Delivering Sustainable Low Carbon Travel: An Essential Guide for Local Authorities

Department for
Transport

Delivering Sustainable Low Carbon Travel: An Essential Guide for Local Authorities

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Contents

Foreword

The challenges we face together, both as local and central government, are significant. We must act to reduce our carbon emissions, we must nurture economic growth and we must also support the health and quality of life of communities.

I believe that sustainable low carbon travel is part of the solution, not just for transport but across a wide range of local priorities. If planned effectively, sustainable travel can deliver tangible local benefits around carbon, health, air quality, access to education, housing, planning and social inclusion.

The last few years have already seen substantial progress. The Sustainable Travel Demonstration Towns are a good example. If the reported kilometre reductions of car travel were repeated in other similar sized towns, each could potentially save around 4,700 to 7,700 tonnes of CO_2 per year.

I hope to see the third round of Local Transport Plans delivering transport strategies which can realise the full benefits of sustainable travel at the local, regional and national level. The key is effective delivery, and I hope that this guide will support you in achieving this.

Rt. Hon. Sadiq Khan
Minister of State for Transport

Executive summary

1 We are facing challenging times. By 2020 the UK must meet a 34% reduction in greenhouse gas emissions on 1990 levels whilst supporting economic growth, improving health and quality of life. And all in a budget-constrained world. Transport has a crucial role to play in meeting these challenges and sustainable travel initiatives offer an opportunity to make a real contribution, not only in decarbonising transport, but also in delivering local objectives around health, congestion, air quality, education, housing, economic development and social inclusion.

2 Sustainable travel initiatives have the potential to add real value to the next round of Local Transport Plans (LTP). This guide seeks to complement statutory LTP Guidance by providing support for developing a sustainable travel business case based on the latest evidence and good practice from around the country.

Sustainable Travel

3 Sustainable travel is about understanding your local area and providing for its transport needs through a package of measures which promote attractive sustainable transport alternatives such as walking, cycling, public transport and sustainable car use, held together by a clear brand. The sustainable travel approach rests on three pillars:

- creating positive choices for travellers;
- a holistic package of measures, which 'lock-in' the benefits; and
- local application tailored to local circumstances.

4 The benefits of sustainable travel measures are increasingly established with the early positive results of the Sustainable Travel Demonstration Towns and Cycling Demonstration Towns. Benefits include reduced congestion, better quality of life, improved air quality, health benefits, and carbon savings. If planned effectively, sustainable travel packages can also be low in cost, have shorter lead-in times and be generally flexible to implement.

Getting started and developing the business case

5   Integrating sustainable travel into a wider transport strategy or developing a specific sustainable travel area wide initiative should fit naturally with the Local Transport Plan process. As part of that, the development of a strong, robust business case is critical to winning the support of councillors and colleagues as well as securing funding from internal and external sources. It is important to identify the evidence that will be most effective in persuading decision makers. Existing methodologies and techniques can be drawn from to develop that evidence and demonstrate value for money.

6   As sustainable travel can impact across the range of local authority responsibilities, it is important to engage early with colleagues from across the authority and as necessary with other partners, to ensure that the full benefits are represented in the business case.

Funding, effective delivery and evaluation

7   A strong business case is vital to securing funding for any prospective sustainable travel initiatives. There is scope for innovative thinking to identify other methods or sources of funding, especially to reflect the contribution of sustainable travel to wider authority objectives.

8   The experience of the Sustainable Travel Demonstration Towns is that successful delivery requires certain key elements, including: a senior management champion; clear strategic direction; political leadership; strong team leadership; properly resourced and motivated teams with appropriate skills; and good stakeholder management.

9   The right governance structure is vital and a steering group can provide leadership and oversight. Working with partners in the community can be particularly valuable in identifying the right audience, extending the reach of the project and maximising the outcomes. Key partners should include: local business, education establishments, health organisations, second tier authorities, local transport operations and third sector groups amongst others.

10   Demonstrating that the project achieved the planned benefits and delivered real results can be critical to securing further support and funding. As such it is important to consider robust and clear monitoring and evaluation and ensure that it is integral to the design of the project.

Part A:
Sustainable Travel Delivery

Courtesy of Peterborough City Council

1 Introduction

1.1   We are being asked to do more in challenging times. The UK has to meet a 34% reduction in greenhouse gas emissions on 1990 levels by 2020. And we have to support economic recovery, promote social inclusion, and improve health and quality of life. And do so in an increasingly budget-constrained world.

1.2   With 21% of total UK domestic greenhouse gas emissions from transport, decarbonising it is a key part of the solution. The Government's approach to making this happen is through supporting a shift to new technologies and fuels; promoting lower carbon choices; and using market mechanisms to encourage the shift to lower carbon transport.

1.3   Sustainable travel initiatives have the potential to make a real contribution to this. If planned effectively they can deliver tangible local benefits on a range of local objectives ranging from reducing congestion to improving health, air quality, education, housing, planning and social inclusion. Active travel for example has a significant role to play in reducing obesity and increasing physical activity as well as improving quality of life[1]. These initiatives can also be low cost, high value for money, low carbon and flexible to implement.

1.4   But as with any transport intervention, to be successful they need careful analysis of the problem, a robust appraisal of options to develop an appropriate package, and a framework for funding, delivering and monitoring.

1.5   There is huge potential to achieve a step change in the delivery of sustainable, low carbon, travel across England. The last few years have already seen substantial progress and the evidence is that sustainable travel initiatives can often have a number of benefits over more traditional, infrastructure based interventions. The Sustainable Travel Demonstration Towns are a case in point: if the reported kilometre reductions of car travel

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1   Healthy Weight, Healthy Lives: One Year On (2008): "encourages local authorities to deliver active travel initiatives through the next round of local transport plans"

were repeated in a similar sized town, there could be potential CO_2 savings of between around 4,700 and 7,700 tonnes[2] each year.

Local Motion campaign, Darlington

Courtesy of Darlington Borough Council

1.6   Local authorities are important partners in helping the UK deliver carbon savings and should be using their local transport policies to deliver against their own climate change goals. They are in a unique position to influence individual travel choices, and embed sustainable travel in the third round of Local Transport Plans and in Integrated Regional Strategies.

1.7   The aim of this guide is to:

- help make the business case for sustainable, low carbon, initiatives and help bring it into the core of local authorities work; and

- draw on the latest developments to show how sustainable travel initiatives might best be delivered, measured and funded, drawing on examples of good practice from around the country.

1.8   This guide will be followed by further detailed evidence and information in the coming months to support the practical development of initiatives.

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2   This assumes similar car km reductions to the Sustainable Travel Towns and uses the average car of unknown fuel emissions factor from DEFRA reporting guidelines (http://www.defra.gov.uk/environment/business/reporting/pdf/ conversion-factors.pdf). The higher end would only be achievable with complementary sustainable travel measures, for example Darlington was also a cycling demonstration town and therefore achieved higher-end carbon savings.

Links to key websites and further information are embedded within the text and are best accessed through the electronic version of the document.

What is meant by sustainable low carbon travel in local areas?

1.9   Sustainable travel is about understanding your local area and providing for its transport needs through a range of measures which promote attractive sustainable transport alternatives such as walking, cycling and public transport. And the key is in the range of measures – by introducing a carefully selected package of complementary measures in a specific targeted location, an authority can achieve a greater and longer-term impact than through individual initiatives alone. This package is then held together by a clear and strong brand with supportive marketing.

Courtesy of Peterborough City Council

1.10   As an approach, it calls for fresh thinking, ideas and a new approach to area wide problems, with transport as part of the solution. It constitutes a shift in emphasis: from the traditional predict and provide to an approach which takes account of the choices that people can make and seeks to influence those choices – tackling the problem at its cause: through influencing transport demand, rather than mitigating its impact. It also recognises that transport can help deliver on a range of local objectives and should interweave with work on the economy, planning, health, social inclusion, education and carbon reduction.

1.11 As set out below (Figure 1.1), the approach rests on three pillars; focusing on creating positive choices to influence behaviour, putting a package of measures together, and tailoring to reflect local needs. This builds on the 'Making Smarter Choices Works' (2004), and draws in measures to influence transport demand through infrastructure, and the latest thinking on active and low carbon choices which should now form part of a sustainable travel package.

Fig 1.1 Creating a Sustainable Travel Package

	Sustainable Travel Package		
Pillars	**Creating positive choices**	**Package of measures**	**Local application**
Principles	• Enabling • Informs trip choice • Long-term • Focuses on influencing demand	• Holistic • Targeted • Lock in benefits • Branded	• Local identity • Tailored to local demography, journeys and geography
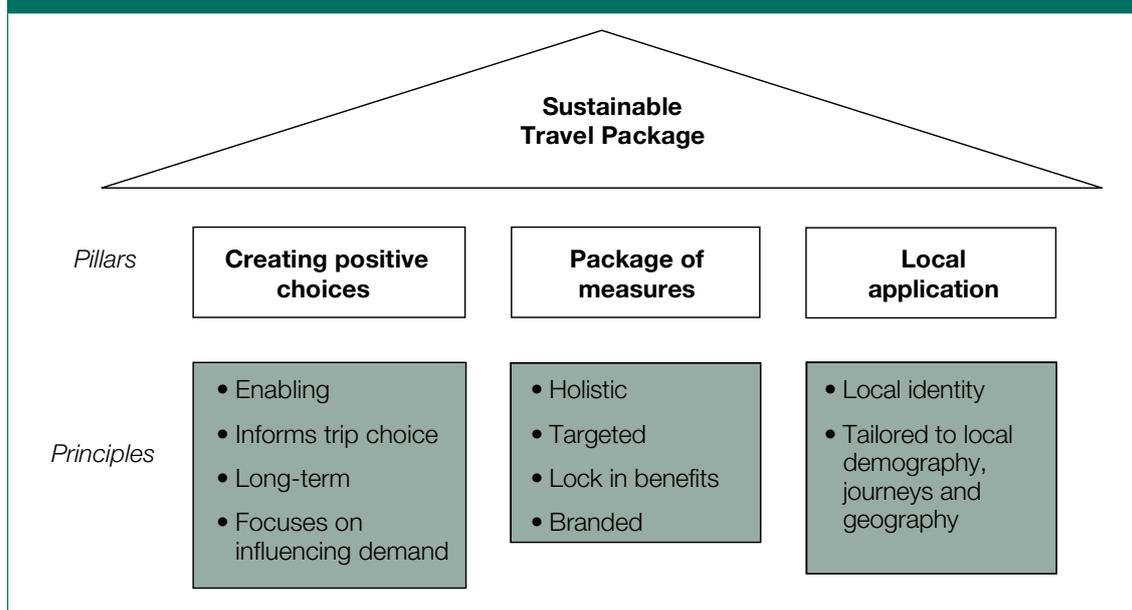
1.12 Some of the typical measures that can be used to form a sustainable travel package are set out below in Table 1.1. The table includes some of the newer measures such as eco driving which could form part of a sustainable low carbon travel package.

