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Foreword by Glasgow Centre for Population Health

Improving physical activity and developing sustainable transport are high on political and public health agendas. The promotion of active travel is therefore an important goal for public and private sector organisations. However, potential effects of active travel go far beyond the considerable contribution it makes to health enhancing physical activity. It has a role to play in reducing carbon emissions, reducing road traffic accidents and even producing stronger communities, as studies into the community impacts of road traffic have demonstrated^{1, 2, 3}. Understanding the motivations and pressures shaping why people currently travel the way they do, and what could be done to promote more active travel, is therefore of vital importance to tackling a range of issues that face us as a society spanning obesity, climate change and social isolation.

One of the key areas of interest in commissioning this research was to understand how the promotion of active travel might play out across various subgroups of society with an eye to avoiding further health inequalities in this area. The findings presented here make a valuable contribution to this endeavour particularly in identifying an emergent cultural norm that the health benefits of active travel appear to be widely recognised. However, a widespread knowledge that walking, cycling and using public transport is 'good for you' does not seem to be a sufficient motivation to increase active travel across all social groups.

Our pessimism is informed by existing research exploring the relationship between health knowledge and health behaviour that suggests that knowledge of health enhancing behaviours is insufficient for their uptake. Indeed Macintyre⁴ reports that health promotion alone is unlikely to decrease health inequalities on account of the relative absence of resources that less well off people possess to be able to take action on health promotion advice. Furthermore, the finding that people feel guilty about failing to travel actively suggests a negative consequence for health promotion when available resources and capacities do not allow its adoption.

Active travel perhaps occupies an unusual place in the understanding of how health inequalities are produced as the poorer health outcomes are in one sense shaped by the individual being in possession of a valuable material resource (car ownership and the ability to travel non-actively) rather than its absence. However, two factors confound this, firstly that it is possible in the UK to own a car and still be poor on relative terms, and secondly that the prioritisation of motorised transport has produced environments and urban spaces that are deleterious to the health of both those who travel by car and those who do not. This creates a lose/lose situation in terms of health for both groups when car travel is a societal priority.

For the better off, who have a greater degree of choice over how they travel, the findings point to how both objective and subjective components push travel choice towards less active travel modes. The objective dimensions of infrastructure can also shape the subjective understanding of what modes of transport 'make sense' when weighing up travel choices. The report sets out some

¹ Appleyard D, Lintell M. The Environmental Quality of City Streets: The Residents Viewpoint. *Journal of the American Institutes of Planners*, 1972: 84-101.

² Appleyard B. *Liveable Streets for Schoolchildren: How safe routes to school programs can improve street and community liveability for children*. 2005. CBW Forum Article. National Centre for Bicycling and Walking

³ Hart J. *Driven To Excess: Impacts of Motor Vehicle Traffic on Residential Quality of Life in Bristol, UK*. MSc in Transport Planning Report, University of the West of England, Bristol, 2008. Website publication <http://www.livingstreets.org.uk/news/uk/-/driven-to-excess>

⁴ Macintyre S. *Inequalities in health in Scotland: what are they and what can we do about them?* Occasional Paper 17. 2007. MRC Social and Public Health Sciences Unit. Glasgow

useful recommendations for improving infrastructure for active travel that can facilitate the 'push' necessary for a modal shift by making the active travel choices more sensible and achievable within the existing imperatives of our daily lives.

Nonetheless, such responses can only go so far, as the cultural norms that lead to transport choices are shaped not only by the experience of the transport mode itself (whether it is a pleasant or unpleasant experience), but why we need to travel in the first place and our expectations of how far we can travel daily in a manner that is convenient. Decades of growth in car travel have led to a situation whereby the pace of modern life has been shaped by the speed and flexibility provided by the motorcar. We both expect and are expected to be able travel more frequently and for greater distances in our daily lives, not just to work and back, but to the out of town shopping centre, the leisure centre, to the school or the after-school activity. It is difficult to make these journeys actively, particularly when the distances between each location have increased and are often beyond the boundaries of residential communities. In a world where many feel 'time-poor', the need to make journeys involving multiple destinations in one outing (or 'trip-chaining') can be a pervasive and justification for having to drive.

The report presents some good news in that certain journeys, such as those made locally and those to the city centre can be more easily made through active travel and that there is evidence that those doing this already respond positively to taking the bus, train, walking or cycling. However, continued infrastructural support for these choices is essential for their growth.

The report also provides evidence that for those who already travel actively but not necessarily through choice, the development of urban life, shaped through prioritisation of car travel, can produce experiences of travel that are 'second-rate'. When people have less choice over how they travel this can have as much a social justice as a health implication. In this report, we learn that public transport and active modes of travel can limit the variety of journeys that can be made and the quality of experience whilst making them. Pollution, anti-social behaviour and risk from other forms of transport are key threats identified. Generalised fears of crime and risk in public space combine with the lay-out of urban space to prioritise motorised transport to produce unpleasant walking and cycling experiences.

This report lays out a number of interventions that can increase the likelihood of people travelling more actively. Some refer to modest infrastructural changes such as better provision of cycling and walking routes and information to encourage their use. Others point to changes at the level of culture and values identifying the positive emotional responses active travel modes can evoke. The report rightly identifies that different people will respond to different messages but a concern is that currently making a positive choice towards active travel may always be either a minority choice or a 'choice' made in the absence of alternatives. Developing both physical infrastructure and our collective values so that active travel is not only supported but enjoyed as the form of travel that makes most sense in most situations will require concerted effort across a range of policy domains. Consequently, it should not only be down to bus companies to promote bus travel or to local authorities to promote cycling and walking (although both have an important role to play). Responsibility must be assumed and action taken by agencies and organisations as diverse as businesses, public sector institutions and voluntary organisations in thinking about how they can make the encouragement of active travel for employees, customers and clients central to their planning. The biggest challenge will be ensuring we have urban spaces and accompanying lifestyles in which active travel is the easiest most accessible choice. This report makes an important contribution to understanding how infrastructure and lifestyle currently intersect in contemporary travel choices but we must recognise that there are a broad spectrum of agencies

and decision makers who can influence the necessary changes that need to take place if the promotion of active travel is to be truly successful.

Executive Summary

Introduction

This report presents the findings from a qualitative study of attitudes to active travel in the Greater Glasgow area. The research was commissioned by the Glasgow Centre for Population Health within a wider programme of research around active travel, and conducted by JMP Consultants Ltd in conjunction with Jillian Anable at the University of Aberdeen. The research examines attitudes, values and cultural norms around current transport use and opportunities and barriers in relation to a move to more active modes (modal shift). Current barriers and facilitators to walking, cycling and use of public transport are explored. This research adds value to ongoing efforts to promote healthy, sustainable travel patterns amongst those travelling in and around the Glasgow conurbation.

Methods

Two approaches to data collection were used centred around four locations in the Greater Glasgow conurbation: Braehead Shopping Centre; Southern General Hospital; Glasgow city centre; and Glasgow Fort Shopping Centre. These locations were selected to represent 'real life' journeys that had just been made by participants. The methods were designed to encourage reflection on how and why people currently travel as they do and explore alternative means of travelling.

The first method utilised 'vox pop' video interviews at each location. Recruited participants were encouraged to outline how they travelled to the location at which they were interviewed and the reasons why they both chose to travel that way and ruled out alternative ways of making the journey. The 'vox pop' video interviews were used to produce a short DVD of participants' views.

A second method utilised 'shared focus groups' in which travellers using different modes were invited to discuss their chosen travel mode firstly amongst a group of individuals who travelled by the same mode and secondly with a mixed group of users of different modes.

Participants included a mix of ages, gender and socio-economic status.

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Key Findings

Data collected demonstrated that people travelled by a range of transport modes, shaped by the circumstances of the journey and traveller. In forming journey choice, seven overarching factors or themes were identified that combined to influence mode choice. These consisted of 'objective' factors (pertaining to the available infrastructure and functional attributes of each mode) and 'subjective' factors (emotional responses to that mode). Both factors shaped cultural norms around transport choice. The seven themes were:

- Convenience
- Time
- Cost
- Sociability
- Habit
- Information

- Personal security.

These were demonstrated in the following ways:

Convenience

The idea of convenience was an important factor in decision making around modal choice. Convenience as an idea was shaped by perceived time-savings, reliability and sense of control. Consequently, the perceived sense of convenience afforded by the car generated strong preferences toward it. However, for others, ideas of convenience encompassed other preferences such as less stress and greater relaxation as a result of not driving. In such cases, bus travel and walking were more convenient modes.

Time

The factor of time had considerable overlap with perceived convenience regarding bus travel which compared poorly over the car, particularly when perception or experiences pointed to slow, convoluted routes, infrequent services or poor reliability. This also meant walking fared badly with one notable exception for congested situations (eg the city centre) where some participants reported walking the last few stops when travelling to the city centre by bus.

Cost

For those who chose to leave their cars at home on certain occasions, the cost of taking a car into the city centre, with associated parking costs was mentioned as a push factor toward other modes. However, it was also recognised that bus travel could be expensive for those on low incomes.

Sociability

All seven factors influencing modal choice have objective and subjective elements but the theme of sociability demonstrates how preferences are not universally experienced. For some, the privacy of cars underpinned its sociability and for others, anti-social behaviour in public space was a barrier to active modes (see also Personal Security). Some, however, welcomed the social contact experienced on buses and saw it as an attraction of that mode.

Habit

Many revealed that their mode choice came out of habit, as simply 'what they do'. The report authors find this of interest as in similar studies there is often a lack of consideration that reasonable alternatives could be available. The idea that using a car is simply a habit people have got into undermines the idea that people are making rational decisions for every journey.

Information

There was evidence that availability of information can be a barrier to public transport use (particularly buses), walking and cycling. For buses, there was evidence of confusion around the sheer number and complexity of services, often run by numerous bus operators. For some destinations, people were unaware of how they would walk or cycle there safely. It seems that when people do not utilise active modes, the knowledge and confidence required for their use can be lost.

Personal Security

Perceptions of safety was a barrier to all forms of active travel. Some of these fears reflect broader concerns with safety in public spaces (such as on buses and walking) but safety risks posed by other traffic and pollution could feature as barriers for walking and cycling also. Cycling on pavements was one notable strategy cited as a response to risks posed by traffic.

An example of how themes combined to establish multi-modal patterns was in that for those who did own a car, travel to the city centre in particular was often undertaken on public transport. This was often to avoid parking costs and difficulties, and also due to high levels of traffic. For other study locations however, car owners were likely to drive, unless they had time and wanted to travel for free (those qualifying for free bus travel), or were motivated by health or cost concerns to walk or cycle. Another exception was the Southern General Hospital, where, due to a perceived lack of parking space and stress of trying to park, public transport was often used, or lifts from friends obtained. Non drivers often got lifts from friends, or used public transport to travel.

Key findings around attitudes to active travel modes

Walking in Glasgow

On the whole, walking was regarded positively with evidence that its health benefits were becoming a widely held cultural norm. Health benefits clearly acknowledged included weight loss, 'fresh air' and 'gives you more energy'. It was also generally seen to be less stressful than other modes and could 'make you feel good about yourself'. There were strong feelings of guilt for some people linked to not walking, and likewise, general disgust for other people taking the car for very short journeys. Another factor was the cost advantages walking offered with free modes of transport being seen as attractive. Some also cited the time savings but many perceived other modes, particularly the car, to be more time advantageous.

The most significant barriers to walking were the amount of time it takes (although for some congested areas in the city centre it was also the quickest), and the weather. The majority reported that they would be happy to walk if the weather was reasonable, if they had a friend with them, etc, but in reality were unlikely to do so without a significant motivator (such as wanting to lose weight). It should also be noted that many of the walking journeys discussed in the research were conducted because there were few alternative options to walking. Those living close to the city centre or travelling with a pram did not feel they could use buses easily.

Cycling in Glasgow

Very few of the participants in either the focus groups or the 'vox pop' interviews cycled but, like walking, cycling was generally seen as a healthy activity. Out of all modes, cycling elicited the most polarised views, particularly between those that did and did not cycle. The greatest barrier to cycling was the perceived road safety risks. Due to this, some understood why people would prefer to cycle on the pavement.

It was generally felt that there were not enough safe cycle facilities available, with many participants acknowledging a lack of awareness about the safest routes to take. Other key barriers included fear of cycle theft, inclement weather, lack of storage space at home and lack of showering facilities at the workplace. Fear of theft was an important issue and revealed how cycling is a mode influenced strongly by social norms; there was a perception that many localities were simply not the types of places in which much cycling could take place easily.

Bus travel in Glasgow

Public transport use was almost synonymous with bus use in the destinations where the research took place. Many different views on bus travel were recorded – one person's motivating factor such as socialising with other passengers was another person's barrier to bus use. Also there were differences in the perception of costs; expensive for a family, good value, or free. The requirement to plan journeys more specifically before travelling was mentioned as a barrier to bus travel, and the difficulty of travelling by bus with a pram in Glasgow was also highlighted, forcing many mothers to walk for journeys undertaken.

Two key issues raised regarding bus services in Glasgow were firstly that the quality of service provided by some of the drivers was poor and secondly, that the sheer number of different bus providers led to congestion, dangerous driving resulting from competition for passengers, and confusion among passengers wishing to find a particular service. The competition for passengers by drivers and the congestion caused by too many buses was a particular issue raised regarding travel in the city centre. Bus service levels were obviously lower for other study locations, but were generally felt to provide a good service. Two points of exception to this were that many of the buses at the Southern General stopped some distance away from the hospital, requiring walking through a 'tunnel', and many visitors to Fort were not able to get a direct bus to Fort, having to change services that encouraged them to drive their own cars.

Recommendations

Three groups of recommendations are presented in the report relating to

- Specific areas of policy or infrastructure improvement
- Motivations for mode choice and encouragement of modal shift
- Areas for further research.

Recommendations for policy intervention and infrastructure improvement

Numerous recommendations are made in relation to the perceived lack of information and low user confidence in using buses, cycling and even walking. The recommendations include;

- Improved information provision and route finding for all active modes including bus services, cycling and walking. As with many of the recommendations, this would require partnership between organisations rather than one single body taking responsibility. Local Authorities, Paths for All and Cycling Scotland are suggested.
- Stronger marketing of routes and services rather than simply relying on travellers gathering information from city centre bus stations or using the internet. The internet is least available to those who are or could be users of public transport.
- Production and improved distribution of Green Travel Maps providing information on cycle routes, walking, parking, bus served roads and route numbers, bus stops etc.
- Monitoring and extension of Personalised Travel Planning.
- Training to increase confidence and awareness of using active travel modes.
- Bus priority and service scheduling and regulatory reform to 'reverse' some of the problems resulting from 1985 transport Act which deregulated bus services outside London.
- Using parking policy to discourage car use and as encouragement to active modes.

