

## Chapter 12

# Travel Plans

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### **Introduction**

Travel plans are unlike any of the other TDM tools described in the chapters of this book since they are a means of delivery and not a TDM instrument in themselves. This chapter therefore provides a suitable way of bringing together some of the wider considerations that need to be addressed in planning and implementing TDM measures.

The purpose of this chapter, is to introduce the concept of the travel plan as a means of delivering TDM measures. To do this, definitions are offered of what travel plans are and how they operate as a transport planning and mobility management measure predominantly in the UK context. In addition, examples of travel plans measures are described and the evolution of the travel plan since its introduction in the UK just over a decade ago is described. Finally a framework is constructed so as to help suggest how travel plans may develop in the future.

The chapter draws on existing literature and the experience of the authors to suggest that travel plans are gradually shifting from being predominantly a niche product towards being an integrated, comprehensive yet still focused tool in three senses: segment, scale and scope.

### **An Introduction to Travel Plans**

This section will review travel plan definitions, types, and measures adopted. It will also explain the benefits of travel plans to organisations, member employers, governments and the wider community and the impact of travel plans.

#### *Definition*

EEBPP (2001) defines a travel plan as being ‘a general term for a package of measures tailored to meet the needs of individual sites and aimed at promoting greener, cleaner travel choices and reducing reliance on the car. It involves the development of a set of mechanisms, initiatives and targets that together can enable an organisation to reduce the impact of travel and transport on the environment, whilst also bringing a number of other benefits to the organisation as an employer and to staff’.

This definition could be further split into two separate but interrelated terms, travel plans and travel planning. A travel plan<sup>1</sup> is therefore ‘a package of measures aimed at reducing the impacts of travel to a particular site’ (Bradshaw, 2001). From the term travel plan is derived ‘travel planning’. Travel Planning<sup>2</sup> involves ‘the development of a set of mechanisms, initiatives and targets aimed at influencing people’s behaviour by mode, cost, time, or route in such a way that alternative mobility options are presented and/or congestion is reduced’ (EEBPP, 2001; Meyer, 1999; NCTR, 2004). In other words, travel planning is the action of applying a travel plan.

### *Travel Plan Applications*

Most commonly travel plans apply to worksites and schools, and these are the areas where most research has been conducted. However, they can also be applied to other travel generators such as for events, leisure facilities and residential developments.

### *Travel Plan Measures*

According to Meyer (1999) measures of the travel plan can be grouped into three broad categories to address different transport aspects covering commute travel, business travel and fleet management. These are:

- offering travellers one or more alternative transport modes or services that result in higher per vehicle occupancy;
- providing incentives/disincentives to reduce travel or to push trips to off-peak hours, and
- accomplishing the trip purpose through non-transport means (such as substituting the use of telecommunications for work or shopping trips).

*Alternative transport modes* Often people are unaware of the public transport service available (Merseyside Travelwise, undated; Sloman, 2004). Therefore, providing generic and/or tailored public transport information can consequently raise awareness. For example, Birmingham City Council provides information boards to organisations and sends out regular mailings of public transport timetables and information to them (Cairns et al., 2004).

Car-sharing is another common measure adopted in a travel plan. It can be used for both regular commute and occasional travel (Sloman, 2004). Normally, participants register into the car-sharing database and travel matches will be identified automatically or manually. Car-sharers can benefit from closer parking spaces to the building, discounted parking fees, or guaranteed taxi ride home

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1 Travel plan is also known as ‘Commuter Trip Reduction’, ‘Employee Trip Reduction’, ‘Employee Commute Option’, ‘Transportation Management Plan’, ‘Employer-Based TDM Programme’ and ‘Site-Based Mobility Management’.

2 Similar terms to travel planning include Travel Demand Management and Mobility Management.

scheme. For example, the Halifax, now part of HBOS plc, has encouraged car-sharing at its offices in Leeds and Halifax with a matching service and designated parking bays for registered car share groups. Consequently, more than 15 percent of member employees at Lovell Park in Leeds and Copley in Halifax now actively car share (Transport, 2000; 2006).

Cycling and walking initiatives are also important tools employed in a travel plan. Organisations normally invest on small scale infrastructure/facility improvements at their worksite such as cycling lanes, pedestrian routes, lockers, shower facilities and cycle racks. In Merseyside and York, there has been a great deal of awareness-raising work relating to the health benefits of walking (Cairns et al., 2004).

*Incentives/disincentives* Travel plans can include both incentives and disincentives to make a travel plan more attractive or more effective.

Public transport pass subsidies are a useful incentive element of a travel plan. For example in Buckinghamshire, UK the County Council has negotiated a 34 percent discount with a local railway operator, and 50 percent discount with a local bus operator (Cairns et al., 2004).

Parking management comprises a range of methods covering charges for use of the car park, allocation of car park permit, parking cash out, benefits for people who do not use the car park or give up their parking permit, and preferential parking for car-sharers. An example of parking management comes from the UK Highways Agency at its Manchester office. The Highways Agency reduced the size of the car park and promised that disabled people and car-sharers would be guaranteed a parking space. This has made life easier for all staff as the car park does not fill up until 9:30am instead of the previous time of 7:00am (Sloman, 2004).

*Non-transport means* This refers to non-transport means in reducing the need to travel.

By implementing teleworking or working-at-home, and providing on-site service facilities such as cash machines, shops can reduce the need to travel. Whilst flexible working time will help member employees travel at off-peak time which may consequently reduce transport congestion. For example, after moving into a new head office, Focus Consultants in Nottingham developed a travel plan which provides facilities for home and teleworking, and supports alternative travel options in order to reduce increasing car reliance (EST, 2005).