Why Sustainable Travel?

1.13 The challenge of tackling climate change means that action needs to be taken at every level – local, national and international. While national and international measures will take us some way, planned local transport measures are forecast to help reduce road transport carbon dioxide emissions in England by around 1 million tonnes per year[3]. And as most journeys are short journeys, the implementation of effective local plans is critical for delivery of carbon reductions.

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3   DfT analysis based on the latest regional forecasts on carbon dioxide emissions from road transport annually, which can be found at: http://www.dft.gov.uk/pgr/economics/ntm/roadtransportforcasts08

Table 1.1: Typical Measures for Sustainable Travel Packages					
Introduce travel plans	Promote public transport	Active travel choices	Influencing demand	Marketing and branding	Sustainable car use
Workplace	Fare incentives and smart ticketing	Walking support and infrastructure	Tele-working/ Teleconferencing	Information on travel choices	Car clubs and car sharing
School	Improved service	Cycle training	Home shopping	Travel awareness campaigns	Car sharing where possible
Personalised Travel Planning	Better access/ interchange	Business cycle facilities and incentives	Parking restrictions	Branding	Eco driving*
Station Travel Plans	Better integration	Cycle hire schemes	Traffic management		Electric vehicle infrastructure*
		Cycle and walking route maps	Integrated land use planning		Vehicle choice*

*addition to traditional menu of sustainable travel measures

1.14   The benefits of sustainable travel are well established. Initiatives can deliver high value for money investment and support a broad range of local and national objectives.

1.15   And they can be more flexible than many transport infrastructure schemes – implementation times are shorter, they can be up or downscaled more quickly in response to changing circumstances, and they can evolve alongside changing priorities and pressures.

1.16   Importantly, they can help achieve outcomes that support wider council priorities around planning, housing, health and education. They can contribute to a range of targets included in Local Area Agreements, including but not limited to the following performance indicators:

Table 1.2: National Indicators	
National Indicator	**Description**
NI 47	People killed or seriously injured in road traffic accidents
NI 48	Children killed or seriously injured in road traffic accidents
NI 55	Obesity among primary school age children in reception year
NI 56	Obesity among primary school age children in year 6
NI 121	Mortality rate from all circulatory diseases at ages under 75
NI 137	Healthy life expectancy at age 65
NI 167	Congestion – average journey time per mile during the morning peak
NI 175	Access to services and facilities by public transport, walking and cycling
NI 176	Working age people with access to employment by public transport (and other specified modes)
NI 177	Local bus passenger journeys originating in the authority area
NI 178	Bus services running on time
NI 185	% CO_2 reduction from LA operations
NI 186	Per capita reductions in carbon emissions in the LA area;
NI 188	Adapting to climate change
NI 198	Children travelling to school, mode of transport usually used
NI 194	% reduction in NOx and primary PM10 emissions through local authority's estate and operations

1.17 More support on how sustainable travel can support local targets can be found in Meeting Targets Through Transport.

Sustainable Travel: delivering in practice

1.18 Between 2004 and 2009 the three Sustainable Travel Demonstration Towns implemented local programmes of travel planning, marketing, and improved information, as well as other measures to support more sustainable travel choices. Over that period, there was a reported reduction in car trips of 7-9% of those targeted. Travel diary data from the towns below shows the relative changes in trips by mode between 2004 and 2008:

Table 1.3: Relative Changes in Trips in Sustainable Travel Towns, 2004-2008			
	Darlington	**Peterborough**	**Worcester**
Walking	+14%	+14%	+12%
Cycling	+113%*	+12%	+19%
Car (as driver)	-9%	-9%	-7%
Bus	-2%	+35%	+20%

*For some of this period Darlington was also a Cycling Demonstration Town

1.19   All three towns plan to continue the programme in some form within their own budgets. This guide draws on early lessons from their experiences in delivery. The full evaluation of the programme is expected to be published shortly.

Cycling: delivering in practice

1.20   Six Cycling Demonstration Towns were selected in 2006 to demonstrate what measures are successful in increasing cycling. The six demonstration towns[4] each received funding of £5 a head from DfT for three years which was match funded by the local authority. Across all the towns from 2006 to 2008, there has been an average increase of 27% in cycling as recorded by a network of automatic cycle counters. This represents a similar rate of increase over three years as seen in several high profile European towns and also in London at the beginning of its cycling programme. London has continued its programme to see cycling double in the central area over 10 years. A summary of the evaluation can be found on DfT's website.

1.21   In 2008, the Cycling Demonstration Towns were extended for a further three years until 2010/11 and expanded to include 12 new cycle city and towns with increased funding of £8 a head (to be match funded locally). DfT is undertaking a more comprehensive research programme of these towns to produce a wider set of evidence of the impacts of promoting cycling.

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4   The cycle demonstration towns were Aylesbury, Brighton and Hove, Lancaster and Morecambe, Darlington, Derby, and Exeter. These were chosen to have a population of about 100,000 (or to concentrate on a group of 100,000 within the wider population)

The City of Worcester became a Sustainable Travel Demonstration Town in 2004

The Worcester project was branded 'Choose How You Move' (CHYM) and comprised a range of initiatives including:

- Travel information – information on a specific CHYM section of Worcester City Council's website, new public transport, walking and cycling maps and timetables

- Marketing and promotion – Individualised Travel Marketing, public transport, car sharing, and walking and cycling marketing campaigns and events structured around an annual calendar linked to the seasons.

- Travel planning – workplace travel plans, school travel plans

- Public transport – service improvements, regular timetable change dates, improved infrastructure and information at bus stops, new ticketing initiatives

- Cycling – cycle loan scheme, Tour of Britain, Pedal in the Park and Dr Bike events, adult and child cycle training, development of new maps and leisure route information

- Walking – walk to school week, walking buses, walk to work events and the summer walking pack (Big Days Out)

- Other measures – car club, car sharing database for employers.

For Worcester, the Sustainable Travel Demonstration Towns project has proved invaluable in defining a new programme of Smarter Choices measures going forward. In implementing the Worcester Transport Strategy the existing CHYM brand continues as it has achieved high recognition amongst the residents of Worcester.

2 Getting started

2.1 Integrating sustainable travel into a wider transport strategy or introducing a specific sustainable travel area-wide initiative should not represent a radical departure from established processes for developing a local transport strategy or plan.

2.2 Guidance on Local Transport Plans emphasises the need to consider the five transport goals agreed as part of "Delivering a Sustainable Transport System", including the goal of seeking to mitigate climate change. But as shown in the previous chapter, sustainable travel initiatives may contribute to a wide range of goals, and they should be routinely considered as possible options to meet the range of problems and challenges that an authority wants to resolve.

2.3 Chapter 4 of the LTP Guidance shows six stages in developing and implementing a Local Transport Plan, and sustainable travel objectives and initiatives need to be considered at each stage. It will be particularly important to generate the right evidence about the nature of the problems to be tackled, the priorities and the likely value and feasibility of different options. This will help to inform the identification of objectives, options and business cases.

2.4 Packages of sustainable travel measures need to be considered together with other possible measures to develop comprehensive programmes for an area. The following sets out key considerations which are pertinent to developing sustainable travel packages as part of the wider LTP process drawn from the experiences of the Sustainable Travel Demonstration Towns.

# Understanding the local area and analysing current behaviour

Courtesy of Peterborough City Council

2.5 Local topography, social mapping, the state of the local bus network and planned developments are all standard considerations for any transport strategy, and sustainable travel is no different. Sustainable travel does not provide a "one-size fits all" solution because local circumstances vary. The most successful packages are adapted to suit local circumstances, and you will need to carefully select a complementary package of the initiatives outlined in the guide to suit your area or problem. You may wish to devise a package based on key destinations such as town centres, railway stations or hospitals. Or you may wish to target certain sections of the population, young people, home movers, those starting new employment, those in areas of social deprivation – reflecting wider equality considerations in your area. Or you might want to build your package around residential areas, growth points or key public transport corridors.

2.6 As an approach, sustainable travel has proved most effective in urban/semi rural areas where there is a density of trips that make cycling, walking and car clubs/sharing realistic alternatives. Areas with a high proportion of shorter trips are also particularly suitable for encouraging mode shift from single occupancy private car. And where providing a viable alternative to single occupancy car trips is more difficult, the emphasis should be on sustainable car use, including promoting low carbon vehicle choices and

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eco driving or car-sharing. Or reducing the need to travel through well planned services, tele-working or home shopping for example.

2.7   Certain trips are also more significant in carbon terms. Figure 2.1 below breaks down the estimated carbon emissions from household cars by journey purpose and journey length. The highest proportion of emissions are in the 2 to 25 mile range, and are mostly from commuting trips, of which 91%[5] are single occupancy car trips. So there can be real value in focusing on the journeys to areas of economic activity and employment.