- Measures to address personal security fears such as putting video cameras on buses. Street-lighting and safer waiting places for public transport use.

Targeted measures for changing motivations and values

The report outlines the most prevalent norms and attitudes uncovered in the study to help design marketing and promotional messages. Key messages could be developed around the following attitudes and norms;

Time savings

Information to address misconceptions about the relative time differences between active travel modes and car use. Additionally, showing how active modes can save time by using travel time for multiple purposes, for example cycling replacing going to the gym, working on trains, reading on the bus, etc.

Targeting individual bus users may not be sufficient to changing cultural norms around time use. We expect to be able to make multiple journeys, at certain times over certain distances on our congested roads. Lowering expectations of journey time or indeed the need to travel at peak times would require cultural shift and the support of employers.

Cost

Information encouraging reflection on parking and other associated costs with motoring. Cost of parking has been revealed as a key motivator to encouraging modal shift and in this regard can be seen as successful.

Sociability

There was evidence that the sociability of public transport, especially buses may resonate with older people.

Image of the bus

The evidence suggested that many aspects of bus travel were seen as “second rate”. Aspects that are within the power of bus companies to address include driver training to combat perceptions of “rude” or unfriendly drivers and the cleanliness of buses. However, the inferior nature of the bus as a mode of transport is also shaped by wider societal travel preferences towards convenience, control and speed. Changing this image would require changing cultural norms that inform subjective responses to bus travel as well as changing the objective factors. Approaches could include encouraging reflection on sustainability of current expectations of convenience.

Safety and risk

Care and consideration should be given to providing accurate and constructive information about safety in public space. Again, fears about using public space are widespread in culture and measures such as CCTV and lighting can only go so far. Indeed, they may increase the perceptions of risk for particular individuals.

Attitudes to health and wellbeing

There was a strong normative belief that active travel was ‘good for you’ encompassing both physical characteristics (weight loss and fitness) and a ‘feel good factor’. The flip side of this was guilt and social pressure to avoid short car journeys which were seen as evidence of ‘laziness’.

Lifecourse approaches

Life transitions (between primary and secondary school, education and work, having a family, retirement) provide junctions where existing habits can be broken. Information at these key moments can lead to the adoption of alternative choices.

Further Research

The findings point to gaps in existing knowledge that may cast light on how active travel could be encouraged. Further exploration of perceptions of travel time, segmentation of mode uses to develop tailored messages and how a cycling culture could be grown (potentially with help of existing converts) are suggested.

1 Introduction

- 1.1 JMP Consultants Ltd was commissioned by the Glasgow Centre for Population Health to undertake innovative qualitative research examining attitudes, cultural norms and values around modal shift in and around Glasgow. GCHP wished to explore current barriers and facilitators to walking, cycling and use of public transport in and around Glasgow in order to add value to ongoing efforts to promote healthy, sustainable travel patterns. This final report outlines the findings of this qualitative research examining attitudes to active travel in Glasgow, and assesses and explains both subjective and objective barriers and facilitators to the use of alternatives to the car among adults in Greater Glasgow. The report will help to better understand the importance of cultural norms and values around current travel and transport in Glasgow, setting out a series of recommendations for targeted promotion of alternatives to the car which have resonance with the lives of the diverse population of Glasgow.

Research Context

- 1.2 Over the last 30 years, the private car has become the dominant mode of travel preferred by society.⁵ There is increasing evidence of the negative health impacts of over reliance on the car, including loss of fitness and weight gain.^{6,7}
- 1.3 The Scottish Government is committed to improving health in Scotland. In the report 'Better Health, Better Care: Action Plan' which set out a vision for the NHS in Scotland, collaborative work to provide practical, safe and pleasant opportunities to increase walking and cycling is identified as crucial to increasing physical activity.⁸ Other strategies outline the importance of walking and cycling for creating a sustainable society and call for good quality open spaces and streetscapes to encourage more sustainable forms of travel.^{9,10} Practical guidelines are provided in 'Scotland's Transport Future: Guidance on Regional transport strategies' stating, '*we favour public transport, walking and cycling because they are safe and sustainable*'.¹¹
- 1.4 In October 2007, the Foresight Report 'Tackling Obesities: Future Choices' was published by the UK Government Office for Science.¹² Key issues highlighted in the report are summarised below:
- Most adults in the UK are already overweight. Modern living ensures every generation is heavier than the last – 'Passive Obesity'.
 - The obesity epidemic cannot be prevented by individual action alone and demands a societal approach.
 - Preventing obesity is a societal challenge, similar to climate change. It requires partnership between government, science, business and civil society.

⁵ Department for Transport website. Transport Statistics. <http://www.dft.gov.uk/pgr/statistics>

⁶ Bassett D, Pucher J, Buehler R, Thompson D, and Crouter S. Walking, Cycling, and Obesity rates in Europe, North America, and Australia. *Journal of Physical Activity and Health*. 2008; **5**(6):795-814.

⁷ Davis A, Valseccia C, and Fergusson M. *Unfit for purpose: How car use fuels climate change and obesity*. 2007. Institute of European Environmental Policy, London

⁸ The Scottish Office. *Better Health, Better Care: Action Plan*. 2007. The Scottish Office, Edinburgh.

⁹ Scottish Executive. *Choosing Our Future: Scotland's Sustainable Development Strategy*. 2005. Scottish Executive, Edinburgh

¹⁰ The Physical Activity Taskforce. *Let's Make Scotland More Active: A Strategy for Physical Activity*. 2003. Scottish Executive, Edinburgh.

¹¹ Scottish Executive. *Scotland's Transport Future: Guidance on regional transport strategies*. 2006. Scottish Executive, Edinburgh

¹² Government Office for Science. *Tackling Obesities: Future Choices – Summary of Key Messages*. Department of Innovation Universities and Skills: HMSO, 2007. <http://www.foresight.gov.uk/Obesity/20.pdf>

- 1.5 Transport is substantially implicated in the Foresight Report in contributing to 'obesogenic environments' in which 'healthy choices' are not 'easy choices' because of existing perceptions and habits where the car is the normative mode of travel.
- 1.6 Previous research has explored the use of tailored approaches to change travel behaviour. In the late 1990s, Mutrie and colleagues conducted a randomised control trial to evaluate the effect of an intervention involving the use of written interactive materials (the "Walk in to Work Out" pack) to encourage commuters to walk or cycle during the journey to work.¹³ The research found that the intervention group was almost twice as likely to increase walking to work as the control group at six months. The intervention was not successful at increasing cycling. The research team concluded that the environment for cycling needed to be improved before cycling would become a popular option.
- 1.7 Barriers to modal shift persist. Issues such as cost, convenience, time saving, safety, the climate etc still favour private car use. These are not however the only barriers to modal shift. In 2006, Anable and colleagues conducted a review of attitudes to travel.¹⁴ They used social psychological theories to understand the link with behaviour and classified barriers into objective, subjective, individual and collective factors as seen in the table below:

Table 1.1 A Typology of barriers to travel behaviour change¹⁴

INDIVIDUAL SUBJECTIVE	INDIVIDUAL OBJECTIVE
<ul style="list-style-type: none"> • Values • Frames • Moral norms/sense of responsibility • Perceived behavioural control • Self efficacy/agency/locus of control • Denial • Instrumental attitudes • Affective attitudes • Identity and status 	<ul style="list-style-type: none"> • Knowledge/Awareness of consequences • Habit • Personal capabilities • Actual resource constraints
COLLECTIVE SUBJECTIVE	COLLECTIVE OBJECTIVE
<ul style="list-style-type: none"> • Social dilemmas • Group cultures/social norms • Trust in others and in government 	<ul style="list-style-type: none"> • Contextual/Situational factors • Communication and the media

- 1.8 Social norms influence active travel.¹⁵ Whether or not people adopt new behaviours can be influenced by what others do. Another key barrier to behaviour change in general, and modal shift in particular, is habit. Travel behaviour is often frequently repeated, the same mode, same time of day, same destination etc, and therefore once an individual has established a successful means of completing that journey, others need not be considered and the journey becomes habitual.

¹³ Mutrie N, Carney C, Blamey A, Crawford F, Atchinson T, Whitelaw A. 'Walk in to Work out': a randomized controlled trial of a self help intervention to promote active commuting, *Journal of Epidemiology and Community Health*. 2001; **56**:407-412

¹⁴ Anable J, Lane B and Kelay T. *An Evidence Base Review of Attitudes to Climate Change and Transport*. 2006. Report for the UK Department for Transport, London.

¹⁵ Bamberg S, Schmidt P, Ajzen I. Choice of travel mode in the theory of planned behavior: the roles of past behavior, habit and reasoned action, *Basic and Applied Social Psychology*. 2008; **25**(3):175-187.

- 1.9 The car does provide many 'objective' benefits over other modes of travel, thus forming the 'rational choice' for many journeys undertaken. However for many of these journeys, the perceptions of these benefits might not be borne out in reality. Indeed perceived benefits of the private car such as convenience, safety, and cost, can vary greatly in different circumstances in relation to other modes. ^{16, 17}

Non car users

- 1.10 Many individuals conduct journeys utilising modes other than the car. Indeed many conduct all their journeys by alternative modes, either due to limited access to the car, or through free choice. Different sub-groups of the population are likely to have different experiences of various travel modes.¹⁸ In particular socio-economic group, and income level will affect an individual's level of access to the car. Different sub-groups will also respond differently to strategies to encourage active travel on account of differences in need, perceptions and experiences of risk and safety and access to resources. ^{16,19}
- 1.11 In order to examine these issues in the Glasgow context this research explored the travel related attitudes, norms and values of residents in Glasgow and the surrounding area.

¹⁶ Brunton G, Oliver S, Oliver S, and Lorence T. *A synthesis of research addressing children's, young people's and parents' views of walking and cycling for transport*. 2006. Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI- Centre)

¹⁷ Anable J, and Gatersleben, B. All Work and No Play: The role of instrumental and affective factors in work and leisure journeys by different travel modes. *Transportation Research Part A: Policy and Practice*. 2005; **39**:163-181

¹⁸ Stradling, S, Carreno M, Rye T, Noble A. Passenger perceptions and the ideal urban bus journey experience. *Transport Policy* 2007; **14**:283-292

¹⁹ Anable J. Complacent Car Addicts or Aspiring Environmentalists? Identifying Travel Behaviour Segments Using Attitude Theory. *Transport Policy* 2005; **12**(1):65-78

2 Key aims and objectives

2.1 The main aims of the research as defined by GCPH and partners was to explore:

- The development of norms and subgroup values around travel preferences through better understanding as to how and why people currently travel as they do;
- The scope for encouraging growth in alternatives to car travel. For modal shift to active travel to be made and sustained, it must 'make sense' and be easily integrated into the daily lives of those who are making the shift.

The specific research questions identified for examination were:

1. What are the attitudes and norms regarding modes used to travel to various locations in and around the Glasgow conurbation?
2. What are the barriers for accessing each location by particular modes?
3. What are the barriers to the use of specific travel modes amongst those travelling in and around the Glasgow conurbation?
4. To what extent does habit play a role in the modal choice of respondents?
5. Are the attitudes of individuals who travel by certain modes, towards that mode, different to individuals who do not travel by that mode?
6. Does discussion with alternative mode users alter the perception of car drivers towards that mode in a positive manner?

3 Methodology

Overview and Rationale

- 3.1 In a study such as this, it was important to find a way of assessing social cues and peer pressure by using methods which encouraged people's articulation of the direct or indirect pressures they believed influenced their choice of travel. Various barriers identified in Table 1.1 (on page 10) especially those in the 'subjective' category, are not easy to measure. Particularly challenging are issues such as identity, social norms and habit. Qualitative techniques are best placed to explore these issues because they tilt the power and expertise away from the researchers toward the respondent and can allow the respondents to freely identify and articulate their concerns.
- 3.2 Two different methodological approaches were taken to examine the aims as outlined in the previous section. The methodology was designed to be both engaging and encouraging 'free speech', but also to prompt and test people's assumptions and preferences by presenting them with alternative perspectives and solutions.
- 3.3 Firstly, members of the public at four separate locations were invited to participate in brief (approx 2 minute) 'vox pop' video interviews outlining how they travelled to the location at which they were interviewed, and their views on their chosen mode(s) and alternatives available for that particular journey. This method obtained a range of views on travel issues by a range of modes to various locations in Glasgow, highlighting attitudes and behaviours. Findings were summarised through the production of a short DVD.
- 3.4 Secondly, members of the public at the same four locations were recruited to participate in shared-focus groups where travellers using different modes were invited to discuss their travel firstly among users of the same mode, and afterwards with users of a different mode. This was to explore assumptions about using different modes and it was intended that participants would learn from each others experiences.

Study Locations

- 3.5 The original study brief proposed three study locations: Glasgow City Centre; Southern General Hospital; and Silverburn Shopping Centre. These locations were identified in order to collect data regarding a variety of different journey purposes. There was a desire to focus on journeys other than work travel as this had already been studied by others.^{13,20} In addition, the national travel survey has reported that leisure travel is now the single largest reason for travel.
- 3.6 The final project proposal recommended adding a fourth location in order to recruit a greater balance of income groups. Whilst researching travel choices it is important to remember that for some groups the travel choices are limited. Lower income groups may not have access to a car, other groups may not have good public transport services and others may have physical impairments that restrict travel options (SEU 2003²¹). At the project inception meeting, Clydebank Shopping Centre was identified as a suitable additional location.
- 3.7 Silverburn Shopping Centre proved unwilling to participate in a study examining travel to the site and also advised that payment of a fee would be required to host the research. As a result, Braehead shopping centre was approached as a comparable replacement. Clydebank Shopping

²⁰ Shannon et al. Active commuting in a university setting: Assessing commuting habits and potential for mode change. *Transport Policy*. 2006; 13:240-253

²¹ Social Exclusion Unit (SEU) *Transport and Social Exclusion: Making the connection*. Final Report. 2003

Centre was initially willing to host the research until it was explained that the intention was to undertake video interviews with the public, to which they advised that they have a no filming or photographic policy on site. Therefore Glasgow Fort was approached as an alternative. The centre manager was initially hesitant regarding participation, due to proposed site expansion and travel already proving a contentious issue, with challenges experienced in implementing their green travel plan. However, he recognised that the outcome of the research could provide them with beneficial information, and so permission was given, provided that a copy of the final report was issued on completion of the research.

- 3.8 The four study sites were therefore Braehead Shopping Centre; Glasgow City Centre; Southern General Hospital; and Glasgow Fort.

Vox pop video interviews

- 3.9 A vox pop video interview day was completed at each the four sites identified in the previous section.

Braehead

- 3.10 Vox pops took place on Thursday 22 January 2009 in the upper mall of the centre, between Thorntons and Whittards.

