaining information on a specific topic (Baseline Consortium, no date) as is the case with decision making and implementation analysis. Focus groups have been considered superior to individual interviews in obtaining perceptions as they offer greater anonymity and the desire to impress the interviewer may be diminished by the presence of peers (ibid.) while the social interactions in the group can produce freer and more complex responses (Iowa State University Extension, 1997).

The same document recommended a commonly followed procedure for conducting focus groups, which was similar in many respects to the procedures recommended for other types of interviews. The methodology followed for the focus groups conducted for this study is presented following the procedural stages suggested in this source.

- **Clear Definition of Purpose**

The focus groups were intended to fulfil the following objectives

- a general evaluation of current situation in the LA regarding walking and cycling policies and their implementation
- identifying the main influences on local policy making process
- establishing what characterises and influences the local implementation process

- **Preparation of Interview Questions**

Interview questions were formulated, which would be suitable for meeting the above objectives

(see Appendix C). Care was taken to ensure that questions were open-ended and unbiased and would be able to stimulate discussion among the participants.

- **Identification and Recruitment of Participants**

It was decided that local authority transport officers would be most likely to be able to supply the answers required as well as being able to spare the time to attend the focus group. Due to timing and resource considerations it was decided to concentrate on officers from Scottish Local Authorities. Twenty authorities within reasonable travelling distance of Edinburgh were contacted by letter explaining the research and the main objectives of the focus groups. Each letter was followed up with at least one telephone call to establish potential and actual participants. The number and availability of participants eventually confirmed allowed two focus groups with four interviewees each to be conducted.

- **Choice of venue**

The focus groups were conducted in the Seminar Room of the Transport Research Institute, which provides a quiet and relaxed setting. Tea and coffee was served before and after the formal sessions.

- **Conducting the Focus Group Interview**

Participants were able to chat briefly before the group session to allow for introductions and a brief familiarisation with the venue. They were assured that all comments made would be kept confidential and that the purpose of the focus groups was not to judge the activities of different authorities but merely to investigate the policy implementation process. Participants were then asked to write down brief notes on the main issues of discussion (as listed at the beginning of the focus groups script, see Appendix C) for the first ten minutes of the session.

In both groups there were more dominating participants but every effort was made to ensure that no single contribution lasted for too long and that everyone was given the opportunity to contribute to each topic. With the consent of the participants, the sessions were recorded on audio tape and subsequently transcribed.

- **Analysing the Data**

The transcripts were read several times, each time making notes on the issues arising during the discussion. It was found that these could be grouped into 14 categories, which were entered into a table to give an overview of the frequency, with which they were mentioned and the specific detail pertaining to different types of authorities. The analysis of this data is presented in Chapter 4.

3.4.2 Questionnaire survey

Quantitative data can be collected using either direct observation or surveys. Observational data would not have been appropriate for answering the research questions as the phenomena under investigation were largely inaccessible to the investigator's direct observation. A survey was thus considered to be the most appropriate way of answering the descriptive questions identified in Table 3.1.

The three most common types of quantitative survey are

- mail survey
- telephone survey
- person-to-person survey

and their comparative advantages and disadvantages are shown in Table 3.2 below. The advantages and disadvantages which in the context of this research are most relevant are shown in *italics*. This evaluation clearly shows the mail survey as the most time and resource efficient method of surveying a large number of informants. In addition, low response rates - one of the main disadvantages of this approach - can be improved substantially through follow up calls and other reminders (Mangione, 1998).

TYPE OF SURVEY	ADVANTAGES	DISADVANTAGES
mail survey	<ul style="list-style-type: none"> • <i>comparatively low cost</i> • reduced biasing error as interviewer influence is removed • <i>provide high degree of anonymity for respondents</i> • <i>respondents can think about their answers and consult other sources</i> • <i>suitable for samples/populations, which have a moderate to high investment in the research topic</i> • <i>wide access to geographically dispersed samples at low cost</i> 	<ul style="list-style-type: none"> • require simple, easily understood questions and instructions • do not offer opportunity to probe for additional information/ clarification • <i>cannot ensure surveys are fully completed</i> • no control over who responds • <i>low response rates</i>
telephone survey	<ul style="list-style-type: none"> • moderate cost • <i>high response rate</i> • high quality of data if interviewers centrally located and under control of researcher(s) 	<ul style="list-style-type: none"> • <i>moderate cost</i> • <i>usually requires more than one interviewer</i> • <i>reluctance to discuss sensitive topics over the telephone</i> • respondents can terminate interview before completion • does not provide supplementary information
person-to-person survey	<ul style="list-style-type: none"> • <i>high response rate</i> • flexibility in the questioning process (can allow probing and clarification) • control of the interview situation (who answers questions, where and in which order) • can collect supplementary information (e.g. respondents spontaneous reactions) 	<ul style="list-style-type: none"> • <i>high cost</i> • <i>usually requires more than one interviewer</i> • innate characteristics of interviewer and different techniques can create bias, especially if several interviewers are used • <i>lack of anonymity</i>

Table 3.2 Advantages and disadvantages of the three most common quantitative survey techniques (adapted from Frankfort-Nachmias & Nachmias, 1996 and Mangione, 1998)

The literature review has furthermore revealed that most researchers of micro-implementation issues had opted either for telephone interviews or postal questionnaires (e.g. Scheirer & Griffiths, 1990; Peattie & Hall, 1994; Wehrmeyer & Rees, 1995; Sparkes & Peattie, 1998) backed up in some cases with in-depths interviews. It was thus decided that the main body of data would be collected through a postal questionnaire. The questions of what local authorities are currently doing to provide for pedestrians and cyclists and how these activities relate to the overall policy framework have already been answered in part by the literature review (see Section 2.2³³). However, for the purpose of this study it was necessary to collect more detailed information on the factors which influenced policy implementation. It was also important to find out if and how local authorities were monitoring implementation success of such strategies and if so whether they were making progress. The fourth group of research questions (see Table 1.1) dealt with the characteristics of local authorities. The intention behind these questions was to establish parameters and variables, which could be used to describe ‘types’ of local authorities successful and unsuccessful in the implementation of walking and cycling policies. It was of further importance to be able to categorise these characteristics when developing conceptual frameworks in answer to the research questions in group 5.

The main aims of the questionnaires were to collect a large amount of relatively detailed and mostly quantitative information which would enable an assessment of

- factors, which practitioners feel have helped or hindered the implementation process
- other important factors, which practitioners may not be directly aware of which were indicated to be important by the literature review (such as monitoring activities)
- a classification of the types of authorities more and less likely to be active and successful in implementing walking and cycling policies
- the most suitable case studies for further research
- the level of success British local authorities have had (in their own estimation) in implementing walking and cycling policies
- how local authorities measure this success

The information, which needed to be collected through the questionnaire, had been identified through the formulation of research questions and the literature review (see Sections 1.4 and 2.5). The resulting questionnaire structure is shown in Table 3.3, a copy of the questionnaire can be found in Appendix F. It should be noted that some data – namely area, population size and figures for council tax band D – were collected from archival sources and the relevant questions were thus not included in the questionnaire.

<i>data categories</i>	<i>specific information to be collected</i>
Information on questionnaire respondent	<ul style="list-style-type: none"> - name of respondent - position - department - local authority name - telephone number - options for requesting anonymity
Geographical characteristics of the local authority	<ul style="list-style-type: none"> - population size and structure - main characteristics of existing transport infrastructure (e.g. road network, pedestrianised town centre, park & ride) - characteristics of town centre(s) (e.g. medieval, historic, shopping precincts)
Political characteristics of the local authority	<ul style="list-style-type: none"> - political groupings within the council - activity and influence of outside bodies (e.g. special interest groups, local residents' associations, trade associations)
Organisational characteristics of the local authority	<ul style="list-style-type: none"> - type of authority - departmental organisation and committee structure - existence and lengths of existence and nature of walking and/or cycling officers' posts (full-time/part-time)
Awareness, availability and application of national and local policy and guidance material	<ul style="list-style-type: none"> - nature of local policy documents and design guidance (walking/cycling strategies, audits) - application of local and national policy and design guidance - nature of public consultation exercises - commitment to Safe Routes to School and/or Home Zones
Resource issues	<ul style="list-style-type: none"> - availability of staff time - staff skills and interests - availability of financial resources (relative to overall budget and in absolute terms) - availability of data on modal shares, monitoring of modal share development
Evaluation of the existing implementation process	<ul style="list-style-type: none"> - success or gaps in the implementation of existing policy, how is this defined - perception of main factors helping or hindering implementation

Table 3.3 Proposed structure of postal questionnaire to be sent to British local authorities

The mail survey was produced with SPSS Data Entry Builder 1.0 (SPSS Inc. Chicago, Illinois), a software package developed specifically for designing questionnaires and recording answers through a direct link to SPSS 10.0 (SPSS Inc. Chicago, Illinois) spreadsheets. These spreadsheets were then used for analysing the quantitative data, which had been collected.

It should be noted here, that the Data Entry Builder software was found to contain several inherent problems, due probably to the fact that the it had only recently been developed. Overcoming the software related difficulties (such as frequent programme crashes, loss of lay-out on printer outputs, limited processing capacity and very slow processing speeds) resulted in the questionnaire design taking considerably longer than was originally envisaged.

The questionnaire contained a total of 61 questions of 5 different types:

- *classification questions* e.g. type of local authority (Q6)

³³ Of particular relevance are the two reports *Stepping out – local authority policies and provision for walking* (Coleman & Headicar, 1998) and the *Cycling Initiatives Register* (Oscar Faber, 1999)

- *closed factual questions*, e.g. how often does the authority measure certain modal share indicators (Q35a); which political parties are represented in the council (Q10); does local authority have a walking officer (Q15)
- *open ended factual questions*, e.g. direct or indirect sources of funding for walking or cycling related projects (Q44)
- *open ended opinion questions*, e.g. changes considered necessary at the local level to improve the implementation of walking policies (Q57)
- *Likert Scale opinion questions*, e.g. ranking a list of factors on a five point scale for their significance in encouraging the adoption of local walking policies from 'very significant' to 'not at all significant' (Q29)

As SPSS spreadsheets allow for only one variable in each field, questions which permitted the choice of more than one answer (e.g. "Which political parties are represented in your local authority?" Q10) or which required evaluation of more than one answer (e.g. "...please rate the following according to how significant you think they were as motivating factors in adopting these [pedestrian] policies/strategies" Q29) had to be coded with as many answer fields as choices allowed/answers to be evaluated. Every variable was further coded to allow for missing responses and, where appropriate, inapplicability (e.g. local authorities without local walking officers could not answer any questions about the nature of this post) or "don't know" answers to ensure that such cases could be treated appropriately during analysis.

The literature (Frankfort-Nachmias & Nachmias, 1996, Chadwick *et al.*, 1984; Mangione, 1998 – in Bickman & Rog, 1998) contains various suggestions for maximising the response rate to mail surveys, which are often said to be low (around 30% - 40%, Moser & Calton, 1971) especially in surveys not sponsored or conducted by the government, such as the general census (*ibid.*). Table 3.4 shows how these strategies relate to this project and to what extent they were employed

Suggested strategies	Application in this project
<ul style="list-style-type: none"> • obtaining sponsorship/official support from an organisation recognised and respected by the respondents 	Attempts to gain official approval from the LGA and CoSLA were unsuccessful as these bodies can only sponsor surveys they have commissioned themselves
<ul style="list-style-type: none"> • offering an inducement to respond 	Financial constraints did not allow for any monetary inducements but the covering letter (see Appendix F) stressed the relevance of the study for all local authorities wishing to implement walking and cycling policies and gave respondents the opportunity to request an executive summary of the results
<ul style="list-style-type: none"> • good quality a) layout and b) paper 	a) Care was taken to produce a clearly structured and well laid out questionnaire (see Appendix F). b) The budget did not allow for a choice between different weights or colours of paper. Plain white A4 paper was used. The covering letter was printed on headed TRI notepaper.
<ul style="list-style-type: none"> • restricting the length of the questionnaire 	There is no agreement on optimal length for mail surveys or obvious cut-off points for number of pages or questions. Questionnaire length was thus determined through the best possible compromise between the information required and the need for brevity

Table 3.4 Strategies for maximising response rates to mail surveys (adapted from Frankfort-Nachmias & Nachmias, 1996; Mangione, 1998; contd.)

Suggested strategies	Application in this project
<ul style="list-style-type: none"> including stamped addressed return envelopes 	As respondents were asked to include relevant documents produced by their local authorities it would not have been possible to provide accurate postage in advance. Since the respondents were furthermore not private individuals but members of an organisation, which would pay postage this strategy was not employed. However, self adhesive address labels were enclosed to minimise effort.
<ul style="list-style-type: none"> using stamped rather than metered mail 	At Napier University mail is processed centrally and this option was not available. In most local authorities even named respondents receive opened mail, though and this was thus not considered a problem
<ul style="list-style-type: none"> using semi-personal covering letters 	As the names of respondents – or at least original addressees – were known from the municipal year book the names and the researchers' signature were added to each letter by hand
<ul style="list-style-type: none"> timing the mailing away from major holiday periods (e.g. summer, Christmas) 	The questionnaires were first sent out at the beginning of August, after the main summer holiday period, with follow up copies sent after this date as required
<ul style="list-style-type: none"> selection of respondents 	The nature of the study meant the survey was sent to a select group with an interest in the research topic, who are generally more likely to yield a higher response rate
<ul style="list-style-type: none"> follow-up by mail or by telephone 	It was not considered appropriate to send follow up letters to those who did not respond after the first mail out as it was known that the original contacts selected from the municipal year book would in many cases not be the actual respondents and since the information contained in the book is also at least one year old and might thus be incorrect. Follow – up was thus conducted by telephone until a named final recipient of the questionnaire could either be established or a named recipient for a replacement questionnaire was found.

Table 3.4 Strategies for maximising response rates to mail surveys (adapted from Frankfort-Nachmias & Nachmias, 1996; Mangione, 1998)

It is generally recommended that survey questionnaires should be piloted on a small sample of the population under investigation to identify possible shortcomings such as ambiguously worded or irrelevant questions or use of inappropriate language (e.g. Moser & Calton, 1971; Richardson *et al.*, 1995). Pilot surveys are also considered especially important for assessing the appropriateness of a chosen sampling strategy. However, since it had been decided to study the whole population – all British local authorities with transport planning responsibilities – no sample was available, which would not also be approached with the finished questionnaire. Sending a comparatively long questionnaire twice to the same respondent was considered to have a potentially disadvantageous influence on the response rate. The draft questionnaire was instead shown to the research supervisor and several colleagues experienced in survey design and/or local government research. Their comments on lay-out and language informed the final version of the questionnaire.

3.4.2.1 Non-respondent bias

There is general agreement in the literature that one of the most serious errors which can occur in survey research is the non-response bias (e.g. Richardson *et al.*, 1995; Frankfort-Nachmias & Nachmias, 1996; Mangione, 1998). Mail surveys addressed to samples of the general population are generally expected to result in an upward bias in the level of education as language barriers or

illiteracy for example cause difficulties in understanding and filling in a written questionnaire (Richardson et al, 1995; Fowler, 1993). However, since the survey population for this study consisted of professionals working in Britain, language and educational barriers were not expected to present a problem. The only possible sources of bias were a refusal to respond, a failure to reach the most suitable respondent (since initial contact had to rely on the quality of information available from the Municipal Year Book, see Section 2) or a prolonged absence of the person to whom the questionnaire was passed. It was thus important to eliminate such possible sources of bias as much as possible during the follow up.

3.4.2.2 Statistical Analysis

The data collected through the questionnaire was of three of different types, nominal (e.g. yes/no type answers), ordinal (e.g. Likert scales) and interval or parametric data (e.g. population numbers) and depending on the data type a variety of statistical tests was employed. This section will explain briefly, which tests were used for which type of data and how the results of these tests are interpreted. It also states the conventions, which were adhered to during the quantitative data analysis.

General conventions of quantitative data analysis

As is often the case with self-administered surveys, not all questions were answered by all respondents. In such cases an answer was coded as *missing* during the data inputting into the SPSS spreadsheet. Some questions furthermore offered respondents the possibility to indicate that either they did not know the answer or that certain questions were not applicable in their particular case (such as the use of specifically Scottish guidance documents by English or Welsh local authorities, Q32). To ensure that only relevant values would be considered in the analysis, this data was generally excluded from the analysis unless otherwise stated in Chapter 4.

In line with general convention (Clegg, 1990) the results of statistical tests were only considered significant if the probability p of making the recorded observation (difference or correlation, depending on the test used) by chance was less than 5% ($p < 0.05$). Further levels of probability recorded - where applicable - were 0.01, 0.005 and 0.001.

Spearman Rank Correlation Coefficient r_s or Spearman's ρ (ρ)

This test was used to measure the strength of association between paired ranked data. The test results in values between -1 and $+1$, where -1 indicates a perfect negative correlation, 0 indicates no correlation and $+1$ indicates a perfect positive correlation. Significance levels for calculated values of r_s depend on the sample size n . The test can be used on ordinal level data and the data need not be normally distributed but it is only suitable for sample sizes larger than 5 (Clegg, 1990). The Spearman Rank Correlation Coefficient was used for example to test the association between the relative number of different types of authorities in the population as a whole and in the sample.

The χ^2 (chi square) test

This test measures association or homogeneity in nominal data (in the form of frequencies of observations rather than percentages³⁴) by comparing observed with (calculated) expected frequencies in a contingency table. It does, however, not measure the strength of an association as the value of χ^2 depends partly on the size of the sample (Kinnear & Gray, 1997).

Data contributing to the entries in each cell of a contingency table must be independent and it is generally agreed that the expected number for each cell in a 2x2 contingency table must not be less than 5 (Clegg, 1990) and that in larger tables no expected frequency should be less than 1 and that no more than 20% of expected frequencies should be smaller than 5 (Kinnear & Gray, 1997).

It is generally recommended that χ^2 values obtained in 2x2 contingency tables or for samples with totals below 25 should be adjusted by applying *Yate's continuity correction*, which results in more conservative but more accurate χ^2 (Fowler & Cohen, 1990).

The significance of χ^2 depends on the degrees of freedom (*df*), which are calculated by multiplying the number of rows-1 with the number of columns-1 in a contingency table. If χ^2 exceeds the critical value for given *df* then the null hypothesis – that there is no association between the variables in the rows and the columns or that the distribution of observations comes from a homogenous population – can be rejected.

This test was used to assess for example whether the number of authorities which employed walking and cycling officers and the number of those, which did not come from a homogenous population or whether there was an association between the type of local authority and the employment of walking and cycling officers.

Coefficient of determination R^2

The coefficient of determination is a measure of the proportion of variability in one variable that is accounted for by variability in another variable. It is used for interval data and the value of R^2 will be between or equal to -1 and +1, where -1 indicates a perfect negative correlation (the greater x is, the smaller y will be) and +1 shows a perfect positive correlation (the greater x is, the greater y is also). R^2 should only be calculated for data, which shows a rectilinear relationship (Fowler & Cohen, 1990). The coefficient was used to determine the degree to which degree variability in for example population size accounted for variability in the *Case Study Selection Index*.

³⁴ Note, however, that the results tables in the analysis chapter usually state percentages calculated from these frequencies to make results more comparable

One way ANOVA

ANOVA or analysis of variance is used to investigate differences of means between two or more groups of independent interval level data. A variety of tests can be used for this purpose but in this study only the on tailed *F*-test or *variance ratio* was employed. ANOVA should only be used on normally distributed data and samples with similar variances (SPSS checks this automatically and flags up cases where these conditions are violated) but the samples do not have to be of equal size (Fowler & Cohen, 1990).

The significance of the value of *F* depends on the degrees of freedom *df*, which are calculated by subtracting 2 from the size *n* of the smallest sample. If *F* is found to be above a critical value, then the null hypotheses – that there is no significant difference between the means of the samples or in other words that the samples have come from the same population – can be rejected.

Independent sample t-test and F-test

The *t* test is used for similar purposes as the one way ANOVA but can only compare two samples at a time. Data to be analysed through a *t* test also has to conform to the same requirements as for ANOVA, namely that it be normally distributed, that the variances of the samples are similar to each other and that it is comprised of interval level measurements (Clegg, 1990).

Before data was subjected to a *t* test the variance ratio was therefore tested using an *F* test, which divides the greater variance by the lesser variance. Absolute equality of variances would result in a variance ratio of one. The significance of the ratio actually calculated depends on the degrees of freedom of both samples, which are calculated by subtracting one from *n* of samples 1 and 2 respectively. This test is run automatically by SPSS if a *t* test is conducted (Green *et al.*, 2000).

The significance of the *t* statistic again depends on the relevant degrees of freedom *df* which in this case are calculated by adding together the two sample sizes *n*₁ and *n*₂ and subtracting 2 (Fowler & Cohen, 1990).

In the case of this study, all *t* tests but one were conducted on independent samples. The exception was the comparison conducted between the *Case Study Selection Index* scores calculated with and without respondents, self assessment of their authority's success in implementing walking and cycling policies (Q37 & 40).

Kruskal Wallis Test

This test is used to compare the medians of non-parametric data and requires scores for and independent or grouping variable as well as dependent or test variable. The grouping variable divides the cases into either two or - more generally – several groups and the test variable assesses individual cases on at least an ordinal scale (Green *et al.*, 2000).

The test statistic K is compared to the distribution of χ^2 but this does not mean that observations have to be frequencies (Fowler & Cohen, 1990). The Kruskal Wallis test uses ranks of all observation (ranking all groups as a whole), the sample sizes $n_{1,2,\dots,x}$, the overall sample size N and a set of constants peculiar to the test itself to calculate K . Degrees of freedom df are calculated by subtracting one from the total number of groups or samples as determined by the grouping variable. If a comparison with the relevant χ^2 values indicates a significant difference between medians within the whole group, it is necessary to conduct follow-up analysis to establish which groups do differ. In the case of ordinal data, a Mann-Whitney U test is normally used.

The Kruskal Wallis test was used for example to find out, whether there were significant differences in the use different types of authorities made of different national guidance documents (Q32).

Mann-Whitney U test

The Mann-Whitney U test is used to detect whether there is a difference between the medians of two (and no more) independent, non-parametric samples. It does not matter, how the samples are distributed (Wonnacott & Wonnacott, 1982), sample sizes can be unequal and as small as four (Fowler & Cohen, 1990). This test also calculates ranks for the data and the literature recommends that a large number of ties in the rank scores should be avoided. However, SPSS provides a correction for such ties (Green *et al.*, 2000).

The significance of the test statistic U does not depend on the degrees of freedom but on the size n of the two samples. The Mann-Whitney U test was used as a follow up analysis to the Kruskal Wallis test as required.

3.4.3 Case Studies

The complexity of the processes and phenomena under investigation meant that mail surveys on their own were unlikely to yield sufficient in depth data to answer the explanatory questions identified in Table 3.1. Robert Yin (1989) compared different research strategies and concluded that the case study approach was the most appropriate for answering explanatory questions (“how?”, “why?”), which centred on contemporary events when there was no control over behavioural events and an experiment was thus not possible. Case studies are also considered particularly appropriate in organisational research (Crompton & Jones 1988) where the interest centres around the contextual variations which shape policy implementation at a local level (Marshall & Rossman, 1999), or as Rist & Joice (1995) have put it “*case studies of various types can help to develop comprehensive understanding about some complex program [sic] or event and the environment in which it operates*” (p.129).

3.4.3.1 The case study approach

The case study approach is a specific way of collecting, organising and analysing data (Quinn Patton, 1990) defined by Yin (1989) as an “*empirical enquiry that:*

- *investigates a contemporary phenomenon* [the implementation of policy] *within its real-life context* [the local authority]; *when*
- *the boundaries between phenomenon and context are not clearly evident; and in which*
- *multiple sources of evidence are used*” (ibid. p.23)

Yin (ibid.) further stresses the importance of determining the following five components of the research design:

1. a study’s questions
2. its propositions, if any;
3. its unit(s) of analysis;
4. the logic linking the data to the propositions; and
5. the criteria for interpreting the findings

The research questions have already been discussed (see Section 3.2). In the case of this study the propositions are as follows:

- that local authorities differ in the degree to which they adopt and implement walking and cycling policies
- that these differences are due to factors both internal and external to the organisation
- that under given circumstances certain models of implementation are more successful than others

The units of analysis were individual local authorities (or more precisely any part of these, such as people, processes, documents), which influenced the implementation of walking and cycling policies.

Once the data was gathered it was analysed for factors, which had either helped or hindered the implementation process under investigation and it was also used to test initial theories based on the questionnaire survey. The criteria for interpreting the findings were matches between the stated implementation ideals – established through the review of official documents, real priorities (Quinn Patton, 1990) and actual successes or failures.

Yin cautioned that during case study research it was important to bear in mind that cases were not sampling units chosen at random from a population but that they had been individually selected using specific criteria - derived in this case, from the questionnaire survey. Results would thus have to be interpreted by inference or analytical generalisation rather than through statistical analysis. This process results in the expansion and generalisation from the cases to theory rather than to the larger population (Yin, 1989). In other words, the case studies can help to devise and test theoretical models of successful implementation processes rather than suggesting that every local authority with some success in implementing walking and cycling policies had necessarily taken exactly the same approach. Models would then function in the manner of conceptual procedural

maps which, rather than claiming that only a single route will lead to successful implementation, suggest one or several routes, which in the past have lead to – or close to – the desired goal.

Case studies typically employ a selection of several methods for collecting data (Marshall & Rossman, 1999; Yin, 1989) and by extension combine all the information a researcher has available about one particular case (Quinn Patton, 1990). In this study the following methods were chosen to collect data from all the case studies (and the data gathered through the mail survey was also included in the case study databases):

- *archival records*: information about Council Tax Band D, area, population size and density
- *documentation*: the most recent versions of local walking and cycling strategies (and/or any policies regarding these modes from the most current Local Transport Plans and Strategies)
- *interviews*: standardised ‘open-ended’ (Quinn Patton, 1990) or ‘focused’ (Yin, 1989) interviews with walking and/or cycling officers as well as the relevant heads of department to enable the assessment of different actors’ perspectives

Archival records had already been collected to complete the mail survey and entered into the SPSS database along with the questionnaire data.

Documents were requested on the questionnaire and 45% of respondents did include relevant information. These pre-supplied documents were used to develop a largely quantitative scoring system (see Appendix F) for content analysis which allowed direct content comparisons. The scoring system recorded the mention or omission of all documents, issues, measures and objectives, which through the literature review and the study of the documents supplied had been identified as relevant and important elements of walking and cycling policies and strategies. The list used was comprehensive in the sense that no element of any walking or cycling policy document studied, which fell into the above categories, went unrecorded. The scoring system was piloted and refined using documents supplied by authorities, which were not chosen as case studies.

A variety of interviewing strategies are available to the qualitative researcher and different sources stress different characteristics. Marshall & Rossman (1999) suggest “elite” interviewing as one possible approach which relies on choosing interviewees according to their influence or expertise relevant to the research topic. This approach was clearly appropriate for the current study. Other authors stress the difference between structured, semi-structured and open ended interviews (Frankfort-Nachmias & Nachmias, 1996; Quinn Patton, 1990; Yin, 1989). Structured interviews are usually considered equivalent to a researcher administered survey and were thus not appropriate for the case studies as a quantitative survey had already been conducted. Open ended interviews on the other hand are generally expected to yield very rich data but in the case of a multiple case study, where some comparison between cases is envisaged as part of the analysis, they are less useful since individual interviews may take very different directions. It was thus decided to employ a semi-

structured approach. This required the identification of a set of loosely worded and fully open-ended questions, which would be presented to each interviewee thus ensuring the same topics would be covered in each interview. However, the researcher allowed for probing and exploration if important issues arose during the interview, which were not covered by the topic list. Questions were presented to each interviewee in the same order and interviews were recorded on audio tape and subsequently transcribed. The questions were developed through analysis of the focus group and questionnaire data (see Appendix G for the interview schedule) and care was taken to avoid double barrelled and leading questions (Yin, 1989; Richardson *et al.*, 1995).

The disadvantage of this approach is the somewhat limited flexibility in fully adapting the interview to individual experiences and circumstances but in the context of this study it was considered more important to gather data, which would lend itself to a common form of organisation and analysis and to ensure that each topic identified as important could be covered (Quinn Patton, 1990).

3.4.3.2 Choosing the case studies – the Case Study Selection Index (CSSI)

Specific case studies had to be chosen to demonstrate in detail the processes, which lead to various levels of success in the implementation of walking and cycling policies by local authorities (see Section 4.4.1). It was intended that different types of ‘successful’ authorities would be identified through the questionnaire data and that case studies would be chosen to represent these types of authorities as well as authorities with similar characteristics, which were less successful.

Since no national level data was available, which could have functioned as an independent indicator of different local authorities’ success in encouraging walking and cycling (such as for example the development of modal share of walking and cycling for each local authority in Great Britain) a proxy indicator had to be developed to allow identification of successful and unsuccessful local authorities. Although respondents of the mail survey had been asked to assess their authority’s success in implementing walking and cycling policies (Questions 37 and 40), it was considered that this subjective assessment alone would not be a sufficiently reliable indicator of success. Consequently a ‘case study selection index’ - or CSSI - was developed, which assigned scores to the following variables, identified in the literature review and focus groups as important elements of successful policy implementation:

- the existence of walking or cycling policies/strategies and officers
- the length of existence of walking and cycling strategies
- the adoption of targets for increasing the modal share of walking and cycling
- the availability of baseline modal share figures for these modes
- the monitoring of the modal share of walking and cycling for different kinds of trips,
- the creation of Safe(r) Routes to School and Home Zones
- the respondents’ evaluation of their authority’s success in implementing walking and cycling policies

Positive scores were given for answers associated with positive action, negative scores for those linked to a lack of action and zero scores were given for missing answers (see Appendix D for a full breakdown of the index). Answers given to the questions selected for the index were recoded in SPSS to reflect the scores associated with each answer. The relevant spreadsheet was then exported into Microsoft Excel and the final index scores for each responding authority were added up. The final totals ranged from –20.5 to 26. Correlation analysis between the scores and other variables (see Chapter 4, Section 4.3.2) showed that the scores were most strongly influenced by the organisational type of local authority and the highest and lowest scoring authority in each categories were thus chosen as case studies.

Face to face interviews were arranged with the original questionnaire respondents or a colleagues named as a contact person for further enquiries. Since it was likely, that within an authority people in different posts would be able to contribute different perspectives of the implementation process, it was attempted to arrange an interview with at least one additional person in each authority. Due to time constraints on both sides, this was possible only in six of the twelve case studies.

The case studies were used to answer the explanatory questions identified in Table 3.1. Interpretation and integration of the results subsequently enabled the development of a conceptual model of the implementation processes (see Chapters 6 & 7). The findings were evaluated against existing theory of implementation and their practical implications for local authority actors were examined. It was considered especially important to assess to what extent the characteristics of successful cases could be transferred to authorities, which were less successful in their policy implementation and which actors would be able to affect these changes (national government, local councils, local authority departments, other non-governmental bodies). Such information is of great importance to both national and local government in their efforts to implement current policies and to overcome obstacles which might currently impede progress.

As it was intended that the end users of the research results would be policy makers and practitioners in local authorities, the information gathered was used to:

- develop a conceptual normative local authority model of the organisational and political requirements for the successful implementation of policies aimed at increasing the modal share of walking and cycling (see Chapter 6)
- produce a set of recommendations for improving the effectiveness of walking and cycling policy implementation to which policy makers and practitioners can refer (see Chapter 7)

In this context, Chapter 7 should be seen as a summary of the results of this study, which can aid local authority decision makers in the process of implementing walking and cycling policies by suggesting solutions to potential problems and highlighting the most important areas for action.

3.4.3.3 Analysing the interview data

The audio recordings of each interview were transcribed into Microsoft Word™ documents. An index system for the information gathered through the interviews was devised by studying each transcript, listing the issues interviewees discussed and grouping this list under five headings (the full list is shown in Appendix H):

- local sources of influence on walking and cycling policy implementation
- national sources of influence on walking and cycling policy implementation
- specific measures
- future chances of walking and cycling policy implementation in the local authority
- influence of the research

Each transcript was coded according to the 72 data categories thus created and each coded unit was numbered consecutively within each interview. Data pertaining to each category was then extracted into a separate table thus allowing an overview of the different issues and opinions discussed under each heading by all interviewees. The tables contained the number code of each piece of data and a code identifying the source interview (allowing to refer back to the original text if necessary), the quote itself and the code(s) assigned to it (each quote could be given up to five different codes if the text fell into more than one of the categories identified). Coding, numbering of quotes and data extraction were carried out with the aid of a non-copyrighted Microsoft Word™ macro, found on the internet (www.mindspring.com/~bethmeyer/Macro97.html).

The following two chapters will present the analysis of the focus group and questionnaire data (Chapter 4) and of the case study data (Chapter 5).

CHAPTER 4 - FOCUS GROUP AND QUESTIONNAIRE ANALYSIS

4.1 INTRODUCTION

The previous chapter has presented methodologies chosen for this thesis and the rationale underlying the choices made. This chapter presents the results of the focus groups and the postal questionnaire, which was sent to all British local authorities with strategic transport planning remits. The first part of the chapter presents findings from the focus groups. These findings in turn were used to inform the main themes of the questionnaire. The results of one are thus closely linked to the results of the other.

The main areas of interest in looking at the process of implementing walking and cycling policies are identified in the focus group analysis while the examination of the questionnaire results looks in more detail at the activities of local authorities relating to walking and cycling, compares the level of these activities between the two modes and establishes the characteristics – as defined by the parameters investigated by the questionnaire – of authorities which are more active towards catering for these modes. The questionnaire analysis also served to construct an index – the *Case Study Selection* Index or CSSI – which was used for selecting a representative group of local authorities for case study interviews. The results of these interviews are presented in Chapter 5.

4.2 ANALYSIS OF THE FOCUS GROUPS

This section presents an analysis of the data collected from the focus groups conducted as part of this study. The data was largely qualitative in nature, although some quantitative analysis was also carried out. Transcripts of the audio recordings made during the focus groups were analysed for issues raised in answer to the questions put to the group and during general discussion. Each point raised by the participants (such as specific walking or cycling measures implemented, factors influencing the decision making process etc.) were then entered into a table and subsequently grouped into subject categories. This process resulted in the creation of 14 categories, which were brought together under the eight headings presented in Table 4.1. The table also shows the frequency with which separate points were made in each category:

Response category	Number of individual points raised in this category
Characteristics of the local authority (size, geographical, organisational)	13
Awareness issues (within local authority, public awareness)	35

Table 4.1 Subject categories arising from focus groups and number of individual points raised which fall into each category (contd.)

Response category	Number of individual points raised in this category
Interactions between different groups, departments, policy areas, local authorities and the public	24
Local sources of influence on walking and cycling policy implementation (inside and outside council, lobby groups, documents)	32
National sources of influence on walking and cycling policy implementation (documents, events and trends)	30
Resource issues	27
Specific measures, which have been or are being implemented	12
Future chances of walking and cycling policies in the local authority	11

Table 4.1 Subject categories arising from focus groups and number of individual points raised which fall into each category

Clearly, though, quantitative description of the focus group data has limited value since several consecutive points might be made on one issue without the total number of these points necessarily indicating the relative or absolute importance of this issue in the context of the focus group. It was thus more important to look in detail at what was said during the discussions since the issues raised were to inform both the design of the questionnaire and the case study interviews. A summary of these issues is provided in the following. The accompanying quotes are not attributed as participants were guaranteed anonymity. To provide some context, all authorities³⁵ are described in terms of their population size and the predominant nature of their settlement structure.

4.2.1 Characteristics of the local authority

In one of the focus groups there was agreement that the size of a local authority has important implications for the work at officer level. Large numbers of dedicated staff meant that many tasks and issues could be dealt with more thoroughly while larger and more numerous departments at the same time created difficulties in communication between officers and departments. This issue was not mentioned in the second focus group.

...there are only 17 of us in the roads office so it's easy to work together, they are only a few feet away it's no like in the bigger authorities so really there's no problem right from the policy to the man that's designing it, really we're finding that's really helpful being so small. – pop. 50,000, rural

...the actual expertise and the push of a larger section closer to a head of not only a division, a head of a complete department, that's where a lot of the change has happened, you don't have the same push because it's such a small section or it's such a small part of a section. – pop. 125,000, rural

³⁵ As has been explained in Chapter 3, all officers participating in the focus groups came from Scottish Unitary Authorities, the type of authority is thus not mentioned specifically.

Participants from more rural authorities felt cities were at an advantage as, for example, air quality concerns were not considered an issue in more rural areas. Rural areas did not face the problem of serious and widespread congestion and the associated detrimental effects in air quality and there was thus less incentive to reduce motorised traffic. Also, walking and cycling were considered mostly urban modes. Improving public transport provision was seen as a greater priority in rural areas since distances covered were generally considered to be too long for walking or cycling. The size of certain cities means on the other hand that walking in particular could only be considered a viable alternative to the car in conjunction with public transport but cities with a more compact centre were considered easier terrain for walking and cycling strategies.

4.2.2 Awareness issues

Several participants felt it was still difficult to convince many local politicians that walking and cycling were important issues and there was a strong feeling in both groups that technical services, highway engineers and economic development departments had a tendency to ignore the two modes.

...and as long as you don't tell the councillors that they must do something, their interest is not there because there's no political capital in it – pop. 87,000, suburban

I think having said earlier that we've got a big hurdle to overcome with perhaps local politicians' way of thinking of transport on foot and by bike I think also a lot of the officers involved in planning matters and transport matters [...] I think there will still be a lot of people in positions of power who are more into designing and building highways and byways for vehicular traffic rather than for pedestrians and cyclists. – pop. 87,000, suburban

But it's this perception that you're hitting the car owner hard, you're hitting the residents hard because he can't get a parking space right in front of his doors. Everything else is immaterial like trying to reduce the heart attack rate is immaterial if they can't get their means of transport right in front of their door - that's number one priority. – pop. 82,000, suburban

Participants also stated that the general public still considered walking and cycling to be largely leisure pursuits. The public were seen to be generally unaware of the link between transport emissions and climate change. However, they were seen to agree overall that the current transport situation presented a problem and generally considered road safety, speed and traffic volumes to be the most important issues. One focus group participant pointed out, though, that in deprived areas transport is a lesser issue and concerns such as housing quality take priority. In the context of continually restricted public funding, it is likely that such priorities will also be reflected in the way councils invest their money – even though transport can play an important part in enhancing social inclusion.

4.2.3 Interactions between different groups, departments, policy areas, local authorities and the public

There was a general perception among focus group participants, that better interaction was needed between transportation planning and other departments (e.g. town planning, education, economic development, network managers and road engineers) and that stronger links needed to be forged with the health boards.

Really I think we could be doing with a lot more interaction between those two divisions [Roads & Transportation and Planning], we're both within the same department but unfortunately we're in different buildings and we think differently and we have very little contact with each other either face to face or in any shape or form. – pop. 87,000, suburban

I mean there's been a lot of stuff coming out from government, policy and whatever saying that the health board should be playing a lead in cycling and walking and stressing the huge health benefits but they don't seem to be doing anything yet and I think that's a very, very strong link we have to make. – pop. 82,000, suburban

Participants from a variety of authorities bemoaned the fact that their activities were largely reactive and led by accident statistics and maintenance requirements. Transport in general was seen to receive a relatively small amount of the councils' budget but some participants stated that due to a Head of Department taking an interest in walking and cycling, these modes benefited from a disproportionate share of the transport budget.

Demands arising from issues such as parking requirements and housing safety, as well as motorised road users, could conflict with walking and cycling priorities (e.g. the provision of well connected routes on and off road). However, success stories from other local authorities were reported to be helpful in resolving such conflicts and promoting similar measures in neighbouring areas. Conflicting priorities between authorities on the other hand could mean that trans-boundary issues were not resolved satisfactorily.

Both groups agreed that involving the public through consultation exercises and civic commissions was generally beneficial for both sides. The council would find out, what the public wanted, where resistance might arise and who their potential allies were while the public would have a chance to have their concerns heard and ideally influence the implementation process right from the time of policy making thus creating a sense of ownership.

I think community ownership is very important in these things I mean that's what they say about Home Zones, it must be community lead and if you can get the community being the ones pushing it and driving it forward then I think there's a chance [...] whereas if it's the council just doing something and imposing it on someone then it's oh why are you doing this here we don't like that. – pop. 82,000, suburban

4.2.4 Local sources of influence on walking and cycling policy implementation

Participants stressed that the attitudes of elected council members were very important as issues championed by even just one councillor could often become priorities. Also a lack of political will to implement certain measures (e.g. due to a worry over a possible backlash of public opinion) could stifle policy implementation significantly. The attitudes of heads of transport were also seen as important since they had the power to influence opinions in committees and also had some discretion in budget allocation.

Both groups agreed that the presence of vocal local pressure groups can have considerable influence on the advancement of policy but that such groups mostly represented cyclists and not pedestrians. It was also mentioned that small groups of vociferous objectors to a particular policy or measure could halt the implementation process, particularly as those who agree with local authority activities generally do not speak up.

In [...], we have a very vocal cycle group, the [...] Cycling Campaign. I wish pedestrian groups were more vocal. I think in England and Wales there's the Pedestrians Association but I'm not aware of there being any [...] branch. – pop. 625,000, urban

I have been to numerous evening meetings on local town issues where you're bombarded at a stage in the evening by Mister Angry from wherever takes the floor for the majority and then maybe for the last ten minutes of the meeting you actually get some kind of positive feedback you know, the views of the mass is actually heard as opposed to the view of the minority - pop. 125,000, rural

Participants generally did not consider their own council's Local Transport Strategies to be very strong on walking and cycling issues but thought that what was included would have a better chance of being implemented as it was seen as part of “something bigger” (the LTS). Two participants mentioned that cycle audits had been helpful in persuading developers to consider the needs of cyclists but there was a feeling that small councils did not have sufficient resources to produce and administer these properly.

4.2.5 National sources of influence on walking and cycling policy implementation

There was general agreement across both groups that the National Cycling Strategy (Department of Transport, 1996) had been very effective in raising awareness of cycling issues but that the targets it set were “*wishy-washy*”, that the national government did not provide sufficient guidance on monitoring and that local authorities needed to be put under real pressure to achieve modal targets if such targets were to be of any use. Similar comments were made about the Transport White Papers (DETR, 1998 a; The Scottish Office, 1998a). It was felt that the English paper had generally been slightly stronger on walking and cycling issues, that both had served to reaffirm the position of walking and cycling on the transport agenda but that they lacked teeth.

... I think for cycling with the National Cycling Strategy [...] was a great step forward and that's been backed up by the White Paper and integrated transport. Again with policy, a lot of it is there, but where it falls down is the wherewithal to do anything - pop. 82,000, suburban

The National Cycle Network (NCN) was generally seen as a very positive development as it provided political capital for local authorities for being part of something national and high profile. This was considered to be of special importance for politicians. The principle of matching funding also meant that authorities could increase the return on their own investments. Millennium routes were also used in some authorities to promote commuter cycling. However, in other authorities NCN routes attracted almost all the budget available for cycling measures and, while NCN routes in some areas serve mostly leisure cyclists, town or city centre areas in real need of improved facilities were neglected.

Certainly I think the National Cycle Network has been a great tool to get involved from our point of view getting those routes implemented has been worth it's weight in gold politically to be able to say you know it is the National Cycle Network and that's what we've concentrated on doing. – pop. 625,000, urban

There was a common feeling that the national government was not prepared enough to enforce transport measures and by leaving action up to local authorities was shifting the potential political blame for unpopular measures. A number of participants agreed that the central British government was “pandering to the car owner” and that it needed to show much more commitment to walking and cycling in terms of legislation and resource allocations. Several participants were also worried that the government was not prepared to put sufficient stress on the link between air quality, climate change and transport issues (see also Section 4.2.2 on *Awareness Issues*).

... unless money is ringfenced somewhere or unless there are carrots and sticks for local authorities to go towards integrated transport then it's not going to happen very easily because elected members do react to those who are shouting loudest about community issues, schools or whatever and therefore that's where priorities tend to lie. I just think the system has to change somewhere. - pop. 82,000, suburban

So I think in all matters relating to a change of policy to make it safer and more convenient and cheaper and more comfortable to walk or cycle short distances central [government] are letting local authorities or rather the travelling public down. – pop. 450,000, urban

4.2.6 Resource issues

All participants felt that implementation suffered from a lack of staff time. In smaller councils this was felt to begin to have an impact on the policy side (development guidelines cannot be updated, strategic tasks cannot be seen through to completion) while in larger councils there were thought to be sufficient officers developing policy, but not enough staff on the operations side to ensure good implementation and construction of schemes.

Being a small authority with a population of about 90,000 people it's probably not realistic right now for me to think that we could have a full time cycling officer especially when we are not making available the funds to carry out any infrastructure works. So having a lack of staff time is a problem for us. – pop. 86,000, rural

Participants also identified a general lack of funding, which meant that high quality visionary schemes could either not be implemented or had to be done bit by bit which often resulted in an initiative losing impetus as partially completed schemes generally do not work. The lack of financial means also meant that short term and cheaper solutions were often preferred over more long term investments.

... 'cause everything comes down to a bottom line: money, a benefit, a net benefit and that's always seen as being money still, in local government and central government, it's always the money thing that has the most weight, ... – pop. 50,000, rural

I think if money was made available, staff time would be made available as well, the two go together. If money was ringfenced for cycling, integrated transport or whatever, and technical services would soon be identifying right we need members of staff doing this, doing this and staff resources would possibly be changed back or reallocated or whatever. – pop. 82,000, suburban

However, there was also a general feeling that walking and cycling were slowly beginning to receive recognition as more serious budgetary items and that increased financial resources, for example through road user charging, would greatly benefit these modes.

4.2.7 Specific measures, which have been or are being implemented

Participants mentioned zebra crossings (often considered good value for money in rural areas and towns) and some physical measures which would be difficult to remove and were being put in place to circumvent some public pressures. The idea behind these was that once they were built they would stay whereas consulting with local users would probably have resulted in the project being abandoned.

One thing that we have introduced quite successfully for pedestrians is zebra crossings [...] and they seem to have been quite well received you get two or three zebra crossings in for the cost of one pelican crossing. That enables the limited resources to go a bit further. – pop. 86,000, rural

Two participants also mentioned that pedestrian and cycle measures (such as improved footways and cycle paths) were being put in place as part of urban regeneration schemes or schemes financed with public transport challenge funding.

I think as a positive schemes for pedestrians the improvement of access to the stations I think is an example for us it's quite a rare example of something that's being done for pedestrians. – pop. 87,000, suburban

Overall, the implementation experiences reported varied both between and within authorities. Only a few were reported to have been an unqualified success, many had encountered some problems (such as lack of money to fund a complete scheme, broken glass and debris accumulating on new off-road cycle routes or public protests) and some had even been complete failures.

... we had a development last year which was [...] beside an existing furniture warehouse, very successful, it's a designer village type and [...] we asked the developer to put in a large number of cycle stands – [...] it's a fairly small town, maybe four or five thousand population but quite a lot of people who work in the [designer] village came from there or came from other towns from about four miles and the cycle stands were full all

summer, which was quite surprising because there weren't any pressures on the workers to actually use them. – pop. 50,000, rural

Generally with the cycle routes they've gone in and they have all proved to be successful for one reason or another but they've all proved to have individual problems... – pop. 625,000, urban

...we tried putting in pedestrian islands on this single two way section of it but [...] the traffic complaints were so much that because people parking, there are still houses and parking at the front, it made so much congestion that we had to take them all back out again. – pop. 50,000, rural

4.2.8 Future chances of walking and cycling policies in the local authority

Despite the general concern over the central government's lack of real commitment to walking and cycling (which was also measured by the continued failure to publish the long awaited National Walking Strategy) participants were generally optimistic that increasingly pedestrian and cycle oriented national policies should help to overcome local resistance to providing for these modes (both within and outside the council).

Certainly I'd agree that the time has never been better for putting through policies that you may have on cycling and walking. – pop. 625,000, urban

I mean twenty mile per hour zones on the roads would perhaps be one way for people to feel safer crossing the road or cycling along the road but the implications are in terms of enforcement or physical measure are way beyond what we have available to us by a huge margin. – pop. 82,000, suburban

However, there was also a feeling that despite some important developments at policy level, implementation had been disappointingly slow and that it would be extremely helpful to have model assessment techniques, which would allow to predict the rate of return of investment in walking and cycling measures as was the case with road building (e.g. in terms of time savings, traffic reduction, accident reduction, modal increase or even overall health benefits).

One participant commented that cycling policies have better chances of being implemented when they are part of something else - such as Local Transport Strategies – and that once councillors had agreed such a package it could be used to argue for resource allocation towards particular walking and cycling schemes, which were part of the original proposal.

4.2.9 Summary and implications for this thesis

The focus groups have indicated that the particular characteristics of a local authority – such as size, the presence of vociferous individuals or lobby groups with strong opinions - have a strong influence on the development and implementation of walking and cycling policy. They have also shown that the lack of government commitment towards walking and cycling identified by officers

was felt to be a significant implementation barrier. On the other hand, positive measures initiated at the national level such as the National Cycling Strategy or Local Transport Plans/ Strategies were seen to have had a significant positive impact on the local implementation process. Further national measures such as a National Walking Strategy, more direct resource allocation for walking and cycling and better guidance on providing for these modes were considered desirable and important.

Several issues indicated to be of importance through the review of literature on decision making and implementation – such as the interactions within and between different organisations and the need for a sound theoretical basis to any policy – were also confirmed at this stage and shall be explored further in the course of this study.

Lack of resources (staff time, budget allocations, information on local modal share levels) was shown to be of considerable importance, demonstrating very clearly that well intentioned policies are not in themselves sufficient to ensure successful implementation.