Figure 2.1: Estimated CO_2 emissions from household cars by journey purpose and journey length, GB, 2002/2006 average
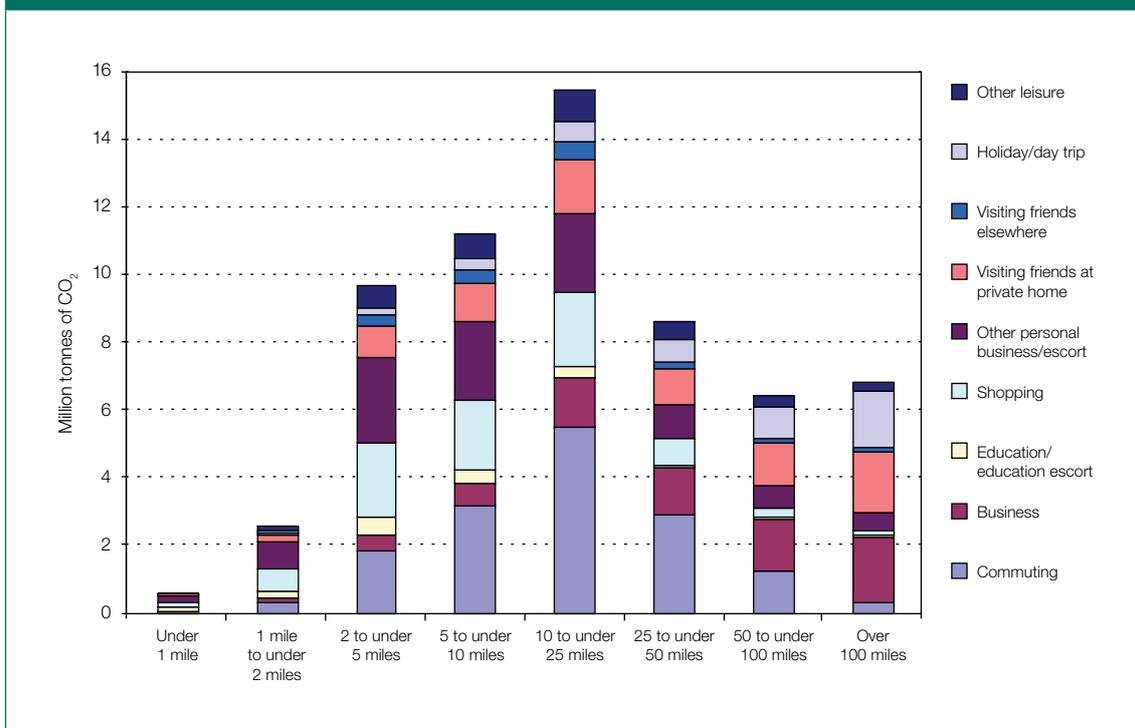
Source: DfT analysis

2.8   Sustainable, low carbon, initiatives also work best where focused on specific geographical locations – either as a trip origin or destination – such as business parks, shopping centres, town centres, railway stations and even leisure destinations such as National Parks or tourist 'honey pots'. These enable targeted, locally designed solutions which can prove very effective in encouraging local participation through a sense of local community ownership of the programme. Residential travel plans can play a role where targeting larger residential areas.

2.9   A sustainable low carbon package can also add real value in the long-term where new developments are being planned. Whether it be new housing or areas for regeneration or growth points, sustainable low carbon transport

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5   DfT Carbon Pathway Analysis

should be planned into development from the outset. There is a real opportunity to influence new residents and businesses entering an area – before they have established their travel patterns – as demonstrated by the example of Northamptonshire set out below. As people change their lifestyle (new job, new home, etc.), they are more likely to be amenable to suggestions of alternatives to using the car. Equally it is important to remember leisure trips and tourist destinations, as travellers might be more receptive to a wider range of options when travelling to a less familiar destination. More details in **Part B**.

Creating travel centres in all new developments in Northamptonshire

Northamptonshire is a key component of the Milton Keynes – South Midlands (MKSM) growth area. Northamptonshire Transport Strategy for Growth set a target of 20% modal shift from new developments. To help reach this target all large developments will be served by a Travel Centre. Funded by Section 106 contributions, these centres will provide residents of new developments with information about smarter travel choices, such as:

- Public transport routes, timetables, stops and ticketing information;

- Obtaining tickets, vouchers and incentives for sustainable activities including public transport;

- Applications for parking permits, car clubs, cycle hire, walking and other activities;

- Local maps of cycling and walking paths;

- School transport options;

- Personalised travel planning services; and

- Details on the location of local businesses, services and amenities.

These services will be available before all residents have moved in so that modal shift can be encouraged before habits and travel patterns become established.

Larger developments will be served by an on-site centre, complemented by a travel centre website. For smaller developments an on-line 'virtual travel centre' will be used. Northamptonshire County Council have been working with a marketing company to develop distinctive branding that can be used within centres, on the websites and on promotional materials.

Setting Your Objectives

2.10 Good evidence about the local area will help inform a local authority's objectives and priorities and the potential to achieve them through sustainable travel initiatives. This will be important in selecting the interventions that will best achieve your objectives.

2.11 As part of its LTP, the authority will be setting a number of overarching goals and challenges, together with a set of targets and performance indicators to allow effective programme management. The authority will want to consider how far some of those targets and indicators should relate directly to its delivery of sustainable travel, either across the authority or in particular locations.

2.12 Sustainable travel initiatives have shown that they can achieve impressive value for money, but developing a successful package depends on an intelligent analysis of the problem and careful targeting of interventions. This helps to ensure that realistic objectives, priorities and outcomes are set and that the location, scale and mix of measures are chosen to achieve the best results. It is vital to identify the right data and analysis to support the business case.

Considering options and developing packages

2.13 Options involving sustainable, low carbon, travel initiatives need to be carefully tailored to the specific location and objectives. For example if there are a large number of organisations or businesses located closely together; joint work based travel plans, car sharing and business networks might be a good option. In city locations with shorter journey times, personalised travel planning, cycling and walking initiatives might form a significant part of any package.

2.14 The kind of measures you should consider in your sustainable travel programmes might include the following (**Part B** includes links to further information):

- Influencing demand through planning and land use
- Locking in benefits
- Active travel choices: cycling and walking
- Supporting travel planning
- Promoting public transport
- Marketing and communication
- Car sharing & car clubs
- Low carbon/electric vehicle choice & infrastructure

2.15 The best packages will include elements to ensure that behavioural change benefits are locked in. Without locking in the benefits, for example through changes to infrastructure, bus and cycle prioritisation or lower speed limits, there is a danger that measures can simply release road space, which is quickly occupied by more traffic. Whilst measures that influence transport demand may be challenged locally, these measures are likely to be more

publicly acceptable when delivered as part of package which also provides viable travel alternatives.

Developing a business case

2.16 Gaining the support of councillors and colleagues is central to any project's success. This means demonstrating that the package chosen is the best alternative to meet the problem and should be a priority. The evidence is growing that sustainable travel packages can deliver very good value for money and tangible benefits and this should help to secure buy-in from internal and external stakeholders.

2.17 Identifying the right type of measurement and data is essential, and often straightforward analysis can be sufficient to make the case. The key is to identify the evidence that will best persuade the decision makers involved in securing funding. There is also value in anticipating information that might be useful for public engagement later in the process – for example using terms and measures that are easy to understand and where the results are tangible to users or residents. It is also worth remembering that your local authority itself is a major employer and 'do as I do' rather than 'do as I say' is a powerful message.

2.18 With the important read-across to other areas of the authority of any sustainable travel area initiative, working early with colleagues across the council to ensure that planning, carbon, economic growth, air quality and regeneration, education and health benefits are clearly set out in the business case is vital. This will help identify potential opportunities and synergies as well as challenges which will affect the outcome of any sustainable travel project. It will also ensure that the value added to wider authority objectives is captured from the very start.

2.19 Often there are also economies of scale which neighbouring authorities can benefit from, especially in urban areas. For example, two or more local authorities might help to deliver electric vehicle infrastructure points by working across a much larger spatial scale with a range of delivery partners in order to achieve the most efficient use of resources.

2.20 Of course, resources allocated to demonstrating value for money need to be proportionate to the scale of the project. But it is often possible to make a compelling case for smaller projects using relatively straight forward calculations. The key is giving stakeholders a sense of what can be delivered to help secure buy in. Information in this guide, as well as the results of the Sustainable Travel Demonstration Towns and Cycling Demonstration Towns, will soon provide valuable material for benchmarking and supporting evidence of the likely outcomes of sustainable travel measures.

Analysis and value for money

2.21 Feedback from authorities suggests that sustainable packages can struggle to demonstrate their value when competing with wider authority objectives, so it's worth taking the time to do the analysis of potential benefits of sustainable travel when developing your options. There is evidence[6] that walking and cycling schemes, while relatively small in scale, can represent far higher value for money than other interventions. This evidence cites three case studies which have a benefit cost ratio ranging from 18.5 to 38.4 – that is £18.50 to £38.40 worth of benefits per £1 of net public expenditure. It is important to factor in the health benefits which can be substantial. An alternative approach to assessment of cycle schemes can be found in the SQW report produced for Cycling England on valuing the benefits of cycling.

2.22 There is a growing evidence base for sustainable travel including some assumptions that can support local analysis. The NATA Refresh programme, completed in April 2009, has strengthened DfT advice on sustainable measures. Guidance on modelling and appraisal of walking and cycling and Smarter Choice measures, as well as the sharing of research, can be found on the DfT Smarter Choices eCommunity[7]. Further evidence is also being collected, including monitoring from Sustainable Travel Demonstration Towns and Cycling Demonstration Towns which will assist in modelling these impacts more successfully. We will be analysing the recent data from the Cycle Demonstration Towns to produce a Benefit Cost Ratio for their interventions. Where local authorities and scheme promoters wish to explore these areas in their modelling and appraisal work, especially for major projects over £5m, advice may be sought from the DfT.

2.23 And a word about the cost of carbon. The graph below (Figure 2.2) illustrates how the price of carbon is expected to change over time for the non-traded sector, and shows that carbon reductions are worth more in the future, as we come closer to the dates in the UK Carbon Transition Plan. This implies that the cost of emissions is rising with time and therefore favours projects which reduce emissions in longer term.

