

This item was submitted to Loughborough's Institutional Repository (https://dspace.lboro.ac.uk/) by the author and is made available under the following Creative Commons Licence conditions.



#### Attribution-NonCommercial-NoDerivs 2.5

#### You are free:

• to copy, distribute, display, and perform the work

#### Under the following conditions:



Attribution. You must attribute the work in the manner specified by the author or licensor.



Noncommercial. You may not use this work for commercial purposes.



No Derivative Works. You may not alter, transform, or build upon this work.

- For any reuse or distribution, you must make clear to others the license terms of
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

This is a human-readable summary of the Legal Code (the full license).

Disclaimer 🗖

For the full text of this licence, please go to: http://creativecommons.org/licenses/by-nc-nd/2.5/

# EUROPEAN EXPERIENCE OF TRAVEL PLANS: AN EXPERT PERSPECTIVE

Lisa Davison, Marcus Enoch and Stephen Ison

Transport Studies Group, Department of Civil and Building Engineering, Loughborough University, Leicestershire LE11 3TU, UK

#### **ABSTRACT**

The current reliance on private vehicles is a major contributing factor to congestion, environmental degradation and energy use. A number of measures, most notably fuel taxes, parking policy, traffic management schemes and more recently road user charging have been implemented in a number of cities as a means of addressing the situation. At the same time 'softer' options, such as travel plans have been applied in an increasing number of cases, in a bid to resolve the issues caused by accessing workplaces, schools and other trip generators by the private car.

A travel plan comprises a package of measures tailored to the needs of individual organisations and aimed at promoting greener, cleaner travel choices and reducing reliance on the car. Unlike the traditional approach to counteract transport problems of providing more capacity, travel plans can be relatively quick, inexpensive, effective and a more acceptable option.

The aim of this paper is to determine the current situation and future direction with respect to travel plans within a European context.

In order to assess the situation in-depth face-to-face and telephone interviews were undertaken with 20 travel plan experts from Europe and the USA. Interviewees were selected based on a careful study of the literature and the authors' detailed knowledge of transport policy and travel plans.

Interviewees highlight the need for an action-based approach to ensure that travel plans have an impact, with communication being key to success. They emphasise the need for standardised monitoring and evaluation to assess the cost saving ability of travel plan adoption to organisations, and carbon reduction potential. For the future there is agreement that there will be a growing demand for mobility management measures and the implementation of travel plans and travel plan networks are expected to play an increasing role. For this to occur it is argued that there needs to be greater support from Government, local authorities and within organisations, so as to provide continuity in funding and targeted provision.

Keywords: Travel Plan, Mobility Management, European

### INTRODUCTION

Growing demand for travel and the desire to own a private vehicle exerts pressure upon the transport system which in turn presents an environmental, economic and societal problem. Government and individuals often prioritise the freedom presented by private vehicle travel, which over time has resulted in expansion of the road network, accompanied by a dispersal of activity sites, which can become increasingly difficult to effectively serve by public transport. Locally these choices result in visual intrusion, noise and air pollution, traffic, congestion with economic impacts, and inequalities in access to vehicles and therefore services and jobs. Globally, these choices depend heavily upon a finite and depleting fuel source which in turn affects energy security and contributes to climate change. Therefore an effective solution is required which depends on a change in behaviour. The traditional approach to travel has encouraged this, change has included fuel tax increases, parking policy, traffic management schemes and more recently, though a couple date back to the 1800's, road user charging. Travel plans also play an increasing role in this as a relatively quick, inexpensive, effective and a more acceptable option (Enoch and Ison, 2008).

Travel plans comprise a package of measures tailored to the needs of individual organisations aimed at encouraging more sustainable travel choices through softer measures are slowly being recognised as part of mainstream demand management. Travel plans can be applied to workplaces, schools residential areas, visitor attractions and indeed to individuals.

The adoption and development of travel plan policy has varied according to context. Ison and Rye (2003) provide examples of travel plans in the USA as early as World War 2 with Boeing in Seattle encouraging car sharing in response to fuel shortages. From the 1970s onwards regulation played a role in the introduction of travel plans in the USA, in response to air pollution, congestion or both. Regulation in the USA required employees with a large number of employees to create a plan detailing how they intended to reduce their transport impact. This demonstrated a move from bottom up to top down motivation. Objections to the use of regulation in order to solve a behavioural problem, led to a backlash which resulted in a more flexible approach in many states (Dill 1998). Despite this, travel plans are still used in the USA where fiscal incentives are the key approach in engaging employers and encouraging individuals to alter their travel choices (Enoch and Potter, 2003).

This 'softer' response has been adopted in a number of European countries following the limitations of other policy options in moderating car use in response to environmental/energy, economic and social problems. The concept transferred first to the Netherlands and then to the United Kingdom (Ison and Rye, 2003). Whilst the 1988 National Transport Structure Plan first introduced travel plans in the Netherlands the approach to travel plans has since been regenerated and is now inline with the broader environmental policy approach (see Keijzers, 2000 for discussion of the changes to the environmental approach).

In the UK travel plans were officially recognised in 'A New Deal for Transport Better for Everyone' (Department for Transport, 1998) as a policy of managing demand, where they

12th WCTR, July 11-15, 2010 – Lisbon, Portugal

formed part of a package of 'soft measures' (Cairns et al. 2004) seeking to shift transport policy. Roby (2010) suggests that the most effective way to mainstream travel plans is to bring the approach inline with motivations internal to the organisation applying them, such as the growing emphasis on corporate social responsibility and to recognise the role of travel plans in organisational change management. This change potentially facilitates efficiency gains in recruitment and retention and reduces business travel and car park costs.