Table 12.1 summarises a range of measures which can be adopted as part of a travel plan.

### *Summary*

In essence, a travel plan can incorporate a set of different measures namely alternative transport modes, incentives/disincentives, and non-transport means. These measures are designed to provide both 'carrots' and 'sticks' in order to promote alternative travel choices to reduce single occupancy car use. Typically, most travel plans introduced so far have consisted mostly of carrots rather than sticks and hence have not yet usually encountered significant implementation problems. On the other hand,

this has meant that their effectiveness has been correspondingly limited. Lastly, from a Government and local authority perspective travel plans are attractive because they are implemented by other organisations which to some extent shields them from the controversy normally generated from introducing TDM measures.

**Table 12.1 Tools of travel planning**

Categories	Tools
Alternative transport modes	
Public transport	<ul style="list-style-type: none"> <li>• Providing generic and tailored public transport information</li> <li>• Access to rail planner</li> <li>• Liaise with local operator for new or better services and cheaper prices</li> <li>• Pay for new services</li> </ul>
Cycling	<ul style="list-style-type: none"> <li>• Pool bikes</li> <li>• Providing better facilities, for example, changing/shower/parking</li> <li>• Encouraging cycling, for example, training for cycling, free bike maintenance</li> <li>• Bike loan scheme</li> </ul>
Walking	<ul style="list-style-type: none"> <li>• Providing better facilities, for example, lighting/walkways/crossings at site</li> <li>• Encouraging walking, for example, walking map</li> </ul>
Car-sharing	<ul style="list-style-type: none"> <li>• Priority parking spaces for car sharers</li> <li>• Guaranteed ride home scheme</li> <li>• Staff travel survey to identify potential sharers</li> </ul>
Incentives/disincentives	
Incentives	<ul style="list-style-type: none"> <li>• Incentives for walkers for example, vouchers for sports shops</li> <li>• Discount purchases of cycles and equipment</li> <li>• Providing subsidies on public transport</li> </ul>
Disincentives	<ul style="list-style-type: none"> <li>• Reducing parking supply</li> <li>• Car fleet management</li> <li>• Company car initiatives (phased out/altered)</li> </ul>
Non-transport means	
Technology/operation	<ul style="list-style-type: none"> <li>• Flexible working hours</li> <li>• Telecommuting/teleworking/teleconferencing</li> </ul>
Culture	<ul style="list-style-type: none"> <li>• Creating a car-free culture, for example, campaign/car-free day</li> </ul>

*Source:* Compiled from Rye 2001, Sloman 2004.

### *Benefits of Travel Plans*

A successful Travel Plan can bring a number of benefits to organisations, member employees and the wider community (Highways Agency, 1999; Pollution Probe, 2001; Shinkwin et al., 2001).

*Benefits to organisations* A travel plan can help organisations improve accessibility. Organisations can mitigate site traffic congestion and provide more travel choices in accessing the workplace. This will consequently lead to improved customer service and an enhanced public profile.

A travel plan can help organisations increase productivity. The improved accessibility will consequently increase productivity as member employees will spend less time looking for parking spaces for example. In addition, absenteeism and illness can be reduced.

A travel plan can also help organisations save money. A reduction in car parking requirements or office space requirements can enable the release of land or buildings for more productive uses. A reduction in off-site car parking needs can also represent a substantial reduction in overheads.

Finally, a travel plan can help organisations with the recruitment and retention of employees. Easing the journey to work for member employees will enhance an organisation's reputation. Travel plan measures can be integrated into an employment package for new staff recruitment. While reduced travel stress levels ensure more content staff, reducing turnover and the associated costs of recruiting and re-training new people.

*Benefits to member employees* Through the adoption of a travel plan, member employees can benefit from improved travel choices to and from their workplaces. In addition, flexible working hours and teleworking can be tailored to meet a range of individual staff circumstances and requirements, offering staff greater flexibility in their working day, while still meeting organisation performance targets.

The costs of commuting can be considerable. Alternative travel options such as car-sharing, cycling, walking, as well as incentives such as discounted transit passes can significantly reduce the travel costs of member employees.

A travel plan can make a journey to work easier, cheaper, quicker and safer for member employees through improved public transport, car-sharing and/or other non-motorised travel modes. As a result, stress can be relieved whilst walking and cycling also bring other health benefits.

Developing a travel plan involves communication, consultation and facilitation of flexibility and choice. Both the communication processes and the facilitation of choices can enhance the overall working environment within an organisation.

*Benefits to government and the wider community* Enoch and Rye (2006) states that 'the attractions of travel plans to Governments and local authorities are that they are reasonably quick to introduce, relatively cheap and importantly are usually politically acceptable. In short, they are an "easy win". This is in marked contrast to most other transport improvement schemes which often require high levels of investment over a long period of time and can carry a high political risk – especially in the short term as conditions frequently deteriorate while improvements are being carried out'.

Travel plans can help improve air quality with less noise, dirt and fumes, as well as reduce the impact of other national and global environmental problems such as photochemical smog and global warming (Highways Agency, 1999). In addition, the

environmental benefits of a travel plan can contribute to a ‘good neighbour’ policy towards other organisations or residents in the area. Such a plan can also form an integral part of an organisation’s environmental management programme including formal standards such as the Environmental Management and Audit Scheme (EMAS) and ISO14001 (Shinkwin et al., 2001).