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6   http://www.dft.gov.uk/webtag/documents/expert/unit3.14.php

7   Membership can be sought by emailing itea@dft.gov.uk

Figure 2.2: Expected Change in Price of Carbon to 2050

Non-traded carbon price

Legend: High — Central — Low
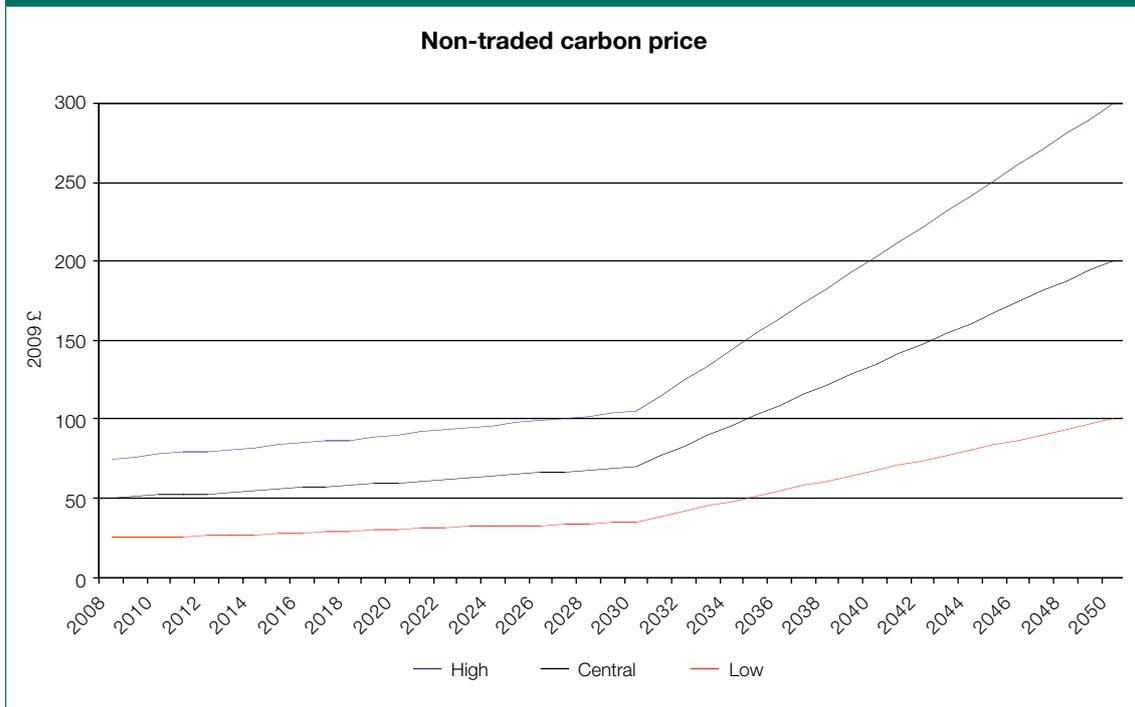
2.24 The Department for Transport publishes annual forecasts of traffic, congestion, vehicle speed and carbon dioxide emissions by region, area type and road type[8]. These can help you understand the sources and location of road transport carbon emissions at the national and sub-national level. The Department's City and Regional Network Data Book also provides useful information about carbon data sources (on pages 22-23) and its annexes bring together many useful maps of recent carbon emission by local authority area[9]. Guidance on appraisal and environmental objectives can be found on webTAG[10]. And the National Atmospheric Emissions Inventory also publishes fuel consumption and emission rates for different transport vehicles[11].

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8   http://www.dft.gov.uk/pgr/economics/ntm/

9   http://www.dft.gov.uk/pgr/regional/strategy/databook/

10 http://www.dft.gsi.gov.uk/webtag

11 http://www.naei.org.uk

3 Funding and financing

3.1 A robust business case will provide the key to unlocking funding both from internal and external sources.

3.2 DfT provides substantial funding that can support sustainable travel initiatives. This includes block capital funding through the local transport settlement (covering capital maintenance and integrated local transport) and specific funding for major schemes through Regional Funding Allocations. Revenue funding for transport and other services is generally provided through the Formula Grant paid by the Department of Communities and Local Government. None of this funding is ring-fenced.

3.3 As sustainable travel initiatives can contribute to a range of non-transport objectives such as health, air quality and carbon reduction, developing a strong business case, which demonstrates the value sustainable travel can deliver for wider authority objectives, should help your authority prioritise funding for a sustainable travel proposal. A number of authorities have also been successful in securing revenue funding from wider authority budgets where objectives overlap and transport can deliver outcomes for health, education and planning to name a few.

3.4 Alternatively, funding can be sought from other organisations. Bodies such as Regional Development Agencies or EU funding streams such as the European Regional Development Fund and CIVITAS should be explored[12]. There are also a number of available central funds, including up to £30 million of funding to facilitate the provision of electric vehicle charging infrastructure through the 'Plugged in Places Infrastructure Framework.' Section 106 contributions through the planning system for new developments can also be utilised to support sustainable travel measures. Local transport operations may also be able to provide financial or other support where the package will increase patronage. Your finance department may be able to help you identify other potential sources of funds. A tool kit to support local authorities in securing funding has also been developed which may help[13].

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12 http://www.travelplanplus.eu/

13 http://www.distillate.ac.uk/outputs/Product%20E1%20-%20Guidance%20(01-04-08).pdf

Cambridgeshire Travel for Work Partnership (TfW)

The Travel Plan Plus Project (TP+) is a major EU project looking at the effect of area travel planning. The lead partner is Loughborough University and Cambridgeshire Travel for Work Partnership (TfW) is managing the UK project site. TfW is establishing a major travel plan network across several large business/science parks and a Post-16 College in the north of Cambridge. TP+ is funded by the Intelligent Energy Europe (IEE) funding stream. TfW has used its share of the IEE funds to attract significant matched funding from the HA and EEDA as well as a substantial grant from S106 contributions associated with the area. This has allowed the project to appoint a full time Travel Plan coordinator and administrator and to extend the project by one year to August 2012, by which time it is planned to have secured a funding model to ensure the network travel plan becomes fully embedded in the area.

TfW itself has been funded and run in partnership by the County Council, three local authorities, the PCT, the University, Addenbrooke's Hospital, the Cycling Campaign, CPRE, local Govt Office and the Chamber of Commerce since 1997. It employs three staff and supports an employer network of 81 employment sites (including many business and science parks) employing over 60,000 staff. The Partnership has developed a wide range of tools and services to assist employers with their workplace travel plans, as well as negotiated discounts with bike shops and train companies as incentives to participate.

3.5 A comprehensive sustainable travel initiative package would usually include elements of both capital and revenue spend. For example significant infrastructure investment such as cycle paths etc. may be considered as capital whilst measures such as personalised travel planning in isolation are primarily revenue spend. This can present challenges when funding sustainable travel initiatives because funding may need to be brought together from different sources. Your finance department or local auditors should be able to give guidance on how best to handle this, including which items should be capitalised.

3.6 Sustainable travel also can add real complementary value to larger capital transport infrastructure projects, strengthening their case for prioritisation and funding. Regions already have flexibility to consider the overall proportion of their capital resources which should be devoted to major investments. In addition, DfT is looking as part of the refresh of major projects guidance at ways through the major project assessment process to reduce the barriers to packages of sustainable travel initiatives being presented as travel major project bids. The Guidance on DaSTS studies also encourages regions to consider a wide range of options to meet challenges.

3.7 And of course, when it comes to securing long-term funding, and future for further programmes, robust evaluation of outcomes will help make your case.

4 Effective delivery and evaluation

4.1 As with any project, successful delivery of sustainable travel requires certain key elements to be in place. This has only been confirmed by the experience of the sustainable travel towns. Those elements include:

- Clear strategic direction, with a vision of success, strong priorities, defined deliverables and a realistic implementation plan

- A senior management champion or advocate at officer level. This person has a belief in success and can help argue for sustainable transport proposals in the decision making process.

- Political support and understanding. A single councillor or council leader who is committed to the approach and can act as an advocate can be key to getting and keeping support for a project.

- A strong team leader who can ensure that the project is adequately resourced, and can provide leadership for the team to keep the project on track.

- Properly resourced and motivated team with the appropriate skills.

- Good stakeholder management, both internal to the council and externally, from the outset.

Smarter Travel Sutton – behaviour change campaign

Smarter Travel Sutton (STS) is a pilot travel behaviour change programme, which aims to test whether it is possible to encourage a shift from car use by using travel planning and social marketing techniques. The £5m programme is being delivered by Sutton Council and Transport for London. By the end of year two, there was encouraging evidence of its impacts, including cycling levels up by 50% above the outer London trend since the first year, and bus use was up by 13%. Legacy is assured, with many of the pilot projects developed through the pilot programme set to continue.

Sutton council has revised its own structure to mainstream the delivery of behaviour change alongside infrastructure schemes, all under the Smarter Travel Sutton brand. Both the local community and stakeholders, including schools, the Police, the Primary Care Trust, local businesses and environmental groups, have embraced and delivered initiatives as part of the programme. Key lessons learnt include involving stakeholders from the start, being open and honest with the community about what the programme is trying to achieve and ensuring that the delivery team is highly proficient in travel planning, social marketing and project management. Further information about Smarter Travel Sutton, including third year results when available and a full breakdown of successes and lessons learnt can be found on the STS website: www.smartertravelsutton.org.uk

Smarter Travel Sutton

Governance and project management

4.2   The towns showed that the right governance structure is vital for giving strong direction, maintaining momentum, ensuring efficient joint working and quick resolution of problems as they inevitably emerge. A steering board can provide such oversight and leadership. Its members need to be carefully selected to ensure balance and the terms of reference should empower it with the authority to make strategic decisions. It is important that all areas of the council which have an interest in the outcome are represented. There can be real value in establishing the group even when the proposals are at the idea stage as it can help imbue a sense of collective ownership which is vital for example in securing funding. Involving stakeholders in that group early on, including those who may be sceptical can help prevent problems emerging at a later date.

4.3   The steering group model can also work well when a sustainable travel project crosses council boundaries. However that creates obvious challenges in terms of joint working. A successful approach has been to establish a set of common objectives and standards early on and secure

agreement to act according to those principles. This can provide a framework under which officers can have freedom to operate.

4.4 Strong project management proved essential for the Sustainable Travel Demonstration Towns. IdEA provide A Project Management Handbook for Local Authorities. General Programme and Project Management support and resources can be found on the Office of Government Commerce site. DfT has recently published wider guidance on programme and risk management of Local Transport Plans.[14]

Creating a Central Strategic Fund in South Yorkshire

During 2007 as part of a major change management programme, South Yorkshire LTP Partners established a new management structure based around a Central Strategic Fund into which the four South Yorkshire Districts and Passenger Transport Executive pooled their capital funding. Partners bid into this fund, with assessment based on fit with LTP transport objectives, thus ensuring that all district partners kept focus and alignment on the overall objectives of the LTP.

This partnership across district boundaries also created clearer lines between the strategy and delivery aspects of the LTP. Building upon tried and tested programme management techniques, the management structure tasks operational and strategic groups, drawn from across the districts, with the production of 'live' business plans that clearly state each group's aims, objectives and key targets for the following year. A key benefit of such an approach is that officers have clearer opportunities to report issues requiring action and develop solutions drawing on collective experience from across South Yorkshire.

