



THE INSTITUTION  
OF HIGHWAYS &  
TRANSPORTATION

**ACT**  
**TRAVELWISE**®

# MAKING SMARTER CHOICES

THE INSTITUTION OF HIGHWAYS &  
TRANSPORTATION 'SMARTER' TRAVEL GUIDE

[www.iht.org](http://www.iht.org)

# FOREWORD

## ACKNOWLEDGEMENTS

The Institution of Highways & Transportation (IHT) Smarter Travel Guide was developed by the IHT Sustainable Transport Panel (STP)

With the support of the RTPI Transport Planning Network and ACT TravelWise

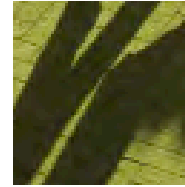
**Principal Authors: Jon Harris and Jacqui Wilkinson**

### Key Contributors/Reviewers:

Martin Doughty  
Conrad Haigh  
Rose McArthur  
Iain Macbeth  
Kit Mitchell  
Amy Naphthine (Secretary to IHT STP)  
Jon Parker  
Derek Palmer  
John Parry (Chairman of IHT STP)  
Sheila Holden  
John Waugh

### Guest Reviewers:

Richard Armitage  
Colin Black  
Scott Dyball  
Stephen Hosking  
Giles Perkins  
James Ryle



At a time when public and private sector resources are being squeezed even more tightly there has never been a more compelling reason to focus on creative and innovative ways to reduce pressure on the UK's already crowded transport system.

'Smarter travel' is an essential part of today's transport solutions. To realise its full potential in our current climate requires commitment and a new level of attention and vigour from a wide range of professionals. Collectively, smarter travel has a key part to play in successfully managing our transport networks and systems.

For a long time smarter travel has been seen as mainly the responsibility of travel planners and other specialists. However, for the real impact of smarter travel to be realised, pan-industry commitment is required, with the bringing together of land use planners, engineers, transport planners, urban designers and professionals operating in a wide range of associated disciplines alongside travel planners in order to mainstream smarter travel.

Building on IHT's 'Climate Change and Sustainable Transport' Report (2008), which set out the challenge for transport professionals in responding to climate change, this new guide outlines the key issues and signposts the wider profession to the 'must know' information. Note it is not 'anti-car' but simply sets out the facts and the issues surrounding the smarter travel debate. We recognise it is only part of an integrated transport solution, but nevertheless a very important one. We are not alone in this message. The recently launched 'Planning for Sustainable Travel' Guide from the Commission for Integrated Transport (October 2009) firmly places smarter travel solutions within the overall toolkit for delivering sustainable development.

As leading professional bodies involved in shaping the transport and built environment, we believe that now is the time for us all to focus on 'thinking smart' in what we do. We hope that you, as a valued professional, will see clearly how you can make a difference.

Our thanks go to IHT's Sustainable Transport Panel and the wider project team responsible for developing this guide and the series of factsheets that will follow on in the near future.



**Chris Jackson,**  
President, IHT



**Neil Scales, Chair,**  
ACT TravelWise



# INTRODUCTION

## SETTING THE SCENE



### CLIMATE CHANGE AND SUSTAINABILITY

In October 2008, the Institution of Highways & Transportation (IHT) published its report 'Climate Change and Sustainable Transport – the challenge for transport professionals'. This high level, strategic document clearly identified the important role that sustainable transport solutions have to play in mitigating or adapting to climate change, and moving the UK forward to meet carbon reduction and other key environmental targets.

One of the key strands of that report was the need for commitment towards smarter travel. The increase in the demand for transport is a major issue at a time when society is beginning to appreciate the global impact of climate change.

*'At present, long-term powered road transport is not sustainable. It is contributing to the depletion of a finite stock of fossil fuel and emitting a rising amount of carbon dioxide. In addition, the number of casualties from traffic collisions is rapidly rising in developing countries such as China, India and Brazil. Impacts are not limited to carbon emissions or road casualties; there is also a real need to address environmental impacts such as noxious emissions, noise and unsustainable land development that cause extended journey patterns.'*

– Climate Change and Sustainable Transport – the challenge for transport professionals (IHT, 2008)

### THE SUSTAINABLE TRANSPORT AGENDA

Given today's economic and environmental climate, the role of sustainable travel (walking, cycling, public transport and other sustainable modes) is arguably as crucial as ever. To achieve climate change benefits and other wider social benefits, innovations in sustainable travel still need to be encouraged and actively progressed by both the public and private sectors.



Used courtesy of Martin Breschinski, on behalf of TfL

Climate Change and Sustainable Transport – the challenge for transport professionals (IHT, 2008) Available at: [www.iht.org](http://www.iht.org)



# GUIDE OBJECTIVES



The development of smarter travel solutions is now a key element of transport planning, with smarter travel adopted as mainstream policy across the UK and Ireland.

Development of smarter travel solutions is now a key element of the professionals' toolkit in addressing sustainable transport challenges. For the sustainable transport agenda to move forward, it is important that there is consistency in understanding of, and commitment to, travel techniques. This is why IHT has decided to move forward with this 'daughter' document (the first of a series) to its climate change report to help fully integrate smarter travel into the way land use planners, engineers, transport planners, urban designers and other 'placemaking' professionals think and deal with key transport issues.

IHT, along with the Royal Town Planning Institute (RTPI) and ACT TravelWise (the professional association promoting travel planning and smarter travel best practice) have collaborated to produce this convenient signposting guide to help all transport, engineering and planning professionals understand the basics of smarter travel. The Royal Town Planning Institute specifically recognises that enabling smarter travel choices is related to the way in which places are planned. This document is therefore signposted as good practice advice on the RTPI website and also on the ACT TravelWise, IHT, TPS and Transport Advice Portal (TAP) websites.



The guide therefore sets out to assist all professionals who may be working on the fringes of smarter travel at the moment, or have simply not had time to study how the travel behaviour dimension relates to their current work. To provide guidance throughout the document, there are a number of symbols to highlight key points. These are:



**Signposting you to best practice, a website, a report or other source of evidence**



**Highlighting an innovation or a new idea**



**Highlighting a tool or technique available to help you**

## WHAT IS SMARTER TRAVEL?

The term smarter travel encompasses a family of techniques (also known as 'interventions', 'measures' or 'tools') for influencing travel behaviour towards more sustainable travel options. Key characteristics of these techniques include increased use of public transport, increased walking, increased cycling, reduced single occupancy car use, reduced travel for work, and using technology to help all of the above.

However, smarter travel has to be seen in context with the wider philosophy of Transport Demand Management (TDM) which has the potential to be a very powerful tool if it is not constrained. Black and Schreffler's paper (2009) on TDM and its role in delivering sustainable urban transport, makes it clear that TDM can be most effective when properly understood as a concept applicable to spatial and transport planning, as opposed to management of transport operations and networks. TDM has a role to play in shaping future environments and not merely managing existing transport situations.

Therefore concepts such as smarter travel, smarter choices, mobility management and active travel management all have a part to play within this wider TDM approach, which if mainstreamed and integrated successfully, will play a major role in delivering sustainable travel systems. Black and Schreffler explain that by integrating parallel TDM initiatives this can have a much more positive impact on transport policy and delivery.

The pivotal role of TDM and smarter travel choices is also made explicit by the Commission for Integrated Transport in their latest guidance 'Planning for Sustainable Travel'. Published in October 2009, CfIT have provided an online resource for land use and transport planners, developers and executive members, to help facilitate sustainable travel in future development.

TDM - including smarter travel solutions - is just one of the 11 themes that have been tackled in CfIT's research. The summary guide, background research and web guide draws out the critical relationships between sustainable transport and effective land use planning. CfIT fully recognise the range of smarter travel measures that are now available and their importance as a complementary tool to sustainable spatial planning. The smarter travel sections look at operational, financial and infrastructure based solutions, all feeding into a rigorous TDM strategy to help reduce per capita car use.