Travel plans in Sweden, and Spain is currently at an earlier stage of development, further demonstrating the spread of travel plan application across Europe. Since the mid 1990s mobility management has featured in the Swedish approach to the growth in car use, first featuring in national transport policy in 2002 (Ljungberg, 2008) driven by the environment and climate related motivators and depending upon Sustainable Urban Transport Plans. To date there has been limited use of workplace travel plans, though the Smart Traveller concept which offers personalised travel plans to households or workplaces has been successful in, for example Lund. In 2003 Catalonia was the first region to implement the Spanish Mobility Law. This law underpins the introduction of travel plans; through a mobility agreement with effect at a range of spatial scales. As a result, mobility agreements have been developed in over 20 Catalan cities including Barcelona. These are designed to engage all key stakeholders in the strategic development of mobility management across a geographic area (normally a city or municipality).

The aim of this paper is to determine the current situation and future direction with respect to travel plans within a European context. It draws on experience from the European Countries of the Netherlands, the United Kingdom, Spain and Sweden, supplemented by insight from the USA. The following section describes the method of data collection and the analysis themes. The next two sections examine the current situation and future direction of travel plans respectively inline with identified themes; this is followed by the discussion and conclusions.

#### **METHODS**

The interviewees represented national, regional and local government bodies, consultancies and academics. All have extensive knowledge of the subject matter and many have been involved in travel plans for many years. Some have had involvement in travel plans since the initial introduction of these softer measures in their respective countries. Table I details the personal experience of each of the 19 European experts. One further interview with an academic in the USA provides additional insights.

Table I - Expert Interviewees

l able I – Expert Interviewees				
Country	Travel plan involvement	First	Identifier	
		involved in		
		travel plans		
		(to date		
USA	Academic	1990	Academic A	
Netherlands	Consultant	1990	Consultant A	
	Consultant	2001	Consultant B	
	Consultant	*	Consultant C	
	Consultant	1993	Consultant D	
United	National Government	2007	National Government	
Kingdom	Consultant	1999	Consultant E	
	Government Agency	2003	Government Agency A	
	Local Authority	2003	Local Authority A	
	Consultant	1999	Consultant F	
	Consultant	2000	Consultant G	
	Government Agency	1995	Government Agency B	
	Government Agency	1997	Government Agency C	
Sweden	Consultant	1992	Consultant H	
	Government Agency	*	Government Agency D	
	Local Authority	2003	Local Authority B**	
	Consultant and Academic	2000	Consultant I / Academic B	
Spain	Government Agency	2008	Government Agency E	
	Trade Union	*	Trade Union A	
	Trade Union	1993	Trade Union B	

<sup>\*</sup> Information not included in interview transcription / translation

All interviews were semi structured with the questions based on context, namely personal experience and background information, views on the performance and potential of travel plans in terms of planning and design issues, performance and future potential. This ensured commonality of information, allowing for systematic analysis of the results. The interviews were recorded and either transcribed in full, or the key concepts were translated into English, alongside illustrative verbatim quotes which are incorporated in the paper.

The interviews identified a number of issues with respect to the current performance and future direction of travel plans. These have been classified by theme, as illustrated in Table II.

<sup>\*\*</sup> Local Authorities are referred to as municipalities in Sweden, this identifier is used for consistency

Table I - Travel Plan themes

	Theme	
Current Situation	Recognition	
	Regulation	
	Negotiation	
	Communication	
	Resources	
Future Direction	Monitoring and evaluation	
	Business case	
	Local Travel Plan Networks	

These themes relate to different aspects of travel plan development. Regarding the current situation, regulation and negotiation are themes which detail the mechanisms used to implement travel plans, whereas communication and resources are investments into a travel plan and recognition is a broader theme which underpins the mechanisms and determines investment. Themes relating to the future direction of travel plans are again investment and mechanism based, with monitoring and evaluation being identified as something which requires investment and Local Travel Plan Networks as a mechanism to implement a travel plan across a number of organisations. The need for a business case is related to both recognition and the communication of travel plans, identified in the current situation.

#### **CURRENT SITUATION**

In this section travel plan recognition, regulation, negotiation, communication and resources will be reviewed as the most prominent themes recognised by those interviewed.

#### Recognition

Two elements of recognition influence the current role of travel plans, namely recognising that a problem exists and recognising the need for a change in travel behaviour as a solution. This recognition is required at a political, organisational and individual level in order to have an impact. In each of the countries involved in this study there was a recognition of both the problem of transport congestion, environmental degradation, societal impact and a travel plan solution at a political level. This was particularly clear in countries where government policy provided resources to support the implementation of travel plan measures. Interviewees presented examples of how governments have increasingly considered the impact of travel choices when making planning and development decisions:

"Previously politicians did not want to disturb companies moving into the area. They did not require organisations to submit plans which considered sustainable transport access to the site. Now the municipality prioritises

energy consumption considering building design and travel impact. As a result the Business Park will now develop in an energy efficient manner."