Furthermore, by the forward publishing of a planned list of schemes, partners are now able to engage with non transport professionals and stakeholders across the region to examine new opportunities to add value to the capital programme. A good example of this is drawing on other funding streams as part of the LAA process to supplement LTP2 funding allocations aimed at supporting common goals within the relevant community strategies. This approach is now being taken further in the development of the strategy for LTP3 which is focused on how transport can contribute to wider sustainable environment, economic and social objectives.

Resources

4.5 Sustainable travel initiatives can in the most part be delivered by staff directly employed by the local authority – this was the Sustainable Travel Demonstration Towns' experience. This has the advantage that it can be closely supported by senior management within the team but the

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14 Programme and Risk Management Good Practice Note – DfT, October 2009 – www.dft.gov.uk

disadvantage that additional staff may need to be recruited if the skills are not available. There is a growing level of consultancy expertise in this area which can provide specific support for example around marketing and personal travel planning, and therefore provide skills support if lacking within the existing team.

Maximise impact by working with partners

4.6 Working with partners in the community can help significantly extend the reach of any sustainable travel project. Indeed, delivery through others is vital for success. Targeting key audiences most receptive to sustainable travel initiatives can also assist in maximising outcome for limited resources, for example businesses in congested areas, regeneration projects, events venues or shopping centres.

4.7 Key partners should, at the very least, include local business, education establishments, health related organisations and local third sector groups, all of whom have a potential vested interest in the success of sustainable travel and can help deliver that success. Local transport operators should also be engaged early on to secure their support and explore opportunities for them to actively contribute to the project. Careful thought and close stakeholder engagement is necessary to ensure that the specific challenges and barriers to take up for different partners are adequately considered and mitigated early on.

Education

4.8 Sustainable travel initiatives have a vital role to play in improving the lives of children, young people and families. They can enhance well-being and sense of community by creating more opportunities for social contact and better access to play and leisure activities and the natural environment. Local authorities should ensure that the work of developing and implementing a sustainable transport initiative is aligned with the priorities for children and young people as set out in the local Children and Young People's Plan (CYPP). The CYPP, monitored and delivered through the Children's Trust co-operation arrangements, is firmly positioned within the overall vision of the area contained in the Sustainable Community Strategy. The key priorities for the local area, including a sustainable transport initiative, should be seen as part of this wider strategic planning which is overseen by the Local Strategic Partnership.

4.9 Travelling to school by car is a significant contributor to local congestion and carbon emissions, as well as a missed opportunity for healthy activity for pupils and staff. Indeed it is estimated that 16% of school carbon emissions stem from journeys to and from school by staff and pupils and travel on school business[15]. The ambition is for all schools to have a travel

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15 Towards a Schools Carbon Plan – DCSF June 2009

plan by March 2010. Further guidance on developing a school travel plan can be found on DfT's website[16]. Guidance on developing a Sustainable Modes of Travel Strategy is contained in 'Home to School Travel and Transport Guidance' that can be found at TeacherNet Toolkit. In the Government's response to the Transport Select Committee's recent report on School Travel, DfT and DCSF gave a commitment to provide good practice guidance on the use of Yellow School Buses.

4.10 As well as schools, Further and Higher Education establishments in the local area should be targeted. A workplace travel plan may be a more appropriate tool for these institutions but the sustainable travel principles remains the same. Ensuring that new schools or colleges fully consider sustainable travel when being planned is also an important consideration.

How to double student walking and cycling in under two years – The Lancaster University Travel Plan

The proportion of students cycling and walking to Lancaster University has almost doubled in less than two years according Travel Plan surveys results from the University. Over ten per cent of students living off-campus now cycle to the University, up from just over five per cent 21 months ago. In the same period, the numbers of students walking to the University has also doubled from just over 3 per cent to over 6 per cent. The proportion of staff cycling to work is one of the highest in Lancashire at just over 13 per cent and fewer students and staff are now driving to the campus.

The survey findings reveal that almost a third of all postgraduate research students living off-campus are regularly cycling. Lancaster University Travel & Environment Co-ordinator, Philip Longton, said: "It is really encouraging to see more and more people taking up cycling. To have more postgraduate research students accessing the campus on bicycles rather than in cars as either drivers or passengers is a great achievement." Overall, student car use dropped by 4.8% between February 2006 and November 2007.

(Source: Cycling England)

Business

4.11 Local authorities can play a key leadership role in supporting other organisations in delivering their own travel plans by considering aspects such as ease of access by sustainable modes or the availability of public transport information.

4.12 Business commonly develop an interest in travel plans through either a constraint on parking, a sense of corporate social responsibility or through seeking planning permission for new developments. Section 106 agreements can be an opportunity to engage with business already working

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16 http://www.dft.gov.uk/pgr/sustainable/schooltravel/localauthorities/schooltravelstrategiesandpla5745

with the council, as well as secure financial support for sustainable travel measures. Some authorities have focused on using staff to directly contact businesses and suggest the take up of travel plans, whilst others have helped host networks. The National Business Travel Network is a DfT sponsored network which uses a peer to peer best practice sharing model to support and inspire businesses in developing travel plans. Their website includes useful case studies as well as advice notes and links to further information. 'Itrace' software developed by TfL could also be explored as a method of providing support for local businesses implementing travel plans, as well as supporting data gathering and monitoring across the area. In some cases a leadership role is most valuable as demonstrated by the Highways Agency whose Influencing Travel Behaviour Programme has had many notable successes including Cambridge Science Park.

Cambridge Science Park

Cambridge Science Park (CSP) is one of the 29 voluntary travel plan schemes which the Highways Agency has sponsored. A total of 71 employers are based on the science park, employing around 5,000 staff. The scheme was developed by the Highways Agency in joint partnership with Cambridgeshire County Council to bring businesses together to form a travel plan network. A number of sustainable travel initiatives were implemented in 2007 including a car share scheme and web-based journey planning information. The scheme has been very enthusiastically supported from the outset by employers and staff.

After one year of operation the scheme had reduced am peak hour trips into the site by 97. This translates into an annual benefit of £250k pa, producing a Benefits Cost Ratio of 15:1, more than twice as high as other comparable Agency schemes. These results correlate well with the Smarter Choices report conclusions.

4.13   Business networks are a growing way for local authorities to support business to take up travel planning or at least do more to promote sustainable travel to their staff. Business in similar locations can club together and share facilities thereby increasing their negotiating power with local operators as well as share any costs involved.

West Sussex Council and easit

West Sussex Council have co-funded the easitCRAWLEY initiative, which is effectively an estate-wide Travel Plan for the Manor Royal Industrial Estate in Crawley (Crawley Borough Council and SEEDA have provided the majority of the funding). The project has targeted the major employers on the estate, which is located within the economically important Gatwick Diamond Area close to Gatwick Airport, and has enabled a small marketing team to conduct employer roadshows and employee travel surveys, negotiate discounts with public transport operators and bicycle retailers, establish a car sharing scheme, and lobby for public transport improvements.

One of the major successes of the easit scheme has been the negotiation of a 20% discount on Southern rail services – including weekly and monthly season tickets. The deal has benefited both passengers and the operator. Not only has patronage increased, but the level of increase has been such that revenue has not been affected. Further details are available on the easitNETWORK website.

Celebrating easit's success

Courtesy of easit

Health

4.14 On average physical inactivity costs Primary Care Trusts (PCTs) £5m a year[17]. With both authorities and local health providers such as local PCTs and NHS Trusts holding improvements to health as a key concern, there should be a strong common interest in promoting sustainable travel to the community, particularly through active travel choices. Active travel and health are intrinsically linked and there is clear read across into other areas such as Education and Business, both of which are in a position to promote walking or cycling as a first choice for everyday short journeys. Active Travel also provides an ideal contribution to the recommended levels of physical activity. This should also apply to the travel choices of both NHS staff and patients supported by the Cycling to Work Guarantee, which is being promoted by Government and employers together to offer employees a healthy and green option to get to and from work.

Nottingham City Primary Care Trust (PCT)

Nottingham City PCT has been working closely with the local authority for many years to promote cycling, including initiatives aimed at NHS employees; working to influence the local transport plan; and more recently as one of Cycling England's Cycling and Health Innovative Pilot Projects. The PCT project delivers a wide range of promotional activities in conjunction with Ridewise, a local cycle training company. These include cycle training for members of priority community groups; free loan bikes; promotional activities and offering free cycle training for NHS staff. The unique aspect of the project is that it enables NHS staff such as health trainers to refer people into the scheme. Clients have been signposted to the scheme from a wide range of community health professionals including Health Trainers; Physical Activity Advisors; Exercise Referral Instructors; YMCA staff; Healthy Minorities team. The project has exceeded its two year training target in the first 11 months, and has introduced people to cycling from a wide range of backgrounds.

Third sector

4.15 Local authorities are strongly encouraged to work with third sector[18] organisations to deliver sustainable community transport solutions and promote local networks. Community transport, in particular "door-to-door" (often termed as dial-a-ride) services connect local people with essential services in a sustainable way who may otherwise be unable to access conventional bus services and other local transport. Third sector organisations can effectively contribute towards the delivery of community transport services that are demand responsive, tailored to meet the needs of individuals and community groups which may otherwise be hard to

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17 Be Active Be Healthy, the Government's Plan for Physical Activity published in February 2009

18 Third Sector organisations are: voluntary and community organisations, charities, social enterprises, cooperatives and mutuals both large and small. (visit: http://www.cabinetoffice.gov.uk/third_sector/about_us.aspx)

reach. For example, CommonWheels[19], a Community Interest company have fostered strong community partnerships within the areas they work in order to provide accessible and affordable low carbon car clubs across the UK to support individuals, universities and many local organisations in connecting to key services.

4.16   Local transport authorities should already be in regular contact with community transport providers in their areas, but the Community Transport Association[20] would be a suitable point of contact for local authorities looking to further increase their engagement with the community transport sector.

Evaluation

4.17   So often, evaluation and lessons learnt are afterthoughts and lost in the rush to move onto the next proposal. But demonstrating that the project achieved the benefits planned and delivered real results is key to winning support for future proposals and securing continued or increased funding for existing proposals. Monitoring progress closely against indicators during the project not only helps demonstrate that work is on track but can also help reduce the burden of evaluation at the end of a project.

