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Local Travel Plan Networks: A Literature Review

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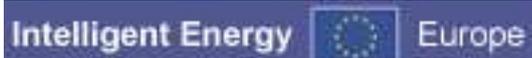
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ABSTRACT

The aim of this Literature Review is to provide an up to date review of the development of Local Travel Plan Networks for practitioners. This will be based on a review of existing academic, professional and government literature. It is designed to be read together with a second review that will report findings from a series of expert interviews to determine the most recent developments in the sector.

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1. Executive Summary

The aim of this Literature Review is to provide an up to date review of the development of Local Travel Plan Networks for practitioners. This will be based on a review of existing academic, professional and government literature. It is designed to be read together with a second review that will report findings from a series of expert interviews to determine the most recent developments in the sector.

Within this, five types of LTPN were identified: Neighbourhood Transport Forums, Area Travel Plans, Business Improvement Districts, Transportation Management Associations and Local Transportation Districts. These range from informal, loosely defined networks drawing on minimal resources to more formal and legally defined organisations with access to a series of possible promotional, regulatory and fiscal tools. They can be either transport-focused or more generally aligned.

LTPN design is heavily influenced by a number of contextual factors. These include: the primary actors, the motivations for group formation, the perceived scope and scale of the problem and the organisational environments, along with geographic, political, and institutional factors.

In terms of performance, there appears to be a direct correlation between the type of LTPN (and the corresponding level of resources available) and the contribution the network can make to reducing transport externalities. There is also an underlying story that LTPNs have not yet realised their full potential either at the individual local network level nor at the wider community transport system level. Even if this were not the case however, it would be difficult to say for sure due to the lack of robust data available on the performance of LTPNs thus far. In particular, while there are examples of LTPNs in Europe (particularly in the Netherlands and in the UK), and while previous European projects have touched on LTPNs, there remains a dearth of literature on the effectiveness of LTPNs from the world outside the United States.



2. Introduction

This section provides a brief summary of the TRAVEL PLAN PLUS project's overall objectives and those of the task that produced this deliverable. The structure of the rest of this document is then presented.

2.1 TRAVEL PLAN PLUS Project Objectives

TRAVEL PLAN PLUS stands for Travel Reduction Attainment Via Energy-efficient Localities PLANning. The project aims to establish travel plan networks at four EU sites to deliver energy savings.

The specific objectives of the proposed TRAVEL PLAN PLUS project are to:

- Promote energy efficiency through the use of Local Travel Plan Networks (LTPNs) across the EU.
- Develop a framework to aid and promote the implementation and dissemination of LTPNs in a systematic way.
- Implement four LTPNs in representative locations across the EU.
- Monitor and evaluate these LTPNs to determine both their impacts on transport behaviour and energy reduction and the barriers to implementation in a range of contextual circumstances.
- Provide recommendations for developing an effective policy framework to encourage and support the widespread adoption of LTPNs across the EU.
- Raise awareness across Europe of the significant energy efficiencies available through the implementation of LTPNs.

The TRAVEL PLAN PLUS project will be undertaken by six partners concerned with energy efficiency and with expertise in mobility management, united by a vision that LTPNs can be delivered to achieve reductions in transport energy use.

The project comprises partners from Hungary, the Netherlands, Spain, Sweden and the UK involved in the development of specific LTPNs. LTPNs, introduced on an area wide basis, involve a set of mechanisms, initiatives and targets, aimed at effectively influencing travel behaviour and thereby energy efficiency.

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2.2 Report Objectives and Methods Used

This deliverable reports on activities undertaken in Task 2.1. The specific objective of this task was to collate and review existing material related to the development, design, performance and future of LTPNs in various contextual situations.

The information used for this stage of the report was gathered through a review of existing literature.

The information from this report and a second review based on primary interviews with LTPN practitioners and wider mobility management experts will be added to that from D2.2 (which seeks to develop a theoretical framework based on ‘Policy Transfer’) to help inform a draft implementation guide (D2.3). This in turn will be built upon later in WP6 to form a full implementation guide, which will be of practical value for LTPN implementation sites in the future.

2.3 Structure of this Report

Section 3 will review the existing literature on LTPNs and present conclusions.