Southern General Hospital

- 3.11 Vox pops were undertaken on Tuesday 3 February 2009 within the out-patients department. Upon arrival and following discussion with the acting ward sister on the most suitable location, filming was undertaken within the main reception area of the building.

Glasgow City Centre

- 3.12 The Events Section of Glasgow City Council gave permission for vox pops to be filmed anywhere on the Buchanan Street pedestrian precinct. On arrival on filming day (Wednesday 4 February), the team chose to be located outside Buchanan Galleries (opposite Buchanan Hotel).

Glasgow Fort

- 3.13 Vox pops were undertaken on Monday 16 February. After reporting to centre management on arrival, the team was advised that filming could be undertaken anywhere within the site, although footfall outside Boots and Next is generally highest. Filming was subsequently undertaken outside a 'Next' store during the morning, and in the afternoon moved to the central concourse where food outlets are located.

Participant Recruitment

- 3.14 At each of the four sites a video location was identified as outlined above, and manned by two staff members, with a third market researcher approaching members of the public and inviting them to participate in a video interview or focus group. Instructions were given to recruit a mix of participants including a range of genders, ages, ethnicity, and modes of travel. All participants completed a consent form providing some of their details such as age, gender, postcode and occupation, and confirming that they were happy to be filmed and for the film to be used publicly or on the Web. Participants' email addresses were also requested in order that they could be informed of study findings. However, many did not have an email address and did not express an interest in being informed. The recruitment approach taken appeared to work well, with no difficulty in recruiting participants for video interviews.

Interview Schedule

- 3.15 Each video interview lasted approximately 2 minutes. The original approved interview schedule composed of three compulsory question topics for each participant, and a number of additional optional questions depending on requirements regarding how talkative each participant was. This was due to the short intended nature of the vox pop interview, and the flexibility that would be required. The compulsory questions requested detail of the participant's journey on the day ('tell us about the journey' – mode used, length etc); reasons for travelling in this way; and reasons for not choosing alternative modes such as walking or cycling.
- 3.16 Supplementary questions included: How did your journey make you feel?; Do you normally travel by this mode?; Do you regularly travel here?; What could have improved your journey to get here today?; Could you travel here by any other modes?; What did you like about your journey today?; What did you dislike about your journey today?
- 3.17 Following the first interview day at Braehead it was felt that a more precise interview schedule was needed to encourage more detailed responses from participants. Accordingly the questions outlined above were expanded to form the final interview schedule.

Participants

- 3.18 105 members of the public completed a vox pop video interview. Just over 50% of the vox pop participants were unemployed and retired, which is unsurprising given that the recruitment took place on weekdays. Participants representing a good range of ages, genders and locations were recruited to the study (see Table 3.1 below). 44% were male and 56% were female. 50% were in full time employment, 26% were retired, and the remainder were a mix of students, unemployed, and homemakers. On the day of the interview 40% of the interviewees had travelled by car as driver, 12% by car as passenger, 26% by bus, 14% had walked, and 10% had taken a train.
- 3.19 There had been some concern that older people might be less willing to appear on film than younger people who were more familiar with the media. However this concern appeared unfounded as Table 3.1 shows that participants were fairly evenly split between the five age categories.
- 3.20 It was noted that ethnic minority groups appeared to be less willing to appear on camera and participate in the research. This included the majority of the Polish and Asian members of the public approached. An additional concern raised by potential participants was that the research team might be from the unemployment office, and intending to 'catch them out' regarding their benefits, which prevented some from participating. These factors have been taken into account in production of the final analysis and report.

Table 3.1 Vox Pop Participants

Gender	Age category	Mode travelled today	Economic Activity
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	Male	Female	18-25	26-35	36-45	46-60	61+	Car as driver	Car passenger	Bus	Walk	Cycle	Train/ subway	Other	Employed	Retired	Student	Housewife	Unemployed	Not Entered	Other
Total	46	59	28	15	16	21	23	42	13	27	15	0	10	1	51	24	16	5	9	1	0
Percentage	44	56	27	14	15	20	22	40	12	26	14	0	9	1	49	23	15	5	9	1	0
Braehead	10	14	7	3	4	4	7	13	3	8	1	0	0	1	10	7	4	3	0	1	0
Southern General Hospital	13	15	4	3	3	10	8	12	6	5	3	0	1	0	13	9	2	0	4	0	0
City Centre	15	13	9	5	4	3	4	5	3	7	5	0	8	0	12	5	6	0	5	0	0
Glasgow Fort	8	17	8	4	5	4	4	12	1	7	6	0	0	0	16	3	4	2	0	0	0

Analysis

- 3.21 The vox pop video interviews were analysed using thematic analysis. Each vox pop video interview was examined and the key issues raised within it noted. As subsequent interviews were viewed, repetition of issues was noted resulting in a table highlighting the issues raised in each interview, and the frequency at which each of the issues were raised. Throughout analysis these issues were reviewed and grouped into themes. These themes formed the basis of discussion of the findings, and production of the DVD.

Focus Group Interviews

- 3.22 The second methodology employed was shared-focus groups. Two separate focus groups of different mode users were held simultaneously (eg one of car users, one of bus users), examining attitudes towards various modes of travel. The two groups were then brought together (a shared-focus group) to discuss their various viewpoints; learn from each others experiences; and directly 'confront' perceptions that one mode user had about another mode. This was in order to examine norms and identities within groups of particular mode users as it was hoped that bringing separate groups together in this way might raise issues of identity. Six of these shared-focus groups were conducted.

Participant recruitment

- 3.23 All vox pop participants were invited to participate in a focus group, which took place approximately 2 weeks after the vox pop interviews. The researcher invited members of the public at the vox pop days to participate in either a vox pop interview, a focus group, or both. In addition to this, some supplementary participants were recruited. All participants made journeys to one of the four identified locations, and made those journeys in the modes outlined in Table 3.2 below. Again a mix of ages, genders and socio-economic status was sought. All participants received a £20 Boots, Argos or Borders voucher for their time.

Table 3.2 Focus Group Details

Group Number	Location	Modes
1	Braehead Shopping Centre	Car – Bus
2	Southern General Hospital	Car – Bus
3	City Centre 1	Walk – Public Transport
4	City Centre 2	Car – Public Transport
5	Glasgow Fort Shopping Centre 1	Car – Walk
6	Glasgow Fort Shopping Centre 2	Car – Public Transport

3.24 Six shared-focus group interviews were completed with residents of the Greater Glasgow Area. One each was completed for Braehead and Southern General, and two focus groups each for the City Centre and Glasgow Fort, due to the greater likelihood of travel by a range of different modes to these sites. Glasgow Fort is located adjacent to a residential area increasing the likelihood of people walking to the site.

3.25 It was recognised that individuals are often multi-modal (Duddleston et al. 2005²²), using many different modes of travel. Participants were therefore classified for focus group purposes according to the main mode they used to travel to the location on the day of recruitment, unless they indicated that this was a one off and not a regular choice of mode.

Interview Procedure

3.26 Each focus group was held either at the location where recruitment took place, or at a venue nearby in order to facilitate discussion of travel to that location, as the journey would be fresh in participants' minds enabling discussion of 'my travel today' rather than having to recall back some weeks. All focus group sessions were audio recorded.

3.27 On arrival at the venue participants were given a brief introduction to the focus group session as a whole group before separating into two separate groups according to mode of travel. The interviews proceeded as outlined in the interview schedule. This was considered to cover the issues as required. The interviews took place in two parts: 1: Two separate groups; 2: groups brought together, shared-focus group.

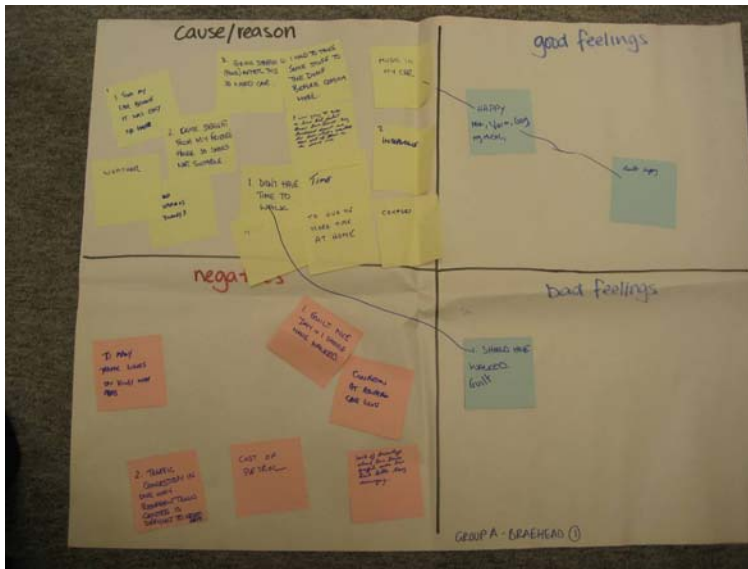
Part one

- Participants were asked to describe their journey on the day of recruitment, give an idea of 'how typical this was' and begin to articulate their reasons for this choice of mode.
- The degree to which their mode choice was felt to be habitual (done without thought and frequently repeated) was also discussed.
- A 'cause and effect' diagram was then drawn up by encouraging participants to write on post-it notes itemising the various issues (positive and negative) leading to their choice of mode to the

²² Duddleston A, Hewitt E, Stradling S and Anable J. *Public Perceptions of Travel Awareness - Phase 3 Final Report*. 2005. Scottish Executive Central Research Unit, Edinburgh

destination at which they were recruited and the 'effects' of this choice (e.g. 'it makes me feel happy/powerful/frustrated'). These were assembled on one large piece of paper as participants discussed the issues raised. An example of a cause effect diagram is shown below.

Figure 3.1 Picture of a cause-effect diagram



- The groups were then asked to repeat the exercise but for the travel mode of the other group they would be meeting in the second half of the session (i.e. car users were asked to itemise the reasons for using a bus and the consequences of bus travel to a particular destination).

Part two, shared-focus group

- 3.28 Two modal groups were then brought together, and the cause effect diagrams were used by the moderator in order to generate a structured discussion between the groups about some of the 'goods' and 'bads' of different modes. For instance, bus users were able to respond as to whether the car users' perceptions of their mode of travel were indeed correct. This session ended with an assessment of what had been learnt from talking to a group of users of a different mode.
- 3.29 A planned third stage of participant debrief, again in two separate groups, did not take place as group members were largely similar in their views so limited new information was uncovered and shared in stage two, therefore discussion in a third stage would have simply been repetition of issues discussed in stage 1 and 2. This issue is discussed in more detail in Appendix A.

Analysis

- 3.30 Following each focus group the moderators made notes of the key issues that had emerged. The audio recordings were then listened to, and more detailed notes of the issues emerging and quotes of interest taken. Many sections of particular interest to the research were transcribed in full in order to facilitate a more detailed analysis.
- 3.31 Thematic analysis was again employed, whereby the issues of relevance to the participants, in particular the barriers to the use of more active modes of travel, were examined. This analysis most neatly falls into segregation by modes discussed (eg reliability of public transport, parking issues for drivers), although certain issues (such as personal safety or sociability) exist across different modes.

Participants

- 3.32 A total of 44 residents of the Greater Glasgow area participated in the shared-focus groups. Not every sub-group had the requested 5 participants as not all of those listed on the attendance list arrived to take part. This is not uncommon in focus group research but has nevertheless been taken up with our market researchers. However, the majority of focus sub-groups had at least 4 participants, enough to allow for discussion and a conversation to take place.
- 3.33 Again a good range of ages were recruited. More women participated than men (61% of participants were female), 30% of the participants were retired and 18% were unemployed. This is not unexpected given that the interviews took place on weekdays.
- 3.34 The majority of participants of the focus groups already had a good understanding of a variety of travel modes, and used different modes to travel around the Glasgow area. Therefore a range of experiences were brought to each focus group.

4 Findings

Introduction

4.1 Both the vox pop video interviews and focus group interviews raised similar issues in terms of attitudes towards travel. Therefore the findings from each methodology are discussed together to avoid repetition. The key themes emerging from the thematic analysis of the short video interviews are outlined first as these themes highlight the issues that were at the forefront of participants' minds during their short two minute interview. The structure of the remainder of the findings section is as follows:

- Travel to the specific study locations
- Attitudes, norms, barriers and motivators regarding modes used for travel in Glasgow
- Conclusions related to the original research questions
- Recommendations for targeted messaging and policy interventions

Key themes highlighted in vox pop video interviews

4.2 As detailed in the methodology section each of the 105 video interviews were viewed and the key issues emerging logged in a table. The issues raised were then combined into themes, as outlined below. There is limited opportunity for elaboration of these issues from a brief 2 minute interview, therefore the themes identified in this section will be further elaborated upon in the following parts of this findings section, incorporating findings from the analysis of the focus group interviews.

Convenience

4.3 Convenience was by far the most frequent issue discussed in the vox pop interviews, and not just in terms of how convenient car driving was, as might be expected based upon previous research literature. Whilst 29 participants referred specifically to car travel as being convenient, 17 referred to bus travel as being convenient. 5 participants did mention that 'you can just walk there', also implying convenience of walking. Modes tended largely to be used because they are perceived as the most convenient for a particular journey.

Reliability and predictability

4.4 Many issues regarding reliability and predictability of public transport services were raised. Bus services in particular were felt to often be unreliable and subject to delays, unlike train services which more often provided real-time information and were less subject to delays. This led to more enjoyable journeys due to increased predictability. It did however tend to be those participants who had not travelled by bus on the day of interview that reported these issues as important.

Parking and traffic as a deterrent to driving

4.5 Difficulty and cost of finding a parking space could clearly be considered a separate issue from high levels of traffic. However, within the vox pop interviews they were frequently referred to in combination as a barrier to driving into Glasgow City Centre. Participants who normally drove to the majority of their destinations were often happy to use public transport to travel to the city centre.

Health conditions affecting travel mode choice

- 4.6 Various participants (particularly those recruited at Southern General) reported health conditions which affected their mode choice. Walking was limited for 8 of the vox pop interviewees, and is the most obvious mode of travel to be affected by health issues such as back and joint problems. These also restricted public transport use in terms of walking to bus and train stops. Differing health conditions also impacted on public transport use such as claustrophobia affecting subway use, and different joint issues affecting ability to climb up onto a bus as not all have low floors. Health issues also affected driving, with certain conditions precluding gaining a driving licence.
- 4.7 The prevalence of these issues among the vox pop participants was clearly a reflection of one of the study locations (Southern General Hospital), however this is useful to highlight the range of issues affecting active travel choices.