4.18   Evaluation should be robust and clearly demonstrate how the benefits were identified as well as delivered. It is important to include planning for future evaluation at an early stage of the project i.e. when developing Key Performance Indicators and identifying potential benefits. Any assumptions should be clearly set out and explained. It is important to maintain a consistent approach to enable comparison between packages and across years – ideally develop a single evaluation methodology.

4.19   Valuable lessons on evaluation of sustainable travel packages will stem from the Sustainable Travel Demonstration Towns project and be available in due course.

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19 http://www.commonwheels.org.uk/html/who_we_are.html

20 Community Transport Association – visit: http://www.ctauk.org/

Part B:
Menu of Sustainable Travel Initiatives

Courtesy of Nottingham City Council

Influencing demand through planning

The easiest way to manage transport problems is to minimise them at the outset. Decisions on the locations of key destinations and major developments are an important determinant of their long-term sustainability.

What is it? What are the benefits?

Embedding sustainable travel in planning involves understanding the services people using the development need access to, and how they can access them without relying on a car. This will ensure that climate change and transport impacts of new developments can be minimised. Sustainable transport should be embedded in the planning process for all developments, including:

- Housing
- Employment sites
- Education facilities
- Retail developments
- Transport Interchanges

Planners and developers should work closely with transport officers to ensure the impact of existing and future developments is minimised on transport networks and reduces the need to travel. National Planning Guidance requires planning applications with significant transport impacts to implement mitigation measures. It is important that sustainable travel and travel plans are familiar to those handling planning as well as transport within a local authority.

The planning system can also be harnessed to facilitate the use of more sustainable low carbon initiatives. For example:

- Requiring new buildings and developments, where they provide car parking, to include charging facilities for electric vehicles or set aside a certain allocation of car parking spaces for electric vehicles as a condition of granting planning consent.
- Considering the development of a car club close or within a new development to reduce traffic and free up more space for development;
- Converting on-street residents and pay and display parking bays into car club use only.

More information and support

The policy objectives to integrate transport and planning are set out in Planning Policy Guidance 13[21]. Local Transport Plans should reflect and support Local Development Frameworks and counties and Integrated Transport Authorities should work closely with districts to ensure alignment between these in two-tier areas.

The Eco town supplementary planning policy statement can be adapted for use in any new development.[22] And 'Building Sustainable Transport into New Developments: A Menu of Options for Growth Points and Eco-towns'[23] sets out best practice for sustainable transport in and around such developments.

Delivering Travel Plans through the Planning Process also provides help for local authorities in ensuring that travel plans are effectively implemented. Code for Sustainable Homes includes basic standards on cycle parking

21 http://www.communities.gov.uk/publications/planningandbuilding/ppg13

22 http://www.communities.gov.uk/publications/planningandbuilding/pps-ecotowns .

23 http://www.dft.gov.uk/pgr/sustainable/sustainabletransnew.pdf

Example of good practice

Woolwich Town Centre Development: In 2006, the council received a major application to develop the Woolwich Town Centre. The plans for this mixed use scheme included 960 residential units, community and or office blocks, retail store, retail, food and drink units, 1,172 car parking spaces and cycle parking. Successful negotiations between planners, air quality officers, the legal department and developers of the scheme ensured that the Section 106 agreement secured improvements in air quality within the designated Air Quality Management Area, and a whole range of low emission measures (shown below). The proposed completion date for Woolwich Town Centre development is 2010.

- provision of a car club and controls on parking permits

- 500 residential spaces with an annual charge of nil to £300 depending on Vehicle Excise Duty rating of the car

- 10 electric vehicle charging points within the residential car park

- 50% of delivery vehicles and 50% home delivery vehicles to meet Euro 5 rating by store opening and to be using bio-fuel. 100% within 5 years.

- £160,000 per annum for 10 years towards the council's environment monitoring

- 10% renewable energy commitment Building Research Establishment Environmental Assessment Method (BREEAM) 'excellent' rating

- a combined heat and power plant

- an auditing process on the implementation of these measures at 5 and 10 years after store opening.

Ebbsfleet Valley and Kent Fastrack: Ebbsfleet Valley is a flagship project in the Thames Gateway regeneration programme. Across the area, 50,000 new jobs and 25,000 new homes are planned over the next 20 years – a large number of which will be in Ebbsfleet Valley. A package of transport interventions were developed combining smaller targeted interventions and wide ranging demand management supported by a high quality public transport network. This included the award-winning Fastrack Rapid Bus Transit – a dedicated bus service across Kent Thameside comprising route A and B. The planning agreement for route A of Fastrack required that the service was was fully up and running before any homes were occupied to provide a credible and attractive alternative to the private care for local journeys. Recent surveys indicated that passenger levels have been 50% above expectations and 19% of passengers previously used a car for their trip.

Locking in benefits

Locking in the benefits of measures to encourage mode shift and promote lower carbon options is key to maximising the benefits of any package. Without these, there is a danger that measures can simply release road space, which is quickly occupied by more traffic.

What could it include? What are the benefits?

There are a range of techniques that can help make areas more appealing for public transport and cycling/walking users by reducing negative impact of car traffic.

Reallocation and prioritisation of road space to bus, car sharing or cycle lanes is an important tool for local authorities in ensuring that any reduction in demand is not replaced by more car traffic and to make the road safer, quicker and more reliable for bus passengers and cyclists. Manual for Streets also sets out a range of other infrastructure and traffic management measures that might be considered in order to support a sustainable travel package. It is also worth discussing with the Highways Agency opportunities to prioritise high occupancy traffic as it moves between the strategic and local road networks.

Local parking policies such as pricing and restrictions, to act as a disincentive to car usage or recoup the environmental cost of driving can be an effective tool to complement any package of sustainable, low carbon, travel measures. Importantly, it will create revenue that might finance new infrastructure or changes to existing infrastructure. Nottingham City Council is introducing the first workplace parking levy scheme to provide a funding contribution to new tramway extensions from 2012.

20 mph zones involve traffic calming and have a long pedigree in reducing traffic speeds substantially and reducing road deaths and injuries[24] but can also complement a package to encourage more sustainable travel and improve the quality of life locally.

Promoting teleconferencing, flexible and home working can also help reduce the pressure on the peak traffic. This is a key advantage of work place travel plans (see page 42).

Local Traffic Management Centres are also beginning to play a key role in helping better manage traffic on the local networks, provide co-ordinated information to a wide range of partners, including the emergency services, police and individual drivers, and work towards a more joined-up system.

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24 A summary of the implementation of 20 mph zones and limits is available at: http://www.dft.gov.uk/pgr/roadsafety/ research/rsrr/theme4/20mphzoneresearch.pdf

More information and support

An interim evaluation of the Portsmouth 20-mph limits available on DfT's website.

Evidence on the value for money of Nottingham's workplace parking[25] levy suggests that adjusting parking supply and charges can deliver positive welfare and environmental benefits via reduced car travel. The levy introduces a levy for each liable space that a business owns with revenues being used to fund an extension of a tram into Nottingham and other schemes such as the Nottingham hub and the Link Buses.

Examples of good practice

A set of ten trial schemes on mixed priority routes (busy streets with shops, parking, deliveries and traffic) has resulted in better streets for pedestrians, substantial road casualty reductions, environmental improvements and economic regeneration.

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25 http://www.dft.gov.uk/pgr/roads/tpm/wpl/vfm.pdf

Active Travel Choices: Walking and Cycling

Walking and Cycling are the most sustainable forms of local transport, and the potential for greater take up is enormous. Any local transport strategy should ensure that walking and cycling are viable, attractive choices for short journeys. And by integrating with other modes (e.g. rail) they can contribute to more sustainable longer journeys.

What does it involve? What are the key benefits?

Walking and cycling are more sustainable options for a wide range of areas, but are particularly suited for trip lengths of less than 5 miles. More walking and cycling can have a range of positive benefits:

- Reduced local congestion, particularly if focused on peak trips. At peak times along radial routes in many urban areas, cycling will typically be faster than using a car[26].

- Improve health through increased physical activity – particularly major chronic diseases such as coronary heart disease, stroke, diabetes and some cancers.

- Low cost accessibility[27] for many groups with or without access to a car.

- No local air pollution or carbon emissions

The best plans for increasing walking and cycling are a mixture of 'hard' infrastructure measures, complemented by softer measures to promote greater take up.

Hard measures include:

- Cycle priority and cycle paths,

- Pedestrian friendly crossings and community street audits

- 20mph zones,

- High quality safe, secure bike parking.

Soft measures include:

- Providing cycle training,

- Walking & cycle maps,

- Signs for pedestrians & cyclists,

- 'In Town Without My Car' days

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26 DfT 1999 Journey times in London:
27 The Price Ain't Right at http://www.cuttingyourcaruse.co.uk/carvbike.htm

More information and support

DfT has published a Cycle Infrastructure Design Guide

The DfT also funds the Cycling Professional Advice Team which can give free expert advice to local authorities on all aspects of cycling.

The DfT has funded additional Bikeability level 2 cycle training for year 5/6 children over the last 2 years.

IHT Guidance: Providing for Journeys on Foot

Cycling England and Walk England also provides further information to support local walking and cycling initiatives.

A good example of comprehensive local cycle parking standards can be found at Bedford Borough Council.

DfT recently announced its Cycle to Work Guarantee to encourage employers to support their employees cycling to work. More information can be found at: www.cycletoworkguarantee.org.uk

Examples of good practice

The evaluation of the first six Cycle Demonstration Towns is now available on DfT's website and shows impressive growth in cycling.

Community Street Audits in Driffield: The streetscene in Driffield town centre has been improved following an award winning community street audit by East Riding of Yorkshire Council which levered £100,000 in funding to declutter footways, renew paving and wayfinding. Recommendations have also informed urban design and potential future Local Transport Plan schemes.

Supporting Travel Plans

The travel planning principle remains at the heart of the sustainable travel approach and should be a key part of any package.

What is it? What are the key benefits?

There are a wide range of potential applications for travel planning.

Personal travel planning (PTP) delivers information, incentives and motivation to individuals to help them voluntarily make sustainable travel choices. Within the UK, PTP has been reported to reduce car trips by 11% and distance travelled by car by 12% amongst the population targeted. International experience suggests that over a 10-year period, PTP can offer a £30 return for every £1 invested[28].

