

# Making travel plans work



Lessons from UK case studies

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# Foreword

This guide has been written for employers who want to reduce traffic congestion around their sites, improve the travel options available for their staff – and save money at the same time.

In the UK several thousand organisations have now produced travel plans – packages of measures to reduce car driving and support alternatives. The trick is to find the right mix of measures to suit individual circumstances.

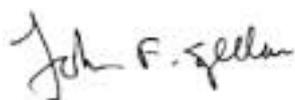
Evidence from the Netherlands and the United States, borne out by early examples in the UK, has shown that even the most “basic” travel plans can achieve 3-5% reductions in the numbers of employees travelling to work alone by car. Plans with large discounts on public transport and restrictions or charging for car parking can achieve 15-30% reductions, and some even more, over a period of – typically – two to four years.

This guide points to key success factors and features of good practice for setting up an effective travel plan. It is based on a recent review of the experience of 20 UK organisations that have successfully brought about a change in the travel patterns of their staff. For these 20 organisations, on average the proportion of commuter journeys to their sites that were made as a car driver was reduced by at least 18%. This represents impressive achievement.

While the effectiveness of travel plans in reducing congestion is now widely recognised, many organisations are not yet aware that they can be financially viable projects in their own right. Travel plans can also save their organisations money: while the annual cost of maintaining a car parking space is typically £300-£500, for the organisations in our study the average cost of running a travel plan was only £47 a year for each full-time employee.

The research on which the guide is based is, we believe, the most detailed UK study of the impact of travel plan measures to date.

I commend it to you.



John Spellar MP  
Minister for Transport



**Making travel plans work**



# Introduction

Each day more than half of UK commuters make the short journey from front door to car door to take the longer journey to work: the average commuter trip is now more than eight miles. Few of us would choose to spend time sitting in congested traffic. Most of us want to live in places with clean air and safe streets. Delays on the roads cost business time and money. Yet often the alternatives to driving seem slow and impractical.

A workplace travel plan is a simple idea with a big ambition: to change the way that people travel to work. Cost, convenience, and comfort all influence our decisions about the journeys we take. Travel plans set out to address these factors, re-framing travel choices with major improvements to the bus, cycling and walking routes that serve the work site. Cyclists are welcomed with secure parking and changing facilities. Bus services are adjusted to staff needs. Drivers can find car share partners through a matching service. Discounts, promotional offers and financial incentives make alternatives to solo driving more attractive. Car park restrictions and charges make driving less so.

This guide points to key success factors and features of good practice for setting up an effective travel plan. It is based on the experience of 20 UK organisations that have brought about a change in staff travel patterns. These employers include hospitals, councils, major companies, a shopping centre and a university. Results indicate that following their plans on average, there were at least 14 fewer cars arriving per 100 staff, representing a reduction of 18% or more in the proportion of commuter journeys being made as a car driver<sup>1</sup>.

The advice given here follows a detailed evaluation of the travel plans adopted by these organisations<sup>2</sup>. The range of reductions they achieved was considerable – from 5% to 66% – making it possible to compare the effectiveness of different travel plan measures and strategies. The guide also draws on the findings of other research in the US and the Netherlands, where travel plans have been in use for much longer.



<sup>1</sup> See Research note 1: Study findings, on page 85

<sup>2</sup> Making travel plans work: Research report and Making travel plans work: Case study summaries, DfT, July 2002

## Tackling traffic

With traffic forecast to rise by 17% over 10 years<sup>3</sup>, employers have a vital role to play in bringing about traffic reduction. Commuter trips add heavily to the volume of vehicles on UK roads: journeys to work make up more than a quarter of all miles driven by car or van<sup>4</sup>.

Travel plans aim to reduce traffic 'at source'. They are one of a range of tools that address transport problems from a new direction: by managing demand for road space more effectively. These strategies are essential to relieve the burden of traffic on local communities and meet national targets for cutting the carbon emissions causing climate change.

## Reaping the benefits

While many of the organisations in our study saw their travel plans as a way of meeting their environmental responsibilities, they also viewed them as an operational necessity that brought a range of benefits for the organisation. Travel planning helped to cut congestion, relieve parking pressure, make sites more accessible and improve staff travel choice. It enhanced image, reduced commuter stress and aided staff retention. Travel plans also saved money: while the annual cost of maintaining a parking space can be £300 to £500, the cost of running a travel plan was typically £47 a year for each full time employee<sup>5</sup>.

In the last five years, travel plans have become much more widespread in the UK. Among councils, hospitals and higher education establishments responding to a recent survey<sup>6</sup>, the majority were either developing plans or had them in place. Local authorities are now expected to encourage all major employers to adopt travel plans, while national planning guidance says planning applications with significant transport implications should be accompanied by a travel plan.

Our study shows that well devised travel plans have a significant impact. The broad principles set out in this guide, should help your organisation to ensure that your travel plan delivers a real reduction in car use to your site.

*Travel planning helped to cut congestion, relieve parking pressure, make sites more accessible and improve staff travel choice. It enhanced image, reduced commuter stress and aided staff retention.*

<sup>3</sup> *Transport 2010: The Background Analysis*, DTLR, July 2000

<sup>4</sup> *National Travel Survey 1998/2000*, DTLR, July 2001

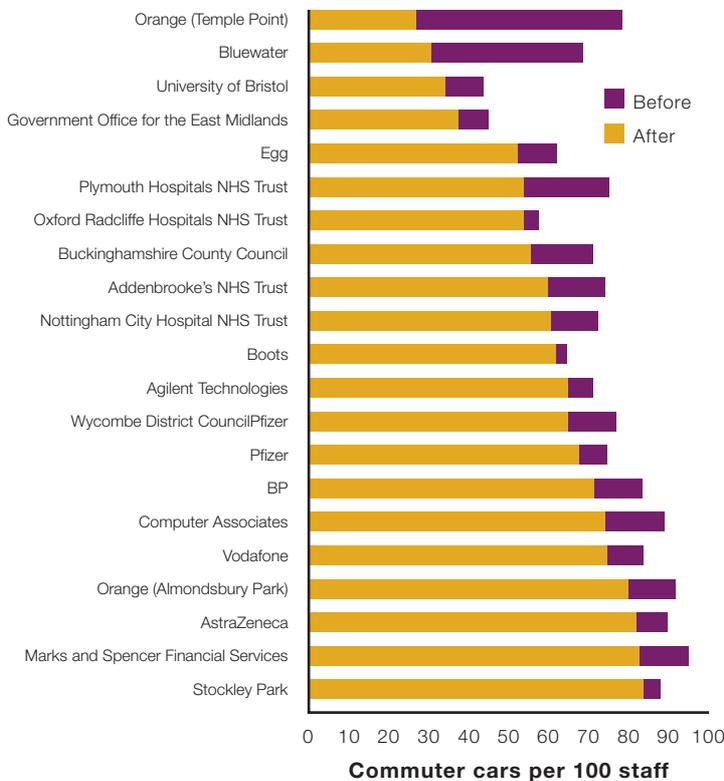
<sup>5</sup> See *Research note 3: Annual running cost per employee*, on page 86

<sup>6</sup> *The Take Up and Effectiveness of Travel Plans and Travel Awareness Campaigns*, Steer Davies Gleave, DETR, 2001

# Case study organisations and results

Organisations that participated<sup>7</sup> in the study were:

- |                                                       |                                                                                 |
|-------------------------------------------------------|---------------------------------------------------------------------------------|
| Addenbrooke's NHS Trust, Cambridge                    | Marks and Spencer Financial Services, Chester                                   |
| Agilent Technologies, South Queensferry, West Lothian | Nottingham City Hospital NHS Trust, Nottingham                                  |
| AstraZeneca, Macclesfield                             | Orange, at Temple Point, central Bristol and at Almondsbury Park, North Bristol |
| Bluewater retail and leisure centre, Greenhithe, Kent | Oxford Radcliffe Hospitals NHS Trust, Oxford                                    |
| Boots, Nottingham                                     | Pfizer, Sandwich, Kent                                                          |
| BP, Sunbury on Thames, Middlesex                      | Plymouth Hospitals NHS Trust, Plymouth                                          |
| Buckinghamshire County Council, Aylesbury             | Stockley Park business park, Uxbridge                                           |
| Computer Associates, Datchet, Berkshire               | University of Bristol, Bristol                                                  |
| Egg, Derby                                            | Vodafone, Newbury, Berkshire                                                    |
| Government Office for the East Midlands, Nottingham   | Wycombe District Council, High Wycombe.                                         |



Averaged overall, these organisations managed to reduce the number of commuter cars arriving by at least 14 per 100 staff – representing a reduction of 18% or more in the proportion of commuter journeys being made as a car driver. Even after allowing for extreme cases, the median change recorded was still 12 cars per 100 staff – representing a 15% reduction in the proportion of commuter journeys being made as a car driver. Fifteen of the travel plans had reduced commuter car driving by more than 10%, five by more than a fifth and two by more than 50%<sup>8</sup>. (Case study achievements and success factors are summarised on pages 78 to 84.)

<sup>7</sup> See Research note 2: Selection of case study organisations, on page 86  
<sup>8</sup> See Research note 1: Study findings, on page 85

## Making travel plans work: key findings

In encouraging car-free access to their sites, travel planners choose from a wide range of measures. Better bus services, walking and cycling facilities and car share matching schemes are all on the travel plan menu. Many of these measures are listed in Part 2 of this guide, which looks at the key steps needed to support different means of travel. Together, the improvements you introduce can make car-free journeys a practical and well-promoted option, and can start to reduce staff car use. But beyond this, it's important to consider how far your travel plan enables alternative travel options to compete successfully with solo car driving – offering staff a genuine reason to change. Evidence shows that higher levels of uptake – reductions in car driving of 17% or more – are likely to depend on two key factors: the financial incentives or disincentives related to travel, and the availability of parking.



### Parking restraint

Parking restraint is a hallmark of high achieving travel plans. Unsurprisingly, limiting parking rights – for example through a parking permit scheme – is one of the most direct and effective ways of reducing staff car use. Organisations that restrict staff parking need a fair and transparent process for allocating permits, in the light of travel needs.

Charging for parking also operates as a form of parking restraint. In our study the travel plans with the lowest car use, used either parking restrictions, parking charges or a combination of the two. One key advantage of charges is that the parking revenue can provide a ring-fenced income to pay for alternative travel options. This not only gives travel plans a substantial budget, but helps gain support for the scheme.

Undoubtedly, parking restraint can prove contentious. On page 26 we look at the steps organisations take to make difficult measures more acceptable to staff.

Effective parking schemes can be undermined by the availability of free and plentiful off-site parking. Organisations need to liaise with the local authority to prevent this happening.



## Financial incentives

Financial incentives are also important in influencing staff travel choices.

This can mean:

- An incentive paid to those who arrive without a car
- Compensatory payments for those giving up a parking space
- Reductions on public transport fares or free works buses.

For organisations reluctant to limit parking or charge for it, financial incentives provide an alternative means of reducing car use. In our study, all organisations introducing significant cash payments for staff to change how they travel encouraged more than 9% of staff not to drive to work.

But financial incentives are at their most effective when combined with parking restraint. The highest performing organisation, Orange, both restricted parking and offered a financial payment – as a form of compensation for those losing a parking place.

Many organisations provide other financial incentives in the form of bus subsidies. Our study showed that free shuttle buses – from the workplace to key destinations – were particularly successful in attracting commuters.

## Tipping the balance

Naturally, the relative levels of financial incentives and disincentives will also affect the level of change from single occupancy car commuting. One organisation launched its travel plan with a subsidised bus pass and a parking charge, but found this had little effect until the cost of the pass was reduced and the parking charge raised, tipping the balance in favour of public transport.

In considering the comparative cost of car travel, it's important to bear in mind that most drivers count only the petrol cost, since they already own the car.

## Combining strategies

Our study shows that quite simple initiatives with a few key measures – for example, parking charges, exemptions for car sharers and a shuttle bus – can achieve a sizeable reduction in car use. At the same time, the most successful travel plans combine parking restraint with a high number of 'carrots' – positive measures to support alternative travel.

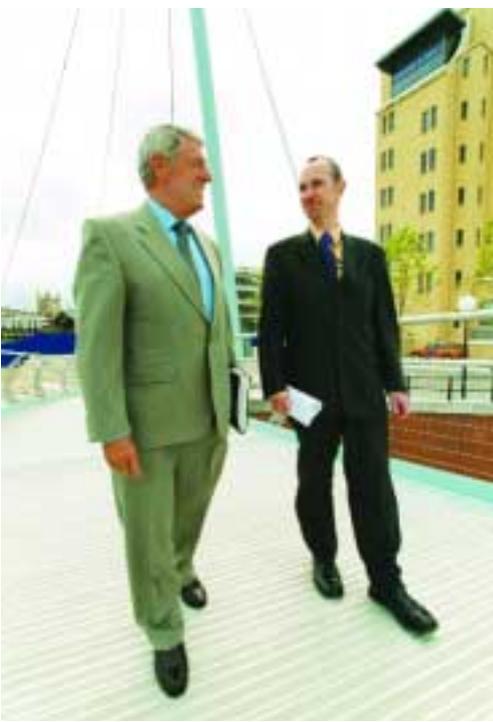
It is important to consider how strategies in the travel plan interact, for example, whether car sharing could be undermining bus use; whether incentives are structured to encourage those using alternative means of travel occasionally, to use them more. The balance of different strategies is considered on page 23.

## Management support and dedicated staff time

Many earlier studies have emphasised the importance of support from senior management in making travel plans succeed. This was borne out by the experience of travel co-ordinators in our case studies. All the organisations had also allocated substantial dedicated staff time to take the travel plan forward, showing the value of nominating or appointing a staff travel co-ordinator (see page 39). Working groups, drawn from across the organisation (see page 26), also have an important role in building a commitment to reducing car use.

## Promotion and marketing

Promotion is vital to travel plans. The organisations in our study use many innovative strategies to raise staff awareness of alternative travel options (see page 32). But high performing travel plans don't usually rely on promotion and awareness raising alone. Plans need to have real travel improvements to 'sell' to staff. There may be exceptions to this – where travel conditions are already much better than staff realise. Initiatives to market the potential for alternative means of travel by engaging with staff at an individual level have been found to be very effective. It is also helpful to find ways of segmenting the market for travel alternatives and particularly to target new recruits (see page 34).



## Location

Organisations in out-of-town locations are likely to have more difficulty in achieving low levels of car use. The example of Orange (see page 11), shows how much easier it is to encourage a change in travel habits at a central location.

Whatever the location, travel plans build on the strengths of the site. It is important to identify site opportunities and barriers. Travel planners shouldn't be unduly deterred by their site's disadvantages. Our case studies show that they should still be able to encourage substantial numbers to use alternatives.

## Reducing the need to travel

Although not widely used by organisations in the study, strategies to cut car use by reducing the need to travel – through home working or local recruitment – appear especially effective (see pages 36 and 67). There is some concern that home working can encourage people to live further from work, reducing car trips but increasing miles driven, so this issue needs to be considered.

## About this guide

While parking restraint, together with financial incentives and disincentives set the context for staff travel, a range of other factors will be important to your travel plan's success.