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3. Local Travel Plan Networks: Existing Literature

3.1 Benefits of Local Travel Plan Networks

There is a significant potential for travel plans to be an effective transport planning tool, but this is not yet being realised because most organisations simply fail to understand that the possible benefits can outweigh the costs of introducing them (Enoch and Zhang, 2008). Local Travel Plan Networks can provide a mechanism for highlighting the opportunities afforded by travel plans and minimising the difficulties of implementing them for organisations, while maximising the transport and wider benefits that such involvement brings to the organisation and the community as a whole. Bluntly, local travel plan networks can offer:

- Economies of scale – i.e. networks 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 companies/organisations to focus more on their core competencies.
- Greater flexibility and effectiveness – i.e. networks have the ability to move Transport Demand Measures (TDM) from a site-specific application to more flexible and effective area-wide application – the nature of transportation and environmental issues is that each employer or agency has the potential to impact upon others – and allow each member to become part of the solution.
- A more strategic and focused approach – i.e. networks 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.

Historically, such benefits helped lead to several local travel plan networks of various forms being set up in North America from the 1980s, before the idea crossed the Atlantic to the Netherlands and most recently the UK. Unsurprisingly then, the majority of the literature reported here derives from these three areas. The next section provides a generic definition of what can be meant by a Local Travel Plan Network.

3.2 Defining the Local Travel Plan Network

Energy Efficiency Best Practice Programme (2001) provides a generic definition that "travel plan networks are groups of organisations working together to manage and reduce their car use. Travel plan networks are run by: local authorities, chambers of commerce, companies, groups of companies and others whose activities generate large volumes of travel" (pp.3). An alternative definition is provided by Enoch et al (2007b) which states that Local Travel Plan Networks are "a group [or network] of organisations that have come together to share resources and ideas for developing and implementing a travel plan in their local area" (pp.5).

Five types of LTPN can be identified from the literature, namely:

- Neighbourhood Transport Forums;



- Area Travel Plans;
- Business Improvement Districts;
- Transport Management Associations; and
- Local Transportation Districts.

These will now be described in turn.

3.3 Neighbourhood Transport Forums

Enoch et al (2007a) describes Area Based Groups [Neighbourhood Transport Forums (NTFs)] as being informal networks of organisations that operate travel plans located within a loosely defined neighbourhood. Such Forums exist where two or more organisations feel combining resources will be a more effective way to deal with transport issues and are generally formed either by local authorities 'suggesting' groups or by one leading organisation taking the lead in helping to address a specific transport issue.

In general NTFs, are multi-member networks and relationships are informal. They also tend to be facilitated by local councils. Full participation is usual and the networks are formed primarily for transport reasons. In the UK the best known level examples are found in Nottingham and Bristol.

Design features

Neighbourhood Transport Forums are the simplest form of LTPN, consisting of informal gatherings of organisations and usually acting primarily as a venue for information exchange which can sometimes lead to measures such as car sharing schemes being adopted (TransportMK, 2009).

Funding is usually minimal. Local authorities and/or larger organisations within the Forum usually support the events through help with administration, links to other agencies, publicity and venues, while smaller organisations can contribute with publicity or expertise for example.

Implementation issues

NTFs are vulnerable for several reasons.

- If transport problems become relatively less important then NTFs become less relevant;
- Their informal nature means they are heavily dependent upon motivated individuals, and should these move on for any reason then the network is potentially in danger as a result;
- They are often not highly resourced and so may be seen as being ineffective at delivering meaningful improvements.

Performance

No data was found on the effectiveness of NTFs in terms of mobility management. However, given the low level of resources generally involved it is assumed that impact is correspondingly low.



Future

In many ways, NTFs help form the first step for organisations with an interest in addressing transport issues. They are thus likely to remain as currently – vehicles for sharing information and coalition building.

3.4 Area Travel Plans

Development Zones are local areas developed for a specific use, such as business parks, retail parks, industrial estates, leisure parks and even airports. The overall area is usually owned (or at least managed) by a single private or public sector body that 'hosts' a number of 'tenant' organisations that are located there. Area Travel Plans (ATPs) are local networks that typically form in Development Zone-type environments. The motivation for Area Travel Plans being developed are largely similar to those facing the larger individual organisations that set up travel plans. With or without local authorities support, the site owner or manager (sometimes a tenant) provides travel plan coordinator(s) who establish, manage and monitor travel plans by using contributions, levy or rental fees from the tenants.

Generally, ATP networks consist of multiple members. The relationships are hierarchical and formal, participation is limited, and the transport element is usually one of several dealt with.

Design features

Area Travel Plans fundamentally tend to operate as travel plans do at large single organisation sites such as large hospitals, universities and large company campuses – the main difference being that several organisations are involved instead of only one. Organisationally, this can make things more complicated, particularly over issues to do with resourcing the travel plan. However, there are also cases where this is less of a problem because of the existence of a site management company.

