TRANSPORT RESEARCH LABORATORY

Transport implications of leisure cycling

Prepared for Driver Information and Traffic Management Division, Department of the Environment, Transport and the Regions

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Executive Summary

The number of leisure trips, and the number of journeys on rural roads is increasing. The annual sales of bicycles match those of the motor car. Despite this, however, the number of people cycling to work has decreased dramatically during the past few decades. This research, commissioned by the Driver Information and Traffic Management Division of the Department of the Environment, Transport and the Regions, sets out to establish the reasons why increased cycling for leisure purposes has not led to more people cycling to work.

The research methodology included interviews of more than 500 leisure cyclists, non-cyclists and those who regularly cycle to work. Additionally, detailed depth interviews and discussion groups were used to probe for subtle variations in the 'image' of the various forms of cycling.

It appears that for most people the decision to use the bicycle purely for leisure purposes is a rational choice as it confers health, fresh air and a socially relaxing pastime. Equally, these same cyclists consider that the use of the car for almost every other trip is also a rational choice. Among leisure cyclists, who go to some length to find paths without traffic, there is currently little incentive to become utility cyclists.

The leisure cyclists surveyed here have a particular image of utility cycling as being dangerous, demanding and stressful, requiring immense self-discipline. This conflicts with their image of leisure cycling as being calm, peaceful and liberating. The problem with this conflicting imagery is that it prevents the leisure cyclist from seeing the utility cyclist as 'one of us'.

Leisure cycling does have an important part to play in preserving the cycling habit. The mountain bike in particular has played a very important part in getting those who lapsed in childhood back on to a bicycle. Many current utility cyclists claim that leisure cycling did encourage them to try cycling to work.

The main barrier to more utility cycling by leisure cyclists is their fear of traffic. Most leisure cyclists would like to see more segregation, although this raises the prospect of some cyclists becoming even more afraid of traffic (and cars less able to deal with cyclists). In contrast, those who already do cycle to work are less concerned about traffic.

It is concluded that leisure cycling is worth encouraging for its many benefits. Efforts should be made, by physical and promotional means, to extend to urban utility journeys the informal, relaxing nature of leisure cycling. This might include, for example, providing more green routes through urban parks and marketing occasional cycling to work 'when conditions are right'.

1 Introduction

The aim of this research is to understand how more people can be encouraged to use sustainable transport modes, particularly bicycles. The objectives of this study are to assess the role of leisure cycling in encouraging or initiating cycling for other trip purposes, and also to identify particular provisions and strategies that might encourage people making leisure trips to transfer or extend their use of the bicycle to short utility trips.

1.1 Background

According to the National Travel Survey (NTS), one third of trips by all modes are for leisure purposes, a percentage that has grown over the past decade. Recorded cycling trips mirror this overall pattern. With the advent of mountain bikes and increased motor traffic on rural roads, it may be that bicycle trips on exclusively off-road tracks have increased even more, but these are not recorded in the NTS.

Some purpose-built off-road cycling facilities, such as the cycle paths on disused rail lines promoted by the charity SUSTRANS have become extremely popular. The Camel Trail in Cornwall has attracted up to 30,000 cyclists per month, making it one of the county's biggest tourist attractions. Certain mass organised rides on roads, such as the annual London to Brighton ride, have attracted more than 25,000 cyclists on a single day.

Some idea of the public view of leisure cycling can be obtained from an article by a journalist describing mountain biking, shown in the box below.

O is for off-roading

THE GREATEST INNOVATION in cycling for over a century, the mountain bike (MTB) has succeeded in making that unlikely object of desire, the ol' push-bike, sexy. According to the Bicycle Association's 'conservative guesstimate', at least 10 million people in the UK now own one; and two out of every three new bikes sold are MTBs. Mountain biking became an official Olympic sport in Atlanta; and now it's so fashionable that Ralph Lauren is sponsoring a Polo Sport MTB team for the World Cup series.
The paradox is that most of us rarely use our mountain bikes outside clogged city streets, where the biggest hit those knobbly tyres and reinforced frames will ever have to take is from the odd pothole. Probably 90 per cent of the bike's potential - to say nothing of the rider's - goes unused and unexplored. Which is why, when you go off-road for the first time, you feel as though you have just discovered what it's like to learn to ride a bike all over again; the sheer fun and joy of discovering what you can do with this new toy is intense beyond words. This is a bike that can go places you never believed it could; a bike that can hop, jump and - in the right hands - even skip, up, down and round about almost anywhere.

Matt Seaton: Observer Life 13 July 1997

A leisure trip is defined here as one that is made purely for the journey itself. Other journeys, that is those that would have been made by another mode had the bicycle not been available, are defined as utility trips (even when they are made to leisure activities such as the cinema). Using this strict definition, leisure cycling is not a form of transport (any more than swimming is a form of transport). However, leisure cycling may have an important role in encouraging cycling for utility purposes.

Government funding for local authority transport schemes through package bids has, since 1994/5, encouraged demand management and discouraged expansion of highway capacity for car commuters. This has enabled greater provision for cycling in some areas. However, there is uncertainty regarding the extent to which leisure cycling routes can be seen as a transport measure, and hence whether it should receive transport package funding.

Leisure cycling may play a role in influencing modal choice for utility transport. It may be the motivation for buying a bike in the first place. Non-cyclists will then (re)learn cycling skills, acquire fitness for cycling, and think of cycling as an enjoyable activity. This, in turn, should make them more able and willing to consider cycling for other (utility) trip purposes. It is also possible that leisure cyclists contribute to achieving the critical mass required to encourage others to cycle and to reduce dangers to cyclists by making drivers anticipate cyclists on the roads. This research sets out to test these arguments.

1.2 Previous research

The major study by TRL of Attitudes to cycling (Davies et al, 1997) found little evidence of leisure cycling leading directly to utility cycling. They identified 'fairweather cyclists' (those enjoying short, undemanding leisure trips) and 'lifestyle cyclists' (those liking the image of mountain biking) as two distinct cycling types and acknowledged that there would be customer resistance to utility cycling, particularly from lifestyle cyclists who were committed to car use. It appears that people compartmentalise their lives, not necessarily making connections between such activities as leisure cycling and commuting. Without a personal need to consider utility cycling, no link may be made.

The TRL study of attitudes to cycling referred to two types of problem-solving: extended problem-solving (EPS) and limited problem-solving (LPS). EPS relates to decisions where there is a risk of a significant negative outcome ie 'the stakes are high'. It entails a rigorous and detailed series of evaluations and can be applied to some transport mode decisions such as cycling or purchases of high value items, such as cars or houses. LPS is often related to impulse decisions such as the purchase of low cost items or perceived 'normal' activities (eg walking the dog) where the risk of significant negative outcomes is perceived to be low.