It was interesting to note that participants (who without exception were walking or cycling officers) were very acutely aware of the influence national policies and commitments (or a lack thereof) had on their ability to do their job, and that the majority wished there to be more pressure on local councils to comply with stated policy aims and targets as that would make their work easier.

The focus groups thus proved a helpful exploratory tool in two respects. They have confirmed the importance of a variety of issues explored in the literature review (such as the national policy context or the importance of motivated local groups and individuals) while at the same time providing a more detailed perspective of the interplay of these subjects.

It was thus clearly important to explore these issues further through the questionnaire and the case studies. Together, these two approaches shall enable a more detailed analysis of the opportunities, problems and – importantly – practicable solutions, which local authorities have experienced in the course of walking and cycling policy implementation. They will also investigate the links between these processes and issues to enable the assessment and development of the implementation model presented in Chapter 2.

4.3 ANALYSIS OF THE QUESTIONNAIRE DATA

4.3.1 The sample

One important feature of this study was that the whole population under investigation – British local authorities with strategic transport planning responsibilities – was known and targeted through the survey. Consequently, several features of the population, such as distribution of different types of local authorities and political composition of councils were also known. It was therefore possible to assess to which extent the sample was representative of the population as a whole with respect to these variables.

Of the 204 questionnaires sent out, 45% (n=92) were returned with the breakdown by local authority type given in Figure 4.1. The figure shows the percentage share each of the six authority types investigated has in the population as a whole (all British local authorities with strategic transport planning responsibilities, i.e. all excluding District Councils – black columns) and in the sample of returned questionnaires (grey columns).

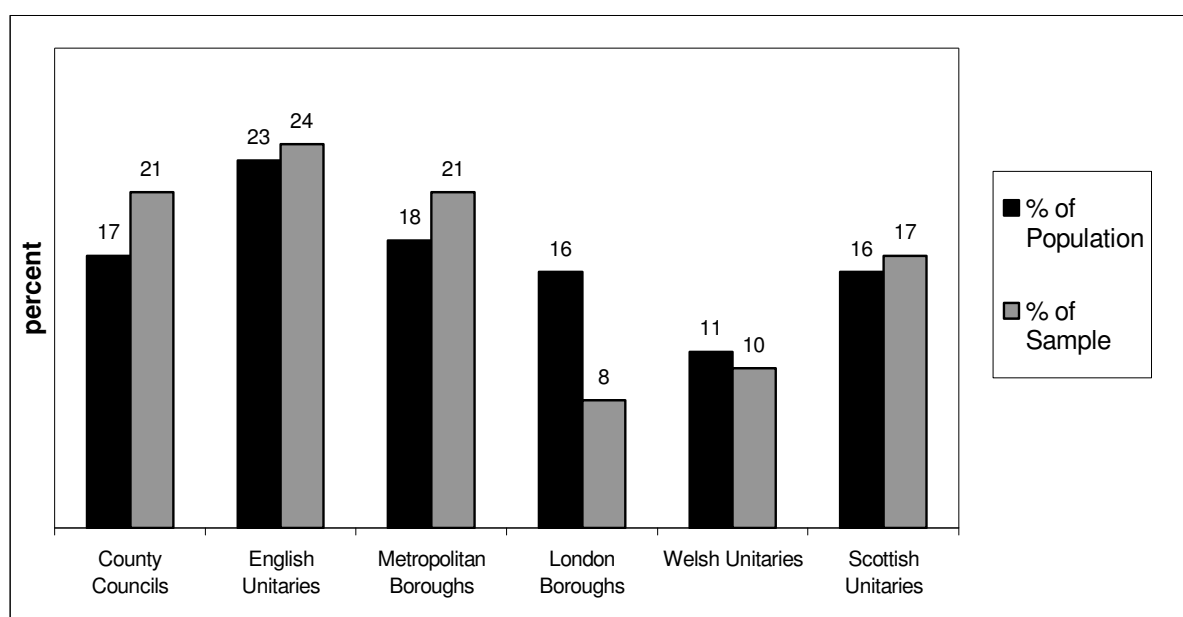


Figure 4.1 Percentage of different local authority types represented in the entire population (n=204) and in the sample of returned questionnaires (n=92).

Of all six authority types only the London Boroughs were noticeably underrepresented. It was not immediately apparent why this was so as all authorities received the same letter and questionnaire and all non-returns were followed up in the same way. However, a possible reason for the low response rate might have been the changes in the organisational framework of the London Boroughs. Since summer 2000 the Boroughs have been embedded in the newly created Greater London Authority (GLA), which at the time of data collection was still to publish its overarching

London Transport Strategy (expected for summer 2001). This was awaited by many councils prior to finalising their own transport plans.

Despite this, it was found that there is a significant correlation between the percentage share each type of local authority has of the population and of the sample respectively ($r_s=0.914$, $P<0.05$, Spearman Rank Correlation Coefficient) and it was therefore inferred that the distribution of local authority types in the sample is representative of the distribution of authority types in Britain as a whole.

It was also interesting to compare the distribution of ruling political parties in the population with that in the sample. However, the Municipal Year Book (Municipal Journal, 2000) only provides information on the distribution of seats between the parties for each council without any further details on political control or ruling coalitions. It was thus decided to compare the mail survey data on ruling parties with the parties holding simple majorities within all British local authorities overall (see Figure 4.2).

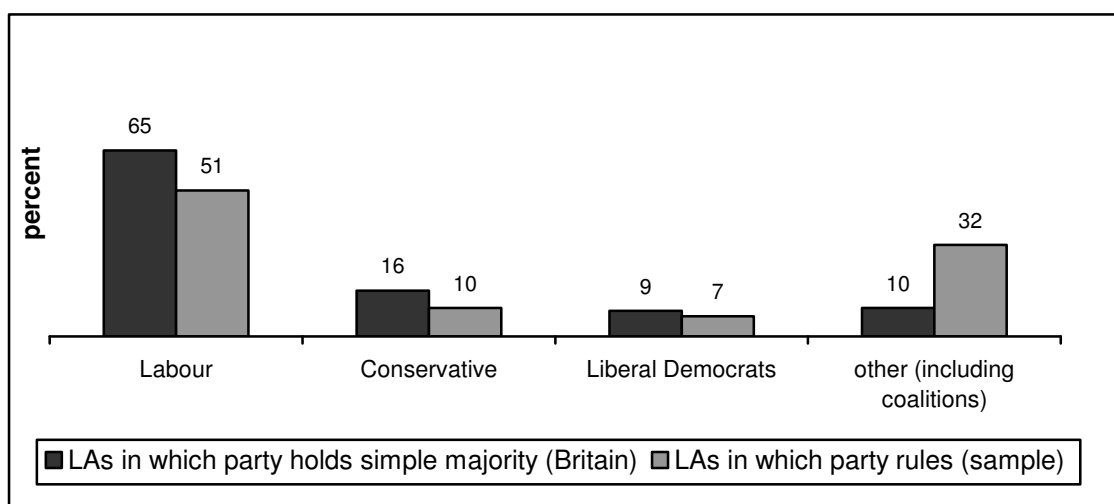


Figure 4.2 Comparison of simple political majority in population and ruling parties in sample.

As might be expected this comparison shows a slight under-representation of all parties in the sample since the use of simple majority figures does not provide information on coalition governments or hung councils, which in the sample have been grouped under “other” (along with e.g. independently ruled councils or those ruled solely by one other political party) and account for 25 percentage points of the 32% shown. Because $n<5$ it was not possible to use the Spearman Rank Correlation Coefficient and it was thus decided to use a χ^2 test (H_0 = there is no significant difference between the proportion of political majorities in the population and the sample) using frequencies rather than percentages. The figures for *others* were disregarded as it was already known that they are not comparable. It was found that there were no associations between a council’s of a political composition and its likelihood to return the questionnaire ($\chi^2=0.304$, $df=2$, $p>0.05$).

Figures describing the authorities' *population size*, *area*, *population density* and *pound sterling paid in council tax band D* were collected as the focus groups had shown that both geographical size and population size (with the associated size of the local authority) played an important part in policy implementation. Since financial resources were also an important issues, the level of Council Tax Band D was used as an indicator of the authorities' income from council tax revenue. Statistics describing these parameters are presented in Table 4.2.

	Range	Mean	Median	Standard deviation	results of one way ANOVA
Population size	22,830–1,541,547	296,060	214,631	252,000	F=32.478, df=5, p<0.05
Area in km ²	10 – 25784	1372	303	3047	F=4.454, df=5, p<0.05
Population density (people / km ²)	8 – 9,068	1480	596	1889	F=15.425, df=5, p<0.05
Council tax band D (£)	401 – 1172	829	821	120	F=8.290, df=5, p<0.05

Table 4.2 Population, area and council tax band D of responding local authorities (calculated from data obtained from the Municipal Year Book; Municipal Journal, 2000) and results of one way ANOVA comparing these variables between different types of local authorities

It should be noted, that the distribution of figures for both the *area in km²* and *population density* were heavily skewed and that the median is thus a more useful statistic for describing these variables. A one way ANOVA test showed there to be significant differences between authority types across all of these variables (although the skewness of the data advises caution about the reliability of these results) but there was no significant relationship between them and the index constructed for case study selection (CSSI, see next section), which served as an indicator of local authorities' activities relating to walking and cycling.

Survey respondents were asked to group their local authority into one of the categories shown in Figure 4.3. The results show that only 39% of the local authorities could be clearly defined as either urban, suburban or rural and that the majority of responses comprised a mixture of these classifications. Since walking and cycling are generally considered to be predominantly urban modes, the variable was then recoded into two groups, one comprising all categories containing *urban* as a descriptor (75% of responses) and one for the remaining, non-urban, categories (25%). There was, however, no difference in the geographical classification of different authority types - no authority type was more likely than any other to be urban, suburban or rural ($\chi^2=4.485$, df=5, $p>.1$).

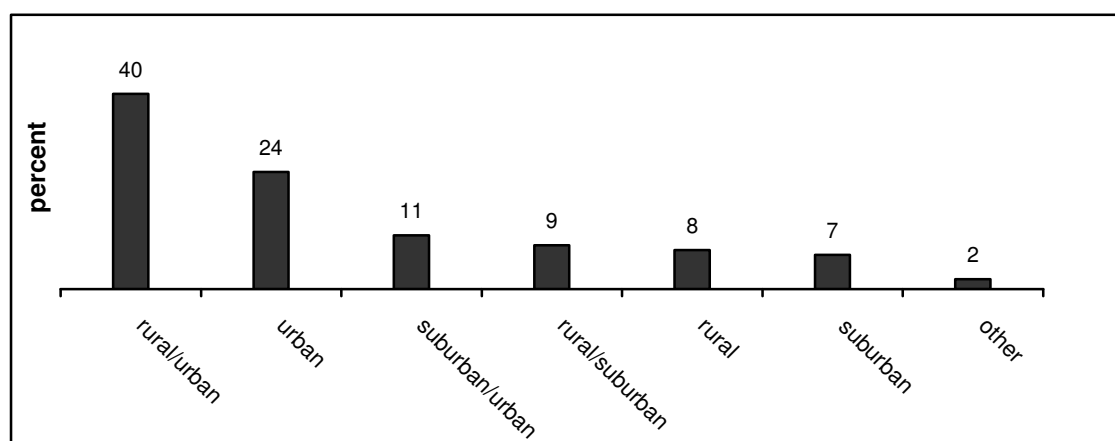


Figure 4.3 In which type of area does the majority of the LA's population live?

4.3.2 Selection of Case Studies

Since one aim of the questionnaire study was to identify types of local authorities, which might be more likely to be successful in the implementation of walking and cycling policies, it was necessary to classify these types prior to further analysis in order to be able to assess, to what degree they would differ across different parameters studied by the questionnaire. As no data is available at a British level to identify successful local authorities (such as changes in modal share broken down by local authority areas), it was decided to create a *case study selection index* (called CSSI hereafter). Such an index would not only help in classifying the effort made by a local authority to implement walking and cycling policies but could also later be used to select representative case studies from the 92 questionnaires returned. The case studies, which were selected, are discussed in more detail in Chapter 5.

The rationale underlying the compilation of this index and the method used have been explained in Chapter 3, Section 3.4.3.2. Once the CSSI had been created, it was necessary to establish, which of the variables characterising different local authorities was most closely related to this index to enable the creation of categories, from which high and low scoring authorities could be selected.

The index was plotted against a variety of other classifying variables. Table 4.3 shows that no correlation was found between the index scores and other numerical descriptors of the local authorities or that variation in one variable was not accounted for by variation in the other.

Case Study Selection Index Scores correlated to...	Coefficient of determination (R ²)
...population size	0.13
...area in km ²	0.00
...population density	0.01
...council tax band D	0.02

Table 4.3 Determination of *Case Study Selection Index* (CSSI) Scores through other numerical descriptors of local authorities

A comparison of means through one-way ANOVA showed that the type of area where the majority of a councils population lived (Q8 rural, urban etc.; $p > 0.1$) and the ruling party in the council (Q11; $p > 0.1$) also did not influence the scores in the case study selection index. However, there was a significant difference between the mean CSSI scores of different local authority types ($F = 6.318$, $v_1 = 86$, $v_2 = 5$, $p < 0.001$; see Figure 4.4).

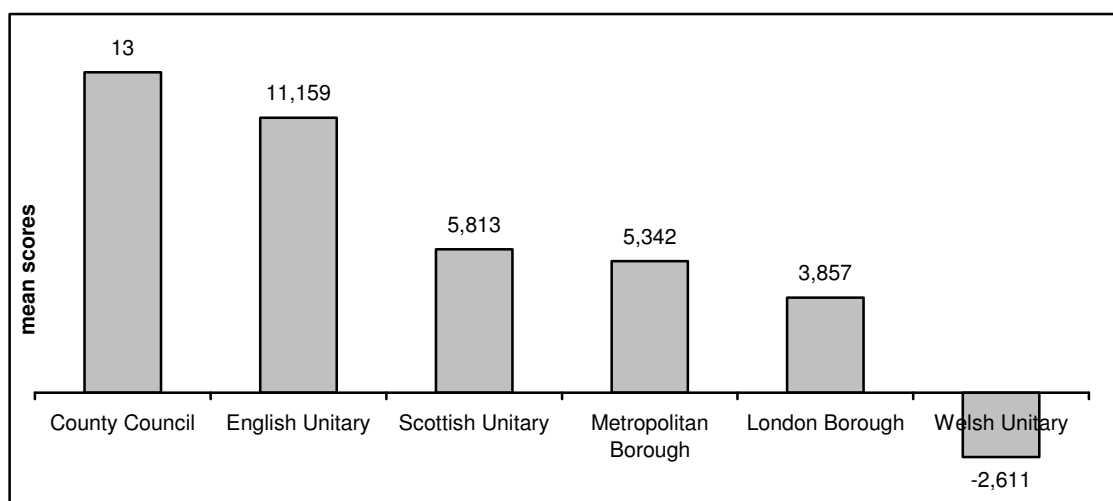


Figure 4.4 Mean Case Study Selection Index scores of the six different local authority types

It was therefore decided that case studies would be selected from the six different authority types by choosing the highest and lowest scoring authority in each category. This approach was further validated by a comparison of index scores with known case studies from the literature, which showed that high scores corresponded with known examples of successful walking and cycling policy implementation (the City of York and Oxfordshire County Council for example achieved scores in the upper 15% of the range).

Since the rankings, which authorities achieved within the index, would determine their likelihood of being selected as a case study it was important to find out to what extent respondents' subjective assessment of their own authorities' success in implementing walking and cycling policies (Q37 & Q40) had influenced the rankings. Comparing the index rankings including the self-assessment with

those excluding them showed a very close correlation ($r_s = 0.943$, $p < 0.01$; Spearman Rank Correlation Coefficient) and it was thus concluded that subjective evaluation by respondents had not unduly influenced the authorities' rankings within the index.

Scores for the *Case Study Selection Index* were not found to differ between authorities with or without walking and cycling officers but – perhaps not surprisingly – there was a significant difference in scores between authorities in different stages of advancement of their walking and cycling strategies ($F=10.113$ and $F=10.067$ respectively; both $p < 0.001$; one-way ANOVA). It would thus be desirable to ensure that the case studies selected from the different local authority types would also provide a representative cross section of the different developmental stages of walking and cycling policies.

The highest and lowest scoring authorities in each organisational group were selected as case studies for qualitative investigation (see Chapter 5), resulting in dual-case replication design (Yin, 1989), where each authority pair was selected for *theoretical replication* or the production of contrary results for predictable reasons. Table 4.4 lists the case study authority, their index scores and the state of development of their walking and cycling policies. It shows that the case studies between them cover all the different possible stages of policy development for both modes

local authority (CSSI)	Walking Strategy	Cycling Strategy
<i>County Councils (CC)</i>		
Suffolk CC (26)	Strategy part of LTP	Strategy part of LTP
Worcestershire CC (3.5)	Developing one	Stand alone document
<i>English Unitary Authorities (EUA)</i>		
City of York (25)	Stand alone document	Stand alone document
Luton (0)	Developing one	Developing one
<i>Scottish Unitary Local Authority (SUA)</i>		
Falkirk (24)	Mode dealt with in LTS	Stand alone document
East Renfrewshire (-5.5)	No specific policies	Part of LTS
<i>Metropolitan Borough Councils (MBC)</i>		
Bury (13.5)	Mode dealt with in LTP	Stand alone document
Oldham (-10.5)	Developing one	Developing one
<i>London Boroughs (LB)</i>		
Royal Borough of Kensington & Chelsea (13.5)	Mode dealt with in LTP	Mode dealt with in LTP
Lambeth (-1)	Stand alone document	Mode dealt with in LTP
<i>Welsh Unitary Authorities (WUA)</i>		
Flintshire (15)	Developing one	Stand alone document
Merthyr Tydfil (-20.5)	No specific policies	No specific policies

Table 4.4 Case studies as selected through CSSI scores (given in brackets) in each type of local authority

In the subsequent analysis, variables will be analysed for all authority types together, but where appropriate, comparisons will also be made between the different authority types as well as between

the two modes. Since a strong relationship has been found between *authority type* and the CSSI, those variables, which have contributed to the Index will not be disaggregated by LA type to avoid circular analysis (see Appendix D for a full list of these variables).

4.3.3 Activities and information relating to walking and cycling

The following section will provide an overview of the key indicators selected to assess authorities' activity relating to walking and cycling. This information could not be compared to figures applying to the entire population since the relevant data is not available at a national level.

The questionnaire asked about several indicators of an authorities' activities relating to walking and cycling such as whether they had a walking or cycling officer or a walking or cycling strategy. Other questions related to Safe Routes to School Projects, Home Zones and the monitoring of modal indicators. The following section will describe the frequencies with which these activities occurred within the sample and will also analyse whether there are significant differences between the two modes.

The focus groups indicated that the presence of a walking and/or cycling officer, i.e. a dedicated member of staff is very important for taking policies forward. Table 4.5 shows the number of authorities with walking and cycling officers and the statistics comparing the two types of posts.

	Walking officer		Cycling officer		Statistics
\bar{x} years post has existed	2.7 yrs		4.4 yrs		$F=1.37, v_1=42, v_2=20$ $p<0.05$ $t=1.09, df=62$ $p>0.1$
\bar{x} years post has existed – outliers removed	1.7 yrs		4 yrs		$F=0.23, v_1=40, v_2=18$ $p<0.05$ $t=3.95, df=58$ $p>0.01$
	n	% of sample	n	% of sample	
Yes	13	14%	40	43%	$\chi^2 = 20.094; df=2; p<0.001$
Same post	8	9%	8	9%	
No	71	77%	44	48 %	
	n	% of existing posts	n	% of existing posts	
full-time	6	29	24	50	$\chi^2 = 1.595; df=1; p>0.1$
part-time	15	71	24	50	

Table 4.5 Frequency and length of existence of the posts of walking and cycling officers and comparative statistics

Of the responding authorities, significantly more had a cycling than a walking officer but the number of years these posts had existed was not initially found to be significantly different.

However, after the removal of two outliers – two local authorities, which had had walking and cycling officers for 10 and 15 years respectively – the difference was found to be 99% significant.

The number of full- and part-time walking and cycling officers did not differ significantly. Of the sample 9% had one post, which covered the responsibilities of both walking and cycling officers, while another 13% (or 12 authorities) had both a walking and a cycling officer.

The majority of responding local authorities had some form of policies for pedestrians and cyclists but there was a significant difference between the form these policies took ($\chi^2 = 27.508$, $df = 4$, $p < 0.001$) with cycling strategies further developed than those for walking. The proportions of different types of policies are shown in Figure 4.5.

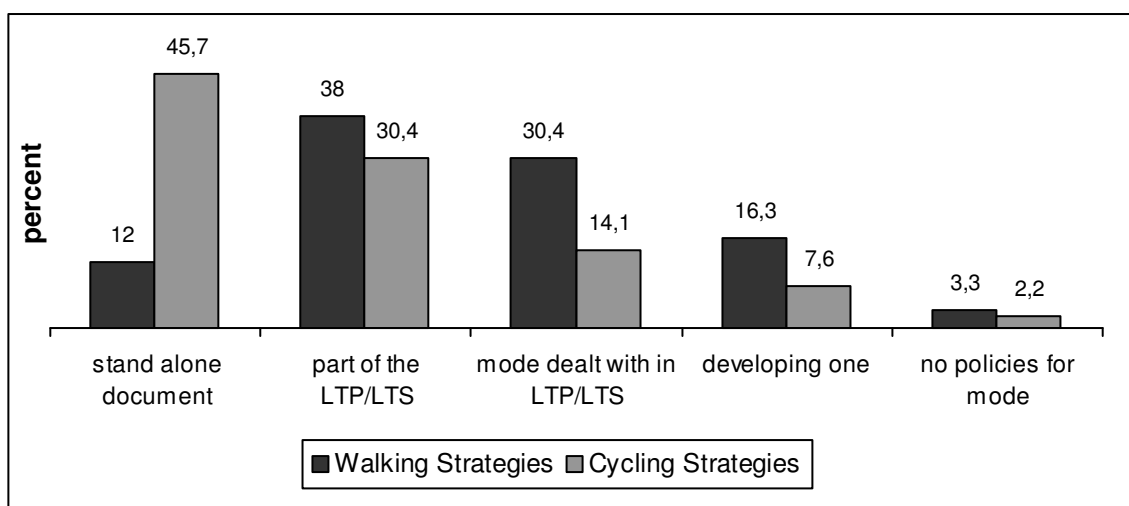


Figure 4.5 Stages of development of walking and cycling strategies/policies

A comparison of the length of existence of walking and cycling strategies showed that (once outliers were removed) cycling strategies had been in existence significantly longer than strategies for walking ($t = 3.31$, $df = 43$, $p < 0.005$). Also, significantly more authorities had adopted targets for increasing the modal share of cycling (82%) than for walking (48%; for frequencies: $\chi^2 = 21.978$, $df = 1$, $p < 0.001$). A comparative analysis of local authority types produced contingency tables in which more than 20% of the expected frequencies were below 5 but the results indicated that there was probably a significant association between the authority type and their likelihood of adopting targets for both walking and cycling (see Table 4.6). Although the ranking by percentage of those LA types, which had adopted targets, was not exactly the same as that obtained through the CSSI, LA types did remain within the same third of the ranking (i.e. County Councils and English Unitaries in the top third, Scottish Unitaries and Metropolitan Boroughs in the middle third and London Boroughs and Welsh Unitaries in the bottom third).

	targets for increasing walking	targets for increasing cycling
County Councils	63%	100%
English Unitaries	73%	96%
Scottish Unitaries	50%	75%
Metropolitan Boroughs	24%	83%
London Boroughs	14%	43%
Welsh Unitary Authorities	22%	56%
comparison of different LA types	$\chi^2 = 16.831, df=5, p<0.01$	$\chi^2 = 18.913, df=5, p<0.005$

Table 4.6 Percentages of different authority types, which have adopted targets for increasing the modal share of walking and cycling (authority types are listed in descending order of mean CSSI scores)

Interestingly, as Table 4.7 shows, far fewer authorities provided base line figures for the current modal share of walking and cycling in their area than had adopted targets for these modes. This is important as in many cases targets related to an increase over the current baseline rather than an absolute figure. Such an increase will be hard to monitor, if the baseline figures are not known. Although no assumptions should be made about the availability of such figures in those authorities, which did not answer this particular question, Table 4.7 demonstrates that in the case of cycling at least, the proportion of authorities with baseline figures would be below the 82%, which have adopted targets, even if it was assumed that all, who did not answer the question had the information available to them.

	trips to work	don't know	no answer	all trips	don't know	no answer
Walking	24%	30%	46%	14%	35%	51%
Cycling	26%	30%	44%	25%	29%	46%

Table 4.7 Proportion of respondents, who provided figures for the existing modal share of walking and cycling in their local authority

The results showed that there were no significant differences between authorities' current monitoring activities relating to walking and cycling (see Table 4.8) but that certainly in the case of cycling less authorities appear to be monitoring modal share than have set targets for it (see Table 4.6) .

	walking to work	cycling to work	all walking trips	all cycling trips	accidents involving pedestrians	accidents involving cyclists	other
yes	27%	32%	22%	38%	87%	89%	50%
no	47%	46%	49%	37%	9%	9%	11%
don't know	6%	6%	5%	6%	1%	1%	6%
no answer	20%	16%	24%	19%	3%	1%	33%

Table 4.8 Proportion of respondents who monitor given indicators

Of those authorities, which monitored “other” indicators, 56% were monitoring *air quality* and only 4% monitored *mode of travel to school*.

Significantly more authorities had implemented – or were in the process of implementing – Safe(r) Routes to School type projects (94%) than Home Zones (36%; $\chi^2 = 90.731$, $df=2$, $p<0.001$). It was attempted to establish correlations between the existence of these projects and the stages of development of walking and cycling policies. It was not possible to conduct meaningful statistical analyses even after recoding the data into fewer categories³⁶. However, Table 4.9 shows some of the numerical results of the cross tabulations, which indicate that authorities, which have adopted policies for walking and cycling are more likely to also have implemented – or be in the process of implementing – Safe(r) Routes to School type projects and Home Zones.

	Does LA have any Safe(r) Routes to School type projects?	
	Yes	In the process of implementing
Walking Strategy (stand alone or as part of LTS/LTP)	40%	7%
No strategy but walking dealt with in LTP/LTS	15%	14%
No strategy exists but LA is in the process of developing one	11%	4%
No specific pedestrian policies	0%	3%
Cycling Strategy (stand alone or as part of LTS/LTP)	57%	15%
No strategy but cycling dealt with in LTP/LTS	5%	9%
No strategy exists but LA is in the process of developing one	4%	2%
No specific cycling policies	0%	2%

Table 4.9 Crosstabulation of stages of development of walking and cycling strategies with the existence of Safe(r) Routes to School type projects and Home Zones (figures in percent of entire sample) (contd.)

³⁶ in the chi-square crosstabulations the number of cells with expected counts below five was consistently over 20%

	Does LA have any Home Zones?	
	Yes	In the process of implementing
Walking Strategy (stand alone or as part of LTS/LTP)	4%	16%
No strategy but walking dealt with in LTP/LTS	1%	8%
No strategy exists but LA is in the process of developing one	1%	5%
No specific pedestrian policies	0 %	0%
Cycling Strategy (stand alone or as part of LTS/LTP)	5%	24%
No strategy but cycling dealt with in LTP/LTS	0%	5%
No strategy exists but LA is in the process of developing one	1%	0%
No specific cycling policies	0%	0%

Table 4.9 Crosstabulation of stages of development of walking and cycling strategies with the existence of Safe(r) Routes to School type projects and Home Zones (figures in percent of entire sample)

Respondents were asked to provide information on their authority's budget for walking and cycling for the most recent completed financial year (1999/2000). Just over half of all the respondents provided this information (52% for walking, 54% for cycling) and the mean budgets for both modes for that year were £153,600 for walking and £141,000 for cycling. There was no significant difference between the budgets for both modes. The majority of respondents foresaw budgets for walking and cycling would increase in future (65% and 71% respectively) and just under a fifth thought they would remain the same (18% and 17% respectively). Only 3% thought that budgets for both modes would fall in future. Again, these figures did not differ significantly between both modes.

The activity of lobby groups was highlighted during the focus groups as an important factor influencing policy and implementation. The questionnaire therefore asked respondents to rate the level of activity of different types of groups within their local authority area (see Figure 4.6). Overall, these activity levels differed significantly between different local lobby groups ($\chi^2 = 180.401$, $df = 15$, $p < 0.001$; see Figure 4.6). However, since the choices given by the questionnaire included groups traditionally active at a local level (e.g. traders, local residents) as well as those more generally acting nationally (e.g. motoring organisations) this result in itself was perhaps not surprising. Statistical comparison showed that cycling groups were as active as local residents groups ($\chi^2 = 5.642$, $df = 3$, $p > 0.05$) and pedestrian and motoring groups – both traditionally more active on a national level in Great Britain – were also equally active – or inactive ($\chi^2 = 2.536$, $df = 3$, $p > 0.05$). Cycling groups were significantly more active than both the latter ($\chi^2 = 33.93$, $df = 3$, $p < 0.001$ and $\chi^2 = 49.328$, $df = 3$, $p < 0.001$ respectively).

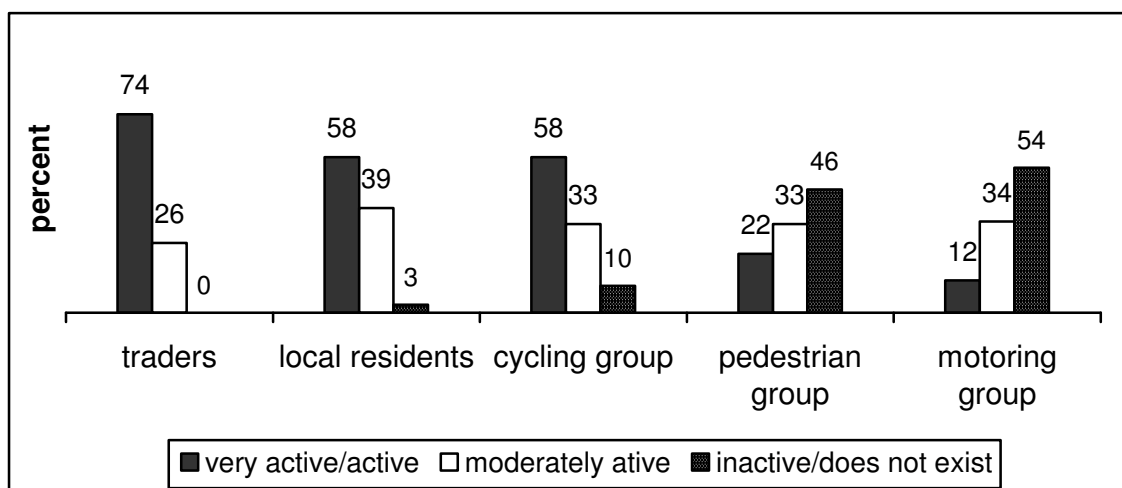


Figure 4.6 Level of activity of local lobby groups throughout the sample (in percent of valid responses received)

The level of activity of these lobby groups differed between authority types only for cycling groups ($\chi^2 = 26.250$, $df = 15$, $p < 0.05$), but did not correspond with the order of authority types as determined by the CSSI (percentage of respondents with *very active* or *active* cycling groups: London Boroughs: 86%; County Councils: 72%; English Unitary Authorities: 64%; Metropolitan Boroughs: 58%; Scottish Unitary Authorities: 50%; Welsh Unitary Authorities: 11%).

Participants of the focus groups had considered working in partnership with bodies and organisations outside the local authority an important aspect of policy implementation. Respondents to the questionnaire were thus asked to indicate their authority's co-operation in promoting walking and cycling and improving facilities for the two modes with a selection of other organisations (Q 55 & 56; see Figure 4.7 for results).

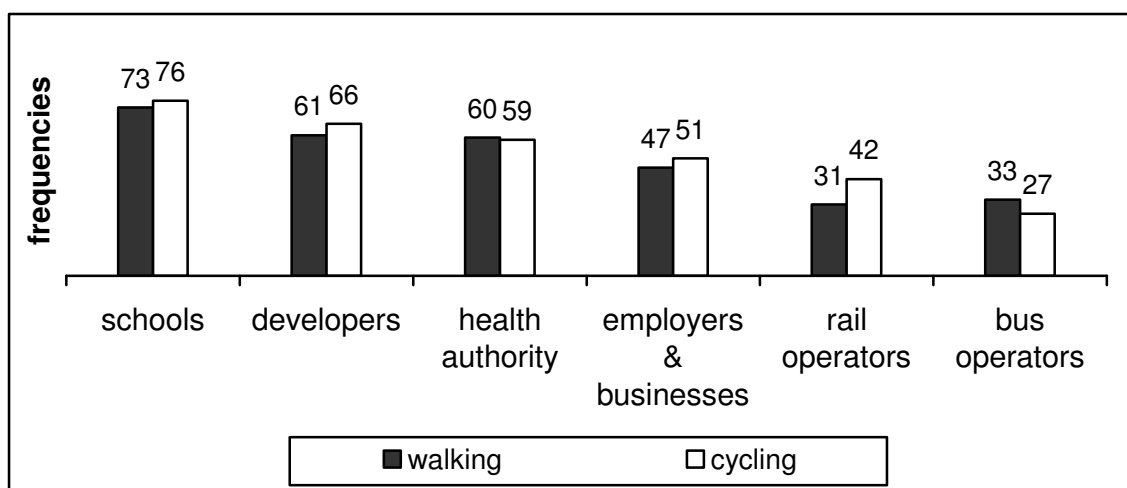


Figure 4.7 Number of authorities, which co-operate with different bodies and organisations on walking and cycling issues

Schools were clearly the most frequent partners for co-operation on the two modes, which might reflect the high profile that *Safe(r) Routes to School* schemes have gained at national level in recent

years (see also Section 2.1.6.1 of the literature review). Developers and health authorities are also relatively well represented as working partners, while only around half of authorities work with employers and businesses and only about a third work with public transport operators. On average, every local authority co-operates with 3 to 4 external agencies and there is no significant difference overall between levels of co-operation for walking and cycling. A χ^2 analysis indicated that there was probably a significant association between the authority type and the level of co-operation with different groups (specifically with *bus-companies*, *employers & businesses* and developers on walking and with *bus companies* and *employers & businesses* on cycling) but the number of expected counts below 5 exceeded 20% in every case so these results are not entirely reliable.

An important function of the questionnaire was to provide criteria, which would aid the selection of representative case studies. To this end respondents were asked to rate the level of success their authority had had in the implementation of walking and cycling policies. The questionnaire had only provided choice of a scale of 1-5 (very successful to unsuccessful) but a large number of respondents added their own category “too early to tell”, so this was incorporated in the analysis. Figure 4.8 shows the results.

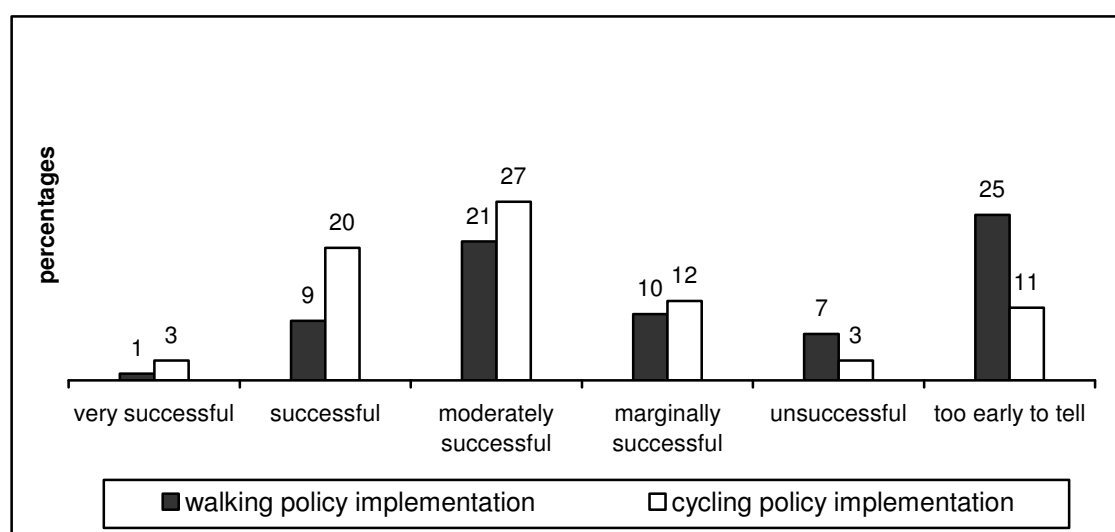


Figure 4.8 Respondents' assessment of their authority's success in implementing walking and cycling policies

Since walking policies have been shown to have been in existence for significantly less time overall than cycling policies it was not surprising to see twice as many respondents judging it as “too early to tell” the success or otherwise of the implementation of walking policies. When this category was disregarded, comparative analysis showed there to be no significant difference between the assessments made of policy implementation for the two modes ($\chi^2 = 5.707$, $df=5$, $p<0.1$).

4.3.4 Awareness and use of policy and guidance documents

Questions 31 to 33 dealt with the availability and use of the most common guidance documents for transport in general and walking and cycling in particular. The respondents' overall awareness of these documents and their availability (Q31) was evaluated by assigning the following scores to the possible answers

Answer:	<i>"I know the document and my LA holds a copy"</i>	<i>"I know the document but my LA does not hold a copy"</i>	<i>"I know the document but do not know, if my LA holds a copy"</i>	<i>"I do not know this document"</i>
Score:	1	2	3	4

thus ranking the answers in descending order of awareness and availability. The mean scores for each document were then calculated with lower means indicating higher levels of awareness of a particular document. Results for the entire sample and the six different authority types are given in Table 4.10³⁷. The table also shows that the documents enjoying greatest levels (low \bar{x}) of awareness differed across authority types.

Document	all LAs	CC	EUA	SUA	MBC	LB	WUA
Local Transport Strategy/Plan Guidelines	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sustrans guidelines	1.13	1.16	1.32	1.00	1.00	1.29	1.00
National Cycling Strategy	1.14	1.00	1.27	1.27	1.00	1.29	1.11
Planning Policy Guidance 13: Transport (England & Wales)	1.15	1.11	1.00	2.00	1.00	1.00	1.00
Traffic Advisory Leaflets	1.16	1.00	1.45	1.20	1.00	1.00	1.11
Cycle Audit and Cycle Review (IHT)	1.26	1.00	1.36	1.13	1.11	2.14	1.33
Cycle Friendly Infrastructure (Bicycle Association, CTC, IHT)	1.39	1.18	1.55	1.47	1.11	2.14	1.25
Encouraging Walking (DETR)	1.40	1.16	1.41	1.93	1.00	1.43	1.78
Transport in the Urban Environment (IHT)	1.69	1.89	1.64	1.87	1.50	1.71	1.44
Design Bulletin 32: Roads and footpaths in residential areas	1.75	1.68	1.59	2.40	1.47	1.71	1.75
Cycling by Design (Scottish Executive)	3.07	3.46	3.44	1.00	4.00	4.00	4.00
National Planning Policy Guidance 17: Transport (Scotland)	3.20	3.62	3.87	1.13	3.67	4.00	4.00
Planning Advice Note 57: Transport (Scotland)	3.30	3.62	3.87	1.40	4.00	4.00	4.00

Table 4.10 Comparative mean scores (\bar{x}) of awareness and availability of documents for all local authorities (LAs) and disaggregated by type (Q31); the three lowest means in each column are shaded grey

³⁷ It should be noted, however, that differences between the mean scores of adjoining ranks within one column are - with some exceptions - not statistically significant.

Since local authorities in England and Wales have a legal obligation to provide Local Transport Plans and the transport funding Scottish authorities receive also depends on the production of a Local Transport Strategy, it is not surprising, that awareness of the guidance on production of these documents is very high across all types of authorities. The results also show, that the awareness of documents specific to different countries within Great Britain differs across types of local authorities. A Kruskal Wallis test (for comparing the medians of non-parametric data) indicated significant differences between authority types for 6 documents (PPG 13; NPPG 17; PAN 17; *Cycling by Design*, *Cycle Audit and Cycle Review* and *Encouraging Walking*). Subsequent Mann-Whitney *U* tests (searching for differences between the medians of two non-parametric samples) showed that respondents from Scottish Unitary Local Authorities were significantly less aware of PPG 13 than those from all other authority types and significantly more aware of NPPG 17, PAN 57 and *Cycling by Design* – although, in the absence of a DETR equivalent publication, the latter document is recommended for use by English and Welsh authorities as well (see Table 4.11 for statistics).

There were further significant differences between the awareness of *Cycle Audit and Cycle Review* and *Encouraging Walking*, with London Boroughs being particularly unaware of the former and Scottish Unitaries being least aware of the latter (see Table 4.11).

Document	LA type	CC	EUA	MBC	LB	WUA
PPG 13	SUA	U= 62.0 p<.01	U= 66.0 p<.01	U= 57.0 p<.01	U= 21.0 p<.05	U= 27.0 p<.05
NPPG 17		U= 9.0 p<.01	U= 1.0 p<.01	U= 8.0 p<.01	U= .0 p<.01	U= .0 p<.01
PAN 57		U= 21.5 p<.01	U= 17.0 p<.01	U= 9.0 p<.01	U= 6.0 p<.01	U= 7.0 p<.01
Cycling by Design		U= 7.5 p<.01	U= 15.0 p<.01	U= .0 p<.01	U= .0 p<.01	U= .0 p<.01
Cycle Audit & Cycle Review	CC	n.a.	n.a.	n.a.	U= 36.0 p<.01	U= 63.0 p<.05
	LB	n.a.	n.a.	U= 38.5 p<.05	n.a.	n.a.
Encouraging Walking	SUA	U= 93 p<.05	n.a.	U= 76.5 p<.01	n.a.	n.a.
	WUA	n.a.	n.a.	U= 51.0 p<.05	n.a.	n.a.

Table 4.11 Results of Mann Whitney *U* test for differences in awareness of six documents between respondents from different authority types

In question 31, respondents were also given the opportunity to list “other” documents they might be aware of and since by necessity these lists would only contain documents the respondent would know, the mean score for “other” was also 1.00. Since this score is thus not comparable to the scoring of a document supplied on the questionnaire, “other” was not included in Table 4.12 or the subsequent analysis. But it should be noted here that out of the 18 responses received in this category (many of which listed several documents), the four most frequently mentioned documents were: *London Cycle Network Design Manual* (5), *Bikeframe* by the CTC (5), *Taking the Strategy Step* by The Pedestrians’ Association (4) and *Guidelines on Providing for Journeys on Foot* by the IHT (4). The availability of the *London Cycle Network Design Manual* to London Boroughs could explain the lesser awareness of *Cycle Audit and Cycle Review* in these authorities.

The next question asked if respondents used the documents that they had available to them *frequently*, *occasionally* or *never*, the answers scoring one to three respectively. Mean scores were calculated as for question 30 and the results are shown in Table 4.12.

Document	all	CC	EUA	SUA	MBC	LB	WUA
Local Transport Strategy/Plan Guidelines	1.36	1.25	1.24	1.27	1.47	1.71	1.56
Traffic Advisory Leaflets	1.44	1.24	1.65	1.57	1.28	1.43	1.50
Cycle Friendly Infrastructure (Bicycle Association, CTC, IHT)	1.48	1.27	1.58	1.77	1.28	1.80	1.43
Sustrans Guidelines	1.52	1.35	1.65	1.60	1.47	1.67	1.44
Planning Policy Guidance 13: Transport (England & Wales)	1.65	1.47	1.52	2.29	1.65	1.57	1.88
National Cycling Strategy	1.69	1.44	1.90	1.79	1.62	1.83	1.57
Cycle Audit and Cycle Review (IHT)	1.70	1.53	1.65	1.80	1.89	1.67	1.63
National Planning Policy Guidance 17: Transport (Scotland)	1.75	2.00	2.50	1.50	2.50	2.00	0.00
Cycling by Design (Scottish Executive)	1.76	1.60	1.90	1.47	2.25	2.00	1.33
Planning Advice Note 57: Transport (Scotland)	1.78	2.00	2.50	1.46	3.00	3.00	0.00
Design Bulletin 32: Roads and footpaths in residential areas	1.81	1.83	1.81	2.14	1.71	1.50	1.89
Encouraging Walking (DETR)	1.84	1.62	1.74	2.00	1.88	2.14	2.00
Transport in the Urban Environment (IHT)	1.87	2.08	1.81	1.80	1.93	1.67	1.78

Table 4.12 Comparative mean scores (\bar{x}) describing frequency of use of listed documents by respondents from all local authorities (LAs) and disaggregated by type (Q32); the three lowest means in each column are shaded grey

The leading position of the guidance on Local Transport Plans and Strategies can probably be ascribed to their importance for funding allocation but it should be noted that in this question

respondents were asked to indicate the frequency of use only of those documents which they had previously indicated were known and available to them. The position of the three Scottish documents should thus not be influenced by their absolute relevance but should be directly comparable to the ratings calculated for other guidance material. A Kruskal Wallis test found no significant difference between the median level of use of any of these documents across the six authority types although Table 4.12 does show, that the most frequently used documents (low \bar{x}) differ across authority types.

A quarter of responding authorities (26%) had produced their own design guidance or audit documents for walking and cycling (Q33), while over half (60%) had not. A further 14% of respondents did not know, if any such documents had been produced by their local authority. When the response option *don't know* was coded as a missing value, there was a significant difference between different local authority types in the production of internal guidance material ($\chi^2 = 15.159$, $df=5$, $p<0.05$) with County Councils having produced most ($n=10$) and Welsh Unitary Authorities least ($n=0$). These rankings corresponds with that of local authority types by CSSI but the ranks of the remaining 4 types do not. There was furthermore no significant difference between the CSSI of those authorities, which had produced internal guidance and those, which had not ($t=1.607$; $df=75$; $p>.10$).

4.3.5 Factors influencing policy adoption and implementation

A set of six questions dealt with variables, which might have influenced the adoption and implementation of walking and cycling policies (Q29, 30, 47, 49, 51 and 53). Respondents were asked to rank factors and documents listed on a Likert scale (1-5) according to their importance. To compare the overall significance of these documents and factors, mean scores were calculated for each and the results ranked in ascending order for all authority types together as well as separately for each type. Low scores indicated a high significance or importance.

Walking			Cycling		
	Mean score	N		Mean score	N
Local Transport Plan / Strategy requirements	1.72	68	Local Transport Plan/Strategy requirements	1.90	84
Committed/motivated officer(s)	2.18	65	National Cycling Strategy	1.91	82
UK Transport White Paper	2.21	63	Committed/motivated officer(s)	2.04	79
Existing traffic problems	2.61	64	UK Transport White Paper	2.48	80
Health policies	2.75	65	Sustrans / National Cycle Network	2.60	80
Road Traffic Reduction Act 1997	2.88	66	Accident reduction targets	2.63	79
Accident reduction targets	2.90	82	Existing traffic problems	2.76	78

Table 4.13 The comparative average importance of different factors in adopting walking (Q29) and cycling (Q30) policies as rated by all authorities (contd.)

Walking			Cycling		
	Mean score	N		Mean score	N
Local road traffic reduction targets	2.90	62	Health policies	2.87	78
Specific sources of funding	2.98	51	Specific sources of funding	2.89	55
Local Agenda 21	3.02	66	Lobbying by local NGOs or pressure group(s)	2.93	75
Air quality targets	3.14	63	Local road traffic reduction targets	3.08	79
Lobbying by councillor(s)	3.41	61	Local Agenda 21	3.14	78
Sustrans / Millennium Routes	3.60	63	Air quality targets	3.18	78
Lobbying by local NGOs / pressure group(s)	3.73	60	Road Traffic Reduction Act 1997	3.19	78
Lobbying by national NGOs / pressure group(s)	3.91	58	Lobbying by councillor(s)	3.34	76
Scottish Transport White Paper	4.35	48	Lobbying by national NGOs or pressure group(s)	3.70	74
			Cycle Challenge Funding	3.79	75
			Scottish Transport White Paper	4.45	60

Table 4.13 The comparative average importance of different factors in adopting walking (Q29) and cycling (Q30) policies as rated by all authorities

As Table 4.13 shows, the requirements made of local authorities to produce walking and cycling policies as part of their LTP/S was the most important factor influencing the adoption of policies for these modes. Committed local officers and the 1998 UK White Paper on Transport – which mentioned the important contribution walking and cycling could be making to an integrated transport system – also ranked very highly. The Scottish Transport White Paper probably ranks at the bottom since it is relevant only to Scottish local authorities, which as a distinct group did consider it to have had a significant influence, though (see Table). The results also show, that policies such as the National Cycling Policy, which are mode specific, were considered to have had a larger overall impact than the more general white papers and that Sustrans – an organisation working for sustainable transport in general – was seen to have had more influence on walking than cycling policies. The smaller overall sample sizes (N) for question 29 are in line with the observation that less authorities have adopted any policies for walking and to those, which have not, this question would not have been relevant.

A disaggregation of these results by local authority type showed, that not all types of authority agreed on the order of importance of these factors. The top three ranking documents for each authority type are shown in Table. More factors have been listed in cases where the relevant ranks were tied.