37% of transport related emissions come from the journey to work, and travelling as part of work.[29] The vast majority of these are made by car. Business is therefore a key area to tackle in terms of carbon reduction as well as promoting more sustainable active travel choices. Workplace travel plans typically combine measures to support walking, cycling, public transport and car sharing. These are reinforced with promotion and incentives and by the management of workplace parking. A good workplace travel plan can reduce the number of people driving to work by 15%, equivalent to about 1 million fewer miles per year for a business of 2000 staff[30]. Business benefits can come from a reduction in parking requirements or business travel costs; for employees, as improved health or reductions in journey times to work; and for the local community, as improved environment and reduced congestion.

Recent rail passenger growth has put pressure on parking and local roads around stations. A Station Travel Plan (STP) is a strategy and action plan to encourage passengers to travel to stations more sustainably – including by cycle and bus.

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28 'Making Personal Travel Planning Work – Summary Report'; DfT, 2007 www.dft.gov.uk/pgr/sustainable/travelplans/ptp
29 Dft analysis
30 p.6 Essential Guide to Travel Planning

More information and support

DfT's Making Personal Travel Planning Work: Practitioner's Guide gives further information, case studies and research reports.

For work based travel plans, the Essential Guide to Travel Planning remains the key source of support and information on implementation. Support for engaging with businesses can be round on the National Business Travel Network.

DfT recently introduced the 'Cycling to Work Guarantee' to encourage employers to do more to support cycling employees.

Delivering Travel Plans through the Planning Process provides help for local authorities in ensuring that travel plans are effectively implemented.

More information on Station Travel Plans is available including a list of pilots and details on the plans they are developing. Tools and practical support are being developed which can help other local authorities/train operators bring in station travel plans for their areas including a research tool kit already available on the website.

Examples of good practice

Personalised Travel Planning in Lancashire: In 2006 Lancashire County Council implemented a TravelSmart campaign to reduce the number of trips by car. It supported the Civitas sustainable transport programme in Preston and the Cycling Demonstration Town project in Lancaster. An initial baseline survey and a final evaluation were completed. The campaign targeted 50,000 households in Preston & South Ribble and Lancaster & Morecambe, including Torrisholme. It provided participating households with a wide range of high-quality personalised information, advice and support on local options for walking, cycling and public transport. The final report in September 2008 showed a significant shift to trips by sustainable modes. Reductions in car trips varied from 10% in Preston to 14% in Lancaster & Morecambe, producing an annual reduction in CO_2 emissions of 13,100 tonnes.

York City Council has been working in partnership with the Energy Savings Trust (based in York) to get a sustainable travel message into workplaces. When sending out information about cycle initiatives and events to business contacts the Council has also included information from the EST about their driving simulator and the availability of someone to go into workplaces and discuss or present information on commercial and personal travel. This has been taken up by a number of businesses including Natural England, Corus, the City Council and FERA, all large employers in the city. The EST is looking to work with the university, college, hospital and other large employers in the near future.

Marketing and communications

Marketing and communications are <u>absolutely key</u> to making any sustainable travel package a success – both in terms of winning support for the initial proposals and for maximising take up once implemented. Sustainable travel is about winning hearts and minds as much as about providing practical support and information.

What is it? What are the key benefits?

Good branding in particular can help improve public recognition and give coherence to the overall package and should therefore be an early consideration. Any package of initiatives must include a communication strategy that is developed at the very start of the development process to ensure that communication is at the core of any proposal.

More information and support

The cross-government Act on CO_2 campaign has developed a Toolkit for Local Authorities to help maximise the effectiveness of climate change campaigns by providing authority, integrity and expertise to partner communications and encourage collective action.

The Rules of the Game, developed in partnership with Defra, gives some useful pointers on communicating sustainability low carbon messages and how to tailor your campaign to achieve maximum effect.

Improvement and Development Agency (IdEA) also have plenty of content on communicating environmental sustainability and climate change.

The Department for Health's 'Change for Life' campaign branding can be used for health related campaigns. Branding Guidelines, giving advice on how to use the logo and overall creative identity, is also available.

Examples of good practice

The Big Wheel – Greater Nottingham: Greater Nottingham Transport Partnership introduced a targeted marketing campaign around the 'Big Wheel' brand in 2001. The programme was started to explain to Nottingham's residents and businesses what was in the Local Transport Plan and what the impact on them might be. Over time this has changed into a programme to help combat increased unnecessary use of the car and facilitate the modal change which has been made possible by local transport improvements. The BigWheel is no longer seen as the marketing and communications programme it is seen as the integrated transport system.

Activities include on-street poster promotion, targeted publications, press and promotional campaigns, a targeted interactive website and events (general ones for the public with those for the business community focused on specific topics.) Over time they have become more targeted in our approach to the various sectors developing specific messages to business and the public. The results show high levels of public support for the LTP and recognition of the BigWheel brand. Traffic levels have been contained to levels seen 5 years ago and public transport use increased whilst the City has grown economically.

Promotional Material

Courtesy of Greater Nottingham Partnership

Promoting public transport

Encouraging greater uptake of public transport is a well established ambition and should be an essential part of any sustainable travel package. A well functioning and well used public transport network can bring real benefits in terms of reducing congestion, improving accessibility and contributing towards a better environment.

What is it? What are the key benefits?

Improving the level and accessibility of public transport information and marketing can help increase uptake by making people aware of the options available. A valuable tool is Transport Direct which allows people to plan a journey by car or public transport from door to door.

Operators and authorities can work together to ensure that services are reliable, comfortable and value for money. Bus priority, including bus lanes, traffic light phasing and tackling congested junctions can help improve bus punctuality and the reliability of bus journey times.

Better information about services and fares (before and during the journey), better multi-modal ticketing for the entire journey, and good interchange facilities with timely connections are all important components in making the whole journey more efficient, and public transport a more attractive option. Smart ticketing can enhance the passenger experience, taking the hassle out of paying for tickets, and make boarding quicker, reducing dwell times.

Passengers think in terms of their door-to-door journey and transport policies need to reflect that, particularly when encouraging more car users onto public transport. Public transport integration is a key part of that. This is not just about big infrastructure projects – there are many smaller initiatives that can make a real difference to the quality of public transport.

More information and support

The Government brought forward legislative proposals – enacted in the Local Transport Act 2008 – to provide new and enhanced opportunities for local authorities to help deliver improved bus services in their area. Details of the Act, including an information leaflet designed for local authorities[31], can be found at www.dft.gov.uk/localtransportact.

The Government and Operators have produced "Door to door journeys by public transport" which focuses on how operators and others can improve rail and bus interchange (see www.cpt-uk.org/_uploads/attachment/690.pdf. Transport operators are also demonstrating a commitment to tackling climate change through their Greener Journey's initiative: www.greener-journeys.com

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31 "The Local Transport Act 2008 : Creating the right public transport system for your area", September 2009.

You may wish to incorporate Transport Direct into your own local authority's website to aid visitors and staff, or to encourage other key destinations in your area to do so. Transport Direct is also steadily extending its cycle journey planner. Transport Direct can already recommend cycle routes in the following areas:

- Derby

- Exeter

- Greater Bristol

- Greater Leicester

- Greater Manchester

- Lancaster

- Merseyside

- Oxford

- Peterborough

- Worcester

More areas are steadily being added and there will be separate correspondence with local authorities over the detail of this. In support of this, Local Authorities will need to maintain and update their data, in the agreed format.[32]

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32 Local authorities need to continue to collect and maintain information on bus stops for inclusion in the National Public Transport Access Nodes (NaPTAN) database, and timetable information in a format that can be used by journey planners such as traveline and Transport Direct.

Examples of good practice

Network St Albans: This partnership group was formed in April 2009 as a result of the Local Transport Act 2008 which offers new opportunities for local authorities to work with transport operators through the creation of 'Quality Partnerships.' As well as building on projects that are already underway, the partnership will start by reviewing St Albans' entire bus and rail network to identify areas in most need of improvement. Smaller schemes that are already underway include creating new maps for bus stops to make bus routes, and links to other forms of public transport, clearer. The partnership will also give consideration to the impact of the existing transport network on the environment and consider sustainable green travel solutions that will reduce pollution and carbon emissions.

The Carbon Quids Programme in South Yorkshire: For European Mobility Week 2007, South Yorkshire Passenger Transport Executive came up with the inspirational scheme "Carbon Quids." This was a carbon-based currency that rewarded people for making sustainable travel choices and promoted brand awareness.

To claim carbon quids, participants had to save public transport tickets or fill in travel diaries over a two-week period. Rewards were in the shape of three value bags: 100, 130 and 150 Carbon Quids. A single bus journey earned five CQs, cycling and walking 10CQs and for registering on the car sharing database 30CQs. CQs had to be redeemed at Carbon Cash-In Points in each of the four district centres (Sheffield, Doncaster, Barnsley and Rotherham) on a particular day, which happened to be car free day that year.

The Cash-In Points were an unmissable element in the promotion, grabbing attention with 15ft inflatable green feet – the iconic symbol of the campaign reflecting both walking as a travel choice and the carbon footprint that we all leave. The campaign also enabled the private sector to invest with their payback being increased public recognition by being named on promotional literature. Businesses that had committed could display the green foot symbol and become members of the "Green Foot Group," which would support future sustainable travel measures. On the day of the launch, BBC Look North featured Carbon Quids as its top news story, despite a bomb scare in Sheffield City Centre the day before.

Lyon has a city-wide bicycle hire scheme and city-wide smart ticketing. The same smartcard can be used to pay for buses, trams, metro and bicycle hire. By renting the advertising space at bicycle stations the service is provided at very low cost to the public, with the first half hour of rental free. Bicycles can be hired from any velo station 24 hours a day, seven days a week.

Car sharing and car clubs

Local authorities can promote car clubs and car-sharing in order to encourage sustainable car use to reduce traffic congestion, save motorists costs, reduce carbon emissions and ease pressure on parking.

What is it? What are the key benefits?