When dealing with the decision to 'become a utility cyclist' those who do not feel a personal need to cycle tend to lack the incentive to embark upon the EPS process. Most non-cyclists fall into this group. Leisure cyclists,

however, may differ as they are already closer to the subject and have already evaluated some aspects of cycling. They may, already feel, for example, that a bike (particularly an expensive mountain bike) can project a positive self-image, and that cycling can result in positive outcomes such as hedonistic pleasure and social approval. This study of leisure cycling evaluates the extent to which leisure cycling affects the decision to become a utility cyclist.

2 Methodology

This research aims to answer the following specific research questions:

- Whether leisure cyclists are more likely to take up utility cycling than the general population;
- the most effective ways to encourage the move from leisure to utility cycling;
- the extent to which utility cyclists started off as leisure cyclists;
- facilities and policies that might attract leisure cyclists to utility cycling;
- the impact of leisure cycling on car use.

Two main survey types were used, quantitative, involving short factual questions, and qualitative, involving fewer questions but in more depth. Firstly, short face to face interviews took place with a sample of 325 people who already cycle mostly for pleasure, and 115 people who cycle mostly as a means of transport. To act as a control group and permit the testing of differences between leisure cyclists and the population at large, 104 people who live near cycle paths in Birmingham and Bristol but who do not cycle were also interviewed.

The qualitative research included depth interviews, in which cyclists were interviewed individually by a trained interviewer over a period of up to one hour, and which were conducted in Birmingham (4 interviews), the Derbyshire Peak District (7 interviews) and Bristol (4 interviews). A further group of 12 cyclists were interviewed by telephone one month later. The questions, though open-ended, followed a topic guide to ensure that the same points of interest were covered each time.

The qualitative research also included two group discussions. These enabled interactions between cyclists and allowed the exploration of the attitudes and beliefs underlying the decision to cycle. Two discussion groups, lasting one and a half hours each, were conducted in Birmingham and Bristol. Respondents were recruited primarily on the basis of the type of cycling they did, and all were aware of the cycle paths in their respective areas. There was a spread of life stages, and at least 5 regular leisure cyclists and 2-3 regular utility cyclists in each group.

2.1 Case study locations

Sites were chosen to include a range of leisure cycling facilities, on the assumption that they would contain a range of leisure cycling ‘types’.

The Rea Valley Cycle Route
in Birmingham is an urban route linking the city centre with the Worcester canal. It attracts utility cyclists, such as those commuting to work or college. It links up with the green belt and has off-road sections through parkland which attract local leisure cyclists.

The Bristol and Bath Path
is a mainly off-road route, converted from a disused railway line, that provides an attractive setting for leisure cyclists along most of its length. Where it is near to the urban centres of Bristol and Bath, utility cyclists form a major part of the usage.

The High Peak Trail
is an almost exclusively leisure route and is all off-road, although it crosses some minor roads. Estimates suggest that up to 1000 cyclists use this trail on a fine weekend day.

In Bristol and Birmingham cyclists on utility journeys, using the same cycle paths as the leisure cyclists, were also questioned. Interviews aimed to establish whether those starting to use a bicycle for utility purposes were previously leisure cyclists, and to explore the linkages between the different types of cycling, if any.

As a control for the experimental process, a group of non-cyclists living near the cycle paths in Bristol and Birmingham were interviewed for their general views on cycling in general and leisure cycling in particular.

2.2 Character of sample

Cyclists were divided into two groups by a set of screening questions. Those who cycle to work regularly were classified as utility cyclists, whilst those who are active leisure cyclists but do not regularly cycle to work were classed as leisure cyclists. The requirement was to obtain a group of leisure-only cyclists and a group of utility cyclists that included both those that did and did not cycle for leisure. This separation was necessary to avoid overlap between the groups. The responses of the ‘leisure’ cycling group are therefore representative of ‘pure’ leisure cyclists, rather than cyclists who sometimes cycle for both leisure and work purposes.

Cyclists interviewed were chosen, as far as possible, to be representative of all users during both peak and off-peak commuting hours. There were some regional differences, with the High Peak Trail dominated by those in full-time employment (73%) with a large proportion of higher professional/managerial workers. The Birmingham route had a wider range of user types, with 49% not in full-time work. Other classifications were as expected for the regions.

The qualitative respondents came from a wide spread of social backgrounds and life stages. If anything, the respondents were distinguished by their ordinariness. They expressed no political or overtly green theories about the world; they were not anti-car and they were very straightforward about their cycle use, which was mainly for pleasure but occasionally for utility purposes.

2.3 Car and bicycle ownership

Nearly all of the qualitative sample owned a car and used it for travel to work and for most utility travel. They also used the car for many leisure activities, with the leisure cycling trip being a minor part of their overall travel pattern.

Evidence of the car domination of leisure cyclists on the High Peak Trail comes from the finding that a full 100% of the sample had access to a car, compared with 74% in the control group of non-cyclists. Only 29% of High Peak users live within an easy cycling distance (5 miles) from their work, compared to 48% in Birmingham.

The prevailing bike culture can be explored by examining household ownership levels. This showed that only 30% of the non-cyclist group had other adults in the house owning a bike. This rose to 53% for utility cyclists, 65% for all leisure users, and 75% of those on the High Peak Trail. Hired bikes were used by 20% of those interviewed on the High Peak Trail, half whom had a bike of their own.

Predictably, the type of bike used reflects the type of route, with the vast majority of leisure cyclists using mountain bikes. Interest in brands, types of bikes or the technicalities of bike ownership seemed minimal throughout the qualitative sample and there was no overall correlation between social class and type of bike owned. This suggests that the majority were what Davies et al (1997) refer to as 'fairweather' cyclists. Although the terms leisure cycling and Mountain Biking are often used interchangeably, 41% of all leisure cyclists probably or definitely would not consider cycling on rocky or rough ground, though the diversity of the leisure groups is shown by there being 42% who probably or definitely would cycle on this terrain.

A number of respondents mentioned that the 'craze' in mountain bikes had influenced them in their choice of bikes and in the amount and type of cycling they now did. People liked them because they were 'more comfortable' to ride than 'racers' and made cycling easier as they had more gears. They also gave people the option of doing 'off-roading'. Mountain bikes did not seem to have made cyclists out of non-cyclists but got lapsed cyclists back on a bike, thus restoring the cycling habit.

