

A Bursary Paper Produced for the Transport Planning Society

Katie Clarke

Transport Planning Associates

(TPS Membership Number: 66679934)

December 2012

Contents

	PAGE
Introduction	1
Smarter Choices – What Are They And How Can They Change Travel Behaviour?	1
Aims & Objectives	2
Literature Review	2
Gaps in Research to Date	4
Research Methodology	5
Analysis	6
Results	6
Interpretation of Results	10
Limitations	11
Further Research	11
Ethical Considerations	11
Conclusions	12
References	13

Appendix A – Copy of Survey

Acknowledgements

I would like to thank the organisations who agreed to take part in the surveys for this study, Keith Buchan, my Bursary Mentor, who provided me with advice and guidance throughout the process of researching and writing this paper, Transport Planning Associates and my family for their support whilst I was writing this paper.

Introduction

Over the years, road traffic has increased significantly with most households now having access to two or more cars. Whilst the length of journeys may be reducing, increased travel by private car has exacerbated social, economic and environmental externalities such as pollution, obesity, exclusion and congestion. Continued traffic growth is therefore unsustainable and as such behaviour change is required to reduce car travel.

In 1963 The Buchanan Report (Traffic in Towns, p.193) stated that 'in the long run, the most potent factor in maintaining a 'ceiling' on private car traffic in busy areas is likely to be the provision of good, cheap public transport, coupled with the public's understanding of the position'. For years, PPG13's aim was to promote more sustainable transport choices, encouraging accessibility by public transport, walking and cycling, and to reduce the need to travel by car. Yet still the private car remains as the predominant mode of choice outside London and major city centres. But why?

Smarter Choices - What Are They and How Can They Change Travel Behaviour?

Steg (2005) found that the car is seen as 'much more than a means of transport' (p.148) with symbolic and affective aspects such as the feeling of power, superiority, control, and the thrill associated with driving. The author indicates that 'resistance to measures aimed at car use' could therefore be attributed to these symbolic and affective features (p.160).

In 2005 the Department for Transport released 'Smarter Choices: Changing the Way We Travel'; a report which analysed a number of soft measures which 'seek to give better information and opportunities, aimed at helping people to choose to reduce their car use while enhancing the attractiveness of alternatives' (Cairns et al, 2004). A very familiar position to that concluded by Buchanan, almost fifty years previously.

Travel demand management interventions are often implemented to influence and alter travel behaviour, whether it is enforced or voluntary. There are two types of travel demand management measures; which can be classified as hard or soft. Smarter Choices are a package of softer measures to manage travel demand and the impact on the environment. They therefore seek to mitigate the adverse impacts of motorised travel, reduce social exclusion and increase accessibility. They also offer a cost effective solution when compared to other, more physical, initiatives (DoH, 2011).

Smarter Choice measures can either be home based such as Personal Travel Planning, or destination based such as Workplace Travel Plans, cycle parking and parking restrictions. Home based measures are often tailored to include local information which are implemented through soft measures only, for example the distribution of information leaflets on walking, cycling and public transport routes in a particular area. However, destination based measures are more easily incorporated within the planning system, for example through planning conditions such as Workplace Travel Plans or infrastructure requirements. Within workplaces, soft measures often lead hard measures. For example, a workplace travel plan may be implemented alongside reduced car parking provision, increased cycle parking, showers and lockers.

The successful implementation of travel behaviour change initiatives often involves a combination of both soft and hard measures, to manage demand and influence behaviour. However, it also requires the traveller to accept the potential effectiveness of the measure and commit to trying it out.

Aims / Objectives

So, why is it so hard to be soft? And how do we get travellers to change their attitudes towards Smarter Choices and increase their acceptance of measures and their perceived effectiveness in their potential for successful travel behaviour change?

This paper has been produced to investigate the role and impact of Smarter Choices in changing travel behaviour. It will examine traveller's perceptions of the effectiveness of measures in changing the way they travel, focussing specifically on travel to work, and whether this has an impact upon traveller's acceptance of their implementation and subsequent behaviour.

This research has therefore sought to investigate the success of Smarter Choices using the availability of Workplace Travel Plans which incorporate a package of measures to influence employee's travel to work at travel at work. The differences between the perceptions and attitudes towards measures of those employees working at organisations without travel plans, or with relatively new travel plans, and employees working at organisations with well established travel plans has therefore been considered.

Literature Review

Academic

Although commuting trips have fallen over the years, they still account for 15 percent of all trips with the private car the predominant mode of travel for areas outside of London (DfT, 2011). Car occupancy rates for commuting trips are lower than the average (1.6 individuals per car) at 1.2 individuals (DfT, 2011), with a staggering 38 million empty seats on the roads during the morning peak hour (Clabburn, 2012).

It is interesting to note that 35% of commuters who travel by car say that congestion (and roadworks) cause them difficulties on their journeys to and from work, compared to 6% of non-car users (DfT, 2011). So, if those already using more sustainable modes are quite positive about doing so, what is preventing car drivers from changing their travel behaviour to an alternative?