Exercise

- 4.8 A desire to improve health and fitness had encouraged a few participants to undertake active travel such as walking and cycling, however cost and time were generally more important considerations. Weight management was a particular aspect of interest in terms of exercise and keeping fit – some people were more concerned about their weight and appearance rather than their general level of fitness and health.

Travelling for free

- 4.9 Travelling for free was clearly an attractive way to travel. Participants who were over 60 years of age had chosen this mode largely because they received a free bus pass. For those participants without such passes, walking was free, and this was a particular appeal of this active mode.

The weather

- 4.10 The weather featured in discussions. This was likely to have been partly affected by the days on which the vox pop interviews took place – with high levels of snow and ice. The weather affected the mode choice of one or two participants who had travelled by public transport because they could not get their car out of their drive-way. It also significantly affected the enjoyment of a journey with added stress and discomfort from the cold, particularly on public transport, which was generally still running. Walking in the rain was not felt to be fun.

Socialising

- 4.11 Participants' views on the benefits or otherwise of socialising whilst travelling varied. A benefit of bus travel in the eyes of some was the opportunity to socialise and chat with fellow passengers. Others viewed the solitude of single car occupancy as positive, so did not enjoy the social aspect of bus travel. Therefore certain modes were more attractive in terms of level of socialising, depending on individual preferences.
- 4.12 Not all social interaction was positive. Rowdy children and teenagers were often felt to be a problem on buses, and enough of a deterrent to put participants off using them.

Enjoying your travel

- 4.13 Participants also referred to enjoying their travel – explicitly when talking about driving and cycling, and implicitly with regard to walking and train travel. When talking about bus travel, people rarely spoke about enjoyment, but depending on the weather did mention enjoyment in relation to walking, and the chance to sit down and enjoy a coffee if travelling by train.

Travel to the specific study locations

- 4.14 This section examines issues raised by both vox pop and focus group participants regarding each of the four specific research locations. It concentrates on the specific points raised in relation to modes of transport to and from the sites. More generic issues relating to these modes are discussed in the next section.

Travel to Braehead Shopping Centre

- 4.15 Visitors to Braehead had mainly travelled either by car (as driver or as passenger) or by bus, with one avid walker having arrived on foot. All of the drivers in the focus group had at some point in the past travelled to Braehead on the bus, and one sometimes also walked if she had the time. The train/subway was not felt to be an option for journeys to Braehead.

You can't even get a train anywhere near here. This place is in the middle of nowhere, the only public transport option is a bus.

- 4.16 Drivers to the centre had few complaints, other than general traffic in Glasgow.

Every time I come back from Braehead it's always busy so I go to Kingsinch road. I always think that there is a lot of traffic lights. It always looks like a nightmare. It's confusing at the cross lights and people hesitate because the traffic lights are difficult to read, it feels like you have only 100 yards to make your mind up and you don't know you are going the right way. It gets hectic.

- 4.17 A few people who received lifts had experienced parking difficulties, but none of the drivers mentioned this. It may be that compared to other locations in Glasgow, parking at Braehead is good, so regular drivers do not notice a difficulty.

Sometimes when I come with my friend it can take about half an hour by the time you go round all the parking lots to find a space, but luckily sometimes you come here and you are lucky because someone is pulling out of a space. It's kind of bad that way.

- 4.18 Some also discussed driving to Braehead and parking there before taking the bus to other locations, as there was felt to be a good range of bus services from the site.

The buses from Braehead to Paisley are spot on – there's one every 5 – 10 minutes. They run until about 10pm at night.

I can get a bus from here at 10 at night which is handy.

- 4.19 Some routes were regarded as fairly convoluted, and some services did not run in the evening. (The last bus from Braehead to Crookston is around 7pm). Many of the bus users however had very little alternative options for travelling to Braehead if the bus was not running as it would be too far to walk.

If couldn't get to Braehead, would go to city centre, or Silverburn. But Braehead is a nicer centre. You can get anything you want here – that's the draw.

- 4.20 The car users in the focus group were happy to walk or take a bus to Braehead if their car was out of action, although it might not be the most pleasant of trips.

We once walked to Braehead but it took a good hour. It's all roundabouts by the Audi garage so it's difficult to navigate around.

- 4.21 Some discussion was also held regarding cycling to Braehead, with one person resident in Paisley potentially keen to cycle, but not sure about routes.

It would be ideal to cycle from Paisley to Braehead. It wouldn't matter how long it would take, it's still keeping you fit and it's therapeutic. Not sure if there are cycle routes, going through schemes, not on any main roads. I've seen lots of places there's a different colour on the road for bikes. I don't know any places to find cycle tracks I don't know any cycle tracks from Paisley to here.

- 4.22 However one participant thought she had seen some cycling facilities.

I think there is a bike stand just out here you know near Sainsbury's.

- 4.23 Development and promotion of any cycling facilities and routes near Braehead shopping centre might generate some visits by cycle.

Travel to Glasgow Fort Shopping Centre

- 4.24 Again participants recruited at Glasgow Fort had travelled by car, bus and walking. No parking issues were raised, other than the need to pay on a Sunday, although some found the traffic more congested than others. Some felt the area was getting busier.

Come on a Sunday it's cool, coming any other day especially on the motorway it's a dog eat dog out there. I take the bus if I'm in a hurry you still have to pay for parking on a Sunday.

I come to the Fort quite a lot and I find it's quite an easy drive, not too hectic and that.

- 4.25 Those who drove were not likely to visit the Fort without a car as many were deterred by the need to take two buses to get there (for example from East Kilbride). Otherwise, if they could not drive, they would probably go somewhere else, perhaps the city centre.

I would never get the bus to the Fort because I would have to get two buses

If you ever are in East Kilbride there are so many buses that go past me that go to Greenfields, but there are very few to the Fort. Sometimes I just have to give up and walk to the train station.

- 4.26 There was a feeling that attempts were being made to improve bus services into the Fort. For example, Service 38 was mentioned as going directly into the site.

- 4.27 Those walking to Glasgow Fort raised several issues regarding the local infrastructure, particularly when walking with prams. Those participants with prams were more likely to walk than take a bus, as travelling on a bus with a pram in Glasgow is felt to be difficult.

If the traffic is really busy then the cars park across the green man crossing so you have to move around them. I don't like it if it's busy I'm scared the cars are going to run me over.

It is busy traffic to cross the road is quite bad you have to go back on yourself when you go to the shops to go on the crossing, But it's too busy.

I have a bike but not used it in a while. I wouldn't use it to get to work, but if it was close enough I might. It would take about an hour. There's a back road through Fort shopping centre, but it's too narrow and busy after they built the shopping centre.

Travel to Southern General Hospital

4.28 Study participants had travelled to Southern General by bus, car and on foot. Southern General is clearly a specific location in terms of travel choices on two key counts. Firstly the majority of people visiting the site were doing so for an appointment, so arriving on time was particularly important (employees at the site were not targeted for participation, although were free to do so should they want to). Secondly many travellers to the site had a health condition of some sort, so this also affected travel mode choices.

4.29 The overwhelming response of travellers to Southern General was that parking on site was extremely difficult. You could spend ages looking for a parking space, which could be extremely stressful if you were becoming late for an appointment. This situation meant that many who would otherwise have driven travelled by bus instead (taking an early service to avoid stress of being late for appointments), or those who could get a lift or took a taxi.

When I go there my husband drops me off because trying to get a parking space is difficult.

4.30 Buses to the site were generally felt to be adequate, some more so than others. A few services go right into the site which was felt to be great, but many stop some distance away from the hospital departments, requiring a walk through a tunnel which some participants (older women in particular) found intimidating.

4.31 One participant who generally walked to Southern General (although had received a one-off lift on the day of recruitment) did so because he had little choice.

Where I stay in Govan I have to walk to the Southern General, it's a 10 minute walk. I'm so near yet I have to walk and I can't get a bus there.

Travel to Glasgow City Centre

4.32 For many people (car drivers in particular) travel to the city centre was a specific case which differed from other journeys undertaken. The level of congestion, and difficulty and cost of parking in the centre was repeatedly cited as a deterrent to driving there, and so public transport (bus, train, subway) was used more often. However, at night the car was frequently returned to due to a fear of getting stuck in town, and less traffic to contend with.

4.33 These public transport services were generally felt to be good (on the day at least), however a number felt there were in fact too many bus services available, with competing companies causing confusion over which routes go where, and certain bus companies not having as good quality buses as others. The level of competition was felt to cause safety issues as drivers competed to get passengers on their buses.

There are so many buses on Union Street it's just absolutely grid locked constantly. I remember the last time I was in town and I needed to get on the 23 and I saw a 23

could I find a bus stop for it? I needed a First 23 and I found an Arriva 23 and it was just a nightmare.

The bendy buses are absolutely horrendous, and they are all trying to kill each other off by having similar bus times.

4.34 The buses were in fact often perceived to be the cause of much of the congestion in the centre, in particular on Renfield Street where they were often seen 'nose to tail'. It would seem that there had been recent articles in the local newspapers on this topic (too many buses in central Glasgow), so this may have affected the level of incidence of these views. It was frequently felt to be quicker to walk to places, and various accounts were given of the best place to get off various bus services into the centre to walk and avoid sitting in congestion (e.g the.Royal Infirmary, or 'the first stop over the Clyde').

4.35 Those interviewed who walked the whole way to the centre tended to live very close by, about 10 minute walk, so alternative forms of transport would be more time consuming and were seen as pointless. Walking was often the chosen mode due to no other choice, particularly a young woman with a baby who felt pram spaces on buses were always taken. The majority of walkers did not really have anything to say about walking in the city centre, it was just something they did, although one enjoyed it as he could just relax and dream. One participant who did not often travel into town had also enjoyed walking near the centre.

Walked back from art gallery to city centre along the river, it was a lovely day. We were busy looking at all the landmarks, we didn't realise that we had walked so far.

4.36 However, although not a commonly aired view, one relatively new resident in Glasgow had strong views on walking in the city centre and ease of navigation.

I hate walking around the city centre – it all looks the same, it's a big grid with no personality and people don't get out of your way. I have a good sense of direction but I find it more difficult in Glasgow (than Dundee, where she comes from) but it does all look exactly the same.

Attitudes, Norms, Barriers and Motivators regarding modes used for travel in Glasgow

4.37 A key finding of this study is the degree to which almost all the participants interviewed can already be regarded as 'multi-modal' and are currently using active modes. The majority of participants interviewed in the study travelled, or at least had experience of travelling by a range of modes. Different modes were frequently chosen to match the purpose and destination involved, highlighting that much of the travel examined is in fact not habitual in nature. This is in fact not surprising as the study focussed on trips alternative to the commute, and therefore many of the journeys examined were not regular and routine – key components of generating habitual travel behaviour. A couple of 'car-addicts' were interviewed, but these were the exception rather than the rule among the participants. Travel to the city centre in particular prompted the majority of participants to seek alternatives to the car.

4.38 The following section will now examine participant attitudes to each mode in turn.

Walking

Attitudes and norms

- 4.39 On the whole, walking was regarded positively, with strong health benefits and for some, cost and time advantages. The health benefits were clearly acknowledged, with 'losing weight' and 'fresh air' and 'gives you more energy' associated with this activity.

If it's sunny I feel good if my lungs are getting full of good stuff.

I think walking and cycling makes you healthy. I know I have a cheek because I smoke, I don't drink, and if I didn't do the walking and cycling I would be really unhealthy.

- 4.40 The mental benefits were also acknowledged in that it was generally seen to be less stressful than other modes. Indeed, 'happy' was the most common 'feeling' response to walking. As a result, walking could 'make you feel good about yourself'.

I think it's relaxing and you can go into a world of your own, think about what you're doing what you aren't doing just in another world.

If it's a nice day you might get a wee sun tan. That might make you feel good.

- 4.41 Interestingly, there were strong feelings of guilt for some people linked to *not* walking. Likewise, there was general disgust for people taking the car for very short journeys and not walking, and this included taking kids in the car for the journey to school.

I feel guilt because it's a nice day and I could have walked home.

I know people who their shop is literally a minute round the corner, a 2 minute walk and they get in the car and drive round and spend petrol to turn round to come back. Why not get a bit of fresh air and exercise?

- 4.42 The distance people were willing to walk varied greatly. Some would 'only be willing to walk half a mile', whereas others reported walking for over an hour to reach particular destinations, largely motivated by a desire to get some exercise for longer distance walks.

- 4.43 Despite recognising and acknowledging the benefits outlined above, a few participants would not be happy to walk. They considered themselves lazy, and 'not walkers', but could not really provide any additional explanation. They seemed to feel that walking was not part of their identity.

I'm just I'm not really a walker you know.

Well no not really you either enjoy it or don't enjoy it- you need to set your mental attitude.

- 4.44 In addition, some walkers had specific reasons for not walking more and reported negative feelings of finding it 'annoying' and often cold. These feelings are related to the barriers identified below, namely the weather and the feelings of frustration with the surrounding traffic and facilities such as crossings for pedestrians.

- 4.45 The majority however reported that they would be happy to walk if the weather was reasonable, if they had a friend with them, etc, but in reality are unlikely to do so without a significant motivator (such as wanting to lose weight).

If it was a really sunny day and someone was with me then I might think about walking.

Motivations for walking

- 4.46 Despite the 'good feelings' outlined above, the underlying motivation for the majority of walking journeys undertaken by the study participants was that it was the only /quickest/ or most convenient mode for the journey. Many of the walking journeys discussed in the research were conducted because there was little other option than walking. For example, those living close to the centre or travelling with a pram did not feel they could use buses easily.

I mean it's easier for me if I walk because I live within walking distance I have to take my kids put them in the car-seat, fold my buggy put it in the car, then I'd have to do it all again put them in the car put my bags in the car put the buggy away. Whereas it's quicker just putting up my buggy once, putting the kids in it walk to the Fort, do what I have to do, bring them back, put them in the house.

- 4.47 The environmental benefits (in terms of climate change etc) were also occasionally acknowledged, but more as a by-product or an added bonus, rather than as the primary motivation for walking among participants.

Well I suppose they think it's good to get exercise and you know the benefits like helping the environment. It's a good feeling.

- 4.48 Being sociable while travelling was a key theme that will be returned to below. Although some clearly enjoyed the time to be alone and think which walking brings, some preferred walking when there were other people around to look at.

You see different styles, different faces, different people walking different ways. Keeps your mind occupied as you're walking.

- 4.49 Health was a motivator for walking, particularly in terms of losing weight.

I try but just I only ever walk if I'm on a diet.

I'm starting to think when my daughter goes to school (assume secondary) I'm going to have to find something to make myself fitter because I'm quite happy to take her to school. I'll have to find a different interest.

Barriers to walking (other than distance and carrying things)

- 4.50 A key theme to emerge from this research relating to mode choice in general was the importance of time as a determinant of mode choice. This might be the actual or perceived time it takes to reach a destination, although both are of course related. Walking was seen variably by some as the quickest mode and by others as too slow. This is unsurprising given that walking is likely to take longer after certain threshold distances.