The importance of the Mountain Bike can be seen in Table 1. The fact that only 15% of the control group (and then excluding the 61% who do not own any bike) have a mountain bike may be partially explained by differences in age and sex, but might also suggest that for this group the mountain bike 'fashion' passed them by and they never realised the attraction that others have for this type of cycling. Further evidence of this comes from the finding that only 36% of the control group think leisure cycling had or would increase their enjoyment of cycling, compared with 70% of utility cyclists (and 89% of those on the High Peak Trail). This is an important finding, as there is unanimous agreement that enjoyment of cycling is a prerequisite for utility cycling, but it appears the control group do not envisage cycling as being as enjoyable as those who already do it.

Table 1 Type of bike owned

Group	*Mountain bike %*	*Other bike %*
High Peak Trail	85	15
All leisure users	70	30
Utility users average	53	47
Control group (not regular cyclists)	15	85

3 Background to cycling/cycling history

At any one time there might be particular circumstances that will inordinately influence cycle use. It is therefore revealing to ask not just about activity at a single point in time, but to enquire about cycling history. Surveys showed that utility cyclists were the most likely (54%) to have remained with their bicycle through childhood and into adult life. This contrasts with nearly 80% of the pure leisure cyclists on the High Peak Trail who had given up at some stage and then re-started.

In the group discussions and depth interviews it was possible to examine in more detail the influence of this cycling history, and in particular to assess the part that leisure cycling plays during different stages of the life cycle.

3.1 Childhood

Cycling was an integral part of all respondents' childhoods. All (both in the groups and in the individual interviews) had owned cycles when they were small children (2 years old onwards). Nearly all had positive recollections of their childhood involvement with cycling. They remembered cycling as a source of fun and enjoyment ('messing about in the neighbourhood'), as an opportunity to socialise with their peers ('cycling around in a gang'), and as a context for family outings ('going for picnics as a family'). None spontaneously mentioned having used their bicycles for utility reasons during their early childhood (though a minority would later cycle to and from school).

Many respondents specifically remembered the bicycle as the means by which they ventured, for the first time on their own, beyond the confines of the house and garden. Perhaps this goes some way towards explaining why as adults, respondents tended strongly to link cycling with notions of escapism and freedom.

For some respondents, recollections of cycling as a child were very similar to their current perceptions of cycling. For them, cycling was still an activity from which enjoyment could and should be derived, and one best done in the company of friends or family. Similar findings were reported in earlier research by TRL (Finch & Morgan, 1989).

3.2 The break from cycling

The majority of the respondents in the qualitative research who had cycled during their childhood had a break from cycling as a consequence of a change in lifestyle or circumstances.

The transition from junior to secondary school often involved cycling being interrupted for functional reasons: school was too far away, nowhere to keep bicycles at school, etc. In winter time, when later school hours often meant going home in the dark, parents' fears were twofold: the roads themselves would be more dangerous to ride on at night (practical) and the child would be vulnerable to attack on a bicycle after dark (attitudinal view of society).

A minority claimed to have stopped cycling to school better to fit in with the student environment. Seeing that the older secondary school students never cycled to school and urgently wanting to be a part of that peer group, they renounced their bicycles and began using public transport instead. At least half of all the respondents had given up cycling in their mid-late teens because it did not correspond with their peer group activities; 'it wasn't cool'; 'it wasn't grown up; you thought of it as a kid's activity'. In effect, cycling was viewed as a phase, an activity that was appropriate to a particular time in life, but was eventually grown out of. A stage was reached where activities were centred around maintaining a certain status and projecting a certain image for the opposite sex: cycling did not contribute to this.

3.3 The return to cycling: quick returners/consistent cyclists

Some of the qualitative research respondents had either returned to leisure and occasional or regular utility cycling in their early twenties - or had never really given up cycling. These people were a minority, mostly male and in manual employment. By the nature of their occupation they did not have to 'dress up' for work, since they had either uniforms or overalls, or their workplace had shower facilities.

The attitude from these respondents was quite clear: a cycle was an economical, non-pretentious and convenient means of transport. Because of their generally lower level of income, these respondents had come to rely on the bicycle as one of their main modes of transport. Typically they would use their cycles to commute and sometimes to visit friends and families.

However, as incomes increased, the car became affordable and displaced the bicycle as the more 'logical' mode. Some car-owning respondents cycled for leisure purposes but others, particularly those who were married with children, did not feel they had time to devote to leisure cycling. Their spare time was spent either with their families or in social activities such as going to the pub or watching and playing football.

3.4 Returners who lapse and return again

This group of respondents (about 50% of the whole qualitative sample) included men and women. They briefly returned to bicycles when at college or work training for predominantly utility purposes. Their main motivation was to save money and the majority rode cheap bikes that they had bought second hand or had acquired from a relative. It was generally acknowledged that bicycles were readily stolen and consequently the cheaper and more nondescript your cycle appeared, the better off you were. In this environment, once again cycling was the norm as it was the most economical and convenient means of transport. In the main, most did not find utility cycling a pleasure at this time; they found it stressful ('it was a chore always worrying if you'd get there on time'; 'it always felt so dangerous in the rush hour, I never felt safe'; 'it was awful in bad weather') and requiring more motivation and discipline than they really wanted to give. Respondents had not expected to encounter this 'stress' which was discordant with the pleasurable cycling experiences of their childhood.

Having given up cycling upon leaving further education, this group had then rediscovered cycling during their mid to late twenties and had added it to their repertoire of leisure activities. Leisure cycling had played an important part in this process. The rediscovery of cycling was fuelled in part by a surge in the general popularity of mountain biking and in part by the creation of biking routes through parks and in surrounding areas. Some, who had got married and had children during their twenties, turned to leisure cycling as an opportunity for family outings, and a chance for their children to 'get some fresh air'.

3.5 Influence of leisure cycling in encouraging (re)starting

A total of 80% of all lapsed cyclists (91% of those on the High Peak Trail) re-started purely for leisure. This is a highly significant finding and suggests that without the attraction of leisure cycling, many lapsed cyclists might simply not re-start. Combining this with the finding that the main attraction for 67% of leisure cyclists is to keep fit and healthy, suggests that jogging or hiking would have been acceptable alternatives, had they not taken up cycling.

The control group of non-cyclists were asked what type of cycling they thought they would be most likely to take up, if any. An overwhelming majority of 75% said leisure cycling, compared with only 11% who thought they would first take up cycling to work. This has important implications, as the influencing of human behaviour will generally be more successful if done in small, achievable, stages. Encouraging more cyclists to cycle for leisure may be a good first step in encouraging them to cycle for other purposes.