Attitudes are an evaluative response to something (Steg, 2005) that results in a positive or negative reaction. Behaviour is subsequently guided by these beliefs. However, a positive attitude does not necessarily constitute behaviour change. Much of the literature (e.g. Schlag, 1997; Garling and Axhausen, 2003; Wright and Egan, 2000) argues that if attitudes provide an explanation for behaviour, then by influencing and changing attitudes behaviour will also change.

Although modal shift away from the private car can have considerable private and social cost savings (Curtis and Headicar, 1997), the private car is often 'perceived as being cheaper and more convenient' (Wright and Egan, 2000, p.289). There are also often emotive issues associated with travellers mode choice and values associated with the modes themselves (Steg, 2005) suggesting that the private car is often much more than

a mode of transport, but a facilitator of independence, freedom, or even a status symbol. However, Owens (1995) states that traveller's will not change their travel behaviour if the car continues to be easy to use and more cost effective than using an alternative mode. However, this is somewhat dependent upon the individual, their circumstances and their perception of different modes.

Anable (2005, p.65) writes that 'psychological factors including perceptions, identity, social norms and habit' are increasingly applied to try to understand travel behaviour. Ajzen's (1991) Theory of Planned Behaviour (TPB) suggests that behaviour is guided by an individual's beliefs about the likely consequences (i.e. attitude), subjective norms (i.e. what is expected of them by others), and perceived behavioural control (i.e. the presence of factors that may help or hinder the performance of their behaviour). Ajzen (1991) found that when an individual had prior knowledge or experience of the behaviour in question, they are more likely to form a positive intention and subsequently act on this. For example, a commuter who has used the bus to travel to work in the past is more likely to form an intention to do so again, based on their previous experiences. Intention therefore mediates attitude and behaviour. However, often what people say they will do (intention) and what they actually do (behaviour) are not the same.

However, TPB assumes that behaviour is always planned when, in reality, this is not often the case, and travellers are often seen as habitual individuals. Therefore, the way in which they choose to travel is often chosen without consideration. Habits arise from the repeated performance of behavioural sequences that require little cognitive effort in order to obtain a certain goal (Triandis, 1977). Verplanken et al (1997) found that those with strong habits are less likely to seek information and investigate the different choices available to them. Therefore, in order to break these habits, behaviour needs to become more conscious and deliberate through policy interventions to raise awareness.

Travel demand management interventions are often implemented by Councils and companies to influence and alter travel behaviour, whether it is enforced or voluntary. Goodwin et al (2004, p6) state that 'policy initiatives, whether to provide improved infrastructure or to improve services and management, normally either are intended either to provide capacity for demand growth, or to reduce or reverse that growth'. Meyer (1999, p.576) also defines interventions as 'actions aimed at influencing people's travel behaviour in such a way that alternative mobility options are presented and/or congestion is reduced'.

There are two types of travel demand management measures; which can be classified as hard or soft. Bonsall (2005) defines soft measures as 'positive encouragement of desirable modes' and hard measures as regulations and physical restrictions (p.619/620). Hard measures most commonly involve physical changes, such as improvements to infrastructure. Hard measures seek to change the attributes of travel and discourage behaviours. They can also include taxes and regulations which can perhaps be described as 'semi-soft' measures as they are more persuasive than physical and seek to influence choice. Soft measures however, most commonly induce psychological changes, such as information and Travel Planning, which seek to change attitudes towards travel modes and encourage behaviours. Soft measures are increasingly becoming known as 'Smarter Choices', a term penned by the DfT. Smarter Choices are local programs of targeted activity which aim to encourage modal shift from the private car. Rather than capital spend projects, these cost effective methods also help to mitigate the adverse impacts of motorised travel as well as reducing social exclusion and increasing accessibility.

Thorpe et al (2000, p.251) state that a key requisite to the successful implementation of TDM measures is that 'it should be both acceptable to the public and also capable of achieving its stated objectives'. They go on to hypothesise that 'more effective measures are less acceptable and vice versa' (p.251). Therefore, it is generally considered that soft measures are more accepted than hard measures, even though hard measures can be more effective (Bamford, 2005). Those measures which are less acceptable may also be 'less politically feasible' (Gärling and Schuitema, 2007, p.149). Therefore, whilst Smarter Choices are favoured because they are less controversial, their effectiveness in changing (and maintaining) travel behaviour is sometimes questioned.

Whilst Curtis and Headicar (1997, p.57, 58) argue that attitudes and behaviour can be more susceptible to change if awareness of the problem is increased, some authors suggest that a current lack of understanding and knowledge about measures means that acceptability and perceived effectiveness are often misguided (Musselwhite and Lyons, 2009). It is also evident that travellers influenced by habit 'tend to discount relevant information' and therefore it can be 'difficult to influence [them] with rational arguments' (Gärling and Axhausen, 2003, p.1). This suggests that whilst Smarter Choices are effective in theory, in practice there are difficulties in ensuring their success.

Policy

The DfT (2012) defines Smarter Choices as 'techniques for influencing people's travel behaviour towards more sustainable options', including travel planning, improving public transport, marketing such as awareness campaigns and websites, and encouraging teleworking.