Local Authority B

It is this prioritisation at the political level which provides a system of support for travel plans and encourages sustainable choice through the provision of alternatives. That said, there is often flexibility in how travel plans are applied at a regional and local level. In Spain, for example, Catalonia is a 'pioneer' (Trade Union A), implementing the Mobility Law when other regions have not demonstrate strong regional recognition. This spatial variation influences the effectiveness of these systems and the willingness of organisations to engage:

"It depends on the local authority, their approach and attitude towards sustainable transport and the level of support from local councillors. Some are forward thinking, enthusiastic, keen to get them delivered, they can see the benefits, such as easing congestion, so spending less money on traffic schemes. However, some authorities, haven't bought into it, as they don't really see the true benefits"

Consultant F

"There are enormous regional variations. In areas where there is less congestion it can be difficult to get political buy-in and to persuade employers to voluntarily consider travel plans... Many of these areas are also trying to develop the local economies and travel plans can be seen to impede this"

Consultant E

The impact of this is effective application of travel plans in areas where local government and organisation each recognise the transport problem and the benefits of a travel plan solution; interviewees suggest that this occurs in areas which experience greater transport related problems. This variability in the acceptance of travel plans could be viewed in two ways: it could either undermine the policy application as a whole or it could identify the requirement of a needs based system that focuses investment where impact is greatest, This rationalisation of resources could provide benefit to areas which are in greatest need, but could be criticised as focusing investment in areas which are already relatively prosperous.

Since the nature of a travel plan is to persuade organisations to change systems and individuals to alter their behaviour it is not simply the high level policy condition which drives change at the local level. Organisations and individuals need to accept role in causing a problem and their role in facilitating change. It is recognition in this form which Interviewees express concerns about:

"The companies do not see themselves as having a role regarding travel behaviour among their employees."

Local Authority B

"The consumptive society makes people value their current situation more than their future. There is not enough awareness about sustainability."

Trade Union B

"The [UK] Department for Transport has published research with respect to people's attitudes to climate change. What it found was that we understand the need to recycle and reduce energy use, but we don't understand the need to change the transport system yet. We have acted with consideration for the environment with many things but not yet with transport."

#### Government Agency B

The present level of recognition will not sustain a widespread change in behaviour given that individuals are not willing to alter their travel choices because of the value they assign to the perceived freedom offered by private car use. Furthermore commuting, and the impact of commuting is not something which companies are willing to recognise as their responsibility. The impact of this lack of recognition is restricting the success of travel plans.

As with political recognition, organisational investment in travel plans is also problem driven and depends on recognising that a transport problem exists. If traffic congestion is impacting upon business efficiency or if transport access issues limit workforce access then a travel plan is recognised as a successful solution.

"Usually they will do it voluntarily if they have some other reason; such as a parking problem, or trying to compete for employees, we definitely saw that in the Silicon Valley area, with all the hi-tech firms, offering programmes like bus passes, or had their own bus service free for employees. For a lot of employers in more suburban areas the motivation isn't necessarily there."

Academic A

"The property owner at the site expressed interest in reducing the use of cars among the companies in the area, both for environmental reasons and to reduce the need for car parking to accommodate a greater number of tenants in the same area."

Local Authority B

"This all depends on the nature of the problem – if this is substantial, companies are willing to take effective action. If there are no problems regarding the accessibility, travel plans are often unsuccessful."

#### Consultant C

As demonstrated by the interviewees motivation for engagement and change is financial reward, such as a trained workforce being able to access the workplace or more productive space.

At present, however, existing systems can hinder recognition by masking the full impact, or indeed, the full cost of existing choices, as exemplified by one interviewee:

"In business travel they only see the cost of say the rail ticket, not the true overall cost of the business trips. It all ends up being attributed to different cost centres within the business without them realising: the taxi paid for by cash; the meal, on expenses; and so on. There is also the time use element; if instead of driving, could you have gone on the train and worked productively?"

#### Government Agency C

This demonstrates the shortcomings in organisational accounting which is limiting and the quantification of benefits delivered through a travel plan and therefore the implementation of travel plans. This resistance at the organisational level can also influence policy provision in accordance to how acceptable a policy is. Whilst there is increasing interest in travel plans per se it is this local resistance which could result in a travel plan slipping down the policy agenda:

"The government is hooked on technical change more than behavioural change interventions and things such as travel plans are extremely undervalued at the moment."

#### Consultant E

Interviewees viewed this fall in recognition as a risk to travel plan success in the future if current shortcomings are not overcome. There is concern that sensitivity in altering individual travel choice will result in travel plans being under resourced, as government, organisations and individuals do not recognise a role in overcoming the transport problem.

"The problem is nobody wants to pick up the tab for transport. But who else will? Transport is central to everything we do, but no one wants to pay for it."

Government Agency C

#### Regulation

In the USA, the traditional and ongoing response to organisations who are contributing to air pollution is top-down regulation. Hence, it was this approach that was initially applied to travel plans. Regulation as a means of introducing travel plans is often related to organisational size, as in the USA or business park size, as in Spain. In the UK travel plans are "tied to the planning process...very rare do you get voluntary requests for help with travel plans" (Consultant F). So, if an organisation or developer want to build or expand operations, then a travel plan can be a condition or obligation for the development to go ahead. It effectively provides an opportunity for engagement.

"problems are too big for local authorities to tackle on their own and because travel plans engage with people we get better solutions to these problems"

Local Authority A

One interviewee identified that in discussion with European contemporaries:

"They say that the UK is more advanced in terms of legislation; if you put in a new development you have to have a travel plan. In other countries in Europe it is not necessarily the case, it is a very loose arrangement."

Consultant F

A criticism of the regulatory approach is that without organisational recognition of wider advantages offered by a travel plan regulation produces written plans to satisfy requirements rather than producing action with real results, such as improved customer access and / or staff recruitment and retention opportunities. Without recognition of other benefits supporting and enforcing a travel plan can be resource intensive.