**Part 1** of this guide looks at issues related to the strategy and design of your travel plan.

Effective travel plans:

- Build partnerships – with the local authority, public transport operators and other employers;
- Identify site opportunities and barriers – making the most of 'easy wins' and addressing 'missing links', while tailoring measures to the location and its staff;
- Encourage progressive change – with some strategies to unlock car use, and others to support sustained use of alternative means of travel;
- Gain staff ownership for the plan – with appropriate consultation, fairness, transparency and plenty of 'carrots';
- Raise the profile of travel initiatives – with imaginative promotion and publicity;
- Reach key groups of staff – segmenting the market for alternative travel and providing the right message at the right time, to those most likely to respond;
- Change aspects of the organisation's culture – engaging management commitment, involving dedicated staff time from a travel plan 'champion' and ensuring working arrangements dovetail with travel needs; and
- Focus on results – assessing the impact of individual strategies in reducing car use.

**Part 2** of this guide looks at the most successful measures for supporting different means of travel – public transport, walking, cycling, car sharing – and for managing parking. It also looks at other strategies to reduce car use, by reducing the need to travel and by addressing business or visitor journeys.

**Part 3** looks at the likely costs of a travel plan and possible sources of funding.

While the guide draws mostly on the experience of organisations with at least 245 staff, a case study of a small company's travel plan is included on page 40.

## CASE STUDY

### Orange: mapping travel needs

<i>Organisation:</i>	<i>Telecommunications company</i>
<i>Location:</i>	<i>City centre</i>
<i>Staff numbers:</i>	<i>400 (but plans to accommodate 700)</i>
<i>Staff car parking:</i>	<i>95 spaces</i>

The experience of Orange shows how limited parking and a town centre location can transform journeys to work. In 2001 the company relocated 400 staff from offices on the edge of Bristol to Temple Point, in the city centre. Orange looked in detail at travel needs, using mapping software to assess staff journeys, ahead of the move. With the introduction of a comprehensive travel plan for the new site, the number of cars for every 100 employees dropped by two thirds.

Tight parking at the new location prompted Orange to introduce a system of carefully allocated permits. With 107 available spaces, 12 were turned over to 50 cycles and 28 motorbikes. Two spaces were assigned to disabled drivers.

The allocation of permits was based on a system of points scored on:

- Personal needs – such as child care and other care responsibilities, hours contracted outside normal office times, the number in the car (for car share spaces) and ease of access by public transport, walking and cycling.
- Business needs – including number of trips off site per week, number of trips per day and the need to transport heavy equipment.



Permits are issued twice yearly so that the allocation remains fair and effective. Those with permits have numbered spaces – ensuring the system is self-policing, since staff report unauthorised parking. Some flexible spaces allow for occasional use and can be booked in advance.

### **Incentives for change**

All those not awarded solo parking have been given a substantial monthly payment, linked to salary band. Staff with greater managerial responsibility receive smaller amounts on the basis that they are out of the office for longer. Part timers receive pro-rata payments. The sum is set to be similar to the cost of a public transport season ticket.

Car sharers can find partners by using a self-matching database on the company intranet. The scheme provides a guaranteed ride home, by taxi, if the sharing arrangement falls through. Cyclists have access to showers, lockers, pool bikes and lockable bike storage facilities covered by CCTV. The new site is well served by public transport and a free half hourly Orange bus service provides a link to the other Orange offices in North Bristol.

### **Results**

At the time of the move, Orange had already achieved some success in travel planning at its head office in North Bristol, where a combination of a car share matching service and bus improvements led to a fall in the proportion of staff driving to work, from 92% to 80% over a five year period. The move to the city centre, coupled with the introduction of a more comprehensive scheme, including parking restraint, led to a far more dramatic reduction – from an average of 79% driving to work at the North Bristol sites, to 27% at Temple Point. Orange now plans to introduce a more comprehensive travel plan, including a needs-based parking permit system, at its North Bristol sites.

**Note:** Staff numbers given in case studies throughout this guide relate to the time of the most recent monitoring that had been undertaken by the organisation by November 2001 (when the research was undertaken).

# 1

## Part 1 Travel plan strategy and design

## Building partnerships

*“Networks are very, very important to help build your knowledge. For green travel planning you need to be a Jack of all trades.”*

John Elliott,  
Transport and  
Planning Manager,  
Pfizer.

Travel plans set out to reach beyond the work site itself, and improve off-site conditions for walking, cycling and public transport. This calls for close co-operation with outside agencies. All the organisations in our study had been involved in partnership working – with local authorities, public transport operators, cycling organisations, cycling retailers and other employers. The success of these partnerships was often crucial to the success of the travel plan. Good co-operation from other agencies was greatly appreciated – and occasionally sorely missed.

### Help from the local authority

Most of the organisations in the study had positive relationships with their councils. Their experience shows that a proactive local authority can do a great deal to make travel plans effective – from offering advice, to funding major infrastructure improvements. Local authorities have supported travel plans by:

- Advising – on travel plans and planning and highways issues
- Participating in a working group to develop the organisation’s travel plan on an ongoing basis
- Co-ordinating travel plan networks for local employers
- Taking part in travel plan launch events
- Helping in negotiations with public transport operators
- Arranging area-wide bus ticket deals on behalf of all local employers
- Contributing to subsidy for buses that serve both the site and the local community
- Offering a ‘travel plan grant’ for site improvements or marketing
- Improving off-site pedestrian and cycle facilities
- Providing off-site bus lanes and improving walking routes to bus stops
- Funding on-site improvements, including a bus station
- Providing on-line travel information through links to the local authority web site
- Setting up an area-wide car sharing scheme.

Local authorities have the scope to introduce many general improvements that will help in reducing commuter traffic, particularly through the local transport plan. It is also important for councils to ‘lead by example’ by developing their own travel

plans. This can create opportunities to co-operate with organisations as fellow employers – making use of the same bus services, car sharing schemes and other facilities.

## Working with public transport operators

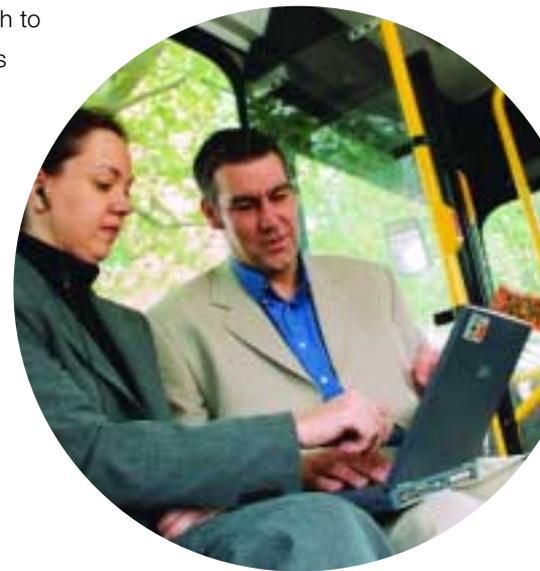
Many employers negotiate changes to public transport. Both sides have much to gain from working together – while operators win new custom, travel planners secure improvements at a reasonable cost.

Help from public transport operators included:

- Substantial discounts on tickets for staff
- Displays and promotion for public transport at the work site, including site specific information, offers of free tickets, on-site ticketing and face to face journey advice for staff
- New bus routes that are better suited to staff travel patterns and diversion of services to run on site
- Introduction of low-floor buses and on-site bus shelters
- Changes to bus liveries to carry the name of employers as a destination.

In approaching local operators, travel co-ordinators say it is important to reach those senior enough to be decision-makers. Enlisting support from the local authority public transport officer is recommended. In negotiations, travel planners find it helps to emphasise the scale of new business they can bring. Maps showing the distribution of staff (produced using Geographical Information Systems software) are a useful focus for discussions. Feedback and results from staff travel surveys provide a valuable source of market research to bus companies, while invitations to promote services at the workplace can also be attractive to operators.

- At the Government Office for the East Midlands the local bus company gave a presentation to help launch the revised travel plan. Staff were consulted directly about plans for new bus routes – generating lots of interest.
- At Buckinghamshire County Council staff are offered a 50% discount on all bus fares and a 33% discount on Chiltern Rail travel (including leisure journeys). Travel co-ordinator Stefan Dimic says they worked with senior people to negotiate these deals, and highlighted that they were “throwing 13,500 people at them”. Both the bus and rail schemes have attracted enough new custom to make a profit.



## Funding services

Where organisations enter into contracts with operators, 'penalty clauses', can help to ensure services are kept up to standard. A variety of partnership arrangements are used:

- Bluewater retail and leisure centre and Stockley Park business park have both provided investment to 'pump prime' services which later became commercially viable.
- Boots subsidises routes for a fixed price, while the bus company keeps the revenue. The arrangement provides an incentive for the operator to market buses to the general public.
- Egg subsidises a public bus service run by Trent Buses. Staff pay a nominal fare of 10p and revenue from this is deducted from the bill.
- Pfizer contracts a number of services from Stagecoach. Employees pay fares at around 10p a mile and Stagecoach is entitled to keep 30% of the revenue, provided buses are kept clean and run on time, and drivers are courteous. The remaining revenue is paid to Pfizer and covers half the cost of running the service. As part of the deal, employees using any bus from work can travel free on any other Stagecoach service to complete their journey home, on presentation of 'bus and rail club' staff ID.
- Plymouth Hospitals NHS Trust offers staff various reduced price bus passes for which the operator contributes a discount and the trust provides a subsidy. One pass for staff who have given up a parking space is subsidised 55% by the trust and 10% by the operator.

Once services are up and running many travel co-ordinators meet frequently with operators to review arrangements and agree adjustments. Ongoing feedback helps to nip problems in the bud and identify new opportunities:

- Staff requirements from subsidised bus services are discussed on a monthly basis at feedback sessions between AstraZeneca and the operator. Over time services have been modified to match – creating new stops and adding bigger buses on more popular routes.

## Meeting with other employers

Travel plan networks – giving regular contact with other employers engaged in travel planning – are immensely useful to travel co-ordinators. Besides providing moral support for those in the difficult job of changing the travel culture, they offer a chance to share ideas and co-operate in local initiatives. For smaller organisations



particularly, linking with other employers can give more weight in negotiations with public transport operators. Participating in travel plan networks will also get other people talking about your organisation's travel plan, raising its profile and attracting good publicity. This in turn helps to win commitment to the plan from within the organisation.

## CASE STUDY

### Plymouth Hospitals NHS Trust: creating a transport hub

<i>Organisation:</i>	<i>District general hospital</i>
<i>Location:</i>	<i>Outer suburb</i>
<i>Staff numbers:</i>	<i>5,761</i>
<i>Staff car parking:</i>	<i>1,353 spaces</i>

An effective partnership with local bus operators has been at the heart of the transport strategy for Derriford Hospital, run by Plymouth Hospitals NHS Trust. Since the plan was first initiated in 1997, the number of buses serving the hospital in the peak hour has doubled, to 44, and services have been restructured so that 80% of existing routes serving northern Plymouth, provide direct and frequent access to the hospital. The trust has now agreed to the creation of a bus station at the site, funded by Plymouth City Council. Transport and Environment Manager Andrew Davies says it is important to make the business case for services. The trust attends quarterly meetings with the city council and bus operators.

#### Bus pass deals

An array of discounted bus passes is available to hospital staff. Those handing back their parking permits are offered a free trial bus pass for four months, at the end of which they can get a one year pass at a 65% reduction (with 55% subsidy from the trust and 10% from the operator). Further bus passes have a 50% discount. For staff not giving up a parking permit, a Green Zone Bus Pass – negotiated with other local employers and the city council – costs £29.25 – £53.00 a month (depending on the zones covered) and is valid on services provided by both of the city's main operators. Another ticket offer provides 10 journeys for the price of 12. Some 15% of staff (FTE) have bought bus passes.

The trust has also taken steps to encourage patient and visitor bus travel – with discounts on two bus routes through areas of poor health. In collaboration with the city council and bus companies, the hospital helped fund a ‘Travel to Derriford’ information leaflet.

### **Parking management**

Bus subsidies are paid for by income from a staff parking charge of 50p a day. Parking permits are limited to 54% of staff, who tend to be those in ‘front-line’ jobs involved in patient care, disabled drivers and those required by contract to have use of a car. Claims for permits on grounds of travel during the course of work are checked against mileage claims and evidence of need, while for staff with an occasional need to bring a car on site, one-day permits are available. Staff can choose to pay charges on a daily basis or by monthly deduction from salary. Staff working nights and weekends, disabled staff, volunteers, car sharers and tenants of the site’s residential accommodation can park free of charge, and permits are not required out of hours.

Car sharers make daily use of 130 reserved spaces close to the building. A computerised matching service is available, and cars carrying groups of five are not uncommon.

The trust operates a parking appeals procedure in which the Director of Facilities is the final arbiter. Posters and newsletters have been used to inform staff about the plan, and staff consultation takes place through a joint staff committee that meets quarterly.

Issuing of parking permits indicates that the travel plan has reduced staff cars arriving per 100 staff by nearly a third.

# Identifying site opportunities

Each work place is different. At a detailed level, travel plans are site specific. Organisations have been resourceful in overcoming barriers and responding to opportunities at their locations. This means knowing your site and seeing the 'easy wins' for encouraging travel change.

## Building on existing strengths

Organisations need to assess the walking, cycling and public transport routes that run close to their sites, in the light of information about where staff live and how they travel. Sites that are well served by routes for cycling, walking or public transport, have an obvious head start. But our study shows natural disadvantages can be overcome – and natural advantages sometimes wasted. Here is how three organisations built on the opportunities their sites offered:

- Though located on a relatively isolated site outside Edinburgh, Agilent Technologies is four minutes walk from Dalmeny railway station. The company negotiated a 33% discount on season tickets with the train operator, and has worked with them to develop better services. Train use has risen from 5% of staff to 13% in two years.
- Buckinghamshire County Council has 39% of staff living within two miles and a good pedestrian environment. The council has successfully promoted walking and its benefits for health. Commuting on foot has increased from nearly 11% of staff to nearly 17% in three years.
- The University of Bristol found a neighbouring health trust ran a free staff bus between the station and the hospital. Following a travel survey that identified demand, the university combined funding with the hospital to expand and extend the service, making it available to the staff of both employers. More than 5% of university employees commute this way some or all of the time.

## Mending the missing links

Often substantial barriers to sustainable travel can be overcome by addressing relatively small 'missing links' in the journey. This could mean, for example:

- Diverting an existing bus service to come on site
- Building a safe cycle way to link the work site with the local cycle network
- Persuading a nearby station to open a rear entrance so that walking times are reduced



- Creating new work site entrances that are more convenient for walkers
- Improving lighting and cutting back shrubs so that people feel safer on a particular pathway.

Walking deserves particular attention as the 'glue' between other forms of transport. Improving and promoting journeys on foot can make bus and rail more attractive.

- At Computer Associates, a financial incentive for walking encourages some staff to commute to a nearby station and walk the remaining distance to work.
- At Nottingham City Hospital, improvements to public transport have gone hand in hand with a site walking strategy, including speed restrictions, traffic calming and safe crossings.