As with large-scale travel plans at single organisations, instruments used range from awareness raising 'informational' measures to the provision of alternatives to the car (e.g. car sharing schemes, improved walking and cycling infrastructure, incentives for using public transport) to measures actively restricting access to the car (e.g. parking management). For instance, Goudse Port Business Park in the Netherlands established an Area Travel Plan due to being involved in European Union project OPTIMUM2. This resulted in a mobility centre, shuttle bus service, mobility card for users, improved cycling facilities and a centralised parking management system being set up (Bossaert and Walvius, 2007).

Significant funding sources tend to include start-up funds from national and/or local government sources, sometimes coupled with developer monies ('captured' through some form of planning agreement) and/or less often contributions from the landlord and tenant. Such support can be in terms of cash, but is also often offered in-kind – perhaps as an employee and office space dedicated to managing the travel plan, as help with marketing and publicity, or with travel plan expertise. Finance generally of ATPs seems to be offered on rather an ad hoc basis and not as a steady stream.

Implementation issues



The key implementation issue for ATPs concerns 'ownership' of the concept by the members within the network. This is because without ownership by the members there is no commitment which in turn means no participation and then no resources. In other words, the temptation for organisations to 'free ride' – i.e. to take advantage of the benefits without contributing to the costs somehow needs to be considered.

Performance

In a review of the effectiveness of ten voluntary Area Travel Plans in the UK for the Highways Agency, Parsons Brinckerhoff (2008) reports that the average spend by the Highways Agency on each ATP was £60,000, not including monitoring costs (£5-£16,000 per site) or implementation costs. Interestingly, in terms of performance, no data was presented for two sites. Of the rest, only one site met its target for reducing car use, while at one site the trend was positive, one site missed the target and four sites exhibited negative trends. Results for car sharing, public transport use and cycling were similarly poor, although results for walking were slightly better. No numerical measures of transport behavioural change are provided in the report.

Meanwhile the de Maas office complex in Rotterdam was one of seven office complexes included in a national test project of 'area-oriented approaches' (ATPs) in the Netherlands in the early 1990s (Bakker, 2001). Measures introduced included the promotion of car pooling and staff buses; the implementation of strict parking control for individual car commuters; the use of personalised journey planning techniques; and the establishment of a full time transport office. In 1992, the project resulted in car travel to and from the office building falling from 49% to 39% (including car pooling) – amounting to a reduction of 1.3 million car kilometres annually, or a daily reduction of 80-90 cars on the road. Other findings were that even if larger numbers of employees participate in the plan, e.g. through joint systems with other institutions or neighbouring businesses, some 10-20% of the costs will still have to be subsidised. In addition, strict parking control is necessary both on and off site and the planning, implementation, and management of transport works best when supervised by a full time transport manager in the company or office.

In general though, monitoring results from ATPs remain relatively scarce and rather mixed.

Future

ATPs are still in their infancy but are beginning to mature. Unsurprisingly the critical issue revolves around 'ownership' and especially its link to funding. One way of achieving a more stable funding stream is to progress to being a TMA.

Parsons Brinckerhoff (2008) offers a series of lessons as to the future of ATPs. In particular, it suggests:

- Sites should be selected for reasons that will enable the promoter to meet its strategic objectives.
- At large sites it may prove more effective to divide the site into small, manageable areas, rather than attempting to develop a travel plan for the entire site from the outset.



- From the outset, all stakeholders in the development of the ATP should reconcile their motivations and agree a common approach. This can lead to mutually beneficial outcomes.
- Reconciling objectives with realistic targets will improve a travel plan's robustness.
- Through working with a sole employer, stakeholder funding can more easily be sourced and funding arrangements can be simpler.
- The focussing of travel planning efforts on small areas of larger employment sites to disseminate sustainable travel practices is worth further exploration.
- Each stage of the ATP development process should be documented, including scoping studies and the reasons why the site was selected.
- The approach to recording baseline and future monitoring data should be consistent to ensure that data sets are comparable.
- Travel plans are not only about promoting and incentivising the use of sustainable modes; they can include disincentives such as parking management.
- Working closely with public transport operators may enable arranging for discounted tickets to be offered to staff of businesses in the local area.
- Reasonable degree of mode shift can be achieved through promoting existing facilities and benefits of alternative modes.
- Voluntary travel plans should aim to maximise the potential of existing provision for sustainable transport.
- A car-sharing scheme can be successful in reducing SOV use if it is well promoted.
- A Continuation Strategy should be developed early on the process of the development of the ATP, with a plan for the handover of leadership.