EEBPP (2001) and Litman (2007a) summarise the benefits of travel plans to organisations, member employees and the wider community. These are:

- Organisations can gain increased productivity from a healthier workforce, cost savings and reduced demand for car parking, with less congestion, better corporate image, and improved worksite accessibility for member employees, visitors and deliveries;
- Employees can have greater travel choice, enjoy improved health, be less stressed, have an improved quality of life, and save money and time;
- The surrounding community will enjoy the reduced traffic congestion and crash risks, shorter journey times, and better public transport services and will appreciate less parking by non-residents in residential areas.

#### *Impacts of Travel Plans*

The aggregate impact of workplace travel plans depends on the average effectiveness of individual travel plans, and the number of workplaces adopting a travel plan (that is, the level of travel plan take-up) (Jones and Sloman, 2003). The effectiveness of individual travel plans is highly dependent on what measures are chosen, how widely they are applied and adopted, how and by whom the measures are implemented, and how they are assessed according to worksite or area’s characteristics, operational characteristics, commuters’ demographic and travel characteristics (Berman and Radow, 1997; COMSIS, 1993; COMSIS, 2002; Litman, 2007a). As a result, the evaluation of individual travel plans is always complicated as is often the case in behavioural change programmes (Taylor and Ampt, 2003).

The ‘reduction in car use’ is the most common indicator when evaluating travel plan effectiveness in the British, Dutch and American literature (Cairns et al., 2002; Cairns et al., 2004; Napier University TRI et al., 2001; Organizational Coaching and Schreffler, 1996; SDG, 2001). This indicator however, has its limitations in that it ‘gives no indication of the organisation’s original starting point or the level of car use achieved in relation to other organisations in similar circumstances’. Therefore, other factors are also used (Ferguson, 1990; Organizational Coaching and Schreffler, 1996; Ligtermoet, 1998; Pollution Probe, 2001; SDG, 2001; Cairns et al., 2002). These include:

- ‘Change in modal share’ (difference in travel behaviour);
- ‘Number of car parking spaces given up’ or ‘Car/employee ratio’; (to determine level of car dependence),
- ‘Reduction of vehicle kilometres’ (strong link to congestion and environmental impacts);
- ‘Average vehicle ridership’ (level of car occupancy);

- ‘Cost per employee’ and ‘cost per trip reduced’ (measure level of cost effectiveness).

The next section will review existing literature with respect to the impact of travel plans in terms of both average effectiveness of individual travel plans including cost effectiveness and the level of travel plan take-up. The impacts on overall commuting travel are also described.

*Effectiveness of individual travel plans* Research for the UK Department for Transport (DfT) (Cairns et al., 2004) reveals that ‘fully fledged travel plans (with parking management) typically reduce car driving by an average of 15–20 percent at individual sites’. A number of other studies revealed similar results (Cairns et al., 2002; Ligtermoet, 1998; Organizational Coaching and Schreffler, 1996; Shoup, 1997; Touwen, 1999; TCRP, 1994).

More specifically, Cairns et al. (2002) looks at a number of public and private sector organisations in the UK and finds that ‘on average, the travel plans had resulted in at least 14 fewer cars arriving per 100 staff, representing a reduction of at least 18 percent in the proportion of commuter journeys being made as a car driver’. In terms of alternative travel modes, ‘on average, the organisations had nearly doubled the proportion of staff commuting by bus, train, cycling and walking. There had also been considerable success with encouraging car-sharing’.

A US study (TCRP, 1994) looks at travel plans developed by 49 employers and found that ‘the average vehicle trip reduction was 15.3 percent’. This study also finds that travel plans providing only information did not bring any trip reduction results; those providing commute alternatives (such as van pools) had an average 8.5 percent reduction; those providing financial incentives (such as transit subsidies) achieved 16.4 percent reduction; and travel plans providing both financial incentives and services (such as van pool/car-sharing matching) realised an average 24.5 percent reduction.

A Dutch study (Ligtermoet, 1998) reviews other studies in the Netherlands together with results from 40 organisations and concludes that ‘travel plans with “basic” measures (such as car-sharing schemes) could achieve a reduction of 6–8 percent in vehicle kilometres; while those with “luxury” measures (such as works buses, public transport subsidies, and parking management) would achieve reductions in the range of 15–20 percent’. Another Dutch study (Touwen, 1999) gives a similar result.

In addition, the impacts of workplace travel plans may increase over time for several reasons (Jones and Sloman, 2003):

- More measures: the longer a travel plan goes on, the more incentives can be put in place;
- Turnover of member employees: new employees are less likely to have fixed ideas about how to get to work, and may be more receptive to options such as car-share matching or cheap public transport;
- Ideas take root: as employees see ‘early adopter’ colleagues trying new ways of getting to work the idea that they could try these too will gradually take root.

Both British and North American literature reports on the cost effectiveness of travel plans (costs of running a travel plan) and this tends to find that costs vary hugely according to the measures adopted in a travel plan.

Cairns et al. (2002) finds that gross annual running costs on individual travel plans vary from GBP£2 per full-time-equivalent employee through to GBP£431 per full-time-equivalent employee. The median average annual running cost is GBP£47 per full-time-equivalent employee which is notably cheaper than the USD\$400–USD\$2,500 (GBP£192–GBP£1,198) range quoted in Litman (2007b) as the annual cost of running a parking space.

Other studies of cost effectiveness of travel plans could be summarised as follows:

Organizational Coaching and Schreffler (1996) reports that,

the cost per employee per year of a travel plan ranged from USD\$8 to USD\$105 (GBP£4 to GBP£50), but in most studies the cost was closer to USD\$30 (GBP£14) a year. The cost per vehicle trip reduced ranged from a low of USD\$0.70 (GBP£0.34) to a high of USD\$100 (GBP£48). However, the most typical cost was closer to USD\$1.00 (GBP£0.48) per daily vehicle trip reduced and some programmes had net savings through programme revenues such as parking income.