When asked what type of utility trip leisure cyclists would be most likely to take up, the most common quoted reason overall was for the combination of small journeys referred to as 'personal business' with 32%. Second most likely would be cycling to work, with 30%, though this reaches 38% in Birmingham but drops to 24% in the High Peak Trail.

A possibly more accurate impression of the importance of leisure cycling can be obtained from the revealed behaviour (rather than the stated preference) of those who are now actually cycling for utility purposes. Of the utility cyclists who gave up cycling and then re-started their main reason for re-starting was almost equally divided between leisure (38%) and commuting (42%) suggesting that the promotion of cycling for utility should certainly not be neglected and may be a more direct means of encouraging utility use.

Around half of all cyclists started leisure cycling first, compared with one third who first started utility cycling. The proportion of people who thought that leisure cycling had encouraged them to take up or increase the amount of utility cycling that they do varied according to how they re-started, and between leisure and utility cyclists (Table 2).

Table 2 Proportions of different groups who consider that leisure cycling increased the amount of utility cycling

Group	*Yes, leisure cycling increased utility cycling*
Current utility cyclists average	63%
Current utility cyclists who first started by utility cycling	50%
Current utility cyclists who first started by leisure cycling	76%
Current utility cyclists who first started by leisure cycling (Bristol)	63%
Leisure cyclists average	49%
Off-road leisure cyclists - High Peak Trail	39%

Two of the groups who feel least influenced towards utility cycling by leisure cycling are from opposite ends of the spectrum. Firstly utility cyclists who originally chose the bicycle as a purely functional means of transport and secondly those who drive many miles to the High Peak in order to avoid traffic whilst leisure cycling.

The Bristol to Bath path appears to have been particularly successful in encouraging the switch from leisure cycling to utility use. This green space linking together two urban areas, provides opportunities for both leisure and utility journeys, and is clearly a good model for other local authorities to follow. A survey in 1997 by Sustrans for this research found that in two directions there were 823 adult cyclists on a typical working day, and 2,448 adults and children on a weekend making it probably the busiest cycle path in Britain.

4 Attitudes to leisure cycling

All leisure cyclists were asked whether they would cycle in different circumstances. Although allowance must be made for the self-reporting of a hypothetical case, some useful information is revealed. 33% of all cyclists wouldn't (definitely or probably) cycle when the weather is cold or wet (confirming the definition 'fair weather' cyclists used in the report by Davies et al, 1997). However, 65% definitely would cycle on routes of more than 10 miles, and 66% definitely or probably would cycle on routes with steep hills. This suggests that people are willing to accept certain types of 'pain', though only when associated with some 'gain'. Further investigation reveals that leisure cyclists are a divided group, with 25% who definitely would, and 24% who definitely would not cycle in the cold or wet.

The answer to the question 'what do you like about cycling' for all three groups interviewed is shown in Table 3.

For all groups the main attraction of cycling is the benefit to health and fitness. The qualitative sample allows more expansion on exactly what is meant by this. Actual fitness was not on its own a priority. Most mentioned that they thought leisure cycling was probably healthy, but stressed that they did not cycle for this reason; they cycled for enjoyment pure and simple. There was no driving motive to cycle for 'x' amount of time a day/week for health reasons. Moreover paths to cycle on were not chosen on the basis of how much physical exercise they would provide, but rather according to how pleasantly bucolic the scenery would be.

Table 3 Things that respondents like(d) about cycling

Reason	*Leisure cyclists %*	*Utility cyclists %*	*Control group (who have ever cycled) %*
Keeping fit/healthy	67	75	65
Fresh air	39	26	36
Seeing the sights	31	15	9
Relaxing	40	18	15
Cheap	9	48	7
Exciting	4	0	0
Spending time with family/friends	14	0	7
Other/don't know	19	14	12

Their motives for leisure cycling were typically 'relaxation' and 'enjoyment'. The nearest they came to a health-conscious attitude were rather vague references to 'filling one's lungs with fresh air'. One respondent, who was seriously committed to health, sport and exercise, had other activities, such as synchronised swimming at near Olympic standard, which she saw as 'exercise' and perceived her cycling as 'pleasure' rather than 'exercise'.

The answer to 'what do/might you dislike about cycling was as shown in Table 4. As with other research of this type by Davies et al. (1997) traffic was the most commonly quoted disadvantage of cycling. This varied with location; those from the busy surroundings of Birmingham being more concerned than other groups, but leisure users still expressing concern, despite having gone to great lengths to avoid meeting motor traffic. According to the qualitative sample, problems came with the cycle paths provided not always allowing continuous access, so they would have to negotiate busy roads, or strange indirect routes through yards and forecourts, as part of their leisure journey. The consensus was that urban motor traffic was inimical to leisure cyclists, and that the noise, fumes and 'hassle' diminished enjoyment. The pleasure came in being able to cycle without fear or worry.

Table 4 What do/might you dislike about cycling

Reason	*Leisure %*	*Utility %*	*Control (who have considered cycling) (%)*
Traffic	33	43 (B'ham=65, Bristol=28)	53 (B'ham=62, Bristol=48)
Nothing	23	12	7
Hills	12	17	17
Weather	11	33	16
Pollution	8	29 (B'ham=50, Bristol=14)	15
Avoiding pedestrians	6	6	0

A small minority of the qualitative group actually liked the 'danger buzz' of riding in traffic. They didn't mind the way cycle routes could alternate between being isolated and then being 'in the thick of the traffic'; they liked to rise to the challenge. These were mainly male, white collar professionals, who also expressed a preference for 'extreme' mountain biking.

4.1 Regional differences

Each case study location demonstrated different characteristics and purposes. The local nature of the paths in Bristol and in Birmingham is evident from the finding that in both cases around 85% had used the path before. The Bristol to Bath path was one of the first leisure cycle routes, and contributed to the formation of the charity SUSTRANS. This may help to explain its apparent fame, with 96% of the control group of non-cyclists in the area being aware of its presence, compared with only 41% in Birmingham (though the name Bristol to Bath is easier to guess than the Rea Valley Route).