3.5 Business Improvement Districts

“Business Improvement Districts (BIDs) are self assessment districts formed by property or business owners” (Morcol and Zimmermann, 2006a, pp.6). Most BIDs are self-taxing districts that are enabled by state legislation and legally established by municipal governments.

BIDs operate in a range of different legal frameworks across the USA and beyond and are also known by various other names including downtown improvement districts, neighbourhood improvement districts, community improvement districts, community benefit districts, self-help business improvement districts, self-supported municipal improvement districts, business improvement areas and city improvement districts. Shoup (2004) reports that the first BID was established in downtown Toronto in 1965. Hoyt (2004) adds that BIDs began operating in Canada, New Zealand, the United States, and South Africa and has more recently spread to other regions of the globe including Australia, Austria, Belgium, Denmark, France, Germany, Japan, Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom. BIDs have started to operate in the UK only since the beginning of 2005 but several now exist in the London area.



BIDs are typically multi-member organisations that have non-hierarchical formal relationships. BIDs enjoy significant participation from their members and are formed for many reasons of which transport is sometimes one.

Design features

Wolf (2006) reports that of four BIDs studied in Washington DC, one (in Georgetown) has transport play a significant role while another (the Downtown BID) provides minor transport services and the others ignore transport altogether. More generally, Morcol and Zimmermann (2006a) reports the main functions of a BID as being of four types: business services, policy advocacy, 'traditional' public services and 'comprehensive Governmental authority'. The main source of revenues for most BIDs is assessments levied on businesses which are typically based on property values (Morcol and Zimmermann, 2006a).

Implementation issues

In some ways the implementation challenges facing BIDs are focused on establishing the BID in the first place – usually as a result of winning a ballot of potential member organisations – at least for the set period of time until the next ballot is called (usually after five years). This is due to the guaranteed source of revenue thanks to the legal requirement that BID member organisations contribute through a surcharge on business rates. In this case then, from a transport planner's perspective the task is to ensure that transport improvements are seen by the rest of the BID team to be 'worthy' of supporting. This is probably easiest to do before the ballot occurs although there are instances (for instance with the Better Bankside BID in central London – Better Bankside, 2009), where transport became a priority after the ballot had taken place.

The main advantages of BIDs relate to their independence from local government. Thus, political risk to politicians is reduced because residents are not taxed to pay for them, meaning any 'public' money that subsequently emerges seems 'free'" (Morcol and Zimmermann, 2006b, pp.89). On the downside, there is a lack of public accountability to their local governments, and to property owners in their districts. Crucially, BIDs can be very successful at leveraging funds from governmental sources (Morcol and Zimmermann, 2006a).

Performance

Once again, evidence of effectiveness is scarce, particularly regarding transport impacts, although evidence from broadly similar Community Improvement Districts in Atlanta, Georgia suggests stakeholders perceive them as being very effective (Morcol and Zimmermann, 2006b).

Future

For BIDs, Morcol and Zimmermann (2006a) findings are that "BIDs are becoming less like special-purpose entities and more like general purpose governments, as they take on larger and more governmental powers and deliver a broader range of services. They are also gradually gaining more legal and de facto autonomy from the local governments that created them" (pp.13).



3.6 Transportation Management Associations/Organisations

Ferguson (2007) states that alternative names for TMAs include Transportation Management Organisations, Transportation Management Initiatives and Transportation Management Districts. Specifically, he notes that TMOs tend to be more action oriented than TMAs, TMIs refer to TMA start ups and TMDs refer to special purpose tax districts and/or operating areas. Schreffler (1986) notes that “TMOs are generally private, not for profit corporations formed so that employers, developers and/or retailers can collectively address transport-related problems. He continues that several characteristics of TMOs can be cited.

1. Initiated by the private sector;
2. Posses non-profit corporate status;
3. Place decision making in the hands of member representatives;
4. Maintain small staffs of planners and liaison personnel;
5. Are funded by membership fees and assessments.

Perhaps more broadly, Enoch et al (2007b) notes that TMAs tend to be multi-member, non-hierarchical formal relationships, with full/limited member participation and are formed primarily for transport reasons.