### Publicising site specific information

Sometimes the 'missing link' is staff awareness of the available travel options. The value of user-friendly information about the existing routes serving your site is hard to over-estimate:

- BP provided a map of local cycle routes through a staff newsletter. An all-in-one public transport information leaflet for staff and visitors 'went like hotcakes'.
- At Bluewater retail and leisure centre, new timetables show bus routes as simple line diagrams with information on 'where from, where to, how often and how long it takes'.

### Finding the priority routes

Where there are concentrations of staff who live in one area, or within easy reach of a particular station, their travel arrangements are an obvious priority and a potential 'easy win'. For the organisations in our study, free shuttle buses to key areas and to stations were particularly successful in attracting commuters:

- At Pfizer, in rural Kent, a free shuttle bus provides a link to the nearest town and also picks up from the station. It is used by an estimated 5% of the workforce.
- At Egg, sited on a business park at the edge of the town centre, a shuttle bus to the centre of Derby is used by 14% of staff.
- At BP, a free shuttle bus, providing a 15 minute journey to Feltham station, is used by around 12% of staff.
- At Computer Associates, 14% of employees use a shuttle bus from Slough bus station, which is also close to the railway station.





## CASE STUDY

### Egg: no charge for sharers at new site

<i>Organisation:</i>	<i>Financial services call centre</i>
<i>Location:</i>	<i>Edge of city centre (business park)</i>
<i>Staff numbers:</i>	<i>880 (on site at any one time)</i>
<i>Staff car parking:</i>	<i>500 spaces</i>

Free parking for car sharers and a new shuttle bus have been key features of a travel plan for Egg's call centre in Derby, brought in soon after occupation at a new site. Car sharing was considered important because over half the staff lived more than 5 miles from the site.

Around a quarter of the workforce now car shares – so avoiding a daily parking charge of 75p – while some 14% use the frequent shuttle bus, between the work site and Derby bus station.

The new shuttle, which is public but subsidised by Egg, runs every 12 minutes. Although initially free to staff, a nominal charge of 10p has since been introduced. A free contract bus also runs between Egg and the nearby park and ride. In liaison with the council, two new bus stops and shelters have been installed close to site entrances.

### Communicating with staff

The new parking policy was announced to staff by email, and launched with a 'road show' – an attended display in a central area of the building – to highlight public transport options.

Awareness that parking charges were related to planning permission helped reconcile staff to the scheme. This was communicated through Egg's 'user forums' – meetings of six to eight people including representatives from different levels of the organisation, who 'cascade' information back to other staff in their own business units. Forums have been particularly useful in addressing concerns and also helped enlist the support of managers to tackle abuses of the car share system. Facilities manager, Peter Dempsey says gaining the 'buy in' of business units and their involvement in making changes, was a key turning point for the scheme.

Financial benefits – through the shared cost of petrol and free parking for sharers, and through free or cheap bus use – are believed to have been most effective in discouraging solo car use.

## Encouraging progressive change

A variety of travel plan measures help to encourage a gradual shift towards sustainable travel. While some initiatives are designed to 'unlock' everyday car use on an occasional basis, others provide incentives to use an alternative most of the time. It's important to consider how these strategies work together.

### Unlocking car use

Persuading staff to 'give green travel a go' is an important hurdle. Some organisations overcome this with incentives for staff to leave the car at home for one or two days a week. The idea is that if everyone changes a little, this will have a significant impact:

- Wycombe District Council launched its travel plan with an invitation for staff to sign up to a 'four day a week pledge' – agreeing to travel to work without a car at least one day each week. Those who signed were entered into a £1,500 holiday prize draw. The council now offers a monthly draw for £25. To claim the money winners have to prove that they travelled one day without a car in the previous week. Around a fifth of staff enter each month.
- At Marks and Spencer Financial Services, staged incentives are offered to those who car share one day or more a week. Staff who complete six months of car sharing on this basis can choose between a range of offers related to driving, such as a car service. Those completing a further 12 months receive £50 worth of Marks and Spencer vouchers. As a result 31% of staff car share once a week or more.
- Computer Associates offers substantial financial incentives – between £150 and £200 – to staff who walk, cycle or car share for 26 days in six months. Around a third of staff signed up to car share, nearly 12% to cycle and 7% to walk for the required days.



*“Because of the travel plan, staff are now multi-modal – there are far more people who travel to work by different means during the week.”*

Jont Cole, Assistant Director of Facilities, University of Bristol.

## Avoiding a commitment to drive

Encouraging staff to use alternatives when they can is particularly relevant to the way in which parking charges are levied. Some employees will only wish to park some of the time. If they have to pay up-front for an annual parking permit, they will have far less incentive to use alternatives on an occasional basis. Once the permit is bought, driving becomes the ‘default option’. By contrast, ‘pay as you go’ parking allows drivers to make these decisions more flexibly:

- Staff driving alone to Egg pay a 75p daily parking charge. Payment is made on leaving the car park, using a staff proximity card. The user can load money on to this at the exit machine, which then shows the value paid on the card and the deduction made.

## Encouraging greater change

High achieving travel plans often have measures in place that provide a greater incentive for more committed change rather than occasional change, or for the use of travel alternatives that are typically more environmentally friendly (walking, cycling or bus use, rather than car sharing). These strategies can help to secure more substantial reductions in individual car use:

- At the University of Bristol, car sharers must share for at least three days a week to qualify for an individually allocated guaranteed parking space.
- At Agilent Technologies, priority parking is offered to car sharing ‘teams’ of three or more. The system encourages two-person sharers to find a third.
- Pfizer’s ‘parking cash out’ offers an allowance (£2 before tax) paid daily to those not bringing a car on to the site, ensuring that ‘the less you drive, the more you earn’.
- At Vodafone, staff who agree to commute by walking, cycling or public transport receive £85 a month, while car sharers receive the lower incentive of £42.50.
- At Wycombe District Council, staff who forgo a parking permit receive an additional £120 subsidy, paid by the council, towards an annual bus season ticket.



## Gaining staff ownership

*“Well planned  
implementation  
takes the sting  
out of criticism”*

Nigel Twinn,  
Travel Plan Advisor

Travel plans usher in changes in established practice. Staff consultation is essential – both to shape the plan and to gain acceptance and ownership for new initiatives. This is clearly more challenging for organisations proposing contentious measures, such as parking restraint. While there is no general expectation that employers pay for bus fares or bicycles, the provision of free workplace parking is often seen differently. Travel plans help to shift employer subsidies from car travel to other travel options. Travel co-ordinators who have been involved in introducing such changes point to several features of good practice that can help in gaining ownership and support for the plan across the organisation.

### Cross-departmental co-operation

In developing plans, it is helpful to involve people from different departments and different levels of the organisation. A plan developed by a working group that includes human resources, facilities and environmental management, together with representatives of unions or staff bodies, is likely to reflect a broad range of concerns and to have greater legitimacy in the eyes of both staff and management.

### Effective channels for consultation

Most organisations have existing structures for consultation. A range of forums have been used to consult staff about travel plans including focus groups, staff committees, building user groups and large meetings – sometimes addressed with the support of senior managers. The staff travel survey can also be a form of consultation, and it is important to report its results back to employees. Reaching a substantial proportion of the workforce over time is also felt to be important. One company stresses the value of consultation meetings that bring together a mix of people from different levels in the organisation.

- Egg implemented parking charges in consultation with ‘user forums’. These meetings involve six to eight people and representatives are from different levels of the organisation who ‘cascade’ information back to staff in their own business units. Facilities manager Peter Dempsey says it is helpful to have communication “at all levels and a mix of levels”. This makes it possible to use management input directly in dealing with problems and complaints, and highlights that the travel plan applies equally to all staff.

## Ongoing communication

Whatever the initial consultation process, co-ordinators emphasise the need to communicate with staff and management on an ongoing and continuous basis. This helps to take people with you as new initiatives are tried. Most travel co-ordinators operate an open door policy – inviting people to contact them about any travel problems they have. It is easier to introduce major changes if you have a long lead time. Besides allowing for detailed consultation, this also gives people a chance to adjust to new plans and think practically about their future travel options.



- Plymouth Hospitals NHS Trust has communicated with staff on a continuous basis and through a variety of media about the travel plan. New developments are discussed with staff consultation bodies through a joint staff committee which meets quarterly or when needed. The group is comprised of five union representatives and two or three managers.
- At Pfizer, two travel surveys were seen as part of a consultation process and the first was supplemented with extensive focus group discussion. An estimated 40% of employees will have attended some kind of meeting about travel plan initiatives. The transport and planning manager, supported at times by site heads, has addressed the staff about the travel plan at a large number of presentations. Management concerns about Pfizer's parking cash out scheme were overcome through regular reporting to a management group that has been party to all decisions.

## Fairness and transparency

Controversial measures – such as changes in parking rights – are much more likely to be accepted if based on transparent and fair criteria, following consultation. Organisations allocating parking permits need to set clear priorities, taking into account the travel needs of individuals (see page 65).

Where staff parking charges are introduced, criteria will also be needed for exemptions. Ring-fencing parking revenue to pay for sustainable travel options, makes it clear that the travel plan is shifting benefits from driving to alternatives. Some organisations set parking charges that are tiered in relation to staff pay levels. Introducing income-related charges may be more complicated for 'pay as you go' schemes (see page 23) although the University of Bristol has done this.

*"It took 13 committee reports to introduce our travel plan. Don't ever give up – just keep going!"*

Stefan Dimic,

Travel Choice

team leader,

Buckinghamshire

County Council

## Providing the 'carrots'

Restrictions on parking will be more acceptable where the travel plan includes plenty of measures that make the alternatives practical and attractive. Initiatives to support walking, cycling, public transport and car sharing are usually popular and offset opposition to parking restraint. Travel plans that introduce restraint without many 'carrots', tend to be less effective. Organisations that are able to compensate staff for the loss of parking rights have an obvious advantage in selling the idea. In evaluating this option, it is helpful to compare the cost of compensation with the cost of maintaining a parking space.

■ At Orange, car parking allocations at the company's new town centre site were explained in an information pack sent to relocating staff. Orange's environmental consultant Louise Baker says: "We have given staff lots of information about travelling here without a car. We've allocated parking using a system based on need to drive to work, that is fair and effective. We understand that our employees have travel needs that do not necessarily relate to their level in the company. The fact that there is compensation for those not taking a solo driver space on site has really helped."

## Explaining the problems

Gaining acceptance for contentious measures is easier where there is a clear operational necessity, such as limited parking space or a planning requirement. Organisations need to explain to staff about the pressures that have led to the travel plan and the constraints facing the site.

■ Addenbrooke's NHS Trust held a series of staff seminars to communicate the need for managing car use on the site and explain the travel plan initiatives. Capital Planning Manager, Roger Cutting says it has helped to explain the issues, including operational constraints. Group work encouraged staff to think about how they travel.

It is important to make staff aware of parking as a resource with a cost attached. Devolving responsibility for parking costs or maintenance to departments or business units can help to do this.

## Coping with dissent

Challenging the prevailing culture of car reliance can be difficult. However carefully changes are introduced there will be some opposition. One message to come through from the travel co-ordinators in our study is “Don’t let them wreck it!” – there will always be some people who see travel initiatives in a negative light and it is possible for a few dissenters to have an outside impact. Those with experience in this area recommend a sense of humour, a thick skin and a pragmatic attitude. Have your explanations ready, and emphasise that you are not asking the impossible: while not everyone will be able to change the way they travel, there are some who can and will.

### CASE STUDY

## University of Bristol: an ABC of parking

<i>Organisation:</i>	<i>University</i>
<i>Location:</i>	<i>Town centre</i>
<i>Staff numbers:</i>	<i>5,000</i>
<i>Staff car parking:</i>	<i>1,070 spaces</i>

Extensive consultation at the University of Bristol led to a system of parking charges related to travel needs and salary levels. Around 1,000 staff attended 15 open meetings about the travel plan. Proposals followed discussions with staff consultation bodies and unions, and were developed by a working group drawn from across the university community. Minutes from meetings are posted on the university’s web site, helping to make the ongoing development of the plan transparent to staff.

### Managing parking

The university’s travel plan focuses on its main precinct close to the city centre. Car parking in the area has been reduced as a result of new developments, while plans for a controlled parking zone have increased pressure to manage spaces effectively.

The plan combines a daily parking charge for those who drive, with a range of incentives for using alternatives. Every vehicle parking in the main university precinct has to display a valid permit. Both permits and spaces are divided into three categories:

Category A – is for staff or students with a disabled driver's badge or temporary/permanent mobility impairment and for staff who are 'formal car sharers' (sharing three days a week or more). These users receive an individually allocated space. In addition some departments are allocated Category A spaces for essential travel in the course of work.

Category B – is for staff with caring responsibilities, dependants and school travel needs where alternative transport is not available, and those with journeys involving more than 30 minutes travel time during peak periods. Eligibility is assessed using a point system in which staff have to score on several criteria. These users are guaranteed a parking space though this is not within any single category B car park and may be 5 – 10 minutes walk from staff departments.

Category C – is for all other salaried staff and is effectively a 'licence to hunt' but provides no guaranteed space.

While permits cost £10, parking charges are levied through a 'scratch and display' pre-paid coupon system. Staff buy coupons, at a price related to pay, with the daily rate set from 50p to £3.75 (0.006% of gross salary). Car sharers save money because they buy one coupon between two or more, with the cost linked to the salary of the sharer earning least. Disabled driver badge holders and those with mobility impairments are exempt from charges for both permits and coupons.

Departments pay £500 a year up front for a Category A parking space for work related travel.

The category system means staff applying for a permit have to gather information about the availability and frequency of public transport, which may in itself encourage them to use alternatives. Before the current system was introduced, parking was charged for but at the much lower rate of 0.35% of salary for an annual permit. Parking revenue now generates £220,000 a year, which is ring-fenced for spending related to travel to work.

## **Support for alternatives**

A raft of measures has been introduced to support more sustainable travel. The university provides a 10% discount on bus services and posts travel information on the web site. Staff are also offered an interest-free loan to buy

bus or train season tickets, with an additional 10% discount from some bus operators. A free shuttle bus runs between the station, the hospital and the university precinct, every 12 to 24 minutes through the day. Jointly funded by the university and the United Bristol Healthcare Trust, it has proved popular.

Improvements to cycle facilities include 200 secure covered and access-limited cycle spaces. Staff can purchase cycle equipment at a 10% discount from local shops and an interest-free loan is available to buy a bike. The mileage allowance for cycling in the course of work is 10p a mile and the university offers cycle training through a local agency. A Bicycle Users' Group has been set up and will help new cyclists to find the best route to work. There have also been initiatives to offer cycle repair through 'bike clinics'.

New pedestrian crossings – provided by the city council – and better on-site lighting and footpaths have helped to improve access within the university area for pedestrians. Walking has been promoted using health messages. Branded umbrellas are sold at a discount.

A car share matching service, developed by the university, can be accessed through the intranet. Sharers are offered a guaranteed ride home if a planned car share falls through unexpectedly. Some 300 staff belong to 130 car share teams, making them eligible for an allocated parking space.