Almost half of all leisure cyclists (48%) used the car in association with their current cycle journey, with half of them travelling by car more than 26 miles on round trips. 12% of those using the High Peak trail had travelled a round trip of more than 100 miles by car. The High Peak Trail, though undoubtedly popular, is attracting an elitist clientele, typically consisting of those who have access to a car, and are seeking an antidote to their stressful lives as senior mangers. Many drove their bicycles by car to a favoured rural spot with designated biking trails and then cycled at leisure: 'you want to enjoy your cycling time, not have all the problems of riding out of the town first'. It is not necessarily fair to say that the cycle trail is 'causing' road trips, however, since the aims of achieving fresh air and exercise might otherwise have been obtained from a rambling trip somewhere even further away. Nevertheless, more off-road paths and locating new ones near railway stations may bring environmental benefits.

Birmingham attracted a high frequency of leisure trips, with 48% claiming to make more than 3 trips per week (a standard definition of leisure trips was used in each location). Assuming a slight degree of over-estimation, and a cycling year of 20 weeks suggests that the average cyclist makes 50 leisure trips per year in Birmingham, 30 in Bristol and 20 in High Peak Trail. Many of these were short, local trips: 23% of Birmingham cyclists would probably or definitely not cycle on routes of more than ten miles (compared with only 6% of High Peak Trail users).

The Bristol path has attracted a good mix of leisure and utility cyclists. Users of this path appear to be equally at home on a bike for work or for fun. The local service nature of the Rea Valley Route in Birmingham is demonstrated by the finding that 26% of respondents never do any leisure cycling, compared with only 1% of those in Bristol. Birmingham, has slightly more who started cycling for utility purposes first, but more people in Bristol started leisure and utility cycling at the same time.

The picture that emerges in both Bristol and Birmingham is of well-used, highly-valued, local facilities that encourage short leisure trips whilst also providing a welcome respite from traffic for utility users.

4.2 Converting from leisure cycling to utility cycling

The likelihood of an individual choosing a certain course of action is influenced by their attitude towards that action, and its relative importance to them. Other influences will be peer-group pressure and the extent to which they have control over their actions.

The questionnaire included a two-stage process which first measured the perceived importance of selected requirements for utility cycling, and secondly, asked to what extent leisure cycling helps meet these needs. Table 5 shows the results of this exercise. A numerical value has been assigned to the answers whereby negative numbers represent disagreement, from -5 = slightly disagree to -10 for strongly disagree. Positive numbers represent agreement, with +5 = slightly agree and +10 = strongly agree. The most important contributory factor will be one that people strongly agree is important, and which they also strongly agree has been increased by leisure cycling. Hence multiplying the scores for the two answers gives an indication of what is leisure cycling's greatest contribution.

Table 5 Indicators of factors needed for utility cycling and the contribution of leisure cycling towards these needs

Factor	*The importance of this factor for utility cycling (score out of 10)*	*Leisure cycling has increased this (score out of 10)*	*Total (product - out of 100)*
Enjoyment of cycling (L)	9.2	9.3	86
Enjoyment of cycling (U)	9.4	8.5	80
Confidence in traffic (L)	8.5	2.8	24
Confidence in traffic (U)	4.9	4.9	24
Cycling fitness (L)	7.8	8.7	68
Cycling fitness (U)	5.2	8.5	44

L = Leisure cyclists
U = Utility cyclists

There is a good deal of agreement between leisure and utility cycling on several points. The most important contribution that leisure cycling is thought to make is to increase the enjoyment of cycling. This is also thought to be an important requirement for utility cycling, and hence the aggregate score is highest for this element. Although utility cyclists have less access to a car (60%) than the average (78%), there is still a large contingent who have the option of driving. The importance of enjoying cycling is therefore not just aesthetic, but can materially affect modal choice.

In the qualitative research some respondents mentioned an initial confidence problem: they felt that at first they had overestimated the perceived difficulty of cycling in traffic, compared with what they now consider to be the actual difficulty. Other respondents consistently envisaged the skill level necessary to avoid urban dangers as beyond their capabilities. One of the most significant findings from the questionnaire survey is that leisure cyclists were less sure than others that leisure cycling had increased their confidence in traffic, but they were more convinced that this was an important requirement for utility cycling. The resulting low aggregate score suggests that leisure use is unlikely to help cyclists to overcome their aversion to traffic.

Interestingly, the influence of regular cycling in reducing perceptions of fear is suggested from the finding that utility cyclists downplay the importance of needing to be confident. However, they do think that leisure cycling has helped increase their confidence (so that the aggregate score is the same as for leisure cyclists). Utility cyclists also downplay the importance of being fit, although they acknowledge that leisure cycling has increased their fitness. For leisure cyclists fitness is an important requirement for utility cycling almost equal, but less than, the need to be confident.

The scale where negative numbers represent disagreement down to -10 for very much disagree, and positive numbers indicate agreement up to +10 for very much agree, provides a convenient mechanism for investigating other issues. Thus, for example, the single score for all cyclists when asked about the importance of facilities to promote utility cycling revealed that parking facilities received an overall score of 7.2, though cycle routes scored slightly higher with 8.1.

A total of 57% of all utility and leisure cyclists agreed to some extent that leisure cycling has encouraged them to cycle for non-work trips to local shops or on small errands. This represents a diversion of trips that might otherwise have been made by car. The remainder who did not agree were mainly those, particularly among the off-road leisure cyclists, who reported that their greatest dislike of cycling was 'traffic'. Respondents who had experience of utility cycling in urban environments spoke of the feeling of vulnerability they feel when cycling on roads. The common feeling is that they received little respect from car drivers. Indeed, they claim that car drivers tend to see them as being 'in the way', 'obstacles' that need to be avoided.

The qualitative sample of leisure cyclists said that they would not convert easily to becoming utilitarian cyclists. They would continue to use their car for most journeys, with their cycle as an adjunct, associated almost entirely with pleasurable relaxed leisure activity. All said they would not consider cycling to and from work without having better cycle facilities, particularly to protect them from traffic.

4.3 Facilities for cycling

The importance of cycle lanes to the quantitative sample is shown in the change in attitude towards routes with and without them (though it is possible that some respondents see cycle lanes as a proxy for 'increased safety' generally). A total of 190 people definitely would cycle on a busy route with a cycle lane, but 120 fewer than this would use a busy road without. Similarly 179 would definitely not use a road without a cycle lane and only 43 people definitely would not use that road if it did have cycle lanes.

It is possible that the leisure cyclists' practice of avoiding traffic is helping to preserve their fear of traffic. The influence of familiarity on perceived traffic danger can be seen in the differences between leisure and utility cyclists. While half of all leisure users would definitely not cycle without lanes, half of all utility cyclists definitely or probably would use such roads. This has important implications as it suggests that if people can find some way of gaining experience of utility cycling, then their need for expensive segregation may be lessened. This suggests that existing utility cyclists should be recognised as a socially 'valuable' group.