**The smarter travel family of techniques includes 4 main types –**

- ◆ Soft measures (e.g. setting up a car share scheme)
- ◆ Promotion and awareness raising (e.g. personalised travel planning)
- ◆ Sustainable transport infrastructure (e.g. new walking and cycling routes)
- ◆ Monitoring and evaluation (e.g. measuring increased use of infrastructure)

Appendix 1, at the end of this guide, sets out the key smarter travel measures most widely adopted in the UK and identifies the characteristics and the typical costs and benefits of each of these. Each measure should not be seen in isolation but form part of a smarter travel package that matches the economic, social, environmental and cultural needs of an area.

It is important to recognise that the smarter travel tools now in place are much wider-ranging, dealing not only with work-based trips, but spanning all types of movement of people and goods. Whilst smarter travel has traditionally been associated within influencing individual behaviour, and is seen as a 'people focussed' issue, there have been considerable advances in sustainable transport and carbon reduction solutions within the freight and logistics sector.



Understanding TDM and its role in the delivery of sustainable urban transport (Black and Schreffler, ETC 2009) Available soon at: <http://www.etcproceedings.org/>



CfIT Planning for Sustainable Travel – (Summary Guide and leaflet available) [www.plan4sustainabletravel.org/summary\\_guide/](http://www.plan4sustainabletravel.org/summary_guide/) Hard copies from [cfit@dft.gsi.gov.uk](mailto:cfit@dft.gsi.gov.uk)



Used courtesy of TfL

London Freight Plan (2008) Available at: [www.londonsfqps.co.uk/LondonFreightPlan.aspx](http://www.londonsfqps.co.uk/LondonFreightPlan.aspx)

Chartered Institute of Logistics and Transport [www.ciltuk.org.uk](http://www.ciltuk.org.uk)

Sustainable Distribution Forum [www.ciltuk.org.uk/pages/envforum](http://www.ciltuk.org.uk/pages/envforum)





Used courtesy of TfL

### OUTCOMES & BENEFITS

Whilst smarter travel initiatives can be measured by outputs (e.g. number of travel plans adopted), the most valuable assessment is based on outcomes (i.e. long term behaviour change) and how successful initiatives are in achieving these outcomes. For successful outcomes it is important that the smarter travel toolkit is flexible, maintaining the ability to switch between measures according to their effectiveness.

Smarter travel *can* and *has* made a real difference, particularly where it is blended with other processes such as public transport investment, home to school transport strategies, regeneration, masterplanning and wider spatial considerations. Within and at the end of this guide, IHT has signposted some of the key research reports and evidence of schemes already in existence.

Smarter travel can be a natural part of any project – the opportunities to develop sustainable solutions should be considered from the planning stage onwards. If we are all ‘thinking smart’ then these are the kinds of results we might see:

- ◆ Town centre traffic management schemes accompanied by a town wide travel plan and smarter travel strategy handling the needs of commuters, shoppers, leisure and logistics users;
- ◆ Masterplans undergoing smarter travel screening on ‘Day 1’ of their scoping to maximise sustainable transport use;
- ◆ Section 106 agreements that map out the route to identifying the end measures to avoid prescription on specific smarter travel solutions too early in the planning process;
- ◆ Flexible travel plans that allow measures to come and go according to demand and viability;
- ◆ Standard evaluation processes including testing of the ‘non-road option’ alongside any major scheme business case;
- ◆ Walking and cycling infrastructure schemes accompanied by a smarter travel strategy for optimising their use;
- ◆ Transport assessments based on a good proportion of trips being taken off the network – considering reducing the need to travel as a principle and what technologies will be put in place;
- ◆ Avoiding costs for developers and public bodies by avoiding the construction of unnecessary infrastructure;
- ◆ Prioritisation of people-based solutions over physical/infrastructure based solutions
- ◆ Health benefits and the associated reduction in direct and indirect care costs to society.

Good Practice Guidelines:  
Delivering Travel Plans  
through the Planning  
Process (DfT, 2009)  
Available at:  
[www.dft.gov.uk/pgr/sustainable/travelplans/tpp/](http://www.dft.gov.uk/pgr/sustainable/travelplans/tpp/)



### THE SMARTER TRAVEL JOURNEY SO FAR

In 1998, the Government made a commitment in the White Paper ‘A New Deal for Transport’ to promote travel planning by the public sector and businesses to reduce congestion. This was the first major Government national statement on travel planning, closely echoed by ‘Planning Policy Guidance 13: Transport’ (PPG13) three years later. It also recognised valuable work developed at a local authority level that had evolved since the early 1990s, stemming particularly from Local Agenda 21 which focused on environmental reasons for reducing travel.

Smarter travel (although the term had yet to be coined) had also been promoted for many years by transport campaigners and the voluntary sector, with organisations such as Sustrans, Transport 2000 (now *Campaign for Better Transport*) and The Pedestrians Association (founded in 1929 and now called *Living Streets*) at the forefront, alongside other organisations promoting individual modes or campaigning on specific issues. Membership bodies the National TravelWise Association (NTWA) and The Association for Commuter Transport (ACT), now known as ACT TravelWise have also been working to promote travel behaviour change since the mid-1990s.

Appendix 1 provides a helpful summary of the smarter travel techniques that have come into play over the past decade, and sets out their main characteristics. However it is also worth noting some of the ‘flagship’ events that have taken place along the way, including:



Used courtesy of Mouchel

- ◆ Key flagship investment decisions such as the Millennium Commission and National Lottery funding for the National Cycle Network also heightened the importance of cycling and walking infrastructure and reinforced the importance of sustainable travel modes within any local and regional transport strategy.
- ◆ Interest in this area rose significantly after the publication of major research in 2004 – ‘Smarter Choices – Changing the Way We Travel’. This examined case studies and previous research into the benefits that can be obtained from smarter travel programmes in reducing traffic, particularly when promoted energetically by local authorities. The main findings were:
  - ◆ Workplace travel plans typically reduced commuter car driving by between 10% and 30%.
  - ◆ School travel plans, on average, could cut traffic on the school run by between 8% and 15%, with high performing schools commonly achieving reductions of over 20%.
  - ◆ Personal travel planning initiatives typically reported reductions in car use of 7%-15% in urban areas and 2%-6% in rural and smaller urban areas.
  - ◆ Improved public transport information and marketing led to recorded increases in bus use, with evidence suggesting that it could cause patronage increases in service improvements to double. When combined with other measures (such as infrastructure improvements), there were reported increases in bus use of up to 5% a year.
  - ◆ Every £1 spent on well-designed smarter choices could bring about £10 of benefits in reduced congestion alone – more in the most congested conditions – with further potential gains from environmental improvements and other effects, provided that the tendency of induced traffic to erode such benefits was controlled.
- ◆ The 2004 report concluded that provided such measures were implemented within a supportive policy context (with a balance of incentive and restraint mechanisms) and with parallel infrastructure provision for sustainable modes, they could be sufficiently effective in facilitating choices to reduce car use and offered sufficiently good value for money. They therefore merited serious consideration for an expanded role in local and national transport strategy.
- ◆ Now that smarter travel solutions were gaining in credibility, backed up by national policy and best practice research, this provided an ideal platform for the release of further technical guidance.
- ◆ In 2005 the first guide on Residential Travel Plans (RTP) was published by the DfT, focusing on the special nature of travel planning within a residential setting, and drew on a number of best practice examples across the UK. The guide looked primarily at those developments which had progressed travel plans innovatively, and how aligned thinking between local authorities and developers early on in the planning process was essential to the delivery of effective RTPs.
- ◆ Soon after this came the revised DfT Guidance on Transport Assessment and Travel Plans. This came as something of a watershed, as for the first time guidance was stressing the importance of considering the role of the travel plan as an ‘up front’ integral tool to assess the impact of new development proposals. The guidance emphasised the parallel role of Transport Assessments and Travel Plans, and how the sustainable transport solutions for a site would be considered prior to more conventional highway infrastructure led approaches. This guide was one of the first to stipulate the ‘think smarter travel first’ approach, and to ensure that mitigation packages were based on minimising traffic impact rather than managing it. However, there are still instances where the full benefit of this guidance is being underplayed, and where travel plans are still developed in the shadow of a more conventional Transport Assessment.
- ◆ Two years later on, however, the release of the DfT/CLG’s ‘Delivering Travel Plans through the Planning Process’, restrengthens the 2007 TA/TP guidance, and reiterates the way in which smarter travel solutions need to be engrained within development proposals from the outset.
- ◆ Updating the position from the original 2002 guidance, this guidance makes it absolutely explicit when, why and how travel plans should be secured through the