## Results

Results from the 2001 travel survey indicate that changes in staff travel have caused the number of commuter cars arriving to decline from 44 cars per 100 staff to around 35, a reduction of 20%. Nearly 4% more people now walk and there have been increases in bus use, train use and cycling. Meanwhile nearly 6% of staff are formal car sharers. The survey found the introduction of the parking regime, together with an increase in charges, had been key factors in changing travel.

## Raising the profile of more sustainable travel

Bus discounts, bike clinics, lunchtime walks – whatever is in your travel plan, staff need to know about it. While promotion alone cannot be expected to reduce car use, your travel plan won't take off without it. Newsletters, large display boards, posters, fliers, information with pay packets, site specific timetables, attractive leaflets and all-staff emails, are all routinely used to raise awareness of travel options.

### Events and road shows

Launch events and attended road shows are especially valued, with other partners – such as local authority officers or public transport operators – often invited to participate. Going for a 'big bang' approach – with billboards, freebies and competitions – can help generate a buzz around new initiatives. Asking senior managers to speak at launch events can emphasise high level commitment to alternative travel. Many organisations participate in national campaigns such as Green Transport Week, Bike2Work Day or Car Free Day, with free breakfasts and other perks for green commuters. Travel co-ordinators have been inventive in finding ways to make events and campaigns take off.

- Buckinghamshire County Council has used frisbees, mugs, mouse mats, stress balls, yo-yos and a giant inflatable that blocked the way into the building, to broadcast the green travel message. For Car Free Day, staff were encouraged to compete in teams of six. Those with the least car use gained entry to a prize draw for 12 theatre tickets with free train travel. A total of 25 teams took part.
- Computer Associates launched its successful car sharing scheme in the staff restaurant. The car share software was demonstrated on a large plasma screen and staff invited to enter their postcodes and find a match there and then.

## Bringing it all together

Organisations find it helpful to bring travel plan initiatives together under a single umbrella – using a slogan, branding or logo to give the plan an identity.

- AstraZeneca markets all travel plan measures under the umbrella ‘Drivers for Change’. The name has been used for a video, shown at regular travel fairs.
- With Buckinghamshire County Council’s ‘Travel Choice’ club card, staff are eligible for a range of benefits including discounts on bus travel and bicycle purchase.



## Intranet web pages

Special web pages on the organisation’s intranet are a popular way of making travel information widely available to staff. Facilities on offer include user-friendly public transport information, car share matching services, links to shopping home delivery sites and more general information about travel plan policies and initiatives.

- The Government Office for the East Midlands has a link to the Nottingham TravelWise web site, which provides traffic and travel information.

## Reaching key groups

People travelling to the same workplace make different journeys under different constraints. Some travel initiatives have found ways to ‘segment the market’ for alternative travel. This is about reaching the right people at the right time with the right messages.

### Personal travel advice

Travel advice that is geared to the needs of the individual can be very successful in reducing car use. Engaging people in face to face consultations about their journey appears to be particularly helpful. Organisations have used personal travel advice in different ways.

- At the Meadowhall Shopping Centre\* personal journey planners were produced for 250 staff, and resulted in a 17% shift from car use to public transport<sup>9</sup>.
- As part of the Don’t Choke Britain campaign, Wycombe District Council asked five volunteers to complete travel diaries. They were each given feedback on their travel – with ideas for making journeys more sustainable. Results were publicised in the local press.

Many organisations in our study made personal journey planners available on request, and there is scope for encouraging wider take up.

### New recruits

Most of the organisations in the study saw new recruits as a group that was important to reach. People starting a new job are likely to be free of established travel patterns and may be interested in receiving travel advice. Some organisations offer personal journey planners for new joiners, and many provide information about travel arrangements as part of the induction process.

- An annual introductory fair for new recruits to Agilent includes a travel stand that offers individual travel advice. There is also a travel information pack for new staff.
- At Buckinghamshire County Council, the travel co-ordinator addresses new employees as part of the staff induction course. Staff also receive an introductory travel pack.
- Applicants for posts at Plymouth Hospitals NHS Trust receive a pack, including information about the travel plan and the parking constraints, which may help those moving into the area decide where to live.

\* Not one of the organisations in our main research study

<sup>9</sup> Review of the Effectiveness of Personalised Journey Planning Techniques, Steer Davies Gleave, Department for Transport, Local Government and the Regions, 2001

- Nottingham City Council\* is working with local job centres to offer travel advice to people going for interviews through a project called WorkWise. Applicants are sent a door-to-door travel pack which provides detailed information for their journey, and in some cases a day rider bus ticket.

Besides making travel part of the induction process, employers can reduce the need to travel by adopting a policy of local recruitment as Bluewater has (see page 36). Relocation packages can also be structured to encourage staff to live locally. Some employers offer different parking rights to new staff, as a way of phasing in more restrictive policies over time.

### Likely switchers

Up to a third of people say they would like to travel less by car<sup>10</sup>. It is helpful if travel co-ordinators can find ways to identify those staff most amenable to change – and likely to be receptive to journey planners, free bus tickets and other offers. One way to find these ‘likely switchers’ is through the travel survey. Staff can be asked how they would prefer to travel and if they would like to receive further travel information.

### Permit seekers

Some organisations target promotions for alternative travel options to staff applying for parking permits. While these people obviously intend to drive, they will not have started, and may not know about the extent of alternatives and the offers available.

- At Bluewater, staff applying for a parking permit have to register with the company’s TravelSense® scheme, after which they become eligible for discounts on public transport and receive all news on promotional offers and travel information.

Where criteria for allocating permits require staff to collect information about public transport, this may also encourage them to use alternatives they didn’t know about.

### Staff near bus routes

Another strategy for targeting promotions is to contact staff living within easy reach of specific bus routes, again with the offer of travel information or travel advice:

- Plymouth Hospitals NHS Trust made use of Geographical Information Systems software to target staff living close to bus routes and those with potential to car share. Letters were then sent to specific staff members about the options available to them.



\* Not one of the organisations in our main research study  
<sup>10</sup> Car Dependence, Goodwin et al, RAC, 1995



## Senior management

One organisation issued individual journey planners to senior board members. While senior staff may not be especially likely to use travel alternatives, those that do have the added impact of ‘leading by example’. Even one person who switches with enthusiasm can make a big difference.

## Stages of change

People who change the way they travel will need different kinds of information and support at different stages:

- Those first considering change will be weighing up the pros and cons, and need information to help them make up their minds, for example, about health benefits, cost savings and incentives.
- Those preparing to change may need more practical information about travel options – such as routes and times.
- Those who have changed may need ongoing support and encouragement – with news of travel improvements and promotional offers.

People who have switched away from driving may well switch back again if it all seems too difficult. Travel co-ordinators need to find ways of staying in touch with staff using different means of travel.

- Orange is developing a new ‘journey sharing’ database which will allow staff who want to walk, cycle or use public transport to find others taking a similar route. The system will also make it possible to communicate directly with those who travel in different ways or would like to, making it easier to gain feedback about their journey needs and ensure they receive relevant information.

### CASE STUDY

#### Bluewater: recruitment by bus route

<i>Organisation:</i>	<i>Retail and leisure centre</i>
<i>Location:</i>	<i>Out of town</i>
<i>Staff numbers:</i>	<i>5,500 (on site at peak times)</i>
<i>Staff car parking:</i>	<i>2,000 spaces allocated</i>

Recruiting locally has helped to limit staff car travel to Bluewater – a large retail and leisure centre in Greenhithe, Kent, where 42% of employees arrive

by public transport. When the centre first opened, new retail staff were recruited from postcodes where future bus routes were planned. In addition, the company created a 'learning shop' with local job centres and a college, so that local people could be retrained for jobs on site.

At the time of Bluewater's opening in March 1999, new employees were given £50 of vouchers that could be exchanged for public transport tickets (for which Bluewater then compensated the operator). Under a more recent scheme, those signing up for the centre's retail training programme are entitled to a month's free travel – paid for by operator Arriva – providing they complete a travel diary recording any problems they have with the service.

Six months before the centre opened all staff were sent a 'Transport to Bluewater' leaflet, while road show events were held in stores to give individual advice on travel options. Since opening, an on-site Travel Centre has been set up, and offers advice on all forms of transport from 8am – 9.30pm.

## **Developing a network**

The company has worked in partnership with public transport operators to bring comprehensive services to the site, now served by 130 trains and 500 buses a day. New services were pump-primed at a cost of £0.5 million – subsidies which were withdrawn as routes became viable. A frequent air conditioned shuttle bus provides a link to the nearest station. A range of ticket discounts is available to staff including a third off rail travel. Books of 10 discounted journeys are particularly attractive for staff working part-time. Tickets are typically 30% cheaper than they would normally be. A state-of-the-art bus station, built on site, is brightly lit at night and includes 'Countdown' style passenger information systems and electronic journey planners for public use. New timetables have simplified bus travel to line diagrams with user-friendly information on 'where from, where to, how often and how long it takes'.

Support for cycling has included funding for a link to the National Cycle Network, and for a local cycling map. Cycle parking has been increased, together with lockers, showers and changing facilities. Two cycle shops offer repairs at the centre. Some 4km of walking and cycling routes cross the site.

Some individual stores offer computerised car share schemes and a site-wide scheme is planned.

*'The biggest problem is changing hearts and minds – the car is a cosy culture.'*

Kelvin Reynolds,  
Transport and  
Infrastructure  
Manager, Bluewater  
Management.

## Restricting parking

Staff parking has been restricted – with a view to minimising peak time congestion and maximising shoppers' parking. While there are 5,500 staff on site at peak times, 2,000 spaces were originally allocated for their use. Parking was initially barrier controlled, and cars electronically tagged to permit entry. CCTV and number plate recognition in car parks made it possible to identify offenders. Restrictions on staff parking also applied at off-peak times, on the grounds that this would help in setting habits for travel to work.

Since August 2000 these arrangements have been relaxed on the grounds of the administrative complexity involved in tagging. Parking is now restricted through a 'red line rule' that staff must park six spaces back from spaces closest to the building in designated car parks only. Despite this change, previous arrangements have created a perception that parking is managed. Staff still have to apply for permits and inappropriate parking is penalised.

## Branding

Those who do apply for permits also have to register with Bluewater's 'TravelSense®' scheme making them eligible for travel discounts and benefits. The TravelSense® branding brings the travel initiatives together under one umbrella. Road shows helped launch the scheme and Arriva and Connex ran 'travel surgeries' to advise on public transport options.

## Benchmarking

In May 2000 (before parking rules were relaxed) a staff travel survey showed 56% of staff arrived by car (39% as drivers). The take up of bus and rail compares favourably with benchmarking data obtained by Bluewater, which suggests that the plan has achieved more than double the predicted 19% public transport use for sites of its kind.

# Changing the corporate culture

Successful travel plans enjoy a good level of commitment from the organisation. Over time, they become part and parcel of its wider culture. Travel plan goals are integrated into corporate objectives. Travel plan progress is seen as fulfilling social and environmental responsibilities and included in social and environmental reporting. Many organisations find work on travel plans generates positive PR: in our study, one of the benefits most often mentioned was an enhanced corporate image.

## Support from senior management

Travel plans rely on the backing of senior management – the more visible the better. High level commitment is usually apparent from the fact that significant funding has been allocated to the plan. Senior managers can demonstrate personal support by participating in presentations about travel initiatives, providing signed statements in travel plan documents, publicly supporting the travel plan on press and radio, and taking action to show that they are ‘walking the talk’ – for instance, using more sustainable transport or giving up a preferential parking space.

## Hands-on co-ordination

High achieving travel plans usually have an identifiable travel co-ordinator, with a hands-on role in pushing forward initiatives and ensuring that they run effectively. This may be someone whose post pre-dates work on the plan. Substantial staff time will be needed at the outset. Less is required once initiatives are up and running, though travel arrangements will still need to be promoted, managed and reviewed on an ongoing basis. Having someone who acts as a ‘champion’ for the plan is a big advantage. Travel co-ordinators need to combine commitment and enthusiasm with a pragmatic approach. Ideally they should be good communicators who are happy to offer an ‘open door’ to staff concerns, but are also able to remain robust in responding to criticisms.

Besides having management backing, co-ordinators need to be given the opportunity and budget to take part in travel plan networks. In the interests of staff retention, organisations need to consider career progression plans for their travel co-ordinators. Some have gone on to become involved in more strategic site planning.



## Becoming travel aware

As travel plans develop, organisations become more travel aware, considering the traffic generation implications of all decisions about the site, and integrating sustainable travel with other working arrangements.

- At an Orange site in Plymouth\*, shifts were organised according to staff location, to facilitate car sharing.
- At AstraZeneca, staff restaurants serve breakfast from 7.30 – 9.30 am three days a week, to support a flexible hours policy that is helpful for car sharers.

## Repositioning alternative travel

Too often those travelling by bus, bike or on foot can feel that they are taking the downmarket option, while drivers enjoy comfort and status. Travel plans need to turn these preconceptions on their head. Providing high quality alternatives sends positive signals about the status of sustainable travel and those who use it.

- At BP, travel planners deliberately chose a high quality air conditioned bus to shuttle staff between the station and the company. Cyclists can pick up a complimentary shower pack at reception.
- At Computer Associates, state-of-the-art cycle shelters, close to the entrance, echo the high quality architectural design of the building.
- At Boots, an executive car park has been turned over to cycle parking.



### CASE STUDY

## Argent Group: a travel plan made to measure

<b>Organisation:</b>	<i>Property developer</i>
<b>Location:</b>	<i>Two city centre sites</i>
<b>Staff numbers:</b>	<i>20 in London; six in Birmingham</i>
<b>Staff car parking:</b>	<i>No specifically dedicated spaces, but access to two spaces in London and parking freely available in Birmingham</i>

As a small organisation, Argent\* has been able to build a cycle-friendly culture, while strongly encouraging staff to use public transport for business

\* Not one of the sites covered by our research study

\* Not one of the organisations covered by our research study

journeys. Tracey Cresswell, who co-ordinates travel initiatives for the company, says Argent's size made it easier to get the message across.

"A lot of it is driven by the Chief Executive who is a keen cyclist. We haven't had to produce newsletters and posters to drive the initiative forward – it's all face to face communication."

The London office has rented a wine cellar under the road to provide secure weather proof cycle storage. There are showers and changing areas with full size lockers and also a drying room converted from an old walk-in safe. The Birmingham office has similar facilities. Each office has an ironing board and supplies toiletries and towels. A 'relaxed but smart' dress code also makes cycling easier. Staff can pick up free light batteries at work and Argent will pay £50 every six months towards the cost of cycle servicing. For those new to cycling, the travel co-ordinator says there is individual support: "We sit down with them and work out a route, and if someone who already cycles lives nearby, we get them to ride in with them". Cycle training is available on request. Other benefits include interest-free loans to purchase a bicycle and accessories, and membership of the London Cycling Campaign.

On business journeys, staff are encouraged to travel first class by train, making it easier to work on the way and saving valuable time that might otherwise be lost in traffic. The London office has readily available carnets of underground tickets and books of rail tickets for other journeys that are made regularly.