Pollution Probe (2001) looks at 18 organisations in the US and seven organisations in Canada and finds that in North America, ‘the cost of travel plan to employers varies from USD\$0.71 (GBP£0.34) per employee to USD\$735<sup>3</sup> (GBP£352) per capita annually’.

*Level of travel plan take-up* The UK Department of Environment, Transport and the Regions (DETR) indicated in its 1998 White Paper that it aimed to secure ‘widespread voluntary take-up of travel plans’. A decade on, and the evidence remains patchy. This is because while the average effectiveness of individual travel plans has been fairly well monitored (see earlier), the level of travel plan take-up has not. This section will look at a limited number of key studies conducted on this issue. The proportion of organisations that have travel plans in place is the key indicator when evaluating the level of travel plan take-up.

From a series of UK surveys with 413 local authorities and 38 other organisations,<sup>4</sup> Bradshaw et al. (1998) reports that ‘only about 3 percent of the local authorities had implemented a travel plan for their own employees on a permanent basis and a further 4 percent had implemented one on a pilot or trial basis. Forty percent of local authorities had started the process, 30 percent had considered the idea of a travel plan but not yet taken any action and the remaining 25 percent had not considered a travel plan at all’.

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<sup>3</sup> Calvert Group (with only 170 employees and an extensive subsidy programme) spends USD\$735 per capita (Pollution Probe 2001).

<sup>4</sup> Including both public sector organisations mainly hospitals and private sector organisations.

Interestingly in the late 1990s, local authorities were slightly more involved in encouraging other organisations to develop travel plans than developing them for their own employees. However,

overall only about 6 percent of authorities had encouraged travel plans at other organisations on a permanent basis, a further 6 percent had encouraged pilot or trial travel plans at other organisations and 23 percent had started the process by contacting employers. Almost 40 percent of authorities had considered encouraging other organisations to adopt travel plans but had not taken any action and 28 percent had not even considered it (Bradshaw et al., 1998).

Rye (2002) reports that in 2000 ‘4 percent of a random sample of large (more than 100 employees) private UK employers had travel plans’.

In 2001, the DETR commissioned a larger scale study which covered 388 local authorities, 1,000 businesses employing over 100 employees, 60 hospitals and 40 higher education establishments. SDG (2001) states that ‘24 percent of local authorities have a travel plan in place of some sort. Forty five percent said they were currently developing a travel plan. Meanwhile 22 percent have considered a travel plan but have taken no action and only 8 percent have not considered a travel plan at all’. This result illustrates a significant increase of travel plan take-up by organisations at public sector, local authorities in particular, compared with the 1998 figures.

**Table 12.2 Level of travel plan take-up (1998–2006)**

Travel plans take-up	1997/1998			2001 <sup>d</sup>			2006 <sup>f</sup>	
	Local authority <sup>a</sup>		Private business <sup>c</sup>	Local authority		Private business <sup>c</sup>	Local auth.	Private business <sup>c</sup>
	Own	Others <sup>b</sup>		Own	Others			
Had travel plans on a permanent basis	3%	6%	4%	24%	47%	7%	62%	11%
Had travel plans on a pilot or trial basis	4%	6%	–					
Had started the process	40%	23%	–	45%	–	–	–	–
Had considered but no action	30%	40%	–	22%	–	4%	–	–
Not considered	25%	28%	–	8%	10%	–	–	–

*Notes:* <sup>a</sup> Based on Bradshaw et al. (1998): study included authorities in Wales and England;

<sup>b</sup> Local authorities had encouraged or started the process by contacting other organisations;

<sup>c</sup> Based on Bradshaw and Lane (1997) and Rye and MacLeod (1998): large organisations (more than 100 employees); <sup>d</sup> Based on SDG (2001); <sup>e</sup> Large organisations (more than 100 employees); <sup>f</sup> Based on the estimation of Cairns et al. (2004).

*Source:* Compiled from; Bradshaw and Lane, 1997; Bradshaw et al., 1998; Cairns et al., 2004; Rye and MacLeod, 1998; SDG, 2001.

By contrast, results from the private sector organisations gave no optimistic signs of widespread travel plan take-up. ‘Only 7 percent of businesses had a travel plan and a further 4 percent were thinking about developing a travel plan [in 2001]’ (SDG, 2001). Compared with the 1997/1998 results, there was only a 3 percent increase of travel plan adoption among private sector organisations. Similarly in the Netherlands, organisations which have been most actively adopting travel plans are those in the public sector, such as local and regional government, universities, hospitals, and organisations which are expanding and/or relocating. Private sector organisations without site-specific transport problems are less likely to be active (Rye, 1999).

The latest study for the UK Government (DfT and GORS, 2007) reports that a review based on Local Transport Plans found that workplace travel plans are mentioned in every example, but that only a minimal reference was found in a third of these. Meanwhile Cairns et al. (2004) estimates that by 2006 only 11 percent of private organisations with 100 or more employees will adopt a travel plan. Table 12.2 summarises level of travel plan take-up since 1998 to 2006.

Finally, Coleman (2000) indicates that the Small and Medium-sized Enterprises (SMEs) (of less than 100 employees) are relatively neglected when developing travel plans, with only ‘19 percent of small businesses being aware of travel plans’.