Smarter Choices –  
Changing the Way We  
Travel (DfT, 2004) Review  
of the Take-Up of Smarter  
Choices in Local Transport  
Plans (DfT, 2007)  
Available at:  
[www.dft.gov.uk/pgr/sustainable/smarterchoices/](http://www.dft.gov.uk/pgr/sustainable/smarterchoices/)



# SMARTER TRAVEL

planning process, built on the need to deliver firm outcomes and ongoing ownership from the development sector. Building on a platform of case studies where the role and purpose of the travel plan has been thought through from the inception of the scheme, this document highlights the importance of buy-in from a much wider range of professionals (development control, urban planners, highway engineers, Section 106 officers etc) to deliver sustainable development in this way



Used courtesy of TfL

## MAKING THE LINK TO CLIMATE CHANGE

- ◆ Under the Climate Change Act 2008, the Government is committed to achieving an 80% reduction in CO<sub>2</sub> emissions by 2050 and a 26% reduction by 2020 (on 1990 levels). Transport has to play its part in achieving this.
- ◆ In April 2009 the Government announced the level of the first three carbon budgets for the periods 2008-12, 2013-17 and 2018-22, representing respectively over a 22%, 28% and 34% reduction in greenhouse gases compared to 1990 levels. Around 24% of UK greenhouse gas emissions are from transport - for domestic transport, the majority (approx 90%) come from road transport with over 50% from passenger cars. Figure 1 summarises the trend in the UK's CO<sub>2</sub> emission level and the contribution that transport is making to these.
- ◆ The 2006 Eddington study on the long-term links between transport and the UK's economic productivity, growth and stability concluded that congestion and unreliability in the transport network would constrain economic growth in the UK. He specifically noted that 'small can be beautiful'. He found that 'small-scale interventions such as walking and cycling schemes... are often the most cost-effective solutions' on local roads (The Eddington Transport Study, Main Report, Vol 3, p121). For example, 23% of car trips are less than 2 miles, a distance easily cycled in 15 minutes, making this an easy target area for action.



Climate Change Act 2008 (Department of Energy & Climate Change website) Available at: [www.decc.gov.uk/en/content/cms/legislation/en/content/cms/legislation/cc\\_act\\_08/cc\\_act\\_08.aspx](http://www.decc.gov.uk/en/content/cms/legislation/en/content/cms/legislation/cc_act_08/cc_act_08.aspx)

The Eddington Transport Study (The Stationery Office, 2006) Available at: [www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/](http://www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/)

Delivering a Sustainable Transport System (DaSTS) (DfT, 2008) Available at: [www.dft.gov.uk/about/strategy/transportstrategy/dasts/](http://www.dft.gov.uk/about/strategy/transportstrategy/dasts/)

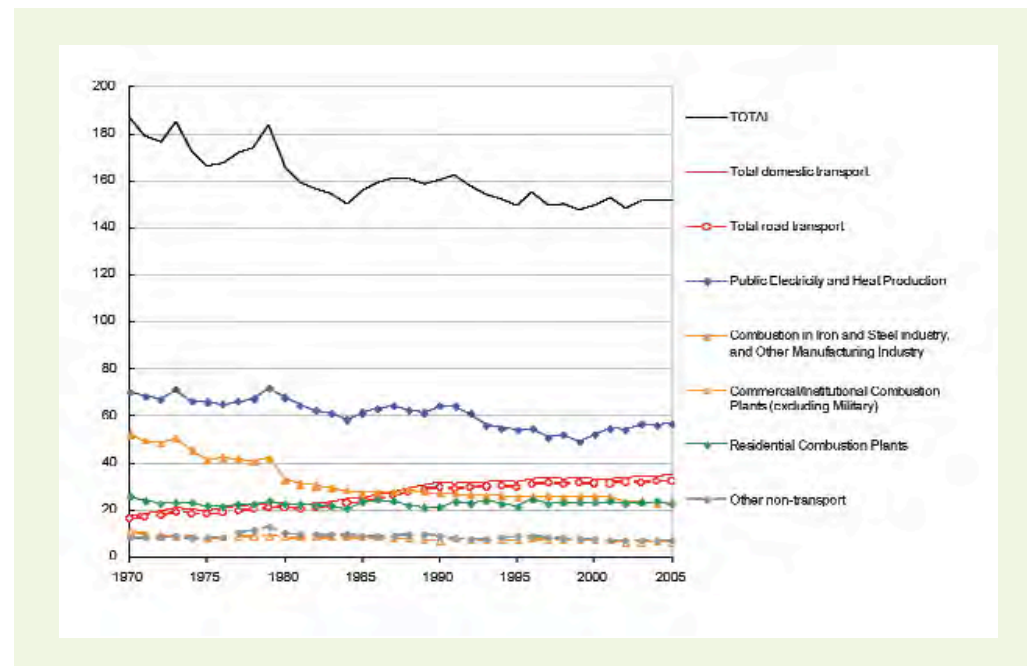
Guidance on Local Transport Plans (DfT, 2009) Available at: [www.dft.gov.uk/pgr/regional/ltp/guidance/localtransportplans/](http://www.dft.gov.uk/pgr/regional/ltp/guidance/localtransportplans/)



## BRINGING WIDER BENEFITS

- ◆ Sustainable travel measures can play a significant role in increasing the potential to improve accessibility, equality of opportunity, quality of life, health and well-being (all goals set by the Department for Transport (DfT) in its 2008 policy document 'Delivering a Sustainable Transport System' (DaSTS).
- ◆ The DfT's 2009 Guidance on Local Transport Plans (LTP3) specifically sets out the importance of smarter travel and the need for local authorities to consider the opportunities for smarter travel first, ahead of infrastructure based solutions.
- ◆ Early indications are that the benefit-cost ratios (BCRs) for sustainable travel interventions are usually at least comparable to, if not better than, more traditional infrastructure-based approaches. However the way in which smarter travel schemes need to be assessed are different from the 'major scheme business case' type approach that has been used for testing the viability of capital schemes. This is an area that requires attention, where results from smarter travel solutions are providing better value for money.
- ◆ For example, traditionally the BCRs for road schemes have scored between 2:1 and 4:1 whereas some of the smarter travel projects currently in place are seeing returns as high as 13:1 based on the level of behaviour change taking place. The latest evidence from the Highways Agency, based on a number of area wide travel plan locations, bears this out.

Figure 1 Carbon Dioxide Emissions by Sector – UK (1970-2006)



Source: Institute of Advanced Motorists – Motoring Facts [www.iam.org.uk/policy\\_and\\_research/](http://www.iam.org.uk/policy_and_research/)

Table 1 Evaluation of Highways Agency ITB Demonstration Sites: Example Results

FULL EVALUATIONS			
	Trips Saved (Peak Hr)	Annual Benefit	Benefit: Cost Ratio
Cambridge Science Park	88	£207k	13:1
Whiteley – Hampshire	52	£133k	3.7:1
Northampton General Hospital A45	76	£67k	5.5:1

Value of benefit is heavily dependent on levels of congestion



Based on Highways Agency figures (2009 Presentation to RTPI/ACT TravelWise/IHT Transport Seminar, Leeds, 17/7/09)

Whilst the actual number of trips 'saved' in Table 1 is relatively small, the rate of return on the investment is sound. The aggregate effect of 'joining together' a number of wide area smarter travel programmes could be quite significant, particularly as the critical mass and viability of measures grows with scale.