Car sharing (or 'lift-sharing') is when two or more people travel by car together, usually to the same destination for all or part of the trip, either as part of an organised scheme or on an ad hoc basis. The best–developed schemes are targeted at the daily commute. Such schemes may operate within a single company or across a number of different employers in the same area, where the vast majority of road transport is single occupancy and there is huge potential to share journeys, cut motoring costs and reduce emissions. Car sharing can also operate for parents taking children to and from school or as one-off schemes related to specific events, such as festivals and shows, or regular trips to tourist destinations. There are a number of car sharing organisations based on the internet, which can provide bespoke matching data systems[33]:

A car club gives people local access to a car whenever they need it but without the high fixed costs of individual car ownership so it is a very cost effective option. Members usually pay an annual fee plus a charge for each mile and hour they use a car. It is a growing area with 100% growth in the last year (08/09) and membership approaching 100,000. Car club operators, property developers and local authorities can work together to achieve the transfer from car ownership to car club membership.

The CO_2 and trip reduction benefits are significant. Car clubs members in the UK reduce their mileage by an average of approximately 65% on joining a scheme. Car club fleets use significant lower emission cars (i.e., criteria: 120q/km of CO_2) and are embracing ultra low carbon vehicles. Members are incentivised to book lower engines as they are charged lower rates. Each car club car is estimated to take 23 cars off the road; on average 14 private vehicles are sold, and a further 9 not being purchased[34]. In addition, compared to the 'average' person, car club members make more trips by public transport and walking or cycling, and considerably fewer trips involving a car, lift, taxi or motorbike, (16-23% of their journeys, as compared to 66%). Combining the effect of fewer miles driven in a more efficient car creates savings of between 1.21 tonnes CO_2 per member per year in the UK. These saved emissions are equivalent to a return flight to Barcelona.

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33 http://www.carclubs.org.uk/279/nationwide/nationwide.html
34 Carplus annual survey of car clubs 2008/09. PPR399. by D Myers & S Cairns (TRL) for Carplus

More information and support

There are a number of car sharing organisations based on the internet, which can provide bespoke matching data systems.

Carplus – a charity organisation works with local authorities, communities, property developers, operators and other partners to promote the development of car clubs. Carplus has a number of guidance packs available to download:

- Low Emission Car Clubs for a Healthier, Equitable and Sustainable Transport Future. A Guidance Document for Policy Makers.

- Fast Track Guide to Setting up a Car Club, Practical Guidance for Local Authorities on Car Club Development

- Car Clubs at Work, An Information Pack for Employers

- Car Club Parking Charter

- Car Clubs in Property Developments, An Information Pack for Developers and Local Authorities

- TMO/TRO Consultation Guidance, A Best Practice Guide for Local Authorities

Examples of good practice

www.LeicesterShare.com: In May 2007 Leicestershire County Council and Leicester City Council in partnership with leading local employers set up an initiative to promote car sharing. They develop a 'branded' car sharing registration site (using Liftshare software) and a programme of local publicity and marketing to encourage its use. The focus was not just on commuting to work but for journeys to school, to shops, to sporting events and concerts – i.e. wherever there may be local traffic or parking congestion. Registration is free to all residents living in, and employees of any organisation based in the City or County. The scheme is also supported by some of the leading employers who have set up 'private' groups within the site for their own employees. The scheme is initially funded for five years up to 2012. Leading local employers and traffic attractors are invited to collaborate and link their' private' schemes to the overall umbrella of LeicesterShare to take advantage of joint promotion. So far more than 2,000 registrations have been recorded, including all those in the Countywide list and those in specific employer schemes. Of these more than 150 active car share partnerships exist.

Bristol City Car Club provides a good example of a working partnership between a number of different sectors. Launched as the BEST car club in July 2000 with seven members sharing two cars, it is steadily expanding into new neighbourhoods. There are now more than 1000 members, with people across the city lining up to join the club as soon as parking bays can be designated in their area. The club now boasts a large fleet of 40 vehicles – the majority parked in on-street bays, and the remainder serving hospitals in North Bristol.

Oxford Community Car Club: In November 2008, a community based car club was launched by Commonwheels in partnership with the local group. The Oxford members had contributed loans to the value of £9k to help establish the scheme and four individuals had loaned their cars to the scheme. The fleet was supplemented by two new VW Polo Blue Motion cars (Band A – 99g/km) provided by Commonwheels, who had also supplied marketing materials. The County Council endorsed the scheme and provided on-street marked bays within the new controlled parking zones. They also promoted the scheme with leaflets as part of the CPZ consultation. At the approach of the first anniversary there are 8 cars (3 from Commonwheels, 5 from members) in the scheme with two more members cars in the pipeline. There are well over 200 members.

Sustainable vehicle use: Low carbon vehicle use

Local authorities are major purchasers of new cars, vans and buses every year and can have huge influence over the growth of low carbon vehicles in the area as well as used by the authority itself.

What is it? What are the key benefits?

In many cases both carbon reduction and long term financial savings through improved fuel savings can be achieved by greener fleet purchasing. The Energy Saving Trust estimates that an organisation with a fleet of 100 vehicles could save up to £90,000 each year by implementing green fleet practices. The public sector vehicle fleet comprises of around 100,000 heavy duty vehicles and at least 200,000 light duty vehicles (the majority being passenger cars, vans or mini-buses); and around 13,000 new HDVs and 75,000 new LDVs are either purchased or leased by public sector organisations each year.

The Green Bus Fund incentivises the take up of low-carbon buses which can reduce greenhouse gas emissions by around 30% compared to a comparable standard diesel bus, and meet the latest European air quality standards. Successful recipients of Green Bus Funding will start operating these buses over the next couple of years, and the Department will publish data on how they perform in operation. Local authorities are encouraged to use this data in considering the business case for buying more low carbon buses and should encourage local bus operators to do the same.

Local authorities are encouraged to participate in the trials or adoption of new vehicle technologies and to help manage cost implications the DfT is funding the £20m Low Carbon Vehicle Procurement Programme to support the trial of electric and low carbon cars and vans in a limited number of local authorities around the UK.

Sustainable biofuels[35] have the potential to offer considerable CO_2 savings. Several local authorities around the country have been trialling high blends of biofuels (anything up to a 100% blend) in their vehicles. Deployment of higher blends is simpler in specialised fleets, as there are fewer infrastructure issues regarding refuelling. Increased use of higher blends of bioethanol and biodiesel will be valuable to the UK in achieving its climate change targets.

Increasingly, local authorities can support the shift to low carbon and electric vehicles through the introduction of infrastructure. Local authorities can consider the provision of charging points on local streets and in local authority car parks and where practical could consider how their on-street charging points can be combined with other street furniture, for example, street lighting columns, bollards, signs or parking meters, so as to reduce street clutter.

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35 A sustainable biofuel is one that delivers high greenhouse gas saving and social and environmental impacts, such as those produced from waste that would otherwise have gone to land fill

More information and support

The DfT provides funding to the Energy Saving Trust to provide smarter driving training and to offer free, independent advice to organisations to help them implement green fleet policies.

The ACT ON CO_2 website lists the ten lowest CO_2 emitting cars in each class and also offers tips that employees can adopt to drive vehicles in a more fuel efficient way.

Vehicle Certification Authority has launched a Van Fuel Data website, which allows buyers to check and compare the fuel consumption and emissions performance of any new van in the UK, alongside tips for van buyers on how to choose the right van for their needs.

The Government runs the Alternate Fuel Infrastructure Grant Programme which supports the installation of refuelling or recharging stations for a range of alternative fuels. Funding worth £1 million is available in the period 2010/11 to 2011/12 to support infrastructure for electric and hydrogen vehicles, natural gas and biogas stations and other non traditional fuels. Further details can be found at: http://www.cenex.co.uk/igp_index.asp

Up to £30 million of funding is being made available to facilitate the provision of electric vehicle charging infrastructure through the 'Plugged in Places Infrastructure Framework'. The overall purpose of the framework is to help around 3 to 6 lead cities or regions in the UK, through consortia of local authorities and businesses, to establish themselves as front-runners in the installation of electric vehicle re-charging infrastructure on streets, car parks and other areas of major vehicle utilisation. More information can be found at: http://www.dft.gov.uk/lowcarbonvehicles

There is a small amount of biogas in use in the UK. Consisting mostly of methane, biogas can be collected from the natural decomposition of organic matter, for instance on landfill sites, or produced by anaerobic digestion of waste. Biogas is more often used by fleet operators than private motorists and is increasingly favoured for trial with municipal vehicles for reasons such as reduced engine noise, and the fact that it can be produced from waste. As well as CO_2 reductions, biogas has been found to offer a reduction in nitrogen oxide emissions compared to diesel, which can help to reduce impacts on air quality.

The City of Westminster has published *"Installation of Two On-Street Recharging Points for Electric Vehicles,"*[36] which provides good advice for authorities wishing to install on-street infrastructure.

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36 http://www3.westminster.gov.uk/docstores/publications_store/Rechargepointsrept06.pdf

Examples of good practice

Using Bio-methane to power a street cleaning vehicle: Camden Council, in partnership with Gasrec, Veolia Environmental Services, and vehicle manufacturer Iveco have recently carried out a commercial trial using biomethane to power a street cleaning vehicle. In October 2008, the Council installed London's first biogas refuelling station, and the six month trial compared the performance of a Compressed Biomethane Gas vehicle to existing vehicles running on Compressed Natural Gas. The vehicle running on biomethane displayed a 6% improvement in fuel economy, and a 56% reduction in CO_2 emissions when compared with the natural gas vehicle. It also found the bio-methane fuel to be higher quality than the natural gas used in the trial.

The Ecolink 30 Bus Service: Nottingham City Council in partnership with Nottingham City Transport is currently trialling the use of ethanol-powered buses. The Ecolink project is a technical, environmental, business and operational trial to see if ethanol fuelled buses can be introduced under Nottingham's specific local conditions and whether it is suitable for expansion into other areas. The City Council has secured £520,000 of funding from EMDA to purchase three ethanol-powered buses and install an ethanol fuelling station.

As part of the 'Ecolink 30 Service Route Plan', Nottingham City Transport are providing the staff and operating resources for the service 30 (City-Radford-Wollaton) route. It operates every 20 minutes between 0700 and 1800 hours, with a reduced frequency in the evenings, early mornings and on Sunday, carrying over 12,000 passengers a week. Annual passenger numbers on the Ecolink 30 service were 3% higher in 2008/09, with 643,000 passengers than they were in 2007/08 with 626,000. The trial is planned to run through to Autumn 2009 with the possibility of being extended pending additional funds. The scheme will be independently assessed by the University of Nottingham and is projected to save 30 CO_2 tonnes per vehicle per annum and up to 90% less CO_2 than an equivalent diesel engine.