"The problem is not to have the companies making a travel plan but rather to implement it. In order to succeed the companies and the person in charge at the site need to understand both the effects and the potential for good results that are possible and also what is needed in order to have successful change of habits within the company."

Local Authority B

"Where done properly with commitment and following a process they have been very successful. Evidence shows that 5-50% modal shifts are possible, both here in the UK and in the USA and Holland. A big issue is quality and ensuring the plan is implemented and not 'sitting on the shelf.' Overall travel plans have not been as effective as they should have been."

Consultant E

There is also criticism of artificially imposed financial gain placed on written plans as opposed to subsidy or investment in alternatives:

"Many years ago, companies got money for developing a travel plan. This lead to much paper but not much action. This happens in a growing number of countries, which we are not happy about."

Consultant B

Though regulation still plays a role in the introduction of travel plans in most of the countries involved in this study this role regulation changed overtime. In the USA this is partially a result of applying a measure designed for processes to human behaviour, in particular individual travel choice. As a result "there was a huge backlash against the regulations, and several of them were rescinded" (Academic A). This occurred during the early 1990s, since then the approach has been less 'heavy-handed' and as identified above, travel plan implementation is now largely driven by financial system, providing fiscal benefits to organisations and employees. The country which has experienced the greatest move away from regulation to introduce travel plans is the Netherlands who now focus primarily on negotiation.

#### **Negotiation**

The nature of travel plans mean it is essential that negotiation features at all stages of travel plan development from a planning authority negotiating proposed travel plan measures with a developer, to an organisation negotiating a new bus route to cater for employees needs. However none rely quite so heavily on negotiation as in the Netherlands. The new approach relies on negotiation between the government and organisations, the focus is on achieving a 'win-win' situation and it is designed to identify and allocate resources to result in action rather than simply planning.

"Approximately 20 years ago Travel Plans were promoted and this led to a real boost in the development of them. The big problem was the implementation. As all focus was on developing travel plans, there were no triggers for companies to implement them. The awareness of problems and opportunities was too low for them to come into action. Another reason for not implementing them was that the threat of legislation disappeared. At that time most of the interest in mobility management disappeared...Now covenants are a key factor in mobility management. A signed covenant is a requirement for getting money for interesting mobility projects"

Consultant B

It is this approach that has enabled politicians and organisation to recognise the problem and provide a solution which thus far seems acceptable after the move from a regulatory approach. Written travel plans have been replaced by negotiated covenants, which are

primarily focussed on implementation and in line with a broader approach adapted from environmental law.

"Every region in the Netherlands has its covenant between business groups and the local government aimed at a 5% reduction of car traffic during peak hours. These agreements (covenants) take the shape of a win-win concept by which all sides can win."

Consultant A

Whilst so far covenants are viewed in a positive light one interviewee provides a word of caution about context when applying travel plan policy:

"This is the Dutch perspective. In Holland negotiation is extremely important, this is our culture. In Munich (Insell gesellschaft) we see the same movement and in Southern European countries a top down approach from central governments with legislation is more usual. It's important to know which strategies are possible within certain cultural/political situations."

Consultant B

Returning to the Dutch example, this specific approach counters the disjoint between political and business aspirations in piggybacking on a policy approach which organisations are already familiar with but it does raise a number of important questions. In particular, do compelling arguments exist to achieve 'buy-in' through negotiation and will this result in more or less travel plan activity? And like with regulation, is using the same mechanism for process driven outputs as effective with people dependent outputs?

Negotiation is already used to advance travel plans across a number of countries, however is this more formal, yet selective, approach the way forward, or should all organisations be expected to have travel plans?

#### Communication

Effective communication of how travel plans can resolve transport related problems is essential for success. It is this communication which contributes to recognition and in turn leads to the implementation of travel plans. Communicating travel plan benefits requires central government backing and this needs to be achieved in a clear, consistent manner in order to have an impact on processes and choice.

"The government needs to... address it as a serious issue, then communicate that to all the sectors. I myself go to lots of presentations on carbon reduction, climate change, where I think I will learn a great deal, but the one thing that never features in any of these big strategy conferences and presentations about the environment is transport."

Government Agency B

"The [UK] Department for Transport is really good with guidance but there is a great deal and many professionals are not familiar with it, so it needs to be pulled together."

Consultant E

Furthermore interviewees raised questions about how a travel plan is communicated. What are the features and benefits of a travel plan and why should organisations and individuals want to buy into the concept? At present interviewees perceive a language barrier in selling the current product as a tool to meet business needs.

"If there is a lack of realisation of the benefits of travel plans business will not look at them. So we need a robust business case."

Government Agency A

"If I was the person having to go out and sell travel plans I don't feel confident with the terminology, as I don't think it is the language that fits business, it's just something about travel plans that I struggle with."

Government Agency B

"Another barrier can be the reasoning that is used to make [organisations] do a travel plan. Especially if this reasoning is only focused on the interests of the society at large and on making elaborate plans instead of thinking and acting."

Consultant A

This highlights the fact that travel plans are not marketed in a manner which readily engages business and encourages initial buy-in. That said, this barrier can be overcome as travel plans have been implemented in each country in this study. Interviewees also highlight the role communication plays during the implementation phase. It is this communication which is used to negotiate with both internal champions and employees and external providers and supporters. Communication matters to the people directly responsible for the travel plan; individuals within an organisation and when communicating, the positive benefits of an active travel plan:

"To me a travel plan works well where a defined group of people communicate and interact well together; as soon as you've got the simple things organised; such as email addresses so they can talk together; unless you put those things in place it can get hard."