Walking			Cycling		
	Mean score	N		Mean score	N
County Councils			County Councils		
UK Transport White Paper	1.79	14	National Cycling Strategy	1.50	18
Local Transport Plan / Strategy requirements	1.88	16	Committed/motivated officer(s)	1.82	17
Committed/motivated officer(s)	1.94	16	Local Transport Plan / Strategy requirements	1.89	18
English Unitary Authorities			English Unitary Authorities		
Local Transport Plan / Strategy requirements	1.42	19	Local Transport Plan / Strategy requirements	1.57	21
UK Transport White Paper	2.26	19	National Cycling Strategy	1.95	21
Committed/motivated officer(s)	2.26	19	Committed/motivated officer(s)	2.19	21
Scottish Unitary Authorities			Scottish Unitary Authorities		
Local Transport Plan / Strategy requirements	1.90	10	Local Transport Plan / Strategy requirements	1.92	13
Scottish Transport White Paper	2.30	10	Committed/motivated officer(s)	1.92	12
Committed/motivated officer(s)	2.33	9	National Cycling Strategy	2.15	13
Metropolitan Borough Councils			Metropolitan Borough Councils		
Local Transport Plan / Strategy requirements	1.40	10	Committed/motivated officer(s)	2.00	15
Specific sources of funding	1.83	6	National Cycling Strategy	2.06	16
Committed/motivated officer(s)	2.00	8	Local Transport Plan / Strategy requirements	2.11	18
London Boroughs			London Boroughs		
Committed/motivated officer(s)	2.14	7	Committed/motivated officer(s)	2.14	7
Health policies	2.29	7	Lobbying by local NGO(s) or pressure group(s)	2.14	7
Air quality targets	2.29	7	Existing traffic problems	2.14	7
UK Transport White Paper	2.29	7			
Welsh Unitary Authorities			Welsh Unitary Authorities		
UK Transport White Paper	1.60	5	National Cycling Strategy	1.43	7
Local Transport Plan / Strategy requirements	1.67	6	National Cycle Network / Millennium Routes	1.57	7
Existing traffic problems	2.17	6	Local Transport Plan / Strategy requirements	2.00	7
Road Traffic Reduction Act 1997	2.17	6			

Table 4.14 The top three ranking factors (by mean score) contributing to the adoption of walking (Q29) and cycling (Q30) policies in different authority types

However, despite these different rankings, significant differences between the mean scores given to individual factors listed for walking in Table 4.14 by the various authority types were only found for the UK and Scottish White Papers ($\chi^2 = 11.244$, $df = 5$, $p < 0.05$ and $\chi^2 = 38.487$, $df = 5$, $p < 0.001$ respectively; Kruskal Wallis test). No differences were found between the factors influencing the adoption of cycling policies.

The results of questions 47 and 49 showed clearly, that a lack of resources (staff, staff time and funding) were considered to be the main factors standing in the way of the adoption and implementation of policies for walking and cycling (Table 4.15). Interestingly, the only other British study dealing with barriers to walking policy implementation (Newby & Sloman, 1996) also found lack of funding to be the greatest barrier, but this was followed by a lack of implementation powers and uncertainty about whether proposed measures would actually be effective in encouraging people to walk (see also Chapter 2, Section 2.2.1.4). However, it should be noted, that this study had a much smaller sample size (N=15) and was conducted at a time, when walking was (even) further down the transport policy agenda.

Walking			Cycling		
	Mean	N		Mean	N
lack of staff time	1.80	75	lack of staff time	1.93	80
lack of staff	1.87	76	lack of staff	2.14	80
lack of funding	2.09	70	lack of funding	2.34	79
insufficient strategic priority given to walking policies	2.99	74	existing professional culture(s) in transport department (or equivalent)	3.28	76
lack of power to implement certain measures	3.26	72	insufficient strategic priority given to cycling policies	3.28	79
lack of interest in walking policies among members	3.28	72	lack of interest in cycling policies among members	3.30	76
uncertainty about effectiveness of certain measures	3.33	72	existing professional culture in other departments	3.34	76
existing professional culture in other departments	3.35	74	lack of power to implement certain measures	3.40	77
lack of interest in walking policies among officers	3.36	76	uncertainty about effectiveness of certain measures	3.43	79
existing professional culture(s) in transport department	3.37	75	perceived lack of public support for cycling measures	3.43	77
absence of national targets for walking	3.47	73	lack of interest in cycling policies among officers	3.47	78
lack of in-house expertise	3.55	71	lack of in-house expertise	3.59	76
absence of local/national road traffic reduction targets	3.69	71	conflicts between cycling policies and other policies	3.69	78
perceived lack of public support for walking measures	3.72	72	lobby groups	3.88	78
absence of local walk targets	3.81	73	absence of local/national road traffic reduction targets	3.99	75
lobby groups	3.97	73	absence of local targets for cycling	4.26	76
conflicts between walking policies and other council policies	4.10	72	co-ordination problems with neighbouring local authorities	4.39	74
co-ordination problems with neighbouring local authorities	4.58	72			

Table 4.15 The comparative average importance of different factors in hindering the drafting and implementation of walking (Q47) and cycling (Q49) policies as rated by all authorities

A breakdown of these results by local authority type showed only small differences in the top three ranking factors (see Table 4.16). *Insufficient strategic priority given to the mode* ranked on third place

among Metropolitan Borough Councils behind *lack of staff time* and *lack of staff* for both walking and cycling (*lack of funding* ranked fourth for MBCs). Among the London Boroughs *lack of interest in walking policies among officers* shared a tied third rank with *lack of funding*. A comparison of mean scores achieved by these factors across different authority types relating to walking policies found significant differences between the mean scores for *lack of funding* ($\chi^2 = 20.267$, $df = 5$, $p < 0.005$; Kruskal Wallis test) and *insufficient strategic priority given to walking policies* ($\chi^2 = 13.003$, $df = 5$, $p < 0.05$; Kruskal Wallis test) showing that different authority types attached various degrees of overall importance to *lack of funding* although all types – except Metropolitan Borough Councils – perceived it to be of similar significance relative to the other factors listed.

These figures also show that *lack of strategic priority given to walking policies* was a significantly greater hurdle for Metropolitan Boroughs than for any other council. The same is true for the *lack of strategic priority given to cycling policies* ($\chi^2 = 14.051$, $df = 5$, $p < 0.05$; Kruskal Wallis test) in this group.

Walking			Cycling		
	Mean score	N		Mean score	N
<i>County Councils</i>			<i>County Councils</i>		
lack of funding	1.92	13	lack of staff time	2.13	15
lack of staff time	2.07	14	lack of funding	2.14	14
lack of staff	2.07	14	lack of staff	2.47	15
<i>English Unitary Authorities</i>			<i>English Unitary Authorities</i>		
lack of staff	1.50	18	lack of staff time	1.63	19
lack of staff time	1.65	17	lack of staff	1.74	19
lack of funding	2.41	17	lack of funding	2.43	21
<i>Scottish Unitary Authorities</i>			<i>Scottish Unitary Authorities</i>		
lack of funding	1.43	14	lack of funding	1.64	14
lack of staff time	1.86	14	lack of staff time	2.15	13
lack of staff	2.21	14	lack of staff	2.31	13
<i>Metropolitan Borough Councils</i>			<i>Metropolitan Borough Councils</i>		
lack of staff time	1.36	14	lack of staff time	1.82	17
lack of staff	1.57	14	lack of staff	1.94	17
insufficient strategic priority given to walking policies	2.00	13	insufficient strategic priority given to cycling	2.41	17
<i>London Boroughs</i>			<i>London Boroughs</i>		
lack of staff	2.43	7	lack of staff time	2.29	7
lack of staff time	2.43	7	lack of staff	2.57	7
lack of funding	3.00	7	lack of funding	2.71	7
lack of interest in walking policies among officers	3.00	7			

Table 4.16 The top three ranking factors (by mean score) hindering the drafting and implementation of walking (Q47) and cycling (Q49) policies in different authority types (contd. >)

Walking			Cycling		
	Mean score	N		Mean score	N
Welsh Unitary Authorities			Welsh Unitary Authorities		
lack of funding	1.33	9	lack of staff time	1.78	9
lack of staff time	1.78	9	lack of funding	2.11	9
lack of staff	1.78	9	lack of staff	2.22	9

Table 4.16 The top three ranking factors (by mean score) hindering the drafting and implementation of walking (Q47) and cycling (Q49) policies in different authority types

One important aim of the questionnaire was to identify factors which authorities had expressly found helpful in the implementation of walking and cycling policies (Q 51 & 53). The answers given showed, that a national policy framework is of great importance, both as a larger framework – such as the goal of moving towards a more integrated transport system – and in setting a mode specific context (see Table 4.17). Walking does not have a mode specific national policy context comparable to that, which exists for cycling (such as the National Cycling Policy and associated documents, see Chapter 2) but since pedestrians are traditionally seen as the most vulnerable road users local accident reduction targets, which might tie in with similar national targets could be considered to be the closest approximation to such a framework. As before, the overall sample sizes are concurrent with the observation, that more authorities actively cater for cycling than for walking.

Walking			Cycling		
	Mean score	N		Mean score	N
local accident reduction targets	2.22	49	committed/motivated officer(s)	2.00	73
committed/motivated officer(s)	2.29	49	other national transport strategies/policies	2.26	74
other national transport strategies/policies	2.63	49	national policy framework for cycling	2.30	73
existing local traffic problems	2.71	48	general public support for cycling measures	2.76	72
perception of general public support for walking measures	2.76	46	local accident reduction targets	2.80	71
national policy framework for walking	2.96	46	existing local traffic problems	2.92	71
health policies	3.06	50	local cycling officer	2.94	62
lobbying by councillors	3.30	47	lobbying by local NGO's or pressure groups	2.97	72
local air quality targets	3.38	48	health policies	3.12	74
head of department championed walking	3.53	40	head of department championed cycling	3.34	62
chair of transport committee championed walking	3.76	41	lobbying by councillors	3.36	70
lobbying by local NGO's or pressure groups	3.81	48	chair of transport committee championed	3.48	61

Table 4.17 The comparative average importance of different factors in helping the implementation of walking (Q51) and cycling (Q53) policies as rated by all authorities (contd.)

Walking			Cycling		
	Mean score	N		Mean score	N
local walking officer	3.85	41	local air quality targets	3.54	70
activities in neighbouring local authorities	4.07	46	national NGO's or pressure groups	3.68	69
lobbying by national NGO's or pressure groups	4.15	46	activities in neighbouring local authorities	3.73	70

Table 4.17 The comparative average importance of different factors in helping the implementation of walking (Q51) and cycling (Q53) policies as rated by all authorities

The mean scores calculated from the answers to questions 51 & 53 again showed some differences between authority types and the top three ranking factors for each type and mode are listed in Table 4.18. However, statistically significant variations of mean scores across authority types were only found for the following factors:

- *existing local traffic problems*
 - walking (Q51): $\chi^2 = 12.671$, $df=5$, $p<0.05$; Kruskal Wallis test
 - cycling (Q53): $\chi^2 = 18.880$, $df=5$, $p<0.005$; Kruskal Wallis test
- *perception of general public support for walking measures* (Q51): $\chi^2 = 11.643$, $df=5$, $p<0.05$; Kruskal Wallis test
- *national policy framework for cycling* (Q53): $\chi^2 = 11.946$, $df=5$, $p<0.05$; Kruskal Wallis test

When looking at these figures, it must be remembered, that they only compare the mean scores of one factor across each authority type. The Kruskal Wallis analysis gives no indication of the relative importance of these factors within each type of authority as the ranges of mean scores, which resulted in a ranking of specific factors differ greatly. Thus the top three factors among County Councils reached mean scores between 1.81 and 1.94, while those of English Unitary Authorities ranged between 2.06 and 3.28. For this reason it is possible to find a significant difference of mean scores for the *national policy framework for cycling* for example, even though it is found among the top three factors of five out of the six authority types.

Walking			Cycling		
	Mean score	N		Mean score	N
County Councils			County Councils		
existing local traffic problems	2.00	11	national policy framework for cycling	1.81	16
committed/motivated officer(s)	2.09	11	other national transport policies/strategies	1.88	16
other national transport policies/strategies	2.20	10	committed/motivated officer(s)	1.94	17

Table 4.18 The top three ranking factors (by mean score) found to be helpful in the implementation of walking (Q51) and cycling (Q53) policies by different authority types (contd.)

Walking				Cycling		
	Mean score	N			Mean score	N
<i>English Unitary Authorities</i>				<i>English Unitary Authorities</i>		
committed/motivated officer(s)	2.25	16		other national transport policies/strategies	2.06	18
local accident reduction targets	2.50	16		national policy framework for cycling	2.12	17
existing local traffic problems	2.60	15		committed/motivated officer(s)	3.28	18
<i>Scottish Unitary Authorities</i>				<i>Scottish Unitary Authorities</i>		
local accident reduction targets	1.88	8		committed/motivated officer(s)	1.92	12
perception of general public support for walking measures	2.71	7		national policy framework for cycling	2.67	12
health policies	2.86	7		local accident reduction targets	2.73	11
<i>Metropolitan Borough Councils</i>				<i>Metropolitan Borough Councils</i>		
perception of general public support for walking measures	1.33	3		committed/motivated officer(s)	1.71	14
committed/motivated officer(s)	1.75	4		other national transport policies/strategies	2.63	16
national policy framework for walking	2.20	5		national policy framework for cycling	2.80	15
<i>London Boroughs</i>				<i>London Boroughs</i>		
local accident reduction targets	1.67	6		local accident reduction targets	1.86	7
committed/motivated officer(s)	2.33	6		committed/motivated officer(s)	2.14	7
local air quality targets	2.50	6		existing traffic problems	2.29	7
existing traffic problems	2.50	6				
<i>Welsh Unitary Authorities</i>				<i>Welsh Unitary Authorities</i>		
local accident reduction targets	2.25	4		national policy framework for cycling	1.50	6
committed/motivated officer(s)	2.25	4		other national transport policies/strategies	1.67	6
perception of public support for walking measures	3.00	4		local accident reduction targets	2.00	5

Table 4.18 The top three ranking factors (by mean score) found to be helpful in the implementation of walking (Q51) and cycling (Q53) policies by different authority types

4.3.6 The characteristics of the most and least active local authorities – comparing the top and bottom quartiles of the CSSI

The compilation of the case study selection index – CSSI – helped to identify authorities, which would be approached for further study. The CSSI was found to relate most closely to the organisational types of local authority – rather than for example physical size, political control or population density. However, even though county councils were found to be the group most actively working for walking and cycling, not all county councils are found in the highest scoring CSSI quartile. Neither are all Welsh Unitary Authorities – the lowest scoring group – represented in the bottom quartile. In order to find characteristics other than the organisational type in which active and less active authorities were significantly different it was thus decided to compare the top and bottom quartiles of the index scores for those parameters, which had not contributed to the

index (and thus the ranking of the authorities) and also for some of the most important ones, which were contained in it. This would ensure that potential similarities or particularly significant differences between different authority types in some of the key variables, which might have been obscured by the cumulative effect of the index, could be separately identified.

The top quartile (20 authorities) contained 7 County Councils, 8 English Unitaries, 3 Scottish Unitaries, one Welsh Unitary Authority and one Metropolitan Borough, while the bottom quartile (23 authorities³⁸) was made up of 7 Welsh Unitaries, 2 London Boroughs, 4 Metropolitan Boroughs, 7 Scottish Unitaries and 3 English Unitary Authorities (see Table 4.19 for a detailed list). There was found to be no difference between the two groups in the political composition of the council, the area of the authority, the population density or council tax band D. It was found, though, that the higher scoring group had a significantly larger population mean (top quartile: \bar{x} = 365,000 bottom quartile: \bar{x} 146,000; $t = -3.306$; $df = 41$; $p < .005$). The population of the highest scoring authorities was on average twice as large as that of the lowest scoring group.

Since walking and cycling are generally seen to be largely urban modes of travel, it was decided to recode the answers to question 8 (which had asked respondents to classify their authority on a rural/urban gradient) into two categories, one containing all answers identifying authorities as fully or partly urban and one category containing all other answers. However, no difference was found between the degree of urbanity of high and low scoring authorities.

Name of Local Authority	Type of local authority	Case study score	Position in list
<i>top quartile of CSSI</i>			
Suffolk CC	CC	26.0	1
City of York Council	EUA	25.0	2
Falkirk Council	SUA	24.0	3
Shropshire CC	CC	22.5	4
Hampshire CC	CC	22.0	5
Reading Borough Council	EUA	21.5	6
Bristol City Council	EUA	21.5	6
South Ayrshire Council	SUA	21.0	8
Fife Council	SUA	20.5	9
Gloucestershire County Council	CC	18.5	10
Oxfordshire County Council	CC	17.5	11
Stoke on Trent City Council	EUA	17.0	12
Wokingham DC	EUA	17.0	12
Hartlepool BC	EUA	16.0	14
West Sussex County Council	CC	16.0	14
St. Helens MBC	MBC	15.0	16
Borough of Poole	EUA	15.0	16

Table 4.19 Authorities in the top and bottom CSSI quartiles (contd.)

³⁸ *n* differs for the two groups as some authorities shared the same score and the sample of 92 could thus not be divided into even quarters of 23

Name of Local Authority	Type of local authority	Case study score	Position in list
<i>top quartile of CSSI</i>			
Flintshire Council	WUA	15.0	16
Cumbria CC	CC	14.5	19
Swindon Borough Council	EUA	14.5	19
<i>bottom quartile of CSSI</i>			
Bolton MBC	MBC	2.0	70
Wrexham County Borough Council	WUA	2.0	70
Midlothian Council	SUA	2.0	70
Aberdeenshire	SUA	1.5	73
Scottish Borders Council	SUA	0.5	74
Bournemouth Borough Council	EUA	0.5	74
Pembrokeshire CC	CC	0.0	76
Luton Borough Council	EUA	0.0	76
LB of Lambeth	LB	-1.0	78
Shetland Island Council	SUA	-1.0	78
Trafford Metropolitan Borough	MBC	-2.0	80
LB of Enfield	LB	-2.5	81
Clackmannanshire	SUA	-3.5	82
Bridgend County Borough Council	WUA	-4.0	83
East Renfrewshire Council	SUA	-5.5	84
Gwynedd Council	WUA	-6.0	85
Redcar and Cleveland Borough	SUA	-6.0	85
Coventry City Council	MBC	-6.5	87
Conwy County Borough Council	WUA	-8.0	88
Oldham MBC	MBC	-10.5	89
Neath Port Talbot County Borough	WUA	-12.0	90
Comhairle nan Eilan Siar	SUA	-16.5	91
Merthyr Tydfil County Borough	WUA	-20.5	92

Table 4.19 Authorities in the top and bottom CSSI quartiles

Question nine had asked respondents to identify certain elements of infrastructure and public transport provision existing in their authority. It was found, that higher scoring authorities were significantly more likely to have population centre(s), which had an outer ring road, were touristically attractive, were historic and offered limited space for traffic, were served by park & ride facilities and were served by intercity rail routes (see Table 4.20 for statistics).

There was no difference between the two groups for the following parameters: population centre has an inner ring road; city/town centre built predominantly for motor traffic; city/town centre is fully pedestrianised; city/town centre is partly pedestrianised; city/town centre is the major retail centre of the local authority area; major retail areas lie outside the city/town centre; city/town is served by a motorway; city/town centre is served by intercity bus route or local authority is part of a larger conurbation.

	% of top (tq) and bottom (bq) quartiles possessing this feature	statistics
population centre has an outer ring road	tq: 35% bq: 4%	$\chi^2 = 4.776, df=1, p<0.05$
city/town centre is considered a tourist attraction	tq: 70% bq: 22%	$\chi^2 = 8.241, df=1, p<0.005$
historic city/town centre offers limited space for traffic	tq: 70% bq: 35%	$\chi^2 = 3.994, df=1, p<0.05$
city/town centre is served by park and ride facilities	tq: 65% bq: 13%	$\chi^2 = 10.236, df=1, p<0.005$
city/town is served by intercity rail routes	tq: 80% bq: 30%	$\chi^2 = 8.665, df=1, p<0.005$

Table 4.20 Differences in infrastructure between high and low scoring local authorities (χ^2 calculated using Yate's continuity correction for 2x2 contingency tables)

There was no significant divergence between the two quartiles in the level of activity of pressure groups (*local residents, traders, pedestrians, cyclists, motorists*). There was also no difference between them concerning the employment of walking and cycling officers and the nature of these posts (part-time or full-time; length of existence), nor did they differ in the development of their walking policies. However, high scoring authorities were significantly more likely to have specific policies for cycling ($\chi^2 = 6.063, df=2, p<0.05$) and to have adopted targets for increasing the modal share of both walking ($\chi^2 = 31.787, df=1, p<0.005$) and cycling ($\chi^2 = 11.997, df=1, p<0.005$). Also, significantly more authorities in the top quartile had implemented Safe(r) Routes to School type projects ($\chi^2 = 10.582, df=2, p=0.005$). No difference was found in the numbers, which had implemented Home Zones.

Monitoring was an area in which the two quartiles differed significantly, with high scoring authorities more active in collecting data for all the parameters listed by the questionnaire (see Table 4.21). It was particularly interesting to find, that higher scoring authorities were so significantly more likely to monitor accidents involving the two modes as the overwhelming majority – just under 90% - of all responding authorities had said, they were collecting this information (see Table). Monitoring and the adoption of targets for modal increase were found to be more closely linked in the top quartile than in the sample as a whole (see Section 4.3.3).

	% of top and bottom quartiles monitoring this parameter	statistics
walking, all trips	tq: 87% bq: 0%	$\chi^2 = 23.117, df=1, p<0.005$
walking, trips to work	tq: 87% bq: 5%	$\chi^2 = 20.538, df=1, p<0.005$
cycling, all trips	tq: 88% bq: 11%	$\chi^2 = 17.752, df=1, p<0.005$
cycling, trips to work	tq: 88% bq: 5%	$\chi^2 = 23.539, df=1, p<0.005$
accidents involving pedestrians	tq: 100% bq: 62%	$\chi^2 = 7.196, df=1, p<0.01$
accidents involving cyclists	tq: 100% bq: 64%	$\chi^2 = 6.780, df=1, p<0.01$

Table 4.21 Differences in monitoring activity between high and low scoring local authorities (χ^2 calculated using Yate's continuity correction for 2x2 contingency tables)

Two questions (Q55 & 56) asked, with which outside bodies the local authorities co-operated in the implementation of walking and cycling policies respectively. There was no difference between the two quartiles in the co-operation on both walking and cycling policies with bus companies and rail operators and also no difference in the co-operation on cycling policies with health authorities and developers. However, authorities in the top quartile were significantly more likely to work with health authorities ($\chi^2 = 8.962$, $df=1$, $p<0.005$), schools ($\chi^2 = 6.780$, $df=1$, $p<0.01$), employers ($\chi^2 = 4.677$, $df=1$, $p<0.05$) and developers ($\chi^2 = 3.938$, $df=1$, $p<0.05$) on the implementation of walking policies. They were also more likely to promote and improve cycling facilities in co-operation with schools ($\chi^2 = 5.517$, $df=1$, $p<0.05$) and employers ($\chi^2 = 6.196$, $df=1$, $p<0.05$).

A number of questions (Q 29-32, 47, 49, 51 & 53) dealt with the documents and factors, which authorities had found helpful in adopting and implementing walking and cycling policies as well as those, which might have created barriers to the implementation of such policies. There were no differences between the two groups in the awareness of a variety of policy and guidance documents but the top quartile made more frequent use of the following: guidance on the production of Local Transport Plans/Strategies ($\chi^2 = 3.905$, $df=2$, $p<0.05$), the *National Cycling Strategy* ($\chi^2 = 5.487$, $df=2$, $p<0.05$) and *Encouraging Walking* ($\chi^2 = 7.415$, $df=2$, $p<0.01$), which are currently the main governmental documents giving advice on producing and implementing policies for walking, cycling and integrated transport.

There were no differences between the two quartiles in the factors they had found helpful in adopting and implementing walking policies (Q29 & 47) but the situation was different concerning cycling policies (Q30 & 49). Here the top quartile had found existing traffic problems ($U = 150$, $p<0.05$), the UK Transport White Paper ($U=122$, $p<0.05$) and the existence of a committed officer ($U= 116$, $p<0.05$) much more important as motivating factors for adopting specific cycling policies while the bottom quartile had found the absence of local cycling targets a greater hindrance in implementing their cycling policies ($U=118.5$, $p<0.05$).

Existing traffic problems were found to be a more important factor in helping the implementation of both walking and cycling policies by the top quartile, and this group also found the general national policy framework and committed local officers to be more important in helping walking policy implementation than did the bottom quartile. Furthermore the perception of general public support for cycling measures was seen as more of an important factor in helping the implementation of cycling policies by the top quartile (see Table 4.22 for statistics). The bottom quartile on the other hand considered activities of neighbouring local authorities more important in helping along the implementation of their own walking and cycling policies.

	walking	cycling
existing local traffic problems	$U=14.5, p<0.01$	$U=71.5, p<0.05$
activities in neighbouring local authorities	$U=24, p<0.05$	$U=72, p<0.05$
general national transport policy framework	$U=31, p<0.05$	n.a.
committed / motivated local officer	$U=15.5, p<0.01$	n.a.
perception of general public support for the mode	n.a.	$U=72, p<0.05$

Table 4.22 Differences between top and bottom quartiles in the judgement of factors important in helping to implement walking and cycling policies (Mann Whitney U test)

4.4 CONCLUSIONS

The data collected through the focus groups and the questionnaire survey – together with the information gathered from the case studies – was used to answer the following research questions:

1. What provisions are local authorities making for walking and cycling, both in terms of policy, administration and in terms of measures on the ground?
2. Are there any discrepancies between policies and implementation and if so, why?
3. What conditions and processes (e.g. internal structures, working practices, professional culture) within an authority are likely to be conducive to successful implementation of walking and cycling policies?
4. What types of local authorities are more likely to implement measures to encourage walking and cycling (e.g. urban/rural; population size; nature of urban fabric and infrastructure)?

The focus groups provided some indications of the issues, which should be explored further, namely the individual characteristics in which local authorities differ (such as size and geography), varying degrees of awareness among officers, local politicians and the general public, interactions between people and policies within and outside the council, specific local and national sources of influence on policy implementation and resource issues.

The quantitative nature of the questionnaire survey was most suited to looking at numerical and organisational characteristics of the authorities, establishing the level of activity relating to walking and cycling (such as the presence and nature of dedicated posts or the level of policy provision) and the awareness and influence of local and national factors such as policy documents or modal champions. The questionnaire thus provided answers to questions 1, 3 and 4. The case study interviews and investigation of the policy documents produced by the local authorities selected gave a more detailed insight into policy provisions, potential discrepancies between policy and implementation and reasons for these and the nature of internal processes, which might influence policy implementation and the results of this part of the investigation are presented in Chapter 5.

Answers provided to the research questions by the questionnaire can be summarised as follows:

4.4.1 What provisions are local authorities making for walking and cycling in terms of policy, administration and in terms of measures on the ground?

Less than half of the responding authorities had a dedicated cycling officer and only a quarter employed a walking officer. About 80% had produced their own cycling strategy, either as a stand alone document or as part of their LTP/S but only half had done the same for walking.

Significantly more authorities had set targets for increasing the modal share of cycling than for walking (82% compared to 48%). These figures compared unfavourably with those indicating the actual level of monitoring of modal share, which were noticeably lower.

Only about a quarter provided figures on the current modal share of walking and cycling and between 22% and 38% were regularly monitoring modal share of all or certain types of trips (such as trips to work or to school). The figures were consistently smaller for walking than for cycling though not always significantly so. Only about half of the respondents provided information about their authority's budget dedicated to walking and cycling and these were not found to differ significantly between the two modes for the financial year 1999/2000 (\bar{x} = £153,000 and £141,000 respectively).

The great majority of respondents had implemented – or were in the process of implementing – Safe(r) Routes to School type projects (94%) and 36% had implemented one or several Home Zones. About three quarters of responding authorities co-operated with schools in the implementation of both walking and cycling policies, while around 60% worked with developers and health authorities. About half worked with employers & businesses on these modes and roughly a third had joined forces with public transport operators

4.4.2 What conditions and processes (e.g. internal structures, working practices, professional culture) within an authority are likely to be conducive to successful implementation of walking and cycling policies?

4.4.2.1 Awareness and use made of policy and guidance material

Responding authorities were most aware of guidance issued for the production of *Local Transport Plans* and *Strategies*. Sustrans' construction guidelines and the *National Cycling Strategy* ranked second and third in overall awareness levels. While awareness of certain documents differed significantly across authority types this was predominantly the case for those documents, which are specific to

either England and Wales (such as PPG 13) or Scotland (NPPG 17 & PAN 57). The LTP/S guidance material was identified as the overall most frequently used, followed by the DETR's *Traffic Advisory leaflets* and *Cycle Friendly Infrastructure*. Again the ranking of documents differed between different authority types but no significant differences in mean scores for frequency of use were found.

4.4.2.2 Factors influencing policy adoption and implementation

The three most important factors which influenced the adoption of walking policies across all types of authorities were the requirements on catering for pedestrians associated with *Local Transport Plans and Strategies*, the *presence of a committed local officer* and the *UK Transport White Paper*. For cycling policies these factors were also the *LTP/S requirements* followed by the *National Cycling Strategy* and a *committed local officer*. A breakdown of these factors by local authority type showed that although the average importance assigned to these factors differed across types for both modes, significant differences between the scores given by different authority types were only found for the *UK and Scottish Transport White Papers'* influence on walking policies. Most authority types chose the same top three factors as the overall sample. However, Metropolitan Borough Councils included *specific sources of funding* among the top three factors influencing the adoption of walking policies, London Boroughs ranked *health policies* and *air quality targets* among the top three and Welsh Unitary Authorities included *existing traffic problems* and the *Road Traffic Reduction Act 1997*.

The top three factors influencing the adoption of cycling policies included *lobbying by local NGO(s) or pressure group(s)* and *existing traffic problems* among the London Boroughs and the *National Cycle Network/Millennium Routes* among the Welsh Unitary Authorities. The main factors hindering the drafting and implementation of walking and cycling policies were found to be *lack of staff time*, *lack of staff* and *lack of funding*. There was general agreement among all authority types on the importance of these factors. However, Metropolitan Boroughs attached significantly less importance to a *lack of funding* but identified significantly greater problems associated with *insufficient strategic priority given to walking and cycling policies* than all other authority types.

Answers relating to the factors which authorities had found helpful in the implementation of walking and cycling policies showed the importance of a national policy framework for these modes with the *national policy framework for cycling* and *other national transport policies/strategies* ranking third and second for the implementation of cycling policies while *other national transport policies/strategies* (i.e. those not specific to walking as a mode) came third for walking policies. While the order of significance of different factors again varied between different authority types, the mean scores for individual factors differed significantly across the six types for only three factors: *existing local traffic problems* for both walking and cycling policies, *perception of general public support for walking measures* and the *national policy framework for cycling*. These differences in mean scores did not necessarily indicate a

differences the relative importance of these factors, however, as the range of mean scores among the top three factors varied widely between authorities. Thus the *national policy framework for cycling* is found among the top three of five out of the six authority types although the mean score assigned to this factor ranges between 1.81 and 2.80.

4.4.3 What types of local authorities are more likely to implement measures to encourage walking and cycling (e.g. urban/rural; population size; nature of urban fabric and infrastructure)?

The questionnaire data was used to help in the selection of case studies. For this purpose a *Case Study Selection Index* (CSSI) was constructed, which assigned scores to key factors as defined by both the literature and the focus groups, such as the presence or absence of a local officer for both modes or the existence of specific policies for the modes.

It was found that the scores calculated through this index were most closely associated with different local authority types (rather than for example political control, authority size or population density). It was thus decided to choose the highest and lowest scoring authority out of each type as case studies thus giving 12 cases all together.

The CSSI was also used to compare the characteristics of the most and least active 25% of authorities:

- Population sizes in authorities in the top 25% of the CSSI were on average twice as large as in the bottom 25%.
- The top 25% were more likely to have an outer ring road around their main population centre, which was also more likely to be attractive to tourists, have an historic building substance and lay out, offer limited space for traffic and be served by park & ride facilities as well as an intercity rail route.
- Authorities in the top quartile were more likely to work with health authorities, schools, employers and developers to further the implementation of walking policies and they were also more likely to co-operate with schools and employers on the implementation of cycling policies.
- The guidance regarding the production of Local Transport Plans and Strategies, the *National Cycling Strategy* and *Encouraging Walking* were used more frequently by the top quartile.
- There were no differences between the two groups in the factors they had found helpful in adopting and walking policies but the top quartile found *existing traffic problems*, the *UK Transport White Paper*, *committed local officers* significantly more helpful in the adoption of cycling policies.

- No difference was found in the factors, which had hampered the implementation of walking policies but the bottom quartile had found the absence of local targets for cycling a significantly greater problem in implementing cycling policies.
- *Existing traffic problems* had been found significantly more helpful in the implementation of both walking and cycling policies by the top 25% of authorities.
- These authorities also considered the *general national policy framework* and a *committed local officer* more helpful in implementing walking policies while the *perception of general public support for cycling measures* was rated significantly more helpful in implementing policies for cycling.
- The bottom quartile on the other hand found the activities of neighbouring authorities significantly more helpful in implementing policies for both modes.

The comparison also looked at the factors, which had contributed to the compilation of the CSSI to tease out the most important components of this index.

- Authorities in the top quartile were more likely to have adopted specific policies for cycling as well as targets for both modes and were more likely to have implemented Safer Routes to School type projects.
- The top 25% were also more likely to monitor all the parameters listed in the questionnaire, namely modal share of walking and cycling of both journeys to work and journeys made overall and accidents involving pedestrians or cyclists.

The questionnaire study has thus provided important answers to the remaining research questions and together with the focus groups has also confirmed the importance of the following elements of the implementation process identified in the literature review:

- the local policy making process
- the role of individuals (such as committed local officers)
- the role of intra- and inter-organisational processes (such as resource allocation, co-operation with other organisations and the activity of lobby groups)

In addition to these, the data has also shown the considerable influence, which the national policy context and other external factors (such as size or existing infrastructure) can have and these will be explored through the case studies together with the elements of the implementation model presented in Chapter 2.

CHAPTER 5 - ANALYSIS OF CASE STUDY DATA

5.1 INTRODUCTION

The quantitative analysis of the questionnaire results has been presented in Chapter 4 which also explained the process by which case studies had been selected and identified the characteristics, which were more likely to be found in authorities actively providing for walking and cycling than in those, which are not. The authorities chosen as case studies are introduced in Table 5.1 on page 163, which gives an overview of size, political composition as well as posts, policies and monitoring activities relating to walking and cycling. Supplementary information about these authorities (the broad geographical, organisational and socio-political framework, within which their policies are drawn up and implemented) and the people, who were interviewed, can be found in Appendix I.

This chapter will analyse the data collected during the personal interviews conducted with representatives of each of these authorities. The analysis will examine the influence of the following factors and processes on walking and cycling policy implementation:

- *influential agents and factors (such as physical characteristics of the authorities, officers, councillors, existing local and national policies, resource issues)*
- *interactions within each authority (between people, modes and other policy areas)*
- *authorities' interactions with others (lobby groups, the general public, schools, developers and other authorities)*

The analysis will thus provide important insights into walking and cycling policy implementation processes. Together with the questionnaire analysis, Chapter 6 will then use the findings to assess and develop the theoretical thinking on policy implementation presented in the literature review.

The aim of this thesis is to collect and analyse new information on walking and cycling policy implementation and to assimilate diverse experiences into a piece of work, which can provide important guidance and inspiration for those working in the field of study. Such guidance is not currently available and the qualitative assessments of a variety of implementation processes is an important element in its development. The analysis and discussion presented in this chapter will therefore provide an insight into the great variety of implementation experiences in different local authorities, their commonalities and differences, the opportunities, the problems and solutions, which have been encountered and the circumstances under which these have occurred.

The interview transcripts provided a rich source of data and although the case studies had originally been selected to represent those authorities within each organisational type, which were the least and the most active in providing for pedestrians and cyclists, the transcript analysis showed, that

both groups contributed to the understanding of bridges as well as barriers to policy implementation.

The following narrative thus discusses factors influencing policy implementation both positively and negatively from both groups of local authorities. Marked differences in occurrence of such factors between different types of authorities are highlighted where they were encountered, although such patterns were not observed with great frequency. To allow the reader to make an immediate visual distinction between authorities with high and low CSSI scores without having to refer back to the relevant tables, the following typological convention has been adopted: the names of high scoring authorities have been represented with increased character spacing (e.g. F a l k i r k, Y o r k or S u f f o l k) while the names of low scoring authorities are shown in a normal typeface (e.g. Luton, Merthyr Tydfil or Oldham).

Quotes used to support the observations made are generally representative of the data collected rather than constituting a list of all the relevant examples. To preserve the anonymity of the interviewees, statements are only attributed to the authorities, in which they were made together with an indication of the interviewee's level of seniority (i.e. officer, manager or senior manager).

	County Councils		English Unitaries		Scottish Unitaries		Metropolitan Boroughs		London Boroughs		Welsh Unitaries	
	Suffolk	Worcester shire	York	Luton	Falkirk	East Renfrews.	Bury	Oldham	Kensi'ton & Chelsea	Lambeth	Flintshire	Merthyr Tydfil
CSSI	26	3.5	25	0	24	-5.5	13.5	-10.5	13.5	-1	15	-20.5
population	666,600	535,700	176,000	181,500	143,000	88,600	181,900	216,500	156,800	265,000	145,300	58,100
area (km ²)	3,802	1,735	272	43	299	173	99	141	12	27	437	111
political representation	Lab 32 Con 31 Lib D 15 Ind 2	Con 23 Lab 21 Lib D 9 Ind 2	Lab 41 Lib D 7 Con 4 Ind 1	Lab 36 Lib D 9 Con 3	Lab 15 SNP 9 Ind 6 Con 2	Lab 9 Con 8 Lib D 2	Lab 37 Con 8 Lib D 3	Lib D 31 Lab 24 Green 3 Con 1	Con 39 Lab 15	Lab 41 Lib D 18 Con 5	Lab 42 Allian. 19 Lib D 7 Plaid C 2	Lab 16 Ind 13 Plaid C 4
walking officer	✗	one f/t walk cycle officer	one f/t walk cycle officer	✗	✗	✗	✗	✗	one p/t	one p/t	✗	✗
cycling officer	one f/t (2x 3 day jobshare)			✗	one f/t	one f/t	✗	✗	one p/t	one f/t	one f/t	✗
walking strategy	part of LTP	being developed	stand alone doc	being developed	mode dealt with in LTS	no specific policies	mode dealt with in LTP	being developed	mode dealt with in LTP	stand alone doc	being developed	no specific policies
cycling strategy	part of LTP	stand alone doc	stand alone doc	being developed	stand alone doc	part of LTS	stand alone doc	being developed	mode dealt with in LTP	mode dealt with in LTP	stand alone doc	no specific policies
LA GTP	✓	✓	✗ (in dev.)	✗	✗ (in dev.)	✗	✗	✗ (in dev.)	✓	✗	✗ (in dev.)	✗
monitoring												
walking, all trips	✓	✗	✗	✗	✓	✗	✓	✗	✗	✗	✓	✗
cycling, all trips	✓	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
walking to work	✓	✗	✓	✗	✓	✗	✓	✗	✓	✗	✓	✗
cycling to work	✓	✗	✓	✗	✓	✗	✗	✗	✓	✗	✗	✗
pedestrian accidents	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗
cycling accidents	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗

Table 5.1 Size and political composition as well as posts, policies and monitoring activities relating to walking and cycling in authorities chosen as case studies (✗ = no, ✓ = yes)

5.2 INFLUENTIAL AGENTS AND FACTORS

5.2.1 Characteristics of the local authority

This category encompassed factors such as size, topography, the existing infrastructure and the organisational structure(s) of the authority. Although it is beyond the powers of most authorities to directly influence these parameters it was nevertheless important to assess their influence to build up a comprehensive picture of the issues involved in policy implementation.

5.2.1.1 Size, geography and infrastructure

The physical size of the authority was not identified as a major issue but three of the less active authorities (Luton, Merthyr Tydfil and Oldham) mentioned that a hilly topography was seen as an obstacle to walking and cycling. However, in two cases – Luton and Merthyr Tydfil – this obstacle was presented as fact by the interviewees, whereas in Oldham it was considered to be in the perception of others.

Certainly, when it comes to cycling, Luton is not a conducive place because of the geography again. For most routes out of the town you've got to go up a hill, and a fairly steep one at that. manager, Luton

...so I think a lot of people, mainstream, think that you know, cycling is fine but there is a lot of people who won't be able to cycle – because it's just so hilly. So I think, I maybe wrong about this but that's the kind of sense I get. officer, Oldham

The other two authorities with hilly terrain – Falkirk and Worcestershire – did not mention this issue, suggesting that the problem might be perceptual rather than being an absolute impediment. Evidence from other countries, such as Switzerland, which features hilly and even mountainous terrain and where 15% of journeys are made by bike (National Cycling Strategy, 1996), also suggests that topography in itself is not a deterrent for cyclists. Rather, the issues seems to be cultural and thus a question of awareness among both officers and the general public. While terrain can not be changed significantly, cultures and attitudes can be influenced for example through awareness campaigns, if the will exists to do so.

Townscape and infrastructure on the other hand do seem to influence policy implementation in a very real sense, although again, the perceptions of problems and opportunities are not necessarily concurrent. Many authorities experience physical constraints in the form of narrow roads or compact town centres but there are clear differences in attitude towards these.

In some authorities, the existence of compact or historic town centres was seen as an advantage.

York's one walkable city. Because it's a very densely packed city, the density of development around the city centre, the scope for encouraging walking around is huge and I think we could do more about it. senior manager, York

...we've got a high density of development, which lends itself to public transport use – obviously it lends itself to walking and cycling as well because the distances involved aren't so great. officer, Luton

It is interesting to note here, that although the link between compactness and the non-motorised modes was made in both cases, in Luton this connection seemed to come more as an afterthought to the link with public transport. A different advantage of a compact urban centre was hinted at in Bury.

*...we were finding that we were having less and less major highway improvements we could actually physically do, because **we were literally running out of things to improve and change.** And there was a shift in policy within the government as well as locally to change from major schemes to more minor and more alternative modes of transport.* officer, Bury

In Bury, this phenomenon of 'running out of things to improve' led to the preparation of a local cycle strategy even before the publication of the National Cycling Strategy in 1996 (DoT, 1996a). Interviewees in other authorities, however, perceived existing urban structure, compactness or lack of space mainly as an implementation barrier as it was seen to limit the opportunities for creating new facilities such as cycle lanes, cycle paths networks or pedestrian zones. However, it will be shown in other sections (see Sections 3.2 & 6), that road space and its allocation to different modes is also often a political issue and a "lack of space" might therefore be the result of an unwillingness to challenge the status quo rather than the physical impossibility to accommodate pedestrians and cyclists.

There isn't much pedestrianisation in the borough because the opportunities are fairly limited because [...] the shopping streets are all radial. manager, Kensington & Chelsea

*If you want to put a [cycle] route through some certain road sometimes **it is just impossible to do because the road is so narrow,** so road space is fairly important.* officer, Oldham

*And yes, we can make sure that there are proper pedestrian facilities and, indeed, cycling facilities [...] within that development. But immediately people exit that development, they are back onto the old road network and we've got no opportunity to do anything with that. [...] **there's substandard footpath in terms of width and alignment, there are no cycling facilities there , and there are never going to be because of physical constraints.*** senior manager, Merthyr Tydfil

In Merthyr Tydfil there actually seemed to be a real feeling of powerlessness in the face of constrained resources (also see below, Section 5.2.6) coupled with the existing infrastructure, which meant that even when improvements were made, they would never link up into a network. The interviewees reported about a land reclamation scheme, which included pedestrian routes and cycle paths co-funded by Sustrans and the Groundwork Trust and which was seen as a very positive development but

*once you come to the site boundary, you're literally going to have everyone thrown back onto the existing road network [...] it's a road that's only 16 to 18 feet wide, so it's only just wide enough for two cars [...] there's no footpath, and there's no street lighting. **But that's the only***

place where the cycleway, the bridleway and the footpath can leave our land reclamation site. senior manager, Merthyr Tydfil

In Luton one of the interviewees suggested that walking would never be a high priority within the council as the basic infrastructure for pedestrians – pavements – already exists even though it was recognised, that this was often of low standard and interrupted by roads.

5.2.1.2 Existing modal share

The issue of critical mass was not mentioned very often but it did receive comment from two of the more active authorities.

I mean the number of people cycling to work is very high and I think it was seen that they [the councillors] wanted to do more for cycling but it was done [...] in a fairly subdued way. manager, Kensington & Chelsea

...in York there's lots of cycling already. [...] If you work in an area where they've got much lower cycling levels, arguably, what they ought to be doing to encourage cycling it's much harder to justify because members [of the Council] say "Only one percent ever bother to cycle in this town. Why are you spending money on cycling? Why aren't you sorting out traffic congestion? Why aren't you spending more money on roads? [...]" So I think in York we are pushing at an open door. senior manager, York

These statements underline, that – unsurprisingly - justifying expenditure to councillors is one issue, which affects implementation. This point will be discussed further in Section 5.2.6, which deals with resource issues.

5.2.1.3 Organisational structure of the local authority

One of the more frequently discussed characteristic of the local authorities was their organisational structure. This can be and has been affected both by local government re-organisation brought about through national legislation (such as the creation of unitary authorities in Scotland and Wales) and through internal restructuring. Opinions about the effects of these changes varied among interviewees.

The re-organisation of councils after the regions were dissolved meant that many heads of department did not come from the same strategic level as was the case previously and many do not have background in transport so some expertise and strategic overview at head of department level was lacking. But people are now catching up and in 4 or 5 years time this gap should have been closed. officer, East Renfrewshire

So at LGR [local government re-organisation] I inherited [sic] the post into a lovely new team, which brought everyone together manager, Worcestershire

My view was that because we were [...] not the Highway Authority, we did what we were asked to do and no more – and it [transportation] had gone downhill quite dramatically over the nine years I've been here, up until the year of the unitary. I could see – and I had no interest in transportation – that it had gone downhill. We

have come back up now to far better than we were [...] officer (not in transportation prior to re-organisation), Luton

I've come from a county council [...] two tier authority and the way of working was quite different. And the benefit of a unitary authority is the close links with engineers. It's a lot closer than local authorities with two tiers. officer, Falkirk

Clearly, experience with reorganisation varied and the process appears to have had both advantages and disadvantages. These statements point to the importance of having close communication links (Falkirk and Worcestershire) as well as being able to implement the authority's policies autonomously without depending on other levels of decision making (Luton). They also hint at the importance of experience and expertise, which can obviously be diluted, when larger organisational units are split up as was the case when East Renfrewshire was created from what had been a small part of the Strathclyde region.

The importance of links between different people was also underlined by interviewees in Oldham, although there were conflicting opinions on whether the most recent changes to an executive style structure had strengthened or weakened these:

...the council has restructured and now the planning policy officers are no longer with the development control planning officers, we are in different departments and because of that [some internal links have been weakened]. officer, Oldham

The Policy Planning and Regeneration Department has been new since spring 2000; **the restructuring was generally positive and has helped to restore sustainability issues and stress the links**³⁹. senior manager, Oldham

It is possible, that this contradiction arises from the fact that the officer is talking about the actual working relationships with colleagues, whereas the manager is commenting on strategic policy links. Connections and links within and outside the council will be discussed further in Sections 5.3 and 5.4. Other authorities generally reported positively on internal changes.

*...we're moving to executive style government rather than committee style government. What that means is that the number of departments has been reduced – there are plus point and minus points – but one of the things that is coming out of it is that **elected members are individually more responsible under those new arrangements and per force, they will have to become – they will become the champions – they will be the [modal] champions.*** officer, Luton

*...they are moving towards **more sensible groupings of subject matter in meetings so that related items tend to get discussed.** [...] So that is going to help the decision making process, and the retention process...* officer, Luton

*Yes, it [executive structure] has streamlined decision making, I think. [...] it means that the people who are actually doing the work are **the people who have been trained for their life time as transport experts, they have the greater***

³⁹ note: One interview and comments made by various interviewees after the tape recorder had been turned off have been recorded in writing by the author. Where this data is presented, it is not written in italics as it is not a direct quote.

influence on the decisions that are made rather than the politicians, who, with all the will in the world, are not transport engineers or transport planners. officer, Lambeth

5.2.2 Awareness and culture within and outside the authority

The focus groups (and common sense) suggested, that the awareness of issues relating to walking and cycling among local authority employees, elected council members and the general public can significantly influence the implementation process. This issue is closely linked with both the professional culture inside these organisations and the transport culture of the population in general.

Since the interviewees were generally the people most closely involved with the strategic side of walking and cycling policy implementation their own awareness and culture would be an important factor.

Generally, interviewees showed awareness of the issues involved, the guidance, that has been produced, how to obtain it and how this could be used to facilitate implementation.

*If you're a cyclist, it's the best way to get around. [...] But you are right, **the people who are cycling out there at the moment are cycling despite the conditions.*** officer, Lambeth

*But, putting in facilities for buses [...], if it's bus lanes, means that there's a ready made bit of infrastructure for cycling. **But it's a question of joining up the links, again.*** officer, Luton

...there is an article in one of the engineering journals that says that too many big schemes have been approved recently, major highway schemes, and that this is giving out the wrong message to the public. officer, Oldham

*Within Highway or Transportation Planning, the people that deal with it [awareness of government guidance] is probably pretty good, in that **both I and the Cycling Officer would look out for stuff to come through.** [...] There are plenty of courses about but **if we can't get on the courses then we look to try and see if course notes are available...*** manager, Flintshire

*... certainly I have quite strong opinions about all this, and I have had for a long time before it was ever the right thing to think in this authority. **And being able to quote bits out of government guidance certainly helps to get your way, as it were...*** officer, Luton

There was however some evidence of a lack of knowledge of certain key documents or activities of the authority.