Aye if I have more time I would walk, but when you're working and you have a million things to do you just don't have time.

- 4.51 Another key barrier was the weather. This in turn had an impact on the clothes and footwear required and relates to the above point about the need to be more organised. This also meant that the choice to walk was frequently taken on a day by day and trip by trip basis.

Walking is out of the question when you are going out for a meal, and you're wearing your high heels, and you're trousers are too long and you'd look ridiculous tucking them into your shoes.

- 4.52 Personal safety was another consideration, both from traffic and from anti-social behaviour. The latter was mentioned more than the former. Some issues, particularly in the 'cause-effect' exercises in the focus groups, revealed specific aspects about the walking environment such as 'pavements in a bad state of repair', 'traffic', 'people running cars while stopped causing pollution' and 'trying to cross the road' as negatives of walking. In open conversation, anti-social behaviour and the fear of encountering crime, particularly at night, was mentioned much more frequently.

I just think I wouldn't walk out at night anyway.

I think as you get older you get more frightened of walking places.

- 4.53 However, others felt that these issues have been over exaggerated:

I mean I don't think that Glasgow is as bad as people make out ...I was watching street crime in London and the amount of people using guns well I just don't think that Glasgow is as bad as that.

- 4.54 Personal safety fears on all modes of transport were common to all modes of active travel and will be elaborated on in the following sections.

Cycling

Attitudes and norms

- 4.55 Very few of the participants in either the focus groups or the Vox pop interviews cycled. This was the mode which seemed to elicit the most polarised views, particularly between those that did and did not participate in the behaviour. Indeed, cycling is clearly a mode which was influenced strongly by social norms and a perception that the locality was simply not the type of place in which much cycling would ever take place.

I think they have a better attitude (in the Netherlands) they use it as a mode of transport that works. Who is going to knock it? - nobody

I've always thought of Glasgow as a bit of a no-no for cycling.

- 4.56 For many, cycling was simply seen as a minority activity. Nevertheless, a few participants did report having seen cyclists around but tended to talk about cyclists as either belonging to a certain group (mainly young people) or as unusual in some way.

A lot of young people use it to get to their work.

I've seen people cycling on the road, it's getting more common. My neighbour must be about 80, he's Asian and he cycles to get his messages and everything, you always see him, on an old bike. That's amazing.

- 4.57 The majority of non-cyclists viewed cyclists relatively favourably, but a few drivers were not so keen.

Bikes don't pay any taxes, so why should they be on the road – that's what my friends think.

Cyclists have to abide by the same rules as cars, like if I go through a red light I will get a fine, and so should they.

Motivations for cycling

- 4.58 Like walking, and notwithstanding the safety issues discussed below, cycling was generally seen as a healthy activity. However, this was most passionately expressed by those who actually used their bicycles, whether for leisure or travel.

It's a great form of exercise, it really is. You forget your woes and problems.

I just love going out on my bike – I can't explain it. I leave too many problems behind and I just go and I just love it.

- 4.59 Other than these health benefits and the fact that 'it's faster than walking', there were few other benefits of cycling mentioned in this research.

Barriers to cycling

- 4.60 The greatest barrier to cycling was the perceived road safety risks. Even those who did cycle generally did so on the pavement. They were quite conscious that this would annoy people, but felt that otherwise they would not be able to cycle, and that as long as they were considerate felt justified in doing so. Some were aware that this was probably against the law, but this seemed less of a concern than wanting to balance not being a nuisance with keeping away from cars. Many non-cyclists did not have a problem with this – they fully understood why people would not want to cycle on the roads.

I try to cycle on the road sometimes, it depends.

It's a bit dicey going on a bike with the volume of traffic. That's why most of them go on the pavements. And you don't blame them for that. There are quite a lot of places now that have cycle lanes which is good.

I hope people don't shout at him (my son) for cycling on the path because I would rather encourage him to get fit that way. He's just started cycling. I'm a bit frightened cos he won't put a helmet on cos it isn't cool to put a helmet on. I don't think it's law, but I moan about it to him.

- 4.61 This latter point is another indication of the normative feeling around cycling. Although it did not emerge strongly in this research, the combination of road safety fears and the feeling of needing to be skilled, fit and wear protective clothing can be a barrier to take-up.

I would like to take up cycling but I don't think I would be very good at it anymore. I used to go with my kids and cycled on a bike when I was pregnant. But I'm not as fit as I used to be.

It just wasn't really encouraged after school so I just didn't carry it on

- 4.62 This lack of confidence was linked to an acknowledgement by many participants of a lack of knowledge about the safest routes to take. It was generally felt that there were not enough safe cycle facilities available, however there was a general awareness of an increase in cycle lanes by non-cyclists 'there are lots of cycle lanes now', but even those with an interest in cycling had little awareness of what cycle routes were available and where they would be able to go.

Cycle tracks never take you to where you want to go, they don't take you to shops or...

We were talking about cycling and I don't know any places to find cycle tracks I don't know any cycle tracks from Paisley to here (Braehead).

It's quite easy in the city centre, there are markings on the road for cyclists, especially on Argyle Street so you don't have to worry about cars or buses pulling into the bit where you are or worry about looking behind you. But on other roads, most motorists are oblivious to cyclists.

- 4.63 There was clearly a demand for improved cycling facilities but also better publication and awareness raising of existing cycling facilities.
- 4.64 Other key barriers apart from the general cultural barriers, road safety fears and the lack of confidence and information already discussed included fear of theft, inclement weather, lack of storage space at home and lack of showering facilities at the workplace. Fear of theft was the biggest issue out of this list.

There's nowhere safe in the town that you could leave a bike. Do you not come back with your tyres missing? You take off your front wheel and lock it to the back.

I think the city in and around Glasgow you have this culture where you think your bike will get stolen.

I stay in flats so there is nowhere to keep a bike. That's my excuse.

- 4.65 It is clear from these findings that more could be done to improve the facilities for cyclists and the promotion of them. Cycling has some perceived positive aspects such as the speed of travel and the health benefits that are worth promoting. The cultural barriers may be the most difficult aspect to overcome, but making visible changes to cycling facilities and positive messages, together with simply increasing the number of cyclists on the network are ways in which to tackle the attitudes and norms around this activity.

Bus travel

Attitudes and norms

- 4.66 Bus travel was the mode occupying the largest proportion of focus group discussion. The majority of participants, regardless of their mode categorisations, had used the bus within the last year, many regularly, although there were some car drivers who had not done so and would not consider travelling on a bus. The general feeling of the non bus user participants was 'why should I? I don't think about other modes, and I've already paid for my car'. Nevertheless the majority of drivers interviewed did travel by bus (this may partly be due to the large number of retired participants, who were entitled to free bus travel).
- 4.67 Participants were as likely to think bus services were good as bad. This may have been a function of where these people lived and needed to travel to, but there were very different views on bus travel. One person's motivating factor was another person's barrier to bus use. These different factors will be examined in turn.

Bus service levels

- 4.68 The overarching view obtained of bus services can be summed up neatly as '*we like to complain or have a moan, but really bus services in Glasgow are pretty good*'. This was particularly true if you have time and don't mind some of the convoluted routes taken.

We have moans, but generally it's ok. Every 10-15 minutes in the day you can get a bus. At night the service drops, the Arriva service still runs, but the Gibby buses disappear at 6pm.

The only time the service is bad is a Sunday.

- 4.69 Many, particularly round the Fort area, felt that buses had been improving in recent years, although still had some way to go.

I find I don't have to run for a bus now. I used to have to now I'd just wait because I'd know its only ten minutes.

- 4.70 The majority of participants seemed to live near a bus stop. This meant that there was not much walking and exercise involved in their bus travel. Some of those who did not live near a stop would drive or get a lift to a bus stop and then take the bus (mostly the retired for whom the bus travel was free).

- 4.71 However, services at night were felt to be less frequent, available and safe.

I find about where I live the last bus to my place leaves Govan at 5 past 6 at night so you're talking about 20 past six that's it over, I could go to other parts of Renfrew to get a bus but it's worth taking a car.

At night time after 6, there's only one bus an hour to Crookston.

- 4.72 For those who did not use the bus at all (or very rarely), a range of reasons were given for this. These were mainly expressed by car drivers and are discussed under the car use section.

Time

- 4.73 It would be fair to conclude from this research that the time it might take to use the bus compared to another mode was one of the greatest barriers to bus travel. Again, this assessment may be perceived or real. Many participants cited specific examples of where a certain bus route would take much longer than another mode, particularly where the service took a convoluted route.

Arriva bus that leaves from Central Way in Paisley to Clydebank is a magical mystery tour, it takes you an hour, compared with 20 minutes in the car. It's unbelievable.

There was a thing in the evening post the other day about a man that was walking against the bus, and he could do the journey that he did something like 11 minutes quicker by walking rather than taking the bus.

- 4.74 Nevertheless, the opposite views were also expressed in that the bus was seen to be quicker than the car. The consequences of this time penalty was the need to leave plenty of time to account for unexpected delays and the stress that could be involved in not getting somewhere on time.

Using the bus, you need to leave a lot earlier.

You can feel agitated on buses if stressing about missing appointments, worried sick about how to get there if the bus doesn't turn up. Missing appointment can ruin a day and it's a toss up between leaving very early and waiting around in waiting room, or stress of being late.

The cost of bus travel

- 4.75 The cost of travel was another area where views differed. Some believed bus travel was good value for money, particularly if weekly tickets were purchased, the fact that parking cost did not need to be included and the fact that over 60's travelled for free.

You get a good deal with an all day ticket on Arriva bus – it's only £2.40.

I have a car, saves me parking charges and petrol etc sometimes it's best for me just to use the bus and save fuel, and the bus is cheaper than the fuel.

- 4.76 On the other hand, some believed that it was expensive, particularly for families.

Single mums have to buy 3 weekly bus passes. I know one who does it and is on the dole. It's extortionate!

If it was free and you have time and no job you can go on buses willy-nilly, you can't do that if you have to fork out a pound every time.

Planning bus journeys and information

- 4.77 Travelling by bus required greater levels of planning than travelling by car, and this could be time consuming. How participants obtained information varied and included using the internet, telephone information lines, asking people, information at the bus stop, and asking the driver. Electronic real time information was generally appreciated, but was not available all over Glasgow.

The bus in the centre can be difficult. If we think back to when we used a lot of buses it was a lot just word of mouth you could always ask or look at the time table, there are so many routes now its just confusing, there are so many options there are too many options so many times, you have Arriva and Gibsons all these different companies and its confusing.

Some stops have the digital displays but others don't. It's strange how some areas have them and some don't. It would be good to have them on the outskirts. Some of them get ripped off and you don't know when the next bus is coming and you could be standing for 40 minutes waiting for a bus.

- 4.78 Importantly, there were some people who lacked the confidence in how to use a bus such as how to get hold of information, what it means and how to figure out the best place to get on and off.

My mum always used to run me about before I got the car and I never really used to have to take the bus or the train. I wouldn't mind getting the bus I just wouldn't really know how to.

I always have to go on buses with someone. I can go on and just stay on until it stops at the end of the day because I don't know where to get off.

- 4.79 Therefore, a lack of information and confidence on how to use the buses and where they went, as was also reported with cycling, and to some extent with walking, could be a barrier to bus travel. In Glasgow, this was felt to be exaggerated by the number of buses in operation and competing on the same routes.

The comfort and convenience of bus travel

- 4.80 Another issue which polarised participants was the degree to which bus travel was an enjoyable experience. For some, bus travel was a time to relax, observe other people or the scenery and

catch up on some reading. Not having to drive or navigate made for a relatively stress free experience.

Two things I enjoy about it are watching the scenery go by and reading the metro.

Driving is stressful sometimes. I find it a bit tiring as well. Although I have a car I might get the bus down there I think I'd find it relaxing. The bus is great you get to just sit there and daydream.

- 4.81 On the other hand, certain aspects meant that bus travel could be an uncomfortable or stressful experience. This included the time pressures discussed above, but also the fact that buses sat in congestion, the condition of the buses, or that the bus drivers themselves could be unfriendly or drive in a way which was uncomfortable. These quotes express the negative emotions felt by some participants:

It takes too long it's unreliable and it's not just the congestion, it's that they stop everywhere. Sometimes you just end up getting a taxi. I don't want to stand in the rain and be cold and wet on a cold bus and you won't get warm till you get home.

When the bus gets too busy and it stops at every stop and traffic lights I get angry.

Customer service

- 4.82 There were relatively frequent complaints about the attitudes of bus drivers and the way they drove the vehicles. Indeed, some of the opinions expressed were quite passionate on this issue.

It's like you have to pass an ignorance test. They don't even look at you if you ask them a question. And some foreign drivers don't know the streets or routes, and there's a language barrier.

Bus drivers are psychopaths.

- 4.83 Some of the complaints about buses and their drivers were specifically targeted at the congestion caused by the number of buses themselves and the conflicts with pedestrians in shared use streets. This was discussed in relation to walking above. However, it was seen to be exacerbated by the ways in which buses were driven.

Coming down Renfield Street is horrendous at busy times. I'm surprised there's not more accidents, they don't give any respect, especially when the lights change.

They try to race each other to get more passengers on their buses.

Sociability

- 4.84 Yet another polarising issue was the degree to which the interaction with other people which the bus allows is a positive or a negative thing. For some, bus travel provided the potential to observe and chat with other people. For others, this was regarded as an invasion of privacy and other passengers could be seen as a nuisance.

- 4.85 Views on this seemed be partly affected by age, with older participants more likely to report enjoying chatting to people on buses but also greater annoyance at people disturbing the peace with their music and mobile phones. However it was not only older participants who enjoyed socialising with strangers whilst travelling, participants in their 20s did as well. Even those who did not seek it felt it rude not to chat to someone who had started a conversation with them.

- 4.86 Some participants had even gone to the extent of switching to more sociable modes largely because they enjoyed meeting people:

I have a friend who must have been driving since the early 60s and I left the country for a while and when I came back she had stopped driving. I asked her why and she said 'because I never knew anyone. Since I stopped driving, I'm at bus stops and it's amazing the amount of people I've met'.

I've only stopped driving since my husband retired. I felt that I didn't need to because he could do it. I've met more people at bus stops.

- 4.87 This was not a minority view. A significant proportion of study participants reported enjoying some of the social aspects of travelling by public transport, as long as the people were regarded as friendly.

As long as you've got ordinary cheery happy people about you there's nothing better than sitting on a bus.

You think you have problems, listening to other people makes you think uh what am I worrying about. It's nice to talk though.