*Impacts of travel plans on overall levels of commuter traffic* Clearly, then, travel plans work effectively at individual sites. However, the low level of travel plan take-up (especially by private business) has meant that the aggregated impacts of travel plans on overall levels of commuter traffic at a national level has not been significant. DETR’s research (Cairns et al., 2004) estimates that travel plans implementation may have only reduced overall levels of car commuting by 0.4–3.3 percent. Similarly, Rye (2002) estimates that travel plans removed up to 1.143 billion km per year, which equates to only 0.74 percent of the total vehicle km travelled to work by car overall.

### *Summary*

In section 2, the definition, types, measures of a travel plan, and their benefits to organisations, member employees, the Government and the wider community have been described. The impacts of travel plans including average effectiveness of individual travel plans, level of travel plan take-up, and overall effectiveness on commuter traffic have also been reviewed.

Aiming at promoting sustainable travel choices and reducing on car use, travel plans consist of a package of different measures including both ‘carrots’ and ‘sticks’. Travel plans are attractive to Government as they are easy to introduce, relatively cheap to implement and politically acceptable. They can also bring benefits to organisations, member employees and the wider community.

The impacts of travel plans have been evaluated from two aspects, the average effectiveness of individual travel plans, and the level of travel plan take-up. At individual sites, travel plans can work effectively and in average, they can achieve a 15–20 percent car trip reduction with a good mix of measures. Despite the fact that travel plan take-up has grown rapidly in the public sector, its implementation among

private businesses is still at a low level. This has consequently affected the overall impact of travel plans on commuting travels.

Given that organisations should be the key implementers of travel plans if successful implementation is to be achieved (Coleman, 2000; Meyer, 1999), there is a need to better understand how the organisation views the whole area of staff travel and travel plans in order to find out why the level of travel plan take-up is poor, especially within the private sector.

Before detailing the barriers to a wider take-up of travel plans by private businesses, it is essential to understand why organisations implement travel plans, that is, the motivations behind them.

### *Motivations Behind Travel Plans*

Understanding organisational motivations behind travel plans is especially important because organisations are largely responsible for implementing the travel plans (Pultz, 1990). Outlined here are some of the key findings that focused on what have motivated organisations to implement travel plans.

Broadly speaking, organisations adopt travel plans either voluntarily or because they are legally required to.

*Voluntary take-up* Ferguson (2000) notes that initially travel plans were developed voluntarily in response to specific circumstances.

- *Oil crisis*: Initially, travel plans were introduced in response to the energy crisis in the 1970s (see later).
- *Employee recruitment and retention*: Many organisations have realised that 'recruitment, retention, and morale problems have been linked to commuting problems' (Pultz, 1990), and so travel plans are sometimes adopted to address these issues.
- *Transport problems*: Another key driver is to mitigate perceived transport problems such as parking shortages or congestion (Cairns et al., 2002; Cleland and Cooper, 2003; Potter et al., 2004; Rye, 1999).
- *Site relocation or expansion*: Relocation or expansion of the existing facilities also encourage organisations to consider travel plans, whether to save money (for example, parking provision is expensive) or to minimise member employee disruption and turnover (Pultz, 1990).
- *Construction works*: Some organisations have implemented travel plans to mitigate problems caused by large scale construction or maintenance work near their worksites.
- *Leading by example*: Organisations in the public sector in particular, have adopted travel plans in order to lead by example. This is partly to encourage private sector organisations to follow suit (Coleman, 2000).
- *Altruistic reasons*: Lastly, many organisations adopt travel plans for altruistic reasons, either to fulfil environmental or corporate social responsibility goals or else to improve their image locally (by reducing transport impacts such as overspill parking and congestion), or nationally (Cairns et al., 2002; Pollution Probe, 2001; Pultz, 1990).

For widespread impact, travel plans need to be adopted more by private businesses (Coleman, 2000). However, Potter et al. (1999) finds that UK organisation attitudes are not entirely positive towards travel plans although more organisations are willing to implement low-cost elements such as the provision of facilities for cyclists. Studies (see Bradshaw, 1997; Coleman, 2000; Rye and MacLeod, 1998) also reveal that organisations prefer voluntary measures but do not feel that they can work alone because they believe that local and particularly national Government have a great deal of responsibility for dealing with transport problems and it is very difficult or impossible for them to influence member employees' travel mode choice.

Consequently, Governments have begun imposing mandatory requirements in order to achieve a wider level of travel plan implementation.

### *Mandatory Requirements*

Legislation/regulation has proved to be a major external motivation in implementing travel plans (Cairns et al., 2002; Pollution Probe, 2001; Rye, 1999). In the US and Italy for example, regulations have tended to be focused on a particular type or size of existing organisation, whereas in the UK the regulations have been applied through the planning system (that is, on *proposed* organisations).

However, Pultz (1990) finds that these are not popular, and that organisations think that 'travel plans should be voluntary because organisations can not actually force employees to change their commute behaviour'. They also think that 'travel plans will require money and impose a burdensome reporting requirement without any guarantee that they will actually change commute behaviour and relieve traffic'. What is more, 'some employers think that it is Government's job to control traffic and that it should not pass its responsibilities off onto the private sector. They think that Government should shoulder some of the burden by providing other inducements for changing commute behaviour, such as a convenient transit service and HOV lanes for car-sharers'.

### *Different Motivations for Public and Private Sector*

It is interesting to see that the motivations in developing travel plans have evolved over time and they are very different in public sector organisations and private sector organisations. Table 12.3 summarises two surveys of the main reasons given to implement travel plans by the public and private sector respectively.