New recruits are briefed about travel policies through the company's 'attitude document' which sets out support for cycling, walking and public transport, alongside information on business objectives.

## Results

In London no-one now regularly drives to the office, although a handful still drive to their local train station. At least 30% of staff come by bike almost every day, while others are fair weather cyclists. Two employees have also taken to walking to work. In Birmingham half of the staff no longer regularly drive, using bus, train or cycle instead.

## Focusing on results

A key aim of a workplace travel plan is to cut commuter car use – though it may also address business or visitor travel and other issues such as fuel efficiency. Monitoring progress in reaching objectives is obviously important, and all the organisations in our study collected information that would help them assess the impact of the changes they had introduced. Detailed guidance on carrying out baseline travel surveys and making progress checks is available elsewhere<sup>11</sup>.

The points below highlight some key ‘dos and don’ts’ to bear in mind. For larger organisations particularly, it is recommended that monitoring surveys are carried out by an independent consultant with experience in this area.



### Focusing on car numbers

In tracking travel plan progress, it is helpful to focus on a key indicator: the number of commuter cars that arrive for every 100 employees<sup>12</sup>.

This makes it easier to evaluate the real impact of your travel plan on car use. For example, an additional 50 car sharers arriving in 25 cars will have half the impact on car use of an additional 50 bus users. By translating results into commuter car reductions (rather than reductions in solo driving), you can compare the effectiveness of individual measures. By establishing the number of commuter cars arriving per 100 employees, you can also compare your organisation’s performance to that of others.

### Allowing for ‘travel blending’

Many travel plans encourage staff to leave their car behind for one or two days a week. If this is likely to be happening, it’s important that your survey can pick it up. Some organisations ask employees to fill out a one week record of travel as part of the travel survey, which allows them to gauge less frequent use of alternatives. This also makes it possible to take account of other variations in travel such as shift working, part time working and working from home. An alternative is to ask an additional question about travel choices used once or twice a week.

### Comparing like with like

In assessing results, it is better to compare like with like. Drawing conclusions from data collected in different ways is difficult. For example, it can be hard to make

<sup>11</sup> See *A travel plan resource pack for employers, Energy Efficiency Best Practice Programme, 2000. (Due to be updated in 2002.)*

<sup>12</sup> See *Research Note 1: Study findings, on page 85*



## Using on-line surveys

A number of organisations carry out staff travel surveys electronically, and one company frequently uses all staff emails to ask, “How did you travel to work today?” – so providing an ongoing picture of staff travel choices. In general, on-line surveys are recommended – but with an important rider: make sure you also take steps to survey those staff without access to a computer. Since they are often less well paid, they are more likely to use travel alternatives. One company found that, without the results from this group, their travel plan targets would not have been met.

## Encouraging a good response

Survey fatigue can mean questionnaires have a poorer response rate as time goes on. Publicising the survey in advance, providing an incentive (such as entry to a draw with a substantial prize) and making sure that staff receive full feedback from earlier survey results, helps to sustain interest and generate more replies.

## Car park monitors

The introduction of sophisticated parking schemes to administer charges (or parking cash out programmes) promises to make it possible to track car use more closely than is possible by other means. Several organisations use proximity cards, containing a microchip ‘purse’ that can be loaded with credit. The charge is then deducted as drivers leave the car park. One company introducing this type of system found car use varied through the week with people most likely to leave their cars at home on Mondays. Fewer staff came in on Fridays, but those that did were more likely to drive.

## Benchmarking and setting targets

Most of the organisations in our study set targets for modal shift – and several had achieved their initial goals. Realistic targets can help to focus management commitment. Meeting them successfully can generate positive PR, while failing to meet them can act as a lever for introducing more far-reaching measures. Given the achievements of organisations in the study, a target to reduce car use by 15% over three years seems reasonable, providing parking management strategies are included in the plan. As a minimum, a target to reduce by 10% is recommended.



Organisations may also find it useful to benchmark their achievements against the findings of the National Travel Survey (see page 87). This can help them to understand better their own performance and to see the value of small increases in more sustainable travel. At the same time, it is crucial not to view national car use patterns as a standard to aim for. Information on patterns of travel to similar organisations in your area (with and without travel plans) will also assist in benchmarking.

## CASE STUDY

### Pfizer: shuttles and sharers

<i>Organisation:</i>	<i>Pharmaceutical company</i>
<i>Location:</i>	<i>Rural</i>
<i>Staff numbers:</i>	<i>5,500 (daily use of site)</i>
<i>Staff car parking:</i>	<i>4,000 spaces</i>

The pharmaceutical company Pfizer has cut car commuting to its UK headquarters by 9% – putting it ahead of schedule to meet its target of a 10% cut by 2003. In 1998, at the time of Pfizer’s first travel survey, the number of cars coming on to its East Kent site for every 100 staff was 75. By 2001 this had been reduced to 68. As a result, the company calculates that demand for parking has been cut by nearly 400 spaces, and that this is equivalent to a financial saving of £0.8 million in capital costs (excluding land). Pfizer estimates car park running costs at an additional £500 per space per year.

### Supporting change

A full range of support measures has helped to bring about the increases in bus use and car sharing that underpin the Pfizer result. Although the company is in a rural location, some 23 bus services now stop on the site at peak times, including a free frequent shuttle bus to the nearest town of Sandwich. An estimated 5% of the workforce use the service. Some staff living in Sandwich have given up second cars as a result. Additional services, contracted from Stagecoach provide links to other areas at a fare of 10p per mile. Staff who commute daily by rail are eligible for a 50% discount on Connex services.

Car sharing is supported with a self-matching car share database, available on the company intranet. While the company offers no automatic guaranteed ride home, a quick search facility on the database can help users find an alternative partner when needed.

To encourage cycling, changing rooms, lockers and showers have all been improved and are now available in all major buildings, while cycle storage has been expanded. Pfizer has also helped fund improvements in local cycle routes on the National Cycle Network. Meanwhile, traffic calming, zebra crossings and a 30mph speed limit on the road through the site have improved walking conditions.

Internal promotion for the travel plan includes an intranet travel web site with comprehensive up-to-date travel information.

Findings from Pfizer's latest travel survey shed light on the popularity of different measures. This showed, for instance, that the shuttle bus was the change that most encouraged bus use, while the introduction of more frequent bus services was the change thought most likely to encourage greater use in future. New cycle paths were considered most likely to encourage more cycling, with the most wanted route being between Sandwich and Pfizer. The survey also showed that more staff were 'travel blending' – using alternatives to the car for one or two days a week.

### **Parking 'cash out'**

Since its most recent travel survey, Pfizer has strengthened its travel plan with a 'parking cash out', introduced in June 2001. All employees are entitled to park, but receive £2 (before tax) for every day that they work at the site but do not bring a car. The bonus was set to cover the estimated cost of providing a parking space. Security access proximity cards are used to operate the scheme. Points are added on entry to the site and deducted from those leaving through the car park barrier. Car sharers also benefit from the scheme – since only one person in the car needs to use their card. One advantage of the system is that data on car use will be automatically collected. The parking cash-out is seen as 'cementing' other measures together – with a single incentive that encourages drivers to use other options where practical.

# 2

## Part 2 Measures for change

## Measures for change

Organisations in our study show that it is possible to bring about changes in the way staff travel, and that there is no 'natural' level of use for more sustainable transport. On average the case studies nearly doubled the proportion of staff arriving by walking, cycling and bus and rail, and there was also considerable success with car sharing.

In Part 2 of this guide we outline measures that have been successfully used to support alternative travel. We also look at good practice in managing parking and at strategies used to reduce the need to travel and to address visitor and business journeys.



# Supporting bus and rail

Among organisations in our study, bus and rail attracted a higher share of travel than any other alternative to the car. The greatest proportion of staff arriving by bus and rail was at the Government Office for the East Midlands – a city centre site where 53% catch the bus or train to work. Other high performers are Bluewater – with 42% – and Orange in the centre of Bristol with 38%.

## Success factors

Key measures used by those successfully supporting bus and rail include:

### ■ Providing a free, dedicated company shuttle bus

Five out of six travel plans that performed best on bus and rail, provided a dedicated shuttle bus. Two organisations introducing these found them used by 14% of staff. Buses can link with bus or rail stations and key towns. A high quality of service and the sense that the bus is there ‘specially for staff’ (even if other people can board) may contribute to success. Some organisations use ‘sweeper’ buses following directly after the main service to ensure no one is left waiting for long.

### ■ Negotiating ticket discounts

The highest ticket discounts negotiated were a 50% reduction on bus fares for staff at Buckinghamshire County Council and a 70% discount on the Heathrow Express train for commuters to Stockley Park business park. Elsewhere, reductions were usually 20-33%. Some organisations cut fares further with an employer subsidy. At Plymouth Hospitals NHS Trust the resulting reduction on some passes was 65%. Discounts on individual tickets appear particularly effective. Relatively high fares – for example, more than £35 a month for a season ticket from 5 miles away – appear to deter public transport use.

### ■ Improving off-site infrastructure

These improvements – usually funded by the local authority – include raised kerbs for low-floor buses, priority measures such as bus lanes and better quality bus stops and waiting areas in the places staff travel from. Some organisations contributed to the cost of these changes.

### ■ Improving service quality

Changes include the introduction of new low-floor buses, which is usually paid for by the operator. Travel planners also secured improvements in service reliability, routing or timing, matching services more closely to working patterns. Several organisations were able to ‘tweak’ services as the plan progressed.

### ■ New or more frequent services

Thirteen organisations managed to increase the number of bus services arriving at the site by an impressive average of 14 extra buses in the peak hour.

### ■ Convenient bus stops

Most of the organisations in the study had bus stops on-site or close to building entrances. Convenient and secure locations with adequate lighting and information were seen to be important in making bus and rail attractive.

### ■ Better access to public transport information and tickets

All organisations in the study made significant improvements in access to information about public transport, using leaflets, web sites and prominent displays in busy parts of the building and reception areas to publicise timetables and routes. Several sold tickets at the workplace (sometimes through payroll) and some invited bus and rail companies to run on-site promotions.

## Innovative strategies

Innovative measures – that were effective for individual organisations – include:

- Bus liveries that show the company as a destination
- Provision of on-site state-of-the-art bus shelters with real time information, phones and lighting
- Promotions targeted at staff living along bus routes
- User-friendly timetables that simplify bus routes to line diagrams
- Provision of on-site travel centres offering comprehensive information
- The use of personal journey planners to help staff understand the public transport options available to them.



## CASE STUDY

### Government Office for the East Midlands: rising bus use in the city centre

<i>Organisation:</i>	<i>Government Office</i>
<i>Location:</i>	<i>Town centre</i>
<i>Staff numbers:</i>	<i>245</i>
<i>Staff car parking:</i>	<i>45 spaces</i>

Situated at the heart of Nottingham with good transport links, GOEM has benefited from general improvements to city bus travel, allowing its travel plan to focus largely on promotion and awareness raising, with posters, displays, events and up-to-date timetables. Bus frequency has increased, and season tickets offer discounts on the regular fare. GOEM has run lunchtime events to promote sustainable travel, with presentations from the local bus company. The company's web site has a link to Nottingham Travelwise – which carries public transport information. Staff are offered interest-free loans to purchase season tickets.

#### Other measures

Less than 50% of staff are entitled to park on-site, with parking allocations for disabled drivers, pool cars, car sharers and those with an operational need, assessed on a case by case basis.

The organisation has also supported car sharing – with a manual matching service, a guaranteed ride home and priority parking spaces. The site has good walking access and has promoted journeys on foot with lunch time walks for health. Staff can take advantage of discounts at local cycle shops and an interest-free loan is available to buy a bike or equipment.

#### Results

GOEM's survey results show more than half of staff habitually use the bus, train or park and ride, 9% walk while 10% car share. Comparison with an earlier survey indicates a drop in staff car use. Between 1997 and 1999 the proportion of car commuting dropped from 45% to 38%.

**CASE STUDY****Nottingham City Hospital NHS Trust:  
bringing buses on site**

<i>Organisation:</i>	<i>Hospital</i>
<i>Location:</i>	<i>Edge of town but residential</i>
<i>Staff numbers:</i>	<i>Over 5,000</i>
<i>Staff car parking:</i>	<i>1,200 spaces</i>

At Nottingham City Hospital buses – which once only stopped at the edge of the site – now come through it every 15 minutes at peak times. Improvements have been secured in partnership with Nottingham City Transport which also funded bus shelters, a new fleet of low-floor buses and a travel map of bus routes serving the hospital. The trust provided raised kerbs at each of the eight site bus stops, which carry the names of hospital departments. A 28 day bus pass costs £28 and provides unlimited travel on NCT buses. The staff intranet has links to web sites provided by local bus operators.

**Other measures**

Staff parking charges are set at £55 annually and the revenue ring-fenced for travel related measures.

A site-wide strategy has improved safety for pedestrians and cyclists with a 15mph speed limit, dropped kerbs and traffic calming measures. Street lighting has been upgraded, new paths constructed and pedestrian signing improved. A car share matching service is offered through the staff intranet. Improvements to the local cycle network have been complemented by cycling facilities, including showers and changing rooms and storage for 450 cycles. Secure compounds, American style ‘cycle safes’ and CCTV have all improved on-site security.

**Results**

Survey results show the proportion of staff travelling to work by bus and train has risen from 11% to 20% in three years, while car sharing is up from 2% to 11%. In the same period solo car use declined from 72% to 55%.

# Supporting walking

Among our case studies, the organisation reporting the greatest proportion of staff arriving on foot was the University of Bristol, where 23% walk to work. Other high performers include Buckinghamshire County Council with 17% and the John Radcliffe Hospital in Oxford with 15%. An increase in walking was reported by a number of travel plans. Buckinghamshire County Council persuaded 6% more staff to arrive on foot, and there were smaller increases at eleven other sites.

## Success factors

Key factors for successfully supporting walking include:

### ■ Good or medium quality access to the site for those on foot

None of the organisations with poor walking conditions in the immediate area achieved particularly high levels of walking, though some did manage to increase the proportion arriving on foot. Several organisations had seen improvements in walking conditions, as a result of local authority initiatives, and some worked in partnership to make these happen. Sometimes a small change – such as adding a crossing on a busy road – made a major difference.

### ■ A high percentage of staff living within walking distance

The top five performing organisations probably all have over a fifth of their staff living within two miles. Although important this is not critical. Some organisations with relatively high levels of walking had relatively small populations living close by.

### ■ On-site security and pedestrian improvements

Security patrols and good lighting are helpful in encouraging access on foot. On larger sites particularly, safety improvements such as traffic calming, wide pavements, speed restrictions and pedestrian crossing places, make walking more attractive.

### ■ Marketing walking to staff

Campaigns often emphasise the health benefits of walking, with some organisations running healthy walks and promotional healthy lunches. Others offer freebies and discounted products such as pedometers and umbrellas. The sociability of walking can be an attraction, and one organisation planned to link up staff who wanted to walk together.