The Future of Transport White Paper (DfT, 2004) and Smarter Choices – Changing the Way we Travel (Cairns et al, 2004) were released alongside each other in 2005. The report by Cairns et al (2004), states that soft measures 'seek to give better information and opportunities, aimed at helping people to choose to reduce their car use while enhancing the attractiveness of alternatives', and whilst they are 'relatively uncontroversial and often popular', they are a new transport policy initiative and therefore the effects are still somewhat variable. However, the report also looked at the effects of Smarter Choice initiatives and found that they could be 'sufficiently effective in reducing traffic that they merit serious consideration for an important role in transport strategy for the foreseeable future' (p.373).

Smarter Choices have an excellent cost:benefit ratio (DoH, 2011). This is reinforced by WebTAG (draft unit 3.10.6), which indicates that Smarter Choices can provide very high benefits compared to costs including reducing the need for expensive infrastructure and reducing CO² emissions. Soft Measures – Hard Facts (DoH, 2011) sets out the value for money of soft measure interventions and examined the impact of measures and found that 'changing how we travel can reduce the need for expensive infrastructure' (p.1)

Gaps In Research To Date

Although much recent policy sets out different types of measures and their success in different circumstances, individual's attitudes towards measures to enable them to be successfully implemented and maintain travel behaviour change them are somewhat overlooked. This is particularly important when considering how to influence car drivers and prevent modal change between already sustainable modes (i.e. from walking to bus, or from bus to cycle).

Much of the existing literature on this topic examines either soft or hard measures, their effectiveness or acceptability. The current literature does not sufficiently investigate the effect of implemented measures on traveller's attitudes. The relationship between an individual's perceptions of measures and how travel demand management interventions can help alter attitudes and behaviour is therefore overlooked.

This paper therefore proposes to investigate the impact of measures on traveller behaviour. It tries to examine whether exposure to different measures and experience of their 'success' can influence individual's attitudes towards travel behaviour change.

As an aside, this paper will also seek to establish the reasons behind perceptions of the role and impact of hard and soft measures, whether this influences acceptance and how this can be overcome to encourage more sustainable travel.

Research Methodology

Travel behaviour and attitudes can be complex and therefore difficult to measure. Roberts (2010, p.196) explains that because attitudes 'are 'psychological constructs, they cannot be observed directly'. Therefore, the author suggests that 'asking people directly' is the quickest, easiest and most cost efficient way to measure attitudes (p.197).

Workplace travel plans often encompass a package of measures which offer employees different choices when choosing how to travel to work to reduce sole occupancy car use. Therefore, in order to establish whether Smarter Choices can benefit travel behaviour, surveys have been undertaken at a number of organisations across the UK to investigate whether Workplace Travel Plans and the measures within them change the way people perceive measures (i.e. their effectiveness and acceptance).

A link to an online survey (created using online survey tool SurveyMonkey) was distributed by email to employees via a point of contact (usually the organisation's Travel Plan Coordinator). The surveys sought to establish whether the attitudes of those employees who work at organisations with established Travel Plans is improved compared to those without a Travel Plan, and also whether perceived effectiveness and acceptability of measures is improved following exposure to measures. Various questions were asked to establish the factors affecting people's views on travel choices and how Smarter Choices may, or may not, influence their travel behaviour. The survey asked employees how they travel to work on a typical day and investigated their main reason for doing so. It also sought to establish whether they thought certain measures would be effective in changing their travel, and if they would accept their implementation.

In order to encourage participation, those respondents who expressed an interest, were entered in to a prize draw to win a high street gift voucher of their choice. A copy of the survey is included at **Appendix A**.

Attitudes, perceptions and behaviours are diverse and vary from person to person and from place to place. A wide range of organisations have been surveyed in various locations, and it is considered that a representative sample has therefore been reached, as far as practicable, and is represented and captured within the data and analysis. However, rather than try and cover all employees of larger organisations, it was decided to obtain a representative sample. This was also influenced by the organisations themselves; some of which placed restrictions on the distribution of the surveys amongst staff. This is discussed in more detail in the limitations section.

Analysis

The surveys sought to obtain both quantitative and qualitative data, through the inclusion of multiple choice and open ended questions. This approach draws from both sociological and psychological approaches to understanding attitudes and behaviour. In order to understand the propensity for change in travel behaviour, it is necessary to understand existing attitudes and behaviours and the perceived success of measures. This section of the report looks to analyse the responses received and highlight any differences between those organisations with and without travel plans.

Each organisation and the respondents within them will remain anonymous throughout the analysis. Average responses have therefore been used.

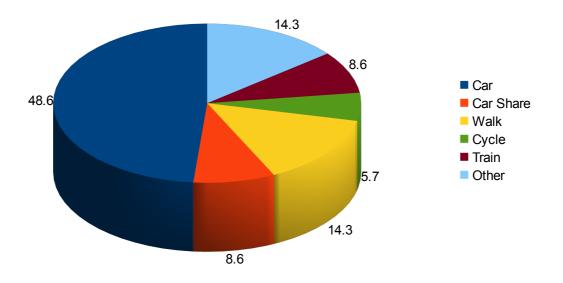
Results

Online surveys were completed by a total of 35 employees at an organisation's offices with new Travel Plans (herein referred to as New TP sample). Workplace Travel Plans have recently been implemented at the Company offices across the UK, and although any initiatives and measures are in their infancy, smarter travel practices are being developed.