- ◆ In providing new housing and development, it is essential that the transport infrastructure is able to handle any increase in traffic. The DfT's TA/TP guidance (2007) states that it is preferable to introduce sustainable travel measures *before* construction of a new development rather than trying to 'retro-fit' them later on. The timing of guidance is particularly important; it is worth noting that the recent Guidance on Sustainable Transport Infrastructure in Ecotowns (2008) was released after the first wave of masterplanning and preliminary design had taken place.

Ultimately, without a clearly thought through strategy which gives the correct emphasis to smarter travel, the ability to deliver housing, jobs and sustainable lifestyles will be hampered and reflected in reduced access to both public and private sector funding streams.

### THE CHALLENGE AND RESPONSE IN PROMOTING SMARTER TRAVEL

In the UK we have finite road capacity and resources for dealing with complex transport issues. Therefore, as professionals, we have to consider solutions which can make the best use of our transport systems. 'Delivering a Sustainable Transport System', 'Guidance on Local Transport Plans' and the equivalent strategy documents for each of the devolved governments, all stress the importance of thinking smarter travel first in terms of our travel solutions.

For example, the 5 goals for transport in 'Delivering a Sustainable Transport System' make it absolutely clear that smarter travel solutions must be an integral part of the solution to our 21st Century transport challenges. Building on the 5 goals, these are:



- ◆ To support national economic competitiveness and growth *as emphasised by the Eddington report*
- ◆ To reduce transport's emissions of carbon dioxide and other greenhouse gases *as emphasised by the Climate Change Act 2008*
- ◆ To contribute to better safety, security and health *as emphasised by the critical link between health and transport*
- ◆ To improve quality of life *as emphasised by the creation of new sustainable communities and the focus on eco-towns and sustainable development*
- ◆ To promote greater equality of opportunity *as emphasised by Governments' continued focus on social inclusion*

Our challenge is, whether or not we as professionals fully incorporate smarter travel when we consider a range of options and consider its full potential in our decision making.

For example, if we are assessing the viability of a key road link; or dealing with the implications of a town centre traffic management scheme; tackling the transport issues associated with major new development; unlocking urban regeneration sites or designing local cycling and walking projects – as professionals we should bow automatically think smarter travel first.

We recognise that the provision of key infrastructure is vital in supporting the UK's economic recovery. However in the current economic climate long term major capital expenditure will have to be prioritised which may result in a consequential reduction in infrastructure programmes. Therefore our transport solutions have to be screened against a very simple 3 stage test. This should be used by professionals in the planning and transport sectors to consider carefully the role and scope of smarter travel solutions in their project appraisal reports and recommendations:

Tackling Congestion by Influencing Travel Behaviour (Highways Agency webpages) Available at: [www.highways.gov.uk/knowledge/9561.aspx](http://www.highways.gov.uk/knowledge/9561.aspx)



Delivering a Sustainable Transport System (DaSTS) (DfT, 2008) Available at: [www.dft.gov.uk/about/strategy/transportstrategy/dasts/](http://www.dft.gov.uk/about/strategy/transportstrategy/dasts/)

Guidance on Local Transport Plans (DfT, 2009) Available at: [www.dft.gov.uk/pgr/regional/ltp/guidance/localtransportplans/](http://www.dft.gov.uk/pgr/regional/ltp/guidance/localtransportplans/)

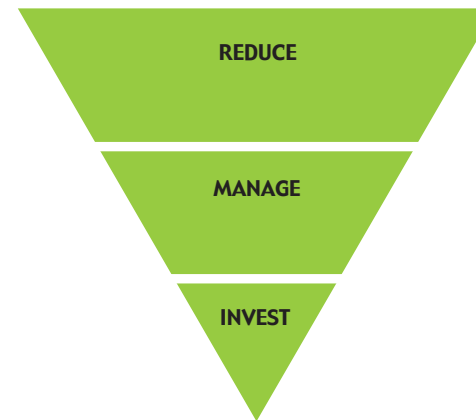
Scotland's National Transport Strategy (Scottish Executive, 2006) Available at: [www.scotland.gov.uk/Topics/Transport/NTS](http://www.scotland.gov.uk/Topics/Transport/NTS)

One Wales: Connecting the Nation – The Wales Transport Strategy (Welsh Assembly Government, 2008) Available at: [wales.gov.uk/topics/transport/publications/transportstrategy/?lang=en](http://wales.gov.uk/topics/transport/publications/transportstrategy/?lang=en)

Regional Transportation Strategy for Northern Ireland 2002-2012 (Department for Regional Development, 2002) Available at: [www.drdni.gov.uk/index/transport\\_planning.htm](http://www.drdni.gov.uk/index/transport_planning.htm)



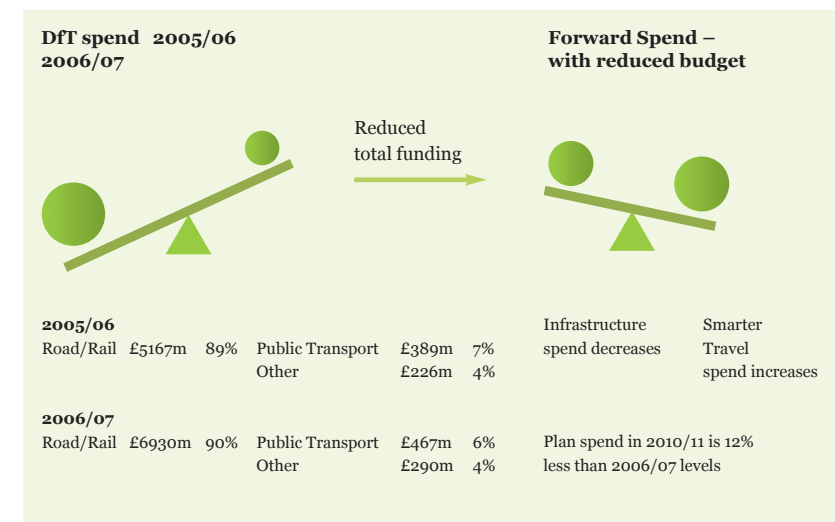
Figure 2 – The Reduce – Manage – Invest Approach



- ◆ Reduce – can we reduce the need to travel?
- ◆ Manage – can we use existing infrastructure more effectively?
- ◆ Invest – do we need to invest in newer, improved infrastructure or can similar or better benefits be achieved through smarter travel initiatives?

The diagram below shows the balance of funding between investment in infrastructure and spend on public transport and sustainable travel before the current economic downturn, based on DfT statistics. The implication of the current economic situation is that not only will the public sector spend profile need to be rebalanced so that more outcomes can be achieved at less cost but also the overall budget scale will shrink. This is also true of the development sector where the scale of transport contributions will need to be reassessed on the grounds of viability.

Figure 3 – Comparative Spending of Infrastructure versus 'softer' measures



Based on Table A9 – DfT identified expenditure on services (England) from DfT Annual Reports 2007 and 2008



The implication of the current economic situation is that not only will the public sector spend profile need to be rebalanced so that more outcomes can be achieved for a lower cost but the overall scale of budget will shrink. This is also true of the development sector where the scale of transport contributions will need to be reassessed on the grounds of viability.

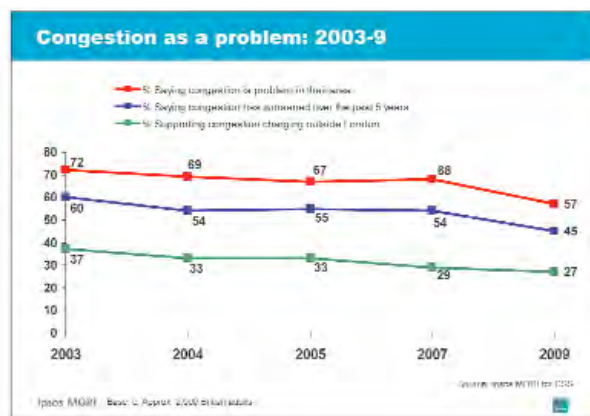
It is therefore essential to provide decision makers with well presented smarter travel options in order to tackle these challenges but also to assist people who need to be able to make real choices about their lifestyles and how best to change them. The role of professionals in the built and transport environments is critical in enabling people to make those choices in an informed and reasonable way.