Design features

Drawing on a North American-wide study, Hendricks (2004) quantifies this further, and reports that “TMAs are either regional, suburban or corridor in geographic scope and serve an average of 48,500 commuters. The central focus of the TMA would be policy leadership, advocacy, and service provision. It would have 20 to 80 members composed mainly of business employers. The TMA would use contact from the executive director and peer to peer contact as its chief member recruiting tactic” (pp.130). Ferguson (1996) writes that TMAs provide a wide variety of products and services, the most common being transit information and ride-sharing assistance. ACT (2001), Miller et al (2005) and Ferguson (2007) expand these, and note that TMAs may serve as:

- Promoter – advocacy, marketing and promotions
- Broker – brokerage and referral services (e.g. parking and shuttle buses – so as to make more efficient use of resources)
- Provider – direct provider of corporate (e.g. consultancy) and/or commuter services, focusing on the exchange of information and other more tangible incentives
- Owner/operator – facility and equipment manager, e.g. parking, vanpools, shuttle.
- Regulator
- Educator
- Facilitator – e.g. by creating a forum for consensus building.



On finance, Hendricks (2004) states that “in 1993, 20% of respondents obtained 100% of their funding from dues. Dues made up 47% of average total revenue. In 2003, 5% of respondents obtained 100% of funding from dues, and dues made up 40% of average total revenue” (pp.131). Other funding sources include transit fares, private grants, taxes, municipal sponsors, parent organisation, foundation grants, vanpool revenues, promotional events, parking fees and company investments. Miller et al (2005) states that most TMAs now require subsidies, especially for start up costs.

By contrast in Canada, only two of the eight TMAs use members dues (and then as a minor source of income) while the majority of funding is provided through government grants (Hendricks, 2004).

Implementation issues

Ferguson (1996) states four steps to TMA implementation. First, is TMA formation. Second is the development of a mission for the TMA including long term goals and short term objectives. Third is to develop a work programme, including products and services to be offered and fourth is to develop an evaluation plan. In terms of barriers to the process, Litman (2008) finds the main barriers to setting up and operating a TMA “are a lack of support among stakeholders and often the perception that short-term benefits are small if there is no immediate parking or traffic congestion problem” (pp.xx). Meanwhile Diggins and Schreffler (1992) cites financial assistance and one-to-one information assistance as being the primary assistance needs for new TMAs. The ‘free rider’ problem, whereby organisations do not join the TMA but benefit from its services nonetheless, is also often seen as being problematic.

Performance

Yet again, the main point here is the scarcity of evidence. Thus, in the ACT (2001) Handbook of TMAs the only reference to transport impacts suggests that single occupancy car use typically fell by between two and five per cent. And Pansing et al’s 1998 review of 58 transportation control measures where TMAs were found to be “relatively effective and cost effective when compared with many of the other projects evaluated” (pp.101), only two TMA schemes were evaluated which “potentially skewed the results”.

In 2001 the number of TMA member companies in the Amsterdam Schiphol Airport TMA, a partnership between the Dutch central government, airport operator, airport-based companies and public transport operators, employed 42,300 employees, or 80 percent of the total workforce of Schiphol-based companies. Total car use, including car sharing, reduced from 72 percent in 1996 to 69.6 percent in 2000/1 and total public transport use increased from 19.4 percent to 21.1 percent over the same period. Schiphol airport regarded this as a success, as car use in society as a whole has risen during this period (Tapestry, 2003; Reeve *et al.*, 2003 and Sam, 2001).

In a survey of employers in Atlanta, Zuehlke and Guensler (2007) reports TMA members (15% of employers) as achieving higher levels of implementation and having more positive employer perception of employer trip reduction programmes than non-members.

Future



As with BIDs, Mallett (1993) foresees that “conceivably TMAs could develop from specific service agents to more general providers by being involved in land use decisions, providing child care facilities, and as a forum for the discussion of public policy issues” (pp.14). Ferguson (2007) however, concludes that TMAs are unlikely to grow as an alternative form of governmental entity but should retain an important niche as a provider of TDM service providers. Meanwhile Hendricks (2004) reports that a general decrease in involvement from TMA members (member dues, fewer board meetings, less volunteerism) and increase in work by professional staff together with increase in government funding could be seen as being negative. This is because Government as a TMA customer represents a less specified, more nebulous target market than developers and business owners.

In looking at what TMAs can offer Europe, Benard and Cre (2007) suggests that there is a need for coordinating structures that can deliver a range of mobility management measures, though less than are necessary in the US context. Specifically, it points out that infrastructural, operational public transport and planning activities would not be required in European TMAs.