A total of 41 employees in three organisations with Established Travel Plans (herein referred to as the Established TP sample). Each of the organisations have a well established Workplace Travel Plan and an appointed Travel Plan Coordinator. All of the sample organisations are located in similar locations in urban areas close to bus routes and with established walking and cycling routes to / from nearby residential areas.

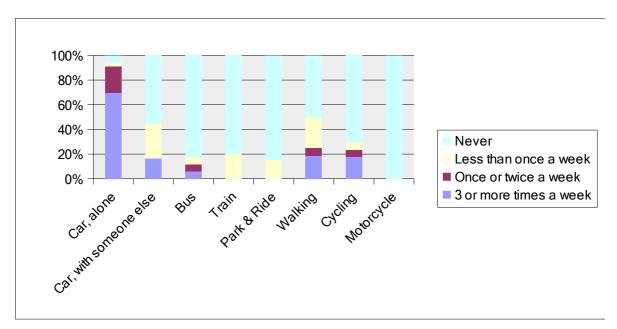
The New TP group shows that 34 percent of respondents live within five miles of their place of work; and in the Established TP survey shows that 46 percent of respondents live less than five miles of their place of work; a distance that could be considered reasonable for walking, cycling or public transport journeys. In the New TP sample, 91 percent of respondents have access to a car for journeys to work, with a total of 61 percent travelling by car for at least part of their journey, and 49 percent travelling alone, as shown on **Figure 1** (Note: Other includes multi-modal journeys including bus and walk, car and bus and car and walk).

Figure 1 – Usual Method of Travel to Work in a Typical Week (New TP)



For the Established TP sample, some 90 percent of employees have access to a car for work and a total of 69.7 percent travel by car alone three or more times a week, as shown on **Figure 2**.

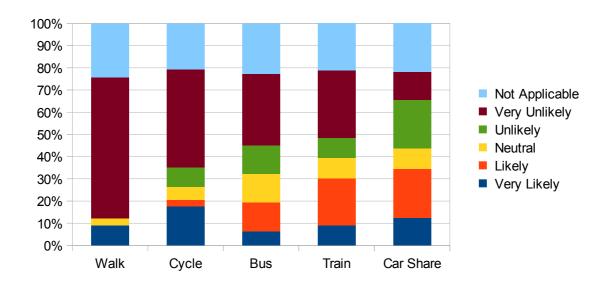
Figure 2 – Method of Travel to Work (Established TP Sample)



Surprisingly, the level of sole occupancy travel is significantly higher than for the New TP sample. The main reason for using the car and not other modes was childcare commitments, especially those who have young children to drop off at school on the way to work. However, a significant number of respondents said that when their children are old enough to travel alone, they may consider changing the way they travel (for example from car to bicycle).

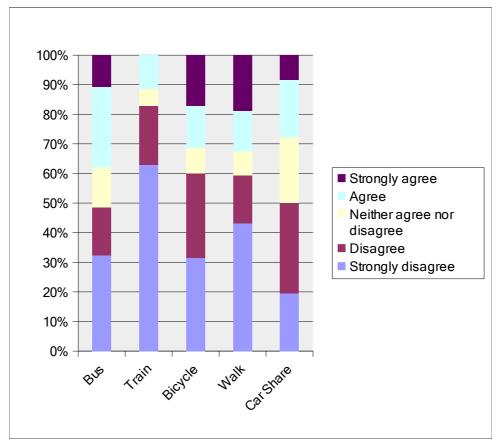
New TP respondents were asked the probability of them using modes other than the car. The results are shown on **Figure 3**. Despite the proximity of work and home destinations, some 64 percent stated that it would be very unlikely that they would walk to work. However, 18 percent said they would be very likely to consider cycling to work.

Figure 3 – Probability of Travelling by Alternative Mode (New TP)



Around 60 percent of the Established TP sample disagreed or strongly disagreed that they could cycle or walk to work and 49 percent by bus. Reasons for this include childcare commitments, needing the car for work purposes and not wanting multi-mode journeys (i.e. having to use both the bus and train). However, 38 percent said that they strongly agree or agree that they could travel to work by bus or by car sharing and 32 percent agreed or strongly agreed that they could walk, as shown on **Figure 4**.

Figure 4 – Probability of Travelling by Alternative Modes



Despite this, the survey shows that just six percent travel to work by bus, 19 percent walk and 17 percent car share three or more times a week, with sole occupancy car travel the predominant mode, as shown on **Figure 2**. However, of the Established TP group, 59 percent said they would like to use their car less. Of those who said they would not, the main reason stated was childcare commitments and the need to drop off / pick up children on the way to and from work.

