



Smarter Travel

Encourage people to change their travel behaviour

- ***Establish travel behaviour change programmes using proven, cost-effective techniques to encourage and support people to travel more sustainably within communities and to workplaces, schools, further and higher education, leisure and retail centres***
- ***Give every child and young person the knowledge, skills and confidence to establish the habit of travel by foot and bike early in life.***

It is a widely held belief that achieving behaviour change, particularly in relation to travel, is difficult. The evidence does not support this. Research carried out in the three English Sustainable Travel Demonstration Towns in 2004 revealed a potential for 9 out of 10 journeys to be made by foot, bike and public transport.

Questions and Answers

Q. Is there any evidence that smarter travel choices behaviour change programmes actually work and bring about long term change?

Research shows that the benefits of smarter travel choices behaviour change programmes are maintained. For example [Sustrans' and Socialdata's work in Peterborough](#), as part of the city's Sustainable Travel Town programme, showed that reductions in car-as-driver trips measured a few months after ITM (relative reduction of 11% on baseline levels) were more or less maintained three years later (9%). Similarly, evidence of sustained behaviour change has been seen after [TravelSmart projects in Gloucester and those delivered by Socialdata outside the UK](#).

Q. In such financially constrained times is it beneficial for business to play a role in encouraging employees to change their travel behaviour?

[A growing body of research from around the world indicates that people who are active in their daily lives are more productive employees and take less time away from work as a result of illness](#). Of course, there are also societal benefits to businesses encouraging travel behaviour change. It is widely accepted that many groups and types of organisation have a role to play here: [business as well as schools, other public sector bodies, and individuals](#). Such as the savings that could be made from the £400 average annual cost of each individual parking space.

Q. How much do behaviour change programmes cost?

Different types of programme have different costs, but as a rule behaviour change programmes are more cost-effective than, for example, road building schemes. TravelSmart Individualised Travel Marketing projects delivered by Sustrans and Socialdata can cost as little as £20 per household on a large scale, [with an estimated benefit:cost ratio of around 8:1](#). They have been shown to deliver as much as a 14% reduction in car driver trips.



Q. What is the potential for changing children's travel to school?

With the average journey to primary school under two miles, and the average trip to secondary school less than three, there is a great opportunity to reduce car travel to schools. [Sustrans' Bike It programme works with children and young people to give them the skills they need to cycle to school, resulting in a doubling of levels of everyday cycling](#) with 26% of children cycling to school at least once a week. Cycle training programmes such as [Cycling England's Bikeability](#) also provide essential skills and training to children and young people.

Q. How can we make school travel sustainable when parental choice means that pupils do not necessarily live near to their school?

Wherever possible families should be encouraged to send their children to their local school. However, there are of course exceptions that require good sustainable travel choices to be made available. Sustrans' [Safe Routes to Schools programme](#) works to enable sustainable travel to schools. Public transport needs to be accessible and a real travel choice. Problems of access often provide serious challenges with nearly half of 16-18 year olds struggling to afford the cost of transport to reach their education.

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Evidence

[Cairns et al, 2008 Smarter Choices: Assessing the Potential to Achieve Traffic Reduction Using 'Soft Measures', Transport Reviews, 28](#)

This study examines whether large-scale programmes of smarter choice measures, including school travel plans, could potentially deliver substantial cuts in car use. In summary, the results suggested that, within approximately ten years, smarter choice measures have the potential to reduce national traffic levels by about 11%, with reductions of up to 21% of peak period urban traffic. Moreover, they represent relatively good value for money, with schemes potentially generating benefit to cost ratios which are in excess of 10:1 (though these are not comprehensive, relating to only one element of the study). The central conclusion of the study is that such measures could play a very significant role in addressing traffic given the right support and policy context.

[Mutrie et al, 2002 'Walk in to Work Out': a randomised controlled trial of self help intervention to promote active commuting, Journal of Epidemiology and Community Health, 56](#)

This study aimed to determine if a self help intervention, delivered via written interactive materials (the "Walk in to Work Out" pack), could increase active commuting behaviour (walking and cycling). Results showed that the intervention group was almost twice as likely to increase walking to work as the control group at six months. The twelve-month post intervention follow-up (rare in transport research) indicates sustainability of behaviour change over time.



Verplanken et al, 2008 Context changes and travel mode choice: Combining the habit discontinuity and self-activation hypotheses, *Journal of Environmental Psychology*, 28

This UK-focussed paper demonstrates the importance of habit break (discontinuity) in bringing about behaviour change. The results support the notion that context change can activate important values that guide the process of negotiating sustainable behaviours.