On walking,** [...] I suppose the national guidance, **there is national guidance, isn't there? manager, Kensington & Chelsea

***Which national walking strategy?** [...] I haven't even read it.* officer, East Renfrewshire

*I hadn't heard about the cycle safety training [being done by the authority]. [...]
Sounds like I need to go and find out more about that.* officer, Oldham

I'm more up-to-date with planning than with what's already gone in.
manager, Worcestershire

However, these quotes need not necessarily point to a lack of interest on the part of the respondent but could also indicate a problem with communication within the council or in the case of national guidance, between national government and local authorities. Both of these issues will be discussed in more detail in subsequent sections (Sections 5.2.5 on the influence of national guidance and policy & 5.3 on interactions between officers, groups and departments).

One Head of Department (Road Transportation) interviewed in one of the smaller and less active authorities provided an interesting insight into his own personal culture and attitudes, which ultimately might come to influence the activities of a department:

Q: Why have walking and cycling gained a higher profile than they had five years ago?
*A: [...] there's a move in the country against the car being taken and so therefore, with the requirements for reducing the use of the car etc., increasing the use of public transport and increasing the use of other modes, **we are being forced to look at walking and cycling.*** senior manager

*[...] **most people, they don't use walking and cycling for medium sized journeys.** So therefore **it's for mostly recreation and health** so we must look carefully at the recreation and health side of it as well.* senior manager

Speeding fines are really a stealth tax on those who drive too fast, they must be seen to be administered carefully. [...] Fair warnings must be given. senior manager

While it cannot be concluded, that the attitudes expressed by this particular interviewee would hinder the implementation of measures benefiting pedestrians and cyclists the quotes do appear to indicate an underlying attitude, which gives priority to car drivers and their – perceived – rights and needs, while walking and cycling are seen as recreational and health benefiting activities rather than ‘serious’ modes of transport (although the policy to link health is of course an important one, as has been shown in the literature review). Nobody else actually expressed similar attitudes as directly themselves but many interviewees observed them in some of their colleagues and superiors.

*Some of my colleagues are from the traditional Scottish/British roads engineering background. [...] for anything other than a very short **journey they're in the habit of using their car for their own primary road transport and perhaps that carried over in their professional attitudes as well.** [...] **We have been indoctrinated into building and maintaining roads for increasing vehicle capacities** rather than as transportation channels for all modes of traveller...* officer, East Renfrewshire

*...there has been, certainly among certain members of staff of the engineering and the planning sides, **there's been an inertia and sort of a natural feeling that the car is the way that people get around.** Why are we doing all these woolly sandal things?* officer, Luton

*We've tried and **failed miserably to get Green Travel sorted out within the authority, but we came up against resistance from the top of the organisation rather than from the grass roots.** [...] the senior officers were just not prepared to be allocated spaces for parking that were further away from the office.*
manager, Luton

*you've got people that have worked on big dual carriageway schemes, motorway schemes, that type of thing – **it's then difficult to then adapt to say 'You're going to put a cycle route in'***
manager, Flintshire

*so it's an engineering problem but I think this is just 'do as you've always done it' sort of thing. **There's a lack of acceptance that you need to change.***
senior manager, Suffolk

But although there was widespread recognition that the professional culture in some parts of the local authority could hinder implementation, interviewees also indicated that these attitudes are beginning to change and gave examples of how such change could be initiated and sustained.

*The other [barrier] is **the remains of apathy or entrenched views within the authority, at a lot of levels, really.** That's less of a barrier because the way people are thinking now in the authority, **those barriers are breaking down under their own accord, more or less.***
officer, Luton

*The engineers here are much more open and a lot of engineers are in various schemes and that's brilliant [...] but you always get the feeling that you have to keep that sort of momentum up. **You have to keep removing all these blinkers they want to put in front of themselves** but it's not just my effort, it's everybody's effort because the sustainable transport messages are filtering down. [...] **it's not just me telling the they need to think about cycling and walking, it's coming from all angles. It's our boss telling them, it's policies, it's London policies.***... officer, Lambeth

*You've got to be aggressive. You've got to take the argument to the motorist and to the guy who uses the car, like me. **We bought a bicycle here** and I am encouraged to go around and get on it and I can actually see the ruts in the road [...] **it does give a different dimension to people who are responsible for actually putting the road surfacing in***
senior manager, Lambeth

*...something national that people could latch onto, and he organised a reception for people riding the [new Millennium Cycle] route [...] and the Mayor was present, you know and members – it got in the papers. **That's the sort of way that we can get people to latch on a bit. We've managed internally to raise awareness, haven't we?***
officer, Luton

*I have a dedicated walk/cycle officer, he works on the cycle audit procedure. He took it out to all the engineering staff, maintenance staff, district council staff [...] **so that they would think "cycle" whenever they were looking at a scheme.** He's working on a similar presentation to incorporate the walk audit – think "walk" ...* manager, Worcestershire

...but it's keeping the level of awareness up, it's getting examples out on a monthly basis. If you're only getting examples on a six monthly basis, it will go out of your mind.
manager, Worcestershire

*I can't put myself in the mind of the director, to say what he would do but from what I can infer, **there is an awareness that the alternative forms of transport have got to have higher priority.***
manager, Flintshire

I've done a review of other LTPs around us [...] So if people that need to know see that, see what others are doing around us, then it may persuade to lead here.
manager, Flintshire

It is interesting that change was forecast mostly in the low scoring authorities. This might be an indication that these are the authorities, which to a greater degree have been held back by entrenched professional cultures and where there is therefore also more scope for improvements. Thus ultimately many interviewees expressed optimism, that working cultures would change but also cautioned that self-sustaining and wide-ranging change would take time and effort.

Some respondents had also experienced resistance to certain measures from councillors while other authorities, while feeling that councillor's attitudes needed to change, discussed options for educating the members of the council.

I think there's sometimes a lack of understanding at committee level of perhaps the wider picture of what we are trying to do. [...] There's I think, sometimes a loss of connection and reality there which sometimes – you get these decisions back from committee and you sort of bang your head on the table and you think 'Oh no!' officer, Bury

...but the entry treatment idea won't get used as much here. There are not so many side roads coming in [to Kensington High Street] and there's also some councillors don't like the entry treatment [for level pedestrian crossings] so much. They think it's not classical enough manager, Kensington & Chelsea

...you also get people who are concerned about the accidents, which is why the approach of saying 'Oh, what we try to do is make it [cycling] safer!' is so successful, because you can't argue with that. manager, Kensington & Chelsea

[Walking and cycling] are not controversial, I just don't think they've got a high enough profile, perhaps. officer, Merthyr Tydfil

Obviously, there's a lot of cycling and walking and these other sustainable modes, in the LTP. All the councillors are signed up to that [...] So they are aware of what's in there, aren't they? officer A *They occasionally need reminding* officer B, Luton

Q: So, if you come against resistance from councillors, what do you do? A: Tend to have it out with them [...] when you talk things through with people, most of them realise that it's true [...]. So it's really just a matter of talking things through with these people, I think. [...] 'There is this many cars going through then we've got to cater for them.' The answer is 'No!' It takes a long, long time and you have to convince people one by one. So that's the biggest barrier, I think officer, Lambeth

Basically [our Members' Training Sessions] are just to train them on the latest transport policy. What is required in local policies from the government, what's the latest trend, walking, cycling, public transport. officer, Oldham

There was no clear pattern suggesting that cultural or awareness problems were limited to the less active authorities and the most prevalent conclusion that can be drawn from this data is that while these problems exist, dedicated efforts at communicating the intended message can over time help to overcome them. This applies both to employees of the authority and to elected members.

Obviously the perception of the general public of the importance of different modes and the resulting reaction to measures introduced by the council in a governmental organisation. Again the experiences and opinions reported were mixed but a generally pessimistic perception of the public's awareness prevailed. There was a widespread recognition, that the car culture still has a strong hold in the public's mind and that more education was needed to change perceptions. This relatively one-sided view could in part be due to the fact that feedback to councillors and officers overwhelmingly consists of complaints, ensuring that those who support walking and cycling measures tend to have less of a voice. The issue of communication between the council and the general public is investigated further in Section 5.4.1.

The car is still sort of seen as a passport to freedom – you can do what you want, you can go where you want [...] any time. I think we have a hard problem trying to deter youngsters from buying a car as soon as they are old enough. officer, Falkirk

There won't be any significant shift in the next ten years, I'm fairly sure about that. The best we can do is reduce the rate of growth. That's the biggest barrier to overcome. officer, Luton

...Merthyr has the lowest level of car ownership in the country. [...] And the first thing that people do when they acquire that little bit of extra affluence, is go and buy a car. Even though they may not really need it, it's a status symbol and it's the car that gets bought. officer, Merthyr Tydfil

...but I think there is a big lack of interest really in general from people to get on their bike and cycle or walk, you know 'rather get in my car...' officer, Oldham

Another issue was the fear of accidents and injury, which was seen to bring about public opposition to certain schemes or measures.

...There's a perception [...] the fear of mixing cyclists and pedestrians and it's supposed to be absolutely safe and I think that's very difficult[...] to get over that barrier ... senior manager, Suffolk

...a general public perception that, in many cases – and this is particularly coming from parents taking their children to school – they perceive that walking the children to school is not safe. officer, Merthyr Tydfil

...people still do not feel safe because you've got sections of cycle route where you feel safe and then you're thrown into situations where you're clearly not safe. [...] Till you've actually addressed the whole journey, I don't believe that it's going to be tremendously attractive to people. senior manager, York

At the same time interviewees were aware, though, that safety fears are often caused by perception rather than real risk and there was again a general feeling that the public needed to be better informed about possible transport choices and their consequences. It was also seen as important to demonstrate through actual schemes what could be achieved to sway public opinion.

So hopefully some of these projects now that we have done are showing that it [integrated transport] does work and it might change people's perceptions and views. manager, Flintshire

...some of them think it's just a waste of money; the amount of cyclists, who are actually using it is so small compared to the cost and the space that it takes on the carriageway so I think it's another indication of the work to be done to get that level of good support from the public. officer, Oldham

I think there are conflicts and we do have them with the general public really because they don't understand what we are doing and why. So I think more education. I don't think the Department of Transport is doing enough to get the message across officer, Oldham

... the imperative we have to get across to people is that, if things carry on as they are, if we stop doing what we are to doing to try and alter travel behaviour, the local economy wouldn't be able to cope. It would grind to a halt. officer, Luton

Once you get a certain amount of joined up links, then people say 'Oh, I can get from there to there without going on a road, brilliant! Forget the car chaps, go on the bike.' officer, Luton

...a public opinion survey carried out [...] in this council area discovered that a lot of people were genuinely interested in cycling, perhaps only as a recreational pursuit but it shows that people out there are, in the right conditions, keen to get on their bikes or go for a walk and I suggest that if we provide the right facilities, people will start to use them. officer, East Renfrewshire

This last comment suggest a need for councils to actively seek the opinions of the public rather than relying on feedback on proposed schemes. Consultation will be discussed further in Section 5.4.1.3. Two interviewees reported even more than the latent demand for cycling touched upon by the officer in East Renfrewshire. One had experienced an active interest from parents in finding alternative ways of getting their children to school and another found that:

They came to us and so there's a body of parents there who already want to do something. officer, Lambeth

In fact, parents have grasped it [the idea of the Walking Bus to school] fairly wholeheartedly. It's the usual core few that do it, but they pull the trolley with all the bags on... It's a novelty to walk anywhere!. officer, Luton

Taken together, these comments suggest that effective communication of schemes and the rationale behind them as well as the wider issues of transport are crucial in creating a receptive public atmosphere for measures which support walking and cycling more actively than this has been done in the past. However, the data did not indicate, that this has been achieved more effectively in high scoring authorities than low scoring ones

5.2.3 Officers

Of the chosen case studies four had dedicated walking officers (York, Kensington & Chelsea, Worcestershire, Lambeth; all of which were part-time), and eight employed a cycling officer (Suffolk, York, Falkirk, Kensington & Chelsea, Flintshire, Worcestershire, East Renfrewshire, Lambeth; all but two were full-time posts). And although only

two of the interviewees were dedicated cycling officers, all had some involvement with these modes, either at a strategic managerial, a planning or an engineering level. Obviously there are many aspects, which affect the influence local authority employees can have on the implementation of walking and cycling policies but the main themes emerging were the interviewees' – and their colleagues – motivation, commitment and experience; the level of senior support, which was experienced and the opportunities for input into the policy making and implementation process.

And I think from a design point of view, implementing schemes [...] it helps to have somebody who rides a bike in post, because you don't get somebody who doesn't use the facilities design something officer, Bury

...the Cycling Officer can now help identify the routes, he knows what the obstacles are to being a cyclists and he has a greater understanding of their needs manager, Flintshire

Yes, they work well, especially with good people like, on the cycling side you've got Humphrey [cycling officer] here, very, very keen on cycling [...] senior manager, East Renfrewshire

Reginald is proactive, is very capable of getting things done, not waiting for things. [...] we've always taken the view, certainly with the cue from Reginald that if you wait to get things done then you'll wait a long time and if you are going to actually bring about a change in mindset and cultural thinking about different modes then you've got to tackle them. You've got to take the argument to the [...] guy who uses the car, like me. senior manager, Lambeth

While the last two quotes both indicate managerial appreciation of their officers' qualities, the people referred to had diverging perspectives on the level of support they experienced in their posts:

I suppose I too often feel as though I am ploughing a lone furrow and that can be frustrating officer, East Renfrewshire

...he hired me knowing that I would want to push a few barriers [...] and he's had absolute faith in what I do, has never called me in and said 'You've gone too far, Reginald!' and he's also given me the authority to go to the engineers and say 'No, you can't do this, it's wrong.' [...] that is the best thing about cycling in Lambeth at the moment, is senior officers. officer, Lambeth

The importance of senior support was mentioned in a positive context by three more interviewees (an officer and senior manager in Oldham and a manager in Worcestershire) while one officer in Luton indicated that their manager was still being persuaded to look at individual walking and cycling schemes in the wider context of transport in the authority. There was no obvious difference in this context between the authorities with high and those with low CSSI scores. This observation need not be surprising since the CSSI did not incorporate factors such as senior support and it should be remembered, that by definition it was predominantly comprised of indicators, which described the past performance of local authority, rather than processes, which might influence this performance – positively or negatively – in the future.

Several people talked about the opportunities they have for influencing walking and cycling policies (aside from their formal responsibilities) or processes, which have a bearing on these modes.

Q: How good do you think the integration of sustainable transport and land-use has been in the past? *A: I can't comment on the past but I hope it's going to be very good because, well, I sit within the planning team, obviously...* manager, Flintshire

... we are lucky that, being a small authority, that I have had the opportunity to put most of the meat on the bones of the cycling strategy. officer, East Renfrewshire

So I have been able to influence those Development Control Officers [...] to quite an extent, because they are sitting as close to me as you are now so I am listening to what they are saying. Again, it's very dependent on personalities... officer, Lambeth

I can take some initiative in where I spend my time to some extent and for instance I can participate in the activities of others, say for instance the Cycling Forum officer, Oldham

...it's another area where I'm sort of wheeling in government guidance and experience of other authorities. I've had to do quite a lot of research on it, actually, to put the officers viewpoint. We're under pressure to give way [allowing private higher vehicles into the town centre] but [...] I'm putting it in the strongest terms that we shouldn't. officer, Luton

The last three quotes point to an issue, which will be discussed further in Sections 5.2.6. (on resource issues) and 5.3 (on interactions within the authority): many aspects of the implementation process depend on the personalities of the people involved. Their resourcefulness, determination or experience can play a deciding role. Another quote from Lambeth illustrates this well:

...the point I made, Hubert, was that I'm only here because you allow me to be here but you only allow me to be here because you had political support. officer, Lambeth

It was interesting to note, that in spite of the different experiences related, only one of the interviewees (officer, East Renfrewshire) reported any conflict between what he considered to be his own professional goals and those of the authority as an organisation, although this question was asked explicitly in each interview. All others expressed a general feeling of everyone working to a common goal and some even felt that – as far as walking or cycling were concerned – they had actually been instrumental in defining what the goals of the authority would be. Again, though, this feeling of unified goals was not limited to high scoring authorities.

5.2.4 Councillors and other politicians

There is no doubt that councillors can have a significant influence on policy implementation – that is after all one of the purposes of their election. The main issue emerging in this context was how helpful the presence of one or several elected members could be, who were championing a particular mode (generally cycling).

Interestingly, however, the reported presence or absence of modal champions among councillors was not necessarily related to whether an authority had obtained a high or low CSSI score. Thus, while Bury and York (both scored highly) reported support from local politicians for cycling, Kensington & Chelsea, Suffolk, Falkirk and Flintshire, which also achieved high scores, said that none of the local politicians actively championed either of the two modes. Interviewees in Lambeth, Oldham and Worcestershire on the other hand (three low scoring authorities) all reported good political support for cycling or sustainable transport issues in general.

*[if our arguments are robust] then we tend to get good support from politicians because the politicians, who have special responsibility, say for the environment or transport, are there for the agenda. **They are there because they want to promote sustainable transport [...]** and so they give us the support that we need.* officer, Lambeth

*On the cycling side, we're lucky in two senses – one that we have a chair – **our cycle forum, the chair is actually a councillor**, [...] so we're getting direct council input there. [...] and we're lucky at the moment in that the leader of the council is also someone who cycles to and from the town hall on a daily basis.* officer, Bury

*But **I'm not aware of anybody that's particularly jumping up** and saying 'You've got to provide for cyclists' above anybody else* manager, Flintshire

They [councillors] delayed putting advisory cycle lanes down in King's Road because of the streetscape manager, Kensington & Chelsea

***They [councillors] always will support their community, Parish Council and so tend to put a lot of demand on us, on the footway programme.** [...] We very seldom get political pressure for cycling unless the local community has really raised the agenda – but very, very seldom* senior manger, Suffolk

This contribution from the senior manager in Suffolk underlines the importance of the wishes of voters for the activities of councillors. Interestingly, this issue was only directly addressed in two other interviews, in East Renfrewshire and York, although the influence of the general public on the council at large was mentioned frequently (see Section 5.4).

The manager in Kensington & Chelsea mentioned the importance of a wider context for influencing councillor's opinion (in this case the London Cycle Network, which councillors felt a responsibility to contribute to), an issue which has already been shown to be potentially helpful in creating a favourable climate for new measures among sceptical colleagues.

Cycling in Worcestershire received the support of the local MP for Wyre Forest – who chaired the Wyre Forest Cycle Forum – and the Car Free Day 2000 event in Lambeth obtained the high profile participation of the Mayor of London, Ken Livingstone, and the Leader of the Green Group in the Greater London Assembly, Darren Johnstone (who raced each other on bikes). Such high profile support was considered to be very helpful in convincing local politicians – and residents – of the advantages of a proactive local approach to cycling.

We hope we got that bit of support by personal relationships, by good example, by aggressive lobbying, by good manners, by treating people properly. *officer, Lambeth*

It is likely, that low scoring authorities, which are reporting political support now might improve their performance in the future, but the diversity of experience in both types of authorities also shows, that political support is not an essential prerequisite for implementation success and neither could it guarantee success in isolation from other factors.

5.2.5 The written word - policies, strategies and other documents

5.2.5.1 National documents, policies and trends

In order to fulfil their *raison d'être*, national policy on walking and cycling and related topics must have an impact in local activity as these modes are catered for at local authority level. The *National Cycling Strategy* (DoT 1996) and *Encouraging Walking* (DETR, 2000) are the key documents in this context and a number of interviewees talked about them – as well as the *National Walking Strategy*, which was originally expected to be published in 1998 and had not been publicly withdrawn at the time of writing⁴⁰.

Several respondents stated, that it was helpful to have a national context for a mode to justify efforts at the local level to councillors (Bury, Oldham, Luton, Worcestershire). This was seen to have been achieved for cycling with the NCS but not for walking. Bury and Flintshire have both adopted the targets for cycling set in the NCS, but the respondent in Kensington & Chelsea felt their benefit was doubtful – without however, giving a reason for this opinion. East Renfrewshire and Worcestershire also described the NCS as generally having had a positive influence, although the senior manager in the latter stressed that in spite of this, progress on the mode was slow.

Interviewees were asked to compare the impact of the *National Cycling Strategy* with the likely effect of *Encouraging Walking*, a document widely regarded as the scaled down version of the *National Walking Strategy*. Their answers showed, that awareness of the document was relatively low and even those, who knew of its existence, had not necessarily read it – which was not an omission admitted to by anyone regarding the NCS.

On walking I suppose the national guidance... there is national guidance, isn't there?
manager, Kensington & Chelsea

I haven't even read it [Encouraging Walking]. officer, East Renfrewshire

⁴⁰ although in March 2001, the then Minister for Transport, Lord Macdonald, had indicated that he considered the case for the Walking Strategy to be 'overblown' (Anon. 2001)

*Q: Have you had a look at Encouraging Walking? A: **Not in detail, no.*** officer, Lambeth

Those who did know the document – or had heard about it from others – judged it to be ‘*too bland*’ and ‘*lacking teeth*’ and did not expect it would bring much benefit for the mode (Lambeth, Merthyr Tydfil, Worcestershire, Suffolk, York). The manager in Suffolk indicated that the lack of conviction conveyed by the document had influenced his own authority’s approach to its walking strategy while the one in York felt it actually done walking a disservice.

...it’s got no teeth to it and I think that’s the difficulty with ours. I think we’ve almost followed that. senior manager, Suffolk

I think it’s [Encouraging Walking] done it [walking] a disservice, it’s just shown it to be a minority consideration really and it’s rather ironic. senior manager, York

Both criticised the national government for being ‘*frightened*’ and ‘*walking away*’ from its responsibilities, an opinion mirrored in Oldham. However, interviewees in Luton and Oldham also felt that walking was a more difficult mode to target as there were less active lobby groups and it was harder to define the user groups.

Three interviewees explicitly stated several times, that they had been – and were still waiting – for the modal targets and practical guidance they expected to find in the National Walking Strategy (Flintshire, Suffolk, Worcestershire) but the officer in Bury felt, chances of the document actually being produced had become very low. The data thus showed a discrepancy between the type of policy and practical support local authority practitioners wanted to see produced at the national level and what was actually being provided.

Other sources of guidance, which received a positive mention were Sustrans (Bury), IHT Cycle Audit Guidelines (Bury), PPG 13 (Luton) and the Traffic Advice Leaflets published by the DETR (Bury). The senior manager in York said guidance available on cycling was generally good, if not always sufficiently detailed and interviewees in Bury and Worcestershire wanted to see more specific design guidance for pedestrian measures. Three respondents stated that the dissemination to local authority level of DETR guidance material was effective (Flintshire, Worcestershire, East Renfrewshire) and the former two indicated that within their authority this information was viewed and passed on in a targeted manner to appropriate colleagues by the recipient thus ensuring people received relevant information but were not swamped with irrelevant detail.

The following exchange between officers in Luton clearly underlines the merits of providing policy leads at national government level – councils are ‘forced’ to act and officers can use the guidance to argue their case.

*A: **Clearly, in terms of blunt instruments, clearly things like PPG 13 help an awful lot, in terms of the fact that we’re being forced to go along certain routes.*** B: *Well, that’s right. Are we not, though, saying that’s sort of reacting to Government requirements...? Well, we are.* A: *We are but you can use that constructively.* B: *That’s*

right, that's right. A: [...] being able to quote bits out of Government guidance certainly helps to get your way, as it were, ... officers, Luton

More general comments by respondents also showed that a general perception of national political trends or moods at the national level could influence the local attitude towards walking and cycling (Bury, Suffolk, Lambeth, Luton, Worcestershire).

Q: Why did you produce a local cycling strategy as early as 1995? A: Well, we'd really seen a shift in emphasis in the way things were going – even the Conservatives were talking about a national policy – and so it was going in that direction officer, Bury

There's a lot of motivation to get people out of cars, obviously because it's government policy and it's good for the country and good for the environment and the first alternative would be cycling [...] well, public transport is the first. senior manager, Suffolk

Also, it's partly down to Zeitgeist, if you like, that there's now much more awareness of sustainable transportation than there was in the past. officer, Luton

By then [in days of predecessor authority] the previous government were making a few of the right noises and lots of authorities were sort of picking up the need to be more sustainable. I don't think I could put it much more strongly than that. senior manager, Worcestershire

Thus local policies and activities are influenced not only by the written word of policy but also by the extent to which the objectives set out in it are supported by the messages communicated by politicians and their main means of communication with the public, the media.

5.2.5.2 Legislation

Compared to the effect of national policies, the influence of specific pieces of legislation was discussed very rarely. This might partly be due to the fact that – in contrast to policies -interviewees were not directly asked for their opinions and experiences with statutory processes and requirements. One respondent expressed a desire for better guidance on statutory requirements connected to the provision for pedestrians and cyclists (East Renfrewshire). The Cycle Tracks Act 1984 was severely criticised as an obstructive piece of legislation in Suffolk while the statutory tools available for development control – and the requirements for pedestrian and cycle provision – were seen in a positive light in Oldham. Other authorities had referred to these tools more indirectly when talking about their work with developers (see Section 5.4.3).

5.2.5.3 Local policies

It is a reasonable assumption, that the production of well thought out policies and the length of their existence should influence the level and quality of implementation in an authority and the data does support this idea. York, Suffolk, Falkirk, Flintshire and Bury all reported that at

least their cycling policies had been in development for three years or more and while not all of them were seen as initially successful, they had subsequently been reviewed and revised.

York has been well ahead of the trend in the past [in cycling policies] and I think what York has done is tended to act as a benchmark for what a lot of people have done subsequently. senior manager, York

We've had a Cycling Strategy for must be about five, six years, something like that but it was [...] written with very little consultation. So it was written really as a council statement, if you like, published and heavily criticised and so we started with that as a framework as well and then sort of remoulded it... senior manager, Suffolk

...it's only really since '95, when the cycling side of it became dominant in my job, when we developed our own strategy. It came out just before the national one. officer, Bury

All five of the authorities listed are in the more active case study group. However, lower scoring authorities are also developing their policies for walking and cycling.

We've been a unitary authority for nearly four years. Prior to that, the authority was pretty much in the doldrums – it was a bit of a dire place to be. We have come on enormously, as I think we've demonstrated by the funding that the Transport Plan has attracted. officer, Luton

...the cycle strategy was actually originally written by consultants pre - '98 [for predecessor authority]. However, reading through what they had written – I came in 1998 and took over – it appeared that my colleagues internally and the district councils had not been consulted. So I gave it to my then Walk/Cycle Officer [...] I said [...] 'You have complete freedom to rewrite but get internal partners'. senior manager, Worcestershire

...we have had some compliments from the local cycling pressure group given that relative to other, neighbouring, council strategies, it seems that ours is a bit more ambitious than most. officer, East Renfrewshire

What I'm trying to do is get stuff in, which is not really in policy. Our policy as a council is to promote walking and cycling, that's it pretty much. officer, Lambeth

It is thus possible, that in time these authorities will become more active than they are at present. Both quantitative and qualitative data certainly showed that the actual presence of detailed policies has a bearing on implementation activities.

Well, there's been a general acceptance of the LTP, so there's no people despoiling that. manager, Flintshire

...that is in the Walking Strategy, that footway programme. [...] So it's in there and that's probably the place where we're likely to put more focus of attention rather than just casually manager, Suffolk

It's [the hierarchy of modes] a very useful device when we try to push forward cycling and walking schemes to be able to say 'This is York, this is York's agreed hierarchy, this is what we signed up to. This is what we should be doing.' senior manager, York

It [the LTP] is a good document to have [...] our strategies are x, y, z and these are our priorities. And that's what they [councillors] agreed to so they can't

really turn round and go 'No, we don't agree with that'. So I think it's a very good document and a lot better than the old TPPs, which were more focused on roads and bridges and I think it does give a good focus for the council on where we should be spending the money.
officer, Falkirk

Interestingly, this relatively optimistic outlook was only communicated by interviewees from authorities with a high CSSI score. This observation is in line with the conclusions drawn from the focus group data that well developed policies are an important facet of a successful implementation process.

A comment made by one interviewee in Merthyr Tydfil suggests, that although the LTP/S guidelines ask authorities to include provisions for pedestrians and cyclists, there might still be a need at national level to ensure this does in fact happen (see also the following section for a discussion of the LTP/S process).

Q: I assume that there are policies for walking and cycling in the LTP? A: Very little. You'll find that it's predominantly directed at rail and road issues – traffic issues.
senior manager

The interviewee in Flintshire, the other Welsh authority also commented that by the time of the interview no formal feedback on the LTPs had been received from the Welsh National Assembly, while English authorities' plans had been reviewed by the DETR and scored according to how well they fulfilled a given list of requirements.

It was interesting to note the obvious divergence between the development of cycling policies and those for walking. As has been shown from the questionnaire data, walking still receives much less attention as a mode than cycling, despite its greater prevalence in the population. In four of the authorities studied – Bury, Suffolk, Falkirk and Worcestershire - consultants had originally been employed to develop the first stages of a cycling strategy but pedestrian policies were still lagging behind, in both development and implementation:

it's [walking strategy] not being implemented as well as it could because there is no full time Walking Officer. [...] I think it needs a dedicated Walking Officer.
officer, Lambeth

a lot of effort has had to be put into the production of the LTP this year [...]. So much so, that a lot of the strategies and policies have not been developed to the extent that we had hoped by now. [...] some of them – like the walking strategy – are very much on the drawing board.
officer, Luton

The person we have just mentioned is the Local Transport Plan person for the council and on of the things she does among others is she has progressed the walking strategy.
officer A *Starting to, not a lot has been done so far.* officer B, Oldham

So that pedestrian one, for walking, was actually written by somebody else but it was sort of based on mine. It was actually watered down a bit.
senior manager, Suffolk

The senior manager in Suffolk also feared that the walking strategy, in spite of having '*all the right words in there*' might not be sufficiently strong to ensure successful implementation as it was lacking actual targets.

On the process of drawing up policy in general the data indicated that proper consultation, solid investigation of the locally important issues and the inclusion of base line data as well as targets were essential ingredients for a good quality strategy. However, the monitoring strategies employed by different authorities varied from anecdotal evidence over travel diaries and permanent automated counters on key routes or junctions to before and after monitoring of particular schemes. Out of the six authorities, which reported an active monitoring programme, 4 had achieved high CSSI scores (Bury, Flintshire, Suffolk and York) while 2 came from the lower scoring group (Luton and Worcestershire). Only the respondent in East Renfrewshire actually stated that his authority was not doing enough monitoring in order to assess the development of cycling levels in the area.

5.2.5.4 The Local Transport Plan / Strategy process

The guidance on the preparation of Local Transport Plans and Strategies makes different requirements of local authorities in England, Wales and Scotland. In England, authorities are encouraged to produce separate strategies for both walking and cycling, in Wales only strategies for cycling are mentioned and the Scottish guidance does not mention strategies for either of the two modes (see Chapter 2 Literature Review). However, their potential benefits and some measures to support them are included in all three guidance documents and since the introduction of the LTP/LTS process for obtaining government capital funding for transport measures was one of the most significant procedural changes of recent years, an impact on the way local authorities dealt with walking and cycling was expected.

Positive effects of the LTP/S process were mentioned in seven of the authorities studied. These ranged from inspiring greater levels of activity on walking (Bury) and cycling (Oldham), creating a need to prove success in terms of usage – to justify the funding received – (Bury, Suffolk, York, Worcestershire) over the advantage of having a nationally required and locally agreed document in obtaining and maintaining support for the two modes (Bury, Falkirk, Luton) to simply having more money available for the two modes due to funding allocations for specific schemes (Suffolk, York, Worcestershire,).

In this context both Scottish authorities pointed out that the different allocation process in the LTS system meant that funding for certain schemes was still dependent on internal bidding and that walking and cycling might thus lose out to measures, which were seen as higher priority.

I think I prefer the ringfencing – it is up to politicians now... In the run up to elections, things start to move towards more road maintenance and things like that. officer, Falkirk

Three respondents were critical of some elements of the LTP/S process. The officer in East Renfrewshire pointed out that the preparation of good LTS bids could be costly and that small authorities might suffer if they did not get the expected return in increased funding. In York it was pointed out that the formula used to calculate funds needed for maintenance was based on London and had resulted in York being underfunded in this sector and the interviewee in Flintshire wanted to see more feedback (the Welsh National Assembly had not provided any by the time the interview was conducted) and better guidance on how to actually prepare LTPs.

Various comments were made on the internal process involved in preparing the LTP/S. While two authorities (East Renfrewshire, Luton) stated it had been a long and drawn out process, one respondent said his authority's LTP had been *'written in a rush as it is in every authority'*. Equally, two authorities reported specific internal consultation processes for the document (Flintshire, Luton) but the senior manager in York reported that lack of time had meant only few people had had a chance to contribute.

Interviewees in East Renfrewshire, Flintshire and Suffolk stressed the importance of submitting realistic bids instead of *'a wish list of everything you want to put in'*. Firstly such an approach would prevent expectations being raised, which could not later be fulfilled and secondly it could counteract the problem of authorities being unable to deliver all the schemes included in the LTP/S within the necessary time frame due to a sudden increase in demand on human resources. It was stressed several times that authorities now had to be able to prove that they had actually achieved what they set out in their LTP/Ss.

*It's like the lottery, you just don't know what to do with it but what you do know is that **you've got to show some outcomes at the end. The government can penalise us if we don't show the outcomes.*** senior manager, Suffolk

The manager in York also cautioned against being tempted into large increases in capital spending, as there might be insufficient revenue to finance the maintenance of new as well as existing schemes.

Overall, the LTP/S process did however receive a positive verdict in both groups of authorities and it would seem to be important that the government supports the momentum generated for walking and cycling by ensuring that the targets, which have been set for these modes, are in fact monitored and ultimately achieved.

5.2.6 Resource issues

The questionnaire has identified a lack of staff, staff time and money as the most significant barriers to successful policy implementation and these issues were frequently touched upon during the interviews. The following analysis distinguishes between council internal financial issues (for example the allocation of funding) and those linked to external funding sources. It also considers people (their time, availability and commitment), knowledge and information and land as these are all resources, which the interviews showed to be of importance.

5.2.6.1 Internal funding issues

When asked which obstacles or barriers they had come up against in the implementation process, seven authorities explicitly mentioned a lack of funding (East Renfrewshire, Merthyr Tydfil, Oldham, Falkirk, Flintshire, Suffolk, York) while the respondents in Bury and Kensington & Chelsea stressed that money was generally not an issue. The officer in Bury had already explained that spending priorities were changing since the authority was simply running out of space for large road based engineering projects and Kensington & Chelsea is one of the wealthiest authorities in the country with a high income from residents parking permits and the Council Tax. The shift away from large scale projects to smaller schemes identified in Bury was also reported in Oldham

However, while some authorities saw a lack of money as a generic problem, others stressed that extra funding such as the Scottish Executive's allocation for Safe Routes to School initiatives had meant that certain projects had gone ahead without running into funding problems (see Table 5.2).

Some respondents stated that walking and cycling in particular or transport in general used to compete for funds with other policy areas, which were given a higher priority in the council, such as public transport (Flintshire, York) or education and social services (East Renfrewshire and Merthyr Tydfil) but most also indicated that the LTP system of bidding for transport money, which made allocation conditional on the delivery of specific schemes and strategies would probably change this situation (see Section 5.2.5.4 on LTP/Ss)

There was also a general feeling in five authorities (three high scoring and two low scoring ones) that the funding situation was improving overall, although this is of course a relative development and it is important to bear in mind that they are starting from different baselines.

So from a funding point of view, we're actually seeing the funds slowly increase year on year, rather than going in the other direction, [...]. So from our end of capital investment, funding really isn't an issue at the moment. officer, Bury

Historically, we've had budgets of fifty thousand, a token gesture if you like, over years [...]. Last year, or the year before, I had £180,000... senior manager, Suffolk

*the prioritisation of schemes, which I don't think we've been quite so good at in the past but on the flip side to that is that **we've never had the money we have now***. senior manager, York

*I think my post has undergone quite a transformation in the last twelve months in that **funds [...] for cycling facilities in particular and also to a fair degree for walking, are not hopefully going to be in such short supply as they once were***. officer, East Renfrewshire

Over the next year it's probably possible [that I will get some assistance] because there's a lot to do, you know. Next financial year we've been given some money [...] for Cycle Training. So I know I'll have some money for cycle training next year [...] and I can't do it all myself so I'm going to need some help... officer, Lambeth

Several interviewees talked about the effect funding allocation has had or could be having in their council. Flintshire, Lambeth and Luton mentioned a lack of dedicated staff (mainly for walking) as a consequence of a lack of financial resources, while Merthyr Tydfil was struggling with a backlog of small scale traffic calming and road safety schemes, that on their current budget would take 40 years to clear. The officer in Worcestershire felt, that despite seeing improvements in the funding situation, money was still so short that implementation continued to rely on an opportunistic approach rather than the strategic prioritisation of objectives.

Other respondents also demonstrated how strongly their activities were influenced by the money that was available. In Kensington & Chelsea, the council's high prioritisation of attractive streetscapes meant that money was usually made available to enable schemes to be finished to a high quality – and that the argument a particular proposal would bring aesthetic benefits could actually mean funding was more likely to come forward. Others reported on how funding determined their priorities for action:

... as Lowestoft, Bury St. Edmunds and Ipswich were the ones that got the money [through urban package bids] then that's how we focussed our attention. So we just work on those and that's where we're spending most of the money on walking and cycling. senior manager, Suffolk

*the availability of funding [for cycling measures] also means that **there is a good reason there for me to try and make the time to spend available funding*** officer, East Renfrewshire

The last comment does indicate, though, that staff time might not always be available even if the funding to implement certain schemes has been approved (see also Section 5.2.6.3 on staff and staff time).

The distinction between capital and revenue funding was mentioned by a number of respondents. While the officer in East Renfrewshire reported that revenue from advertising on bus shelters, which had internally been ringfenced for public transport and cycling would mean more money for these modes in the future, he also felt that the particular nature of LTS funding allocation in Scotland had meant - due to internal funding priorities - less capital was coming to transportation

and roads than had been the case under the TPP bidding scenario (see also following section). The senior manager in York cautioned that the new capital funds for new schemes coming into councils through the LTP allocations were often not matched by the revenue available internally for maintenance.

...that lack of revenue resources in many aspect of transport, particularly cycling is an issue. It's not just building facilities. [...] We could build one hundred, two hundred kilometres of cycle track but we couldn't maintain it. What's the point in that? senior manager, York

While funding allocation was reported to influence officers' activities, some (Flintshire, Kensington & Chelsea, Suffolk) also indicated that they in turn could influence the allocation process. Means of influence mentioned were the preparation of bids to attract ringfenced funding from outside sources, linking schemes to issues which the council prioritised, the delivery of good schemes to show money could be spent successfully and overspending to indicate more money was needed.

5.2.6.2 Funding from external sources

The majority of respondents talked about funding from external sources -including the allocation of LTP and LTS funding at national government level - and the effect their availability had had on walking and cycling policy implementation.

Three interviewees felt that the scheme specific allocation of money for LTPs in England and Wales had increased the money available for walking and cycling measures (Luton, Suffolk, York), while other respondents indicated that they had either been underfunded (Flintshire: *'something will have to give'*) or were unsure whether their schemes would receive the funding required (Oldham). It is interesting to note in this context that Flintshire received 33% of its bid while Luton with 45% did not get very much more – and there was actually no complete agreement among the two Luton interviewees whether or not this was to be considered a success.

Managers in Suffolk and York pointed out that although so much more money had become available, there might be some delay in translating this into implementation since many authorities were simply not set up spending large sums of money on transport schemes in a short period of time and because there was a national shortage of people with the right skills – both in the public and private sectors – to do the work required (see also Section 5.2.6.3 on time and staff).

Both Scottish authorities (East Renfrewshire, Falkirk) expressed regret that LTS allocations were not ringfenced, thus making funding for particular schemes dependent on internal bidding and prioritisation. They felt that walking and cycling might actually lose out in this process.

*There's no ringfenced money coming into the council. COSLA wanted it that way and are sticking to their guns. We have suffered because of that. **We have seen this capital***

funding drop drastically coming to roads within an authority.
manager, East Renfrewshire

senior

In general all other external funding sources were considered to be a positive influence, particularly when funding had become available specifically for walking and cycling related schemes thus circumventing the competition with other policy priorities. The table below shows the various sources identified and what they have been - or in the case of ongoing applications were intended to be - used for. The data suggests that high scoring authorities are more likely to use external funding for added value purposes rather than basic provisions. This in turn indicates that although a lack of money was identified as an implementation barrier in both groups, the problem of getting even basic provisions funded is more marked in the low scoring authorities (see also quotes below).

Local authority	Source	Scheme
East Renfrewshire	Scottish Executive Public Transport Fund	walking and cycling facilities leading to and linking with PT stops
	Scottish Executive <i>Safe Routes to School</i> funding	at grade pedestrian crossings on school routes among others
	Scottish Natural Heritage	funding for an Access Officer
Lambeth	Mayor of London	funding for Car Free Day 2001 activities
	DETR Travel Plan / SRtS bursaries	funding for one Workplace and one Schools Green Travel Plan Officer
Merthyr Tydfil	Groundwork Trust	bridleways, footpaths and cycleways in land reclamation schemes
	Sustrans	Newport to Cardiff cycle route
	Welsh National Assembly	Safe Routes to School pilot schemes
	Welsh Development Agency	official adoption of habitual rights-of-way in land reclamation schemes
Worcestershire	Sustrans	urban sections of National Cycle Routes
Falkirk	Scottish Executive <i>Safe Routes to School</i> funding	SRtS schemes
Flintshire	Welsh Development Agency Environmental Grants	pedestrian routes in Flint
	Welsh National Assembly	Safe Routes to School
		Deeside Integrated Transport Strategy
Kensington & Chelsea		local safety schemes
	DETR Travel Plan / SRtS bursaries	funding for a Travel Plan Co-ordinator
	Mayor of London	funds for preparing bids for "Exhibition Way" pedestrian scheme
		funding for "Exhibition Way" pedestrian scheme
	London Underground	asked for major improvements to major underground stations
	other councils	spent national government funding unused by other councils

Table 5.2 External funding sources and their application (contd.)

Local authority	Source	Scheme
Suffolk	developers	improvements for pedestrians and cyclists on-site and linking to it
	East of England Development Agency	not specified
York	DETR	demonstration project on traffic management

Table 5.2 External funding sources and their application

It was pointed out several times that making the best use of these resources for pedestrian and cycling schemes required an integrated and well thought out approach. Matched funding from external sources – such as the Welsh Development Agency or Sustrans - could be used as a lever to increase internal allocations and new schemes should ideally be sited so that they would provide strategic links. European funding was more likely to be made available if several policy areas – such as transport and social inclusion - could be integrated (Luton, Oldham) and if the people responsible for allocation were open to applying overarching criteria of sustainability (Oldham). The manager in York pointed out that the results of the traffic management demonstration project they were involved in might bring benefits for pedestrians and cyclists if they could be used to stop rat running *‘to give those roads back to the people for walking and cycling’*.

Falkirk and Flintshire also pointed out the advantage of having well developed proposals to hand so funding opportunities could be grasped effectively as they became available.

The Scottish Executive came up last year with the Safe Routes to School package, so fortunately we had this report already done [study of school routes in Grangemouth], we’d set out all these projects, so we put a bid in for that and got £142,000.
officer, Falkirk

The manager in Merthyr Tydfil made it explicit, that obtaining external dedicated funding was conditional for certain walking and cycling schemes to go ahead

we tend to rely, as I said earlier on, on external funding for these unique schemes. [...] we’ll grasp it eagerly, because it means that we can do something in that area that our £4000 [annual budget for walking & cycling]... well, it’s just a waste of time. senior manager, Merthyr Tydfil

The manager in Flintshire provided an example for the influence funding conditions can have on the policy approach at local level - and for the benefits of having good schemes prepared even before funding has been secured.

And for the last two years, the National Assembly have said ‘We will accept no bids for new road schemes’. [...] you’ve then got to say, ‘Well, we want to develop these as normal studies, a) because there may be another way of dealing with the problem, b) if they come up with the evidence that you still need a road scheme, you’ve got more evidence to support your case and you’ve considered all the options.’
manager, Flintshire

5.2.6.3 Time and staff

These two issues are inextricably linked as more staff automatically means more – if not necessarily enough - person hours available to spend on walking and cycling matters.

Several interviewees identified a lack of time in their own job (Falkirk, East Renfrewshire, Luton, Lambeth, Oldham) or of additional staff (East Renfrewshire, Lambeth, York) as a barrier to policy implementation or indicated that the appointment of a new member of staff to work on these modes had made a difference to how well they were catered for (Flintshire).

I did some work on cycling, but it was pretty minimal [...] it was never allowed to progress because there were always other demands on my time as Planning Officer in the Forward Planning Team as it was then [before re-organisation] officer, Luton

So therefore one of the barriers is that there is a lack of people in a small authority like this who can deal with strategic transportation and planning. senior manager, East Renfrewshire

more than the availability of funds, it's the problem of myself and any assistance that I might be able to muster generating enough time to design an scheme to the required standard and to oversee its implementation, ensuring that it's constructed properly. officer, East Renfrewshire

we're still quite a small team for what we're required to do [...] half of me wants to have a finger in every pie but of course that other side of that is it just can't be done and I still feel at the moment very much like a one man crusade. If I get run over tomorrow, it could come to a grinding halt. officer, Lambeth

we're not doing anything about it [getting a GTP implemented] because we haven't got the time, we haven't got enough people.[...] It's not whether you've got money to put things in. It's whether you've got the people to put things in. officer, Lambeth

lack of staff time (is a barrier), to take forward things, to progress things you know, when you've got twelve things to do and one of them is about walking and cycling. officer, Oldham

..it's just a case of keeping juggling. So yeah, I don't think you can do it as well [implementing cycling schemes], 'cos you certainly need to get out and I don't think I get out enough to really assess things. officer, Falkirk

Twenty years ago, I think it could quite reasonably be argued that we were a bit on the fat side and over staffed. I mean you could never argue that now and I think in terms of having to consider plans and give proposals, we don't have the resources. senior manager, York

I think the appointment of a Cycling Officer has helped – to have a member of staff, who can dedicate the time, more so than anybody else. manager, Flintshire

Lack of time seemed to be a more severe problem in low scoring authorities – an observation in line with the fact that they are also less likely to have dedicated (and well supported) staff for walking and cycling. The concern about staff time was underlined by the fact that in some authorities, which did not have dedicated cycling or walking officers, those who did work on these modes could only dedicate between 30% and 10% of their time to them (Falkirk, East

Renfrewshire, Lambeth, Merthyr Tydfil) although there was some flexibility in how work time was allocated. Consequently, it is not just important to have people allocated to work on a certain mode but their own personal motivation is also a factor, which will affect implementation and three interviewees touched on this issue specifically and repeatedly.

The cycling strategy is down to me. If I don't start it, nobody will and this comes back to this one man crusade, which is a worry. officer, Lambeth

And this is the chipping away, you have to keep chipping away at it. You can't do it overnight. officer, Lambeth

it's like moving this huge monolithic thing but you know, there is progress being made but a lot of it is just time and you just have to keep at it and you have people, who are inspirational, you know, hearts and minds officer, Oldham

Only through persistence really [are we getting round problems of land acquisition]... senior manager, Suffolk

As has been indicated earlier, it was not just the availability of staff *per se* but also of the necessary skills, which sometimes impeded implementation (East Renfrewshire, Lambeth, Oldham, Suffolk). In two cases, on the other hand, respondents felt that they did have the right skills available within their team and that being aware of these and making good use of them made implementation easier (senior managers in Kensington & Chelsea and York).

5.2.6.4 Information

Seven authorities indicated that having good information and guidance on walking and cycling available was important, either to be able to design good schemes (Bury, Flintshire, Lambeth, Worcestershire, York) or to use it in convincing people that there was a demand and potential which should be satisfied and unlocked (East Renfrewshire, Lambeth, York). However, there was a feeling that particularly government guidance on walking and cycling was insufficient and was not disseminated effectively.

...perhaps because of the lack of information available to promote walking or to ensure the standard of footways and footpaths is adequate. officer, East Renfrewshire

...the National Cycling Strategy Group may or may not be turning out good stuff. I just don't know [...] I've never had anything from DETR on cycling advice. I've been here fourteen months [as cycling officer], I've never had anything. officer, Lambeth

the [National Walking] Strategy⁴¹ would be good if it gave an idea of what people can do on the ground – if it gave guidance on what you need to do or what you can do, then that would be a big help – and it had the evidence to back up case studies where things have been done. manager, Flintshire

⁴¹ The National Cycling Strategy and *Encouraging Walking* have been discussed more specifically in Section 5.2.5, which deals with national sources of influence on policy implementation.

*There's got to be ways of trying to spread the money [for constructing cycle paths] out further **but trying to find guidance that you can actually take to my more sceptical colleagues in maintenance and say 'Look, this is acceptable' [using stone chips instead of tarmac], there was nothing that you could easily pull out and say 'This is what we should do'.*** senior manager, York.

Mutual participation in benchmarking projects and study tours in particular (Bury, York, Lambeth) as well as guidelines from Sustrans and the Institute of Highways Technologies (Bury) were described as better sources of information than national guidance, although the officer in East Renfrewshire felt that the dissemination of guidelines had been effective. He also admitted, though, that he did not really have the time to read them, therefore his awareness of what was published might not have been comprehensive.

Respondents in both York and East Renfrewshire expressed a desire to see the information and guidance currently available collated into more accessible formats than was currently the case.

5.2.6.5 Land

I think the worst barrier in terms of building anything is land, it really is the worst one. senior manager, Suffolk

In the implementation of walking and cycling schemes, land to construct them on can also be an important resource since not all new schemes are established on existing highways or pavements. This issue was predominantly discussed by the interviewees in Merthyr Tydfil and Suffolk, although it was also touched upon in East Renfrewshire and Falkirk. The predominance of non-English authorities is probably related to the fact that rights-of-way are less well established and regulated in Scotland and Wales, while the very rural nature of Suffolk could have contributed to its problems with land acquisition.