### DELIVERING SMARTER TRAVEL IN A CHANGING ENVIRONMENT

A 2009 Ipsos MORI Survey demonstrates the importance of transport within the public's mindset.

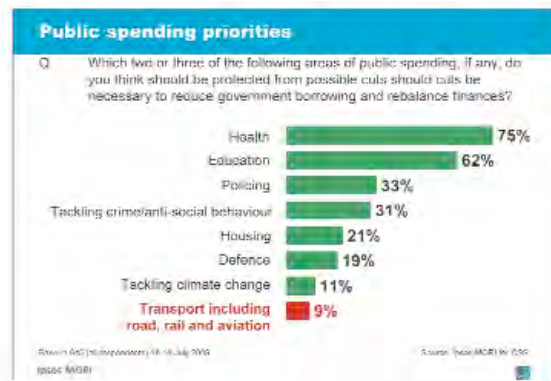
Figure 4 from the survey report, shown below, clearly shows that congestion is not seen as such a problem as it was, while Figure 5 shows that, in the face of key public spending cuts, health is far above transport in terms of public perception of importance and the need to safeguard services.

Figure 4 Congestion as a problem 2003 – 09



Source: Ipsos MORI poll results 2009, page 5

Figure 5 Public Spending Priorities



Source: Ipsos MORI poll results 2009, page 6

The MORI poll gives very helpful information about the current situation regarding transport and travel in the UK. More importantly it shows that people are still not making a connection between health and transport and understanding that through healthy lifestyles (which include 'active travel' e.g. walking and cycling) some of the financial burden on the National Health Service can be reduced. Sustrans, the UK's leading sustainable transport charity, provides some information (see website link on right). Professionals need to be aware of this perception gap in their local areas and apply creative thinking to introduce cross-discipline initiatives which support each other.

Survey of public attitudes towards transport (Ipsos MORI on behalf of County Surveyor's Society, 2009) Available at: [www.ipsos-mori.com/researchpublications/researcharchive/poll.aspx?oltemId=2464](http://www.ipsos-mori.com/researchpublications/researcharchive/poll.aspx?oltemId=2464)



Physical Activity and Health – Facts and Figures (from Sustrans website) Available at: [www.sustrans.org.uk/what-we-do/activetravel/news](http://www.sustrans.org.uk/what-we-do/activetravel/news)

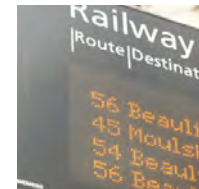


## BELIEF IN SMARTER TRAVEL

IHT has carried out analysis on barriers to the acceptance of smarter travel at a local level which indicated that there are still some issues about 'belief' by the wider profession. Evidence from the IHT Smarter Travel Needs Survey 2009 demonstrated that over 60% of those surveyed considered there were still managerial and professional barriers to the acceptance of smarter travel solutions. Nearly 80% felt there were still political obstacles to its mainstreaming. Whilst the vast majority of professionals considered that the evidence base now available on the subject was sufficient, over 65% felt that the priority must be to achieve wider political and professional acceptance of the smarter travel agenda.

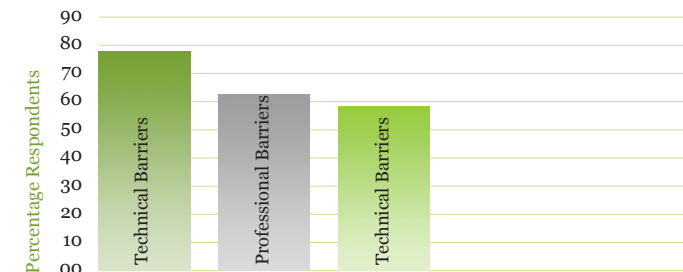


IHT Smarter Travel Needs Survey 2009 Available soon at: [www.iht.org](http://www.iht.org)



Used courtesy of Mouchel

Figure 6 Barriers to the acceptance of Smarter Travel solutions



Barriers to acceptance of Smarter Travel solutions

Based on IHT Smarter Travel Needs Survey 2009

### EVIDENCE CREDIBILITY

The evidence base for smarter travel is rapidly expanding. Considerable progress has been made in setting up systems to provide consistency in smarter travel techniques. Examples include the TRICS and TRAVL databases which support the promotion of standard approaches to travel planning. The DfT has carried out a number of studies to evaluate the effect and potential impact of smarter travel interventions.



iTRACE (a standardised approach to Travel Plan management) (iTRACE website) Available at: <http://itrace.org.uk/Default.aspx>

TRICS (a system for challenging and validating assumptions about the transport impacts of new developments) (TRICS website) Available at: [www.trics.org/default.html](http://www.trics.org/default.html)

TRAVL (Trip Rate Assessment Valid for London) (TRAVL website) Available at: [www.travl.org.uk/](http://www.travl.org.uk/)

Smarter Choices – Changing the Way We Travel (DfT, 2004) Available at: [www.dft.gov.uk/pgr/sustainable/smarterchoices/](http://www.dft.gov.uk/pgr/sustainable/smarterchoices/)

Delivering travel plans through the planning process – Research report (Addison & Associates for DfT / DCLG, 2008) Available at: [www.dft.gov.uk/pgr/sustainable/travelplans/tpp/](http://www.dft.gov.uk/pgr/sustainable/travelplans/tpp/)

Making travel plans work: Research report (DfT, 2002) Available at: [www.dft.gov.uk/pgr/sustainable/travelplans/work/](http://www.dft.gov.uk/pgr/sustainable/travelplans/work/)

Making Personal Travel Planning Work: Research Report (Integrated Transport Planning Ltd for DfT, 2007) Available at: [www.dft.gov.uk/pgr/sustainable/travelplans/ptp/](http://www.dft.gov.uk/pgr/sustainable/travelplans/ptp/)

Travelling to School Initiative: report on the findings of the initial evaluation (DfT, 2005) Available at: [www.dft.gov.uk/pgr/sustainable/schooltravel/research/tsi/](http://www.dft.gov.uk/pgr/sustainable/schooltravel/research/tsi/)



## SMARTER TRAVEL...

Whether assessing transport on a regional, area wide or site specific basis, smarter travel solutions have an essential part to play in any strategy or scheme. The challenge to think smarter travel first is one that is central to the ongoing development and delivery of a modern transport system. As previously stated, the Government's emphasis on smarter travel has been particularly supported by the DfT's 'Delivering a Sustainable Transport System' (2008) and more recently the 2009 Guidance on Local Transport Plans which places more emphasis on smarter travel and sustainable modes. It also requires local authorities, whether individually or together in sub-regional consortiums, to look seriously for the smarter travel options first.

For London, the Mayor's Statement of Intent also places greater emphasis on sustainable travel measures in addressing transport issues. London Boroughs will be developing their Local Implementation Plans (LIPs) in line with the Mayor's Strategy

There is clearly a need to see a stronger evidence base that can justify investment in this key area of transport planning. Smarter travel professionals have historically been frustrated that the methodology for justifying infrastructure-based schemes (the 'major schemes business case') is currently difficult to use for smarter travel and soft intervention packages, even if the BCR surpasses an equivalent level achieved through capital investment. But progress is being achieved and what was once seen as an art is now becoming much more a proven science. On this basis, ways to justify fiscally larger scale smarter travel programmes should be considered strategically at DaSTS regional study level and also within individual or consortia-based local authority Local Transport Plan 3 activities.



### THE HOUSING AND DEVELOPMENT AGENDA

The full use of smarter travel tools is particularly important when trying to enable economic and housing growth (particularly affordable housing) in the current economic climate, where private sector investment capital for major infrastructure-led solutions is not so readily available.

The role of smarter travel in facilitating new housing and employment growth is also supported through the DfT's latest guidance on 'Delivering Travel Plans through the Planning Process' (2009), emphasising the importance of travel plans in major urban extensions, eco-towns and sustainable urban redevelopment schemes. In promoting sustainable growth, particularly within the national Growth Areas and Growth Points strategy, full opportunity should be taken to promote a holistic placemaking approach and to encourage long term stakeholder engagement when developing smarter travel delivery programmes.