The facilities thought most likely to help encourage utility cycling showed that more cycle routes were strongly preferred by 67% of all cyclists and 72% of all leisure cyclists. Better parking was next most popular with 40%, then changing and shower facilities with 24%. Local differences were revealed in that 44% of cyclists in Bristol wanted improved security or lighting on the route. A 'hard core' of 13% of leisure users and 34% of the control group insist that nothing would encourage them to cycle for utility purposes.

The qualitative research sample were asked to discuss what improvements were needed to encourage utility cycling. The physical and practical proposals that emerged agreed with the quantitative survey:

1 Improving cycle paths - In Birmingham this implied keeping the paths separate from the car traffic lanes, improving the tarmac and making the routes clearer and more continuous. In Bristol, where cycling paths tended to cross suburban roads and rural areas, the need for main road crossings and for security on the paths were big issues. Adequate lighting, cameras and mirrors at noted danger spots, emergency telephones and shelters (for when the skies opened) were all thought necessary.

2 Employer Contributions - All potential new cyclists said that a necessary prerequisite to considering utility cycling was having access to showers and changing facilities and a designated safe area where bikes could be locked up. The Groups suggested that employers should provide some sort of incentive to encourage cycling to work - a travel allowance, a cash advance for bike purchase, or an allowed time discount for showering and changing.

3 Locking Facilities - Shops and central city areas should provide proper lockable bike racks under the sight of security cameras or guards. All felt that bike theft was now so prevalent that it was often necessary to remove the bike seat and sometimes even the front wheel. Theft of mountain bikes, the preferred choice for leisure cyclists, was reported to be a particular problem.

A less tangible proposal was:

1 A political/mind set change which inhibited the use of the car (by progressively exiling cars from city centres and by higher taxes on petrol). Even among car owners this idea was supported as it would then make cycling to work more socially acceptable, more pleasant, more frequent and no longer a marginal activity for marginal individuals. Once utility cycling was perceived to be a universally approved method of transport then it would be easier to push for the practical changes mentioned above.

4.4 Leisure cycling as a relaxing social activity

The majority of respondents in the groups and from the depth interviews cycled with friends or with family. It was

seen as a social activity, where you admired scenery, chatted, picnicked or stopped for a drink or lunch at a rural pub - an outing with a leisure purpose. However a significant minority also cycled solo - for the peace and quiet and to 'get time to think my own thoughts'. Short local trips, such as in Birmingham, are more likely to involve solitary cycling (37% of all trips). For the High Peak Trail users, only 8% normally cycle alone. When asked if they would consider cycling alone, most leisure cyclists had no major objections, with only 11% of all cyclists saying they definitely would not (and a further 6% probably would not).

More men than women were willing to cycle alone. Some of the female respondents had problems with solo cycling; they did not feel safe if the cycle lanes were too isolated, and would not cycle in parks or the countryside on their own. They felt vulnerable in this situation where they would not in a car. One female cyclist cited the example of Milton Keynes: 'they have lovely cycle lanes there, but they wander off through park land, and through woods and bushes - I'd feel absolutely fine there with friends, but I'd never cycle down them on my own. You could be mugged or assaulted so easily, and no-one would hear you or see you. You just wouldn't feel safe'.

There appears to be a general view that leisure cycling is good not just for the body, but also for the mind. The words and expressions most commonly associated with leisure cycling were 'peace and quiet', 'time to think', 'serenity, you can just drift off', 'away from the rat race, relaxing and being with people without pressure'. On the High Peak Trail, 70% of the sample were middle or senior managerial, and nearly 100% had access to a car. Perhaps not coincidentally a common cited reason for enjoying cycling on the High Peak Trail route was given as 'relaxing' (49%).

4.5 Leisure cycling as an individual choice

One of the key features of leisure cycling that was mentioned several times in the qualitative work is that one has a great deal of control. Leisure cycling allows you to set your own pace. It is not necessary to match cycling speeds with the flow of traffic, or to coordinate departure and arrival times with others' expectations.

The majority of respondents in the qualitative research would cycle not following a regular schedule but 'when we feel like it', and 'only when the weather is good'. Leisure cycling was concerned with freedom and choice. There were no set routes that had to be taken: some had their favourite cycle rides but there was always the possibility of 'going somewhere new', 'finding some place you've never been to, that you'd miss if you were driving around'. This contributes to there being fewer factors that people dislike about leisure cycling, since as one person in Birmingham put it 'if it's going to be a bother for you then you just don't bother'.

All of this choice available to leisure cyclists contrasts starkly with the situation facing utility cyclists, particularly commuters, who face the same route every day, come rain or shine. Most of the respondents in the qualitative research who were long term cycle commuters did so for ease, convenience and cheapness, but several stressed that they had gone to some lengths to recreate the benefits of leisure cycling in their utility trips (although admitting that circumstances were on their side):

- Their journey to work was short, in a quasi-rural environment, away from busy roads.
- They went to work early, before the rush hour, or would choose their time of work arrival, so they did not have to suffer time stress or urban traffic stress.
- If it was too cold or too wet, they took the car.
- If they had other errands, heavy baggage, or any other impediment to cycling, they took the car.

The reasons cited by these utility cyclists as to why they enjoyed commuting with their bicycles were therefore similar to the reasons why leisure cyclists derived pleasure from their leisure cycling. They appreciated the lack of traffic, and the leisurely pace at which they could cycle on their chosen routes. Those whose early morning commuting preceded the rush hour, described that trip as a usually 'peaceful' and 'tranquillising' experience; but the evening journey, where they had to negotiate traffic, was often described as an unpleasant experience.

The desire to have control over adverse circumstances suggests that to persuade people to cycle to work, it will be easier to target occasions that they choose to suit themselves. This could include, for example, trying to cycle just once a week, on a fine summer evening, when there is no need to carry anything or collect children on the way home. One person suggested that everyone should 'make space for the bike' not just on the road, but also in the weekly commuting schedule.

5 Utility cycling

A constant theme in the leisure cyclist interviews was that the traveller's choice of mode is made, quite rationally, according to the needs of the journey. Therefore, where the aim was pleasure and exercise, the leisure cycle was a suitable vehicle. For almost every other journey the car was a more rational choice. Leisure cycling is seen as quite distinct from the need to make utility journeys. It was difficult for some to even consider not using a car for utility trips, even short ones. The reasons they gave for rejecting utility cycling (seen primarily as the journey to and from work) were a mixture of the pragmatic and the social.