The greatest barrier seemed to be the reluctance of land owners to sell the parts of their property, which were needed to allow a new scheme to go ahead (East Renfrewshire, Merthyr Tydfil, Falkirk, Suffolk). In some cases this could simply stop a scheme going ahead, while in others it resulted in lengthy negotiations or compulsory purchase processes. The manager in Suffolk pointed out that the creation of the National Cycle Network had helped in this context, since the national perspective created greater motivation to actually persist with these processes. The need for persistence was also stressed in East Renfrewshire and Merthyr Tydfil. The latter reported a particular problem with rights-of-way, since it belongs to one of the three areas in the UK, which did not produce a rights-of-way plan in the middle of the 20th century, when the idea of a deliberate planning process first took hold. They were thus dealing with a backlog of about 120 'claimed' rights of way, the legality of which needed to be established, often in the face of resistance from land owners and insufficient resources to actually create and maintain paths, which were safe enough not to leave the council liable for injuries occurring on them.

Most times, we do succeed at the end of the day, but it is a long hard slog.
manager, Merthyr Tydfil

5.2.7 The mechanics of implementation

Clearly all the topics discussed in this chapter have a bearing on policy implementation in a more or less direct way and very often, they address issues, which go beyond the formal processes, employed by councils for implementing their adopted policies. However, during the course of the interviews, respondents often commented on this formal process, how it had affected their work, and which factors and actions could or had influenced it.

Two interesting strategic dichotomies emerged from these comments. Firstly, authorities might approach implementation either on an ad hoc basis (i.e. whenever an opportunity would arise for example through a new development) or they might decide on core routes or areas for action and would then implement policies within this strategic unit. While the higher scoring authorities (Bury, Falkirk, Flintshire, Kensington & Chelsea, Suffolk) generally took the more strategic approach – backed up by making use of ad hoc opportunities as they arose – lower scoring authorities (Luton, Oldham, Merthyr Tydfil) only reported an opportunistic approach to policy implementation.

rather than spreading the resources thinly, I think it's more 'Let's look at Grangemouth, let's get as much done as we can, and then move on to another area'
officer, Falkirk

We've done the first route, which we thought was of main importance, which was the Welsh Road Cycle Network manager, Flintshire

I referred to the King's Road scheme and that was over a period of years, the full length of the King's Road has been looked at [for pedestrian oriented improvements] manager, Kensington & Chelsea

...we take a responsibility for writing our own action plans [for cycling] for each of the towns or areas [district councils] senior manager, Suffolk

...we know we haven't given these modes the attention they need. And that's partly because we have done a lot of piggy-backing – in other words, a scheme will come along, road narrowing, traffic calming – let's have a cycle lane on the back of it chaps. But in a position where we know it's going to fit in with the overall plan, once we get it in place.
officer, Luton

...and [we] seek to co-ordinate whatever [the Groundwork Trust] are doing on that unique piece of land, hopefully to a grander scheme of things, which would be developed over a period of time. senior manager, Merthyr Tydfil

I think with walking it's very piecemeal. It's not like you have a programme that you are trying to put through [...] it's through constant vigilance, constant making sure that pedestrian access is considered when a new development comes up or when the regeneration programme is being developed officer, Oldham

...so you know, things [measures for cycling] happen sort of on an ad hoc basis... officer, Oldham

These diverging, if not mutually exclusive, approaches might arise from the fact that proactive, strategic implementation requires a certain amount of priority – and resources – to be given to the policy or objectives in question and this again underlines the conclusion drawn earlier that having policy in place is an important but not in itself sufficient condition for successful implementation.

The second dichotomy can be described as a different version of the *strategic* versus *ad hoc* approach. In some cases, policies and implementation are proactively aimed at fulfilling strategic objectives such as increasing modal share policy while in others measures react to a situation observed on the ground (such as existing levels of cycle or pedestrian use or accident black spots). In this case, the ad hoc implementation would be triggered by need rather than opportunity. These two alternative approaches did not divide clearly between different types of authorities, however.

*But, as I said, we are at the point of writing the [pedestrian] strategy and **implementing things from that when there is a strategy in place*** officer, Bury

*if there are problems for pedestrians, if they are coming up as accidents, then those would be looked at, **pedestrian facilities maybe being needed** but I think we look at the need for, **we might still put in pedestrian facilities even if there are no accidents.*** manager, Kensington & Chelsea

...Grangemouth had quite a high ratio of people cycling and I think it was felt that, to sort of enhance that or keep that going, to put some new cycle routes in Grangemouth and the 'Grangemouth Cycle Friendly Town' started officer, Falkirk

*And we've seen in the past, quite a few cyclists either on the road or on the footpath, which they shouldn't have done at the time, going into the industrial park up here. **So we've actually made a formal cycle way through here...*** manager, Flintshire

if people want any cycle parking stands, they can contact my group and we often put these in very quickly manager, Kensington & Chelsea

Under both scenarios, successful implementation can also set in motion a positive feed-back loop if usable, well thought out new measures result in increased usage, which then leads to further measures being added.

Dynamic balance we call it. You start from a low base. you want to get more cyclists, but you can't get more cyclists until you've got more for them to ride on. So you bring that side up, then that side comes up. They follow each other. It's the same with walking... officer, Luton

*...we found 200% increase in the number of cyclists on the scheme [new cycle scheme on a major radial road]. **So it was obviously a facility that served a purpose, and people liked it because it was visual. [...]** So reaction to that one was very good – it fed straight into the town centre **and was ultimately led into other schemes and linked into other things, as well.*** officer, Bury

*So, as I say, a Walking Bus has got no, in itself, has got no engineering in it **but if you need to make the route safer then we follow that up.*** senior manager, Suffolk

Two interviewees also hinted at the possibility of using the implementation of uncontroversial measures to reinforce the case for those, which might face opposition from within or outside the council. This could be described as another version of reactive implementation, only in this case the parameters triggering a reaction have actually been actively influenced by the implementers.

It's about critical mass - get lots of cycle ways in where you can, and get people on their bikes, and then you can start putting in the filling-in-bits on the road where we really want them. officer, Luton

There was a lot done on cycle parking and then certain routes were introduced in a fairly discrete way and we sort of built on that. manager, Kensington & Chelsea

In the case of Kensington & Chelsea, the interviewee also stressed repeatedly that – it being a wealthy, highly residential but also much visited borough - the councillors were very concerned about the quality of the streetscape and that schemes were more likely to gain acceptance if they could be shown to enhance the overall appearance of a street or area. Together with the comments on safety cited earlier, this shows that policies are more likely to be implemented if they can be shown to be in line with the dominant priorities of those, who have the power to accept or reject a scheme.

More direct ways of influencing the decisions taken during internal negotiations (in council committees or during public hearings) were either through formal reports or by personally persuading committee leaders or other councillors of the merits of a scheme to either overcome objections or to enlist active support. Thus interviewees stressed the importance of well argued written reports backed up by convincing evidence (Bury, Flintshire, Kensington & Chelsea, Suffolk, Luton). Clearly, this point received more attention in high scoring authorities.

However, carrying through such an approach thoroughly and consistently – particularly in the face of persistent internal or external opposition - does require a lot of personal dedication from the officers involved.

...in the last two years, off the top of my head, I can't think of any notable successes, where [...] we can say 'Well, that's gone really well.' It does tend to require a lot of pushing prodding, driving things forward, cajoling... senior manager, Merthyr Tydfil

5.2.8 Politics

Although several respondents stressed the need for rational argument when persuading politicians of the desirability of a scheme, the more subjective elements of politics were also shown to play a role in implementation. Local political pressures were predominantly seen as a negative influence, stopping proposals from going forward, either due to concerns about adverse public reaction – particularly near election time - or because of the strong views of particular individuals. These

problems were not limited to the less active authorities or authorities with small political majorities in their councils.

*[a particular cycling project] has become purely a political thing in that one of the main leaders in this particular area board has a thing under his skin about cyclists and cycle lanes and **there's been a political decision to suggest that this particular scheme gets dropped. Which would be shame because it's a good scheme and it stands on its own merits*** officer, Bury

*This can be a terrible time of year to try and get things through, **because we've got the ogre of local elections looming at May time, so people get very fidgety.*** 'Oh no, I can't be seen to be doing things that may get political and public adverse reactions in the press' officer, Bury

*I think I prefer the ringfencing [of LTP money in England as opposed to the allocation of lump sums in Scotland] – **it is up to politicians now... In the run up to elections, things start to move towards more and more road maintenance and things like that.*** officer, Falkirk

*We are looking at one or two extensions to Foot Streets but they are going to be very contentious. [...] **It means that there's very limited access. [...] How far politically we'll get with this, we don't know.*** senior manager, York

***Where there may be contentious issues are on a very local basis [...]** if a new bridleway or footpath is constructed alongside their property, and we do get resistance, **which obviously is then reflected through perhaps the local members, even though the council as a whole [...]** don't view footpaths and cycleways as being contentious officer, Merthyr Tydfil*

*The private hire people [800] want the same [town centre & bus lane access] rights as licensed taxis [80] – we're determined not to give them to them. [...] **The leading light in the private hire sector has got himself elected to the council, comes from an ethnic minority, so he's playing that card to some extent and we're under a lot of pressure from the members [...] to give way...*** And it looks as if we might lose that one. officer, Luton

However, political concerns can also work the other way if the ruling party is more interested in sustainable transport or particular modes, if local pressure is actually pushing for walking or cycling measures (which rarely seemed to be the case) or if public success of certain schemes is deemed to be politically beneficial.

It's a Conservative ward, so I mean that's some consolation because we're a Labour authority, and the Labour members will be quite happy to push that [bus scheme opposed by local residents] through in the face of opposition officer, Luton

*We've got this scheme at the moment [...] and it depends, whether the politics – **if it becomes one side against the other, in which case it can work in our favour.*** officer, Bury

Footways in rural areas are very, very political animals, very sensitive and seen as supplying what people want, what the people need and so politically it's very important and so they get higher, a high priority. senior manager, Suffolk

*I think the fact that York enjoyed a [...] national reputation for achievement in terms of walking and cycling. **I think that helps drive things along because members [of the council] thrive on good publicity. It's their bread and butter really, so as long as we're sort of delivering, that's good news for them.*** senior manager, York

Many interviewees expressed the view that political support was very useful in aiding implementation - either by making positive mention of its presence (Oldham, Lambeth, Bury, Flintshire, York) or by regretting its absence (East Renfrewshire).

5.3 INTERACTIONS WITHIN EACH AUTHORITY

Since the implementation of walking and cycling policies does not generally depend on just one person or group inside the council but potentially involves policy officers, highway and road safety engineers, planners as well as councillors and committees and can often touch on the responsibilities of more than one department or policy area, interactions and communication inside the council can be very important. This section looks at how different actors and factors are interlinked and laced together.

5.3.1 Officers, groups and departments

Since walking and cycling potentially span the responsibility of several individuals, groups and even departments within a council (predominantly transport planning and transport engineering but also for example education, public health and air quality management) communication within the council should be one important aspect in the policy implementation process – and this issue was touched upon by all the interviewees, often several times at different points in the interview.

Subtle differences in the mechanisms for communication were observed. It was either taking place between individuals on a more or less informal – if not unofficial - basis or within a framework specially created for exchange and co-operation such as officers groups. Communication between individuals tended to employ more informal mechanisms, while targeted exchange between groups or departments often – but not exclusively - relied on formal channels. The importance of such exchanges was furthermore underlined by the fact that some interviewees regretted their absence or inadequacy.

5.3.1.1 Individuals

Interactions between individuals within the council had a fairly high profile, being mentioned on 20 separate occasions in nine different authorities. These included all the high scoring authorities but only three of the low scoring ones (Lambeth, Luton and East Renfrewshire), one of which (East Renfrewshire) stated that attempts at working with colleagues sometimes met with a lack of co-operation. Lack of such informal communication can be brought about by the physical distance of the relevant people, it could be due to the personalities involved or it might even be actively discouraged by the authority (though no example of this was given).

All interviewees from the nine authorities listed above stressed the importance of personal, informal face-to-face communication (in preference to paper or e-mail based) for gathering or giving input on walking and cycling related projects.

We've got a Rights-of Way officer, so when we're looking at off-highway facilities, we always talk to him about schemes. officer, Bury

...housing had asked the engineers to cut back some trees and vegetation and they came to us and said 'Well, while we're doing it, why don't we put in a footpath? [...] There is a need because it's linking a housing estate' officer, Falkirk

Most of them for instance on cycling schemes do come to me and say [...] 'What do you think of this, what do you think of that?' Obviously there are only so many hours in the day [...] and some come to me more than others but I am trying to foster this sort of atmosphere 'Look, I'm just over here, give me a shout, because if you don't come to me, I'm going to stand over your shoulder anyway, which is what I tend to do. officer, Lambeth

In this context, three respondents (Falkirk, Lambeth, Luton) mentioned the importance of physical proximity of the offices of people involved to facilitate such direct and spontaneous interaction – or the problems caused by different physical locations (Oldham).

[Departments being geographically dispersed] slows down the process of me communicating with people or meeting people in the council who I might want to co-operate with, who might have some information that would be useful to me or something. officer, Oldham

Obviously such a personal approach requires a certain level of initiative from the people involved and thus depends on personalities – as well as physical availability of potential communication partners. Where these prerequisites are not necessarily fulfilled – or where time constraints might inhibit more spontaneous ways of communicating – formal networks – such as officer groups - and occasions for the exchange of views and information can also be useful and they generally cut across groups or even departments.

Respondents in Luton and Oldham reported that they would often try to discuss schemes informally with councillors prior to council committee meetings or even prior to writing a report. This personal contact helped firstly to sound out possible objections and also to explain the reasoning behind proposals on a one-to-one basis rather than through an 'dry' written report and secondly it created the chance of finding an active supporter, who could speak out in favour of a scheme during the committee meeting, which officers would generally not be asked to attend.

5.3.1.2 Groups and Departments

Respondents from eleven authorities – Merthyr Tydfil being the only exception - reported on some level of ongoing formalised communication and co-operation on walking and cycling issues. However, East Renfrewshire and Oldham also indicated that co-operation was not as good as the interviewees would wish while both Kensington & Chelsea and Merthyr Tydfil stressed that walking and cycling was still predominantly dealt with by the respondents own department

(Transportation and Engineering respectively) with little involvement from elsewhere in the authority.

The most important concept emerging from those authorities, which had created formalised communication channels (Bury, Falkirk, Flintshire, Suffolk, York, Lambeth, Luton, Oldham and Worcestershire) was the importance of fostering joined-up thinking to connect related activities by exchanging ideas and expertise and maintain mutual awareness of the two modes' relevance to people's work. Various mechanisms for interaction were identified in both groups of authorities:

I am in the Strategic Transport Team and within that team we have a Transport Planner [...], Community Transport Officer [...] Walking Officer and myself.[...] Within that team is also the development and control function where planning applications [...] are passed on to us by the planning Department, which is in a completely different Directorate. officer, Lambeth

There are also health aspects of these sustainable modes of transport, which are addressed through our links with Health Action Zone and various county council health action groups. officer, Luton

we have a group here called the Transport Issues Group and we meet, normally meet about every six weeks to two months or so there are representatives from different departments and we basically just run through what's going on. It could be new national guidance or it could be as specific as there is a new bus lay-by being built outside such and such a school[...] So you need motivation or opportunity to get together but I think having that ongoing liaison is really useful to make sure people aren't completely in the dark. officer, Oldham

I think we've made a lot of progress in terms of linking in with the Education and Corporate Services Directorates [...] that's been quite a recent thing with the Safe Routes to School and with our own travel plan and it's just getting easier now. [...] having had a few instances, where we got back in contact with them and said this is why we need to know that, the information is just coming through now as a matter of course. manager, Worcestershire

With the LTP it was full cross-directorate involvement. We set up an officer working group and it had fairly senior officer level from most of the directorates. manager, Flintshire

My job is to build things, it's the policy team's job to think about what you should be doing and we are actually coming together and knitting together the thinking. senior manager, Suffolk

I talked about the project team earlier which set up across the three groups of people in Highway Regulation, Engineering and the Consultancy and ourselves. We take people from each of those groups, put them together into the Safe Routes Project team and they are actually having a team building exercise today. senior manager, York

The respondent in East Renfrewshire indicated that, just like spontaneous individual communication, cross departmental communication could also suffer from the physical dispersion of offices – a problem, which is likely to be exacerbated in the absence of formalised networks in that authority.

*I think co-operation [with planning] could and should be better. I think it would be a lot better if we were in the same building. **It's sad to say but even though we've all got phones and e-mail, it isn't the same as being physically in the same place and I don't think it ever will be.*** officer, East Renfrewshire

However, this opinion was in marked difference to the experience reported by a senior manager in the same department:

*Most of them [other departments] are in [...] Giffnock and our Directorate, we're part of the Environment Department - this is Roads and Transportation Service – they're based there as well. **So, myself and other officers are in and out of there all the time.*** senior manager, East Renfrewshire

These conflicting statements could indicate that the senior officer simply has more opportunity to travel between different offices to make personal contact with other officers but it is also possible that he is either misrepresenting what he knows to be the reality or is unaware of other officers' problems in maintaining the same level of personal contact with other departments as he does. In all cases, the implementation process is likely to be affected, though, if the responsible officer experiences interaction with a vital department such as Planning to be insufficient.

5.3.1.3 Consultation

A very specific form of internal communication is consultation on policy. Six authorities, five high scoring and one low scoring one reported that either their LTP/S (Falkirk, Flintshire, Kensington & Chelsea) or cycling strategy (Bury, Suffolk, Luton) had been consulted on within the council. The respondents in York on the other hand felt internal consultation on these documents had been quite narrow, partly due to a lack of time. The officer in East Renfrewshire felt he could not comment on the consultation process for the LTS as he *'had a very limited involvement with it.'* Given that he himself wrote parts of it this would indicate consultation was narrow if it happened at all. Regarding the cycling strategy he stated consultation had only been *'internal, within this service'* while his superior officer had said that the cycling strategy *'had been round the council, just to see if anybody would want to have a say in it'*. Again there were two diverging perceptions of important aspects of the implementation process in East Renfrewshire.

The interviewee in Flintshire also pointed out that the LTP had been approved by councillors before it was presented to the Welsh National Assembly, which ensured that they could not subsequently argue with the aims and objectives contained within it. Although it would be tempting to assume that this should be standard practice in all authorities, no other interviewee described an involvement of councillors in internal consultation on these particular documents. Walking strategies were not mentioned at all in this context.

5.3.2 Modes

In a national policy context, which stresses the merits of integrated transport it would obviously be important for local policy makers and implementers to be aware of the links between modes and how they could best be stressed and strengthened. The interviews were therefore analysed for evidence of such links.

The connections between walking and cycling – and other modes – were discussed from two different perspectives: the possible synergies between them and potential or existing conflicts. Respondents in six authorities (three from each group: Bury, Falkirk, Kensington & Chelsea, East Renfrewshire, Luton, Oldham and Worcestershire) gave examples of how measures for cycling or walking could be linked in with each other or other schemes and two high scoring ones talked about the enhancement of interchanges between these modes and public transport (Falkirk, Kensington & Chelsea).

*part of the area was detrunked and **to reduce the speed on the road [...] to bring it down to one lane, we put cycle lanes in it*** officer, East Renfrewshire

*we are putting in [...] **two lengths of shared use cycle/pedestrian paths**, designed to a fairly high standard. It is not something we would normally consider but there's already a pedestrian route there and there are good reasons for doing it in a fairly sort of calm environment.* officer, Luton

*A: Cyclists shouldn't be banished off to where they are impinging on pedestrians or whatever, we should be making the motorised traffic give way, particularly cars. B: Exactly so, Exactly so. **We need to have cyclists on the road as a sign to the motorists 'We share this road, it's not just yours'*** officers, Luton

*...local safety and traffic calming schemes are, again, a glorious way of **getting cycling facilities and walking facilities on the ground**. And funded from a different source.* officer, Bury

*...you know, **we start off in Grangemouth with a few cycle routes, and then we're looking at Safer Routes to School within Grangemouth, it's all interlinked.*** officer, Falkirk

*we're still looking at cycling and walking in the Safe Routes to School initiative, and **that's the sort of area, where we can implement cycling and walking measures.*** manager, Flintshire

*the traffic management of the whole length of the King's Road was called a Traffic Safety and Pedestrian Scheme and there were a lot of facilities put in there [...] **it was a combined scheme** [...] it looked at bus movement, cycle movement, everything* manager, Kensington & Chelsea

*We've got facilities at the railway station for cyclists – cycle lockers – and obviously, cyclists can take their bikes on the train [...] I'm also doing a project on the bus station, [...] **so we're waiting for them [public transport operators] to start to move, and then we'll look at, again signage and cycle rack and things like that at the bus station. So I think it's having facilities at each of these locations, and good signage for pedestrians...*** officer, Falkirk

However, it is clear from these quotes, that while the links are being made in some of the authorities, the motivations for making them differ. In the case of Bury and East Renfrewshire walking and cycling measures are portrayed as means for calming the traffic rather than describing traffic calming as a benefit for pedestrians and cyclists. However, this approach might have arisen from some officers' continuing difficulties of justifying expenses solely for the benefit of these two modes and instead having to justify investment through other arguments. Luton also reported that most measures were brought in on the back of other projects.

A: Stuff that we're doing that is specifically targeted at cycling and walking improvement is relatively modest, isn't it? B: It is. officers, Luton

But every time we do something, we do it with the needs of pedestrians and all other transport users in mind. manager, Luton

High scoring councils, though, appear to be taking a more proactive approach (Falkirk, Kensington & Chelsea, Flintshire; see also Section 5.2.7 on the mechanics of implementation).

Two respondents (Bury, York) reported concerns over real or perceived conflicts between pedestrians and cyclists (both in the eyes of the public and in the eyes of colleagues), which in the case of Bury had proved to have been unjustified after implementation.

Walmesley Road has worked well – we've got subways and shared footways [...] despite a couple of pedestrian lobby groups, or lobby people within the authority saying 'Oh no, you can't do that, we're going to have cyclists running into pedestrians, and carnage everywhere!' And we're not having any incidents at all. officer, Bury

The higher profile that cycling still has as a mode compared to walking was also mentioned (East Renfrewshire, Lambeth, Oldham, Worcestershire, Suffolk) mostly by low scoring authorities. This has already found expression in the comparison between activities relating to the two modes in the last chapter. There was some disagreement, however, on whether the profile of walking would ever reach the same level as that of cycling.

I think perhaps like cycling [policy provision for walking] will change slowly in the next years or perhaps the next couple of decades. The National Cycling Strategy I feel has helped me to give cycling higher priority in my work. I think it would be good if the National Walking Strategy achieved the same result for the most basic form of transport of all officer, East Renfrewshire

So the time spent on walking [by the part-time walking officer] isn't anywhere near the time I spend on cycling officer, Lambeth

A: I think somehow people take cycling more seriously than walking. B: I think that's true, it's too ordinary. officers, Oldham

and although [walking and cycling] are linked together, I think they are actually poles apart in terms of motivation [to provide for them]. senior manager, Suffolk

I think we are just a stage behind, we are tailing almost on this sinusoidal curve, we are tailing what we've done in cycling but [...] I think we will have the same success, I'm optimistic. manager, Worcestershire

Three interviewees also mentioned the hierarchy of transport modes adopted by their authority. While in Luton, public transport had consciously been placed at the top as the mode most likely to help solve existing problems (followed by pedestrians and cyclists), Lambeth and Y o r k had both given priority to walking and cycling on paper but both respondents felt that this idea had not yet pervaded all the council's activities as the car was still automatically prioritised if a choice had to be made (on salting surfaces in Y o r k and on road space allocation in Lambeth).

5.3.3 Other policy areas

One aspect of integration is making the links between walking and cycling and policy areas outside of transport. Interviewees mentioned the following connections being made and developed in their authorities (Table 5.3):

policy link	authorities, where link was mentioned
planning - cycling/transport	Flintshire, Kensington & Chelsea, Luton, Oldham, Worcestershire
health - walking/transport	Kensington & Chelsea, Oldham
air quality - transport	Kensington & Chelsea
social inclusion - walking and cycling	Luton, Worcestershire
sustainability - transport	Luton, Oldham

Table 5.3 Policy links discussed in different local authorities

In planning, the connection was generally enforced through provisions in the statutory development plans but also through specific requirements such as facilities for bike storage in new residential developments (Kensington & Chelsea). In other policy areas the links ranged from a general recognition of the connection without specific measures being mentioned to more targeted initiatives, mostly stressing the health benefits of walking (such as an Asian Women's Walking Group in Oldham).

Some respondents also talked about the connections that failed to be made.

...air quality will be an issue, well, with development it is an issue but not really in the way that you describe [encouraging the consideration of non-motorised modes]. officer, Oldham

This admission is perhaps surprising in an authority, which is very urban and densely populated and it seems to indicate that the message about the importance of these issues has not yet been universally converted from the national and local policy statements into practical thinking. The officer in East Renfrewshire also stated that links between walking and cycling and health as well as air quality were not being made – although the senior manager in this authority had said that *there is*

a policy of the council of safer environment and healthy living so therefore there is the health side of walking and cycling comes out as well.

Officers in East Renfrewshire and Oldham also talked about conflicts between different policy areas. In East Renfrewshire the problem was that spending priorities were heavily concentrated in education (and walking and cycling were not seen as fitting into these, even from an educational point of view). In Oldham the officer felt that safety concerns sometimes made it hard to provide pedestrians, cyclists, buses and drivers with adequate facilities on the same stretch of road. He made no mention of possible prioritisation of modes, perhaps because – like many other authorities - his council has not actually adopted a road user hierarchy.

5.4 AUTHORITIES' INTERACTIONS WITH OTHERS

The preceding two sections have discussed the influence of a variety of agents and factors as well as interactions between these within local authorities on the implementation of walking and cycling policies. However, authorities also interact with other groups and organisations and these relationships were frequently discussed in the interviews.

5.4.1 Interest groups, lobby groups and the general public

Mention has already been made of the potential influence the perception of public opinion can have on political support for walking and cycling measures. In addition, individuals or interest groups outside from outside the council might also communicate with officers and departments themselves and thereby influence policy implementation. Such influence could take the form of either support for or opposition to specific schemes. Proactive lobbying was also said to have an effect on the way policies were prioritised inside councils.

Six interviewees – three in each of the two groups - considered active support or lobbying for walking or cycling schemes to be a positive and re-enforcing influence on their activities (East Renfrewshire, Lambeth, Merthyr Tydfil, Flintshire, Suffolk and York), which they might even actively encourage while five expressed a sense of regret about the lack of active pedestrian (Falkirk, Lambeth, Luton, Suffolk) or cycling (Merthyr Tydfil) lobby groups in their council's area.

the local cycling activists are now organising themselves quite well, sometimes with guidance from ourselves as to what it is that makes us tick or gets us to implement a project [...] Councillors are now coming back [...] reporting that they've had an enquiry from a constituent or a resident regarding what's available for cyclists [...] that's probably one reason why I find myself allocating more time to cycling matters. officer, East Renfrewshire

*And also they [Lambeth Cyclists] help me in my direct work in individual schemes, so we'll agree for instance that the scheme that is on the table, really could do a lot more for cyclists. **So we agree for instance on whether they're going to make a formal complaint. So I use them as a lobbying tool as much as they use me...*** officer,
Lambeth

*I think **the problem with walking generally is that it's very difficult to home in on the lobby group**, if you like – [...] when it comes to mobilising a walking interest it's very very difficult. [...] **unless there's a push locally, certainly here, walking's going to be sort of intermediate on the agenda.** It's never going to be very high.* manager, Luton

Another positive aspect of the presence of local lobby groups or even individuals was seen to be the potential for drawing on their expertise and co-operating on the development of policies and schemes (Flintshire, Suffolk, Lambeth, Merthyr Tydfil, Worcestershire). Active co-operation with these groups was seen to be an important aspect of policy implementation (see also Section 5.3.1.3 on consultation).

*...the **Ramblers' Association local representative himself [...] is a good source of local knowledge.** Obviously they want to do rural walking but where they link into urban areas, he can help me identify areas, where spend has doubled input.* manager,
Worcestershire

it's always useful to have some knowledgeable forum, which can effectively funnel the input that is needed into the authority, rather than dealing with a plethora of individuals. senior manager, Merthyr Tydfil

*...through talking to them more and going willingly to be talking with them, involving them, **they are actually coming out as our advocates rather than adversaries.** So that's quite interesting how we've managed to turn that around. **Normally, they would be lobbying against us but now we can work together.*** senior manager,
Suffolk

However, experiences with pressure groups were not always positive, as four authorities reported resistance, that had been encountered to particular schemes (East Renfrewshire, Worcestershire, Flintshire, York). The objections received were not always considered justified by the interviewees, yet reportedly had had the potential to stop a scheme going ahead. In this context, three respondents also cautioned that it was sometimes necessary to look beyond the voices of dissent to see whether they defended a minority interest, which might be in conflict with the wider benefits for the community (East Renfrewshire, Luton, York).

*Some years ago improvement for cyclists of a north/south key route [...] began **but opposition from traders and some local residents to cycle routes in front of their properties made the completion of this extremely difficult**, it will probably not happen in the foreseeable future.* officer, East
Renfrewshire

*What the problem is **when you have a local group, which takes upon themselves that they don't like something [...] that's going to affect their interest [...] and that's to be balanced against the needs of the populace.*** officer, East Renfrewshire.

*Because the concerns have been raised by particular groups **...it's just like you feel that they're just trying to turn anything now to stop us doing it. They've just***

basically set their faces against us putting a strip of tarmac across this grass.

senior manager, York

One comment made by the officer in East Renfrewshire strongly underlined the fact that officers – although not directly answerable to the electorate – do not operate in a vacuum isolated from the public and that, while opposition and criticism can affect the outcome of a scheme, positive feedback can work in the opposite direction by enhancing personal motivation – which in turn can influence the amount of effort dedicated to particular tasks.

*I think whenever you get **something as simple as a letter or fax from a member of the public for having provided a certain facility, that in a very basic way can help to motivate you to allocate perhaps 30% instead of 25% of your time to work on a certain project** because that's where you feel you are making a difference*

officer, East Renfrewshire

Clearly, both positive and negative experiences could be found in both groups of authorities.

5.4.1.1 Sustrans and the National Cycle Network

Sustrans is a charity established in 1997, which has channelled £43.5 million of money from the British national lottery and donations into the development of measures supporting sustainable transport modes, namely walking and cycling. One of its conditions of funding is that the Sustrans contribution is matched at least equally in cash or in kind by other funders, which often include local authorities. Its flagship project is the creation of the National Cycle Network (NCN), the first 5000 miles of which were opened in 2000. Sustrans and the NCN were consistently described as having had a positive influence on local activities relating to cycling.

East Renfrewshire, Lambeth, Luton, Merthyr Tydfil, Falkirk and Suffolk all described synergies generated between Sustrans' activities and the councils' desire to support walking and cycling.

*...because I wanted to use Sustrans' experience in Safe Routes to School and they wanted to have more of a presence in London **so it's good for both of us.***

officer, Lambeth

*...**the National Cycle Routes make a lot of difference to us** because we've got National Cycle Route 1, 51 and 13 come through the county. So they make a lot of difference because **you can really focus your attention on work with Sustrans on route development.***

senior manager, Suffolk

Interviewees in four low scoring authorities also talked more generally about the ways in which they co-operated with Sustrans (East Renfrewshire, Lambeth, Luton, Merthyr Tydfil) and in two of these – East Renfrewshire and Luton, which are not currently on the National Cycle Network – officers expressed the desire to have one of the routes running through their area, as they saw clear benefits in this.

One great advantage of the Sustrans initiatives was considered to be that they provided matched funding, and the resulting increase councils could see in the value of their own contribution, which

often made it easier to obtain funding internally (Merthyr Tydfil, Suffolk) and that it provided a national context for local activities which could often be used to obtain positive publicity for cycling (Luton, Merthyr Tydfil, Oldham, Suffolk),

Actually, I organised a reception in support of the launch of the National Cycle Network, which was sort of an unusual thing for me to get involved with, actually, but that was a way of showing support for what was going on nationally and highlighting cycling. officer, Oldham

A: So that was something national, which people could latch onto, and Howard organised a sort of reception for people riding the route. B: When they did the Ride The Net last year, we had 20-odd riders.... A: And the Mayor was present, you know, and members – it got in the papers. That's the sort of thing that we can get people to latch on a bit. We managed internally to raise awareness, haven't we? officers, Luton

Other benefits of the initiative mentioned were their activities as the – sole – lobby group in Falkirk and Sustrans' ability to act as a neutral agent in negotiations with land owners unwilling to talk to the council in Suffolk.

Low scoring authorities mentioned the positive contribution of Sustrans more frequently and a possible reason is that the additional momentum created by the initiative made a more noticeable impact in these councils due to the relatively lower existing interest in cycling.

The London Cycle Network is another project with Sustrans involvement. It is being implemented by the London Boroughs under the co-ordination of a steering group, which includes representatives from various government bodies as well as the London Cycle Campaign. This network was also seen as helpful in getting cycling schemes accepted through providing a wider, high-profile context, particularly because the National Cycle Network does not touch many of the London Boroughs (Lambeth, Kensington & Chelsea).

5.4.1.2 Cyclists' Touring Club (CTC) Cycle Safe and Benchmarking initiatives

The CTC *Cycle Safe* initiative encourages authorities to subscribe to a set of strategic principles aimed at ensuring that cycling will become safer in their area. In return, the club offers public accreditation in a national context. Officers in Bury and East Renfrewshire considered this initiative to have provided a useful incentive.

Other reasons for policies being easier to promote, I think the co-operation of organisations like Sustrans and the CTC can help. We recently signed up to the CTC Cycle Safe Initiative whereby we hope to ensure that all our schemes, be they cycling specific or traffic calming schemes are going to be more cycle friendly. officer, East Renfrewshire

The interviewees in Bury, Lambeth and York also talked about the CTC Benchmarking Project, an initiative to which authorities sign up, if they want to take part in an inter-authority exchange of ideas and experiences. This was felt to be 'extremely good' and a very useful way of 'pinching ideas from other people'.

5.4.1.3 Public Consultation

Proactively seeking the views of the public, stakeholders and user groups on policies, strategies and proposals is becoming a more and more accepted part of council activity and in the case of LTPs and LTSs as well as planning applications of course it is actually a required part of the process. All respondents reported on some form of consultation, which generally divided into topic based (e.g. Cycle Forums) and area based (e.g. Local Forums) mechanisms. The following table gives an overview of the various approaches described – it is not intended to suggest that the list for each council is exhaustive.

Council	Mechanism, partners for formal consultation	topic	area
Bury	Cycle Forum Rights-of-Way Group Professional user groups Area Board	✓ ✓ ✓	✓
Falkirk	consultant for SRTS consultation	✓	
Flintshire	LTP Focus Groups Cycle Groups	✓ ✓	
Kensington & Chelsea	Resident Associations Civic Trust Schools Public Exhibition		✓ ✓ ✓ ✓
Suffolk	cycling conferences	✓	
York	door to door leafleting		✓
Oldham	Cycling Forum Environment Forum	✓ ✓	
East Renfrewshire	Area Committees Community Councils		✓ ✓
Merthyr Tydfil	on-site meetings with stakeholders Local Forums <i>'various consultees'</i> on LTP	✓	✓ ✓
Lambeth	Transport Taskforce (convened on different issues as required) Lambeth Cyclists Group Older Persons' Transport Forum	✓ ✓ ✓	
Worcestershire	Walk/Cycle/Vulnerable Users Forum local cycle groups	✓ ✓	
Luton	Citizens panel Transport Forum Community Forum <i>'cycling fraternity'</i>	✓ ✓ ✓	✓

Table 5.4 An overview of consultation partners and mechanisms mentioned by case study interviewees

All experiences with topic based consultation with cycling user groups were reported to have been positive in receiving constructive input, creating a knowledgeable forum for explaining proposals and decisions and ensuring more widespread public support for schemes.

I think the Cycle Forum is a good idea – the feedback you get from cyclists is good.
officer, Bury

The Cycling Forum is gonna start next month and that consists of a lot of people, Cyclists' Touring Clubs and Associations, health authorities, different people, different departments and they all contribute to the ideas of how to set out the strategy [...] ***One of the councillors is going to be chairing it. So the forum idea is definitely a success.***
officer, Oldham

*what we did was to **hold two conferences** [to consult on the Cycling Strategy], which the invitees were all the District Councils, and the interest groups, cycling groups, the action groups throughout the whole county [...]* ***then we went away, redrafted it and came back to another one where we checked it out and that worked very, very well. A lot of good will came through that.***
senior manager, Suffolk

Interviewees in Lambeth and Worcestershire also reported on habitual consultation of the local cycling groups, which in the case of the former meant that the cycling officer attended the groups monthly meetings and also met with them at the council on a quarterly basis to discuss schemes and policies.

However, not all consultation exercises were deemed successful. Officers in Luton reported a general lack of response to consultations (which did not, however, prevent criticism being voiced once a scheme had been implemented), the respondent in Merthyr Tydfil felt positions were often so entrenched, that even small issues (such as the location of 120m of footpaths) could hold up developments for long periods of time.

Interviewees in Bury, Flintshire and York reported on cycling schemes, which had been 'watered down' or not gone ahead as planned as a result of public consultation and had ended up not fulfilling their original purpose.

Respondents in East Renfrewshire, Luton, Oldham, Worcestershire and York stressed the importance of pro-actively seeking the public's view before any decisions were taken and trying to obtain approval for policies and proposals to prevent problems and delays later on in the process.

I think the most important thing is getting everybody with an interest involved early on with full consultation.
manager, Worcestershire

But in York – even though the respondent generally judged the existing consultation processes very positively - there was also a feeling that it was possible to consult too much, thus generating discussion on quite small details or becoming too sensitive to vociferous and well articulated minorities, which did not actually represent the views or interests of most of the people affected.

People in York will get hung up on the sighting of a single bollard, a small piece of kerb realignment, which they've had problems with. I think if you ask anybody here privately they'll say the same, it's gone mad sometimes. Things that you probably, in other authorities, minor things you would not have consulted anyone or you would just have put a notice in the street - here we go door to door with leaflets and all sorts of things.
senior manager, York

Managers in both York and Kensington stressed that sometimes the council(lors) had to show the political will – and vision – to go against the wishes of outspoken opponents if their views go against the wider interest of the community or valid experiences made elsewhere.

There was no obvious difference between high and low scoring authorities' approaches to consultation or the positive and negative experiences they reported.

5.4.1.4 Public Relations

Several interviewees talked about the importance of informing the public about travel issues in general, the council's activities and the motivations behind them as well as demonstrating the successes, which had been achieved in order to foster a receptive and positive atmosphere for future activities.

However, it was found that only high scoring authorities reported on any targeted efforts to promote walking and cycling. This could take the form of leaflets (Kensington & Chelsea) or maps (Suffolk) promoting certain routes or activities or the organisation of public cycling events (Falkirk), which could cover several aspects such as safety, health and leisure cycling.

Respondents in East Renfrewshire, Luton and Falkirk (neither of which currently have GTPs in place) stressed that the council also needed to lead by example and could not expect employers to prepare Green Travel Plans until the council had adopted one itself.

A: Clearly we need to lead by example on these things [GTPs] B: Well that's true, but with this resistance [from senior officers] it's a little bit difficult. You can't go out to people and say 'You should be doing this, that and the other' and they say 'Do you do that?... 'Hmmm!' It's not good enough. officers, Luton

The importance of demonstrating success to convince the public of the merit of the council's strategies was mentioned by the officer in Bury and one important channel for communicating with the public on both planned and completed schemes were seen to be the media (talked about by three councils, Bury, Oldham and East Renfrewshire). All three councils agreed that the media could be very selective and often negative in their treatment of information coming from the council but also reported that well targeted press briefings could pay dividends in favourable coverage. The interviewee in East Renfrewshire pointed out, though, that these could take time, which he might not always have available.

On National Bike Week two years ago, I actually took one of the journalists out [...] on cycle lanes, we took him on off-road routes, but we also took him on bits of road which were busy without cycle lanes so he could see the difference. And that ended up with a two-page centre spread in the local paper and it was a very good report that he wrote. officer, Bury

Bury also boasts a cycling Council Leader, whose presence the officer had found very useful in generating press interest in new cycle schemes. This again demonstrates the value of high profile, dedicated modal champions.

5.4.2 Schools

Safe Routes to School was shown by the literature review and the questionnaire results to be a very widely adopted concept, which by its nature can benefit residents and other road users in addition to school children and also has the potential to spawn wider initiatives aimed at promoting walking and cycling. The interviews showed, however, that different authorities had made different experiences in dealing with schools and it was thus decided to investigate this element of external communication separately.

Respondents stressed the importance of involving schools in the process from the beginning to create a sense of ownership of the scheme (Flintshire, Lambeth, Worcestershire) as well as being prepared to respond to proactive schools, which come to the council asking for help in getting Safe Routes to School schemes started (Lambeth, Worcestershire) since these are more likely to turn into successful schemes, which can act as examples for other, potentially more reluctant, schools.

...as far as I understand, a lot of the schools have been appreciative of the fact that we've gone out and asked them what do they feel they want [...] so hopefully we've had a better outlook than maybe others have experienced. manager, Flintshire

They came to us first and [...] three of them came to us about cycle parking and so I've gone back to them and said 'Look we'll do cycle parking as part of the Safe Routes to School programme' officer, Lambeth

we started going into schools and setting up school travel plans, where we outline in more detail what we're looking to do in Safe Routes to School [...] so that the whole scheme is brought together with the school's agreement and nobody is left wondering whether they actually agree with this or not later on. manager, Worcestershire

The officer in Lambeth also stressed the benefits of working with schools in geographical clusters (as the same measures could then benefit more than one school) and reported that they had got Sustrans involved to benefit from that organisations' existing expertise and experience.

However, some interviewees also reported problems in their attempts of involving schools. Three had come up against concerns over who would take responsibility if children walking or cycling to school were involved in an accident (Bury, Luton, Merthyr Tydfil), or found that the measures the council was able or prepared to provide did not meet with the approval of teachers and parents (Merthyr Tydfil, Suffolk), who due to concerns over traffic safety often favoured hard engineering measures on the roads over softer approaches such as walking buses or safety training.

The reaction of the parents was ‘Well, if the council is organising the walking bus, is the council going to accept responsibility for the safety of the children while they’re being walked to school?’ And of course we had to say no. officer, Merthyr Tydfil

...there is money floating around but it’s generally those sorts of things [difficulties in agreeing schemes] that are holding us back. senior manager, Suffolk

Two respondents cautioned against raising expectations by starting consultations with schools, which could then not be fulfilled (East Renfrewshire, Kensington & Chelsea). These concerns seemed largely to be borne out of the experience that ultimately there was no money or council support for implementing certain measures.

However, several people also reported on how they had overcome problems in dealing with schools. Kensington & Chelsea had simply decided not to use the Safe Routes to School label for their schemes but to call them school travel plans instead (which would include public transport), while Luton made a Green Travel Plan a requirement for giving planning permission to a primary school, which was wanting to increase its car parking capacity. Both Luton and Merthyr Tydfil also organised class room travel surveys and talks during activity weeks as a tool for raising awareness of travel issues both among children and teachers while Worcestershire successfully traded the provision of engineering measures (such as cycle racks) for the development of the softer measures by the schools themselves. They also pointed out to schools the benefits that school travel plans would bring to OFSTED assessments.

Generally the data showed that time and financial resources needed to be invested into making the co-operation with schools successful and that consequently authorities, where these resources are in particularly short supply – such as Merthyr Tydfil and East Renfrewshire – are less likely to be successful.

5.4.3 Developers

The importance of making the connections between transport and development planning has already been demonstrated in the literature review and it was thus of interest to see to what extent this was reflected in the way councils dealt with developers.

Six interviewees reported that national and local requirements for the granting of planning consent meant developers were either proactively considering provisions for pedestrians and cyclists in their applications or could successfully be encouraged to do so if they had not (Bury, Flintshire, Kensington & Chelsea, York, Luton, Oldham). Some also stressed that new developments often provided opportunities for implementing measures, which the council did not

have to pay for but which might still fill a gap in the existing provisions or even act as a catalyst for getting other measures on the ground.

...under the Section 106 agreement for the [new business park] development, the Welsh Development Agency [primary developer] will put in cycle routes, footpaths, subsidise bus services for a period of time and I believe appoint a Green Transport Officer as well. manager, Flintshire

Well, I think there's a different attitude out there with developers now. I mean this railway station re-development, they new about our aspirations for that pedestrian route between the station and the town centre, we didn't have to badger them to provide it, it was part of their original proposal. And anything that gets them planning consent, they're going to be happy to go along with, aren't they. manager, Luton

obviously now if you want your application for development to be approved, you have to provide certain things, certain facilities for cycling and walking. officer, Oldham

However, this situation is different in the two tier authorities, where the District Councils are the planning authorities, whose priorities and economic development interests may not necessarily be consistent with the strategic priorities of the County Council (Suffolk). This could make the realisation of county level aspirations more difficult.

...our development control people have a lot of trouble trying to keep the standard and from a County perspective as well, we can only recommend on planning applications, we can't make a decision... senior manager, Suffolk

5.4.4 Other councils

Participants of the focus groups had indicated that the activities of other councils could impact in several ways on the implementation processes in their own and the interview data confirmed this observation.

In three of the six authority types investigated, the potential for mutual exchange and influence was inbuilt: the two Metropolitan Boroughs – together with the other boroughs in Greater Manchester – participated in the production of the Greater Manchester Transport Plan, the London Boroughs take part in a similar process lead by *Transport for London* and the County Councils share responsibilities for the same geographical areas with the District Councils they encompass.

In Greater Manchester, the process of cross-fertilisation was generally seen as positive. Firstly progressive councils had the chance to influence the contents of the Greater Manchester LTP (Bury), which would in turn influence other borough's LTPs. Secondly, the GM LTP could be used as a lead document for politically sensitive measures such as road pricing, which would make their implementation at local level less contentious (Oldham). It was also felt that the Greater Manchester Transport Unit, which was funded jointly by all the boroughs was providing a very

useful service through frequent and regular collection of large volumes of data on transport and travel in the area.

The officer in Lambeth (London) agreed with the idea that progressive councils could positively influence the agenda and *'push the barriers'* even in such a centrally led process. Other respondents mentioned a variety of formal groups, which had been established to facilitate the co-ordination of activities and exchange of ideas and experiences: the East of England Transport Group (Luton), the North Wales Integrated Transport Group (Flintshire) and Westran (East Renfrewshire). All of these groups were considered to be very useful fora for achieving consistency in neighbouring councils, maximising in- and outputs where resources could be pooled and providing examples of successful schemes, which be used to make a case for implementation 'at home'.

A: Case studies from elsewhere make a difference to your work – if you can say Well, actually, things do work – look at X, Y, Z. B: Yeah, we rely on that.
officers, Luton

There are links we can set up through Westran to think on how we're going to deal with things on a strategic basis. officer, East Renfrewshire

Other groups mentioned were the *Local Authorities' Cycling Group*, which received a very enthusiastic review from the officer in Bury while both the *(London) Boroughs Cycling Officers Group* and the *Scottish Cycle Officers Group* were considered not to be achieving their potential due to lack of frequency of contact and attendance.

The Local Authorities Cycling Group meetings [...] I think are fantastic. A wonderful way of networking (a terrible word!) and finding out what people are doing – I think those are great. officer, Bury

There's a Borough Cycling Officers Group [...]. It's not really kept up, quarterly isn't regular enough to keep up a kind of momentum. So really it's just a kind of progress report on the London Cycle Network but it could be a whole lot more.
officer, Lambeth

I try to go along to most of the six monthly meetings of cycling officers at the Scottish Executive and whilst those meetings could be more fruitful, they are still helpful for keeping you motivated and also finding out what other councils and officers like myself are doing. In general councils in Scotland need more pressure to e.g. attend events like the Scottish Cycle Officers Forum [...] last time only 9 councils were represented, which is very poor. officer, East Renfrewshire

The respondent in York also stressed the value of learning from each other, which he hoped to achieve by taking his team on study tours to interesting case studies. The officer in East Renfrewshire reported on a more indirect way of influencing other councils:

East Renfrewshire and Glasgow, on a personal officer level, would like each other to construct projects right up to common boundaries, which will in turn put pressure on "the other side" to continue the lanes/networks into their own area or show them up as being behind and thereby create political momentum for going ahead with schemes. officer, East Renfrewshire

Working with lower tier councils was also mentioned by interviewees in Flintshire (community councils) and of course Worcestershire and Suffolk, where the co-operation with District Councils was considered to have both positive and negative aspects.

So we're dependent on the planning authority supporting us, the District Council and a lot of times they go against our recommendation and that's very, very difficult when you've got to live with it afterwards, very difficult and these are even people who should know better who make these decisions. senior manager, Suffolk

District Councils, where they have cycle officers, that's like an added resource a real bonus. Because of my one cycle officer trying to go out and chivvy up interest in different districts, where there are cycle officers [...] he just has to keep in touch with them, they do it for us. manager, Worcestershire

The respondents in Worcestershire also explained that their county level cycle officer was responsible for interpreting guidance and information for further distribution to District Councils and through a combination of formal written and personal contact (in presentations) was able to raise and maintain awareness at District level of the most important issues.

The data thus suggests, that implementation of walking and cycling policies will generally benefit from co-operation both with neighbouring authorities and with those further afield, on a formal as well as informal basis.