Consultation methods should ensure that the 'menu' of smarter travel measures is appropriate for the lifestyle, cultural and social needs of the incoming population, ensuring that local people have a clear voice in developing and prioritising the smarter travel package. The social, health and wellbeing benefits need to be promoted early in the process and consultation focused around wider travel choice issues rather than the more traditional model of consulting on specific infrastructure schemes. Ideally the opportunity should be taken to assess the full potential of smarter travel before assembling any infrastructure-based strategy using the Reduce-Manage-Invest process outlined earlier.

Whilst there is still debate over the relative merits of CIL (Community Infrastructure Levy) versus the existing Section 106 obligation method to securing developer contributions, the key issue is that smarter travel solutions have to be appropriately resourced, delivered and managed, whether through funding support mechanisms or through 'performance-based' obligations. Measures such as area wide residential travel plans are a key part of the social infrastructure needed to support new developments, and the investment in public transport, walking, cycling and other sustainable transport infrastructure needs to complement such an approach. Residential travel plans should therefore be recognised within the overall Community Infrastructure Levy as a key part of the social infrastructure needed to support major housing growth areas. The DfT has published guidelines for residential travel plans since 2005, with the latest DfT guidance on travel plans and the planning process reiterating the importance of this tool for the housing sector.



Guidance on Local Transport Plans (DfT, 2009) Available at: [www.dft.gov.uk/pgr/regional/ltp/guidance/localtransportplans/](http://www.dft.gov.uk/pgr/regional/ltp/guidance/localtransportplans/)

The Mayor's Transport Strategy (consultation draft) (TfL / Mayor of London, 2009) Available at: <http://mts.tfl.gov.uk/>



Good Practice Guidelines: Delivering Travel Plans through the Planning Process (DfT, 2009) Available at: [www.dft.gov.uk/pgr/sustainable/travelplans/tpp/](http://www.dft.gov.uk/pgr/sustainable/travelplans/tpp/)

Building Sustainable Transport into New Developments: A Menu of Options for Growth Points and Eco-towns (DfT, 2008) Available at: [www.dft.gov.uk/pgr/sustainable/sustainabletransnew.pdf](http://www.dft.gov.uk/pgr/sustainable/sustainabletransnew.pdf)

CABE (Commission for Architecture and the Built Environment) – Improving quality of life through design (CABE website) Available at: [www.cabe.org.uk/#2](http://www.cabe.org.uk/#2)

Making residential travel plans work: good practice guidelines for new development (Transport 2000 Trust for DfT, 2005) Making Residential Travel Plans Work: summary document (DfT, 2007) Available at: [www.dft.gov.uk/pgr/sustainable/travelplans/rpt/](http://www.dft.gov.uk/pgr/sustainable/travelplans/rpt/)



### A POSITIVE FOR EVERY NEGATIVE

From IHT's research in this area, we know that there are still perceived barriers to the widespread application of smarter travel techniques. But for every reason for resistance there is positive evidence that smarter travel really does work. Some examples are shown in this table:

PERCEIVED BARRIER	YES / NO	POSITIVE EVIDENCE
"Smarter travel can only work in urban areas where there is a concentration of population"	No	DfT research into the effectiveness of measures showed that market towns and smaller centres of population can support smarter travel action
"Businesses aren't interested in this – it's only optional"	No	The British Chambers of Commerce Business Transport survey shows the critical importance of smarter travel and smart working to save money and make businesses more efficient
"It's about telling people to leave their car keys at home"	No	The recent studies on the links between health and transport clearly point to the role of active travel to improve people's quality of life (the Sustrans website has a useful summary and references, see link above right)
"It's a waste of time – people love their cars too much"	No	Evidence from personalised travel planning projects across the UK points to the level of modal shift that can occur if smarter travel is promoted effectively ('Making Personal Travel Planning Work: Research Report', see link above right)
"It's only about carbon – not wider issues"	No	Tackling climate change is only one benefit from smarter travel – congestion relief, improved accessibility, improved personal health and cost savings all come through 'thinking smart' in the way we travel

Physical Activity and Health – Facts and Figures (from Sustrans website) Available at: [www.sustrans.org.uk/what-we-do/activetravel/news](http://www.sustrans.org.uk/what-we-do/activetravel/news)

Making Personal Travel Planning Work: Research Report (Integrated Transport Planning Ltd for DfT, 2007) Available at: [www.dft.gov.uk/pgr/sustainable/travelplans/ptp/](http://www.dft.gov.uk/pgr/sustainable/travelplans/ptp/)

The Congestion Question – A Business Transport survey from the British Chambers of Commerce Available at: [www.britishchambers.org.uk/6798219244790033732/Transport\\_Survey\\_2008.pdf](http://www.britishchambers.org.uk/6798219244790033732/Transport_Survey_2008.pdf)



## SO WHAT IS IN THE SMARTER TRAVEL TOOLKIT?



There are a number of key tools that are signposted. Useful documents and websites are listed at the end of this guide.

### THINK SMARTER TRAVEL FACTSHEETS

To help you find out more about the essentials of smarter travel, IHT, in collaboration with other professional institutions and associations, will be producing a series of 'Think Smarter Travel Factsheets' dealing with different aspects of smarter travel. These accessible reference documents will signpost you to the main research, guidance and websites already available on the topic, and specifically help professionals to assimilate and reinforce their knowledge and skill base in this area of work.



Used courtesy of TFL

The factsheets will be based on the major themes listed below, and will be available to download free from the following websites. Nearly 30 specific titles have been identified, with the first group of factsheets available during 2010.

[www.iht.org](http://www.iht.org);  
[www.acttravelwise.org](http://www.acttravelwise.org); or  
[www.rtpi.org.uk](http://www.rtpi.org.uk)

- Theme 1: Getting Commitment** – covering management buy-in, corporate commitment, consultation and engagement, policy, evidence base, funding leverage, member participation and training needs.
- Theme 2: Personal Travel** – covering personalised travel planning and travel surveys.
- Theme 3: Planning and Development** – covering planning applications, section 106 agreements, implications of CIL, public inquiries and masterplanning.
- Theme 4: Communication and Marketing** – covering travel / health awareness campaigns, event planning, running networks and websites.
- Theme 5: Using Technology** – covering car sharing, carbon reduction, car clubs and freight / logistics
- Theme 6: Travel Planning** – including residential, workplace, school, tourism / leisure, hospital, station, and area wide travel plans.
- Theme 7: Infrastructure** – covering cycling and walking networks, public transport infrastructure, signage and legibility, access for all / Disability Discrimination Act issues and timing / programming considerations.



### MAKING SMARTER TRAVEL CHOICES – CONCLUSIONS

For the future to be smart we need sustainable thinking. As professionals across land use planning, transport, engineering, architecture, design and other related disciplines, we need to embrace the full range of smarter travel solutions within our daily work and ensure that opportunities are not missed for social and economic renewal and environmental stewardship.

It is considered that smarter travel solutions is now an essential part of any professional's toolkit. It is recommended as a proven and accepted way of dealing with the transport challenges of today and into the future. Whilst it is part of the answer, it is essential that professionals identify and work through ways of introducing smarter travel solutions within their local setting, building on the wide range of professional skills and talents already available.