The survey results indicate that the majority of respondents in the New TP sample (66 percent) consider reliability the main reason for choosing their mode of travel to work. Cost, convenience and length of journey were ranked as very important factors to respondents. Some 85 percent of the Established TP group consider reliability to be the most important factor when choosing their mode of travel to work, closely followed by convenience (79 percent). Cost, weather and length of journey were also ranked as very important factors to these respondents. Image and the ability to travel with others or alone were not important at all to either sample group. It is noted that the level of responses for 'Very Important' factors is higher in the Established TP group than for the New TP group. A comparison between the two samples is shown on **Figure 5**.

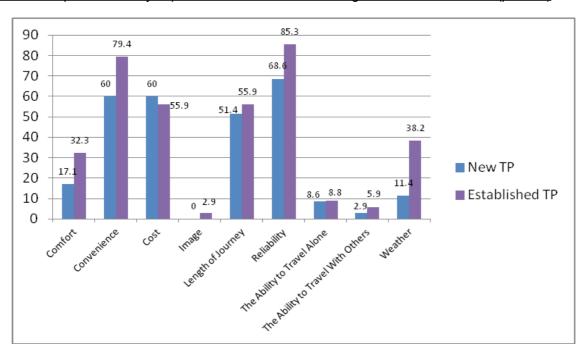


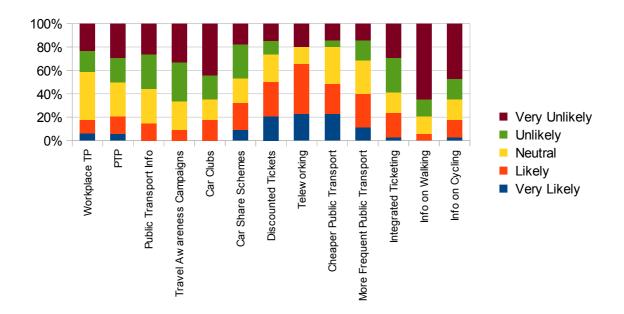
Figure 5 – Comparison of Very Important Factors When Choosing How to Travel to Work (percent)

When the New TP sample was asked about different Smarter Choices measures, almost all of the respondents had heard of Workplace Travel Plans (perhaps pertinent considering the company has just implemented them!) and car share schemes, with all measures known by at least one employee. In the Established TP group, almost all (94 percent) of the respondents had heard of car share schemes and improved cycle facilities. Fewer people on the other hand, had heard of car clubs and the potential for the internet and email to change travel behaviour (47 percent).

The New TP sample would be happy to see measures in their areas which involve public transport (80 percent), whereas the Established TP sample were more accepting of measures which reduced the need to travel including teleworking, internet and email (37 percent), and also better cycle facilities (48 percent). The number of respondents who would not be happy to see any measures in their area was higher for the Established group than for the New TP group.

When asked whether Smarter Choices would influence the way they travelled to work, the majority of New TP respondents said that improved public transport would succeed in changing the way they travel, as shown on **Figure 6**; the same measures that they would be happy to see implemented in their area. On the other hand, information and campaigns were considered as the least likely to change travel behaviour. Of the respondents, 79 percent said that information on walking would be unlikely or very unlikely to change the way they travel to work, and around two thirds stating that information on cycling and travel awareness campaigns would also be ineffective.

Figure 6 – Likelihood of Measures in Changing Travel Behaviour (New TP)



In the Established TP sample, respondents said that teleworking (44 percent) and better cycle facilities (26 percent) would succeed in changing the way they travel. On the other hand, car clubs, travel awareness campaigns, Personalised Travel Planning and Workplace Travel Plans(!) were considered as the least likely to change travel behaviour.

As an aside, the survey asked respondents in the Established TP sample what they like and dislike about their current journey to work and 49 percent said that they traffic, congestion and parking were all areas of annoyance. Many of those who walk and cycle identify keeping fit and healthy as a key attraction.

Interpretation of Results

The results of the Established TP sample are somewhat interesting as they appear to suggest that whilst employees have been exposed to measures and are aware of their role in changing travel behaviour, perhaps through the Workplace Travel Plan, the impact of measures is limited in the longer term. The results indicate that respondents of the New TP sample are more susceptible to change and are open to a wider variety of measures and willing to try alternatives.

Of the measures, the most commonly known are Destination Based, with very few people aware of Personalised Travel Planning. It is also clear that if people do not know what a measure constitutes, they are not willing to see it implemented in their area. It is therefore considered that the ability to influence travel behaviour through Smarter Choices may be very much dependent upon locational characteristics (i.e. where individuals live and work) and the choices available to them. External factors such as incorporating childcare commitments within the journey to work are also important when choosing how to travel, and the practicalities of this. However, Home Based Smarter Choices, especially Personalised Travel Planning, could allow for this and help travellers to plan their journeys more effectively.

Limitations

There were a number of limitations to this research study, particularly within the data collection process.

Many of the organisations that were approached expressed a reluctance to participate in the surveys due to impending surveys of their own, and the possibility that it may jeopardise their own response rate and results at a later date. Internal processes were also encountered through which the survey would have had to go through to get approval for distribution, especially within larger organisations. This would have been too time consuming and restrictive.

There were also time, budget and resource constraints placed upon the researcher and these should be considered when utilising the results. If more time and resources were available then in depth interviews or focus groups could have been carried out to obtain more qualitative data to assess current attitudes towards measures and whether they can be changed.