5.5 EXISTING AND PLANNED PROVISIONS FOR PEDESTRIANS AND CYCLISTS

There are no databases or national statistics, which would allow an objective comparison of the quantity and quality of the facilities provided for pedestrians and cyclists by local authorities in Great Britain or of their level of use. Additionally, it was not possible to obtain consistent and comparable data on these facilities from the authorities chosen as case studies. Finally, statistics such as the overall length of cycle tracks or number of pedestrian crossings for example would actually say very little about the quality of these facilities, their state of maintenance, whether or not they are appropriately sited along cyclist's desire lines or at important points in the pedestrian network and how well they are used. A comparative statistical analysis of these facilities was thus not attempted – although it is hoped that the LTP/S requirements for demonstrating the effect of measures on *modal share* will in future allow to compare this – arguably most important - aspect of walking and cycling across Britain and follow its development over time.

However, the interviewees did talk about a variety of schemes, their local authority had implemented, was planning to implement or had failed to implement. Some schemes were discussed at length while others were mentioned more or less in passing to illustrate points made about the effect of political pressure or the co-operation with developers.

The information collected about actual schemes in this manner provided useful examples (see Appendix J). The following table (Table 5.5) gives an overview of the number of schemes discussed in each authority and whether or not they were considered a success⁴². Success or failure of individual schemes was a matter of the personal judgement of respondents since in most cases, no objective measures were provided – or, in the widespread absence of regular monitoring, available – to justify evaluations.

Authority (low CSSI)	walking		cycling		Authority (high CSSI)	walking		cycling	
	positive example(s)	negative example(s)	positive example(s)	negative example(s)		positive example(s)	negative example(s)	positive example(s)	negative example(s)
	joint schemes					joint schemes			
Worcester shire CC	0	0	+	—	Suffolk CC	++	0	+	—
	++					—			
Luton EUA	++ ++ ++ +	—	++ ++ ++ +	—	York EUA	++ +	—	++ ++ +	— — —
	+					+++++; —			
Oldham MBC	0	0	++	— —	Bury MBC	++	0	++	—
	++					+; — — —			
Lambeth LB	+	0	++	0	Kensington & Chelsea LB	++ ++ ++ +	0	++	—
	+++++ ++					++ ++			
Merthyr Tydfil WUA	+	— —	++	0	Flintshire WUA	++	0	++	0
	++++ ++; — — —					+++			
East Renfrewshire SUA	++	0	+	—	Falkirk SUA	+	0	+	—
	0					+			
legend:	+ scheme — existing or in construction - considered a success; ++ scheme still at the planning stage — scheme — existing or in construction - considered problematic or a failure; — — scheme still at the planning stage the number of symbols denotes the number of schemes mentioned in each category								

Table 5.5 Overview of the number of walking, cycling or combined schemes mentioned in each case study

⁴² This information should not necessarily be read as an objective comparison of the level of provision in these authorities as interviewees were free to discuss as many – or as few schemes – as they wished.

In general, lower scoring authorities discussed more individual schemes than high scoring ones, in all categories, with the exception of problematic cycling schemes, more of which were mentioned in the higher scoring authorities. A variety of conclusions might be drawn from this observation, such as the possibility that in spite of the implications of the CSSI, lower scoring authorities are actually providing more facilities for pedestrians and cyclists or that respondents in higher scoring authorities have a higher awareness of the scale of effort, which needs to be directed at walking and cycling and are thus less likely to mention non-strategic provisions such as an individual entrance treatment or one safe route to school. However, the numerical comparison is in many ways problematic as the term ‘schemes’ in this context describes a very wide variety of provisions, ranging from individual segments of cycle lanes or pedestrian crossings through cycle lockers at railway stations to the comprehensive treatment of major traffic and shopping arteries including pavement widening, cycle lanes and bike stands.

A closer look at the data shows clearly, that both the conclusions suggested above would be wrong (an authority by authority overview summarising the schemes mentioned in each interview is provided in Appendix J).

5.6 WALKING AND CYCLING POLICIES IN THE LOCAL AUTHORITIES STUDIED

The previous chapter has already provided an overview of the formats of walking and cycling policies in the different authorities (Table 5.1). These range from modal strategies as stand alone documents to a complete absence of specific policies dealing with these modes. The checklist shown in Appendix E was used to analyse these policies where they were available in a written form. The checklist was prepared following a review of policy documents returned with the questionnaires, which was cross-referenced with the main issues arising from the literature review and the focus groups. The following table will give an overview of the extend to which topics were covered in the policies, distinguishing between authorities with a low and those with a high CSSI score. Each column represents six authorities, thus a maximum of six “✓” was theoretically possible in each cell. This would have indicated that all six authorities covered the topic in question in their walking or cycling policies⁴³. Policy topics were only scored if they were mentioned specifically in conjunction with either or both of the two modes, thus for example a general reference to the *UK Transport White Paper* (DETR, 1998a) and integrated transport would not have been considered as a discussion of the *National Policy Framework* of either mode.

⁴³ As has already been shown in Chapter 4, a small number of authorities had no specific policies covering walking and/or cycling. This effectively means they could not contribute at all to the overall scores but this is also considered a valid finding in the context of this table and such authorities are thus included in the possible maximum score.

The quantitative approach was chosen as the most appropriate means to summarise the results of the document study and findings of specific interest will be commented on in the following.

	WALKING / PEDESTRIAN POLICIES		CYCLING POLICIES		TOTALS (OUT OF 24)
	high CSSI	low CSSI	high CSSI	low CSSI	
Barriers to mode	✓✓✓✓	✓✓	✓✓	✓✓✓	11
Existing misconceptions of the mode			✓		1
Reasons for decline of mode	✓	✓			2
Reasons to change policy approach			✓✓	✓	3
National policy framework	✓✓		✓✓✓		5
National targets	N/A	N/A	✓	✓✓✓	4 / 12
National Cycle Strategy	N/A	N/A	✓✓✓	✓✓✓	6 / 12
Links / potential benefits to:					
Social inclusion	✓	✓✓	✓	✓	5
Health	✓✓✓✓	✓✓✓✓	✓✓✓✓✓	✓✓✓✓✓	18
Environment	✓✓✓	✓	✓✓	✓✓	8
Congestion	✓✓	✓✓	✓	✓✓	7
Pollution	✓✓		✓✓✓	✓✓✓	8
Air quality	✓✓		✓		3
Global climate change	✓✓			✓	3
Quality of life	✓✓	✓✓	✓		5
Hierarchy of transport modes	✓	✓			2
Connection with development plans	✓	✓✓	✓✓	✓✓	7
Links with land use planning	✓✓✓✓	✓✓	✓✓	✓✓✓✓	12
Enhancing urban centres	✓	✓✓✓	✓✓✓		7
Audits of new schemes	✓✓✓	✓✓	✓✓✓✓	✓	10
Audits/review of existing network	✓✓	✓✓	✓✓		6
Accessibility	✓✓	✓	✓	✓✓	6
Employer Travel Plans	✓	✓		✓	3
Higher/further Education travel Plans			✓		1
School Travel Plans			✓✓✓	✓	4
Safe Routes to School	✓	✓	✓✓✓	✓✓	7
Home zones		✓			1
Leisure walking / cycling	✓			✓✓✓✓✓	6
Enforcement of existing traffic regulations	✓✓			✓	3
Enforcement powers			✓✓✓✓		4

Table 5.6 Analysis of walking and cycling policies in local authorities chosen as case studies (✓ = issue is mentioned/covered specifically in relation to the mode in one authority's policy document; hence a maximum of six ticks is possible per cell; contd.)

	WALKING / PEDESTRIAN POLICIES		CYCLING POLICIES		TOTALS (OUT OF 24)
	high CSSI	low CSSI	high CSSI	low CSSI	
Interchanges	✓	✓	✓✓	✓✓	6
Integration with					
public transport	✓✓	✓✓✓	✓✓✓✓	✓✓✓✓✓	14
other modes		✓✓	✓	✓✓	5
Millennium Route Network	✓		✓✓✓✓	✓	6
Local networks for mode	✓✓	✓	✓✓✓✓✓	✓✓✓✓	12
Routes / route information	✓✓✓	✓✓✓	✓✓✓✓✓	✓✓✓✓	15
Signposting	✓✓✓	✓✓	✓✓	✓	8
Public awareness campaigns	✓✓✓		✓✓✓✓	✓✓	9
Safety / cycle training		✓	✓✓✓✓	✓✓✓	8
Safety, personal	✓✓✓	✓✓✓✓✓		✓	9
Safety, road	✓✓✓	✓✓✓✓✓	✓✓✓	✓✓✓✓	15
Cycle parking					
in town centres	N/A	N/A	✓✓	✓✓	4 / 12
at shopping centres	N/A	N/A	✓✓✓✓	✓	5 / 12
at PT stops	N/A	N/A	✓✓✓	✓✓	5 / 12
at work places / schools	N/A	N/A	✓✓	✓	3 / 12
Parking standards	N/A	N/A	✓✓	✓	3 / 12
Maintenance of facilities	✓✓✓✓	✓✓✓	✓✓✓✓✓	✓✓✓	15
Pedestrianisation	✓	✓✓✓	N/A	N/A	4 / 12
Road space reallocation		✓✓	✓✓✓	✓✓	7
Reducing traffic (volumes)			✓✓✓	✓	4
Speed limits		✓			1
Speed reduction		✓	✓✓		3
Crossings/ junction treatments	✓✓✓✓	✓✓✓	✓✓✓✓✓	✓✓	14
Traffic calming	✓✓	✓	✓✓✓	✓✓	8
Targets for					
trips to work	✓✓	✓	✓✓	✓✓	7
trips to school	✓✓✓	✓✓	✓✓✓✓		9
modal share	✓✓✓	✓✓		✓✓✓✓	9
health		✓	✓✓✓✓✓		6
accident reduction		✓✓✓		✓✓✓	6
engineering measures	✓	✓✓✓✓	✓✓	✓✓✓	10
safety training		✓✓	✓✓	✓✓✓	7
cycle theft reduction	N/A	N/A	✓✓✓	✓	4
Base line data available?	✓✓	✓	✓✓✓✓	✓	8
Reference to external / internal design guidelines	✓✓		✓✓✓	✓✓	7

Table 5.6 Analysis of walking and cycling policies in local authorities chosen as case studies (✓ = issue is mentioned/covered specifically in relation to the mode in one authority's policy document; hence a maximum of six ticks is possible per cell; contd.)

	WALKING / PEDESTRIAN POLICIES		CYCLING POLICIES		TOTALS (OUT OF 24)
	high CSSI	low CSSI	high CSSI	low CSSI	
Best practice examples			✓✓✓		3
Associated literature	✓✓		✓		3
Alternative sources of funding			✓		1
Total frequency of issues covered by all authorities (% of possible maximum score)	92 (25%)	84 (23%)	149 (37%)	108 (27%)	

Table 5.6 Analysis of walking and cycling policies in local authorities chosen as case studies (✓ = issue is mentioned/covered specifically in relation to the mode in one authority's policy document; hence a maximum of six ticks is possible per cell)

The table shows that in terms of policy provision walking as a mode is not as well covered overall as cycling. This confirms the finding of the questionnaire analysis, which showed that local authorities provided less actively for walking than for cycling and also the statements of several interviewees, who considered walking to be taken less seriously in their authority than cycling. However, the biggest difference exists between the policy coverage for cycling in authorities, which obtained a high CSSI and those, whose CSSI was low. Thus, while walking is generally less well catered for as a mode, the comparison of cycling policies indicates that past and present activities related to cycling as expressed by the CSSI also seem to be reflected in how well authorities cover the mode in policies for future activities.

The only issues, which were covered in 50% or more of the policy documents analysed were (in descending order):

1. links of walking / cycling with health
2. road safety
3. maintenance of facilities
4. routes / route information
5. integration with public transport
6. crossings / junction treatments
7. local networks for the mode
8. links with land use planning
9. National Cycling Strategy

The finding that links of walking and / or cycling with health were mentioned most frequently was somewhat surprising as they had been discussed very little during the interviews and even those who did talk about them in part regretted that the links were not being sufficiently acknowledged. This finding is more directly reflected in the number of authorities, which adopted any targets linking these modes to health – they were almost exclusively targets linking cycling and health in high scoring authorities (five out of a total of six) such as increasing the number of patients, who were prescribed cycling as part of an exercise programme.

Road safety on the other hand was mentioned often during the interviews, both as a concern existing within the council as well as an issue raised by the general public in connection with both modes. This finding also concurs with the literature review, which has shown that the safety of pedestrians and cyclists has traditionally been one of the primary driving forces behind provisions made for these modes, since they are considered to be the most vulnerable and policies to reduce the number and severity of traffic accidents have existed at both national and local levels for a decade or more.

Maintenance was also of great concern to many interviewees, most of whom felt that the council had or allocated insufficient resources to properly maintaining existing facilities. It was thus of little surprise to find these two issues reasonably well covered in the policy documents.

The next four issues – routes / routes information; integration with public transport; crossings / junction treatments and local networks - are all dealing directly with actual engineering measures for the two modes and several existing or planned provisions falling into these categories were mentioned by the interviewees (13; 8; 10 and 4 respectively, see Section 5.5), indicating again a relative concurrence between the issues, which are foremost in the minds of local practitioners and those covered in local policy documents.

Links with land use planning – and concrete new schemes – were also discussed in seven of the twelve authorities and the National Cycling Strategy had been mentioned in a third of the case studies so again there are no noticeable discrepancies between policy coverage and officer awareness of these two issues.

It was more surprising to see, that policy documents made little mention of the links between walking, cycling, air quality and climate change, although connections between these issues clearly exist and were also shown to have been made in at least some national policy documents (see Chapter 1). The fact that these connections were rarely acknowledged might reflect the national government's relative reluctance to reinforce the message about links between transport and the emissions, which affect both air quality and the climate⁴⁴. Walking and cycling are also predominantly local modes of transport, which might to some extent obscure the links with more regional or even global issues such as air quality and climate change.

Another surprising omission from local policy documents, however, was the creation of local hierarchies of transport modes in spite of the recommendations made by national transport planning guidelines (PPG 13 for England and Wales, NPPG 17 in Scotland; see literature review).

⁴⁴ as demonstrated for example by the notable absence of government statements stressing the importance of these links during the high profile national protests of lorry drivers' and operators' against rising fuel prices in 2000

Such hierarchies had been considered very useful tools by both interviewees, whose authorities had adopted them although both acknowledged that they were not being strictly adhered to.

Considering the great influence interviewees reported public opinion to have on implementation, it might have been expected to find more widespread plans for public awareness campaigns, since these would be a good tool for explaining the reasons behind council policy and specific proposals. A comment made by one officer in Oldham, though, might indicate that the education of the general public could be considered more a matter of national rather than local responsibility.

Lastly it was again noticeable that the availability of base line data would not seem to be able to support the monitoring of the targets set by various authorities. This finding has already been made in the questionnaire analysis and it is an important issue, particularly since several interviewees stressed the advantage of both national and local targets to focus activities as well as the need to be able to demonstrate success under the LTP/S agreements in order to justify future funding allocations from the national government.

The walking and cycling policies analysed were thus only partly adequate in providing for walking and cycling in a way that could help to achieve the national goal of increasing the modal share of both modes – even if they were all fully implemented. It must be remembered at this stage that the interview analysis has already shown other factors such as the attitudes, awareness and culture of people involved in the implementation process both within and outside an authority can strongly influence implementation. Thus, while policy provision is important and must be treated accordingly, it should only be seen as one step on the way to successful implementation.

5.7 FUTURE OPPORTUNITIES FOR THE IMPLEMENTATION OF WALKING AND CYCLING POLICIES

In general, the evaluation of the chances current walking and cycling policies – mostly laid down in LTPs and LTSs – will have of actually being implemented can be summarised as conditional optimism. However, there is variation across the different councils and between different policy areas.

Three respondents (Kensington & Chelsea, Luton, Suffolk) felt that walking policies or certain pedestrian measures were not very likely to be implemented in their own right, either due to specific concerns about a scheme or a lack of commitment to the mode itself. There was more optimism in Worcestershire on this issue.

...Kensington High Street is being looked at but the entry treatment idea won't be used as much there. [...] there's also some councillors actually don't like the entry treatment so much. They think it's not really classical enough [...] They don't want things that are seen as an imported Continental idea and they just want the classic London street. manager, Kensington & Chelsea

It's almost all the other measures that's going to make us walk more than the walking strategy. I think it would almost be a consequence of everything else rather than something in its own right and I suppose it's about thinking sustainably. It's about pricking the conscience... senior manager, Suffolk

unless there's a push locally, certainly here, walking's going to be sort of intermediate on the agenda. It's never going to be very high. officer, Luton

we are tailing almost on this sinusoidal curve what we've done in cycling but we've done it in the same format and I think we are getting the same partners, the same people on board and I think we will have the same success. I'm optimistic. manager, Worcestershire

The interviewee in Kensington & Chelsea gave two more examples of the local councillors' prioritisation of form over function. He reported a delay in implementing some advisory cycle lanes as well as traffic management schemes in general due to concerns over their impact on streetscapes although he remained optimistic that they would eventually be constructed.

Others talked about the development of the Safe Routes to School initiative in their area (Falkirk, Lambeth, Worcestershire), which all three thought was likely to move forward, subject to continued funding allocation (Lambeth, Falkirk) and political support (Lambeth). The manager in Worcestershire, however, expressed great certainty that they would have dealt with all the schools in their area at the end of the five year LTP period. In the County Council this was perhaps easier to predict, as funding had already been allocated through the LTP while in the Scottish Unitary Authority the potential hurdle of internal allocation still would still have to be overcome year on year and the cash flow in Lambeth was also dependent on the publication of the Mayors Transport Strategy for London and the subsequent evaluation of the Boroughs' own proposals.

This dependence on decisions made at the London level in Lambeth was illustrated by two further examples. One was the road closures proposed for a Home Zone – which would have to be approved by the Borough Manager for Transport for London, who might decide that the impact on 'his' roads would be too great. The other example was Car Free Day 2001, which would only go ahead if extra funding was provided from the Mayor since in 2000 the event – though very successful – had been run 'on an absolute shoe string' and the effort needed to organise it meant that the production of the Lambeth Cycling Strategy had been delayed.

The interviewees in Merthyr Tydfil displayed less optimism, citing a lack of appropriate locations (for building cycle routes) and money (for converting exiting opportunities into new pedestrian and cycle routes) as obstacles to implementation and hoping for some outside pressure for better provisions to encourage better resource allocation within their authority.

In five other interviews (Falkirk, Flintshire, Lambeth, Luton, York), respondents said they were generally hopeful that the policies currently laid down in their transport plans would be converted into action within the intended timeframe.

There's a good chance that the majority of [current walking and cycling policies] will be done by 2004. As I say, it all depends on the money. As long as the money keeps coming in we'll keep implementing. officer, Falkirk

I've just had a look at what's in here [LTP]. We've got the cycling strategy that's being produced and I think a lot of the things can be done... manager, Flintshire

I think within London we are either in the third or fourth quartile in terms of [...] what is out there on the ground now but we are moving up fast [...] as a result of that political and senior support I think in two or maybe three years time, we'll be in the top quartile. Maybe longer than that, maybe five years [...] we're getting there. officer, Lambeth

A: In terms of actually achieving our Utopia, if you like ... I don't think that will ever happen. We're just progressing towards it, that's the thing. B: We're on this exponential curve – we'll never achieve it. But we're sort of back here, but we're moving up quite quickly now. officers, Luton

I would be fairly optimistic because I think a lot of the schemes we're looking at are fairly non-controversial and I think there's a lot of support for them. senior manager, York

These responses demonstrated quite clearly, that the level of commitment to walking and cycling defined by the CSSI is very much an image of past provisions and priorities. A lot of the future development in these areas will depend on factors, which are to some extent independent of the status quo. However, the case studies also showed that low CSSI scores had been brought about by a variety of factors or combinations of these and it is to be expected that some past obstacles to implementation will be easier to overcome than others. This discussion will be taken further in the following sections and the concluding chapter of this thesis.

5.8 CONCLUSIONS

The literature review has answered the original research questions on the current policy and legal framework for walking and cycling in Great Britain and the theoretical and empirical background of implementation analysis while the questionnaire analysis has already provided some information on

the status quo of walking and cycling policies in British local authorities and the characteristics of those authorities, which are more likely to actively provide for walking and cycling. The purpose of the case study interviews and document study was to find more detailed answers to the following questions

- *What provisions are local authorities making for walking and cycling, both in terms of policy and in terms of measures on the ground?*
- *Are there any discrepancies between policies and implementation and if so, why?*
- *What conditions and processes (e.g. internal structures, working practices, professional culture) within an authority are likely to be conducive to successful implementation of walking and cycling policies?*

Findings from the interview analysis relating to these questions will be presented in the following three sections. It should be noted, that these conclusions can only be based on what the respondents said during the interviews - and in Section 8.1 on what was printed in their authorities' policy documents – and that these personal accounts might not have provided an exhaustive list of all the issues involved in walking and cycling policy implementation. It is, however, believed that the telephone conversations and letters preceding the interviews together with the questions chosen for the interview schedule will have succeeded in drawing out the most important and significant issues, particularly since provisions for walking and cycling were part of the daily working life of the majority of respondents.

5.8.1 Walking and cycling policies in the case study authorities

The check list for analysing policy documents had been compiled from studying the documents provided by case study authorities, further documents returned with the questionnaires and issues identified in the literature review and the focus group analysis. A total of 60 issues for walking and 66 for cycling were identified (see Table 5.6).

The policy review showed that none of the local authorities studied comprehensively covered all possible issues identified and that policy provision for both modes varied greatly, between different issues – some of which were covered by up to 75% of all authorities, others by only 8% - between the two modes and between high and low scoring authorities. The review confirmed, that cycling is generally better catered for than walking and showed this difference to be more pronounced in the high scoring authorities, whose policies overall catered better for cycling than low scoring ones.

However, policies in general were not very exhaustive. Only 9 out of 66 possible issues identified in the compilation of the policy check list were covered by 50% or more of the case study authorities. These were

- links of walking / cycling with health
- road safety
- maintenance of facilities
- routes / route information
- integration with public transport
- crossings / junction treatments
- local networks for the mode
- links with land use planning
- National Cycling Strategy

The list largely contains policy issues and measures also identified as important during the interviews – although interviewees also discussed a number of other implementation issues, which would not be expected to be dealt with in policy documents (see Section 5.6). Only the links of the two modes with health had been described as too weak by respondents although it was the most frequently covered policy issue. This observation is a symptom of the possible discrepancy between written policy and actual implementation activities.

Other issues, which received surprisingly little coverage in the policy documents – despite recommendations made at the national level – were local hierarchies of transport modes and the availability, provision or collection of base line data. The latter omission is particularly significant in the light of the more widespread adoption of targets for a variety of indicators relating to walking and cycling and the general requirement of providing evidence, that measures financed through financial allocations for LTPs and LTSs have actually made a positive impact on factors such as modal share.

Provisions made for pedestrians and cyclists could not be compared objectively as no universally comparable indicators describing these are available. However, interviewees described a wide variety of completed and planned schemes and these were compiled into an authority-by-authority overview (see Appendix J). The frequency, with which different types of schemes were mentioned, is shown in Table 5.7. It must be stressed, though, that interviewees were not prompted to speak about any schemes in particular, so the fact that some might not have mentioned schemes discussed in other authorities does not necessarily indicate they had not been planned or implemented.

	mentioned in positive context	mentioned in negative context
routes / route information and signage	15	2
footpaths/ cycle lanes	11	12
NCN routes	5	2
crossings and junction treatments	11	2
local networks	2	2
creating links	8	2

Table 5.7 Summary of planned and implemented walking and cycling schemes discussed by interviewees (contd.)

	mentioned in positive context	mentioned in negative context
Safe(r) Routes to School	6	4
walking bus	4	1
safety training	3	
school travel plans	2	
facilities for better integration with public transport	8	
cycle parking	4	
pedestrianisation	2	2
road safety schemes	2	
walking group	1	
maintenance	1	
Home Zones	1	
public education	1	

Table 5.7 Summary of planned and implemented walking and cycling schemes discussed by interviewees

The summary shows that individual routes, footpaths and cycle lanes were discussed most frequently but that cycle lanes were also the schemes, which most often encountered problems. These mainly arose from conflicts between the interest of cyclists, for whose benefits cycle lanes should be mandatory, and the interest of drivers and residents, who felt that road space for driving and parking would be unjustly taken away from them. In many cases, such conflicts had led to schemes being amended, delayed or entirely abandoned. However, several respondents also reported success with on-road cycle lanes, which had resulted in increased usage or had acted as a psychological traffic calming tool.

Crossings and junction treatments were also discussed by many interviewees and these were generally intended to provide increased convenience for pedestrians and cyclists, to close gaps in the existing network (for example across busy roads or rivers) or to reduce accidents.

Creating the necessary links between pedestrian and cycling facilities to provide continuous local networks was another important issue and Safe Routes to School schemes or particular elements of these were also mentioned often. Several interviewees reported problems relating to the Safe(r) Routes to School approach, all of which resulted from parental concerns about road safety. These either lead to demands for measures (such as road humps, chicanes or speed reduction) which the council was unwilling or unable to meet or they meant that proposals for ‘softer’ measures such as walking buses were not considered acceptable. The latter idea did find enthusiastic take up in other authorities, though.

5.8.2 Discrepancies between policies and implementation and reasons why - implementation barriers

Although the interviewees provided few concrete examples of schemes, which had not been successfully implemented when asked, the various problems discussed during the interviews indicated a variety of barriers to implementation and the effects these had had. The problems areas identified will thus be summarised and illustrated with concrete examples where possible.

5.8.2.1 Influential agents and factors

The re-organisation of the council was identified by two respondents to have created problems, either by physically separating people who should ideally work closely together (good personal contacts with colleagues were identified as an important factor in successful implementation, see Section 5.3) or by reducing the skills base present in the council when previously larger authorities were re-organised into smaller units.

The awareness of people working on walking and cycling is obviously also very important. Some felt that walking and cycling could not be properly encouraged until car traffic had not been reduced, an attitude, which could lead to a vicious circle of limiting provisions for the two modes while waiting for traffic reduction, which was delayed due to a lack of modal shift⁴⁵. Another authority provided a good example of the influence of senior managers on the implementation of policies in their department. While the manager expressed general support for his cycling officer he also made several comments, which indicated that he did not consider walking and cycling to be priority modes important in their own right and the officer expressed a feeling of fighting a lone battle, reporting also that a lack of active high level support for the two modes support made his job more difficult. This was also one of the authorities with the lowest CSSI score and the fewest policies and measures in support of the two modes.

In another authority, the unwillingness of senior officers to relinquish their car parking spaces close to the town hall was reported to have blocked the implementation of the authority's Green Travel Plan.

The prevailing professional culture of highway engineers, who are used to prioritising provisions for the car and may not see a need to change their approach – for example by automatically making an effort to provide high quality cycling facilities as part of new schemes - was considered another obstacle in a third of the case studies.

⁴⁵ The literature review (see Chapter 2) has show that public transport alone is not likely to replace the current use of the car for short trips, which in most towns and cities make up the majority of journeys.

Councillors also have significant influence and one respondent reported that a cycle lane scheme he had designed had been refused by the committee due to what he considered a lack of understanding of the issues involved and the potential benefits of the proposal. Being elected politicians, councillors were also reported to be very unwilling to go against public opinion, even if officers could prove that the objections made to a scheme were unfounded. Public pressure on councillors was reported to have prevented two schemes (one on-road and one off-road cycle paths) and delayed several others. Two respondents also reported that priorities for resource allocation change noticeably when elections are imminent in favour of new schemes benefiting motorised traffic and that any potentially controversial measures will experience delay at such times.

Naturally, the existence and form of local policies plays an important part in policy implementation. Thus it was generally – but not exclusively – the lower scoring authorities, which had less written policy for walking and cycling, reported less activity and more implementation problems. Existing policy agreed by councillors was reported to be a very useful tool in making a case for implementation – an issue, which will be returned to in the following section. One interviewee also indicated that his authority's existing walking policy was unlikely to be successfully implemented as it did not contain any concrete targets and thus '*lacked teeth*'. He blamed this shortfall in part on the lack of a National Walking Strategy equivalent to that for cycling and felt that the inadequacies of the only relevant national policy document *Encouraging Walking* had negatively influenced the policy adopted at the local level.

Encouraging Walking received a negative review in six authorities and was unknown in a seventh. Opinions ranged from the forecast that it would not bring much benefit to the mode to the declaration that it actually did walking a disservice in proving how little importance was assigned to this mode at the national level. Three respondents also stated, that the absence of national targets and adequate guidance for walking would impede policy implementation at the local level. The absence of adequate guidance material for both modes was seen as a barrier to implementation by a further three interviewees. Specific issues on which more information was needed were identified as value for money options for different schemes (e.g. alternative surfaces for cycle paths), adequate standards for pedestrian provisions (e.g. crossings, footways) and lay-out and signing of shared use facilities.

Policies and processes associated with the production and implementation of LTPs and LTSs were generally seen as positive. The only serious problem identified was the method for funding allocation adopted in Scotland, where LTSs money was not ringfenced for particular policies or schemes and was thus still subject to internal bidding and prioritisation. Interviewees were thus less confident that walking and cycling policies and schemes included in the LTS would actually be implemented than their colleagues in England and Wales, where funding allocations are tied to individual items of the LTP.

However, lack of funding was still identified as an existing or potential barrier to implementation in a total of seven authorities, including the two Scottish case studies. These statements were based to a small degree on past experience but even the LTP process does of course not guarantee that all schemes bid for will actually be approved and in one of the two Welsh authorities, respondents reported a general lack of walking and cycling policies in their LTP, which was coupled with an annual allocation for these modes totalling just £4000. Unsurprisingly, they had found it very hard to implement any strategic schemes and had mostly relied on outside funding for the provision of more costly facilities. They also reported a backlog of requests for road crossings and footpaths provisions, which under their current budget would take 40 years to clear.

Four authorities reported that other policy areas such as education and social services generally took priority, particularly in the internal allocation of revenue and that this resulted for example in a lack of staff to do all the work to implement schemes currently planned – even if money for the schemes themselves had become available.

Another four authorities also reported that a general lack of staff was hindering the implementation of walking and cycling policies, for example if they did not have a dedicated walking or cycling officer and these modes thus had to be catered for in competition with other demands on people's time. But even where dedicated officers existed it was sometimes felt impossible to do all the work that was theoretically necessary to do the necessary work to a satisfactory standard. In addition to a shortage of staff, the long dormancy of the two modes in the transport sector was also reported to have created a shortage of the necessary skills so that in some cases new posts, which had been created for the two modes had remained unfilled for a period of several months or attempts at finding outside contractors to do some of the necessary work had failed due to high demand for and low supply of the necessary skills and experience.

The shortage of staff and financial resources for dealing with walking and cycling is mirrored by the findings of a survey of local authorities in England and Wales (Local Government Association, 2001). With a response rate of 80%, this study found that over two thirds of authorities expected major obstacles to the preparation of LTPs, the most significant of which would be the problem of finding sufficient staff and financial resources.

Land was another resource, which was seen as a significant potential barrier to implementation of schemes in four authorities. Two respondents reported that the reluctance of local land owners to sell a small part of their land for the construction of small stretches of new foot or cycle ways had delayed the implementation of particular schemes for over one and a half years. These problems are particularly significant in authorities, which suffer from a shortage of staff and or money as prolonged negotiations over land issues require a significant input of both, often for a very small -

but strategically important - piece of land. One respondent even felt that land could be a bigger barrier to implementation than lack of money.

5.8.2.2 Interactions within the authority

Since walking and cycling potentially touch on a variety of policy areas and might span the responsibilities of more than one person, group or even department interactions within the council can be expected to play an important role in policy implementation. Although many respondents talked about this issue, very few actually reported problems. One interviewee felt that the co-operation between different departments was not as good as it could be - partly again due to physical remoteness – and also felt that the links between walking and cycling, health, education and air quality, which could create important synergies, were not being made. Another reported that the internal prioritisation of road safety by other officers had sometimes prevented schemes from going ahead, which in the respondent's view would have been beneficial.

5.8.2.3 Interactions of the council with others

The influence of the general public through the channel of political pressure has already been discussed. However, a lack of pressure could also hinder implementation, as demonstrated by three interviewees, who felt that the absence of an effective local lobby group for walking was deleterious to their own efforts in raising awareness of this mode. This was partly due to the fact that not enough political momentum was created since there was no perception of demand from the public but two interviewees also felt that a good local lobby group or even individual could function as a valuable source of local knowledge, which could supplement what staff with a limiting time schedule were able to collect.

The issue of local authorities' Green Travel Plans was raised several times and two respondents felt strongly that their council was unlikely to succeed in encouraging other employers to implement such plans – with the associated benefits these would bring to walking and cycling – since in the absence of their own GTP they were unable to lead by example.

The last barrier identified is particular to two tier authorities, which are the County Councils and now to some extent also the London boroughs. One County Council respondent expressed frustration at the fact that District Councils, which have planning responsibilities in the two tier system might often prioritise economic considerations, which could result in new developments creating new transport problems rather than providing solutions. In the London Boroughs, the implementation of transport schemes, which are likely to affect traffic on major arteries under the control of *Transport for London* are subject to the approval of this body. One respondent reported that this could result in schemes – such as a proposed local road closure - being stopped even though they would be beneficial in the long run due to the proven effect of traffic evaporation (i.e.

the removal of road space has been shown to result over time in an overall reduction of traffic as people chose alternative modes or travel times).

5.8.3 Factors and processes conducive to successful implementation of walking and cycling policies – the bridges

Respondents discussed a wide variety of ‘bridges’ to implementation. Some of these were factors, which were outside the authority’s or at least the officer’s immediate control – such as the presence of schools, where teachers and parents were proactive in trying to get Safe Routes to School schemes established. But other bridges had clearly been constructed within the authorities themselves, often in response to encountering an obstacle. All of these factors will be discussed in the following sections but the subsequent chapter will concentrate on those issued, which rely at least to some extent on action at local – or national – government level as these will be of greatest interest to local government transport decision makers and practitioners.

5.8.3.1 Existing characteristics of the local authority

A small number of the implementation bridges identified during the interviews were factors which are to some extent outside of the immediate control of a local authority such as the nature of the existing infrastructure or the organisational structure of the authority itself. However, the fact that compact town centres were seen to be conducive to encouraging walking and cycling - due to short travel distances and the impossibility to accommodate growing car traffic – does underline the need for land-use planning policies, which ensure good accessibility of new facilities by a large number of people and especially for the non-motorised modes. While some respondents felt a lack of space to be a limitation – based on the assumption that walking and cycling could only be catered for once car traffic was accommodated – others saw it as an opportunity to reallocate space away from the car to the benefit of other road users.

An existing critical mass of mode users was also considered to be helpful in justifying new measures as key decision makers as well as the general public could be convinced that a demand existed rather than having to justify expenses and potentially contentious decisions through the creation of future demand. This observation should serve as an encouragement to practitioners in authorities with relatively low levels of walking and cycling – any successful facilities implemented now will eventually make it easier to justify future work

Recent re-organisation to an executive structure in some authorities was also seen as a potential help to implementation since it was expected that the new structure would streamline decision making and that councillors would become more personally responsible for particular policy areas thereby generating more interest and potential champions

5.8.3.2 *People within the authority*

Officers

In authorities with cycle officers, managers felt it was very beneficial to have somebody in post, who was an active cyclist himself⁴⁶ as this person would be more likely to be aware of important issues and the needs of the user group. The officers themselves on the other hand stressed that their job was made a lot easier by active and open support from senior officers for their work and the modes themselves. Such support not only gave them the feeling that any cases they made for certain measures would if necessary be backed at a higher level but also gave them the authority to actively encourage other colleagues to pay more attention to the needs of pedestrians and cyclists. Transport engineers were again mentioned in this context, but while some interviewees had experienced problems with the car-focussed professional culture of their colleagues, others felt that the apathy towards walking and cycling was slowly breaking down and engineers were beginning to be more open to issues relating to these modes. This beginning cultural shift was seen to be due to higher level support but also to the fact that the relevant messages were increasingly coming from *'all sides'*, including government guidance and policy. One manager reported that providing good examples from neighbouring authorities' LTPs could be helpful in making colleagues more aware of walking and cycling. In one of the two county councils it was standard practice for the walk/cycle officer to regularly visit his colleagues at district level and give presentations about new guidance and policies on the two modes to maintain a high level of awareness of the relevant issues.

Personal contact with colleagues was identified as a vital element of successful implementation in nine out of the twelve case study authorities, making it one of the most consistently mentioned issues along with staff time and money, which were the most frequently discussed problems. Such contact was reported to help gather and disseminate important information on issues and activities relating to walking and cycling, it was considered the best tool for raising awareness and for ensuring that walking and cycling measures were considered in any relevant schemes and activities planned and implemented by the authority.

Councillors

One-to-one interaction was also considered the best way of communicating with councillors, who along with senior officers were identified as very important allies in implementation. Having even one modal champion among the elected members was said to make a significant difference, firstly because there would be somebody actively speaking out in favour of new proposals in committee meetings (which were not normally attended by officers) and secondly because such a person could generally help to raise the profile of the mode within the authority. Discussion of individual

⁴⁶ None of the case study authorities employed female cycling officers

schemes with councillors before they went to committee was also said to have helped identify and overcome potential points of resistance, convince members of the merit of certain proposals or recruit active support. This was reported by some officers to be more useful than simply writing a report, which might fail to answer individual members' queries or adequately convey the benefits of a scheme (a potential lack of understanding from councillors has already been discussed in Section 5.2.4).

One officer reported that he had done a lot of research on one particular issue, which had already caused debate in the council, to prove to councillors that the decision they might be about to make ran contrary to all current government guidance and also to examples from elsewhere⁴⁷. So although personal contact was important, well researched and well argued reports could also aid implementation.

Local Transport Plans and Strategies were identified as further important tools for gaining support from councillors – if they contained walking and cycling policies. Once these had officially been adopted by the council and funding allocations from the national government had been based on them, councillors could be reminded of the commitments they subscribed to when making an argument for implementation.

Another good way of gaining members' support for walking and cycling was linking local activities into regional or national contexts and activities such as the National Cycling Strategy or the National and the London Cycle Networks. Some respondents also found that highlighting the potential of becoming a best practice example to other authorities through national benchmarking schemes or gaining accreditation from national bodies for good policies and practice and the positive publicity associated with these initiatives helped to generate local political support.

One officer stressed that it was important to be sensitive to the issues, which took priority from the politicians' point of view and to highlight the benefits new walking or cycling schemes could bring to that particular area of the council's activities. Two interviewees talked about the beneficial effects of the members' training sessions organised by their council, which provided a formalised setting for keeping councillors updated with developments in policy, guidance and legislation.

Staff skills and staff time

The great significance of personal contact as a potential bridge to implementation underlines the influence, which individuals and their personalities can have on policy implementation in general and walking and cycling measures in particular. This sends a strong message both to those involved

⁴⁷The outcome of the debate was not known at the time of the interview.

in recruiting officers - that it is important to find staff, who have enthusiasm and good interpersonal skills as well as the relevant experience - and to current practitioners that their individual efforts can make a difference.

In general respondents stressed the value of having sufficient staff time and skills available to be able invest the time and effort needed to produce quality proposals, oversee implementation and overcome potential obstacles encountered along the way. Some also reported that they were able to use some discretion in deciding how much time to allocate to different elements of their job and obviously personal motivation and the support - or resistance - walking and cycling encounter in their working environment will influence how they use their time.

5.8.3.3 The general public

There was no example of the council's perception of public opinion having been particularly helpful in policy implementation – maybe because of the widely reported phenomenon that the voice of 'the public' is mostly heard in protest, not praise. However, various mechanisms for creating a receptive public climate for walking and cycling were suggested:

- *joining forces with those, who already had an interest in walking and/or cycling to gain allies among the general public (see also Section 5.4.1 on lobby groups)*
- *making sure that new schemes are of high quality and that new or (cycle) existing routes are properly linked together to demonstrate, that expenditure does bring benefits by increasing usage*
- *demonstrating that the local economy depends on solving traffic problems and that walking and cycling are part of the solution*
- *organising public events such as Car Free Day, the opening of the National Cycle Network or general cycling festivals, which highlight the advantages of the mode and are likely to gain positive publicity*

An important concept, which should be highlighted in this context was the idea of using implementation to justify implementation. Once one or two schemes or routes had been constructed, their use could demonstrate demand and could also provide an argument for providing more links or facilities for example to increase safety. Such implementation chains were reported to have been based on facilities for leisure use, on important strategic routes traversing a town centre along a major desire line and on a walking bus, which was enthusiastically received and then justified the provision of harder engineering measures to increase road safety.

5.8.3.4 Local and national policies

It was generally found that the longer specific modal policies had been in existence in a local authority the more active it was in providing for this mode (which was predominantly cycling). Officers reported that they could influence policy when they were involved in the actual drafting of the text and also through participating in internal groups, which discussed the relevant issues or were consulted on policy documents.

The introduction of Local Transport Plans and Strategies with their more explicit requirement to develop walking and cycling policies was predominantly reported to have had a positive effect on the implementation of walking and cycling policies. Despite the weaknesses of the associated guidance identified in the literature review (Chapter 2) some respondents reported that LTPs had inspired more walking and/or cycling related activity in their council and several saw the new requirement to demonstrate improvements of modal share – in order to justify funding allocations – as an advantage. The national requirement for producing LTP/LTS provided another means of placing walking and cycling into a larger context, which could be used to some extent to deflect potential public or political criticisms away from the councils since they could justifiably claim to be following policy adopted at a higher level. In contrast to Scotland (see Section 5.2.5 above) the system for allocating funds to LTP bids in England and Wales also meant that money was becoming available for specific walking and cycling schemes, which might previously have had to compete for funding with other transport schemes.

In authorities, which had adopted modal hierarchies in or even previous to their LTPs, these had been experienced as a further useful argument in backing policy implementation – even if they were not generally strictly adhered to.

Several officers stressed that they would advise councils to always submit realistic packages, bidding only for schemes, which could actually be implemented in the allocated timescale and that it was important to remember, that maintenance budgets had to grow along with the provision of new facilities.

National policy documents – such as the National Cycling Policy – have already been shown to be of benefit in creating a national context for a mode and in this context several respondents expressed the strong hope that the government would publish an equivalent document on walking. Other guidance documents – such as PPG 13 and Transport Advisory Leaflets - were also seen to be helpful both in providing quality criteria for implementation and in supporting arguments for the choice and form of walking and cycling schemes.

5.8.3.5 Funding

Many respondents had reported lack of funding to be a strong barrier to implementation but some alternative means of financing walking and cycling schemes were also identified. Nine authorities reported having used external funding – that is funding, which did not come out of allocations for TPPs or subsequently LTPs and LTSs - to finance walking and cycling schemes wholly or in part. Sources included government funding made available through the Public Transport Fund and for Safe Routes to School, matching funding from Sustrans, ringfenced revenue from advertising contracts on bus shelters, contributions from the Groundwork Trust and from public and private developers. Respondents said it was important to be constantly aware of potential new funding sources and ideally to have well thought out proposals ready prepared, which could be used for bids as soon as money became available.

5.8.3.6 Internal interactions

The value of informal personal interactions among officers and with councillors has already been discussed in Section 5.3.1. However, nine authorities had also established formalised mechanisms of ensuring that different groups or even departments communicated with each other on issues, which cut across their respective areas of responsibility. These were generally officers groups with titles such as the *Transport Issues Group* or project teams set up to deal with the implementation of Safe(r) Routes to School for example. These groups were said to be of great benefit as schemes could be discussed in a cross disciplinary context and a variety of skills could be brought together.

Internal consultation on transport policies was also sometimes carried out in cross departmental groups, while other interviewees reported a more informal approach based on '*passing documents round*' to anyone who might have an interest. Nobody actually reported any direct benefits from this process although it should be expected that gaining input from all the relevant internal stakeholders would make policies more robust and provide more widespread support at the implementation stage.

Some beneficial interactions were reported between different modes and policy areas. Eight respondents talked about the possibility of using new schemes to provide for more than just one mode and the importance of drawing out synergies. Cycle lanes were mentioned several times as a helpful tool for indirect traffic calming as they took road space away from cars and also gave out the signal that non-motorised modes were entitled to using the highway, while traffic calming could bring indirect and direct benefits to pedestrians and cyclists depending on the measures used.

It was further reported that in many councils the connection between planning and transport, including cycling and sometimes walking, had successfully been established and that where possible new schemes were used to generate better provisions for both pedestrians and cyclists.

5.8.3.7 Interactions of the council with others

In a number of councils active modal lobby groups had had a positive influence on implementation by demonstrating public demand for new or improved facilities and thereby also creating political momentum. They had also proved helpful in identifying priority areas for investments and supplementing the information available to the council with detailed local knowledge. While councils can of course not generate lobby groups where none are active, interviewees described the positive effects of actively encouraging lobbying activities for certain schemes and working closely together with such groups as allies rather than adversaries.

Co-operation with Sustrans emerged as a very good step on the way to successful implementation because this group could provide a high profile national context as well as matching funding and help in land purchase negotiations.

The benchmarking and accreditation schemes run by the Cyclists' Touring Club were also mentioned several times, both for providing political kudos and for facilitating the exchange of ideas and best practice examples between councils. Positive mention was made in this context of other regional or national groups and events, which allowed officers to discuss current developments and learn from each other's experience.

Many respondents stressed the benefits of – and need for – proactive and well targeted public consultation on new policies, proposals for new schemes and with schools on SRtS projects. It was reported not only to fulfil the consultation requirements associated with LTPs and LTSs but also to be very helpful in generating good will and – ideally – answering all possible queries and complaints before schemes went before committees. However, respondents cautioned against raising expectations in the process of such consultation which could ultimately not be fulfilled in practice. Using the media proactively by providing quality briefings to journalists was seen as another useful – if potentially time consuming – way of working on good public relations.

5.8.4 The CSSI and findings from qualitative data

The quantitative data gathered through the questionnaire study was used to select case studies from among the responding authorities. These case studies were selected as representative examples of a spectrum of local authorities' implementation efforts as measured by the CSSI, the quantitative index constructed from the questionnaire data. While this index did indicate clear differences among the 12 case studies in the strategic, administrative and practical provisions made for pedestrians and cyclists, it was not expected, that these differences would clearly be reflected in every aspect of the qualitative analysis. Indeed this chapter has shown, that while a positive experience with some of the implementation parameters investigated is clearly linked to a high CSSI scores (such as interviewees' positive evaluation of existing policies for the two modes or an

awareness of the importance of well argued and researched written reports for committees), no such pattern was associated with the great majority of the individual parameters.

A positive implementation experience - just as a high CSSI score - is composed of a large variety of facets and there is no single prevailing combination of these factors, which characterises such an experience. However, to allow a comparison between the classification of an authority through its CSSI and the nature of implementation experiences reported in the interviews, it was decided to construct a table listing all the main headings under which parameters for the qualitative analysis had been coded (see Appendix H). The implementation experiences reported by interviewees in the case study authorities were scored against these headings as follows: positive experiences scored +1, negative experiences -1 and a zero score was recorded if an area had not been discussed by interviewees from a particular authority. The results of this exercise are shown in Table 5.8.

Name of local authority	CSSI score	Name of local authority	qualitative score
Suffolk CC	26	Bury MBC	30
York EUA	25	Worcestershire CC	19
Falkirk SUA	24	Flintshire WUA	18
Flintshire WUA	15	Kensington & Chelsea LB	17
Bury MBC	13.5	Luton EUA	17
Kensington & Chelsea LB	13.5	Suffolk CC	15
Worcestershire CC	3.5	Lambeth LB	14
Luton EUA	0	Falkirk SUA	8
Lambeth LB	-1	York EUA	8
East Renfrewshire SUA	-5.5	Oldham MBC	2
Oldham MBC	-10.5	Merthyr Tydfil WUA	-10
Merthyr Tydfil WUA	-20.5	East Renfrewshire SUA	-14

Table 5.8 Case study local authorities ranked by CSSI score and by numerical score of qualitative data

It is interesting to note, that the ranking of case studies by the numerical score of qualitative data is quite different from the ranking by CSSI. Two of the authorities, which scored most highly in the CSSI (Falkirk and York) reached relatively low scores in the other evaluation. The relationship between high and low scoring case studies within the six authority types has been maintained in four (Scottish Unitary Authorities, Metropolitan Borough Councils, London Boroughs and Welsh Unitary Authorities) while it was reversed in the County Councils and English Unitary Authorities with York and Suffolk scoring lower in the second evaluation than their less active counterparts as defined by the CSSI.

A variety of factors will have contributed to this result. Firstly, the questions posed during the case study interviews – much like those asked during the focus groups - were open ended thus allowing respondents a degree of freedom in the specific issues they chose to discuss and the way in which they evaluated these issues. The answers to a question such as whether or not a local authority

employs a walking officer (Q15 in the questionnaire – this question contributed to the compilation of the CSSI) will be much more directly comparable than interviewees' personal evaluations of the influence of politics on walking and cycling policy implementation, for example.

For the reason given above, the direct comparison between qualitative and quantitative data is always a difficult exercise. In the context of this study, it might for example have been the case, that interviewees from more active authorities had experienced more implementation problems simply because their authorities' higher level of activity provided more opportunity for such an experience. Similarly, interviewees from less active authorities might have been more concerned with reporting positive experiences to present their authority or their own work in a better light precisely because they were aware of the actual deficiencies.

Lastly, it should be remembered that the CSSI and the qualitative evaluation not only constituted different approaches to assessing the implementation experience but were also concerned with slightly different elements of it. The CSSI largely measured the outcome of past efforts to provide for walking and cycling such as for example whether specific policies had been adopted, whether dedicated officers had been employed and whether or not any Safe Routes to School or Home Zones had been implemented. Thus an authority like Lambeth, which achieved a low CSSI score, but reported very good current senior support for cycling and good internal communication links might score much more highly on the parameters measured by the CSSI in a few years time.