3.7 Local Transportation Districts

There are several types of Local Transportation Districts covered within this category. These include Parking Benefit or Management Districts, whereby a proportion of the revenue from parking charges and fines is earmarked to be spent on transportation improvements in the district where the monies are collected (Shoup, 2004), the Transportation Improvement District (Mallett, 1993) and Transportation Management Districts (TMD's) (Pogue, 1997).

The key point is that legal ordinances are used within a legally designated geographical area either to set up a form of tax or charge (for example on parking spaces) in order to raise revenues to pay for improved transport, or else to require organisations to perhaps produce, implement and monitor some form of travel plan. In other words, Transportation Management Districts form a mechanism for enacting TDM regulations, thus providing the motivation for businesses to participate (Flynn and Glazer, 1989; Pogue, 1997). For example, in Montgomery County, Maryland Flynn and Glazer (1989) notes that the TMD requires all existing and new employers to file TDM plans that seek to meet an average auto occupancy of 1.3 persons per vehicle and 25-30% transit ridership. For further examples of institutional arrangements whereby local charges or taxes (e.g. from employment taxes, road or bridge tolls, sales taxes and so on) see the book *Unfare Solutions* (Ubbels et al, 2004).

Design features

LTDs are administratively probably the most complex type of LTPN to set up and the most resource intensive. This is because they are effectively a Government body, unlike the other network types described here. However, they can also potentially be the most effective in delivering transport goals due to the greater range of instruments available.

Transportation Management Districts are probably the closest related existing LTDs to travel plans, and the only TMDs in operation currently exist in Montgomery County, Maryland. Approximately 120,000 commuters and 1,120 employers are arranged in four



TMDs (soon to increase to five), that range in size from 5,000 to 65,000 employees – 50 to 520 employers. TMDs legally require employers of more than a set minimum of employees to produce, implement and monitor a travel plan (MCC, 2004). These five TMDs offer employers a truly comprehensive package of measures. On the one hand, employers are legally required to adopt travel plan measures, but on the other the TMDs provide a huge range of free services to help employers market alternative transport options to employees (MCCS, 2009), focusing mainly on the provision of information.

One significant attraction of LTDs is that funding sources are generally established from the start and are often relatively secure. Thus, Special Parking Districts are often funded from parking charges and parking fine revenues (Shoup, 2004). For the Montgomery County TMDs (Pogue, 1997), dedicated funding sources considered included various parking taxes and charges, membership fees, developer levies and other new taxes such as an employee head tax or payroll tax.

Implementation issues

Implementing some form of travel plan focused LTD (at least outside of the United States where legal frameworks are broadly sympathetic to such entities) is likely to be complicated. This is because in general such bodies – equipped with specialised legal powers and dedicated sources of funding – have not been implemented on any scale meaning that significant political, legal and institutional barriers would need to be overcome. This would seem to be an unlikely prospect unless it could be demonstrated that the Montgomery County examples were delivering significantly more impressive results than the alternative network types.

Performance

Pogue (1997) reports the North Bethesda TMD as being an effective tool for reducing energy consumption, lowering emissions and changing travel behaviour. Crucially, this depended on the support of elected officials and the community at large, and secondly it must cooperate private employers to cooperate with it to produce measurable improvements. While no results could be determined for the TMDs, there are a series of commuting goals that have been identified for each TMD (MCCS, 2009). These goals represent the percentage of commuters not driving to work during the most congested times of the day and for the United States are stringent, ranging from 37% to 50%. More generally Mallett (1993) asserts that special district governments [including Local Transportation Districts] do help provide improved services in areas with limited financial and administrative capabilities and are generally independent of local government (i.e. shielded from politics and political abuses). However, they can also be criticised for being inefficient, unfair, confusing to citizens and unaccountable.

Future

As noted above, implementing a LTD would seem to be an unlikely prospect without some significant shift in the current context. Nevertheless, the high level of ambition signalled in Montgomery County does mark out the TMD as a target to strive towards.

3.8 Selecting a suitable Type of LTPN

The Table below summarises the characteristics of the LTPN types discussed.