*“There is no point in telling people to walk in dark unlit subways – you need to get the strategy right.”*

**Stefan Dimic,**  
Travel Choice  
Team Leader,  
Buckinghamshire  
County Council

## Innovative strategies

Innovative ideas for promoting walking, that were effective for individual organisations, include:

- Maps showing walking routes serving the site – which may also be useful for visitors
- Financial incentives for those who walk – such as the ‘Comfortable Boot Award’ at Computer Associates, where those walking more than 25 days in six months receive £150
- Inviting walkers to use shower and changing facilities
- Using crunchy gravel to create ‘audible footpaths’ – so that walkers can hear others approaching – as an on-site security measure
- Interest-free loans for walking equipment including coats and boots
- Encouraging walking as part of a longer journey, for example, from a nearby station.

## CASE STUDY

### Buckinghamshire County Council: walking to health

<i>Organisation:</i>	<i>County council</i>
<i>Location:</i>	<i>Town centre</i>
<i>Staff numbers:</i>	<i>1,423 in county hall, 780 in area offices</i>
<i>Staff car parking:</i>	<i>380 spaces nearby, 3,500 off site in charged car parks.</i>

With good walking conditions and nearly four out of ten staff living within two miles of work, Buckinghamshire County Council is well-placed to promote journeys on foot. Around 17% of staff now walk to work. Emphasising health benefits has been particularly successful. Travel planners have linked up with local school travel initiatives to address safety concerns about local roads. Walkers are welcome to use the lockers and showers provided for cyclists.

### Other initiatives

Buckinghamshire’s travel plan also includes impressive discounts on public transport. Staff travel half price on buses and receive a third off rail travel –

reductions negotiated with local operators, Arriva and Chiltern. Both companies have attracted enough new custom to profit from the deal. Public transport use has nearly doubled, up from 8% to 14%.

Cycling is also increasing, following improvements to off-site tracks and better bike storage, including two new, locked and CCTV-monitored cycle parking stores. New showers and lockers have been introduced and staff have a discount of up to 20% with a local cycle shop, which also offers repairs. The cycle mileage allowance for business travel is 12p a mile and staff can use two pool bikes to give cycling a go. Interest-free loans up to £1,000 are available for bike purchase. Cyclists' breakfasts are held every six months.

Car sharers can find matches through a centrally co-ordinated scheme. Four prize draws a year encourage participation and funds are set aside for a guaranteed ride home when arrangements fall through, though this is rarely used. Car sharers are exempt from parking charges and can use a 'green bay space' in the nearby multi-storey car park. Promotion emphasises that car sharing saves money – and one group of sharers were able to splash out on a holiday with all their unspent cash.

## **Promotion**

Buckinghamshire's travel plan initiatives have moved forward in a blaze of publicity and promotion. Frizbies, yo-yos, car air fresheners, stress balls, mouse mats, mugs and a giant inflatable blocking the way into work for a morning, all helped to raise the profile of green travel, and keep the message in mind.

## **Parking**

Under a parking permit system, around half of employees have free parking, either next to the council offices or half a mile away. The other half can pay £2 a day to park in the further car park or £6.50 a day to use on-street spaces outside the offices. Section heads can offer to cover parking charges, and will usually do this on days when staff have a particular need to drive.

## **Results**

Buckinghamshire's plan has reduced driving to work by over a fifth, from 71% to 56% of staff commuter trips.

## Supporting cycling

The organisation in our study with the greatest proportion of staff arriving by bike was Addenbrooke's Hospital in Cambridge where 21% of staff cycle to work. Others managing high rates of cycling were the John Radcliffe Hospital in Oxford – at 12% – Orange in central Bristol – at 9% – and the University of Bristol at 8%. Travel plans also achieved changes in levels of cycling – with 4% more staff starting to cycle at Addenbrooke's, 3% more at Wycombe District Council, and smaller increases at eight other sites.



### Success factors

Key factors for successfully supporting cycling include:

#### ■ Improving the quality of off-site cycle access

A number of organisations improved cycle access to their sites by working in partnership with local authorities and cycling groups such as Sustrans. At some sites, the National Cycle Network has provided new opportunities for staff to cycle.

#### ■ Increasing available parking for cyclists

Providing cycle parking close to building entrances makes it convenient and visible – sending a clear message that the organisation values cycling. Access to parking needs careful consideration to avoid conflict with site traffic. Some organisations have had difficulties with cycle security. Police tagging, cycle insurance schemes and the provision of heavy duty chains on stands (requiring only a padlock) can all help. Alternatively, lockable compounds and CCTV coverage may be necessary.

#### ■ Providing showers, changing and locker facilities

Provision for cyclists' changing needs to be clearly identified and conveniently located, close to building entrances. Besides being popular with cyclists, facilities can also be useful for pedestrians or joggers.

#### ■ Supporting a Bicycle Users' Group

Bicycle Users' Groups (or BUGs) provide a voice for cyclists within the organisation and can help avoid mistakes, such as locating facilities in the wrong place. BUGs also provide assistance with other initiatives such as cycling events, the development of cycle maps and 'cycle buddy' schemes – in which new cyclists are paired with experienced ones for the journey to work.

### ■ Holding events to promote cycling

Bike2Work days – with promotions such as cyclists’ breakfasts, bike clinics and police bike tagging – can raise cycling levels by five or even ten fold.

Their popularity suggests good potential for increasing regular cycling if barriers – such as local road danger – can be effectively tackled.

### ■ Arranging staff discounts on cycling equipment and offering cycle repair

Several organisations had successfully negotiated with local cycle shops to provide these benefits.

## Innovative strategies

Innovative ways of supporting cycling, that were effective for individual organisations, include:

- Site specific cycle maps
- Free use of a company bike for travel to and from work, with the chance to try different models such as folding and electrically assisted bikes
- Financial incentives for those agreeing to cycle
- Complimentary shower packs
- Attractively designed cycle shelters that enhance the site and complement its architecture.

### CASE STUDY

## Addenbrooke’s NHS Trust: making way for bikes and buses

<i>Organisation:</i>	<i>Hospital</i>
<i>Location:</i>	<i>Edge of town</i>
<i>Staff numbers:</i>	<i>5,801 (but over 9,000 including other staff on same site)</i>
<i>Staff car parking:</i>	<i>2,400 spaces</i>

Good cycle access and the town’s cycle friendly culture have helped to encourage cycling to Addenbrooke’s Hospital on the southern edge of Cambridge. On and off-highway cycle paths serve all the main routes feeding the site while a shared-use facility has improved access to the main entrance. A track links the hospital to a nearby village and is popular with

both cyclists and pedestrians. Cycle storage has increased, so that there are now 950 stands, though bikes locked to railings show demand still outstrips supply. Existing showers and changing rooms have been refurbished.

Promotional activities during National Bike Week include free bicycle 'rental', and staff can use an interest-free loan to buy a bicycle. A local bike shop provides on-site cycle repair twice a week.

### **Other measures**

Car use is discouraged with a 'pay as you go' staff parking charge of 30p daily.

Addenbrooke's is served by 21 bus services in the peak hour, five of which enter the hospital site. A site specific bus timetable has been made available through pay packets, reception desks, the on-site travel bureau and an 'Access to Addenbrooke's' web page. Discounted tickets are offered at promotional events. There is a park and ride agreement with a supermarket two miles away, linked to the hospital by an all-day minibus. Following a new deal with Stagecoach there are plans for discounted tickets, new services and better routing – based on staff home postcode information.

A car sharing service offers computerised matching, a guaranteed ride home if the arrangement falls through unexpectedly and dedicated parking close to the main entrance.

### **Results**

Surveys indicate that between 1993 and 1999 the proportion of staff coming by car fell from 74% to 60%. In the same period cycle use rose from 17% to 21% and bus use trebled – from 4% to 12%.

## CASE STUDY

### Computer Associates: raising the stakes for cyclists

<i>Organisation:</i>	<i>Business software company</i>
<i>Location:</i>	<i>Edge of town</i>
<i>Staff numbers:</i>	<i>850</i>
<i>Staff car parking:</i>	<i>825 spaces</i>

Staff at Computer Associates, on the edge of Slough, can make use of a fleet of 25 company bicycles to ride to and from work, with accessories also provided free of charge. A state-of-the-art cycle shelter echoes the design of the headquarters and provides storage for 60 bikes, while lockers, drying facilities and showers are available in the company gym. Staff who cycle 25 days in six months receive £150 – a cash incentive that persuaded nearly 12% of staff to sign up to the scheme.

#### Other initiatives

Those who walk or car share 25 days in six months are also entitled to cash incentives. A free shuttle bus from Slough bus station makes six trips morning and evening and is used by 14% of staff. Travel co-ordinator Belinda Nahal says the generous financial benefits help to overcome barriers: “If you want to do these green initiatives, you have to put something into it”. She also argues that asking staff to switch for one day a week is effective in bringing them on board, and says once they have made this commitment they may consider expanding it. Uptake of all incentives has been enthusiastic, with more than a third of staff signing up to car share and 7% to walk for some or all of their journey.

## Supporting car sharing

Several organisations in our study achieved high participation in car sharing schemes. At Computer Associates 34% of staff signed up to car share 25 days in six months, while at Marks and Spencer Financial Services, 48% of staff registered with the scheme and 31% actively share at least one day a week. Meanwhile companies such as Egg – where 26% car share on a daily basis – are probably making the greatest impact on car use.

### Success factors

Key factors in successfully supporting car sharing include:

#### ■ A car share matching service

While some schemes enable staff to find a car share partner through the organisation's intranet, others rely on a co-ordinator who administers the service. In general, central co-ordination appears to be more successful than self-matching, though it is also more resource-intensive. Although most schemes rely on car share software, many organisations have experienced problems in getting systems up and running. When choosing a software package it is worth checking whether the system:

- Lets you know immediately whether it has a match or not
- Automatically offers matches along your route, rather than just those within your home area
- Gives you a good range of matches, even if they are not all a 'perfect fit' (people will often make adjustments for the sake of a match)
- Provides a visual representation of your journey
- Has the potential to be combined with schemes run by other employers in the immediate area
- Lets you specify which department or other unit the employee belongs to, and makes matching with other people from that unit a priority (this can be important for schemes that cover several organisations)
- Can operate by itself once it has been set up, or will require additional administrative support (different organisations will have different preferences).

### ■ A launch event

Launch events can be vital for getting car sharing off the ground. Besides promoting the scheme they can attract enough participants to reach the 'critical mass' needed for easy matching. Events can also be a meeting place for those who prefer to make sharing arrangements face to face. Follow up promotions help attract new takers.

### ■ Financial incentives/free parking

Offering major financial incentives or exemption from parking charges is effective in persuading staff to share the drive. Five of the companies in our study pay substantial sums (from around £100 to £500 a year) to staff who car share, while several of those that charge for parking offer free or reduced rates to sharers. Exemption from charges is a powerful incentive, as is shown by the experience of Egg: waiving a 75p charge encouraged around a quarter of staff to car share, despite having no formal matching service. With or without such incentives, car sharing saves money on petrol – a benefit that can be publicised to staff.

As has already been mentioned (see page 25), car sharing can potentially undermine forms of transport that are typically more sustainable. Where financial incentives are offered, employers need to ensure that higher rewards go to those who walk, cycle or take the bus.



### ■ Priority parking

A number of organisations have provided dedicated car share parking in prime spots close to the building – and seen sharing grow as a result. Marking spaces out helps flag up the scheme to solo drivers as they battle their way from less convenient spaces on rainy days. One organisation restricts priority parking to car share 'teams' of three or more, and finds this encourages car sharing pairs to find a third.

### ■ Prizes for registering/sharing

Several organisations promote car sharing with gifts – rewarding staff when they first register on the scheme or later, when they confirm that they are sharing. In two of the most successful schemes, new joiners were offered gift vouchers – in one case worth £50.

### ■ ‘One day a week’

Schemes that encourage staff to car share on a part time basis – offering incentives for sharing one day a week or more – appear to be successful in attracting large scale take up. ‘Kick-starting’ schemes in this way may be more important where parking is free and unrestricted. Employers using this strategy should consider higher incentives for those who share for more days in the week.

### ■ Guaranteed ride home

Several organisations offer a guaranteed ride home by taxi, should the car sharing arrangement fail unexpectedly. Though not critical to the success of car sharing, this service is very cheap to provide, as actual take up is typically very low. A guaranteed ride home may well give some staff the reassurance to car share, and helps to demonstrate a flexible approach to people’s individual travel needs. The same service can be usefully offered as well to those walking, cycling and taking the bus.

## Innovative strategies

Innovative ways of supporting car sharing, that have been effective for individual organisations, include:

- Running software on a large plasma screen at the launch event – and offering to match people there and then
- Arranging shift times according to postcode – so that those in the same area come into work at the same time
- Promotional freebies.

## CASE STUDY

### Marks and Spencer Financial Services: car share and cash out

<i>Organisation:</i>	<i>Financial services company</i>
<i>Location:</i>	<i>Edge of town business park</i>
<i>Staff numbers:</i>	<i>1,100 (during core hours)</i>
<i>Staff car parking:</i>	<i>922 spaces</i>

Car sharing has been at the forefront of reducing traffic to Marks and Spencer Financial Services in Chester, where the travel plan was developed in response to huge congestion at an edge of town business park. Over 30% of employees now car share one or more days a week.

Sharers are matched using a computer database and offered the most convenient spaces at the front of the building. A guaranteed ride home is available, should arrangements fall through. Meanwhile a range of incentives encourages sharing. Those joining receive a £20 Marks and Spencer voucher. Those who complete six months of sharing choose from several car-related perks – the cost of road tax (to the value of the lower band) or the same amount of money spent on car servicing or petrol vouchers. Those completing 18 months of sharing receive M&S vouchers worth £50. The company's flexible approach to start and finish times within the shift system makes it easier for staff to find a match.

**CASE STUDY****Agilent Technologies: three in a car means £100 a month**

*Organisation:* Telecommunications products company

*Location:* Rural

*Staff numbers:* 1,500

*Staff car parking:* 1,059 spaces

Some 12% of staff car share at Agilent Technologies – a company located on a relatively isolated site outside Edinburgh. Staff initially found partners through a car sharing notice board, though they can now use the company intranet to advertise in a similar way. The main incentive to share is dedicated green bay parking spaces, located in prime spots and available only to car pools of three or more people. In five years, the number of car pools has nearly doubled, while many of the initial teams are still sharing. Drivers find the three-in-a-car rule also has an impact on their pockets: those car sharing from Glasgow or Peebles say they save over £100 a month.

**Other initiatives**

Public transport is the other major focus of Agilent's travel plan. Following a 33% discount on rail season tickets, negotiated with the operator Scotrail, train use has more than doubled, rising from 5% to 13%.

The company is also promoting cycling with new cycle sheds, showers and changing facilities. Staff receive a 10% discount on equipment at a local store. A Bicycle Users' Group has been set up. Though poor off-site conditions have meant fairly low levels of use, the company hopes to see an increase following the opening of a new Millennium cycle path.

**Results**

Results indicate that in two years the number of commuter cars on-site dropped by approximately six per 100 staff (from 71 to 65).

# Managing parking

Whatever support organisations offer for more sustainable travel, the cost and availability of workplace car parking is likely to play a critical role in influencing travel patterns. In our study, those organisations that addressed parking achieved, on average, a considerably greater reduction in car driving.