Equally, it seems likely that authorities, which achieved low scores in both assessments, such as East Renfrewshire and Merthyr Tydfil will continue to struggle with the implementation of walking and cycling policies (either their own – as far as they exist – or national ones) if the factors hindering this process are not addressed.

The CSSI has thus been useful in describing measurable activities for walking and cycling in local authorities and selecting sample representative of the variety of situations present in the sample. The qualitative assessment on the other hand has helped to investigate more closely the factors, which ultimately determine the nature of such directly quantifiable activities and how such factors can be influenced.

In conclusion the interview analysis gave a detailed insight into the experiences people in local authorities had made in the process of implementing walking and cycling policies. It was found that walking and cycling policy implementation happened under a wide variety of circumstances and therefore there was no universal recipe for success. However, some key factors, which can and have been influenced have been identified and it is at these points where others might wish to draw on the experiences described in this study. The next chapter will integrate the information presented here with the theory on implementation discussed in the literature review.

CHAPTER 6 – DECISION MAKING AND IMPLEMENTATION OF WALKING AND CYCLING POLICIES – HOW PRACTICE RELATES TO THEORY

It is the mark of an instructed mind to rest satisfied with the degree of precision which the nature of the subject admits and not to seek exactness when only an approximation of the truth is possible.

Aristotle 384-322 BC

6.1 INTRODUCTION

The literature review (Chapter 2 Section 2.3) has presented the most prevalent theoretical approaches to implementation analysis⁴⁸. It was found that since the 1970's a variety of both descriptive and prescriptive models of implementation have been developed and while some were complementary others contradict each other. The major conflict arose between the idea of top-down against bottom-up implementation processes. However, subsequent analysts went on to develop models which either combined features of the opposing approaches or admitted the impossibility of producing a model, which fitted all implementation processes under all conditions and suggested a more open stance in both normative and descriptive modelling.

In concurrence with Elmore (1978), the literature review thus lead to the conclusion that all models were simplifications of reality and that no single model could capture the full complexity of the policy implementation process. It was shown that it was not only impossible but not desirable to choose one model, which could adequately explain walking and cycling policy implementation and neither should it be attempted to synthesise all existing approaches into one all-encompassing approach. Instead, implementation analysts should bear in mind those issues identified as important (such as the role of hierarchies and power distribution, the parallelism of policy making and implementation, the role of street-level bureaucrats, inter- and intra-organisational dynamics, the influence of different policy types and the policy context) while approaching the collection and analysis of data with an open mind.

⁴⁸ A review of the most prevalent theories of decision making was presented in Appendix A but although decision making in general is obviously an element of implementation, the theories deal mostly with policy making. For the purpose of this thesis it was thus decided to concentrate on implementation theories and their applicability in the cases observed.

However, the literature review served to categorise the main elements of - and influences on - implementation processes and outcomes, which have been synthesised by Søren Winter (1990) into the general model shown in Figure 1.1 (for a more detailed discussion of this model see Chapter 2, Section 2.3.7). This chapter will integrate the data collected and analysed in this study with the categories used in Winter's model while at the same time investigating how current implementation theory (as reviewed in Chapter 2 Section 2.3) relates to the findings. The analysis will assess, whether the model currently covers all the variables and processes observed. It will also evaluate the links and relationships Winter suggested between the elements of her model in the light of the findings of this study. In the next chapter concrete recommendations for improving local authorities' implementation of walking and cycling policies will be presented.

6.2 THE DETERMINANTS OF IMPLEMENTATION RESULTS

The determinants of implementation result as summarised by Winter (1990) from existing theories on the implementation process are shown in Figure 6.1 and have been described in Chapter 2, Section 2.3.7. These elements of her model will be used to structure the evaluation of the findings so far as presented in this section. Agreements and discrepancies with elements of implementation theory as discussed in the literature review (Chapter 2) will be discussed as appropriate.

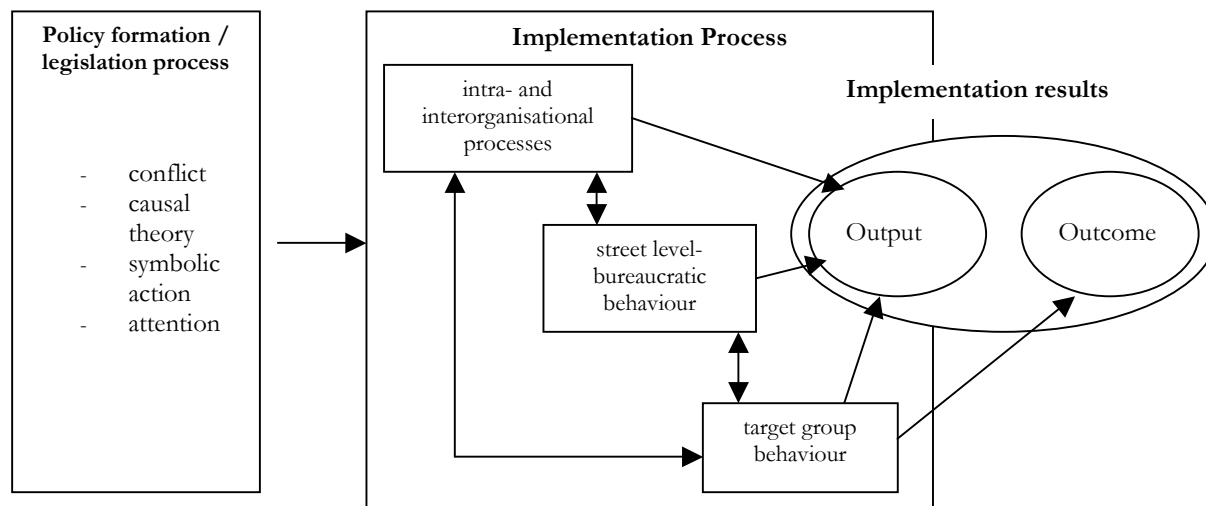


Figure 6.1 The implementation process and determinants of the implementation result (from Winter, 1990)

6.2.1 The policy formation process

Since this investigation focused on the implementation rather than the making of policy, little direct evidence pertaining to this process was collected. However, a number of inferences can be made from the data, even if it is not always possible to state conclusively whether or not the elements of policy formation as listed by Winter played a role in the authorities investigated.

6.2.1.1 Conflict

Though no direct evidence of conflict in the policy formation process was found, Winter (1990) has pointed out that one of the symptoms of conflict can be the agreement of policies in exchange for weak implementation structures. In Scotland for example funding awarded by the national government for the implementation of LTSs must subsequently be allocated to different LTS policies and actions by local authorities internally. It is therefore possible that contentious walking and cycling policies are agreed by councillors without any intention to subsequently make sufficient resources available to implement them. Such a phenomenon would tie in with Lowi's (1964) classification of policy, which predicted that redistributive policies (i.e. those redistributing existing funding, which the internal bidding process for LTS money would effectively mean) would be inherently more conflict laden than distributive ones, which determine the distribution of new resources (see Chapter 2, Section 2.3.6). Conversely, practitioners in English and Welsh authorities which had included comprehensive walking and cycling policies in their LTPs expected their funding problems to decrease as national funding allocations would be tied specifically to such policies.

In one of the two Welsh authorities there was a strong feeling, that the lack of walking and cycling policies in the LTP would mean the existing very small budget for these modes was not going to increase. It is possible, that conflict at the policy formation stage in this authority resulted in policies not even being adopted, which does of course represent a serious barrier to implementation.

A further symptom of the potential for conflict influencing policy adoption can be found in the types of policies actually adopted by the case study authorities (see Chapter 5, Table 5.6). It was found, that those policies most likely to interfere directly with the interests of car drivers were much less likely to be adopted than policies aimed directly at pedestrians and cyclists without any obvious impacts on drivers. Examples for policies with little potential for conflict include the provision of routes and route information, integration with public transport, maintenance of existing facilities and the provision of cycle parking. Policies less likely to be adopted included raising speed limits and reducing the speeds of motorised transport; improving the enforcement of existing traffic regulations; introducing modal hierarchies, traffic calming, pedestrianisation and Home Zones or aiming for road space reallocation.

6.2.1.2 Causal theory

Sabatier & Mazmanian (1989) pointed out that one important condition for successful implementation would be the validity of the theory explaining the causes of the behaviour which was to be changed. In the context of this study, the necessary question would thus be: Why do

people walk and cycle so little and how can they be encouraged (or made to?) walk and cycle more? The literature review (Chapter 2, Section 2.2) has shown, that there is a good body of knowledge describing the reasons why people choose not to walk or cycle. It also described measures, which have helped to increase the share of these modes in various situations. However, there was only limited evidence, that local policies had actually been based on this knowledge.

Questionnaire respondents identified the most important factors influencing local adoption of walking and cycling policies respectively to have been

- the requirements associated with *Local Transport Plans and Strategies* as well as
- the *presence of a committed local officer* for both modes,
- the *UK Transport White Paper* for walking and
- the *National Cycling Strategy* for cycling.

The data further confirmed that most specific policies for these modes had indeed come into being since the relevant documents had been published at the national level. Local officers could be very knowledgeable about the root causes of the behaviour they are trying to address through the walking and cycling policies they champion within their own authorities. It is possible, that they tried to shape the policies (drafts of which they often wrote themselves) in such a way that these root causes would be addressed adequately. While the interviews did indeed show many dedicated modal officers to be quite well informed, this did not necessarily result in an acceptance of their proposals by the politicians. Thus a knowledge of the problem to be addressed might shape early policy drafts but the underlying analysis can be overturned by political considerations further down the line.

One indication for the fact that local politicians might not necessarily base their policy decisions on a firm analytical footing is the observation that policy developments at the national level had the greatest influence on the adoption of walking and cycling policies at the local level (see Chapter 4, Section 3.5). It was thus largely the national political framework which brought about local policy adoption rather than knowledge and analysis of local conditions. The interviews also indicated though, that the developments at the national level could serve as a justification for adopting potentially politically controversial policies by providing a top-down requirement.

Nevertheless, a review of walking and cycling policy documents from the twelve case study local authorities showed that very few of them explicitly dealt with either reasons for the decline of these modes, reasons to change the policy approach or any of the existing misconceptions of these modes (which form part of the reason people decide not to use them – such as safety and image concerns). Few of the documents mentioned speed limits or speed reduction in connection with walking or cycling – although concern over traffic speeds is known to be a strong deterrent to the use of these modes (see Chapter 2, Section 2.2). In over half of the authorities, policy documents did mention road safety more generally but without necessarily discussing specifically how to

improve it. Only half of the documents analysed also talked about the link between land use planning and walking and/or cycling, which has been identified as an important issue and to which the national government has dedicated detailed advice documents (see Chapter 2, Section 2.1.8).

If local policy adoption is often a response to policy developments at the national level and if policy contents are thus likely to follow the national example, it would be important to establish, whether this national policy example is based on a detailed analysis of existing problems and possible solutions. The review of the national policy framework (Chapter 2, Section 2.1) has shown, that such an analysis does indeed sometimes influence the formulation of policy – although the process is rarely acknowledged directly. It was also found, though, that the results of such an analysis were sometimes disregarded when it came to the adoption of concrete policy goals and targets.

The questionnaire analysis showed that authorities in the top quartile of the CSSI (i.e. those providing more actively for walking and cycling) were more likely to use the relevant national guidance documents and had found existing traffic problems a more significant factor leading to the adoption of walking and cycling policies. Although it is difficult to determine, whether these problems had been seen to be the cause of low walking and cycling rates or whether walking and cycling were seen as part of the solution to these problems – or both – this finding does suggest a greater awareness of the wider context of the two modes.

It can thus be concluded that – for a variety of reasons – policy adopters make too little use of the relevant causal theories but that there are exceptions to this rule and that the more ‘theoretically aware’ authorities have proved to be more effective in providing for walking and cycling.

6.2.1.3 Symbolic Action

Both the questionnaire and the document study of local authorities’ walking and cycling policies provided some indication of symbolic policy action. Firstly, although 82% of authorities responding to the questionnaire survey had adopted targets for the modal share of cycling and 48% had adopted such targets for walking, significantly fewer authorities were monitoring these indicators or provided base line figures against which policy outcomes could be assessed. The situation was even more stark in the case study authorities, whose policy documents were studied. Less than half had even adopted any modal targets and a similarly small number had provided base line figures against which to monitor these. A comparison of the top and bottom quartiles of the CSSI again showed that the top 25% were more likely to have adopted targets and to monitor the necessary indicators⁴⁹. Authorities in the bottom quartile also indicated that for them the absence

⁴⁹ Note: These variables had contributed to the compilation of the CSSI and some relationship with the index should thus be expected but analysis showed that these variables were especially strongly related with an authorities overall position in the CSSI ranking.

of local targets for cycling had proven a significantly greater obstacle to implementing cycling policies than for the top scoring authorities.

Since the adoption and monitoring of targets provides the only viable means of assessing the success and appropriateness of a policy, their absence at the local level⁵⁰ (and for walking also at national level) is a strong indication of a lack of real desire on behalf of the local as well as national policy makers to actually achieve the aims they have formulated.

However, as Nakamura (1990) has demonstrated, even symbolic policies can sometimes be implemented and the adoption of modal hierarchies by some local authorities are a case in point. All interviewees in these authorities stated that the hierarchies – which are recommended in national planning policy guidance documents - were very often not adhered. Nevertheless they had sometimes provided a useful argument in gaining support for walk and cycle friendly measures since they had only come into existence through an approval by the local councillors in the first place - however symbolic this approval might originally have been.

6.2.1.4 Attention

The attention given to walking and cycling policies during the formation process is only documented through circumstantial evidence. On the one hand, the strong relationship between the drafting of the Local Transport Plans and Strategies and the adoption of walking and cycling policies suggests that these policies might not always have received sustained and detailed attention since they were brought in as part of a much larger package of policy measures. The LTP/S process was often described as both work intensive and time consuming and the document study showed that walking and cycling policies often – but not always – only made up a small proportion of the final policy package. On the other hand, interviewees also said that the LTP/S process and the associated guidance had actually helped to raise politicians' awareness of walking and cycling and thereby ensured that these modes received more attention than they previously might have done.

The level of attention given to walking at national level was shown to be low. The *National Cycling Strategy* (DoT, 1996a) for example, which contains national targets and has strongly influenced local policy formulation was never followed by an equivalent walking strategy, despite repeated promises to the contrary. The only document, which comes close to such a strategy is *Encouraging Walking* (DETR, 2000b) and this was heavily criticised by a number of interviewees for being weak and ineffectual (because it does not set any national targets for walking) and for showing walking to be 'a minority consideration' about which no-one at the national level cared sufficiently to support it with a strong policy framework.

⁵⁰ even in the face of national guidance strongly recommending the adoption of such targets locally

On the positive side it was reported that local councillors, who would champion either or both modes, could be of considerable benefit because they could speak out for them at committee meetings (both during the formation of policy and the discussion of specific schemes), and thus influence the level of attention given to these modes in a setting to which local officers generally had no access.

The policy formation process thus has been shown to have an influence on implementation and all the determinants identified in Winter's model (Figure 6.1) were found to play a role in local walking and cycling policy implementation in Britain. However, Winter's model does not deal with the influence policy processes at different governmental levels can have on each other. It therefore provides no opportunity to account for the significant influence that the UK White Paper, the requirements for Local Transport Plans and Strategies and the National Cycling Strategy have had on the process of local policy formulation.

Furthermore, the model does not indicate the possibility of – or need for – a constant review of the adequacy of policy, which would enable any necessary amendments. In some ways, this omission automatically renders the policy formation process a symbolic exercise as a lack of feedback between it and policy outcomes makes it impossible to judge the adequacy of the policy approach.

6.2.2 The Implementation Process

6.2.2.1 Intra-organisational processes

Intra-organisational processes were talked about extensively by interviewees and the questionnaire analysis also found evidence of their importance. The latter showed that the presence of *committed local officers* was considered one of the three most important factors for the adoption of walking and cycling policies – a finding clearly contrary to the *systems management* idea (see Chapter 2, Section 2.3.4), which stipulates that policy making is the domain of top-level decision makers and bottom-level actors merely function as rational implementers. The main factors hindering the implementation of these policies were identified as *lack of staff time*, *lack of staff* and *lack of funding* – in other words a shortage of resources. This finding confirms the element of the *conflict and bargaining model* (see Chapter 2, Section 2.3.4), which suggests that resources are one of the “prizes” over which conflicts arise since local authorities are unlikely to ever be fully resourced.

The top and bottom quartiles of the CSSI differed in that local actors were more likely to use national guidance documents such as the *National Cycling Strategy*, *Encouraging Walking* and the LTP/S guidance. In the case of the former two documents, the higher frequency of use could simply be a result of their greater activity for the two modes but the LTP/S guidance should in theory be consulted equally by all authorities as all are required to produce the five-year transport

plans. *Committed local officers* were found to be significantly more helpful for the adoption of cycling and the implementation of walking policies by the top quartile. Since this group was also more likely to actually employ dedicated modal officers, this finding confirms the idea that the creation of dedicated posts is an important contributor to successful policy formulation and implementation.

Organisational structures

Organisational structures of the council were found to have both practical and strategic implications. In some authorities it was felt that recent re-organisations had physically separated people, who should ideally work closely together or had narrowed the skills base available for policy making and implementation. A move to an executive structure on the other hand was considered to be positive as politicians would become more personally responsible for – and associated with – certain policy areas.

Senior Support

The importance of support for walking and cycling and the validation of efforts made to cater for these modes by senior officers, managers and obviously councillors was also discussed – both by those who were experiencing such support, and by those who were not. Thus, contrary to the tenets of the *conflict and bargaining model*, there does appear to be some form of hierarchical control or at least influence, which cannot necessarily be overcome through bargaining. Senior support – or lack of – was shown to influence both policy outputs and the policy formulation process, as well as the behaviour of street level bureaucrats. It was considered to be important to have an active champion of the modes among senior managers or politicians and the presence of a dedicated officer could not necessarily compensate for the absence of such support – especially in the face of political and professional cultures of groups or individuals, which were often considered to be still too car-oriented.

Personal communication

Several interviewees identified personal communication with colleagues (from their own and from other departments), managers and politicians as one vital element of successful implementation. Such contact could help to exchange vital information, raise internal awareness of – and possibly also support for – walking and cycling issues and ensure that walking and cycling received some consideration in any relevant schemes planned and implemented by the authority.

Existing policy was on occasion identified as a useful bargaining tool in these exchanges as it could be used to remind councillors (as well as colleagues), what the council had publicly committed itself

to while pointing out that proposed schemes were merely the logical consequence of the adopted strategy.

While informal personal contact was important, many councils had also put into place formalised fora for internal communication – such as cross-disciplinary officers groups and project teams or members training seminars – which provided a structural framework for internal communication. In spite of making extra demands on people's time, participation in these groups was generally considered important and valuable.

These findings point to the importance of personal motivation and commitment on the part of officers as well as politicians to achieve consensus and the accommodation of issues between different organisational units. This is a concept which is given high value by the *organisational development model* (Chapter 2, Section 2.3.4).

Resource issues

A shortage of resources (money and consequently also staff and staff time) and internal prioritisation of their distribution were often found to result in walking and cycling (or even transport in general) losing out in competition with education and social services for example. One resource, which was not necessarily dependent on internal decisions (and is also not covered by Winter's model) was the necessary skill to design good pedestrian and cycling measures and oversee their implementation. Several interviewees reported that these skills had been eroded by the prolonged professional neglect of the two modes and that the resulting shortage was now affecting the ability of both local authorities and the outside contractors they might employ to deliver policy outputs.

Interactions between policy issues

Positive interactions between different council activities were also discussed. With the greater awareness of the concept of integrated transport it was becoming easier to ensure that walking and cycling received some consideration in the design and implementation of new transport schemes, even if this approach did not reach as far as some respondents felt would be appropriate. Links between land use planning and walking and cycling were increasingly being made and some practical examples of how this had influenced planning decisions were cited during the interviews. These interactions could thus influence outputs and through these the behaviour of the target groups.

While Winter's model thus covers most links between intra-organisational processes and other implementation determinants, it does not account for the possibility that they can also influence policy formation and can in turn be influenced by external factors.

6.2.2.2 Inter-organisational processes

Much evidence from the case study interviews pointed to the importance of inter-organisational processes. These could have both positive and negative effects on the implementation process in general and on the various determinants, with which Winter links these processes in her model.

The presence of active local walking and cycling interest groups was reported to have influenced both the adoption and the implementation of policies for the modes – just as the absence of such groups was reported by some interviewees as a barrier since it meant there was no perception among politicians of public pressure to cater for them. Local officers (street level bureaucrats) even sometimes reported they actively co-operated with lobby groups by briefing them on the most politically effective way of encouraging the council to implement certain schemes and such co-operation was said to be helpful in cases where officers foresaw potential internal opposition to their proposals. Officers also used lobby groups as a source of local knowledge, which they themselves did not have the time and resources to collect to the same level of detail. On the other hand, lobby groups campaigning against certain policy outputs (such as local residents, or local traders associations) could also be effective at blocking their implementation or forcing the plans to be altered to such an extent that they were no longer considered an effective measure by the local officers.

In interactions with employers, Green Travel Plans were mentioned several times and officers pointed out that an authority, which had not adopted such a plan itself was unlikely to convince local employers to do so. This interaction can be argued to also influence target group behaviour, as employers in such a case represent both an organisation and a target group for a specific policy (of increasing the number of GTP's in the local area).

Policy output could also be influenced by the interaction with other councils, particularly in the case of two tier authorities. One County Council reported that the local District Councils sometimes made planning decisions, which prioritised economic considerations and caused more transport problems than they solved while in London decisions made by *Transport for London* were on some occasions reported to have overridden the borough's plans for local road closures.

The other county council reported, however, that it used its own walk cycle officer to ensure that practitioners in the districts were kept up to date with new policy developments, legislation and relevant guidance and that this approach was helping to raise awareness among the District street-

level bureaucrats. No concrete example of how this approach had affected policy outputs or outcomes was given, though.

Another way of interacting with other councils were the various mechanisms, which allowed the exchange of experiences, ideas and information by local officers and these were universally seen as positive. Firstly, successful case studies from other councils – as well as the possibility of becoming such a case study - could help to generate local political support for new policies or proposals and secondly these exchanges made the work of local actors easier by providing guidance and information they would not otherwise have had the opportunity or resources to obtain. The lowest scoring quartile of the CSSI found the activities in neighbouring authorities especially helpful in the implementation of what walking and cycling policies they had.

A further inter-organisational link, which emerged in a very positive light was the co-operation with Sustrans, which was reported to have helped the adoption of new policies (by providing a national framework for initiatives such as Safe Routes to School) and measures thereby significantly enhancing policy outputs.

Unsurprisingly, the questionnaire analysis confirmed that authorities more actively providing for walking and cycling (those in the in the top CSSI quartile) were also more likely to co-operate with other bodies - such as health authorities, schools, employers and developers – on the implementation of walking and cycling policies. Outside organisations were also identified as important sources of finance for new schemes and thus as a potential influence on policy outputs.

As predicted in the literature review, the study found examples of both the *power and resource based approach* - or the idea of inter-organisational dependencies - as well as the idea of *organisational exchange* (Parsons, 1995, Chapter 2, Section 2.3.5). Dependencies exist for example between national and local governments with local authorities being dependent on receiving national funding for their LTP/Ss. In theory, the national government also depends on local authorities to implement its policies on walking and cycling but since particularly on the walking side they seem to be of a largely symbolic nature, this is more a theoretical than an actual dependency. Organisational exchange on the other hand could be shown for example between local authorities and developers where planning permission or land sales were exchanged against the provision of certain facilities within a new scheme.

Again, Winter's links between implementation determinants have been confirmed but the potential link between local policy formation and inter-organisational processes is missing from her model. Furthermore, there is no good reason to maintain the combination of inter- and intra-organisational processes into a single determinant as suggested by the original model since, although these

processes are related, this relationship is not any stronger than the relationships between other elements.

6.2.2.3 Street-Level Bureaucrats' Behaviour

Lipsky's (1971) concept of street-level bureaucrats states that it is important to look at the behaviour of local officers, who work at the interface between their council and the public Chapter 2, Section 2.3.2.2). The concept was developed in critique of linear the top-down view of implementation first proposed by Pressman & Wildawski (1973; Chapter 2, Section 2.3.2.1) and several examples of how the behaviour of such officers can influence implementation have been found in this study (see also Chapter 7, Section 7.6).

In addition to personal initiative and motivation (see Section 6.2.2.1), local actors' awareness is an important issue. Do they know about the issues pertaining to walking and cycling, are they aware of the needs of the modes' users and of the potential obstacles? It was found that authorities, in which local officers or their managers were less aware of these issues – or considered the modes relatively less important than motorised transport (private as well as public) were less likely to make extensive policy and concrete provisions for walking and cycling than those, in which a great awareness of issues was demonstrated. Thus guidance material for example was used more often in authorities with high CSSI than in those with low scores. On the other hand, several authorities, which were found to be providing actively for cycling were often found to have cycling officers in post, who were keen cyclists themselves and the advantage of having such expertise was stressed by several interviewees.

Street-level bureaucrats experience tension generated through potential conflicts between the interests of their clients and those of their organisation. The *bureaucratic process* model of organisational theory (see Chapter 2, Section 2.3.4) thus considers local actor's main aim to be the minimisation of such tensions. They are expected to define their operating arena within the organisation through the use of discretion while at the same time creating routines to maintain this arena and minimise conflicts within it.

Conflicts at 'street-level' were shown to arise, for example, when councillors rejected the proposal for a new scheme, which officers had judged to be of great potential benefit to pedestrians or cyclists (their clients) but generally such problems seemed simply to result in the officers in question working harder to explain the benefits of the scheme and back up their reports with concrete evidence. Obviously, councillors could also be considered street level bureaucrats to some extent since they, too, might experience tension - for example between the actions suggested by

agreed policies or strategies and the perceived⁵¹ wishes of their constituents (or voters – their clients as well as to some extent employers). The routine local politicians might develop is the tendency to reject proposals, which are likely to meet with strong local opposition. However, it has been shown that even well organised and sustained local campaigns often do not achieve their goals when competing with corporate interests (Monbiot, 2000), which can thus obviously also have an influence on implementation, even though these interests might officially not be connected with the target group.

The use of routine was also identified by interviewees among some of their colleagues in transport engineering, who were reluctant to change their well established (relatively car-centred) approach to road building. However, it was also reported that personal communication as well as the changes in political messages were gradually breaking down this barrier.

Discretion was shown to be used by people in the face of heavy workloads, which demanded prioritisation. One officer related how even small amounts of positive feedback from his clients, the general public, could lead him to devote more time to a particular project since he felt that his efforts were having more of a positive effect in such a situation. It is fair to assume that officers try to maximise their personal job-satisfaction through minimising conflict and maximising praise, although this motive was not mentioned explicitly. Other interviewees also explained, that they had some choice in the allocation of their time to different tasks, which they could use to maximise their own professional values and goals – which of course cannot be separated from personal values. Thus some officers for example chose to engage closely with local cycling interest groups by both calling and attending regular meetings in an effort to maximise information exchange and common strategies.

While many of the elements of typical street level bureaucrat behaviour were thus observed in this study, it was found that in accordance with common criticisms of this concept (e.g. Elmore, 1978) individuals often showed more personal initiative and engaged in more creative and spontaneous interactions with each other than the traditional model suggests.

Officers also reported that they were often involved in writing policy drafts and incorporating suggested changes and that through this mechanism, they could influence the direction and details of the walking and cycling policies their authority would eventually adopt. Such influence on the process of policy formation is not generally part of the bureaucratic process model, which sees local officers mostly as reactive agents. Street-level bureaucrats were thus shown to be able to influence both inter- and intra-organisational processes, policy outputs and target group behaviour – as suggested by Winter's model - but also the policy formation process itself.

⁵¹ Those voters, who make their points most vociferously, by no means always represent the wishes of the majority.

6.2.2.4 Target Group Behaviour

One important element of target group behaviour is the use of – or refusal to use – existing and new facilities, which local authorities provide. However, this will be discussed under policy outcomes.

Since the majority of the population is part of the potential target group for walking and cycling facilities, any interaction of the general public with the local authority, which influences the implementation of such facilities, can be considered target group behaviour. Interviewees talked about a number of newly planned or already implemented schemes and the public reception they had received. The majority of examples (such as footpaths, cycle lanes, pedestrian crossing, or Safe(r) Routes to School initiatives) were illustrated with reports of both positive and negative feedback from the general public and it was evident that in most cases, such feedback had influenced either the development of the scheme in question or the details of future proposals of a similar nature. In some cases, it had been the initiative of certain individuals or public groupings, which had brought about the implementation of particular schemes. In other cases it became obvious that the target group for walking and cycling policies is by no means homogenous and that conflicts also arise between different sections of this group, which can ultimately influence implementation.

The power of potential voters over the decisions of local politicians has already been discussed in the previous section, as has the potential influence of lobby groups – both through protest and through co-operation. Interviewees also reported, that to some extent the behaviour and certainly the opinions of the general public could actively be influenced from within the council by a variety of means, such as making active use of the media, consulting widely even during the policy formation stages and ensuring that new schemes were of high design quality.

While again the study has confirmed the links Winter makes between different implementation determinants, her model makes no mention of external factors, which can influence target group behaviour. In the case of walking and cycling policy these include car-ownership, weather, topography and fashion and they can make a significant difference both to the reception of new schemes (if a cycle lane is expected to reduce car parking space, for example) and to their outcome (see Section 6.2.3).

6.2.2.5 External Factors

As indicated in the previous section, the study found a variety of factors external to Winter's model of implementation, which have had an influence on the process of implementing and also formulating pedestrian and cycling policies. Thus policy formation and implementation were both

influenced directly by national government policy and the slowly growing political acceptance of walking and cycling as important modes at national level.

They were also influenced by conditions such as the existing structure of important population centres. The questionnaire study showed, that in authorities scoring higher on the CSSI these were more likely to have an outer ring road, offer park & ride facilities and be located on an inter-city rail route. City or town centres were also more likely to be attractive to tourists, have an historic building substance and limit space for traffic. Evidently, the amount of space available to accommodate rising traffic levels and the alternative facilities available to motorists, who wish to go into or through the town centre are related to activities for walking and cycling. It is politically easier to restrict the road space given to cars if either traffic congestion and parking problems have already become untenable in the eyes of the public, if they threaten to affect tourist trade or if people can reach the centre conveniently by means other than the private car. The provision of park-and-ride facilities for example might also be an indicator of a forward planning authority, which might in itself be more likely to provide for walking and cycling.

During the interviews, prevailing weather conditions and topography were also mentioned as factors influencing walking and cycling levels as areas of high rain fall and hilly terrain were seen to be less conducive to these modes. However, it became clear that these factors presented obstacles in the minds of decision makers as much as they might ultimately influence the behaviour of potential pedestrians and cyclists.

To reflect the findings of this study, external factors will have to be added to Winter's model of implementation.

6.2.3 Implementation Results - Outputs and Outcomes

The distinction between implementation outputs and policy outcomes is extremely important. Local authorities might succeed in providing new facilities or initiatives for pedestrians and cyclists but if the facilities are not used, if modal share is not increased, if perceptions and safety of the modes is not improved then the policy has not been successful.

However, outputs are an important step on the way to achieving positive outcomes and it was found that these differed widely between different authorities. The questionnaire analysis showed that only about half of the responding authorities employed a dedicated cycling officer and only a quarter employed a walking officer. This finding is particularly significant since it has already been established, that the presence of a dedicated member of staff is very helpful in the formation and implementation of walking and cycling policies (see Chapter 4, Section 4.3.5 and Chapter 5, Sections 5.2.3 & 5.3.1.1). Although more authorities have adopted specific strategies for the two

modes (80% for cycling, 40% for walking), there is still a significant shortfall, especially since national guidance on Local Transport Plans and Strategies now requires the provision of such strategies.

Interviewees also discussed a variety of measures for pedestrians and cyclists, which their authority had implemented or planned (see Chapter 5, Table 5.5). The criteria, which determined interviewees' positive or negative judgement of schemes were *the degree of conflict during the implementation stages, design quality, integration with existing facilities, reception by the target group and levels of use*. The latter is obviously the most relevant for judging policy outcomes, as most authorities aim – at least in theory – to increase levels of walking and cycling. However, interestingly none of the interviewees provided any concrete figures describing levels of use or general modal share and less than half of the case studies provided such figures in their walking and cycling policy documents. This finding is concurrent with the low levels of monitoring found in the questionnaire study. Thus, although most respondents could provide anecdotal evidence for measures of policy outcome it is important to note that – barring some exceptions - most local authorities are currently unlikely to be able to objectively assess the success of their walking and cycling policies.

It should also be noted, though, that even anecdotal evidence of implementation success or failure can influence future approaches in similar situations. A number of interviewees reported on a phenomenon, which will be termed *serial implementation*. An authority would start off by constructing one or two cycle routes or pedestrian crossing points on major desire lines and if these were felt to generate a high level of use this could be used to demonstrate demand and justify the provision of further facilities either to extend the network or to provide more links in the existing network. High levels of walking and cycling on either new or existing schemes could also be used to justify new provisions on safety grounds. By the same token, some officers were concerned that new schemes, which had to be heavily compromised (for example due to internal or external pressures or lack of funding) or which did not connect up into a convenient and attractive facility might be considered failures and could therefore influence an authority's willingness to implement similar schemes in future. Thus most respondents recognised that pedestrians and cyclists could not be expected to use schemes in increasing numbers, if these were not well thought out and did not cater for their actual needs. Consequently it is important to recognise, that implementation results will feed back into both the implementation and the policy formation processes. These links are missing from Winter's model but were included in Lewis & Flynn's action based concept of implementation (1978; see Chapter 2, Section 2.3.3). They recognised, that actions "*may precede the formulation of a procedure for dealing with similar cases in future and therefore the policy*" (ibid., p.5). This concept also describes what has been termed the ad hoc approach to implementation (Chapter 4, Section 4.2.7) in stating that "*actions may result from what is feasible in the circumstances rather than the fulfilment of the original objectives*".

6.3 CONCLUSIONS

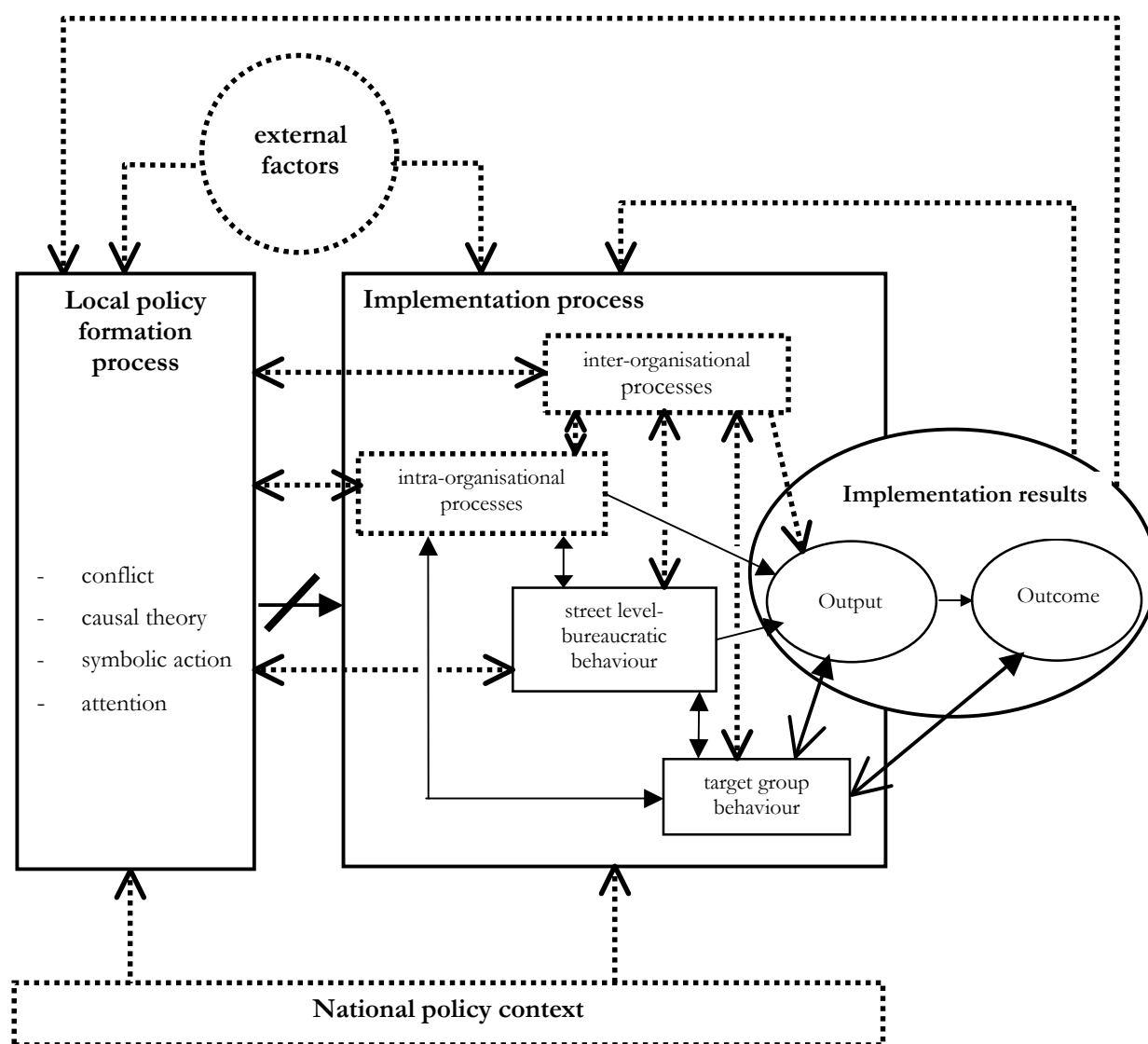
The literature review provided an overview of the current theories on implementation. In agreement with a number of authors (e.g. Elmore, 1978; Winter, 1990; Hill, 1997) it was concluded, that there was no single model, approach or theory that should be chosen to either define the approach taken by this thesis or to analyse and structure its findings. Instead it was decided to take as a starting point the summary model of implementation determinants suggested by Søren Winter (1990, see Figure 6.1). This chapter has shown, that the determinants included in that model (which in turn were based on the body of current thinking in implementation) and the links between them were all confirmed by the findings of this thesis. However, additional factors and influential relationships were identified and an amended version of Winter's model is thus required. This following section will thus fulfil two purposes:

- Firstly, it will present the new conceptual model of implementation based on Winter's original model (Section 6.3.1).
- Secondly, it will summarise the way in which implementation theory as presented in Chapter 2 relates to the findings of this study (Section 6.3.2)

6.3.1 Proposal for a revised conceptual model of policy implementation

The new model based on the results presented in the previous section of this chapter is shown in Figure 6.2. While the revised version lacks the seductive simplicity of the original, it reflects the fact that the implementation processes examined in this thesis revealed more intricate processes, than the original model could accommodate.

The revised model confirms the following idea developed in the literature review: rather than seeing implementation as a causal chain, the process should be considered as a network of determinants and connections, which can influence each other and might run in parallel. They are also often connected through feedback loops (see Chapter 2, Section 2.3). Thus for example instead of seeing '*local policy formation*' and '*implementation*' as two separate and sequentially connected processes, the new model suggests a more interactive and open relationship.



Legend

		relationship identified in Winter's model
		relationship identified in Winter's model with additional directional influence
		new relationship identified through this study
		new determinant identified through this study (or existing determinant with altered position)
		existing relationship replaced by more detailed connections between individual determinants

Figure 6.2 Revised version of Winter's model of implementation determinants (1990) showing the findings of this thesis

However, in itself this model only charts the important components of the process of walking and cycling policy implementation in British local authorities and identifies how they are connected. It thus works on a conceptual level without qualifying the nature of these components and their interrelationships at either a prescriptive or a descriptive level. The contribution of the revised model is therefore to enable both implementation analysts and practitioners to structure their view of the implementation process when attempting to study, describe or improve it. The new model

will make both theoretical and practical approaches to the implementation process much easier and it is proposed that other analysts of walking and cycling policy implementation in Britain would be unlikely to obtain results, which would require significant changes. It is, however, recognised, that each individual implementation process has its own idiosyncrasies and while the author suspects that even the implementation of other (non-statutory) policies in Britain could be described well within the proposed framework, the model is not assumed to contain immutable truths. It is considered to provide a further step on the way of understanding - and hopefully improving - the process, which ensures that new policies can successfully be converted into practice as well as making a further contribution to the implementation debate described in Chapter 2 (Section 2.3).

6.3.2 How implementation theory relates to the findings of this study

This chapter has looked at how different strands of implementation theory identified in the literature relate to the findings of this study. No single theory was identified, which accommodated all of the findings and this confirms the conclusion of literature review, namely that implementation theory consists of a collection of different approaches, which are in part complimentary and in part contradictory. The following table (Table 6.1) provides an overview of how the implementation theories and models discussed in the literature review relate to elements of the revised implementation model.

Component of the revised Implementation Model	Relevant element(s) and/or authors of implementation theory	Relevant section in literature review
External Factors	<i>Top-down model</i> , Gunn (1978): suggested circumstances external to implementing agency should not impose crippling constraints - confirmed	2.3.2.1
	<i>Action model</i> , Lewis & Flynn (1978 & 1979): implementers are actors, who are constrained both by the world outside their organisations and by their institutional context - confirmed	2.3.3
	<i>Bottom-up model</i> , Ham & Hill (1985): indicated researchers needed to take account of social, economic and political contexts within which implementation takes place - confirmed	2.3.7
	<i>Organisational development model</i> , Greenwood et al. (1975); Elmore (1978): implementers are influenced by values, belief systems and responsibilities, which lie outside the remit of their organisation - confirmed	2.3.4
National policy context	<i>Top-down model</i> , Sabatier & Mazmanian (1989): statutes or directives should clearly define their objectives – confirmed – and should structure the implementation of those objectives – partly confirmed , must leave room for discretion at local level	2.3.1
	<i>Bottom-up model</i> , Barrett & Hill (1984): policy-action relationship does not necessarily operate on a linear basis; several policies may shape a particular behaviour and several different activities may influence a policy instrument - confirmed	2.3.3

Table 6.1 The relationship between theories of implementation and the findings of this study (contd.)

Component of the revised Implementation Model	Relevant element(s) and/or authors of implementation theory	Relevant section in literature review
LOCAL POLICY FORMATION PROCESS	<i>Bottom-up model, Barrett & Hill (1984)</i> : policy-action relationship does not necessarily operate on a linear basis; several policies may shape a particular behaviour and several different activities may influence a policy instrument - confirmed	2.3.3
Conflict	<i>Ham & Hill (1984)</i> : contrary to top-down model, decisions might be left to the implementation process as conflicts cannot be resolved at policy making stage – confirmed	2.3.2.2
	<i>Policy-inherent potential for conflict, Lowi (1972); Barrett & Hill (1984); Ham & Hill (1984), Parsons (1995)</i> : contrary to rational top-down view policies differ in complexity; thus both ease and modes of implementation will differ - confirmed	2.3.6
Causal theory	<i>Top-down model, Sabatier & Mazmanian (1989)</i> : statutes or directives should clearly define their objectives – confirmed	2.3.1
	<i>Top-down model, Gunn (1978)</i> : policy to be implemented should be based on a valid theory of cause and effect – confirmed	2.3.2.1
Symbolic action	<i>Top-down model, Gunn (1978)</i> : condition for success is complete agreement on and understanding of objectives to be achieved throughout the implementation process – partly confirmed , symbolic policies can also sometimes be implemented	2.3.2.1
	<i>Hargrove (1975)</i> : contrary to top-down model, the assumption that implementation could and should have a clearly formulated and well understood policy as its objective is unrealistic - confirmed	2.3.2.2
	<i>Winter (1990); Nakamura (1990)</i> : the adoption of policy for symbolic reasons can create inherent implementation problems - confirmed	2.3.6
Attention	<i>Winter (1990)</i> : the likelihood of successful implementation is directly related to the level of attention a policy achieves in formation process; can be influenced e.g. by number of competing issues, length of process, continued presence of proponents - confirmed	2.3.7
IMPLEMENTATION PROCESS		
Inter-organisational processes	<i>Top-down model, Pressman & Wildavsky (1973)</i> : implementation process can only be as effective as the links between departments and organisations involved in it – partly confirmed , their view of implementation as linear process not reflected by findings; implementation success requires close to 100% efficiency in these processes – not confirmed , none of the examples studied showed such efficiency despite reporting some successes	2.3.2.1
	<i>Bottom-up model, Bardach (1977)</i> : implementation seen as a game structured through, conflict, bargaining and persuasion, thus there are no clear boundaries between politics and bureaucracy – confirmed	2.3.3
	<i>Ham & Hill (1984)</i> : contrary to top-down model it must be recognised, that day to day decisions may involve negotiations and compromise with powerful groups – confirmed	2.3.2.2

Table 6.1 The relationship between theories of implementation and the findings of this study (contd.)

Component of the revised Implementation Model	Relevant element(s) and/or authors of implementation theory	Relevant section in literature review
	<i>Elmore (1977), Parsons (1995)</i> : interorganisational dynamics are shaped by power and dependencies and thus conflict and bargaining – confirmed ; organisations work together to achieve common goals voluntarily - confirmed – both mechanisms occur	2.3.4, 2.3.5
Intra-organisational processes	<i>Top-down model, Pressman & Wildavsky (1973)</i> : implementation process can only be as effective as the links between departments and organisations involved in it – partly confirmed , their view of implementation as linear process not reflected by findings; implementation success requires close to 100% efficiency in these processes – not confirmed , none of the examples studied showed such efficiency despite reporting some successes	2.3.2.1
	<i>Top-down model, Gunn (1978)</i> : implementation success requires that adequate time and sufficient resources are made available – partly confirmed , such an ideal case was not encountered, yet several examples of at least partial implementation success were given	2.3.2.1
	<i>Top-down model, Gunn (1978)</i> : implementation success requires perfect communication, co-ordination and subordinate obedience within implementing agencies – not confirmed	2.3.2.1
	<i>Bottom-up model, Lewis & Flynn (1978)</i> : implementation activity can result from resolution of conflict between policy or priority areas – confirmed ; it can result in the formulation of procedures for dealing with similar cases in future and thus shape policy – confirmed ; it can represent what is feasible under the circumstances rather than the fulfilment of original objectives - confirmed	2.3.3
	<i>Organisational theory approaches (Elmore, 1978)</i> : systems management model – not confirmed ; bureaucratic process model – partly confirmed , individuals do not automatically resist change or act to preserve all aspects of their professional sphere; organisational development model – partly confirmed , power to implement does not arise solely at the bottom, some hierarchical control was also observed; conflict and bargaining model – partly confirmed , it is not always in everyone's interest to preserve the bargaining arena	2.3.4
Street-level bureaucrats' behaviour	<i>Top-down model, Hood (1976)</i> : ideal implementation has clear lines of authority, people do what they are told and asked – not confirmed	2.3.2.1
	<i>Bottom-up model, Lipsky (1971)</i> : local actors at the service/public interface might develop routines in response to local pressures and use their own discretion in day to day decisions - confirmed	2.3.2.2
	<i>Elmore (1977), Ham & Hill (1985)</i> : contrary to top-down model, the means and requirements of every implementation level must be considered, often not desirable to take all decisions at the top but necessary to rely on local discretion - confirmed	2.3.3
Target group behaviour	<i>Backward mapping, Elmore (1978)</i> : the behaviour, which is seen as cause for policy intervention and its underlying reasons should be basis for policy and implementation - confirmed	2.3.3

Table 6.1 The relationship between theories of implementation and the findings of this study (contd.)

Component of the revised Implementation Model	Relevant element(s) and/or authors of implementation theory	Relevant section in literature review
IMPLEMENTATION RESULTS	<i>Winter (1990)</i> : it is important to distinguish between implementation output and outcome and how they relate to each other - confirmed	2.3.7
Outputs	<i>Most of the theories discussed predict conditions for perfect implementation or provide criteria for explaining shortfalls. Very few explicitly distinguish between outputs and outcomes, how they relate to each other and to other components of implementation</i>	
Outcomes	<i>Backward mapping, Elmore (1978)</i> : implies that changing the behaviour in question is desired implementation outcome- confirmed	3.3

Table 6.1 The relationship between theories of implementation and the findings of this study

The conclusions presented in Table 6.1 once again confirm that no single approach to implementation provides a framework, which can accommodate all the elements and processes found during this investigation. Instead most current theories describe some of the findings of this study, and this is true for both descriptive and prescriptive approaches (as far as they can be clearly separated). Thus, the development of implementation theory continues and it is suggested that the revised conceptual model developed in this study will provide a useful tool in this endeavour.

The following chapter will illustrate the elements of the new model with the findings from this study and will be structured in such a way that its main elements can be taken as stand alone text which will be useful and accessible to local transport practitioners.

CHAPTER 7 – WALKING AND CYCLING POLICY IMPLEMENTATION IN PRAXIS – OPPORTUNITIES, PROBLEMS AND SOLUTIONS

7.1 INTRODUCTION

The literature review has shown that there is no prevalent model or theory, which should be followed during the analytical stage of this thesis but that instead, implementation analysts should take into account a variety of approaches. The previous chapter thus used a conceptual implementation model proposed by Winter (1990) to structure the review of the findings in the light of current implementation theory. This process led to the conclusion that no single implementation model – normative or descriptive – could accommodate all the influential factors and processes identified in this study. Consequently, Winter's conceptual model also had to be amended and expanded to reflect the current findings.

The purpose of the current chapter is twofold. Firstly, it will use the study's findings and the conclusions drawn from them to answer the remaining research questions, namely

- Can the characteristics of an ideal model (or models) of walking and cycling policy implementation be identified and if so, what are they?
- If such characteristics can be identified, what can local authorities currently struggling with walking and cycling policy implementation learn from these findings?