There may also be limitations within the results themselves. It is considered that social desirability bias (Roberts, 2010, p.206) may have occurred whereby respondents give the answers which 'portrays themselves in a ... more favourable light' to the researcher. This could be considered to be the case more so within the 'no Travel Plan' group as employees are more likely to be open to potential change than those in organisations with Travel Plans who have had experience of the measures and therefore have formed attitudes towards them.

Further Research

Without significant further work into individual Workplace Travel Plans and their measures and achievements to date, the long term effect of Smarter Choices cannot be confirmed from this research, and research into how Smarter Choices can be disseminated amongst travellers to maintain travel behaviour change could be considered.

Further research into the effect of Home Based and Destination Based Smarter Choices would also be beneficial to examine the effect upon attitudes towards measures and their subsequent travel behaviour.

Ethical considerations

Participation in the surveys was voluntary and as such no person was obliged to contribute to the study. Those participants who were willing to take part were not deceived about the aims and content of the study and were made aware of it's purpose from the outset with an introductory email to the Travel Plan Coordinator. The survey also consisted of a short introductory paragraph explaining the reasons for the research and that all answers would remain anonymous.

Conclusions

This paper has sought to investigate the role and impact of Smarter Choices in changing travel behaviour. It

examined traveller's perceptions of the effectiveness of measures in changing the way they travel, focussing

specifically on travel to work, and whether this has an impact upon traveller's acceptance of their

implementation and subsequent behaviour.

This research examined the success of Smarter Choices using the availability of Workplace Travel Plans.

The differences between perceptions and attitudes towards measures of those employees working at

organisations without travel plans, or with relatively new travel plans, and employees working at

organisations with well established travel plans has been considered and the results compared to determine whether attitudes towards Smarter Choices are improved with exposure to measures (in this instance, a

Travel Plan).

Although theories suggest that when an individual has prior knowledge or experience of the behaviour in

question, they are more likely to form a positive intention and subsequently act on this, the results of the

survey do not support this. It appears that whilst employees of organisations with newly implemented Travel Plans have more positive attitudes towards Smarter Choices and their potential for travel behaviour change,

more needs to be done to maintain interest in Workplace Travel Plans once they are established to

encourage employees to continue with their travel behaviour change.

It is also worth noting that the most commonly known measures are Destination Based, with very few people

aware of Home Based measures such as Personalised Travel Planning. It is also clear that if people do not

know what a measure constitutes, they are not willing to see it implemented in their area. It is therefore

considered that the ability to influence travel behaviour through Smarter Choices may be very much

dependent upon locational characteristics (i.e. where individuals live and work) and the choices available to them. There appears to be a need therefore for educating travellers on the different options available to

them when choosing how to travel and the positive effect that this can have in reducing sole occupancy car

use.

Whilst smarter choice have an excellent cost:benefit ratio and changing the way we travel can reduce the

need for additional expensive infrastructure, much of the literature suggests that successful implementation

of travel behaviour change initiatives often involves a combination of both soft and hard measures, to

manage demand and influence behaviour. However, it also requires the traveller to accept the potential

effectiveness of the measure and commit to trying it out. This research suggests therefore, that whilst Smarter Choices may succeed in their early stages and influence those new to the measures, they must be

implemented appropriately and followed up regularly to maintain interest in the measures and continue travel

behaviour change amongst those already targeted.

Written by: Katie Clarke

Transport Planning Associates

Word Count: 4,935.

12

References

- Anable, J. (2005) Complacent Car Addicts or Aspiring Environmentalists? Identifying Travel Behaviour Segments Using Attitude Theory. *Transport Policy*. Vol. 12. pp 65-78.
- Ajzen, I. (1991) The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. Vol 50 (2)
- Bonsall, P. (2005) Stimulating Modal Shift. *Handbook of Transport Strategy, Policy and Institutions*. Edited by K.J. Button and D.A. Hensher (2005) Elsevier.
- Buchanan, C. (1963) The Buchanan Report: Traffic in Towns. HMSO.
- Cairns, S. Sloman, L. Newson, C. Anable, J. Kirkbridge, A. and Goodwin, P. (2004) *Smarter Choices Changing the Way we Travel.* DfT.
- Clabburn, A. (2012) Ashden Case Study, Liftshare.com, UK
- Curtis, C. and Headicar, P. (1997) Targeting Travel Awareness Campaigns. *Transport Policy.* Vol. 4 (1)
- Department for Transport (2004) A Future for Transport White Paper. HMSO.
- Department for Transport (2011) Personal Travel Factsheet: Commuting and Business Travel. DfT.
- Department for Transport (2012) Research and Analysis. Available Online at:

 https://www.gov.uk/government/publications/smarter-choices-main-report-about-changing-the-way-we-travel
- Department of Health (2011) Soft Measures Hard Facts. DoH.
- Gärling, T. and Axhausen, K.W. (2003) Introduction: Habitual travel choice. *Transportation*. Vol. 30 (1)
- Gärling, T. and Schuitema, G. (2007) *Travel demand management targeting reduced private car use:*Effectiveness, public acceptability and political feasibility. Journal of Social Issues. Vol. 63 (1)
- Goodwin, P. Cairns, S. Dargay, J. Hanly, M, Parkhurst, G. Stokes, G. and Vythoulkas, P. (2004) *Changing Travel Behaviour.* ESRC Transport Studies Unit (TSU Conference, September 2004), University College London.
- Owens, S. (1995) From 'predict and provide' to 'predict and prevent'?: Pricing and planning in transport policy. *Transport Policy*. Vol. 2 (1)
- Meyer, M. D. (1999) Demand management as an element of transportation policy: using carrots and stick to influence travel behavior. *Transportation Research Part : Policy and Practice*. Vol. 33 (7-8)
- Musselwhite, C. and Lyons, G. (2009) Exploring the public acceptability of road pricing. UTSG. London.
- Roberts, C. (2010) In Bulmer, M. Gibbs, J. and Hyman, L. (2010) *Social measurement through social surveys: An applied approach*. Ashgate publishing. Farnham.
- Schlag, B. (1997) *Public acceptability of transport pricing.* Dresden University of Technology. Dresden.
- Steg, L. (2005) Car use: lust and must. Instrumental, symbolic and affective motives for car use. *Transportation Research Part A: Policy and Practice.* Vol. 39 (2-3).

- Thorpe, N. Hills, P. and Jaensirisak, S. (2000) Public attitudes to TDM measures: a comparative study. *Transport Policy*. Vol. 7 (4)
- Triandis, H.C. (1977) Interpersonal Behaviour. Monterey, Brook/Cole.
- Verplanken, B. Aarts, H. and Knippenberg, A.V. (1997) Habit, information acquisition and the process of making travel mode choices. *European Journal of Social Psychology.* Vol. 27 (5)
- Wright, C. and Egan, J. (2000) De-Marketing the car. Transport Policy. Vol. 7 (4)

Introduction

My name is Katie Clarke and I am undertaking some research for the Transport Planning Society (TPS) as part of their 2012 bursary scheme.
I am specifically interested in the choices you make when travelling to work and your opinions on different measures and initiatives that seek to change travel behaviour.
This survey consists of 17 questions and should take you no longer than 10 minutes to complete.
Please note that all of your responses will remain anonymous.
Thank you for your help with this research project.
Please click next to start the survey.

Travel to Work - A Research Project for the Transport Planning Society **About you** *1. Which of the following applies to you? Under 17 17-29 30-39 50-59 40-49 Over 60 0 0 0 0 0 0 Male 0 0 0 0 0 Female 2. Do you own or have access to a car to travel to work? Yes O No *3. For which organisation do you work? 4. Does your place of work have a Travel Plan? O Yes O No O Don't know Comments

Your travel to work

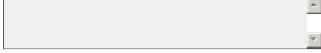
*5. How often do you travel to work by the following means of transport in a normal week?

	Never	Less than once a week	Once or twice a week	3 or more times a week
Car, as drive alone	0	0	O	0
Car, with someone else (as driver or passenger)	O	0	O	O
Bus	0	О	0	O
Train	0	O	O	O
Park & Ride	0	0	0	0
Walking	\odot	0	O	O
Cycling	0	0	O	O
Motorcycle	\odot	0	O	O
Other (please specify)				
Over 1 mile and up to 2 n	niles			
Over 1 mile and up to 2 n Over 2 miles and up to 4 Over 4 miles and up to 10 Over 10 miles and up to 2 Over 20 miles Don't know	miles O miles			
Over 2 miles and up to 4 Over 4 miles and up to 10 Over 10 miles and up to 2 Over 20 miles Don't know	miles O miles 20 miles	you like to use your c	car less?	
Over 2 miles and up to 4 Over 4 miles and up to 10 Over 10 miles and up to 2 Over 20 miles Don't know	miles O miles 20 miles	you like to use your c	car less?	
Over 2 miles and up to 4 Over 4 miles and up to 10 Over 10 miles and up to 2 Over 20 miles Don't know *7. If you drive to v	miles O miles 20 miles	you like to use your c	car less?	
Over 2 miles and up to 4 Over 4 miles and up to 10 Over 10 miles and up to 2 Over 20 miles Don't know *7. If you drive to ver 20 Yes	miles O miles 20 miles	you like to use your c	car less?	

8. How much do you agree with the following state	ement: It is possible for me to travel to
work by	

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Bus	O	0	0	0	0
Train	0	0	O	0	0
Bicycle	0	0	0	0	0
Walk	0	0	O	0	0
Car Share	O	0	0	O	0
If you have answered IT	Diagraph or ICtropaly diagrap	l to only of the enti	and why is this the second		

lf y	you have answered 'Disagree' or '	Strongly disagree' to any of	the options,	why is this the case?
			A	