## FURTHER HELPFUL REFERENCES



**In addition to the signposted documents in the guide, the following will also provide helpful background:**

A New Deal for Transport: Better for Everyone – White Paper (DfT, 1998)  
[www.dft.gov.uk/about/strategy/whitepapers/previous/anewdealfortransportbetterfo5695](http://www.dft.gov.uk/about/strategy/whitepapers/previous/anewdealfortransportbetterfo5695)

Smarter Choices – Changing the Way We Travel (DfT, 2004)  
[www.dft.gov.uk/pgr/sustainable/smarterchoices/](http://www.dft.gov.uk/pgr/sustainable/smarterchoices/)

Climate Change – the UK Programme (The Stationery Office, 2006)  
[www.official-documents.gov.uk/document/cm67/6764/6764.pdf](http://www.official-documents.gov.uk/document/cm67/6764/6764.pdf)

The Eddington Transport Study (The Stationery Office, 2006)  
(subtitled 'Transport's role in sustaining the UK's productivity and competitiveness')  
[www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/](http://www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/)

Stern Review: The Economics of Climate Change (HM Treasury / Cabinet Office / Cambridge University Press, 2006)  
[www.hm-treasury.gov.uk/sternreview\\_index.htm](http://www.hm-treasury.gov.uk/sternreview_index.htm)

Delivering a Sustainable Transport System (DaSTS) (DfT, 2008)  
[www.dft.gov.uk/about/strategy/transportstrategy/dasts/](http://www.dft.gov.uk/about/strategy/transportstrategy/dasts/)

Carbon Pathways Analysis – Informing Development of a Carbon Reduction Strategy for the Transport Sector (DfT, 2008)  
[www.dft.gov.uk/pgr/sustainable/analysis.pdf](http://www.dft.gov.uk/pgr/sustainable/analysis.pdf)

Meeting Targets Through Transport (DfT / Campaign for Better Transport / Local Government Association / Sustrans, 2008)  
[www.dft.gov.uk/pgr/regional/ltg/guidance/targets.pdf](http://www.dft.gov.uk/pgr/regional/ltg/guidance/targets.pdf)

Guidance on Local Transport Plans (DfT, 2009)  
[www.dft.gov.uk/pgr/regional/ltg/guidance/localtransportplans/](http://www.dft.gov.uk/pgr/regional/ltg/guidance/localtransportplans/)



Used courtesy of TFL

# HELPFUL WEBSITES



## UK Wide

Act on CO2	<a href="http://actonco2.direct.gov.uk/actonco2/home.html">http://actonco2.direct.gov.uk/actonco2/home.html</a>	
Doing Your Bit	<a href="http://www.doingyourbit.org.uk">www.doingyourbit.org.uk</a>	
Campaign for Better Transport	<a href="http://www.bettertransport.org.uk">www.bettertransport.org.uk</a>	020 7566 6480
Carbon Trust	<a href="http://www.carbontrust.co.uk">www.carbontrust.co.uk</a>	0800 085 2005
CfIT	<a href="http://www.plan4sustainabletravel.org">www.plan4sustainabletravel.org</a>	
Change4Life	<a href="http://www.nhs.uk/Change4Life">www.nhs.uk/Change4Life</a>	0300 123 4567
CTC – the UK’s National Cyclists’ Organisation	<a href="http://www.ctc.org.uk">www.ctc.org.uk</a>	0844 736 8450
Cycling England	<a href="http://www.dft.gov.uk/cyclingengland">www.dft.gov.uk/cyclingengland</a>	
Energy Saving Trust	<a href="http://www.energysavingtrust.org.uk">www.energysavingtrust.org.uk</a>	020 7222 0101
The Environmental Transport Association (ETA)	<a href="http://www.eta.co.uk">www.eta.co.uk</a>	0845 389 1010
HM Revenue & Customs	<a href="http://www.hmrc.gov.uk">www.hmrc.gov.uk</a>	
The Institute of Advanced Motorists (IAM)	<a href="http://www.iam.org.uk">www.iam.org.uk</a>	0845 126 8600
Liftshare	<a href="http://www.liftshare.com">www.liftshare.com</a>	01953 451166
Living Streets	<a href="http://www.livingstreets.org.uk">www.livingstreets.org.uk</a>	020 7377 4900
Modeshift	<a href="http://www.modeshift.org.uk">www.modeshift.org.uk</a>	
National Business Travel Network	<a href="http://www.nbtn.org.uk">www.nbtn.org.uk</a>	07912 274 169
Newride	<a href="http://www.newride.org.uk">www.newride.org.uk</a>	020 7974 5896
Powershift register	<a href="http://www.energysavingtrust.org.uk/business/Transport-in-business/other-services/Powershift-Register">www.energysavingtrust.org.uk/business/Transport-in-business/other-services/Powershift-Register</a>	0845 602 1425
	<a href="http://www.sustrans.org.uk">www.sustrans.org.uk</a>	0845 113 0065
Sustrans	<a href="http://www.tap.iht.org">www.tap.iht.org</a>	
IHT Transport Advice Portal	<a href="http://www.transportdirect.info">www.transportdirect.info</a>	
Transport Direct	<a href="http://www.traveline.info/index.htm">www.traveline.info/index.htm</a>	0871 200 22 33
Traveline	<a href="http://www.walktoschool.org.uk">www.walktoschool.org.uk</a>	020 7377 4900 (Living Streets)
Walk to School	<a href="http://www.worldlpgas.com">www.worldlpgas.com</a>	+33 158 05 28 00
World LP Gas Association		
<b>England</b>		
Department for Transport	<a href="http://www.dft.gov.uk">www.dft.gov.uk</a>	0300 330 3000
Department for Communities and Local Government	<a href="http://www.communities.gov.uk">www.communities.gov.uk</a>	0303 444 0000
<b>London</b>		
Transport for London	<a href="http://www.tfl.gov.uk">www.tfl.gov.uk</a>	
<b>Wales</b>		
Welsh Assembly Government (Economy & Transport)	<a href="http://wales.gov.uk/about/departments/dein/?lang=en">http://wales.gov.uk/about/departments/dein/?lang=en</a>	0300 060 3300
Llywodraeth Cynulliad Cymru (Economi a Thrafnidiaeth)	<a href="http://wales.gov.uk/about/departments/dein/?lang=cy">http://wales.gov.uk/about/departments/dein/?lang=cy</a>	0300 060 4400
<b>Scotland</b>		
The Scottish Government / Riaghaltas na h-Alba (Transport)	<a href="http://www.scotland.gov.uk/Topics/Transport">www.scotland.gov.uk/Topics/Transport</a>	0131 556 8400
<b>Northern Ireland</b>		
Northern Ireland Government (Department for Regional Development)	<a href="http://www.drdni.gov.uk">www.drdni.gov.uk</a>	028 9054 0540
(An Roinn Forbartha Réigiúnaí) (Máinnstríe fur Kintra Pairts Fordèrin)	<a href="http://www.drdni.gov.uk/index/gaeilge.htm">www.drdni.gov.uk/index/gaeilge.htm</a> <a href="http://www.drdni.gov.uk/alternative_formats_in_ulster_scots">www.drdni.gov.uk/alternative_formats_in_ulster_scots</a>	
<b>Republic of Ireland</b>		
Department of Transport	<a href="http://www.transport.ie/index.aspx">www.transport.ie/index.aspx</a>	+353 1 670 7444
<b>Professional Institutes and Associations</b>		
Institution of Highways & Transportation	<a href="http://www.iht.org">www.iht.org</a>	020 7336 1555
Royal Town Planning Institute	<a href="http://www.rtpi.org.uk">www.rtpi.org.uk</a>	020 7929 9494
ACT TravelWise	<a href="http://www.acttravelwise.org">www.acttravelwise.org</a>	020 7348 1970



# APPENDIX

TYPICAL SMARTER TRAVEL MEASURES

## APPENDIX ONE

### Typical Smarter Travel Measures

This table gives examples of typical smarter travel measures that are currently being used. Whilst most are 'incentive-based' it is important that these are matched by restraint and wider demand management tools