Organisations restrained parking in a variety of ways, including:

- Allocating staff parking using a permit system
- Reducing the number of parking spaces available – for example when developing the site
- Charging for parking
- Making cash payments to those not parking on site.

Almost self-evidently, limiting the overall number of spaces available to staff is the most effective way to limit the number of cars arriving on site. Charging for parking or providing incentives to those who don't park will also reduce demand, though the impact is likely to be less pronounced. Where staff parking is restricted the additional introduction of charges or financial incentives can be expected to reduce car use further.

## Good practice

Features of good practice include:

### ■ Measures to prevent overspill parking in the immediate area

Where there is free and plentiful parking close to the work site, measures to reduce car use may simply encourage drivers to park nearby. Controlling parking in the immediate area usually requires co-operation from the local authority.

### ■ Fair and reasonable criteria for allocating permits or levying charges

Parking schemes should take into account individual needs such as temporary or permanent mobility impairment, home location, access to alternative transport, job needs and the responsibilities of carers. Some charging schemes are tiered, to take account of earnings. Staff consultation (see page 26) is especially important in introducing parking restrictions, and the details of schemes will vary according to the outcome of these discussions.

**■ Parking charges that are 'pay as you go' rather than 'pay up-front'**

Once staff have bought an annual parking permit they are much less likely to use alternatives (see page 24). In a similar way, the use of payments for not parking, offered on an 'earn as you go' basis, can provide an incentive for drivers to leave the car at home when possible.

**■ Travel improvements that are linked to parking restraint**

Travel planners restricting staff parking need to be able to point to clear improvements in arrangements for alternative travel. The link is especially clear where parking revenue is used to pay for travel alternatives.

**■ Raising awareness of parking as a resource**

In many organisations, there is little awareness of the costs of managing and providing parking. Even where parking remains free and all staff are entitled to use it, it is important to raise awareness that it is a resource. One way to do this is to devolve the costs of parking spaces to business units. Another is to offer a 'parking cash out' – either as a one-off sum for those giving up a parking permit, or as a daily allowance for staff leaving their cars at home.

**■ Introducing new parking regimes on occupation of a new site**

An organisation arriving at a new site has a good opportunity to implement a new parking regime (together with other travel initiatives) from the outset. This applies whether staff are being newly recruited or relocated from another building.

**■ Commitment and support from senior management**

It is unreasonable to expect travel co-ordinators to implement contentious measures without a clear mandate from those running the organisation.

# Reducing the need to travel and other strategies

Besides addressing travel arrangements, some organisations in the study had taken steps to reduce the need to travel, through a home working policy or a strategy for local recruitment. In addition, most organisations had introduced measures to address non-commuter journeys, such as those made by visitors or for business.

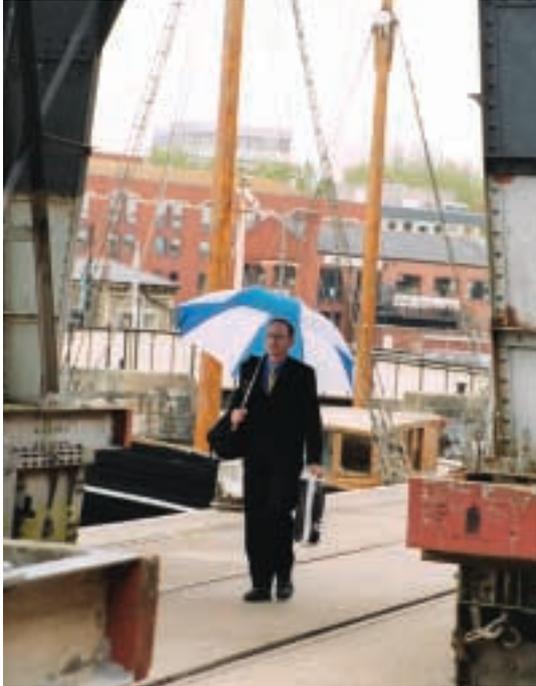
## Home working

Encouraging home working may be one of the few measures to reduce car trips where success is not directly linked to parking availability. It can also be very effective, as at Wycombe District Council, where, on a typical day, 8% of staff work at home. Many other organisations were exploring policies on home working or flexible working, but had not monitored their effect on travel or linked them to the travel plan.

Commuter trips have grown a third longer in 10 years, and there is some concern that home working will encourage people to live further from work – reducing trips, but increasing miles driven. Organisations using home working to cut travel need to monitor the effect on car commuting distance – to check they are not exchanging fewer trips for more miles.

## Local recruitment and relocation packages

A local recruitment strategy can reduce commuting distances, while making journeys more amenable to public transport, cycling or walking. In our study, Bluewater's policy of recruiting along bus routes and offering training to local people (see page 36) is likely to have contributed substantially to its success in encouraging staff to arrive by public transport. In view of the growing length of journeys to work, local recruitment could play an important role in cutting car use. An alternative approach is to provide an attractive relocation package that encourages employees to live close to the workplace.



## Visitor journeys

Many of the changes that make it easier for staff to reach the site without a car will also facilitate sustainable travel for visitors. Measures used to address visitor travel include:

- Visitor leaflets with directions for reaching the site by walking, cycling or public transport, together with training for reception staff to advise visitors on all forms of travel
- Subsidies paid towards bus services that provide access for substantial numbers of visitors – for example in a key catchment area for a hospital.

## Business travel

Measures used to reduce car use for business travel include:

- Allowances for cycling in the course of business
- Video conferencing facilities, reducing the need to travel
- A policy of encouraging staff to choose public transport where possible
- Cash benefits offered as an alternative to the company car
- Availability of a pool car for business journeys (reducing the need for company cars)
- A booking service that organises travel arrangements, providing public transport tickets on-site and making car share matches for business journeys
- Pool bikes available for travel in the course of work
- Inter-site buses.



## Likely costs

Travel plans come with different price tags. The costs involved will depend on the amount of assistance provided by other partners and the natural advantages of the work site and its location. Where bus and rail operators oblige with hefty discounts and improvements to services, and where local authorities complement your plan with bus lanes and traffic calming, the organisation will need to invest less to achieve the same reduction in car use. Organisations in town centres usually spend less on improving public transport.

The design of your travel plan will also affect its cost. Organisations that rely on financial incentives alone to coax people out of their cars spend more than those that use parking restrictions. Those that charge for parking create a revenue stream that can make the plan self-sustaining: two organisations in our study reduced their costs in this way, while four completely covered them. The existence of parking revenue can also make it possible for travel planners to finance more innovative projects – such as the walking strategy at Nottingham City Hospital or the on-site travel bureau at Addenbrooke's Hospital.

### Spend per employee

In our study, annual running costs ranged from £2 per employee (where most changes were paid for by public transport operators) through to £431 per employee (where the organisation subsidised 10 works buses and paid staff to give up their parking permits). The average annual running cost, however, was £47 per employee<sup>13</sup>. The figure compares well with the annual running cost of a parking space of £300 to £500. (In terms of capital costs, one organisation calculated that its reduction in car use had cut demand for parking by 400 spaces, equivalent to a capital financial saving of £0.8m, excluding land costs.)

In budgeting for travel plans, it makes sense to separate running costs from initial setting up costs – for example, provision of cycle storage, on-site footpaths and crossings and investment in a car sharing database.



<sup>13</sup> This is the median average. This is quoted, instead of the mean, because of the wide range in spending. Research note 3: Annual running cost per employee, on page 86, explains how this sum is calculated.

## Typical costs

Costs varied significantly between organisations in the study. The following table gives some guide to what they were spending.

### Indicative sums spent by organisations on different measures\*

Measure		Cost
<b>Bus/rail measures</b>	Private shuttle bus service (including vehicle and one year's running cost)	£70-100,000
	Annual subsidy for five commuter routes	£150,000
	Major pump priming of services across the area	£0.5-1 million
<b>Cycling</b>	10 lockers	£300-£1,000
	Two sets of shower and changing facilities	£3-8,000
	Area of lockable parking	£3-8,000
	Infrastructure of a new cycle route	£30-100,000
<b>Walking</b>	Promotion work	£500-1,000
	Significant improvements to infrastructure, such as traffic calming, pedestrian crossings, lighting and/or improved pavements.	£30-100,000
<b>Car sharing</b>	Setting up a database system	£5,000
	Guaranteed ride home and/or marking out dedicated car-share parking spaces	£50-500
<b>Travel co-ordinator</b>	Salary plus on-costs	£40,000
<b>Surveys</b>	Two staff travel surveys	£10,000
<b>Publicity and promotion</b>	Annual budget	£5-15,000
<b>Incentives to staff</b>	£500p.a. for 100 staff	£50,000

*\*Of course, actual costs depend on exactly what is being done, and local conditions. These figures provide an indication only. Your organisation may only need to make a contribution to some costs, as other partners, such as local authorities or public transport operators, may pay the majority.*

## Value for money

It is important to target spending as effectively as possible. Measures need to be evaluated in terms of their impact on the number of commuter cars travelling to the site, rather than reductions in solo driving (which will not translate directly into cost savings for parking spaces or saved time from reduced congestion on the approach to the site). Similarly, incentives for staff need to be structured to achieve the greatest commuter car use reduction.



Subsidising bus services can be very effective in reducing car use, but is often the greatest travel plan cost to the organisation (excluding parking), and needs to be carefully focused. Several organisations had successfully provided investment on a short term basis: pump priming services that later became economic. A bus pass subsidy contributed by the organisation can often be topped up with a discount from

the operator. And, as has already been shown, many organisations negotiate public transport reductions without providing any funding. At the same time, there will be situations where it is appropriate for the organisation to fund services on a long term basis to ensure that staff have an attractive alternative to driving. This cost is best viewed as an operational necessity – just as car parking costs have traditionally been seen in this way. The best way to ensure value for money is through careful planning of services to meet staff travel needs.

## Finding the funds

Most organisations setting up travel plans begin by allocating existing resources to the project. Staff time may initially be made available from existing posts – such as the environmental specialist or facilities manager. Funding may be seen as part of more general budgets, for example, for development or relocation.

Travel plan costs are usually offset by potential savings on car parking. One organisation that had been refused planning permission to build a car park, allocated the funds they had expected to spend on this to the travel plan instead. Organisations charging for parking cover some or all of their costs. Whatever the savings or revenue, over time, many organisations come to view their travel plans as an operational necessity. Nevertheless, travel plans can attract funding or support from a range of external agencies.

### Travel plan partners

As outlined on page 14, the local highway authority and public transport operators can fund many measures that will make your plan effective. Some local authorities also run travel plan grant schemes – offering funding for a range of initiatives such as marketing or cycle storage.

### Free site specific advice

The Energy Efficiency Best Practice Programme offers up to five days of free site specific advice, from an expert adviser, to help businesses and other organisations develop and implement an effective travel plan. For more information contact the Environment and Energy Helpline 0800 585 794 or visit the web site at [www.energy-efficiency.gov.uk/transport](http://www.energy-efficiency.gov.uk/transport)

### National cycling fund

A new 'Cycling Project Fund' was launched in March 2002 by the Department for Transport, Local Government and the Regions (now Department for Transport). The fund supports the growth of local provision for cycling and is open to any public or private organisation, including those in the health and education sectors, but excluding traffic authorities acting in that capacity. To be eligible, projects have to be noticeable, capable of speedy completion (ideally in no longer than six to nine months) and expected to lead to an increase in cycling. Projects also have to be able to guarantee matched funds of at least 20% for voluntary organisations, and at least 50% for others. Application forms are available from Bob Richards at DfT on 020 7944 2979 [Bob.Richards@df.t.gsi.gov.uk](mailto:Bob.Richards@df.t.gsi.gov.uk)

## Health sector funding

Because of the health benefits of encouraging walking and cycling, and reducing air pollution, there are several examples where the health sector has contributed funding to travel plan initiatives, including some run by organisations outside the health service.

- The Bristol-based 'Health on Wheels' project received revenue funding from partner NHS Trusts and Avon Health Authority for development of cycle facilities and travel plans. The project also has funding from a Primary Care Trust in Bristol for the implementation of cycle parking, mainly at GP surgeries.
- The Cambridge Travel for Work project received some funding from a consortium which included Cambridge and Huntingdon Health Authority.
- Stockport and Sandwell health authorities funded staff posts which, while focused on the promotion of walking and cycling within the local population, also contributed to the development of travel plan work within the health authority.

Since April 2002, the main responsibility for health improvement rests with Primary Care Trusts.

## Rail Passenger Partnerships

The Strategic Rail Authority's Rail Passenger Partnership scheme can provide funding for either station or service enhancements such as cycle parking, evening services or increased capacity. Funding for the programme has been extended, with £40m now being available each year for a 10 year period. Schemes should promote a shift from car to rail and integration with other kinds of transport. A bidding guide document with details of successful bids so far, a pre-qualification questionnaire and formal bid forms are provided for applicants by the SRA, on 020 7654 6000 or at [www.sra.gov.uk](http://www.sra.gov.uk).

## Rural Transport Partnerships

The aim of Rural Transport Partnerships is the enhancement of rural transport services "to secure a long term improvement in rural people's access to jobs, services and social activities, and in visitors' sustainable access to the countryside." The fund is open until the end of March 2004.



## Tax issues

There is no tax on the following green commuting benefits provided by employers:

- Works buses with nine or more passenger seats which are used to bring employees to and from work.
- General subsidies to public bus services used by employees to travel to work, provided the employees pay the same fare as other members of the public.
- Bicycles and cycling safety equipment made available for employees to get between home and work.
- Workplace parking for bicycles.

### In addition,

- Employers are able to pay their employees up to 20p per mile tax free for using their own cycles on business travel; and employees are able to claim tax relief on 20p per business mile if their employer pays less than 20p or provides no payment.
- Employers are able to pay tax free for alternative transport to get car sharing employees home in exceptional circumstances, such as a domestic emergency or working late.
- Following the April 2002 Budget, a change in the tax law means that where employees receive free/subsidised travel on buses this is not treated as a taxable benefit. This makes tax treatment of employer-subsidised travel on buses equivalent to that of employer-provided buses.



For the latest news on green travel and tax, check the Inland Revenue web site, [www.inlandrevenue.gov.uk](http://www.inlandrevenue.gov.uk).



**Further information**



## Case study summary

This table summarises the key achievements and success factors for travel plans in the research study according to the most recent monitoring work that they had completed by November 2001.