9. What do you like about your journey to work?

<u></u>
Г
$\overline{}$

10. What do you dislike about your journey to work?

	<u></u>
	~

Choosing how you travel to work

11. Which of the following factors are important to you when choosing how to travel to work?

	Very Important	Somewhat Important	Not Important At All
Comfort	0	O	0
Convenience	O	O	0
Cost	O	O	0
Image	O	O	0
Length of Journey	O	O	O
Reliability	O	O	O
The ability to travel alone	O	O	O
The ability to travel with others	О	O	O
Weather	0	O	O
Other (please specify) 12. Have you heard of travel? (tick all that a	of any of the following to	that are aimed at char	nging the way you
Better cycle facilities (i.e. coshowers) Car Clubs	ycle lanes, cycle parking, lockers,	☐ Integrated Ticketing☐ More Frequent Public Trans	nsport
_ Cai Glabo		Park & Ride	

	Better cycle facilities (i.e. cycle lanes, cycle parking, lockers,		Integrated Licketing
show	ers)		More Frequent Public Transport
	Car Clubs		Park & Ride
	Car Share Schemes		
	Cheaper Public Transport		Personalised Travel Planning
_	Chaper rubbe transport		Public Transport Information
	Discounted Tickets		Road Pricing
	Fewer parking spaces		Teleworking (i.e. working from home)
	Help with purchasing a bicycle		releworking (i.e. working from frome)
			The internet & email
	Increased fuel tax		Traffic calming
	Increased parking charges	П	Travel Awareness Campaigns
	Information on Cycling		Travel Awareness Campaigns
	Information on Malling		Workplace Travel Plans
	Information on Walking		

	Better cycle facilities (i.e. cycle lanes, cycle parking, lockers,		Integrated Ticketing
now	ers) Car Clubs		More Frequent Public Transport
_			Park & Ride
	Car Share Schemes		Personalised Travel Planning
	Cheaper Public Transport		Public Transport Information
	Discounted Tickets		Road Pricing
	Fewer parking spaces		Teleworking (i.e. working from home)
	Help with purchasing a bicycle		The internet & email
_	Increased fuel tax		Traffic calming
	Increased parking charges		Travel Awareness Campaigns
	Information on Cycling		Workplace Travel Plans
	Information on Walking		
	If costs of car travel were to increase, vest likely take? Make more efficient use of the car (i.e. combining trips or car standard the need to travel by using electronic communiciations.) Change where I travel to	haring)	
	St likely take? Make more efficient use of the car (i.e. combining trips or car sl Reduce the need to travel by using electronic communiciations	haring)	
10:	Make more efficient use of the car (i.e. combining trips or car standard trips). Reduce the need to travel by using electronic communiciations. Change where I travel to Use alternatives to the car more Nothing - Stay the same	haring) s more	(i.e. emails, online shopping)
10:	Make more efficient use of the car (i.e. combining trips or car storage) Reduce the need to travel by using electronic communiciations Change where I travel to Use alternatives to the car more Nothing - Stay the same or (please specify) If public transport was made more appears	haring) s more	(i.e. emails, online shopping)
Dithe	Make more efficient use of the car (i.e. combining trips or car stock Reduce the need to travel by using electronic communiciations. Change where I travel to Use alternatives to the car more Nothing - Stay the same or (please specify) If public transport was made more appeared you do?	haring) s more	(i.e. emails, online shopping)
10:	Make more efficient use of the car (i.e. combining trips or car storage and the car (i.e. combining trips or car storage). Reduce the need to travel by using electronic communiciations. Change where I travel to Use alternatives to the car more. Nothing - Stay the same. If public transport was made more appearable appearable to the car more. I would definitely use public transport.	haring) s more	(i.e. emails, online shopping)
10:	Make more efficient use of the car (i.e. combining trips or car stocked to the need to travel by using electronic communiciations. Change where I travel to Use alternatives to the car more Nothing - Stay the same or (please specify) If public transport was made more appearable appearable to the public transport. I would definitely use public transport.	haring) s more	(i.e. emails, online shopping)

16. Which of the following measures would succeed / have succeeded in changing the way you travel to work? Better cycle facilities (i.e. cycle lanes, cycle parking, lockers, Integrated Ticketing More Frequent Public Transport ☐ Car Clubs Park & Ride Car Share Schemes Personalised Travel Planning Cheaper Public Transport Public Transport Information Discounted Tickets Road Pricing Fewer parking spaces Teleworking (i.e. working from home) Help with purchasing a bicycle The internet & email Increased fuel tax Traffic calming Increased parking charges □ Travel Awareness Campaigns Information on Cycling Workplace Travel Plans Information on Walking Other (please specify) 17. Which of the following measures would you be happy to see set up in your area? Better cycle facilities (i.e. cycle lanes, cycle parking) Park & Ride Car Clubs Personalised Travel Planning Car Share Schemes **Public Transport Information** Fewer parking spaces Road Pricing Help with purchasing a bicycle Teleworking (i.e. working from home) Increased fuel tax The internet & email Increased parking charges ☐ Traffic calming Information on Cycling Travel Awareness Campaigns Information on Walking ☐ Workplace Travel Plans Integrated Ticketing Other (please specify)

Iravel to Work - A Research Project for the Transport Planning Society
Thank you for completing this survey
18. If you would like be entered into a prize draw to win a £15.00 high street voucher of your choice, please include your name and contact details below. One winner will be chosen from each organisation.