Table 12.3 shows that organisations in the public sector including Government Departments, local authorities and the National Health Service have a strong moral obligation to 'lead by example' and to fulfil environmental responsibility when developing travel plans. By contrast, the private sector sees little need to lead by example, or to introduce travel plans for altruistic reasons. They implement travel plans only when they have transport problems, have other internal reasons or are required to do so in comply with a legal requirement. Having said this, more recent evidence seems to indicate that this mood is changing and that the Corporate Social Responsibility and Environmental Audit agendas are now becoming far more influential in persuading organisations to at least consider travel plans (Enoch and Ison, 2007).

**Table 12.3 Most common reasons to implement travel plans**

	1998	2001
Public sector organisations	<ul style="list-style-type: none"> <li>• Congestion</li> <li>• Sustainability</li> <li>• Air quality improvements/targets</li> </ul>	<ul style="list-style-type: none"> <li>• Lead by example</li> <li>• Improve environmental image</li> <li>• Government encouragement</li> </ul>
Private sector organisations	<ul style="list-style-type: none"> <li>• To solve parking problems</li> <li>• Environmental reasons</li> <li>• To reduce congestion around worksites</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental reasons</li> <li>• Parking pressures</li> <li>• Saving money/time/fuel</li> <li>• Secure planning permission</li> </ul>

*Source:* Compiled from Bradshaw et al., 1998; SDG, 2001.

### *Summary*

Section 3 explained motivations behind travel plans. In general, organisations are either implementing travel plans voluntarily in order to fulfil their own goals, or required to do so under laws or regulations. The following section looks at the barriers to the widespread travel plan take-up, and reviews the role of the UK Government in stimulating travel plan development.

### **Barriers to Wider Travel Plan Take-up and Possible Solutions**

The UK Government encourages both public organisations and private bodies to implement travel plans. This assumes however, that these organisations are keen to introduce them. Section 3 revealed that the basis of travel plans may be undermined in that the whole process is predicated on other organisations being motivated to participate in helping to solve something that is not legally or institutionally ‘their problem’. Thus, unless these organisations have some pressing motivation, for example, they have access issues, a shortage of parking, need more space, want to save money, or enhance corporation image, they are unlikely to participate. In particular, eight key barriers are identified (Rye, 2002; Bradshaw et al., 1998; Coleman, 2000; SDG, 2001; COMSIS, 2002; Litman, 2007a), namely:

- Companies’ self interest and internal organisational barriers;
- Personal taxation and commuting;
- Lack of examples due to novelty of the concept;
- Lack of staff resource;
- Lack of financial resource;
- Lack of small and medium-sized enterprise involvement;
- Lack of public transport operator involvement; and
- Lack of regulatory requirements for travel plans.

This section will give details on each barrier to wider take up as well as tactics employed by the Government. It will then provide some suggested solutions that have been adopted.

#### *Companies' Self Interest and Internal Organisational Barriers*

As a general rule, unless there are specific operational problems most organisations will not devote resources or change existing organisational practices in developing travel plan. According to SDG (2001), 'of those private businesses who had not yet developed a travel plans, the most common reason given was that all/most staff live locally. The second most common response was that they had not heard of travel plans. This was followed by 'no interest in travel plans or not seen as a priority'.

#### *Personal Taxation and Commuting*

Historically in the UK, any organisational contributions to member employees' commuting costs have been subject to personal taxation. This has had an impact on the type of measures that are implemented in travel plans (Potter et al., 2006).

#### *Lack of Examples due to Novelty of the Concept*

When the travel plan concept was officially adopted in the UK Government's 1998 White Paper – *A New Deal for Transport: Better for Everyone* (DETR, 1998) – there were very few examples of them having worked successfully, particularly in the UK meaning that relatively few organisations had good examples to emulate (Rye, 2002).

#### *Lack of Staff Resource*

Bradshaw et al. (1998) and SDG (2001) report that 'lack of staff resource' is the most common reason preventing organisations from adopting travel plans. Put simply, suitably trained travel planners remain a rare commodity meaning that organisations are often unable to properly implement a plan.

#### *Lack of Financial Resource*

Another common reason for not developing a travel plan is the 'lack of financial resources' (Bradshaw et al., 1998; SDG, 2001; Haddock and Hyner, 2000).

#### *Lack of Small and Medium-sized Enterprise Involvement*

At the start of 2005, SMEs (0–250 employees) together accounted for 99.9 percent of UK businesses, employing 58.7 percent of the workforce (approximately 13 million people) in the UK (DTI, 2005; SBS, 2006). Collectively, SMEs have significant transport impacts, but so far little progress has been made in involving them in travel plan development, which NCBS (2006) ascribes to being because:

- The majority of SMEs are simply not aware of the advice, training and funding they can access;
- Those that are aware of the support available do not always think their organisation will be big enough for any help;
- Some SMEs said they were concerned about appearing disorganised and unprofessional to other organisations if they opened themselves up for closer scrutiny.

#### *Lack of Public Transport Operator Involvement*

Outside of London, most public transport in the UK is operated in a privatised for profit environment. Yet ‘the very areas most in need of travel plans are often not attractive places for [public transport] operators to serve’ (Rye, 2002; Rye et al., 2002). As a result, modern public transport operators are reluctant to take commercial risks and get involved in developing travel plans mainly because of the highly peaked demand and the hostile layout of bus service infrastructure (SDG, 2001). By contrast, businesses see the need for co-operation from operators if their travel plans are to be effective.