Measure	Characteristics	Costs	Benefits	Barriers
Workplace Travel Plans	A package of measures put in place by an employer to try to encourage more sustainable travel, usually meaning less car use. Results seen after 1-3 years	Cost per capita between £2-£431 per employee. Median annual running cost of £47 per full time employee	Reduction of 3% - 35% single occupancy car travel. Average of 18% reduction in single occupancy car usage across all evaluated sites Better staff retention and less absenteeism. Reduced parking costs. Improved environmental credentials and image	Requires resources to champion, monitor and implement travel plan. Importance of effective car park management to maximize benefits
School Travel Plans	A process whereby schools work out how they intend to make travel to and from the school by pupils, parents and teachers more sustainable and safer	Grants sometimes available from local authorities. Higher cost than Workplace Travel Plans due to safety infrastructure. Grants approximately £5000 per primary school and £10,000 per secondary school. Average cost per pupil of around £4	With a good level of engagement, a reduction of 13-21% in car trips. 80% of schools see some reduction. Average car trip reduction in London is 6.7%. Improved health, safety and environmental awareness of children and their families. Reduced peak traffic and safer streets	Needs active championing from a school representative
Personalised Travel Plans	Direct marketing of travel planning tailored to the individual's current travel patterns and options for changing their travel. Also known as personalised journey planning and individualised travel marketing	PTP typically costs between £20 and £38 per household targeted. Cost reduces with increased scale (often on an area-wide scale) but increases with range of initiatives offered	Average of 11% reduction in car use	High demands for staff time
Car Sharing	Two or more people sharing a car for a whole or part of a journey. It can be a formal scheme, such as those implemented by workplaces using a database or internet application to find partners, or an informal arrangement	For organisations, £400-£8,000 to set up web based application or £15,000 - £35,000 for specialist software. Individuals can join schemes for free. Ongoing administrative costs and annual licensing costs	A reduction of 2% - 28% in single occupancy car trips. Reduced vehicle running costs, reduced parking demand and reduced peak-time traffic, more sociable	Not suitable for all types of workplaces and people. Often difficult to monitor
Teleworking	Giving employees the opportunity and facilities to work remotely, often from home or other bases, using telephones and computers	Variable. Depends if the employer and employee have the relevant facilities already in place	Reduction range of between 15 – 200 car miles per week. 70% fewer sick days, improved work/life balance, better productivity and higher staff retention	Not suitable for all types of work and can result in isolation and lack of support/supervision
Tele-Conferencing and Video Conferencing	The use of tele-conferencing and video-conferencing to replace face-to-face meetings. Often referred to within the term 'Smart Working'	£5,000 - £40,000 for video equipment, plus maintenance costs  About £10 - £15 per hour for tele-conferencing	Companies who do this such as Mason Williams and Tetrapax, report a 10% - 30% reduction in business travel	Not suitable for all types of workplace

## APPENDIX ONE

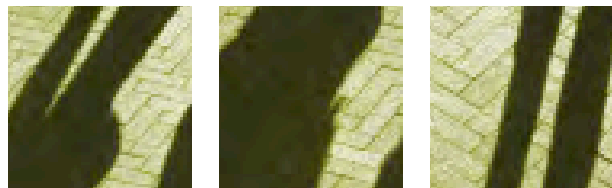
Continued...

Measure	Characteristics	Costs	Benefits	Barriers
Car Clubs	Members of car clubs pay an annual fee to allow them to book and access short-term communal hire cars for an hourly rate, which are parked in publicly/easily accessible locations	£100,000+ start-up costs. Ongoing management and license costs but member fees subsidise some cost. Eventually become self-financing	Annual car mileage in Bristol and Edinburgh has reduced by at least 3,600km per member. Start-up grants sometimes available. Eventually becomes self-financing	High start-up costs. May encourage non-car owners to drive or existing car-owners to start using a second vehicle
Home Shopping for Groceries	Users purchase goods without visiting a shop (i.e. using the internet, telephone, mail-order) and the goods are delivered to their door	Generally low cost. Investment by retailers and freight companies	A potential 1.5% reduction in grocery mileage. Small percentage but as a volume of trips quite significant. Less frequent shopping but larger orders	Buyer not always able to receive delivery so results in increased travel (see 'Local Collection Points' below)
Local Collection Points	Collection points (e.g. local post office, library, concierge) allows people to pick up parcels from a convenient place if they would not be in to receive the delivery	Generally low cost	Reduced the need for multiple delivery attempts or out-of-town collection by the customer. A pilot in Nottingham saved 50,000-100,000 car miles in a year	Requires co-ordination with Royal Mail/delivery companies
Public Transport Information and Marketing	Targeted marketing that may be area-wide or mode-specific	Annual marketing budgets range from £60,000 to £220,000	Increased use of public transport	Difficult to predict impact
Developer Travel Plans	Collective name given to travel plans secured through the planning process	Costs built into the viability assessment of the site. Costs depend upon the size of the site, ability to accommodate sustainable transport, and the length of time the travel plan is required to be monitored. For a large site this could be up to 5- 10 years	Increased use of sustainable transport and public transport to the development. This may involve applying improvements to the surrounding area to help encourage sustainable travel patterns to a wider basis	Early engagement and discussions should take place at preliminary design/concept stage and as part of pre-application discussions. In reality, lack of resources and priorities means that the travel plan is left until the main negotiation phase
Residential travel plans	Travel plans introduced by developers and housing associations to encourage sustainable travel patterns from a development	Most successful if integrated within the development from concept stage and inbuilt within the marketing/selling process. Costs are viable depending on whether they are integrated into a Section 106 agreement or kept fluid within the travel plans	Increased use of a wide range of sustainable travel methods, public transport and car sharing – suited to the lifestyle of the residents First wave of case studies reported in DfT Best Practice Guide on Residential Travel Plans (2005) followed by DfT Guidance on Delivering Travel Plans through the Planning Process (2009)	Lack of early buy-in by developers and perception as a Section 106 'burden'
Hospital/Health Travel Plans	Travel plan introduced across the NHS/Health Sector in line with requirements for carbon reduction and sustainable travel across the health sector	Most successful where introduced as part of a balance 'carrot and stick; approach, particularly where parking demand and charging are involved. Costs similar to workplace travel plans	Increased use of sustainable travel and public transport by employees. Visitors, outpatient and supplies traffic	Relies on maintaining momentum and ensuring that surrounding land activities support the hospital in its strategy

## APPENDIX ONE

Continued...

Measure	Characteristics	Costs	Benefits	Barriers
Station Travel Plans	Travel plans specifically designed to reduce the need to use single occupancy car to access rail stations	Initial station research between £5,000 - £10,000 based on assessing the travel needs of existing customers rather than non-users. ATOC pilot project 2008 – 11 is current best source of information	Increased use of walking and cycling to rail stations with focus on 'PlusBus' approach for larger stations and car sharing for those with larger car parks/Parkway station	Relies on strong partnership including long term commitment from TOC and local authorities
Construction (workers) travel plans	Travel plans dealing with the construction phase of a major project and how construction workers can access the site. Normally linked to a planning permission	Built into the development cost for the scheme and CDM requirements	Increased use of train, bus, cycling walking and minibus/contract travel for those workers only needing to bring limited equipment on site. Also deals with off-site consolidation practices	Requires assessing early in the planning process and Environmental Assessment is required, is often left until later on in the application process
Travel Awareness Campaigns	This can be in the form of advertising, posters, leaflets, press articles, radio, television, cinema or events. These types of advertising campaigns tend to be aimed at the general population rather than specific groups	From 40p – 50p per resident	Usually reach 20% – 40% of target population.	Difficult to predict impact
Delivery and Servicing Plans	A package of measures for retail businesses to better manage their deliveries and servicing, such as night-time deliveries or consolidation. Particularly suited to town centres	Unknown	An off-peak delivery trial in Wandsworth reported no complaints, better journey times, and good feedback and air quality improvements. Aims to reduce goods-vehicle related congestion	3 year investment. Often a high turn-over of staff in retail environments so difficult to maintain momentum. Planning conditions can restrict scope



[www.acttravelwise.org](http://www.acttravelwise.org)  
[www.iht.org](http://www.iht.org)  
[www.rtpi.org.uk](http://www.rtpi.org.uk)  
[www.tps.org.uk](http://www.tps.org.uk)

**IHT REGISTERED OFFICE**

119 Britannia Walk, London, N1 7JE

Telephone: +44 (0)20 7336 1555

Facsimile: +44 (0)20 7336 1556

Registered in England No. 252735

Registered Charity No. 267321

[www.iht.org](http://www.iht.org)