The majority of the qualitative sample do not reject the notion of using their cycles to travel to and from work. They agree this is economical and socially responsible. However their experience tells them that there are many practical issues which militate against their actually doing this. For these practical reasons the qualitative sample rejected bicycling to work and felt justified in doing so because they spoke from the viewpoint of being 'a cyclist'.

5.1 Car use

The three sites proved to be good examples of different types of car use. 70% of leisure cyclists on the High Peak

Trail normally travel to work by car, 52% in Bristol and 45% in Birmingham. Typical amongst the responses of the qualitative sample were respondents who, once they were employed, did not cycle to work but used public transport and/or bought a car. A formidable list of advantages of the car relative to the bicycle was quoted including:

- It was difficult and inappropriate to cycle in smart clothes. When creating the pen-portrait of the commuting cyclist, invariably this individual was not wearing a suit. There was a definite dissimilarity between how these respondents viewed themselves (smartly attired,ambitious and professional) and how they pictured the commuter who would ride his bicycle to work ('outdoorsy', athletic, physically self-disciplined).
- Some respondents also felt that cycling to work implied that you could not afford a car. Driving a car to work was a visible measure of success whereas riding a bicycle certainly was not. A minority felt that cycling to work, especially at a middle-management level, would give their employers the impression that they had rebellious attitudes and counter-cultural tendencies - 'It's for poor people, kids, and people with attitudes which employers don't like.'
- On a practical level, many workplaces lacked proper facilities for changing clothes, showering, and storing bikes. There was, moreover, a perception that changing and showering were time-consuming processes that would extend their working day.
- Many had grown too accustomed to the comfort and privacy of the car. It was a space where they could 'relax', listen to the music they wanted to, shout obscenities if they wanted to. They had, in a sense, transformed their cars into a mobile den - they felt they could do anything they pleased within that personal space.

5.2 Opinions of utility cycling

When asked what made utility cyclists take up cycling, around half of all respondents referred to the desire 'to get fit'. As 75% of them now state that this is one of the main things they enjoy about cycling, then we might suppose that this aim has been achieved. Around half (54%) of utility cyclists in Birmingham included being 'cheap' as a reason for choosing to cycle, compared with 43% in Bristol. 16% of those in Bristol have no dislikes at all about utility cycling, compared with only 7% in Birmingham.

When utility cyclists were asked what they dislike, the most commonly mentioned factor was traffic by 65% in Birmingham and 28% in Bristol. This is also the main factor that acts as a disincentive for leisure cyclists and the control group of non-cyclists at around 50% each. It is difficult to draw conclusions from this, as the differences between the views of utility cyclists on different routes are significant. The concerns of Birmingham users (being in an area with main arterial roads) are reflected in their heightened concern about traffic and pollution. That fewer respondents in Bristol than Birmingham dislike traffic may be related to the finding that 70% of those in Birmingham think the route is 'quick' compared with only 26% in Bristol (possibly due to detours that are more attractive, but longer.) There were 22% of those in Birmingham who mentioned 'distance is just right' as a reason for cycling, compared with 6% in Bristol.

5.3 Images of cycling

Group participants took part in picture board exercises where they were asked to select, assemble and comment on various images which they associated with leisure cycling. The images were chosen from style magazines by the researchers, and did not specifically relate to cycling. Pictures, for example, included photographs of different types of cars, sports and fashions.

Although the interviewees were aware that mountain biking is sometimes presented as an extreme sport for those seeking an adrenaline rush, from their own perspective this was a marginal aspect of leisure cycling and largely foreign to them. They did not choose pictures of very young and healthy people wearing latest clothes and top-of-the-range cars to represent the image of leisure cycling. Instead they chose pictures of more ordinary people, of all ages, on a variety of transport. They felt that the individual most likely to leisure cycle on a regular basis would be someone partial to outdoor activities. However the picture was not of a 'sporty' person or a 'health fanatic', rather of someone who liked the countryside and enjoyed 'pottering around'.

The selection of pictures of a rural idyll gave further evidence of the strong association that interviewees make between leisure cycling and natural environments. Leisure cycling had a very 'wholesome' and 'natural' image as reflected in pictures of large, healthy families, as well as natural and fresh food products. The picture boards re-emphasised the notion that over time a regular leisure cyclist was probably someone who would become quite fit, but that this was not the prime objective of leisure cycling.

Leisure cycling was considered to be a very democratic activity. It was a highly accessible pastime, something anyone could do regardless of their age, social background, and more importantly, cycling ability and fitness level. It was in fact felt that leisure cycling only required a minimum of cycling ability and by no means did one have to be a natural athlete in order to partake in it.

Cycling in urban environments was seen as dirty, fume-filled and generally a nasty, unpleasant, unhealthy, stress-filled experience. While leisure cycling was affiliated with natural, open-air, oxygen-rich, 'pure' environments, utility cycling was associated with quite the opposite. Picture board images of utility cycling included sharp steel knives, alarm clocks, and were often in black and white.

A person who cycled to work regularly conveyed an image of being highly motivated, self-disciplined, individualistic and (as far as white collar workers were concerned) in a position not to worry about what others thought of him or her (i.e. could afford to be thought of as eccentric). This person was seen as being on-time and highly organised. Our sample of respondents could not identify with the image they created of that individual. They confessed to often being 'lazy', and 'going for the easy option'.

6 Discussion

Overall, leisure cycling was seen as a social activity that served as a source of peace and relaxation, an opportunity to retreat from the bustle and pollution of urban life. It was most pleasurable when done in rural areas and undertaken at a moderate pace.

The selection of separate leisure and utility research samples has excluded many regular cyclists who cycle for leisure and for utility purposes and make little distinction between them. However, this research indicates that, at the extremes, there exists little common ground between the imagery associated with leisure cycling and that associated with utility cycling. Respondents qualified leisure cycling as a relaxing, bucolic activity best appreciated when in the company of friends and family. No doubt this 'outdoorsy', natural-setting image linked to leisure cycling is in part attributable to the popularity of mountain bikes, designed for off-road use. Mountain biking has made it fashionable once again to cycle in a rural setting (perhaps at the expense of road cycling).

Conversely, utility cycling was perceived, particularly by leisure cyclists and non-cyclists, as dangerous, physically and mentally stressful and requiring a relatively intense self-discipline. What is problematic about this conflicting imagery is that it prevents the leisure and non-cyclist from identifying with the type of individual who would be likely to utility cycle.