Consultant G

"[In Sweden] the organisation said no to compensating the employers when using private cars on business trips, introduced a workplace parking charge, using the income to subsidise public transport and started a car sharing service. This package was very well communicated and delivered good results."

Government Agency D

Communication also plays a role in meeting everyday mobility requirements. Interviewees identified the role of local transport information provision and site based travel plan coordinators as particularly valuable.

"We had a commuter centre with three full time staff who gave out information they needed"

Government Agency B

"We seem to be focussed on the travel side of things, when doing mobility management; not things like market choices, in Austria particularly, they're very keen on their mobility centres; I don't think we have enough of that."

Consultant F

#### Resources

Successful travel plans have received a level of resource provision, these can take a number of forms; financial, human resources and service provision. These are defined by the level of problem recognition and mechanisms used to introduce travel plans, resources can come from governmental, organisational and external sources. Direct financial support for sustainable travel options was most apparent in the USA where both government and organisations invest in sustainable travel options to support travel plans. (These funds are then used to provide human resources and service provision).

"Usually the members will pay dues and then they will provide services; bus passes, on the ground support; transportation fares; it can be far more effective than each employer working on their own..."The regional transport authority provides funding set aside for the regional travel options programme... They can also fund things that are appropriate at a regional level; such as car pool matching at sites. I think that funding is key; also doing things at a regional level."

Academic A

Financial investment occurs in a similar manner in the other countries, for example the Task Forces in the Netherlands provide human resources for covenant negotiations and organisations in the UK invest in car share facilities to assist employees. At present however

organisations joining together to fund a dedicated employee is less common outside the USA. The system in the UK has often relied on centrally funded personnel to introduce a local authority service, assuming that local authorities will then take responsibility for the role, however this was not the case.

"For the first couple of years when there was the funding for the post of travel plan co-ordinator. Then when the time came that ran out... I think the government idea was that, once embedded it would become part of the local authority remit. But that has never happened; the funding went and so did the posts."

#### Government Agency C

Interviewees stressed the need for support in the form of human resource; this was particularly the case when travel plans were obligatory. The example above emphasises the need for resource continuity in supporting the progress of a travel plan. Another valuable human resource is the travel plan champion, who is responsible for driving implementation of measures. These are the key link within a company and unless the travel plan is a formal part of the person's role, staff turnover can often result in a set back and sometimes failure of the plan:

"Other barriers can be when key personnel have moved, champions of the local networks go and then there's no one left to take it on."

Academic A

When encouraging sustainable travel choice, alternative options are a key resource for success. Connectivity through public transport service provision is largely influenced by geography:

"The success is largely based on geography, the employers that are downtown, and in anywhere that you have to pay to park, these are the places that are successful. The geography means that there is already a good infrastructure which provides cheaper travel alternatives, relative to parking...Even in suburban areas we have found that the worksites that are closer to rail etc, and have valuable options for employees, are more successful."

Academic A

"There are geographical variations. It is easier to work with Travel Plans in bigger cities with good public transport and congestion."

Consultant I / Academic B

While organisations could provide dedicated buses or subsidise public bus provision this can be an expensive option, so geographical location with ready access to public transport, or sufficient demand to support a commercial service is a valuable resource. Therefore urban planning and development control need to recognise existing resources to assist sustainable travel. Furthermore interviewees indentified the cost to individuals which influences travel choices needs as something which needs to be addressed:

"The cost of driving a car, relative to coming to work by public transport is diverging. It's getting more expensive to use public transport rather than coming to work in the car, and that is fundamentally wrong."

Consultant G

Interviewees stressed that further resources should be made available, either directly, for example continuity of funding for travel plan support personnel and subsidising alternatives to the car or indirectly through tax systems which incentivise businesses to invest:

"If you were to say to companies if you produce results; improve by 10%, then we will knock 2% off your corporation tax, for example, then I guarantee that suddenly everyone will get involved in implementing a travel plan. You need to give them a real value to work towards"

Consultant G

### **FUTURE DIRECTION**

This section details the most prominent themes on the future direction of travel plans, as determined by the interviewees. These are the monitoring and evaluation of travel plans, the business case for travel plans and the role of Local Travel Plan Networks.

### **Monitoring and Evaluation**

Monitoring and evaluation of travel plan activity is required to justify resource investment, however, current monitoring practice is identified across Europe as weak with one interviewee stating it is "patchy and piecemeal" (National Government). The future of travel plans requires a robust and consistent approach to monitoring and evaluation. A monitoring framework which allows comparison between organisations for benchmarking, is necessary to progress

"Hopefully, you would get a more consistent approach across organisations; otherwise it becomes more difficult to compare things across different sites. The key thing is consistency of data. What you're measuring might change; your outcomes that you want might be a bit different; but the actual collection of the data should be consistent."

#### Government Agency C

Yet, achieving consistency and consensus is difficult, each interviewee has examples of best practice and what they view as essential criteria. In the UK a number of interviewees highlight the recent introduction of iTrace in London as a step towards consistency in the UK. iTrace electronically records before and after data for organisations with travel plans. Interviewees from all countries were primarily supportive of the before and after approach to data collection. However other interviewees demonstrated a less conventional approach, which provides an indication of economic benefits from journey time savings:

"The UK Highways Agency has developed a methodology that calculates the journey time savings and converts saving into a monetary value using standard Department for Transport figures. This calculation shows a 13:1 Benefit Cost Ratio (BCR) for the Cambridge Science Park which is a significant saving. Other schemes showed BCRs of around 4:1"

#### Government Agency A

A number of interviewees highlighted the need to monitor satisfaction with available travel modes, though the USA experience suggest this might be difficult. Although organisations are less interested in wider benefit to society one Interviewee argues that there is also scope to quantify these in terms of the advantage provided to business, through employee access, recruitment and retention.