Organisation	Key achievements	Key success factors
<b>Addenbrooke's NHS Trust</b>	There has been a 14 percentage point drop in the proportion of commuting journeys being made by car, whilst 8% more staff have started taking the bus and 4% more have started cycling. 16% of staff regularly car share.	The trust has improved access to bus/rail information and undertaken a number of promotional events where discounted tickets have been offered to staff. A number of cycling measures have been implemented – including better parking and improvements to on and off-site infrastructure. Meanwhile, a daily parking charge has been introduced, and there is a shortage of parking. Car sharing has been encouraged with a central matching service, a guaranteed ride home, priority parking and promotion events.
<b>Agilent Technologies</b>	8% more staff have changed to commuting by train, and the number of 3+ car pools has roughly doubled.	Agilent has negotiated a 33% discount for train season tickets, and worked with the train operator to improve the convenience and reliability of services. People who car share in teams of three or more can choose a dedicated parking space, and a self-matching service is offered.
<b>AstraZeneca</b>	25% of staff have registered to car share (with 18% actively sharing), and bus use has increased from 2% to 7% of all staff (a tenfold increase in absolute numbers).	AstraZeneca has a state-of-the-art car share scheme in place, and held both a major launch event and a promotion event one year on, to encourage people to join. Publicity emphasises that they are only asking people to share 'some of the time'. AstraZeneca has also subsidised a number of very cheap public bus services, significantly increasing services to the site, and provides a number of shuttle services for travel to other AstraZeneca sites and to the local airport.



<b>Buckinghamshire County Council</b>	15 percentage point reduction in the proportion of staff arriving as a car driver, with 6% more staff walking and 5% more taking the bus.	Package of measures called 'TravelChoice' launched, including 50% discounts on bus fares, improved access to timetables, and imaginative marketing, including marketing of walking on health grounds. The costs of car use have been highlighted, and there is a context of parking restraint.
<b>Computer Associates</b>	9% more staff have started using the site shuttle bus. Meanwhile, for 25 days in six months, 34% have agreed to car-share, 12% have agreed to cycle and 7% have agreed to walk.	Computer Associates has provided a shuttle bus from Slough bus and train station. Meanwhile, those who sign up to use other, alternative modes (for 25 days in six months) receive £150 to start doing so, and larger incentive payments after the first 6 months. These incentives were promoted with major launch events for each mode – the car sharing launch was particularly effective, with staff being matched up live, on a large display screen in the cafeteria at lunchtime.
<b>Egg</b>	26% of staff are car sharing, and 14% are using the subsidised bus service to the city centre.	Staff are charged 75p a day to park. Car-sharers are exempt from the charge, which provides the only incentive to car share. Egg subsidises key shuttle services from the city bus station, and from the local park and ride site, which were free at the time of the monitoring. Prior to this, there were no buses stopping at the site.
<b>Government Office for the East Midlands</b>	The proportion of staff commuting by bus has increased by 6 percentage points, and 4% more staff currently walk to work.	There has been a steady programme aimed at promoting alternatives to solo car commuting. Access to the site on foot is reasonably good. There is a context of improved bus services, brought about by a proactive local authority and commuter planners' club negotiating good partnership working between the two main public transport operators. There is limited parking available on site for staff.

<b>Marks and Spencer Financial Services</b>	Train use, cycling and walking have all more than doubled, and nearly half the staff have signed up for car sharing (with 31% actively sharing at least once a week).	Car sharing is the main focus of the plan. A sophisticated central matching scheme has been introduced. Priority parking, and a guaranteed ride home are offered. Staff receive a £20 voucher for joining, approximately £100 of a motoring benefit for completing their first six months of sharing, and a £50 voucher for the following year. During the travel plan, a bus link has been provided from the local railway station. A wide variety of cycle measures have been provided. There is a Millennium cycle route near the site, but there are problems gaining access to the site itself by bike. There have been no direct measures to encourage walking, although lunchtime bus services have been provided for staff who want to go shopping, which may have reduced the need to bring a car.
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<b>Nottingham City Hospital NHS Trust</b>	9% more staff have started car sharing or arriving as a car passenger, and 7% more have been persuaded to take the bus.	During the travel plan, a number of high quality bus services have started to enter the hospital site. (Previously, there were none that did so.) There are more services generally, better on-site infrastructure and better information. There are also intra-site shuttle services. Staff are charged £55 p.a. to park, and parking is limited.
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<b>Orange (Almondsbury Park)</b>	The proportion of staff arriving as a car driver has been reduced by 12 percentage points, whilst 4% more staff arrive as car passengers, and 5% more have begun using the bus.	A self-matching service is offered for car sharing. Orange has paid for a dedicated free shuttle bus running between their two sites in North Bristol, and central Bristol.
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<b>Orange (Temple Point)</b>	After relocating staff from their North Bristol sites to new offices at Temple Point, the proportion driving to work has fallen from 79% to 27%. Meanwhile, 38% are taking buses or trains, 13% are walking and 9% are arriving by bike.	The change in location has significantly altered the travel opportunities available to staff with many public bus services stopping close to the buildings, and a nearby train station. Access for cyclists and walkers is good. There are high quality on-site facilities for cyclists. In addition, parking is limited on a needs-based allocation system, and each space is allocated to a particular person. All staff are given a substantial payment if they do not receive a solo car driver permit. Bus/rail users, cyclists and walkers can claim an interest-free loan of up to £750 for any equipment that they need to buy.
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<b>Oxford Radcliffe Hospitals NHS Trust</b>	At both the John Radcliffe (JR) Hospital and the Churchill, the proportion of staff arriving at work as a car driver has reduced by 4 percentage points. At the JR, over 1% more staff have started using the bus and 2% more staff are walking. At the Churchill, over 4% more staff have started cycling to work.	On both sites, a parking charge of £20 p.a. has been introduced, and entitlement to parking has been restricted. There have been some infrastructure improvements for pedestrians. Cycle access to both sites is good (from some directions), and new parking, changing and locker facilities have been introduced. There are more bus services that stop on the site of the JR as opposed to the Churchill. Discounts of up to 20% on fares are available, and some bus information has been provided on the intranet. A shuttle bus service now runs between the two sites.
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<b>Pfizer</b>	Single occupancy vehicle use has declined by 8 percentage points, whilst 3% more staff have begun to car-share, and the	Car sharing has been facilitated by a self-matching web site, a car sharers' breakfast, and general promotional material. Meanwhile, a shuttle bus has been introduced, which picks up from three key points in the nearest town. Pfizer has also subsidised the bus
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proportion of staff commuting by bus has approximately doubled to 12% of all staff.

operator to increase the number of public services for staff, and cheap fares are offered. Other improvements, considered to be less significant by staff, include on-site bus infrastructure improvements, and better access to information. Cash for those who leave their cars at home has been planned and advertised from the beginning of travel plan work, but was not yet offered at the time of the latest monitoring survey.

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**Plymouth  
Hospitals NHS  
Trust**

At the time of the first travel survey, 90% of staff were arriving by car. Now only 54% of staff have a parking permit. Meanwhile, over 6% of staff arriving each day are car sharing, and the proportion of staff commuting by bus has more than doubled, with 15% of FTE staff buying long-term bus passes.

Through collaboration with the bus operators (and some subsidy payments), the number of bus services serving the site has increased considerably and routes are more direct. Better on-site infrastructure and bus information have been provided. A range of discounted tickets is available, and four months of free travel was offered to those handing in their car park permit. For car sharers, a central matching service is offered, they are exempt from parking charges, there is priority parking and a guaranteed ride home. Access to parking is restricted and staff are charged 50p a day to park. Staff who have a permit to drive 3+ days a week are offered £250 to return it (although few have done so)

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**Stockley Park**

2% more staff have started commuting by bus/rail, and the proportion of staff cycling to work has doubled.

Stockley Park has provided pump-priming funds for a number of new bus services. Public transport services and on-site infrastructure are of high quality. Access to bus/rail information has been improved, and there have been marketing initiatives (including free bus tickets at Christmas). Cycle access is good and most buildings have good parking and changing facilities. Cycle training and repairs are available, there is a Bicycle Users' Group, and there have been promotion events.

<b>University of Bristol</b>	The proportion of staff driving to work has fallen from 44% to 32% (excluding car sharers). 4% more staff have started walking to work, and there have also been increases in cycling and bus/rail use. Meanwhile, 6% of staff now formally car share, and more people commute by different modes on different days.	Parking has been restricted, and parking charges have been increased – up to £3.75 per day for those on the highest salary scales, although charges are more typically around £1.50 a day. For pedestrians, the university has introduced infrastructure and lighting improvements, and carried out marketing on health grounds. Cycle access is good, and a wide variety of positive cycling measures have been put in place. The university part funds a free shuttle bus service, together with the local hospital, to the train station and has also negotiated discounts on annual public transport passes. There is a web-based self-matching service for car sharers, a guaranteed ride home and some relief from parking charges.
<b>Vodafone</b>	A reduction of 9 cars or more per 100 staff has been achieved, mostly as a result of staff starting to use buses and trains.	Over a quarter of staff have taken up incentive payments not to drive alone to work (£42.50 per month for car sharers, £85 per month for other alternatives). Meanwhile, Vodafone has provided ten high-quality dedicated bus services for staff, which pass through local towns and villages and also connect with local train stations.
<b>Wycombe District Council</b>	12 percentage point reduction in the proportion of staff arriving at work as a car driver, with 8% more staff working from home and 3% more starting cycling.	Launch of the travel plan was accompanied by a promotion where staff were asked to pledge not to drive to work one day per week, and doing so led to entry into a prize draw for a £1,500 holiday. Opportunities for home working increased, and state-of-the-art cycle parking, changing and locker facilities were introduced, helped by support for cycling from a proactive leading councillor.

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# Research notes

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The following notes provide background information about the research study on which this guide is based (see page 89).

## 1. Study findings

The number of commuter cars arriving per 100 staff was identified for each organisation at the time of the earliest and latest monitoring that had been undertaken by the organisation by November 2001 (when the research work was undertaken). The change was then calculated, and used to produce the percentage reduction in the proportion of commuter journeys being made as a car driver. For example, an organisation which started with 50 commuter cars arriving per 100 staff and finished with 40 commuter cars arriving per 100 staff would have experienced a decline of 10 commuter cars arriving per 100 staff, equivalent to a 20% reduction in the proportion of commuter journeys being made as a car driver. In this study, staff who were parking off-site were counted as bringing a car. Staff using park and ride services for commuting were not counted as bringing a car. In the majority of cases, calculations were based on results from staff travel surveys.

Where travel surveys were not used, counts of the number of cars arriving were compared to the most appropriate information available about the number of staff, eg the number of staff arriving on site on a typical day (plus homeworkers). In all cases, conservative assumptions were used when calculating changes in car driving. For example, it was sometimes not possible to calculate reductions in driving due to increased car sharing. This means that the headline figure of 14 fewer cars per 100 staff is probably an underestimate of the average change that was achieved.

## 2. Selection of case study organisations

A range of case studies, with different staff profiles, situated in different circumstances, and from different parts of the country were selected. For selection, case studies needed to have monitored travel plan effectiveness, achieved a reduction in car use, exemplify some aspects of best practice in travel planning and have experience that would be as relevant to others as possible. A particularly important issue was organisation size. The research study included three organisations with approximately 500 employees or less. Argent – a company with 20 employees – is additionally reported on page 40. Particular issues for SMEs are mentioned on page 21, although most of the general lessons that emerged from the work apply to all organisations, regardless of size.

## 3. Annual running cost per employee

In the research study, organisations were asked about all spending on the travel plan, including both initial set up costs, and annual running costs. For annual running costs, they were asked to consider all running costs that fell under the headings “Parking cash-out scheme; Car sharing measures; Bus/rail measures; Cycle measures; Walking measures; Publicity and promotion; Staff time in managing the plan; Other”. The total annual running cost was then divided by the number of full-time equivalent staff (or, where the fte figure was unavailable, the number of staff on site during core hours, which was assumed to be approximately equivalent). Note that the cost figure gives an indication of the general cost to the organisation of providing a travel plan, and is not affected by the success of the plan. Annual running costs have been quoted in preference to set-up costs, or an amalgam of the two, principally because initial set-up costs were even more variable, and partly dependent on whether new development was taking place at the work site, when larger budgets are typically made available.

# National Travel Survey data

The following information is provided to assist in benchmarking.  
For updated data visit [www.transtat.dft.gov.uk/](http://www.transtat.dft.gov.uk/)

## 1998-2000 National Travel Survey data on commuting journeys by area type and Government Office Region

	Percentage				
	Car driver	Car passenger	Public transport	Walk & cycle	Other private
<b>Urban areas 250k+ (incl Metropolitan areas &amp; London)</b>					
North East	53	17	14	15	1
NW & Merseyside	60	13	14	12	1
Yorkshire & Humberside	58	9	17	15	0
East Midlands	56	12	12	19	1
West Midlands	57	12	15	15	1
Eastern	52	12	20	16	1
Greater London	40	6	42	10	2
South East	60	8	13	16	4
South West	62	4	10	22	2
England	52	10	22	14	1
Wales	61	12	14	12	0
Scotland	47	12	27	13	1
<b>Urban areas 25-250k</b>					
North East	49	20	20	12	0
NW & Merseyside	61	10	11	17	2
Yorkshire & Humberside	54	15	8	22	0
East Midlands	62	12	5	19	2
West Midlands	61	12	5	19	4
Eastern	56	13	11	19	2
South East	62	9	12	16	1
South West	57	11	10	22	1
England	59	12	10	18	2
Wales	64	16	4	15	0
Scotland	60	11	17	11	0

	Percentage				
	Car driver	Car passenger	Public transport	Walk & cycle	Other private
<b>Urban areas 3-25k</b>					
North East	57	16	8	19	0
NW & Merseyside	66	7	3	22	2
Yorkshire & Humberside	58	12	10	19	0
East Midlands	64	10	4	22	1
West Midlands	76	10	3	12	0
Eastern	72	10	8	8	2
South East	70	11	5	12	2
South West	64	11	5	17	4
England	67	11	6	15	2
Wales	68	15	6	7	3
Scotland	56	14	12	16	2
<b>Rural areas</b>					
North East (Excluded due to unreliable sample sizes)					
NW & Merseyside	60	12	10	17	1
Yorkshire & Humberside	66	9	6	15	4
East Midlands	71	12	5	10	1
West Midlands	86	2	0	11	0
Eastern	74	14	4	7	0
South East	68	11	8	11	3
South West	65	12	2	18	3
England	68	11	5	13	2
Wales	77	10	5	6	2
Scotland	64	14	5	16	1

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## Useful publications

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This guide is based on research carried out by Transport 2000 Trust, University College London and Adrian Davis Associates for the Department for Transport between September and November 2001. The full report *Making travel plans work: Research report* together with individual case studies of all 20 organisations can be found at [www.local-transport.dft.gov.uk/travelplans/index.htm](http://www.local-transport.dft.gov.uk/travelplans/index.htm) or ordered from [dft@twoten.press.net](mailto:dft@twoten.press.net), telephone 0870 1226 236.

### Other travel plan guidance

*A travel plan resource pack for employers*, Energy Efficiency Best Practice Programme, 2000 (Due to be updated in 2002)

*Changing Journeys to Work: an employers' guide to green commuter plans*, Transport 2000, 1997, price £30

*The Healthy Transport Toolkit: a guide to reducing car trips to NHS facilities*, Transport 2000, 1998, price £20

*Tourism without Traffic: a good practice guide* (includes travel plans for leisure attractions), Transport 2000, 2001, price £20

*The benefits of green transport plans*, DETR, June 1999

*Using the planning process to secure travel plans: best practice guidance for local authorities, developers and occupiers*, DfT, July 2002

*Using the planning process to secure travel plans: Research report and Appendices to research report*, DfT, July 2002

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