I've used them a few times, it's alright I've never had any hassle. There's a few rowdy ones but you just keep yourself to yourself. If you're drunk you end up talking to them anyway. I've seen a few sights but mostly it's having a laugh, sharing chips, getting a sing-a-long. But sometimes it can turn a bit nasty.

- 4.88 However three particular groups tended to be reported as the least desirable company on a bus: drunks, noisy schoolchildren and threatening teenagers.

You do occasionally get some pleasant people but if you ever happen to be on the bus when the schools are coming out it's embarrassing the language the kids use on the bus, people swear quite loud in general conversation.

Sometimes travelling late at night on bus 15,18 year olds can be 'less than pleasant'. Also the football fans, but the bus drivers don't do anything.

You'd have to be mad to get on the night buses, they are full of mentals.

- 4.89 Other participants very much enjoyed their own space.

When you do use public transport you have everyone with their music in their ears and people talking on their phones it's just not as quiet as it should be and people listen in to other conversations and you have to listen to other people speak when you don't want to.

If you go in the car you ... you are in the car yourself without strangers being around you. I like being in my own space.

- 4.90 This anti-social behaviour extended to the idea that there is some inconsiderate behaviour towards people with push chairs or older people. There were very mixed views about the likelihood of people making space for other passengers, young people giving older travellers a seat or people moving to make way for prams. The youngest participants in the focus groups felt that people moving to help them was very unlikely, and older participants reported seeing people not moving

over, whereas others reported they would happily give up a seat, and generally felt that most people would do the same. There was however a consensus that it was difficult to travel on the bus with prams.

It's really frustrating with a pram because you are only allowed one on. If there are two one of them has to wait for the next bus and you actually feel for them. It must be very frustrating.

Sometimes you see them kick people with prams off the bus to make way for disabled people, so even if people have paid to go the whole way they have to get off.

Safety concerns

- 4.91 The issues above relating to the attitudes of drivers, driver behaviour and the anti-social behaviour all combined to mean that some travellers felt unsafe on buses, at least at certain times of the day or in certain areas.

At night time I would never get a bus, neither would my son or my daughter it's too dangerous to travel back late at night

Normally if I'm on the bus and a junkie sits next to me I find another female on the bus and move next to them, I think they are grateful for the company as well.

- 4.92 Additionally, there was a particular concern on the part of one or two younger participants with travelling through areas that were not 'their patch'. They felt at risk of being recognised as not from that area, and at risk of attack. In one case this fear actually prevented a young male from using a service that went to a destination he occasionally wished to travel to, as the route travelled through an area he wanted to avoid and so he would walk or take a taxi if he had money.

Trains

- 4.93 Trains and the subway were mentioned least in the vox pops and the focus groups. Not all of the study sites were accessible by train or tube, and therefore train travellers were not specifically sought for focus group participation unlike drivers, walkers and bus users. However, it is possible to conclude that, almost without exception, the train was seen as an extremely positive mode of travel. For those who had access to a train station, the train was seen as a relaxing form of transport, warm and comfortable, quick and reliable. The time spent on the train was enjoyable and even sociable.

I like it. I've met so many people on the train and had such a laugh. One time we were going from St Andrews to Glasgow and we had loads of booze. There were two weegies sitting in front of us and we started chatting. We all went to a karaoke night with these people we had met and it was such a brilliant night.

Can't think of anything bad about the train. Makes you relaxed.

I would get on the train after work, get myself a couple of cans of beer, get the Independent, and maybe a wee sandwich from M&S, very civilised, or maybe a bottle of Bucks Fizz if it was pay day and it was lovely. Apart from once when there were no working toilets on the train and that was hell. But that's not a regular occurrence.

- 4.94 They were however not without fault, with fares for the train and the subway often felt to be expensive.

The subway is the same it's gone up from 2 pound discovery ticket, its now 3 pound.

My sister is often late for work because she goes to work on the train and there are signal repairs.

Car (as driver, as passenger)

Attitudes and Norms

- 4.95 Approximately 45% of the study participants had access to a car and could drive. However, even those without regular access to a car often travelled in a car as a passenger and had some positive and negative feelings to express. Also, as mentioned, the participants in this research were largely 'multi-modal' and there were few with entirely narrow views around car travel. Nevertheless, some views highlighted how attached people could become to car travel at the expense of even considering, let alone using, other modes.

Habitual car use and 'laziness'

- 4.96 Despite most of the participants seeming to use a mixture of modes appropriate to their travel patterns, there was clear evidence of some habitual car use among the groups. This is difficult to detect and measure in any type of survey, particularly qualitative work, as people do not own up easily to not rationally considering their options. However, in this study, some people openly admitted to driving most places because this is 'what they do':

Yes, but I've just always done it, I passed my test when I was like 17, I mean maybe if I didn't have the car it would have been a bit easier. Once you pass your test you just drive everywhere.

I simply didn't consider any alternatives for my travel than the car.

- 4.97 Other people admitted to being lazy (or accused others of being lazy) and using their car when they could have used another mode of transport:

Driving makes you lazy. Every year I say I'll do more walking, but if the weathers bad, two steps out the door and you are in the car. It encourages laziness, I'm afraid.

The car - it's not very responsible though. People are just lazy pigs these days, I include myself in this category. I've got loads of pals who have increased in weight two fold when they passed their driving test.

- 4.98 From this discussion, it seems as though there may be an element of both personal guilt and social pressure to use the car less for short journeys which can be exploited by policy messages used to promote active modes. However, for some, there was no guilt attached. Whilst more of a conscious motive, this habitual behaviour and lack of consideration of the alternatives could manifest itself as wanting to get the most out of the car given that it had been 'paid for':

I don't see the point in paying car insurance and tax if I'm going to walk. I drive even though it takes as long as I walk.

- 4.99 In addition to these economic arguments, it is likely that certain societal structures impose travel habits on to people. This was evident in the fact that the car was seen as essential for both securing work and travelling to work:

I've only been driving for 3 years, I used to walk everywhere but as I was trying for a new job I found that it would be easier if I drove.

You just get back into driving when you're back at work and stuff.

Convenience, freedom and flexibility

- 4.100 Most people were open and honest about the convenience the car brought and the sense of control, freedom and independence it offered. This was often the case even though it was admitted that alternatives exist. These attributes of car travel were very big attractors to car use and, aside from habit, were been found to be the biggest barrier to reducing car travel in other studies of travel behaviour. They need to be contrasted to some of the feelings of frustration elicited in relation to bus travel.

I'm happy when I'm driving. It makes you feel independent

I have no excuse there are plenty of buses at the top of the hill where I live but I just think it's more convenient to drive than to walk to the top of the hill to get a bus.

You can relax when you are in a car, if talking to your mate can use language that wouldn't normally use in front of women and children.

- 4.101 Consequently, for some people, it is unimaginable to live without a car:

I'd feel as if my lung had been removed if I had to use the bus all the time I think it would be really difficult.

That would just put you over the edge – credit crunch first and then no car.

- 4.102 Of course, there were plenty of examples where the car would be the best or the only way to make a journey because of the need to carry a heavy load or reach places or people which could not otherwise be reached without one.

The only time I'm really glad of the car is when I'm getting the messages, because there are 6 of us in the house and a lot of bags.

There are some people I visit who I can't get to without a car though and that's the reason I keep it, otherwise I think I could live without a car.

- 4.103 The car was also seen as particularly good for trip chaining.

I came straight from my friend's house, I didn't have enough time to walk and I'm going food shopping after this so I need the car for my bags. I was at the dump before I came here so I had to take stuff here.

- 4.104 For those without access to a car on a regular basis, the opinion was mixed as to whether car ownership would be a good thing. Some without a car described the benefits experienced when occasionally receiving lifts. Several young people wanted to drive, citing 'freedom' as the main benefit and acknowledging that car ownership would lead to less public transport use and probably more travelling in general.

I'm sending away for a driving licence soon. Then I won't need to get a taxi everywhere, I will get my mum to buy me a car. I wouldn't use the bus if had a car, so I don't need to wait on a bus and would get there faster.

If I could drive, I would probably drive absolutely everywhere, so it's probably a good thing that I can't drive.

The cost of motoring and parking issues

- 4.105 Reasons why driving might be too problematic were also given by non drivers. These primarily included the cost of travel and parking problems which make other modes relatively favourable.

I've never wanted to drive, the cost has put me off. I've got more things to do with my money than spend it on cars.

- 4.106 Two issues – cost and parking – were closely related in the discussions. Parking was seen as a problem by both existing car drivers and as a reason *not* to drive by non car drivers:

You wouldn't take a car into town – parking is far too pricey.

I get the bus stop from my door. I don't drive but if I had a car you hear people saying sometimes by the time you find a parking space you're as quick taking the bus.

- 4.107 It is clear that these negative aspects of car travel did encourage travel by more active modes by the study participants.

5 Conclusions and Recommendations

Research questions

- 5.1 In this section the various strands of the research are drawn together – the vox pops and focus group discussions. The specific issues relating to different transport modes, and overarching issues related to the original research questions are identified. Recommendations for the targeted promotion of active travel modes are then identified.
- 5.2 The specific research questions identified for examination in this study were:
1. What are the attitudes and norms regarding modes used to travel to various locations in and around the Glasgow conurbation?
 2. What are the barriers for accessing each location by particular modes?
 3. What are the barriers to the use of specific travel modes amongst those travelling in and around the Glasgow conurbation?
 4. To what extent does habit play a role in the modal choice of respondents?
 5. Are the attitudes of individuals who travel by certain modes, towards that mode, different to individuals who do not travel by that mode?
 6. Does discussion with alternative mode users alter the perception of car drivers towards that mode in a positive manner?

What are the attitudes and norms regarding modes used to travel to various locations in and around the Glasgow conurbation?

- 5.3 This question was examined in detail in the previous section of the report. The majority of participants interviewed were multi-modal in nature, using a combination of the private car and public transport to get around the city, with occasional examples of walking and cycling. Specific destinations however 'encouraged' different modes to be the 'norms' of travel. This was most notable for travel to the city centre, where public transport such as bus, train or subway were clearly the most popular modes due to high levels of congestion and difficulties and cost of parking. Train and subway would be preferred where available, again due to road congestion and relative speed of travel, however bus services to the centre were generally felt to be fairly good, with a large range available, albeit with some confusion over number of services, and fewer services available at night. Some participants were happier driving into the centre at night, rather than risking getting stranded through (attempted) use of public transport.
- 5.4 For all other study destinations (Braehead, Glasgow Fort, and Southern General Hospital), the car was felt to be a good mode of travel (despite some parking issues at Southern General), with bus providing the main alternative. Some participants also travelled to Glasgow Fort by train.
- 5.5 Attitudes and norms regarding walking and cycling to destinations will be discussed under research question 3, as very few location specific attitudes were observed. Walking was generally chosen as a mode when it would be the quickest as the journey was very short, or the most convenient such as when travelling with a pram.

What are the barriers for accessing each location by particular modes?

- 5.6 Again this question was examined in detail at the start of Section 4, and some of the issues covered in the above discussion. Many of the barriers to use of certain modes were general barriers to mode use in Glasgow such as costs and fear of crime, and will be examined under the following research question, therefore only a few location specific barriers identified will be highlighted here.
- 5.7 Levels of congestion around Glasgow city centre meant that access by car was very unattractive, Access by bus could also be unattractive, with people short on time reporting getting off buses in order to walk the last 10 minutes. This action is actually recommended by the Scottish Government in terms of tips for promoting good health,²³ so it is interesting to see that traffic congestion can have this 'beneficial' side-effect. Availability and cost of parking again seemed to discourage travel to the city centre by private car. Cost for train, subway and bus fares were a barrier to travel by some.
- 5.8 Visitors to Southern General Hospital often have health conditions meaning that the private car is the easiest form of travel. However the availability of parking on site was repeatedly raised as an issue, with visitors often being given lifts by family and friends. Bus services to the site were generally felt to be adequate and useable, however many services stopped some way away from the wards preventing use by people unable to walk any distance.
- 5.9 Bus services at Braehead were generally felt to be very good, with people living locally often travelling to the site by car in order to take onward buses. Availability of parking at the site was occasionally an issue, but not excessively so. Train was not generally perceived to be an option for travel to the site due to the distance from stations. There was a general lack of awareness of any cycling facilities in the area, and also the surrounding area was not conducive to easy walking due to large roundabouts presenting navigation difficulties, although these issues did not completely prevent walking. Bus services to Glasgow Fort were less extensive, with many visitors having to take two buses to get there, and therefore travelling by car. Train here was also an option. Pedestrians noted a few difficulties with crossing roads around the site, particularly with buggies, where cars would be parked over the crossings.

What are the barriers to use of specific travel modes in and around the Glasgow conurbation?

- 5.10 The discussion in Section 5 outlined the detailed findings with respect to the barriers and motivators for the use of walking, cycling, bus, train and car travel. We have summarised these findings in Table 5.1 before going on to identify six unifying themes which could be used to design informative and motivational messages.

Table 5.1 has defined the main barriers and opportunities to the take up of various modes. These have been further broken down into 'objective' and 'subjective' issues. The former relate to issues which can be classified as relating to the provision of the infrastructure for and the functional attributes of each mode. Subjective issues pertain more to the emotional responses which participants described in relation to each mode of transport. These two categorisations however are not so clear cut as it is the individual perception of the 'objective' situation that determines behaviour. For example, the same train fare might be perceived by one individual as expensive, but by someone else as reasonable. Policy often focuses on the objective (i.e. improving services), but

²³ Scottish Government Healthier Scotland. Take Life On. <http://www.takelifeon.co.uk/being-active.html>

soft policies can do more to target the subjective (including perceptions of quality of service). Changing perceptions can be challenging but are nevertheless the key to success.