"It would be nice if you did have measures: such as the social impact, so you could tie it in, for example... If it's easier for the individual to get to work, then it's not so stressful for them, they're taking less time off, better employment retention rate; their health might improve if they are walking or cycling to work; you could measure how much of that is due to the individual or the travel plan. There are huge, wide, benefits that would be really interesting to have measured, but at the moment I don't see that monitoring frameworks would go for that."

Consultant F

#### **Business Case**

The need for a business case highlights the requirement for monitoring and evaluation to be target audience driven, as motivations do vary.

"The government is coming from the angle of climate change and CO<sub>2</sub> reduction very strongly; that is their big issue that they have to deal with; but that's not where businesses are coming from, they are about money, as are travel plans; and arguably I think almost the term of travel plan, it's all about business efficiency"

#### Government Agency B

The main drivers for improving monitoring and evaluation are to create this 'Business case', which:

- 1. Demonstrates cost savings with an effect on the bottom line for organisations; and
- 2. Demonstrates the ability to reduce carbon emissions, energy use and congestion, to the Government.

Essentially what is required is an improved understanding of what measures work in certain circumstances. An Interviewee from the Netherlands considered the covenant approach capable of achieving this inline with business and government requirements:

"The future is that governments and companies understand each other better: governments know better what triggers companies and what do they need in order to become active in mobility management. Companies know what (im)possibilities governments have. Within 5 years a joint perspective will be developed about the win-wins of mobility management: gains for governments; gains for companies; gains for employees."

Consultant B

The interviewees argued that for travel plans to be mainstreamed it needs to become part of a business's core activity, suggestions include incorporating travel plans into ISO14001 or cost saving activities or through organisational practices which promote life work balance and other benefits for employees, for example, flexible working.

"Organisations must see a win-win situation before they will introduce mobility management. In other words, the economic factors are important... Recently there are more and more examples where employment benefits coupled with mobility management give a higher flexibility to the employees, which reduces travel times, provides more travel options and also contributes to higher employee satisfaction."

Consultant D

This goes beyond semantics in communicating travel plans and puts demands on organisations and the policy makers when introducing, supporting and enforcing travel plans.

#### **Local Travel Plan Networks**

Interviewees identified the potential for businesses to gain from working together in developing a collective travel plan to provide the greatest shared benefit. The importance of this for future travel plans is evident from the region based approach of the Netherlands, the existence of TMAs in the USA, plus in Spain initial efforts in mobility planning focussed on an area rather than individual traffic generators:

"In the US we have something called TMA's; Transportation Management Associations. Usually one will be formed in a small geographic area to try and get several employers together to implement these programmes".

Academic A

"Currently activities are being undertaken at the municipal level and in big agglomerations: industrial estates, enterprise areas, university centres... These networks hence are focused on sites of high activity, both socially and economically."

Government Agency E

The motivation for this collective action is that it provides economies of scale for the introduction of measures and gives individual organisations increased influence locally.

"Local travel plans are always better then conventional travel plans, since they involve more employees."

Consultant C

"It can be useful to work as a collective lobby to a local council to make a business case; for a re-direction of a bus route; or a new bus stop or two. Individual businesses would struggle to achieve that by themselves."

Government Agency C

Geography and communication are identified as the underlying conditions determining LTPN resource provision and success. There is broad agreement across those interviewed that LTPNs are suited to areas where there is a large number of organisations, ideally with a pre-existing transport infrastructure supporting choice. Central business districts or business parks with restricted access points are identified as optimal, in that space is at a premium and organisations are likely to experience shared problems and would thereby be looking for shared solutions. An existing relationship between companies and strong communication also determine effectiveness in collective response to traffic-related problems, though interviewees recognised challenges in getting coordination between organisations company culture and objectives do differ. Furthermore like travel plans the most effective LTPNs are also problem driven.

"By using the existing network and communication channels of the property owner the LTPN runs more efficiently. By working in a geographical area there are possibilities to find common solutions that serve many and have potential to attract enough demand to get a critical mass in order to make the service economically sound. Such as, for pool bikes or car sharing services and web-meeting facilities"

Local Authority B

"LTPNs are harder to co-ordinate than ordinary travel plans. Getting a group together is relatively easy but getting participation and achieving company buy-in is more difficult. It is important to establish a workable structure and partnership agreement that gives everyone something of what they want. If this can be achieved then companies are much more likely to contribute resources and energy."

Government Agency A

"As far as I understand LTPNs can be of use in business areas with a strong internal organisation who are dealing with major mobility or accessibility issues. If one of these circumstances is absent it is doubtful that LTPNs can survive without external support."

Consultant A

Interviewee perspectives on whether LTPNs could entirely replace travel plans varied according to country context with experts from the Netherlands being more open to this approach and experts from the UK less so. This reflects the differing approaches that exist. The majority of experts however did agree that travel plans would be most appropriate in geographically isolated organisations as the use of LTPNs expand to involve areas where organisations are concentrated.