	Neighbourhood Travel Forums (NTFs)	Area Travel Plans (ATPs)	Business Improvement Districts (BIDs)	Transportation Management Associations (TMAs)	Local Transportation Districts (LTDs)
Definition	Informal networks in a loosely defined neighbourhood	Local areas developed for specific uses	LA-business partnership to invest within a defined area	Private, non-profit, member-controlled organisations for defined area	Companies in defined area legally required to develop travel plans
Network structure	Organisations all equal	Leading organisation and members	Coordinating organisation created	Coordinating organisation created	Led by LA coordinating organisation
Leader-member relationship	Common interest – informal	Landlord-tenant – formal	Financial (tax) – very formal	Financial (member fee) – fairly formal	Legal requirement – very formal
Power structure	Power shared equally	Landlord in control	Membership in control	Membership in control	LA in control
Transport only issue?	Yes	Yes	No	Yes	Yes
Primary actor	LA/private companies	DZ/LA	LA initially, then private BID company	LA/private companies	LA
Secondary actors	Private companies/LA	LA/DZ	Private company members	Private company members	Private companies
Role of local authority (voluntary travel plan)	Support	Support	Initiator and facilitator	Support	N/A
Role of local authority (mandatory travel plan)	Support	Regulator	N/A	Regulator	Regulator
Funding	Ad hoc grants, scheme basis	Ad hoc grants, rent	Business levy	Ad hoc	Local authority funded

Table 1: Attributes of the various Local Travel Plan Network Types (adapted from Enoch et al, 2007b)

The next step in selecting a type of LTPN suitable for a particular site then, is to take account of the contextual circumstances. Enoch et al (2007a) suggests these include the primary actors, the motivations for group formation, the perceived scope and scale of the problem and the organisational environments, along with geographic, political, and institutional factors as being key.

Primary actors

Traditionally transport policy is implemented by suppliers (operators, construction companies, technology providers, infrastructure managers and vehicle producers) and by various levels and agencies of Government, while the field of travel planning involves a number of new actors. These include generators of travel such as workplaces, visitor attractions and schools, as well as private developers. With the establishment of a LTPN it is often the case that a new actor is either formed (as in the case of a TMA) or becomes included in delivering transport (e.g. an existing business network or site management company). It is also interesting to examine which actor tends to take the lead where each type of LTPN is concerned.



Thus with Area Travel Plans in the UK local authorities and bodies such as Transport for London and the national trunk road operator the Highways Agency have tended to try and persuade landowners, managers, tenants and developers of business/retail zones to participate. This is usually done through specially contracted expert consultants, who then may be invited to operate the ATP whilst it becomes established.

Neighbourhood Transport Forums meanwhile are often facilitated and sometimes led by local authorities through the provision of basic funding and administrative resources together with links to public transport operators and public service and information providers.

Diggins and Schreffler (1992), Mallett (1993) and Ferguson (1996) note that TMAs can be organised by two main groups – either by developers (as a means of securing planning permission from the local authority or as a marketing tool for potential tenants) or in the majority of cases by major landowners or major businesses. Morcal and Zimmermann (2005) notes some TMAs are created voluntarily by private sector organisations but that others are encouraged, facilitated or even mandated by local authorities, while Miller et al (2005) asserts that TMAs are formed by regional or local governments, chambers of commerce, clustered businesses or management of a major employer such as a hospital or university.

Motivations for group formation

DeHart Davis and Guensler (2005) reports that employers voluntarily mediate policy problems either because of:

1. Organisational self interest (i.e. when there is perceived to be a direct or indirect economic payoff);
2. Organisational control (i.e. where actions taken reduce employee discretion so that employees behaviour becomes more closely aligned to the goals of the organisation);
3. Association membership (i.e. whereby peer pressure generates a socialisation process whereby identity is developed, norms are communicated and members then conform to these norms so as to gain the approval and respect of fellow members).

Clearly, LTPNs tap most obviously into the final motivation although there may also be links with the first.

Looking at individual types of LTPN, perhaps the crucial relationship concerns not the type of motivation, but the degree. So, weakly motivated organisations will be more likely to join a NTF or ATP, while networks seeking more tangible benefits might gravitate towards the BIDs, TMAs and LTDs.

Perceived scope and scale of the problem

In simple terms, transport-focused networks (ATPs, NTFs, TMAs, LTDs) will more likely be established in locations with significant transport issues whereas where other issues are dominant it may be that more generalised networks such as BIDs are formed (that may or may not then seek to address transport problems). Next, the scale of the problem refers to whether the issue to be dealt with requires a localised or site-based solution, or whether it needs to be addressed on a neighbourhood basis. ATPs and

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TMA's tend to focus on site specific concerns, whereas NTFs, BID's and LTD's are less delineated and deal with neighbourhood-wide issues.