Secondly, it will be used as a bridge between the scientific process of data collection and interpretation on the one hand and the real-life policy implementers on the other. It thus aims to serve local actors involved in walking and cycling policy implementation as an accessible guide to good practice⁵².

The conceptual model presented at the end of the last chapter (see Section 6.3) will be used in this section to structure the presentation of the concrete examples of potential implementation problems and solutions identified through this study. To make the model more accessible, all new implementation determinants and links identified through this study and the elements of the original model have been given the same visual format. Abstract technical terms of implementation theory – such as 'street-level bureaucrats' – have been replaced as appropriate by the concrete terminology applicable in walking and cycling policy implementation (see Figure 7.1). The following discussion will illustrate the conceptual units of the model by illustrating the mechanisms and

⁵² In order to be able to fulfil this purpose, this chapter contains a summary description of the different elements of the (revised) implementation model, which have already been dealt with in greater detail in Chapters 2 and 6.

processes linking the different determinants with concrete examples and recommendations, which will be grouped under the headings *opportunities*, *problems* and *solutions*. A diagrammatic representation of the model will be used as an icon to aid orientation.

Since the information has been gathered from authorities with very different characteristics there should be no expectation that all points raised will be relevant to every authority wishing to implement walking and cycling policies. Equally, not every authority will benefit from the same opportunities or will be able to use the same problem solving approaches. However, the breadth of cases examined should by the same token cover a wide enough range of possible implementation scenarios to enable most local actors or authorities to benefit from these findings in some way.

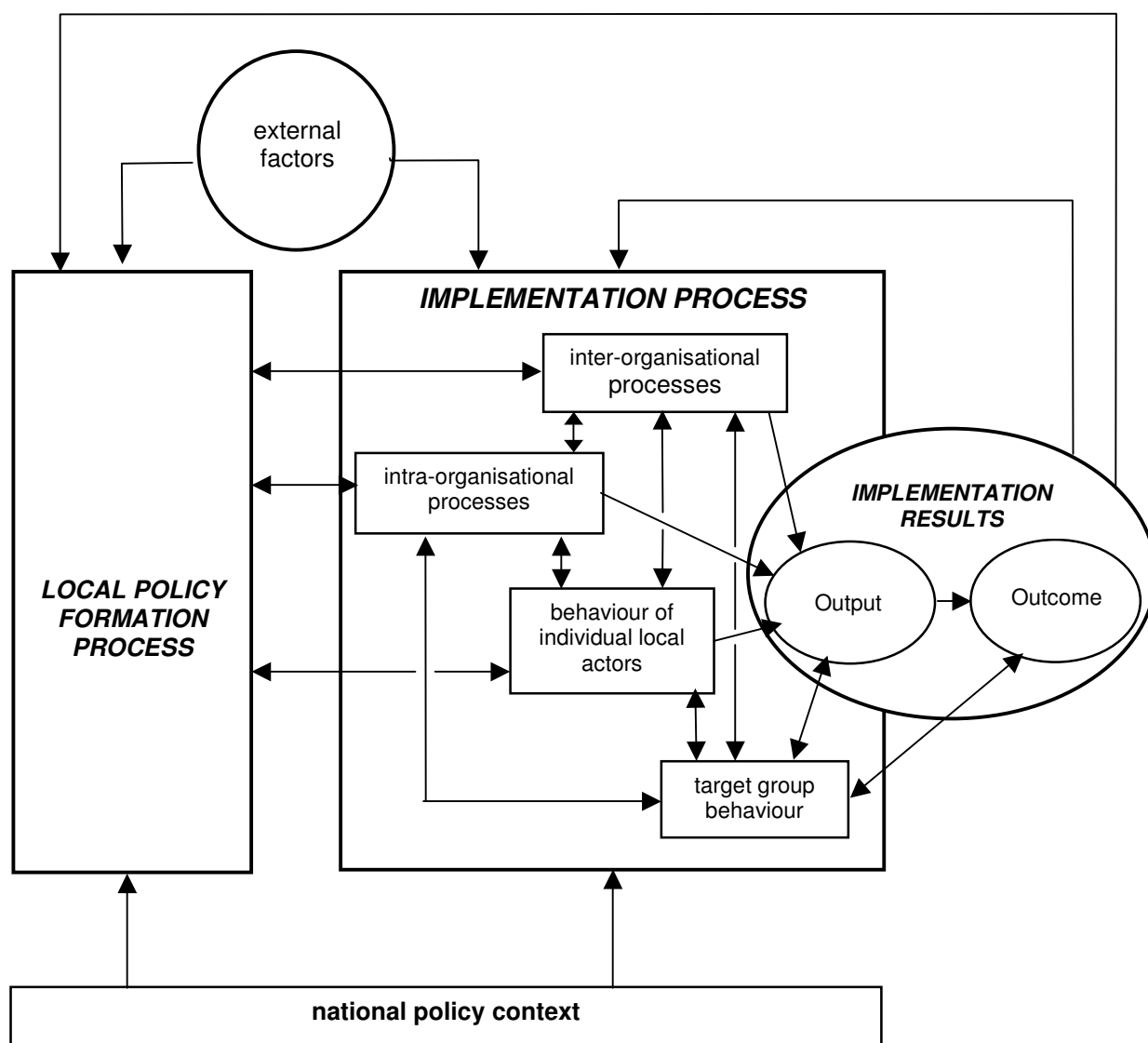


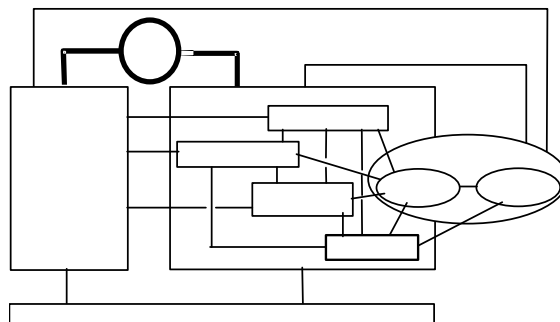
Figure 7.1 Conceptual model of walking and cycling policy implementation determinants adapted from Winter (1990) in the light of the findings of this study (simplified from Figure 6.2)

The meaning of the concepts of *local policy formation* and the *national policy context* shown in Figure 7.1 are contained in the terms themselves and the concept of *external factors* is discussed in more detail in the following section. It will, however, be useful to briefly reiterate a definition of the remaining determinants:

- *inter-organisational processes*: all interactions between the local authority and other organisations such as local interest groups, employers, schools and other authorities
- *intra-organisational processes*: all interactions between individuals, groups, departments or even policy areas within a local authority
- *behaviour of individual local actors*: all characteristics, attitudes and behaviours of individual local actors such as officers, managers or councillors (it is acknowledged, that this determinant has some overlap with the previous one but the differences are sufficiently important to treat them separately)
- *target group behaviour*: characteristics, attitudes and behaviours of members of the general public outside an organisational context
- *output*: all hard and soft measures implemented by the authority
- *outcome*: the effects of these measures on usage (and thus modal share), accident rates, the perception of modes and other indicators

7.2 EXTERNAL FACTORS

Opportunities: A flat terrain and low rainfall are generally associated with areas more conducive to the two modes and cycling in particular. Equally, urban areas, which are attractive to tourists were associated with good walking and cycling facilities, primarily because noise, congestion and pollution associated with car traffic are considered to be



deterrents to the tourist trade and local policy makers as well as those benefiting economically from this trade considered the reduction of car traffic a higher priority. Sufficient existing road space to accommodate new walking and especially cycling facilities without causing major inconvenience to motorised traffic was sometimes identified as an asset and even a prerequisite for getting such measures planned and implemented. Compact and accessible town or local area centres were also seen as conducive to walking and cycling since the distances people needed to cover for many of their trips were within the range of most pedestrians or cyclists.

Highly urbanised local authorities can sometimes be faced with a situation, where there is simply no more room for further road building or expansion projects, which might compete with walking and cycling for funding, thus creating a shift in focus towards more small scale projects. This was seen as an opportunity in the context of walking and cycling policy implementation.

Problems: The major potential problem associated with most of the external factors identified in this study is that they are – or can appear to be – outside the control of the local actors involved in

implementing walking and cycling policies. Potential problems identified were a hilly topography, bad weather, lack of space for new facilities due to the nature of the urban fabric or generally rural areas with low density development, which resulted in people having to make longer trips unsuitable to walking and cycling. High levels of car ownership and a general perception of the car as a more desirable mode of transport than walking or cycling were also reported to influence implementation success.

Solutions: Statistics show that in other European countries, which feature high rainfall, a cold climate or a hilly topography (e.g. Denmark, the Netherlands, Sweden, Switzerland) the modal share of cycling reaches up to 15% (National Cycling Strategy; DoT, 1996). This suggests, that in themselves, such “external” circumstances are not sufficient to deter people from cycling. This study also showed that these “problematic factors” were not perceived as barriers in every authorities. Thus it seems that giving these external factors as reasons for a lack of walking and cycling policy or measures is based either on an incorrect perception of the real problems facing these modes – or on the desire to find an excuse for inaction. Consequently, local actors keen to see walking and cycling policy developed and implemented can cite examples either from other British authorities with similar conditions or from other European countries⁵³ to counteract arguments about ‘bad weather’ or ‘too many hills’.

A lack of space for facilities is harder to deal with but again, instances where such problems occur should be carefully examined to ascertain, whether the argument about space is in fact an accurate perception of the problem. There is generally an existing network for pedestrians in the form of pavements (although it is often inadequate in many respects), thus a lack of space was generally cited as an obstacle to providing new facilities for cyclists such as cycle lanes. However, road space reallocation is an acknowledged tool for improving conditions for both pedestrians and cyclists and it is often a matter of political will rather than an absolute physical lack of space, which determines the provision of new facilities. It has also been shown, that the careful combination of cyclists with public transport (in bus lanes) and even pedestrians (the Sustrans off-road network is a good example) can successfully be used in situations where other solutions are not feasible or where small gaps in an existing or planned network need to be bridged.

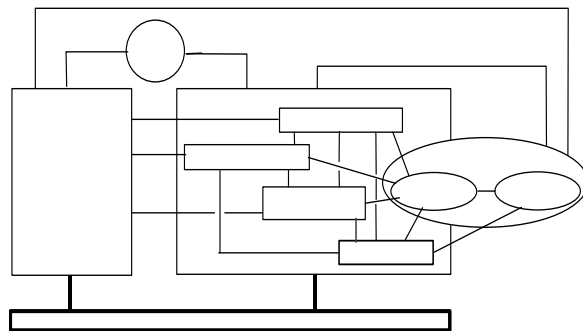
In areas with low population densities it will be difficult to ensure that the majority of people will be within walking or cycling distance of jobs, shops and other facilities. However, authorities should consider both short and long term approaches such as the integration of the modes with public transport (e.g. cycle lockers at stations, safe routes to stations) and issues of land use

⁵³ Finding such information can be time-consuming, thus membership and participation in the relevant national or regional groups for local officer can be a great advantage.

planning. It is recognised, though, that some of these approaches are outside the direct influence of local actors.

7.3 THE NATIONAL POLICY CONTEXT

Opportunities: This research has clearly identified that the national policy framework influences both local policy making and the implementation process. The strongest sources of influence were the *UK Transport White Papers*, the *National Cycling Strategy* and the requirements associated with the preparation of *Local Transport*



Plans and Strategies (LTP/Ss). All of these have served to give more credibility to walking and cycling as important modes in their own rights and have also created a framework, to which local actors can refer when policies or measures for walking and cycling meet with local doubts or opposition and which helps over time is to raise awareness of these modes within and outside local authorities. The targets set by the National Cycling Strategy – though subsequently amended – were shown to have had a particular impact in this context as they gave local authorities a concrete goal to aim for in their own policies.

The Local Transport Plan (LTP) regulations in England and Wales, which tie funding to specific measures included in the LTPs, has meant that funding for specific walking and cycling projects has increased. This has overcome some problems of a shortage of local resources having been allocated to these modes.

National planning guidance documents such as PPG 13 (England and Wales), NPPG 17 and PAN 57 (Scotland) were also identified as having influenced the local approach to transport planning and some local actors had used these documents to back up their arguments for specific schemes.

Problems: The main problems identified were the lack of national targets for walking and the comparative weakness of *Encouraging Walking*, which in the absence of a National Walking Strategy is seen as the nearest equivalent to the National Cycling Strategy. An additional – and potentially serious – problem identified in Scotland was the fact that funding allocations based on Local Transport Strategies (LTSs) were not tied to individual schemes and since authorities were generally receiving less than they bid for, this still meant walking and cycling had to compete for funds internally.

Another problem, which emerged, was the fact that some authorities still have little or no policies for walking and cycling included in their LTP/Ss. The encouragement given for such policies at the national level thus appears to be ineffective in ensuring that walking and cycling are catered for with adequate local policy provision throughout Great Britain. It could also be that those responsible for approving draft LTP/Ss do not ensure they fulfil the requirements relating to the two modes.

Lastly, the questionnaire found that respondents were not equally aware of guidance documents and design manuals published at the national level, which were considered to be very helpful by many of those, who did use them. However, gaps in this guidance material were also identified by local actors which they felt the national government should strive to fill.

Solutions: Some solutions to local implementation problems are outside the influence of local actors or even local authorities. More can be done in this area and it is the national government, which is responsible for the national policy context. This study identified the following measures which the national government should consider, if it is serious about wishing to see better provisions made for pedestrians and cyclists together with an associated rise in modal share:

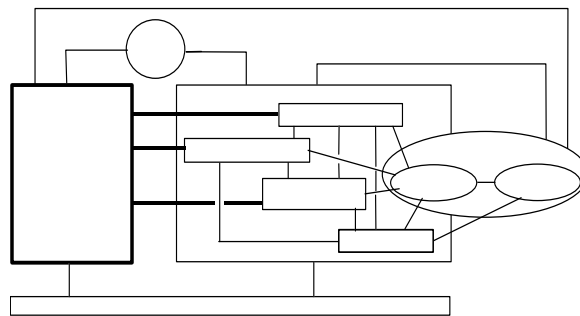
- a national strategy for walking, which incorporates national modal targets
- ensuring that national policies are based on relevant theories and experience and complement each other (the virtual omission of walking and cycling from the government's strategy for buses (DETR, 1999) is an example of bad practice)
- Westminster, the Scottish Executive and the Welsh National Assembly should ensure, that all local authorities adopt well developed walking and cycling strategies as part of their LTP/S
- firming up requirements - and guidance - for a local assessment of base levels and the monitoring of key indicators of policy outputs and outcomes and collate and evaluate this information centrally to be able to provide a more detailed national picture
- collating and providing more detailed design guidance on specific pedestrian and cycling issues and measures (such as the existing series of Transport Advice leaflets) and ensure targeted distribution of these to all local actors

The study has shown that such an improved national framework would help to underline the importance of walking and cycling and would be useful in helping local authorities and actors to justify actions and expenditures, which might meet with local opposition.

One approach local actors could take is to ensure that they have the relevant guidance material available to them, firstly as reference material for their own use and secondly as a source of supporting arguments for new schemes and proposals. This, though, can be a time consuming task and it will be difficult to perform for officers, who merely cover walking and cycling as part of a wider job description.

7.4 THE LOCAL POLICY FORMATION PROCESS

Opportunities: The most obvious opportunities are provided by the Local Transport Plans and Strategies. If local authorities, interest groups or even individual modal champions succeed in getting sound policy provisions for pedestrians and cyclists embedded in these plans, an important step will have been taken towards



successful implementation. This is due to the fairly obvious principle that it is hard to implement policies which do not exist (although some of the case studies have shown that committed local actors can still affect change even in the absence of written statements). The study has also shown that once policy has been agreed, it can provide a useful basis for reminding local politicians and other actors of the commitments, which have been agreed when arguing the case for implementing certain measures.

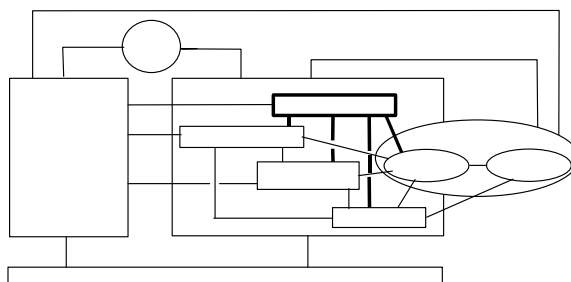
Problems: A lack of walking and cycling policy or inadequate policies (e.g. those not addressing the causes of modal decline or specific local problems and conditions) are very obvious obstacle, which can seriously affect many other determinants of the implementation process. However, conflicts during the policy formation process can also lead to weak implementation structures being put in place – a lack of committed staff time would be one example. If the policies are formed without adequate internal consultation, it is possible that either important connections or elements are missed or that vital stakeholders will lack a sense of involvement and ownership, which can result in implementation problems later on in the process. Equally, it was found that neglecting consultation with outside bodies and the general public during the policy formation process could lead to conflict during implementation. However, even thorough consultation did not necessarily prevent such conflicts.

Solutions: Local authorities should ensure, that they formulate well founded detailed policies for pedestrians and cyclists. Various mechanisms for enhancing this process were identified. Authorities, which have not previously included these modes in their transport policies can look at the provisions made in the LTP/S of councils more active in this respect. Evidently, it is very helpful if the authority has a modal champion, ideally a committed officer, who is willing and able to do the necessary research. Such people have also been shown to be able to influence policy through being involved in writing policy proposals and in such cases it is important that the relevant officer has a good awareness of the relevant issues

It is also important that an interactive implementation process is specified at the policy making stage to ensure actors are aware of the links which need to be made (such as policy links between e.g. health and transport), the groups which should be consulted (such as local or national user groups), and the organisations which should be involved (such as health authorities, local employers and public transport operators). Furthermore, policies must specify targets for policy outputs (such as number of new cycle parking facilities, pedestrian crossings or Safe Routes to School schemes) as well as policy outcomes (e.g. for modal share for different types of trips, levels of use of new or existing facilities, accident reduction). Only if targets are specified, base levels are measured and the chosen indicators are then monitored (with both the latter actions also anchored in policy) will authorities be able to assess if their policies are being implemented as planned, and whether they are having the desired effects. This review and feedback process is vital if policies and their implementation are intended to be more than symbolic acts. It should also be remembered, however, that any targets – while they need to be challenging – should be tailored to local conditions rather than simply adopting overall national figures.

7.5 INTER-ORGANISATIONAL PROCESSES

Opportunities: A major opportunity for enhancing the implementation of walking and cycling policies was found to be the existence of active local groups supporting these modes (although very few authorities reported such groups supporting walking). Such groups, which have traditionally often been seen as adversaries or at least critics of local authorities, could be helpful in providing local expertise and also vocal support for new policies and schemes. Their active lobbying was reported to be a good way of demonstrating public demand and thus gaining political support for walking and cycling measures. Thus, where they exist, efforts should be made to involve them in both policy formation and implementation stages through formal consultation but also through less formal attendance of local group meetings for example.



Equally, there were some authorities, which reported the existence of schools and parent groups keen on developing Safe(r) Routes to School. Again, fostering good links with such groups and offering certain measures, which they desired in exchange for schools offering cycle training or parents running walking buses for example was seen as a good way of generating and maximising support as well as policy outputs.

Working with developers can also result in enhanced provisions for pedestrians and cyclists, which are often cheap compared to the overall cost of a new scheme, are supported by current planning guidance and regulations and can thus be included in the requirements for planning consent.

A good opportunity for gathering and exchanging information and practical experience across different authorities is provided by a variety of schemes and groups such as cycling officers' groups, integrated transport groups and the CTC benchmarking project (which include study visits to locations and authorities of interest). All officers who took part in such groups were very enthusiastic about their benefits.

Lastly, Sustrans was an organisation, which many authorities had found to be of particular use as a partner in implementing projects beneficial to pedestrians and cyclists in particular. Sustrans provided matching funding thus enhancing authorities' return for their own investments. Sustrans could also contribute specific expertise and experience, a wider context in the form of the National Cycle Network (which could help to generate political support) and the organisations sometimes even helped in difficult negotiations with land owners when purchases had to be made. Several local actors reported that their authorities had actively lobbied for NCN routes to pass through their area. In some cases, such routes were then used as justification for providing other facilities leading to them or linking them with an existing network.

Problems: The potential influence of local lobby groups can of course also create implementation problems if the groups are opposed to walking or cycling schemes. This was seen as a serious problem by several local actors.

Another potential problem in two tier authorities are conflicting goals or priorities (either between County Councils and District Councils or between London Boroughs and *Transport for London*) between the different tiers. District Councils as the planning authorities and *Transport for London* as the transport authority for major London traffic arteries can sometimes take decisions, which run contrary to plans and strategic aims adopted in their partner authorities.

Some authorities reported that developers were not always amenable to requests for including walking or cycling facilities in their schemes.

A final problem was identified through the questionnaire, namely the fact that a considerable number of authorities did not actively involve organisations such as local schools, employers, health authorities or public transport operators in the implementation process.

Solutions: A potential solution to local opposition is consultation and authorities had employed a variety of techniques including targeted contact with both statutory consultees and other potential

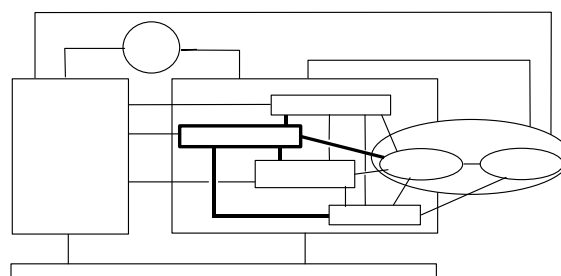
stakeholder groups. However, it was sometimes found that it was not possible to reach mutually acceptable compromises through this process. In this context, local actors felt that politicians should not be reluctant to decide against the wishes of a particularly vociferous group as such groups very often only represented a minority opinion while the measures in question would actually provide a net benefit to the community. If it was felt, the proposed measures would be of overall benefit in the long run the answer would be for local politicians to be prepared to take decisions, which might attract some adverse publicity in the beginning. There are many examples in Britain where even the initial detractors of a scheme supported after it had been implemented and its benefits had begun to manifest themselves – such as increased economic turn-over in newly pedestrianised streets (Hass-Klau *et al.*, 1992). In such cases, it is very important to make good use of potential allies outside the authority who might be able to fight parts of the public battle without the real – or perceived – limitations imposed by political accountability.

Another potential way of increasing organisational support and involvement is the organisation of local events dedicated to walking and cycling (such as the participation in the annual European Car Free Day, for example). Such events, which should emphasise the fun and health aspects of the modes generally create positive publicity and can help to demonstrate public demand – to both the council and outside organisations.

At the time of writing, the national government is also funding travel plan officers' posts in local authorities, which are intended to help develop both the authorities' own employer transport plans but also to give support and encouragement to other organisations (such as schools, employers or hospitals) to do the same.

7.6 INTRA-ORGANISATIONAL PROCESSES

Opportunities: Communication within the organisation was shown to be a very important factor in local policy implementation. Good existing communication links - both formal and informal - between individuals, groups and departments should thus be promoted and made use of wherever



possible. The study has also shown that personal face-to-face communication either in meetings or between individuals can often be the most effective way of clarifying queries, conveying the importance or relevance of walking and cycling or preventing conflicts later on in the process. Written reports on the other hand were seen to be useful as a potential medium for presenting detailed arguments, particularly if they could be backed up by good practice examples and other relevant background information such as statistics.

Senior and political support for the modes and measures geared to cater for them were also shown to constitute a significant positive force in the implementation process and where these exist, they should be viewed as a considerable asset and fostered wherever possible.

Topical links with other policy areas, such as health or land-use planning were also identified as opportunities, the latter particularly in the light of planning guidance and legislation increasingly stressing the need for these links and giving planning authorities the right to demand certain provisions as a condition for granting planning permission.

Problems: The importance of internal links, communication and support means that where these processes and related structures are inadequate or even partly absent, the resulting problems can negatively influence most other implementation determinants.

Problems identified included the spatial separation of key actors (e.g. officers, groups or department located in different buildings) a lack of interest, awareness and support – particularly at senior officer level - and a general lack of strategic priority being given to walking and cycling and a resulting shortage in resources (particularly staff time and money). The lack of resources was in fact identified as one of the most important impediments to successful policy implementation.

Solutions: Although the physical location of different groups and departments is often reliant on the existing building structure and distribution, optimising the physical proximity of people who need to – or should – work together should be a consideration if local authorities do carry out staff relocation.

Another way of establishing and fostering interpersonal communication is the formation of specific groups which bring together people working on related issues or on a common project. Wherever appropriate, such groups should span different departments and can also be used for internal consultation during the policy formation process for example. Many local actors contributing to this study felt that the extra time, which needed to be invested in attending such meetings was more than offset by the benefits derived from participating. Some authorities also run training seminars, in which officers provide information on important issues and the latest developments in their own area of expertise (e.g. in legislation, guidance or good practice). Such seminars can be aimed at both local politicians (who often have to take decisions in policy areas, in which they have little or no expertise) and other officers, to whom the issues are relevant but who might not have time to collate and digest all the relevant information during their work.

Several local actors stressed the benefit of making the effort to talk to colleagues and councillors in person. They found such informal communication helpful in gaining allies for new schemes, raising

awareness among their colleagues of walking and cycling issues as well as identifying and potentially overcoming possible objections to new schemes before proposals were officially discussed in committees (the political decision making bodies). Since the formation and development of such personal contacts require both initiative and good interpersonal skills authorities would do well to ensure that the relevant posts are filled with people, who possess these characteristics.

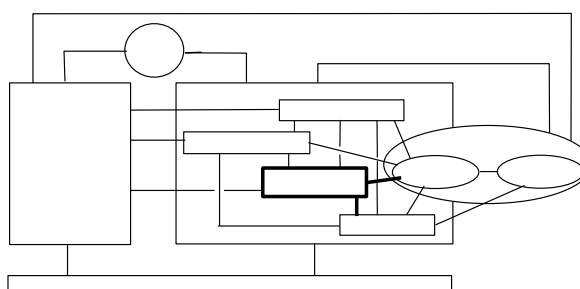
Over time, an enhanced level of awareness among decision makers of the importance of walking and cycling and the potential contribution these modes can make in solving local transport problems can lead to increased allocation of the necessary resources. Several authorities also stressed that it was important to remain vigilant about potential sources of extra funding (the list included Sustrans, developer contributions, European funding, land-fill tax, additional dedicated national funding and regional development agencies) and if possible to be prepared to submit well developed bids as soon as the availability of new money became known. In this context, it was mentioned several times, that authorities, which employed an officer specifically with the task of tracking and tapping the various EU and national funding opportunities found this to be an extremely useful investment and one that generally resulted in greater activity due to more money coming in.

It was also found that many officers tried to maximise the effects of council spending by adding walking and cycling elements to any new schemes on an ad hoc basis. However, from a strategic point of view it was considered to be preferable if dedicated funding for walking and cycling measures meant policy outputs could be prioritised according to need and effectiveness. If modal share of walking and cycling is truly expected to rise the importance of allocating sufficient resources to the two modes – both at national and at the local level - cannot be overstated.

Although senior support has been identified as a very important factor, no examples were found for approaches, which could generate such support where it was lacking. It can merely be flagged up as an issue, which departments and authorities should be aware of when trying to improve provisions for pedestrians and cyclists.

7.7 BEHAVIOUR OF INDIVIDUAL LOCAL ACTORS

The potential for local actors to influence local policy formation has already been discussed. The previous two sections on inter- and intra-organisational processes have by necessity also covered some issues dealing with individual behaviour since such interaction by definition take



place between two or more people. However, there are still some issues, which are more specific to the activities of the individual local actor.

Opportunities: As this study has shown, the existence of a dedicated post for both or either of the two modes represents a major opportunity in itself. Such posts almost automatically create an internal champion and are generally filled with individuals, who are motivated to achieve positive results for the mode in question. Often, they also contribute personal experience of the mode and might also have existing contacts with the relevant interest groups. All of these factors have been shown to make the implementation process more successful.

If such motivated and experienced individuals also have the chance to participate in the policy formulation process, additional opportunities are created through harnessing their knowledge and commitment.

Problems: Along with a lack of money, lack of time was the problem most commonly identified by local actors working on walking or cycling – even if their posts were entirely dedicated to these modes. A second important problem was a lack of the appropriate skills and experience due to the prolonged neglect of the two modes. Some officers felt that they did not know enough and in other cases authorities had experienced problems filling new posts with qualified personnel. A lack of experience among transport engineers and potential contractors can also impede implementation.

In addition to experience both awareness and existing professional culture can have a significant impact on the way walking and cycling policies are implemented. Several officers identified a lack of awareness among colleagues or an unwillingness to change their approach to their work as a potential barrier.

Solutions: It has become apparent in the course of this study, that successful implementation of adequate walking and cycling policies is very unlikely if a local authority does not employ an officer, whose work time is largely if not fully dedicated to either of the two modes. Although some authorities combine these modes into one post, such a set up is only likely to be successful in the long run, if the post holder can draw on the support of other members of staff.

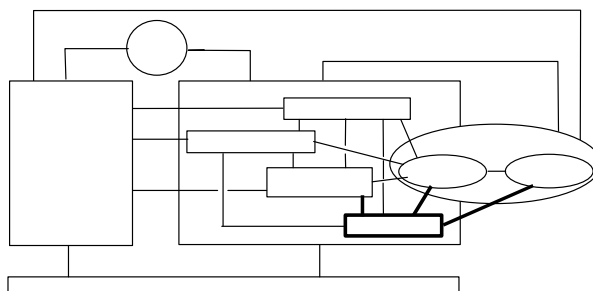
Local authorities should furthermore foster the professional development of walking and cycling officers, for example by enabling them to take part in cross-authority officer groups and relevant conferences or seminars. Although such events might at first seem to be using up time, which is already in very short supply, this study has shown that the experience gained and knowledge accumulated are invaluable and should in the long run make the investment worth while. The lack of professional skills can (and increasingly is) also be addressed by training and education

organisations to ensure that future transport engineers are better able to design and build good quality pedestrian and cycling facilities and are also more aware of the need for doing so.

It is also important that local officers recognise the power of personal communication and try to foster good individual relationships with their colleagues. Naturally, this is a two-way process and it should be supported by the organisation, for example through the location and lay-out of offices and the good example of managers and senior officers.

7.8 TARGET GROUP BEHAVIOUR

The issues surrounding local interest groups have already been discussed in Section 7.5. This section is looking in more detail at the target group – which is considered to comprise most members of the general public – outside any organised context.



Opportunities: The main opportunity associated with non-organised target group behaviour were high existing levels of walking and cycling. This study has shown that a local authority's perception of existing demand for new and improved facilities and a good take up rate of such facilities once they were provided were likely to provide a more favourable climate for policy formation and implementation.

Problems: A variety of problems were associated with behaviour and attitudes in the target group. Public protest against proposed or newly constructed schemes was one of the main potential detractors alongside an apparent or actual unwillingness to switch modes. People expressing opposition to new schemes were mostly concerned about negative impacts on parking and road space and these concerns reflect the underlying mainstream transport culture, which generally considers the car to be the superior and more desirable mode of travel, which should be given priority over other private transport modes. Some local actors indicated that it was often difficult to persuade land owners to sell the – usually small – parts of their property which were required for the construction of a new foot or cycle path⁵⁴ and that the necessary negotiations could consume a lot of time and energy. Safety fears associated with traffic volumes and speed were identified as another reason, which prevented people from walking and cycling more.

⁵⁴ Although in the capacity of landowners, individuals are not necessarily part of the direct target group, they are members of the general public and can as such influence the implementation process through their behaviour.

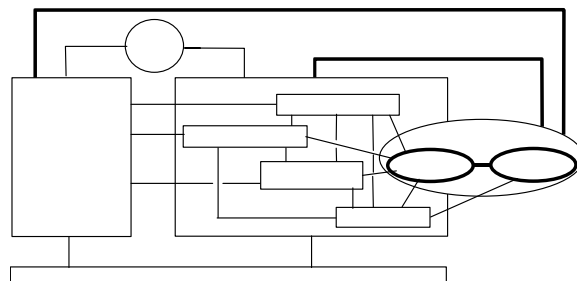
Solutions: One of the most important measures preventing potential adverse public reception to new proposals and schemes is far-reaching consultation, which involves people early in the process. Local actors reported on a variety of approaches, which they considered to have been successful in different circumstances: door-to-door leafleting, the formation of cycling forums which involved stakeholders from both outside and inside the authority, public exhibitions and the organisation of public conferences dealing with strategic policy development. Consultation is not only useful to inform the public about new proposals and seek their views, but also to explain the reasoning behind the policies and schemes directly without having to rely on filters such as the media. But it must be remembered that any consultation process should be carried out with a true desire for dialogue coupled with the knowledge that the loudest detractors will not necessarily be representing majority or even valid views. It is also possible to 'overconsult' thus creating more potential for conflict than is appropriate.

Other potentially successful ways of influencing public opinion are a proactive and creative use of the media (e.g. through giving detailed briefings, creating attractive photo-opportunities and selling the council's success stories) and the organisation of public events associated with walking and cycling (which again are likely to attract coverage from the local media). It is also important to ensure that any new schemes implemented are attractive, functional and well constructed.

Councils should further consider running public awareness campaigns, which are aimed at getting people to reconsider their transport options and address the cultural imbalance between walking and cycling on the one hand and the private car on the other. Such campaigns often do not show immediate results and can also be relatively costly. Considering this absence of direct returns they are more likely to succeed if they can tie into similar activities at the national level.

7.9 IMPLEMENTATION RESULTS – OUTPUTS AND OUTCOMES

Implementation outputs are a very direct result of all the issues and processes which have already been discussed and it would be inappropriate to attempt to provide a detailed discussion of the possible measures, which local authorities can take at this point. These issues are covered in



more – but not always sufficient – detail in the guidance material available, which has been reviewed in Chapter 2. However, some important points have arisen from this study, which local actors should be (and in many cases already are) aware of. It is important to ensure that facilities provided for pedestrians and cyclists are well designed and, wherever possible, continuous. Isolated sections of cycle path distributed throughout an authority, for example, are less likely to attract new

users than one continuous facility serving a major route. However, it is better to provide discontinuous facilities of potentially lesser quality, if the alternative would be to provide no facilities at all. Such outputs, which are often constructed on an ad hoc basis when other schemes create an opportunity, can sometimes generate public demand for further improvements and can serve to justify additional efforts. They can also serve as a visual (if perhaps occasional) reminder that walking and cycling are welcome activities, which should be catered for.

The main purpose of implementation outputs is of course to make walking and cycling more attractive and hence more frequently chosen modes of travel. But the assessment of these outcomes – which could then feed back into both policy formation and implementation – can be expected to be quite difficult, at least in the near future. This study has found that a great proportion of local authorities do not have base line figures for walking cycling (such as modal share for different types of trips or at different locations) and that they are not currently monitoring most of the relevant indicators. This finding is in stark contrast to the requirements for monitoring, which are associated with LTP/Ss and the fact that many more authorities have adopted targets than will actually be able to assess whether they are meeting them. Accident rates were monitored almost universally and proved to be the exception in this context. Although anecdotal evidence of the use of new facilities is sometimes available, monitoring must become an integral part of policy implementation. Policy making and implementation are cyclical rather than linear processes and these cycles can only be properly completed through informed reviews in the light of the relevant indicators.

7.10 CONCLUSIONS

This chapter has presented the main opportunities, problems and solutions associated with the implementation of walking and cycling policies as identified through this thesis. It has suggested strategies and approaches which local actors, local authorities, other local stakeholders and the national government can adopt in their efforts to improve the provisions for pedestrians and cyclists. It is not intended to suggest that affordable and convenient solutions exist for every problem experienced by local authorities or their employees nor that the approaches discussed are all vital ingredients of successful implementation. Implementation is a complex process and problems can occur at all the nodes of activity and communication involved in it. This also means, however, that everyone involved in the process has some means at their disposal of influencing it and no individual, group or organisation is entirely dependent in its actions on any other.

This chapter therefore addresses all the potential stakeholders in the implementation process and is intended as a guide, which can serve as a basis for planning, evaluating and improving the process of implementation of local walking and cycling policies. The chapter has also answered the

remaining two research questions (see Section 7.1) by identifying strategies and approaches which are important elements of successful walking and cycling policy implementation and could be adapted by other local authorities for their own use.

The following and final chapter will draw together the conclusions of this study and will discuss promising issues for future research in walking and cycling policy implementation.

CHAPTER 8 - SUMMARY AND IDEAS FOR FUTURE RESEARCH

The future belongs to those who believe in the beauty of their dreams.

Eleanor Roosevelt, 1884-1962

8.1 INTRODUCTION

As the first chapter of this thesis has shown, the debate around transport has ceased to simply be concerned with getting people and goods from A to B. Informed discourse about the way people travel nowadays also spans issues of land use, air quality, climate change, personal and public health and social equity. In this context walking and cycling are extremely important modes as they can contribute to the solution of problems in all of these areas. They are increasingly mentioned in British policy documents relating to these issues and there is a general consensus that these modes should be supported and that people should be encouraged to choose them more often. However, although important, such abstract goals are not sufficient and more concrete policies are needed, particularly at the local authority level where walking and cycling are predominantly provided for. But such policies will not bring success either unless they are properly implemented and this is a process, which has been comparatively ill-studied in spite of its obvious importance for policy outcomes. It was thus the purpose of this thesis

- to examine the processes and factors, which determine the implementation of walking and cycling policies in British local authorities;
- to investigate theories or models describing the policy implementation process which could be helpful in its analysis and
- to develop recommendations and – if possible - a new model for improving walking and cycling policy implementation within British local authorities

The means chosen to achieve these goals were a comprehensive quantitative mail-survey of British local authorities with strategic transport planning responsibility and twelve in depth local authority case studies comprising a series of personal interviews and document reviews. The analysis of the data confirmed the findings of the literature review, namely that walking and cycling are ill provided for in terms of administrative structures and policy compared to the car for example. Additionally, walking fares considerably worse than cycling in spite of the fact that many national and local policy documents claim it should be placed at the top of the hierarchy of transport modes. The study also found that there is very large variation across Britain in the way policies are implemented and that in spite of a number of authorities – and importantly individuals - being very active and successful in providing for pedestrians and cyclists, the overall picture strongly suggests that local policy implementation needs to be considerably improved if the national rhetoric about supporting the healthy and sustainable modes is to be converted into widespread practice. The findings of the

study stressed, however, that the responsibility for such improvement cannot be placed at the doorstep of one group, body or organisation alone. Many factors play a part in the implementation process and every stakeholder and they depend to varying degrees on the activities of both national and local politicians and administration as well as non-governmental organisations, lobby groups and the general public.

The following section of this chapter will present the main findings and conclusions arising from this study⁵⁵ and Section 8.3 will indicate important issues for future research in this area.

8.2 FINDINGS

8.2.1 Defining implementation success

This investigation set out to research factors, which determine the success or failure of local authority walking and cycling policy implementation. An important indicator of implementation success is an increase in the modal share of walking and cycling. Though it was expected at the beginning of the study that such information would be relatively easy to obtain, this assumption was found to be premature. There is no national database, which disaggregates information on the modal share of walking and cycling to the level of local authorities - or in other words to the level of administration, which is actually responsible for providing for these modes. But even local authorities themselves often do not know the levels of walking and cycling in their administrative boundaries and the majority do not monitor the relevant indicators. This means that most authorities are also unable to evaluate the outcome of their walking and cycling policy implementation because either they have no baseline for comparison or because they do not know how modal shares are developing - or both. This in turn will make it very difficult for the national government to assess, whether the funding provided for walking and cycling measures through LTP/LTSs and other funding mechanisms is actually having the desired impact.

The lack of this information further meant that in most cases it was not possible to compare policy outcomes in different authorities through existing numerical parameters or to select case studies according to such parameters. For the purpose of this study it was thus necessary to find another way of selecting case studies, which would be representative of the variety of implementation experiences and activities. Thus the Case Study Selection Index or CSSI was created as a new tool to identify local authorities representative for different implementation experiences across Great Britain (for an assessment of this index see Chapter 5, Section 5.8.4).

⁵⁵ The recommendations for action resulting from these findings have already been presented in Chapter 7.

8.2.2 A new conceptual model for studying and optimising policy implementation

The existing body of implementation theory does not offer the analyst a universal approach nor does it provide the practitioner with a universal ideal. Early competition between opposing theories – the top-down and the bottom-up approach - was found to have been softened by the admission that both approaches and their various proponents had something valid to say but that on the other hand neither theory was in itself an adequate normative or descriptive framework. Implementation elements which were considered to have been neglected in the top-down/bottom up dialectic have also been further described and classified but the theoretical discourse has not progressed far enough to synthesise different normative and descriptive ideas into one or even several alternative frameworks.

Since policy implementation occurs in a plethora of different legal, political and socio-economic circumstances it would actually be difficult to envisage a model which could describe all of them adequately while at the same time combining both normative and descriptive properties. Rather than pretending that such a model could be deducted from the observation of implementation in a very specific policy area, it was decided that this study would instead contribute to the development of a conceptual model. An existing model of the different elements of the policy implementation process was chosen as a structure for relating empirical findings to different strands of implementation theory. At the same time the model itself was tested for its validity and it was modified and improved in the light of the findings (see Section 6.3.1) .

It is dangerous to assume that any model – be it mathematical or conceptual - could ever accurately describe or prescribe the multiple facets and variations of processes, which involve human decision making at the political, professional and personal level. Consequently the model developed in this study is sufficiently flexible to allow for these variations. It provides a breakdown of the implementation process into its main conceptual elements and is supported by concrete explanations of the opportunities, problems and solutions associated with these (see Chapter 7). The model is thus a tool which can help implementation actors at all levels in identifying the different elements of the process they are involved in and which can thus guide their approach to optimising these elements and the links between them within the means they have at their own disposal. Additionally, the model can help students of implementation to structure their work in a systematic way while remaining open for their own findings and conclusions.

8.2.3 The national policy framework

The national policy frameworks for walking and cycling – however adequate or inadequate they are or might have been - have not so far succeeded in creating equal levels of policy provision and implementation for these modes within local authorities. This study showed that activities in some authorities actually preceded national policy developments while many other authorities are

currently lagging behind the goals and requirements of the national framework (see Section 4.4). However, it was also found that the national policy framework and the general message given out by the government (via policy documents, guidance, legislation, subsidy programmes or public statements) does have a strong influence on activities at the local level. The findings show that a strong national policy lead which is well supported by appropriate guidance and funding allocations, and which is accompanied by an enforceable obligation on local authorities to contribute to policy goals is an important element of successful local implementation. The Local Transport Plans and Strategies and the funding associated with them can provide a strong tool in this context, if their potential was fully realised. This was found not to be the case (see Section 5.2.5).

8.2.4 Differences between walking and cycling policy and implementation

On first inspection cycling is well supported by national policy since it is provided for by its own national strategy document, which is complemented by a growing number of supporting documents and guidance material. This is in clear contrast to walking which has not been provided for with a national strategy despite repeated promises to the contrary. Walking was instead covered in a low profile guidance document which in many respects lacked the strength of its own convictions (see Section 2.1.9.1). It was also found that provisions for cycling at the local level are more prevalent and coherent than those made for walking and the absence of strong national policies for the latter mode was found to be one reason for these differences (see Section 4.4.2.2).

Pedestrians are undeniably a generally more difficult group to involve in the policy making and implementation processes as they are more heterogeneous than cyclists and thus have much less of a public voice and a political lobby. Since they are also a much larger group, though, the national government needs to make a stronger effort to create policy support if it wants to see improvements in conditions for pedestrians and in the share of this mode in people's travel activities. However, even cycling is not as well provided for locally as its national 'policy advantage' might suggest. To give better national support for both modes, the following need to be provided

- stronger financial incentives through more targeted funding
- more targeted, accessible guidance and information and particularly
- a readiness to share with local authorities the burden of potentially politically controversial strategies and measures

Such measures would help to strengthen the adoption and implementation of cycling policies and would also raise awareness of the importance of walking as a mode, thus improving implementation at the local level.

8.2.5 Implementation activities within local authorities

At the local authority level there is a collection of factors and processes which influence policy implementation outcome and which can be organised into eight groups. Instead of being arranged

in the linear implementation chain envisaged by some theorists, these elements form a network in which some processes run in parallel and most influence each other. Included in this network is local policy formation, which should not be seen as an activity that is completely separate from the process of implementation.

Within the conceptual framework developed in this study, no one path to success or failure was found and consequently no panacea for local implementation problems can be suggested. As has been explained in Section 8.2.2 this had not been expected. Instead, one of the most important finding of this study from the local stakeholders' point of view is probably that everyone involved in the implementation process can influence it within their own area of activity and one motivated individual - a local champion - can often be sufficient to influence implementation results for the benefit of pedestrians and/or cyclists. However, such dependence on individuals also signals, that walking and cycling policy implementation is not well embedded in existing administrative and political structures and cultures. The importance of individuals also means, of course that highly motivated actors or groups opposing the implementation of certain policies can have a restrictive influence. Thus it will not be enough to rely on single groups or individuals. Local authorities have to commit political will and resources in order to ensure the sustained and consistent implementation of policies for pedestrians and cyclists and since local conditions will always vary beyond the spheres, which are under the influence of those working for implementation, the policy outputs and outcomes will also vary between authorities. On the other hand, it was found that several of the implementation barriers identified were of a perceptual rather than a material nature and as campaigns against drunk driving have shown, personal and public culture can be influenced if the effort to do so is targeted and sustained. Thus it is suggested here that precisely due to the interactive and multivariate nature of the implementation process it will be unlikely to find a British local authority in which the implementation of walking and cycling policies cannot be improved.

8.3 FUTURE RESEARCH

There are two main areas of research, which can build on the results of this study. The first is the development of implementation theory, the second is the implementation of walking and cycling policies in British local authorities.

8.3.1 Implementation theory

Implementation theory is a complex field which encompasses ideas on decision making, policy making, communication and the organisation of institutions. It is also an important area of study since without implementation – be it deliberate or coincidental– no theories, ideas or policies would ever be put into practice. It is precisely for this reason that implementation theorists must bear in mind how their work can benefit implementation practitioners. If theory has too far to go before it

reaches practical applicability, it is a purely intellectual exercise. Thus more tools must be developed, which can help practitioners in their daily activities.

The conceptual model developed in Chapter 6 is seen as a contribution to the ongoing development of theory as well as a tool for practitioners. It should be further tested in other areas of policy implementation to assess whether it provides both students and practitioners of implementation with an adequate framework to structure their work beyond the issues of walking and cycling in British local authorities. The model should be used for example for the study of policy implementation at national government level, the implementation of statutory duties or the implementation of policies within non-governmental structures. The eight main elements of the model should also be further investigated to integrate theories relating to them and further improve their descriptive and prescriptive powers. It is hoped that any future workers will approach the model with an open and critical mind since it is within the nature of any model to conceptualise and simplify reality.

8.3.2 Walking and cycling policy implementation in British local authorities

It will be extremely important to fill the information gaps on the modal share of walking and cycling at the local level. More authorities must begin to monitor indicators such as the modal share of these modes, their share of trips for different purposes and the development of overall travel behaviour. However, evidence of the activities relating to walking and cycling policy implementation – such as the provision of facilities, the existence and contents of mode specific policies and employment of qualified staff - should also be gathered. The collection of such locally specific data should be supported by the national government since it will be impossible to adequately identify problems and address their causes in the absence of this information.

The integration of better quantitative information with qualitative implementation determinants can then help to assess the relative importance of these factors under different local circumstances. Since sound quantitative information is often a necessary - if not generally sufficient – prerequisite for politically uncomfortable decisions, such as the redistribution of resources or the restriction of popular activities such as driving, establishing base lines and showing their development are essential elements of improving walking and cycling policy implementation.

It will also be of interest to follow the case studies described here over time. It was found that the current level of walking and cycling policy implementation as described through the indicators chosen did not always correspond to the implementation activities described through the qualitative assessment. It would thus be useful to assess whether authorities which currently show a dynamic and positive approach to policy implementation without necessarily matching this input with

corresponding policy outcomes, will over time manage to improve their implementation results. Such follow up studies can help to demonstrate by practical example to what extent local authorities can change their implementation records, which of the elements of the implementation model have contributed to such change and how.

It must further be investigated what has caused the difference in CSSI scores between local authority types. Would this have been different, if other indicators had been chosen, was it thus a co-incidence? Or does it in fact relate to inherent differences between authority types? If that is the case, what are these and what are their implications for policy implementation? The number of case studies, which could be covered in this investigation (i.e. two examples from each authority type) did not allow for a sufficiently large sample size to draw any conclusions on this issue. The answer to these questions is furthermore likely to be strongly related to past events such as for example the various instances of local authority re-organisation. This study on the other hand was more concerned with describing the present situation and developing recommendations for future action.

8.4 IDEA(L)S INTO ACTION?

It is a common convention that the authors of scientific studies are represented only through their work and that they are generally assumed to be objective observers. While it is certainly desirable for any scientist to maintain an open mind and to be ready to question their own ideas, it is the belief of this author that there can be no such thing as an entirely objective scientist and that there can thus be no entirely objective science. The choice of subject for this study was therefore the result of the personal interests and values of its author. The motivation for the work stemmed from the belief that social and environmental sustainability are important and closely connected goals which individuals, organisations and societies should strive towards. In the area of human mobility walking and cycling have an important contribution to make in working towards these goals. Their full potential can only be realised, though, if constructive policies for these modes are adopted and if such policies are then successfully converted into action through the process of implementation. The study has already found many individuals and organisations which are working towards this aim with great commitment but significant shortfalls have also been identified. It is hoped that the findings of this study and the tools which have been developed from them will go beyond the proverbial contribution to knowledge expected of a doctoral thesis and will help implementation actors to improve local practice at all levels.