Ogilvie et al, 2004 Promoting walking and cycling as an alternative to using cars: systematic review, *British Medical Journal*, 329

This study's objectives were to assess what interventions are effective in promoting a population shift from using cars towards walking and cycling and to assess the health effects of such interventions. 22 studies were included. Findings are consistent with the view that interventions that engage people in a participative process and address factors of personal relevance may be more effective than those that simply aim to raise awareness or impose changes in the physical and economic environments.

Haq et al, 2004 Intelligent Travel: Personalised Travel Planning in the City of York, *Stockholm Environment Institute, University of York*

Intelligent Travel aimed to examine the potential for changing travel behaviour by reducing car use and encouraging walking, cycling and public transport use which promote health, fitness and a better environment. The Intelligent Travel interventions produced a 16 percentage point reduction in car trips. This is the overall result for all project areas. The change over the same time period in the non-intervention group was a 5 per cent increase in car trips. Intelligent Travel has converted a potential 5-percentage point increase in car trips into a 16-percentage point reduction. The results of this UK study are consistent with general theories of travel choice and behavioural change.

Chatterjee, 2009 A comparative evaluation of large-scale personal travel planning projects in England, *Transport Policy*, 16

This study assesses the effectiveness of large-scale, residential-based personal travel planning projects in eight areas in England. The project evaluation results show consistent reductions in car driver trips with an average reduction of 11%. The mode of travel that experiences the most substantial increase is walking with modest increases reported for cycling and public transport.

Brog et al, 2009 Evaluation of voluntary travel behaviour change: Experiences from three continents, *Transport Policy*, 16

This paper reviews the development of the IndiMark technique and the key features of its evaluation using the KONTIV® survey method. It draws on this experience to address key challenges in the evaluation of voluntary travel behaviour change initiatives, and to identify the common threads of an integrated approach which might strengthen the case for all soft measures. The paper concludes that the consistency, repetition of results from successive applications and the cumulative sample size now achieved, combined with consistently high survey response rates, have negated some doubts about effectiveness based on the method of evaluation.



Sustrans information

Sustrans, 2009 Travel behaviour research in the Sustainable Travel Towns

This Briefing Note summarises the key findings of travel behaviour research conducted in the three English Sustainable Travel Towns.

Sustrans, 2008 Leading the way in travel behaviour change

Sustrans information sheet relating to TravelSmart.

TravelSmart has a strong track record in delivering significant and sustained travel behaviour change, helping to reduce the environmental, social and economic costs of transport. Detailed travel behaviour surveys before and after the Individualised Travel Marketing implementation provide robust evidence of reductions in car use, together with increases in walking, cycling and the use of public transport. The outcomes of the some recent large-scale TravelSmart projects can be found in the following reports:

Worcester Interim Research Report 2006

Worcester Interim Research Report 2007

Peterborough Interim Research Report 2006

Peterborough Interim Research Report 2007

South Ribble Interim Research Report 2007

Torrisholme Interim Research Report 2007

Policies from other organisations

Department for Transport, 2005 Smarter Choices: Changing the way we travel

This report studies the impact of soft measures, using evidence from the UK and abroad, case study interviews and the experiences of stakeholders.

UK Energy Research Centre, 2009 What Policies are Effective at Reducing Carbon Emissions from Surface Passenger Transport

This literature review provides: an evaluation of UK case studies on the effectiveness of personalised travel planning that suggests that this can reduce car driver trips by 11% and distance travelled by car by 12%. Additionally the paper details a trial of individualised marketing in South Perth, Western Australia in 1997 and draws out data from case studies in the UK (including from British Telecom), the US and the Netherlands on individual workplace travel plans that suggest that this can reduce car driver trips for commuting purposes by between 10% and 30%.



Further reading

Department for Transport, 2006 Walking and cycling: 'Links to Schools' extending the National Cycle Network to schools

This Report features 15 case studies, detailing the interventions and successes of the Links to Schools project. Local authorities across England are working with Sustrans to connect schools and their communities to the National Cycle Network. These Links come in a variety of forms, from new cycle routes to pedestrian crossings, all providing the safe routes that young people need to cycle and walk to school.

Committee on Climate Change, 2009 Meeting Carbon Budgets - the need for a step change

This report estimates that it is possible for the UK to achieve CO₂ emissions reductions for roll out of Smarter Choices in different types of settlements, totalling up to 2.4-4.8 MtCO₂. They called for a phased roll-out across the UK to encourage better journey planning and more use of public transport.

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Evidence

McKee et al, 2007 Promoting walking to school: results of a quasi-experimental trial, Journal of Epidemiology Community Health, 61

The objective of this study was to assess the impact of a combined intervention on children's travel behaviour, stage of behavioural change and motivations for and barriers to actively commuting to school. This was achieved through a trial involving pre- and post-intervention mapping of routes to school by active and inactive mode of travel and surveys of "stage behaviour change" and motivations and barriers. The paper concludes that the intervention was effective in achieving an increase in the mean distance travelled by active mode and a reduction in the mean distance travelled by inactive mode on the school journey.