#### *Lack of Regulatory Requirements for Travel Plans*

Enoch and Potter (2003) reviews a range of solutions that have been applied to the problems discussed. Specifically, the review suggests that national and local governments can apply ‘information and exhortation’ methods (for example, lead by example at their own sites and compile good practice guides); fiscal subsidies (for example, capital grants for equipment, bursary posts or expert advice); and tax incentives (that is, ensure as far as possible that the tax system discourages car use and encourages the use of alternatives). Finally, it suggests that a further mechanism would be to legally require organisations to adopt travel plans in order to force organisations to act (and overcome the final ‘barrier’) – that is, the lack of regulatory requirements for organisations to set up and manage travel plans.

FoE (1995) summarises the thinking behind this barrier by suggesting that the voluntary approach is fundamentally ineffective because ‘the potential motivations for compliance are neither strong enough nor sufficiently widespread’. Moreover, ‘the voluntary approach has been shown to fail to stimulate innovation and to tend to lock firms into existing, often short-term, solutions’, while lacking ‘public credibility’. Interestingly though, while mandatory programmes appear more effective than voluntary ones at getting all employers or developers in an area to participate in the programme, Pultz (1990) reports that ‘contrary to the common perception, mandatory programmes are not necessarily more effective than voluntary programmes [at limiting transport impacts]’. Also revealing, is that with the significant exception of Washington State (where TDM measures form an integral component of how transport improvements are delivered) (Enoch and Potter, 2003), the US as the pioneer of this approach has shifted away from mandatory requirements to some more flexible means which give incentives to organisations. Therefore, although mandatory requirements can play a role in encouraging travel plans, particularly

where they form part of an integrated suite of TDM measures, it would seem that in general it has so far been more effective to encourage organisations to play an active role in leading travel plans implementation rather than requiring them to do so.

### *Summary*

This section has reviewed a number of barriers identified by the existing literature. These include companies' self interests, personal taxation issues, lack of examples, staff resource, financial resource, lack of SMEs and public transport operators involvement, and lack of regulatory requirements. So far, evidence in the UK demonstrates that only slow progress has been made but that things are slowly improving (Enoch and Ison, 2007), while elsewhere there are relatively few cases of effective travel plans in operation.

### **Where Next for Travel Plans?**

Despite these barriers, travel plans have somehow survived and over the last few years have begun to make an increasing impression on the formulation of transport policy and practice and on the travel behaviour of some people in the UK. This final section aims to look from mainly a UK perspective at how travel plans have evolved thus far, and then tries to predict how travel plan policy will develop in the future.

### *The Story of the Travel Plan*

Travel plans were originally developed (simultaneously and independently) as a response to the oil crises of 1973 and 1979 by electronics company 3M in St Paul, Minnesota and Conoco in Houston, Texas in the US (Martz, 2006). The travel plan concept spread first to the Netherlands and eventually arrived in the UK in the mid-1990s, where Boots and Nottinghamshire County Council in Nottingham and Derriford Hospital in Plymouth became some of the first UK organisations to develop plans. Thus, initially, travel plans were focused on large organisations at single sites and on commuting and business trips.

Since this time, travel plans in the UK can be said to have developed in three core directions – by segment, scope and scale. The following paragraphs briefly describe how this relatively niche mode of operation has subsequently expanded.

*Segment* From a segmental perspective, workplaces were the first area to develop travel plans, largely as a response to commercial pressures (as noted earlier). Then there was a gap of a few years – the creation of the School Travel Advisory Group (STAG) by Government occurred in December 1998 – before the idea of travel plans for schools was put forward (this time by local authorities) as a way of combating traffic levels during the 'school run' and improving children's health. After this, the segments where travel plans have been applied has begun to grow more quickly, and hence leisure facilities (both for day to day visitors and for one off events) (Transport, 2000; 2001), shopping centres and most recently residential areas (DfT, 2005a) are

now also served, while the idea of Quality Freight Partnerships – that focus on goods delivery and distribution issues rather than on just people – are also gaining currency with pilot schemes operational in Winchester (Hampshire) and Bristol.

*Scope* A second major trend, has been in the scope of travel plans. In particular, while the first plans were applied by the organisation themselves to mitigate existing problems, by the late 1990s a number of local planning authorities were beginning to make the link between travel plans and planning consent. Therefore, by 2001 a survey for the UK Department of Transport Local Government and the Regions found that 156 local authorities out of 388 surveyed required the developers of some proposed developments to set up a travel plan as a condition for being awarded planning permission (DTLR, 2001). However, until the changing of planning guidance in 2005 with the issuing of Planning Circular 5/05 (ODPM, 2005), such rules and regulations tended to be made on a case-by-case basis with no guarantee that an effective plan would be in place following the results of the negotiation phase. With the new guidance though, local authorities are now encouraged to develop standardised, transparent, and area-based approaches to planning decisions although so far there is little evidence as to whether this is happening or not. One exception to this is in London, where Transport for London (TfL), the capital's transport authority is currently in the process of drawing up guidance for London Boroughs that aims to ensure that some form of travel plan will need to be provided for every planning application in the capital. Once again however, there is resistance from staff in several of the London Boroughs affected who say they do not have sufficient resources to implement this guidance.

There is also evidence that the scope of travel plans is also been extended to more existing organisations. For example, all NHS facilities and all Government Department offices have been required to adopt a travel plan for a number of years, while a limited number of commercial organisations are applying similar regulations based on internal drivers typically driven by cost saving and/or by corporate responsibility agendas.