There was some debate as to whether large organisations or small organisations would benefit most from a LTPN, arguments that large employers have a greater number of employees to benefit, whilst, smaller employees cannot justify the resources nor exert sufficient influence on service provision to benefit from an individual travel plan.

"We set up an 80:20 rule; with about 350 organisations we didn't want to have to be in contact with all of them; so we thought let's look at the staff who work for the top twenty organisations; that's at least 80% of the staff."

Consultant B

"When working with smaller companies the format with a group or network has an advantage for the smaller companies because it takes fewer resources from each company."

National Government

There was also some debate about the scope of LTPNs, with some interviewees arguing that a large area equalled greater economies of scale where others argued that unless they were maintained at a local level getting agreement between partners and providing services to meet needs would be unmanageable.

"I just think that if we're not too careful that they will get out of hand, huge, you will end up perhaps having a TPN for London. What would be the point of that? There'd be so many people working on it, but would anything actually be achieved?"

Consultant F

"Larger scale corridor networks are being formed, to generate economies of scale provide much more potential for much greater levels of benefit - to get business engagement up a notch or two."

Government Agency A

#### DISCUSSION AND CONCLUSIONS

The expert interviews were an effective means of assessing the current situation and future direction of travel plan application, providing examples across a number of European countries and the USA.

The interviewees demonstrated that travel plans do have a role in overcoming transport related problems as a flexible tool which can, for example, consider environmental degradation through modal shift; economic restriction through effective use of transport networks to reduce congestion; and societal disharmony through improved access to workplaces and services. This is a role which has been recognised by policy makers, either at a national or regional level. Even when there is recognition at a national level, policy application varies according to region, in part driven by the devolved nature of policy development but most importantly the scale and impact of transport related problems either regionally or within local hotspots. It is where the problem is most pronounced that business and individuals are most likely to recognise their role in achieving a solution through process and behavioural change. This change is most achievable in central business districts where land value is at a premium which in turn increases parking costs and congestion and also facilitates a critical mass for effective public transport provision. This ability to change behaviour also has potential in peripheral areas which are well served by public transport, or where organisations are compelled to provide or subsidise transport for employees without access to a car. Therefore in areas which are not well served by alternatives and / or do not have a significant problem with congestion, access or environmental impact, organisations are less willing to engage with travel plan implementation.

Policy which underpins the introduction of travel plans is often regulatory. Regulating behaviour through such systems can have unintended and undesirable consequences, which has resulted in the full benefits of travel plans not being achieved by organisations, employees and society at large. For example, where the motivation is limited to regulation, completing a travel plan can become a 'tick box' activity and create paperwork rather than effective action. A result of this is a reduction in recognition from policy makers given the limited effects, or in response to a 'backlash' from the electorate. Often the more successful

travel plans occur when there are acute problems or when employers or employees receive a financial reward or incentives. This change is evident in the USA where the role of financial incentives and assistance grew as the role of regulation was scaled back.

The adaptation in the Netherlands took advantage of an existing system that involves negotiation, which had developed to reduce organisational environmental impact. When applied to travel plans this has resulted in the development of signed covenants rather than travel plans, these covenants set out what the government and organisations are going to invest in reducing the impact of the journey to work on the surrounding network and therefore the sustainability of the transport system as a whole. Unlike the negotiations related to a planning application in the UK, the organisations entering into the agreement do so on a voluntary basis. In many ways the covenant approach mirrors the reason for travel plans initially being introduced under a regulation: in the USA regulation was applied to point-source emissions to reduce output to ecosystems. However, negotiation is more people focussed than regulation so there could be greater potential for this approach, this was certainly the argument put forward by experts from the Netherlands.

A further point made by the interviewees, in one case explicitly, is the importance of country context when selecting the system which underpins the introduction of travel plans. For example, if there is a culture of negotiation then covenants can have an effect, if the policy system as a whole relies on top down direction then this approach may not be as effective.

The key role of both communication and resources were highlighted through the interviews. Interviewees made three clear points about communication: it needs to be from the top down and consistent, to have an impact; the language used needs to be appropriate to business; and, it is essential during the implementation phase of a travel plan. A lack of communication at any of these stages can in turn influence the recognition of a travel plan and how it can meet the needs of business and individuals. Failure in achieving this will lead to resistance, a do minimum approach and a lack of action which in turn leads to policy failure. The resources valued most by interviewees were of the human kind, such a person focussed policy requires people to communicate, support and if necessary enforce travel plans. In achieving a change in behaviour service provision is vital and this relies heavily upon geography or organisational will and an ability to provide alternatives through for example car sharing, van pooling or bus subsidisation. In countries where financial incentives exist to support flexible transport options this is more achievable.

In summary, interviewees identified a current role for travel plans but highlighted shortcomings in achieving wide scale organisational recognition of a problem and a travel plan solutions. Achieving this organisational recognition is essential to the adoption of travel plans given their role in resolving transport related problems, through encouraging sustainable site access and working practices. Regulation was seen as a way of engaging organisation in the process and in some cases this had a significantly positive effect. However when other motivations do not exist for the organisations to implement measures there is the risk that written a travel plans remains just that and does not result in action. Responses to this include the use of fiscal incentives and bringing policy inline with an

already accepted, business focussed mode of operation, for example the covenant system in the Netherlands which formalises the negotiation process. Whatever approach is used these need to be communicated consistently in an appropriate manner and adequately resourced.