Collins & Kearns, 2010 Walking school buses in the Auckland region: A longitudinal assessment, Transport Policy, 17

This article examines the development of walking school buses in Auckland, New Zealand, drawing on five annual surveys. Longitudinal analysis reveals sustained growth in the number of routes, and in levels of participation, although activity remains concentrated in the wealthiest neighbourhoods. The authors conclude; with recognition that supervised walking is neither the sole answer to children's mobility needs, nor a panacea for the ills of auto-dominated environments. Rather, walking school buses can and perhaps should be regarded as stepping stones towards two broader developments: increased independent mobility for children for a range of neighbourhood-level journeys; and significantly reduced car use, speeds and density in suburban neighbourhoods.



Paul Osborne, 2005 Safe routes for children: what they want and what works, Children, Youth and Environments, 15

This paper summarises some of the key trends in children's travel, health and social behaviour, and the influence of the city environment, particularly on the school journey. It draws on examples of safe routes in Denmark, the United Kingdom and the United States, and includes a summary of policy and practice in the United Kingdom, with particular emphasis on lessons for other countries wishing to improve the environment for children and young people. Rather than detailing the effects of the interventions, this is a descriptive account and policy overview which provides background to the origins, aims and successes in Denmark.

Brunton et al, 2006 A Synthesis of Research Addressing Children's, Young People's and Parents' Views of Walking and Cycling for Transport. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London

This report presents the findings from a systematic review (with a UK focus) of the research evidence relating to the public's views of walking and cycling, in particular the views of children, young people and parents. The need for such a review was recognised in light of an effectiveness review of interventions promoting a shift away from car travel towards more active modes of transport, the 'modal shift' review (Ogilvie et al., 2004). This found equivocal evidence of effectiveness for population-level interventions that promote walking and cycling as alternatives to car use.

Jensen, 2008 How to obtain a healthy journey to school, Transportation Research Part A, 42

Danish children walk and cycle a lot and at the same time have one of the best child road safety records in the western part of world. Based on several studies, the paper describes how Denmark has obtained a good child road safety and why Danish children choose to walk and cycle. Sustrans Safe Routes to Schools programme was inspired by Denmark. This paper provides the most recent English language descriptive account of experience in Denmark.

Sustrans information

Sustrans, 2009 Bike It Project Review 2009

Review of Bike It, one of the UK's most successful projects in bringing about travel behaviour change amongst young people by enabling them to cycle to school.

Sustrans, 2009 Rural Safe Routes to Schools Project Review

The first of its kind in Northern Ireland, the project sought to bring together a wide variety of agencies and resources that were already working on encouraging active school travel, and focus efforts on achieving two key objectives: reducing car use on the school run by 10% and increasing levels of cycling and walking.



Sustrans, 2009 National Hands Up Survey Scotland: Report on data collected 2008

The 2008 National Hands-Up Survey is the first national dataset to look at mode of travel to school across Scotland. The survey is a joint project between School Travel Co-ordinators working in Scotland and Sustrans. The 2008 survey was the first time the survey was conducted and all Local Authorities were invited to collect data. The National Hands-Up Survey will run continuously on an annual basis in the autumn of each year.

Sustrans, 2009 London Bike It Project Review 2009

This review shows that during 2009 the Sustrans Bike It programme achieved a doubling in the number of children cycling daily to participating schools. It's because of results like these that Bike It is continuing to grow apace in London.

Policies from other organisations

Scottish Government, 2005 Choosing our future: Scotland's sustainable development strategy

This strategy sets out action which Scotland will take to turn the shared priorities set out in the UK Framework for sustainable development into action.

Welsh Assembly Government, 2008 A Walking and Cycling Action Plan for Wales 2009-2013

This Action Plan brings together all the key initiatives which the Welsh Assembly Government and its key partners are undertaking or planning to undertake in support of walking and cycling in Wales. A key aim of the Plan is to help secure a change in behaviour - so that more people, young and old, walk and cycle more often.

Further reading

World Health Organization, 2002 A physically active life through everyday transport

This document summarises the scientific evidence on the negative health effects of physical inactivity and on the benefits provided by moderate levels of physical activity, especially walking and cycling. It highlights the interaction between strategies for health promotion and the role of transport and land-use policy in providing environmental conditions that can facilitate and enable people deciding to walk and cycle for transport.

National Institute for Health and Clinical Excellence, 2009 Promoting physical activity for children and young people

The guidance is for all those who have a direct or indirect role in – and responsibility for – promoting physical activity for children and young people. This includes those working in the NHS, education, local authorities and the wider public, private, voluntary and community sectors. It will also be of interest to parents, grandparents and other carers (including professional carers), children and young people and other members of the public. It includes recommendations for schools, but does not make recommendations for the national curriculum.