Organisational environment

Obviously the organisational environment – which refers to the number of organisations, locations (edge of town, city centre), distribution (clusters, evenly spread, corridors), sectors (industrial, leisure, retail, commercial, health, education, mixed), and size (number of employees and visitors) – is another crucial element in determining the type of LTPN adopted. For instance, as with the perceived scope and scale of the problem ATPs and TMA's might be appropriate in a business or retail park context whereas NTFs, BID's and LTD's are usually less restricted by site boundaries. From a different perspective, organisations with fewer resources and/or less motivation to address transport issues are more likely to develop NTFs and ATPs than TMA's, BID's or LTD's.

Geographic, political and institutional factors

Regarding geographic factors, the ATPs and TMA's tend to have distinctive borders and are typically located at edge or out-of-town sites, whereas ABD's, BID's and the TMD examples are usually found in inner city or downtown areas and can have quite blurred boundaries. However, these generalisations do not always hold true. Litman (2008) suggests "TMA's are appropriate for any geographic area where there are multiple employers or business clustered together, which can benefit from cooperative transportation management or parking brokerage services. Regional and local governments, business associations and individual businesses and can all help establish TMA's" (pp.3).

Politically, the split is actually less to do with type of network than with the motivation behind its formation – i.e. is it implemented because of self interest or as a legal requirement. The exceptions are that LTD's are always pushed by legal requirement while the NTFs are usually voluntary. Of the remainder, ATPs can be either voluntary or mandatory, while the BID's and TMA's seem far more dependent on both public and private bodies 'buying in' to the groups and taking the lead at different stages of their development.

Legally, NTFs and ATPs can exist anywhere, as can TMA's although some advice may be necessary as to the most effective administrative form. BID's and LTD's require legislation before they can be introduced if none is currently in place. For example, TMD's are not legally sanctioned anywhere outside of Montgomery County, Maryland in the USA.

The institutional issue is focused on whether a suitable existing group may be used to 'piggyback' transport issues. This can be easier than setting up a brand new specialist group but can also be less focused on delivering transport goals, especially if transport objectives are not fully accepted by other members. BID's form the pre-existing LTPG types, while ATPs, NTFs, TMA's and LTD's are set up specifically to deal with transport issues.



3.9 The Future of LTPNs

For the future, EEBPP (2001) notes that the benefits of expanding networks can be significant because:

- larger networks offer economies of scale and the ability to spread costs more widely;
- representing larger numbers of employers (and employees) strengthens a network's position in negotiations with policy and decision-making bodies, such as local authorities and public transport operators;
- the larger the network, the greater the pool of 'good practice' information that members have to share;
- the larger the membership, the more viable some services become, such as car-sharing schemes;
- the scope for special-interest sub-groups increases with network size;
- within the network catchment area, the greater the proportion of organisations that are members of that network, the less the influence of non-members who may be 'dissenters'.

It also suggests that funding be sought from a range of sources so as to minimise dependence on a single provider.

3.10 Conclusions

The aim of this literature review is to provide an up to date review of the development of Local Travel Plan Networks so far across the world.

Within this, five types of LTPN were identified: Neighbourhood Transport Forums, Area Travel Plans, Business Improvement Districts, Transportation Management Associations and Local Transportation Districts. These range from informal, loosely defined networks drawing on minimal resources to more formal and legally defined organisations with access to a series of possible promotional, regulatory and fiscal tools. They can be either transport-focused or more generally aligned.

LTPN design is heavily influenced by a number of contextual factors. These include: the primary actors, the motivations for group formation, the perceived scope and scale of the problem and the organisational environments, along with geographic, political, and institutional factors.

In terms of performance, there appears to be a direct correlation between the type of LTPN (and the corresponding level of resources available) and the contribution the network can make to reducing transport externalities. There is also an underlying story that LTPNs have not yet realised their full potential either at the individual local network level nor at the wider community transport system level. Even if this were not the case however, it would be difficult to say for sure due to the lack of robust data available on the performance of LTPNs thus far. In particular, while there are examples of LTPNs in Europe (particularly in the Netherlands and in the UK), and while previous European projects have touched on LTPNs, there remains a dearth of literature on the effectiveness of LTPNs from the world outside the United States.



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Appendix A: LTPNs: Practical Information Guides

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Appendix B: Glossary of Terms

<i>Term</i>	<i>Description / Explanation</i>
BID	Business Improvement District
LTD	Local Transportation District
LTPN	Local Travel Plan Network
NTF	Neighbourhood Transport Forum
TMA	Transportation Management Association
TMD	Transportation Management District
TMO	Transportation Management Association