Table 5.1 Summary of barriers and opportunities to use alternative travel modes

	BARRIERS		OPPORTUNITIES	
	Objective	Subjective	Objective	Subjective
WALKING	Weather Time/distance Personal security Need to carry items Knowledge of walking routes Road crossings Traffic/pollution	Habit Perceptions of time Laziness Confidence Knowledge of walking routes Need to be organised	Health and fitness Time (quicker) No waiting Cost (cheap) No parking Energy efficient	Feels good Guilt Good image Pleasant /Relaxing Fresh air Feels 'green' Sociable Convenient Good with kids Spontaneous
CYCLING	Personal safety Weather Hilly Facilities (parking, showers) Crime (theft)	Perceptions of risk Confidence Knowledge of cycle routes Fitness Image/norms	Health Time (quicker) Free Energy efficient	Feels good Guilt Convenient
BUS	Time (too slow) Customer service Cost (expensive) Poor information No service No room for prams Personal safety Anti-social behaviour Overcrowding Weather Road congestion Unreliable	Perceptions of time Habit Stressful Lack of privacy Uncomfortable Need to be organised Laziness (walk to bus stop)	Time (quicker) No parking Cost (cheap) Social inclusion Healthy (walk to bus stop)	Relaxing Sociable Make good use of travel time Warm, cosy Interesting Independence
TRAIN	No access (for some) Cost Personal safety		Time (quick)	Good image Relaxing Sociable Warm and comfortable Reliable
CAR (less use)	Time (quicker) Weather Carrying items Cost (cheaper)	Convenience Habit Privacy Independence/flexibility Comfortable Warm and cosy Safe Sociable (with family) Enjoy driving	Accidents/safety Time (longer) Congestion Cost (expensive) Parking Pollution No access	Stressful Guilt Frustrating Other drivers are bad Confidence Unhealthy Aspirational

- 5.11 It is apparent from this table, and from the discussion above, that one person's barrier can be another person's opportunity. For instance, some perceive bus travel to be a time saver and for others lengthy travel times are the most frustrating feature of bus journeys. Similarly, some value the social opportunities brought by bus travel, and cite this as a reason to travel this way. Realising this diversity is the key to designing effective campaigns and targeting messages and policies to promote alternatives to the car. Ideally, messages should be segmented to account for the fact that different things are important to different people. Partnership working with relevant professionals is also essential.
- 5.12 It should also be noted that the attributes identified in Table 5.1 come both from the dialogue in the vox pops and the discussions, but also from the post-it notes written by participants as part of the cause-effect diagrams in the focus groups. These asked for negative and positive feelings and issues associated with different modes.
- 5.13 From this summary, in addition to the general concept of 'convenience', it is possible to identify seven overarching themes which appear to have pervaded the discussion of all the travel modes across all the groups and locations. These are:
- Convenience
 - Time
 - Cost
 - Sociability
 - Habit
 - Information
 - Personal security

Convenience

- 5.14 Most people were open and honest about the convenience the car brings and the sense of control, freedom and independence it offers. These are very big attractors to car use and barriers to active modes. However, 'convenience' can be disaggregated further to be more meaningful from a policy and promotional perspective. For instance, what is convenient means different things to different people. Different journey attributes were valued differently by different people. Some put a value on time savings, some on reliability and for others it is the lack of stress and responsibility involved in being a passenger on public transport rather than a car driver. So, although convenience is of overriding importance, it is more useful to pay attention to some of the other overarching themes which help to illuminate this construct.

Time

- 5.15 The notion of having enough time to travel by a certain mode was a strong theme to cut across the discussions on all the different modes. However, there is no one conclusion to emerge from this i.e. it cannot be said that the car is more time advantageous than the bus or vice versa. It was clear that time could be one of the most important barriers to bus use, as their frequent stopping, hold ups in congestion and circuitous routes were sources of frustration for many people. However, for many, car use was also seen as time consuming when the whole journey is taken into account.
- 5.16 For certain types of journey, active modes such as cycling and walking, were acknowledged as being the most time efficient. In addition, certain modes were better than others for offering an

opportunity to utilise the journey time for certain activities such as relaxing, socialising or reading. Consequently, some people seem to be more prepared than others to trade off the actual journey time for the ability to use this time constructively.

Cost

- 5.17 The cost of travel also influenced modal choice. Parking costs in the city centre were perceived as prohibitively expensive, encouraging the choice of alternative modes such as bus, subway or train for travel to the city centre. Alternatively some car owners wanted to use their cars precisely because they had already paid for them, to make the most of them. Some participants walked or cycled because it was free (some of these felt they would not be able to afford to pay for motorised travel). Those receiving a free bus pass were particularly likely to travel by bus precisely because it was free. It is clear that free travel is extremely attractive and costs do indeed influence travel choices.

Sociability

- 5.18 Many of the participants raised issues regarding the sociability of travel. Travel by public transport, the bus in particular, was felt to be more sociable than travel by car. Walking was also felt to be relatively sociable and car travel was also seen as being a sociable activity with the family and sometimes with friends. However the views regarding the benefits or otherwise of increased levels of sociability varied greatly among participants, with some viewing increased sociability highly positively and others viewing it extremely negatively.
- 5.19 Perceptions of sociability did seem to be partly affected by age, with older participants more likely to report enjoying chatting to nice people on buses but also greater annoyance at people disturbing the peace with their music and mobile phones. However it was not only older participants who enjoyed socialising with strangers whilst travelling, participants in their 20s did as well.

Habit

- 5.20 As previously highlighted the majority of participants could be considered multi-modal – they used a variety of different modes of travel. Given that this research has not focussed on the commute to work (the journey that is most frequently repeated under the same circumstances, and therefore fulfilling most of the prerequisites for habit forming) this is not hugely surprising. Also, habit can be difficult to detect. However, in this study, some people openly admitted to driving most places because this is ‘what they do’ and even blamed this on laziness.
- 5.21 In the literature on travel behaviour and car dependency, habit is seen as one of the principle barriers to encouraging people to use active modes.²⁴ What is particularly interesting in this study is the degree of openness that there was among participants that there were often alternatives to the car that *could* be used. However, the car was seen as more convenient and was sometimes used because ‘it is paid for’. This is unusual as other studies of this nature have detected much more resistance to the idea that other alternatives exist.²⁵ This is likely to be due to the fact this has taken place in Glasgow where there is a good public transport network but also where car ownership is lower than the Scottish average.

²⁴ Verplanken B, Aarts H, Van Knippenberg A & Van Knippenberg C. Attitude versus general habit: Antecedents of travel mode choice. *Journal of Applied Social Psychology*. 1994; **24**:285-300

²⁵ Anable J, Lane B and Kelay T. *An Evidence Based Review of Attitudes to Climate Change and Transport*. 2006. Report for the UK Department for Transport, London

Information

- 5.22 An important theme to emerge from the discussions was the need for more information about alternatives to the car. For each of the active modes, there was confusion around timetables and routes. Wayfinding also applies to cycling and walking, particularly the former where there is a general perception that cycle lanes might exist, but confusion about where they might be. The current situation can exacerbate a lack of confidence in how to use these modes and fuel perceptions about lack of options and relative performance in terms of time and cost.

Personal security

- 5.23 A significant worry for all the focus group participants was personal safety. Fear of crime was a concern particularly on public transport or walking, but rarely actually prevented participants from travelling. The personal safety issue was raised far less within the two minute vox pop interviews than in the focus groups. One explanation for this may well be because people put their safety concerns out of their heads as they have to get on with their lives and travelling - the issues become less salient, less at the forefront of thought – however once raised they are a significant concern. This reduced salience of personal safety may be because the vox pops were conducted during the day time, when people are less fearful of crime, but this was also true of the focus groups.

To what extent does habit play a role in the modal choice of respondents?

- 5.24 This is discussed in sections 5.20 and 5.21 above. In summary, habit was detected as an important barrier to travel choices, alongside some other equally important issues.

Are the attitudes of individuals who travel by certain modes, towards that mode, different to individuals who do not travel by that mode?

- 5.25 Within the participant set interviewed, not many participants travelled exclusively by individual modes. Many of the non car drivers got lifts from friends and family, and most of the drivers would take the bus or train into the town centre. Most people walk for at least part of their journey. This makes it difficult to generalise about the views of specific mode users.
- 5.26 Nevertheless, a few observations can be made. Firstly, those who cycled were clearly more passionate and positive about cycling than those who did not. Those without any experience of cycling in Glasgow had strong perceptions that it was not possible or advisable to do so.
- 5.27 Similarly, frequent bus users appeared to have a better view about bus reliability than those who were not in the 'bus or public transport' groups, or who had not travelled by bus that day. Otherwise, bus users hold fairly mixed views and were as likely to be frustrated by the journey time as relish the time spent on a bus. This points yet again for the need to segment the population on the basis of dominant motivations that they hold and not simply to divide them according to the dominant mode they use. The issue of segmenting travellers has been discussed in detail by Anable who has developed a typology of seven types of traveller.²⁶ These include the 'malcontented motorist', 'die hard driver', 'car complacents', 'aspiring environmentalists', 'car sceptics', 'car aspirers' and 'reluctant riders.' She discusses the fact that different people hold different attitudes and must be targeted by different motivational messages and policy initiatives and that traditional segments (by age, income or type of user) are insufficient to understand the complexity of travel choice.
- 5.28 There were differences between frequent car users and non users, but not as much as was first hypothesised. For instance, car users did have a tendency to perceive bus use as expensive,

²⁶ Anable J. Complacent Car Addicts or Aspiring Environmentalists? Identifying Travel Behaviour Segments Using Attitude Theory. *Transport Policy*. 2005; **12** (1):65-78.

particularly for families, but were also likely to acknowledge the costs of car ownership. However, in some cases, the cost of car ownership was a motivator to use the car (and get the best value from it), rather than use it less. Some non car owners extolled the virtues of travelling by car although others were sceptical about the benefits that car use could bring.

Does discussion with alternative mode users alter the perception of car drivers towards that mode in a positive manner?

- 5.29 Within the constraints of the current study the clear answer to this question is 'no'. However this is due to the fact that the majority of car drivers interviewed as part of the research tended to use a variety of modes of travel and therefore already had relatively positive views towards alternative modes. Travel choices tended to be based on convenience, as participants largely lived in the city of Glasgow or in the surrounding area, with a good range of transport options available.
- 5.30 In the groups where a cyclist was present the other participants were keen to hear about his/her experiences and share their views. A lone cyclist was not able to convince the others that cycling was not too dangerous to consider. It would be interesting to explore the potential of future approaches to promote cycling in Glasgow that involved regular cyclists in Glasgow conversing and sharing their views with non-cyclists.
- 5.31 The reason for structuring the research in this way was to investigate the potential importance of social norms and group identity. This is the idea that people see themselves as a certain type of 'traveller' and have entrenched views about how other people see them and about how they see other groups. As discussed, it is difficult for this study to reach conclusions on these aspects. However, there were some hints of the importance of personal norms and identity in relation to the use of walking and cycling. The connection between these modes and a healthy lifestyle has a strong tendency to associate users of these modes with a certain outlook, set of skills and personal discipline. Whilst personal norms (the sense of responsibility and guilt put on ones self) were stronger than social norms (the positive or negative views about other people using these modes) or identity (whether or not someone feels they belong to a certain group), these normative influences were present in the discussions to some degree. From the group discussions, it seems as though there may be an element of both personal guilt and social pressure to use the car less for short journeys which could potentially be exploited by policy messages used to promote active modes. It is possible that these are stronger influences than have been revealed here given that such influences are notoriously difficult to elicit in survey work, especially from group discussions.
- 5.32 Altogether, this begs the question as to whether car use and ownership was seen in any way as superior to the use of active modes. It has to be concluded from this research that issues of status and identity in relation to car use did not emerge as strong themes for the participants. Specifically these issues did not come through strongly in the open discussion, even when a non car owner was asked explicitly by the interviewer 'how about your friends, would they think that you were uncool or anything [for not travelling by car]?', the answer was definitely negative. Given the relatively low car ownership in the areas surveyed, it is likely that, although car ownership may be aspired to by many people, not having a car is seen as the norm in these communities and people are resigned to and accepting of non car ownership. This situation provides an opportunity for more effective promotion of active travel to expand the travel horizons of these people and promote health and well being through active travel.

Recommendations

5.33 This section draws upon the findings to set out a series of recommendations for targeted promotion of active modes which have resonance with the lives of the diverse population of Glasgow. Three groups of recommendations are presented. The first relate to specific areas of policy or infrastructure improvement and the second relate to the motivations for mode choice found in this research which could be used in targeted messages to encourage mode shift. A table is provided indicating the relevant agencies to help address these issues. The third area of recommendations relates to issues for further research.

Recommendations for policy interventions

- Information provision for wayfinding
- 5.34 Bus travel, cycling and even walking modes suffer from a lack of information concerning routes and timetables. This is most evident with respect to bus travel and the 'confusing' array of bus services, bus stops and routes which exist, particularly in the centre of Glasgow routes. However, it also applies to cycling and walking where people have an appetite for information on the most appropriate routes, eg most direct and safest. Continued collaboration of Paths for All, Glasgow City Council (GCC) and Cycling Scotland would be required to address this.
- 5.35 Good examples of information provision exist. The Aberdeen Cycle Map was updated in 2005. It shows existing cycle facilities such as cycle lanes, as well as cycle shops, places to lock bikes, recommended quiet routes and recreational routes around the City. The map is available in City libraries and most public Council buildings. Some cycling maps and guides were produced by GCC in the 1990s and these could be revised.
- 5.36 The South West of Scotland Transport Partnership (SWESTRANs), Dumfries & Galloway Council and various other stakeholders have produced a Green Travel Map for the Dumfries & Galloway area. The Green Travel Map provides a wealth of information such as cycle routes and parking, footpaths, bus served roads and route number, bus stops within Dumfries town centre etc. The map is available from various sources such as libraries, tourist information centres and the internet (<http://www.sustrans.org.uk/webfiles/AT/Scotland/DandG%20GreenTravelMap%20Side2Final.pdf>).
- 5.37 In Glasgow, Go Bike in conjunction with Spokes has produced a similar map that additionally indicates journey times when cycling. Given the importance of time considerations such information provision should continue and be made widely available. Issues of perceived time and convenience are covered in more detail below.
- Personalised Travel Planning (PTP)
- 5.38 Many people are unaware of the public transport routes, cycle routes and walking distances etc, and are uncertain about where to find information that is relevant to them. Providing residents with travel information tailored to their specific needs and highlighting the options and alternatives available to them, when combined with incentives to trial these alternatives can effect real changes in travel behaviour. Strathclyde Passenger Transport (SPT) should lead on distributing and targeting of this information better at the district level, perhaps in collaboration with local service providers eg neighbourhood centres, local supermarkets etc.
- 5.39 Certain areas of Glasgow and Scotland in general will be commencing such programmes shortly. 'Smarter Choices, Smarter Places' is a Scottish Government funded project designed to promote sustainable communities, healthy lifestyles and reductions in transport emissions. Barrhead, Kirkwall, Dumfries, Dundee (with a main focus on health), Kirkintilloch/Lenzie,

Larbert/Stenhousemuir and Glasgow East End will use £15 million of funding to develop a wide range of initiatives such as personalised travel planning which provides tailored travel information based on the needs of the individual household. Local councils will be promoting sustainable travel, trying to increase public transport use and encouraging people to use more active forms of travel. It will be beneficial if the results of these programmes are closely monitored and findings quickly disseminated to other local authorities.