*Scale* Meanwhile a third trend that has started to emerge since the beginning of 2005 in the UK (but twenty years ago in the US) is the development of so-called local travel plan groups or networks. Such groups have come about for a number of reasons, but fundamentally these are that:

- Groups are collectively able to achieve more than single agencies or employers when dealing with common concerns (thanks to pooled resources delivering higher investment, dedicated staff, and greater political influence) and yet allows the member companies/organisations to focus more on their core competencies.
- Groups have the ability to move Transport Demand Measures (TDM) from a site-specific application to more flexible and effective area-wide application.
- Groups can improve the level of communication between the sectors and allow the level of flexibility necessary to ensure that transport objectives are met in ways that maximise the benefits for businesses, residents and commuters.

Enoch, Zhang and Morris (2005) provides an overview of the various types of groups in place as of mid-2005 and develops a basic framework to classify their structures and functions. What is particularly interesting is that some of these groups are becoming increasingly formal, while some also include not only business organisations, but residential areas and shopping facilities too – for example, at the Dyce Transportation Management Organisation in Aberdeen.

At this point it is also important to note that a slightly different form of travel planning is also now being applied at the individual level. Various known as ‘Travel Blending’, ‘Personalised Journey Planning’, ‘Travel Smart’ and ‘Individualised Marketing’, this technique involves trained personnel visiting householders or employees and discussing the travel choices available to them in a bid to persuade them to try alternatives to the car. First developed by Werner Brog at SocialData in Germany, the technique has since been tried at several locations including Perth, Western Australia; London and Edinburgh with some significant results (see DfT, 2005b for a review of these schemes).

In addition to the trends directly affecting travel plans and the transport agenda, it is also clear that such a shift towards this neighbourhood-based model of service delivery is not just confined to the transport sector – for instance policing and health care have been moving to such a devolved model for a number of years. Until now though, transport has usually been an absent voice even in such policies as the Sustainable Communities programme, run by the Department for Communities and Local Government.

*Structural* Finally, there is a fourth dimension which is rather less visible and far less linear in its development (and therefore does not appear in the following figure as a dimension). This concerns the degree to which the travel plan is integrated within the structure of an organisation. Therefore, travel plans tended to be first developed within Transport, Facilities or Estates departments and so consequently did not tend to be taken seriously within the organisation as a whole. Indeed, it is only with the support of Personnel, Corporate Social Responsibility, Environment and (especially) Finance departments that travel plans are likely to reach their true potential.

#### *Possible Future Directions for Travel Plans*

Based on the above observations, it is therefore possible to plot how these steps have occurred (see Figure 12.1). Moreover, these stepping stones actually seem to lead towards a possible future policy destination, whereby travel plans continue to develop until:

- They cover all segments.
- They apply to all proposed and existing organisations (the logical extension from covering all proposed developments as they will in London from 2007 and from them being mandatory for all NHS and Government Department buildings).
- They apply to increasingly comprehensive local networks or groups that apply across all segments on a neighbourhood basis.

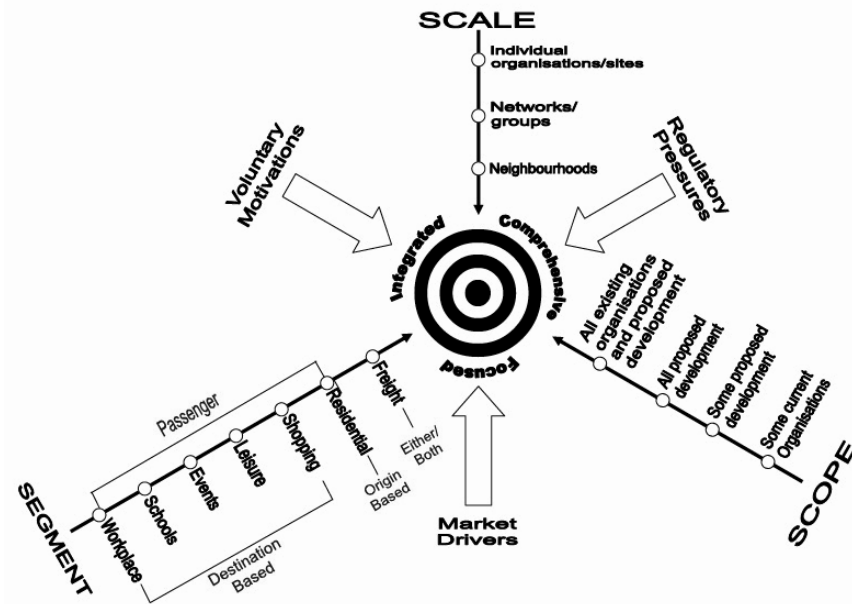


Figure 12.1 Mapping the development of travel plans in the UK

In other words, travel plans could potentially switch from being a very niche tool not just to being a mainstream mechanism of transportation demand management, but to being the primary means of delivering transport policy within a local area or neighbourhood. However, this will only happen if the UK Government dramatically changes its approach to travel plans and sees them as this delivery mechanism, rather than as the marginal tool as currently.

*Future Policy Implications*

In terms of future implications for policy, such an adjustment to this neighbourhood development approach may finally allow Government to deliver its sustainable transport policy agenda in a more joined-up and integrated way – rather than in the age-old mode by mode approach.

For instance, in London the Local Implementation Plans (LiPs) (equivalent to Local Transport Plans outside the capital) are currently made up of sections considering walking, cycling, parking and so on, and travel plans independently of each other. Instead, LiPs could seek to consider local transport issues as a whole on a neighbourhood by neighbourhood basis (involving local stakeholders perhaps from some kind of local transport network), look at the authority-wide strategic decisions, and then consider the interactions before finalising the details.

In this way, perhaps travel plans may finally realise their true potential as the default delivery system of transport demand measures at the neighbourhood level.

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