In actual fact, the utility cyclists interviewed explained that their journey to work was usually planned to avoid congestion, pollution and all the hazards that leisure cyclists systematically link to utility cycling - indeed that is what rendered their commuting, if not pleasurable, then at least tolerable.

Around half of all the leisure cyclists selected for interview (by a screening question that removed current regular commuter cyclists) had cycled to work at some point in their lives. Many found it an unpleasant and stressful experience. The car was their preferred mode of utility transport. All said that in an ideal world it would be a good and pleasant thing - distance permitting - to cycle to work. However, in the present world they considered there were too many difficulties (associated with urban traffic, danger, fumes and anxiety), some of which were thought to be insurmountable.

What is apparently required in order to facilitate (though perhaps not trigger) the transition between leisure cycling and utility cycling is filling the gap between the differing images that separate these two types of cycling. This implies creating the stress-free aspect of leisure cycling on the cycle routes that lead to business areas. In concrete terms, this could, for instance, involve providing more bike paths and separating them from roads and pedestrian walkways.

To encourage cycling for utility purposes it will be necessary to confront the fear that people have of cycling in traffic. Those who already cycle for utility purposes, and therefore have more experience of cycling with traffic, are less concerned about its dangers. If some means could be found of encouraging people to take up utility cycling directly, the resultant improved perception of safety (and the likely reduction in cyclists accident rates due to greater driver awareness) might increase cycling even on roads without expensive segregation facilities.

Employers could encourage utility cycling by installing the necessary facilities (shower and lock-up facilities), offer financial incentives and other forms of support, but also by emphasising that cycling to work does not clash with the company ethos but is accepted and encouraged (Gardner & Ryley, 1997). A company bike available for a spontaneous occasional cycle home on a warm summer's evening might help to create a leisure cycling type of experience out of a utility trip. Such measures might influence individuals on the 'brink' of converting between leisure and utility cycling - an important target market.

7 Conclusions and recommendations

The key responses obtained during this research are as shown in Table 6. All of the evidence suggests that leisure cycling can play an important part in encouraging utility cycling. In particular, the mountain bike appears to play a key part in encouraging those who had given up cycling as a child to restart. The main findings are as follows:

- Those who have never cycled, and the large group of people who once cycled but then gave up, are more likely to start or re-start for leisure purposes. The most important contribution that leisure cycling is thought to

Table 6 A summary of the key responses

Question	*Group*	*Answer*	*Percentage response*
What type of cycling would you take up	Control (current non-cyclists)	Leisure	75%
		Work	11%
If you gave up, for what type of cycling did you restart cycling as an adult	Leisure who gave up (69% of sample)	Leisure	90%
	Utility who gave up (45% of sample)	Utility	42%
		Leisure	38%
Did leisure cycling encourage utility cycling	Utility	Yes	76%
Has leisure cycling made you more likely to cycle for other purposes	Leisure (Bristol & Birmingham)	Yes	53%
	Off-road leisure (High Peak Trail)	No	60%

make is to increase the enjoyment of cycling. Without this the bicycle might simply not figure in the lives of those who are physically able to ride one.

- Leisure cyclists consider the bicycle a perfectly logical choice for an afternoon in the country. These same people think, for practical reasons including traffic fear, that the car is an equally logical choice for all of their utility trips and see no compelling reason to change this arrangement.
- Leisure cyclists may go on to become utility cyclists. Many existing utility cyclists believe that leisure cycling increased their confidence to cycle in traffic, at least slightly. However, there is no direct link and leisure cyclists who are most afraid of traffic (such as those who have driven to the High Peak specifically to avoid it) are the least likely to switch to utility cycling.
- The majority of utility cyclists have either always cycled or returned directly to utility cycling, not via leisure cycling. This suggests that some people can be attracted directly to utility cycling.
- Compared to leisure cyclists, utility cyclists view traffic as a less important obstacle. This suggests that if people can be encouraged to gain some experience of utility cycling, their fear of cycling with traffic (and hence perhaps the need for expensive segregation) may be lessened. This shows the importance of promoting new, and retaining existing, utility cyclists and considering their needs.
- The popularity of mountain bikes means that many new cyclists have expensive bicycles with easily removable components. This can act as a barrier to these being used for trips to work or shopping centres.
- The use of green spaces in urban areas to provide routes for cyclists can help encourage leisure trips by the local community. They can also attract local short utility trips that otherwise might have been made by car.
- Off-road routes are very popular for leisure and people can drive long distances to use them. This provides relaxation for busy people and the chance to be with the family. This is associated with high car mileage, although part of the attraction (as with alternatives such as rambling) is ‘getting away from it all’.

The recommendations supported or given weight by this research include:

- Promotional activities to encourage the switch from leisure cycling to utility cycling should recognise that one attraction of leisure cycling is that it is done only when it suits the individual person and their individual circumstances at the time. This may mean encouraging cycling to work occasionally, rather than every day.
- There is dissonance between the image of the highly practical utility cyclists and the more relaxed freedom of the leisure scene. In order to reduce this, campaigns should promote an image of utility cyclists that leisure users can recognise as being ‘people like us’.
- Leisure cycling should be encouraged as without it people may never consider cycling at all and therefore have one less alternative to car travel. Leisure cycling should also be encouraged for its health, social and relaxation benefits.
- Utility cyclists appear to be more likely than leisure cyclists to cycle on roads that do not have cycle lanes. Some people will take up utility cycling directly, without first following the leisure route and this should also be encouraged (and existing users valued).
- Off-road cycle paths can encourage utility cycling, but must be provided nearer urban areas or near rail stations
- Unless alternative means are found to allow people to gain experience of cycling with traffic, there will be a need for cycle tracks. These should be extensively provided, be segregated but not isolated, and should include some elements to recreate the attractions of leisure cycling, such as vistas and points of interest.
- As mountain bikes are so popular, cycle parking facilities should provide protection not only for the bike itself, but also for any quick-release components.
- Cycle paths using green spaces in existing urban areas appear to have the most benefits for leisure and utility cycling and should be widely promoted and encouraged.

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Abstract

This research considers the links between leisure cycling, purely for the enjoyment of it, and cycling for more utility purposes, such as to work. Surveys of more than 500 leisure cyclists, non-cyclists and those who cycle to work have been completed along with depth interviews and discussion groups.

The main focus of the work is to understand what are the differences between the perceptions of leisure cycling and utility cycling and to determine how this might be overcome in order to increase the use of cycling for utility journeys. Recommendations are made of the type of facility and promotional means that might encourage more people to move from leisure cycling to utility cycling.

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