The future of travel plans relies on consistent monitoring and evaluation of activity, an area which at present is under-resourced. However disagreement exists even between the 20 experts interviewed as to how to achieve this. This extends to the form of data collection and the reporting of results. An initial step therefore is to identify and agree a system which allows for benchmarking between organisations, so similar data collection methods and similar reporting of indicators so as to demonstrate outputs and outcomes.

Interviewees identify a need for a clear business case for travel plans, the role of this is two-fold, so businesses can recognise the financial incentive provided through a travel plan and respond by implementing measures and to demonstrate to government that travel plans are a justified and worthwhile investment, thereby providing resources to support the action-based implementation and continued monitoring and evaluation of travel plans. A number of interviewees argue that this business case also requires travel plans to evolve into a system which is more business and employee focussed, for example through direct inclusion in environmental management systems such as ISO14001 or in an organisation's commitment to employee wellbeing through flexible working. In effect, turning a travel plan, into something which an organisation does by default rather than an added responsibility for an impact which is outside an organisation's core competencies.

One way in which the benefits of travel plans can be extended and measures implemented in a cost effective manner is through the expansion of Local Travel Plan Networks (LTPNs), whereby a number of organisations work together to implement travel plan measures. Interviewees believed this concept would play a growing role in travel plan implementation and in some countries this spatial approach is already enforced by policy, in others there is increasing recognition of LTPNs. Challenges are similar to those of organisational travel plans, for example if the organisations do not perceive a problem then introducing a LTPN is difficult. Additional challenges include the bringing together of organisational cultures and objectives and it is here where effective communication is even more important than for single organisational travel plans. However the advantages provided from the increased financial and lobbying power were seen as surpassing these challenges so as to result in a positive travel plan impact.

In summary, the future direction needs to highlight to businesses what can be achieved through travel plans and appease government by demonstrating the impact of travel plans. This requires an effective monitoring and evaluation system, which allows for benchmarking. The adaptable nature is what has assisted in keeping travel plans alive across a range of countries, in a number of guises. The future form of travel plans needs to take advantage of this and the system needs to adapt to business practices, rather than business practices adapting to suit policy objectives. It is this that will sustain travel plans. An option which is open to organisations and presents a number of advantages is LTPNs, through collective use of resources to create further benefits to organisations.

This paper demonstrates that travel plans are an adaptable policy application which can be underpinned by a number of policy approaches and is therefore suited to a range of countries, to be adopted inline with the governmental and cultural approach to transport mode and travel. At present it is a successful policy option where travel-related problems are sufficient for a travel plan to be self enforcing. This has resulted in spatial differences in how travel plans are applied. Herein lies the argument that travel plans should focus on areas where there is the greatest demand for change, this is one option where travel plans can continue in their current form. However, with adaptation there could be further potential for a travel plan approach. This potential relies on a proven track record in meeting business needs and achieving policy objectives, two requirements which can be at cross purposes. Monitoring and evaluation and increasing the ease in implementing travel plans for organisation each play a role in this. The preferred ways to make it easier for business is by making travel plans a core business activity, to provide benefits to the bottom line and by encouraging organisations within a defined area to join an LTPN. Through these channels hopefully governments, organisations and individuals can 'pick up the tab' for transport.

### **ACKNOWLEDGEMENTS**

The authors would like to acknowledge Intelligent Energy Europe the funders of TRAVEL PLAN PLUS. They are very grateful to each of the anonymous interviewees and Hans, Zuiver (NL), Mark Webb (UK), Nicholas Hort (SW) and Daniel Satue (ES) in their role as interviewers.

#### REFERENCES

- Cairns, S, L. Sloman, C. Newson, J. Anable, A, Kirkbride and P. Goodwin (2004) Smarter Choices Changing the Way We Travel (available <a href="http://www.dft.gov.uk/pgr/sustainable/smarterchoices/ctwwt/">http://www.dft.gov.uk/pgr/sustainable/smarterchoices/ctwwt/</a> accessed 13<sup>th</sup> April 2010
- Department for Transport (1998) A New Deal for Transport: Better for Everyone HMSO: London
- Dill, J (1998) Mandatory Employer-Based Trip Reduction: What Happened? Transportation Research Record, 1618, 103-110
- Enoch, M. P. and S. Ison (2008), Expert Perspectives on the Past, Present and Future of Travel Plans in the UK, Research Report to the Department for Transport and the National Business Travel Network (available

  <a href="http://www.nbtn.org.uk/downloads/Expert%20Perspectives%20on%20Travel%20Plans.pdf">http://www.nbtn.org.uk/downloads/Expert%20Perspectives%20on%20Travel%20Plans.pdf</a> accessed 25<sup>th</sup> May 2010)
- Enoch, M. P. and S. Potter (2003) Encouraging the commercial sector to help employees to change their travel behaviour, Transport Policy., 10: 51-58
- Ison, S. G. and T Rye (2003) Lessons from travel planning and road user charging for policy-making: through imperfection to implementation Transport Policy., 10, 223-233
- Keijzers, G. (2000) The evolution of Dutch environmental policy: the changing ecological arena from 1970–2000 and beyond Journal of Cleaner Production 8: 179–200

- Ljungberg, C. (2008) State of the Art Paper on Mobility Management in Sweden (available <a href="http://www.epomm.org/docs/State\_of\_the\_Art\_MM\_2008\_Sweden.pdf">http://www.epomm.org/docs/State\_of\_the\_Art\_MM\_2008\_Sweden.pdf</a> accessed 13th April 2010)
- Roby, H. (2010) Workplace travel plans: past, present and future, Journal of Transport Geography 18, 23-30