- Training

5.40 Certain modes, particularly bus travel and cycling, could benefit from some training on how to use these modes. Some people express a lack of confidence and wariness and this has been overcome in other locations through bespoke, often one on one training sessions with volunteers. Cycling Scotland, for example, offer a range of instructor and staff training courses which include cycle training, cycle ride leadership, police cycle patrol and cycle patrol for parks and countryside. Cycling Scotland also manage the Cycle Friendly Employer and Cycle Friendly Schools Awards and the Scottish Cycle Training Scheme. Paths for All, Sustrans, and other voluntary organisations can provide greater support for the active travel modes, although there is a revenue cost attached to potentially short-term projects, which then raises the issues of promotion of these modes needing to be more substantially embedded into GCC work programmes.

- Cycle provision and promotion.

5.41 Lack of cycling facilities are a large barrier to cycling in Glasgow. Improving these facilities will be important in the promotion of active travel in Glasgow, and Cycling Scotland could take a lead in this area. But greater support and advice from public health would be important not least given the obesity 'forecasts' and need for action now. As well as building and promoting the routes, it is important that messages are used which demonstrate the convenience and relative safety of this mode of travel.

- Bus priority and service scheduling

5.42 Bus journey times and reliability are one of the greatest obstacles to bus use. Some of the problems seemed to be put down to the fact that buses are a victim of wider road congestion. In addition, there is a perception that bus services stop too early on many routes. Improved services and their promotion are key to greater patronage. Area specific surveys might discover areas of further demand for services.

5.43 The SPT need to work more with GCC to get greater priority for dedicated roadspace. Regulatory reform is still needed to 'reverse' some of the problems resulting from the 1985 Transport Act which deregulated bus services outside London. Greater regulation of those services would also encourage greater use as service availability could be clearer, with a high quality of vehicles, service provision and customer service could be sustained. There was widespread complaint about the attitude of bus drivers and their driving standard. This needs to be addressed through partnership with the bus companies.

- Parking

5.44 The relative scarcity and expense of car parking in the city centre and hospital locations was a clear deterrent to car use. This proves the effectiveness of parking policy to discourage car use and encourage active modes, a policy which could in theory be extended to other sites, but in practise is unlikely to be palatable to, for example shopping centres, who want to attract as many visitors as possible. Parking restrictions at a hospital could raise issues of equality for those needing to reach the services that find it difficult to travel by alternative means, but yet the majority of patients,

including day visitors, are able bodied and greater restraint would mean more certainty in travel for those who actually require car access eg due to mobility limitations.

- Crime prevention

5.45 Fear of crime or personal attack are barriers to certain travel modes, particularly at night. Measures are being taken to address these issues, such as the implementation of video cameras on buses, but if more can be achieved in this area fewer people are likely to perceive this as a key barrier to active travel. Police support and collaboration would be required to improve safety levels, and improvements to the environment and provision of street lighting and safer waiting places for public transport can contribute much against fear of crime.

- Car Clubs

5.46 It is clear that most car drivers in this survey acknowledge that many if not most of their journeys can be undertaken by alternative modes. While some would not consider life without their car at all, many are attached to their car for the more practical benefits it can bring, particularly when carrying shopping or travelling to visit someone or something some distance away. Also, many are conscious of the costs of car travel. These are all conditions under which car clubs can be developed and promoted. Car clubs also have the benefit of being attractive to aspiring car owners who may then not go on to own a car and develop the habitual behaviour outlined in this study. There is also some evidence to suggest that car club members are more physically active than non members²⁷.

5.47 City Car Club was launched in Edinburgh a decade ago. There, motorists pay a joining fee of £50 to get access to a range of cars. Vehicles are parked in dedicated bays across the city and members can hop in and just drive off. The cost of having a car for one hour varies between £4.95 and £5.95 depending on the size of the engine. City Car Club met with council Glasgow City Council officials early 2009 to discuss plans for a Glasgow scheme. Nevertheless, one of the main problems appears to be getting the parking bays allocated. If these issues can be resolved then there is much potential benefit for those residents of Greater Glasgow that only occasionally need to use a car. The charity Carplus provides support for car clubs and an accreditation scheme.

5.48 Table 5.2, below, highlights the relevant agencies for addressing the issues and recommendations outlined above, and the policy messages to be outlined shortly.

Table 5.2 Identified issues and Agencies to address them

	GCPH	Local Authorities (Highways)	SPT	Bus Companies	Voluntary Sector	NHS	Local groups	Scottish Govt	Other/ consultancy	Car club	Cycling Scotland	Police
Wayfinding information provision – bus, walk, cycle		X	X	X		X					X	
PTP		X						X	X			

²⁷ Frank L, Andresen M, Schmid T. Obesity relationships with community design, physical activity, and time spent in cars, *American Journal of Preventive Medicine*. 2004; **27**(2):87-96

cycle provision and promotion		X				X					X	
Training		X	X				X					
Bus priority, scheduling, customer service		X	X	X		X						
Parking		X	X									
Crime Prevention								X				X
Car Clubs		X								X		
Messages to promote:												
Bus image improvements, regulation		X	X	X				X				
Sociability			X		X							
Perceptions of time and cost		X	X		X							
Perceptions of safety			X									X
Health benefits	X	X			X	X	X	X			X	
Lifecourse approach	X	X				X		X	X		X	

Recommendations for targeted policy messages

5.49 The most prevalent attitudes and norms discovered in this study to influence mode choice can be used to design and target marketing and promotional messages. More work would be needed to test out these messages on specific target groups. However, it is possible to outline broad areas as follows:

- Health. Not only were active modes, including bus travel, acknowledged to bring both physical and mental health benefits, there was a strong sense that people feel some compulsion to take advantage of them. Physical health benefits largely included weight loss and fitness, but also general stamina, more energy and a 'feel good factor'. Mental health benefits included relaxation and a relative lack of stress compared to other modes of travel. All in all, there were some feelings of guilt and social pressure to avoid short car journeys and the laziness associated with avoiding walking more often. This suggests that the messages presented for example by Healthier Scotland²⁸ with the Take Life On campaign may be having some success. It is however worth noting that previous work has highlighted that direct promotion of health messages are a turn off for some and can actually increase health inequalities.
- Time savings. As mentioned several times above, journey time is an important factor in mode choice. However, it is possible that there are some misperceptions involved in assessments of how long it might take to walk, cycle or travel by bus as compared to the car. Therefore, promotional messages would benefit from concentrating on the relative time advantages of different modes. In addition to this it is possible to 'save time' through active travel, for example by cycling to work instead of going to the gym.
- Cost. As with time, there may be misperceptions surrounding the cost of travelling by particular modes. In particular, car users may not routinely factor in the cost of car parking and other motoring costs when comparing car use against other modes. Therefore, messages giving comparative cost information could be beneficial.

²⁸ Scottish Government Healthier Scotland. Take Life On. <http://www.takelifeon.co.uk/being-active.html>

- Sociability. The potential social benefits of travelling by bus or walking will not be a message which resonates with everyone. However, the positive benefits of interacting with other people while travelling could be promoted to certain audiences, particularly elderly people.
- Image of the bus. Although not a strong and explicit factor in this research, certain aspects of bus travel were clearly thought to be 'second rate'. This included the attitudes of bus drivers, cleanliness of buses and the anti-social behaviour that can be encountered. As a result, any improvements in these aspects of the service would warrant special promotion.
- Safety and risk. Although perceptions of personal security and safety are delicate and deep-rooted issues to tackle, these are very important aspects of mode choice. Careful consideration should be given to how accurate and constructive information can be portrayed about these issues.
- Lifecourse approach. Travel needs vary throughout the lifecourse as children move from school, to college, to employment and as families grow and adults move into older age and retirement. These life transitions present ideal opportunities to target travel behaviour change messages, as any travel habits are likely to be weakened by the context changes occurring at these times (Verplanken et al, 2008)²⁹.

Recommendations for further research

5.50 This research has been an in depth study of attitudes to various travel modes in four different locations in Glasgow and the surrounding area. Although it has illuminated some aspects of travel mode choice in detail and provides an understanding of the salient travel issues for residents in these areas, there are certain questions which remain unanswered or have been brought to light by the research. These can be summarised as follows:

- Perceptions of travel time. Given the importance attached to journey time, it would be worthwhile to investigate the correlation between perceived and actual journey times on specific travel modes. Any misperceptions could then be corrected through specific and targeted information and promotion.
- Segmentation. The research has revealed that there is not a typical bus user, walker or car driver in the study area. Promotional messages will be optimised when they can account for the fact that different things are important to different people. This qualitative research cannot lead to a definitive segmentation model of travellers in and around Glasgow, but this could be a consideration for further research.

Cycling. This mode of travel appears to generate some of the strongest opinions and negative associations with participants. It would be worthwhile to examine the source of these (mis)perceptions with reference to specific journeys, areas and target groups.

The wider influences upon choice and decision making

5.51 Alongside interventions to change individual responses toward active travel, it is equally important to acknowledge the wider influences on decision making that individual decision makers are operating within. This includes both the physical environment (a collective objective influence) and societal norms and cultures (collective subjective influence).

²⁹ Verplanken B, Walker I, Davis A, Jurasek M, Context change and travel mode choice: Combining the habit discontinuity and self-activation hypotheses, *Journal of Environmental Psychology*. 2008; **28**(2):121-127

- 5.52 The design of urban areas and destinations renders active travel either more or less difficult to achieve for all or sub-groups of individuals. Certain destinations are difficult to reach (for all or some users) by modes other than car. This can be viewed as a 'collective objective' viewpoint. Given that destinations such as shopping centres and hospitals are designed to attract people from wide catchment areas, retro-fitting public transport and active travel options to encourage modal shift for visitors from all areas can be extremely difficult. Even buses, which represent a flexible mode of public transport, may not achieve an equal service in terms of frequency and speed for all. Consequently, prioritising opportunities for active travel in the planning process *from inception* for future developments would lead to consideration of how journey makers could access developments actively.
- 5.53 Travel decisions are also made within the context of societal norms and cultures (collective subjective influence). For example 'typical working hours' resulting in peak hour congestion; time pressures of modern life resulting in a 'need' to travel quickly and a modern expectation and prioritisation of 'convenience'.
- 5.54 Recent technological advances have allowed the development and expansion of a variety of working practises such as tele-working; home working; and altered working hours. As these develop in popularity and cultural acceptance this should reduce the difficulty of achieving punctual arrivals and creating road safety issues associated with peak hour congestion (two barriers to active travel). The International Futures Forum³⁰, looking at the problem of congestion in Edinburgh, suggested the promotion of broadband capacity to allow more flexible working patterns that could reduce the need for many to make inward and outward journeys at the same time. This however requires support from both employers and employees and is an example of how many aspects of cultural change is beyond the remit of agencies typically involved in transport planning and requires commitment from across a broad spectrum.
- 5.55 Time pressures that lead to a preference for car use have also been revealed as an important collective subjective element in this research. Many participants complained about more active modes not satisfying expectations of travel time or being impractical for making multiple journeys or 'trip-chaining'. The idea of time pressure and convenience however has a collective origin. We live in a society where quick and comfortable travel is expected all day, everyday and for a greater variety of destinations. Public transport is unlikely to match this for every journey.
- 5.56 There is additionally a widespread cultural expectation that we should be able to make a great variety of journeys at different times. In an increasingly 'always on' 24/7 society it can be difficult for public transport to adapt to the complexity and variety of travel needs demanded by travellers. For example, many study participants complained about the lack of frequency and unreliability of public transport at 'off peak' times. This often leads to a preference for car travel at such times and shows how this mode can become habit. The purely active modes such as walking and cycling offer a high degree of control, independence and freedom to make journeys at any time which have the potential to match these expectations. Information could highlight this aspect of active travel alongside tackling the infrastructural and safety issues that currently act as a disincentive.
- 5.57 However, whilst the organisation and design of urban resources are at a scale achievable only by motorised transport (with workplaces and out of town shopping destinations separated from residential areas) many journeys will continue to be biased against active travel becoming a convenient means of access. Again a response could be to prioritise active travel options within the

³⁰ Leicester G, Lorimer D and Hall M. *The Extended Economy: Flexible Working, Growth and the Edinburgh City Region*. Report by International Futures Foundation

planning process for new developments, from inception. Indeed, thinking in this way may produce very different developments in future than the ones we have today.

Appendix A

Observations on Methodology

- 5.58 The brief for this research requested innovative qualitative methodology, and accordingly the methods employed in this research have been relatively experimental. It is therefore valuable to comment on the success or otherwise of these methods.

Vox pop video interviews

- 5.59 The vox pop video interviews were intended to provide accounts of people's journeys to various locations around Glasgow. However people proved even less talkative than anticipated, and were often somewhat nervous of the camera, despite being happy to participate in front of the camera. Therefore a more structured interview schedule became necessary, asking participants lots of questions, rather than collecting simple accounts of people's journeys in their own words. With this more structured interview schedule in place and lots of questions asked and prompting, many people were able to provide interesting detail, and the views of a range of mode users were obtained.
- 5.60 This is likely to be because for the majority of people a journey is 'just a journey', a normal, ordinary event etc, so not much notice is taken of it. This would account for people's general inability to provide much information or detail on their journeys without extensive prompting through questions. It might however be possible to collect such accounts in future by interviewing participants that had been pre-requested in advance to take notice of their journeys in order to be able to describe it. Despite this useful information on attitudes regarding various modes of travel to the four locations was obtained.

Shared-focus groups

- 5.61 The intention of the shared-focus groups was for users of different modes to be able to learn from each others experiences and confront assumptions. The interactions of the two groups were also intended to highlight group norms and identity issues.
- 5.62 The majority of the focus group participants recruited could be considered multi-modal, or had experience of using a variety of modes. Very few of the drivers and walkers never used public transport, and many people without a car would often get lifts from the friends. There was therefore relatively little that the groups could learn from each other. The attitudes and views of the different mode users groups also did not differ very greatly, therefore there was little in the way of identity highlighted. For these reasons the third section of the shared-focus groups was largely less successful as participants were repeating issues already covered in earlier discussions that were not new to the other group.
- 5.63 The original idea behind these shared-focus groups came from another piece of work conducted on bus use in a rural area. In the first study the presence of the bus users was seen by the non-bus-users as a reliable source of information – they provided a credible source that was not seen to have an ulterior motive that a research or official might have. Research into information provision for behaviour change highlights the need for credible sources.
- 5.64 It is likely that this approach would be more successful in a rural area, or area where bus facilities are not so widespread as a city such as Glasgow. In such situations many people do not see the

bus as an option at all, and therefore would have much to learn from bus users in the area. In a city such as Glasgow the majority of the population is aware of public transport as an option for them as individuals and has some experience of using them.

Cause and effect diagrams

- 5.65 These proved useful tools to get people to compare their thoughts on the different modes discussed. Younger participants tended to find the cause and effect diagrams easier than older ones, however all were able to put their thoughts onto post-it notes. One participant could not read and write, so she directed the moderator what to write on the post-it notes on her behalf (as had been planned for in contingency).