THE IMPORTANCE AND DIFFICULTIES OF POLICY LEARNING ACROSS CITIES

Greg Marsden, Institute for Transport Studies, University of Leeds, G.R.Marsden@its.leeds.ac.uk

Karen Trapenberg Frick, University of California Transportation Center, kfrick@berkeley.edu

Anthony D. May, Emeritus Professor, Institute for Transport Studies, University of Leeds, <u>A.D.May@its.leeds.ac.uk</u>

Elizabeth Deakin University of California at Berkeley, City and Regional Planning Department, edeakin@berkeley.edu

1. ABSTRACT

Policy transfer analysis seeks to develop understandings of the processes by which knowledge about institutions, policies or delivery systems at one sector or level of governance is used in the development of such elements in another place, sector or level of governance. For example 'Bus Rapid Transit' is transferring rapidly around the globe both as a concept and in various system designs. Whilst it is well understood that policy transfer happens, the processes by which it occurs are far less well researched.

This paper draws on two literature reviews and a series of interviews with eleven cities in Northern Europe and North America. The literature reviews have examined the frameworks for studying policy transfer and the paper begins by presenting the key elements of these frameworks. Of particular importance are the motivations for transfer (which can range from rational voluntary learning through to coercive learning where conditions are attached to funding), the agents involved in learning (from the public and private sector), the methods applied in learning and their resultant outcomes. Different methodological approaches which stem from different epistemological traditions are also described. The literature suggests particular weaknesses in understanding the process of transfer, the success of the transfer and, importantly for WCTRS, the transfer of policies between developed and developing countries.

The study of eleven cities considered the processes involved in the adoption of policies which were new for the chosen city and which involved a degree of transfer from elsewhere. Innovations include planning for transit-oriented development, congestion charging, city car clubs and new public transport systems. The paper will describe the approach taken to learning across the different cities, what was learnt and how this was put into practice.

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

The paper concludes with a discussion which suggests that the processes of policy transfer could be improved through better information about potential options, stronger networks of peers, clearer guidance on how to learn about new policies and a more transparent evidence base to use when considering transfer. Organizational culture also appears to be important to the way in which individuals see value in taking lessons from elsewhere. Transfer was less likely to occur where substantial institutional and/or cultural differences exist between cities and it is postulated that this, combined with language difficulties may limit successful transfer, particularly between developed and developing countries. The research and practitioner communities alike would benefit from an enhanced understanding of what policies work in what contexts but also how they were selected.

Keywords: policy transfer; innovation; urban transport; policy learning; implementation

2. INTRODUCTION

There is considerable interest in identifying examples of good practice in urban transport policy (e.g. CfIT, 2001; Dunphy et al., 2003; Knapp, 2005 and Ison and Rye, 2008). Academics and practitioners alike are interested in studying new policies, programmes and projects and reporting on their actual or anticipated performance, successful or otherwise (Pressman and Wildavsky, 1984; Rye et al., 2008). In contrast there is little tradition of studying the process of the development and transfer of policy ideas (Heichal, 2005 and Van der Burgh et al., 2007). This is particularly important given the recent heightened focus at all levels of government on sustainability and climate change in an era of constrained financial resources, mounting traffic congestion and deteriorating transport infrastructure.

Political scientists have, for many years, studied and attempted to understand the transfer of policies (e.g. Rose, 1991; Bulmer and Padgett, 2004). Policy transfer is defined as:

"the process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system"

(Dolowitz and Marsh, 2000, p5)

This work was largely borne out of the transfer of policies across state boundaries in the US (e.g. Mintrom, 1997) and across national boundaries (e.g. Stone, 2001). More recently however scholars have been turning their attention to the role of cities as agents of change capable of exerting influence across a range of administrative governance scales from regional to supranational (Betsill and Bulkeley, 2004 and Bulmer and Padgett, 2004).

This paper describes a research project which was commissioned to understand how cities find out about sustainable transport policies and projects which are new to their context. Building on a literature review (Marsden, 2008; Marsden and Stead, 2010), the project took an interview-led approach to studying the process of policy transfer for a range of innovations in ten cities. Section 2 of the paper describes the key findings of the literature review. Section

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

3 presents the data collection and analysis process and explains how it links to the literature. Section 4 provides a brief overview of key institutional differences between the cities. Section 5 presents the key findings on the different aspects of policy transfer. Section 6 describes the authors' synthesis of the key barriers to effective policy transfer and to the adoption of apparently effective and innovative policies. Section 7 discusses a range of potential solutions identified by the city participants and assesses their potential impact on the barriers from Section 6. The paper concludes by summarising the implications of the research for the practice and research communities.

3. KEY ASPECTS OF CITY LEARNING

Dolowitz and Marsh's framework of key components of policy transfer provides a useful introduction to the range of issues that might define any study of the phenomenon (Dolowitz and Marsh, 2000).

Why Transfer Policy?

The literature addressing the process of policy transfer suggests policy transfer occurs on a continuum from *coercive* (such as EU regulations on liberalisation of air movements) to *voluntary* (where administrations go in search of alternative policies). Coercive policy transfer can occur through direct means such as regulation or more indirect means such as financial conditions attached to funds (Bulmer and Padgett, 2004; Marsh and Sharman, 2009). Evans (2009a) notes that donor countries, supra-national institutions and global financial institutions all constrain the choice of policy even though some form of negotiation takes place. This may, for example, partly explain the growth in Public-Private partnership funding of infrastructure in developing countries in the 1990s (Estache, 2001). Policy transfer also occurs simply by interesting examples providing an inspiration for change (Rose, 2005). Voluntary learning appears to be stimulated by dissatisfaction with the status quo and an inability to find suitable historical policy lessons locally.

Who is involved?

A large range of potential actors are involved in policy transfer including elected officials, government administrators, suppliers, interest groups, residents, think-tanks, consultants, non-governmental organisations and 'policy entrepreneurs' (who may be located inside one of the aforementioned groups). It is suggested that actors can work as receivers or senders of information (and potentially both). Evans (2009a) suggests that it is important to understand the motivations, resources and role that actors engaged in the transfer process play. Stead et al. (2008) report on two policy transfer projects funded by the German Federal Environment Agency to consider the transfer of German style passenger transport executives to Wroclow (Poland) and Riga (Latvia) suggesting significant external influence and differential resources between the new and established EU countries. Matsumoto (2007) identified the presence of charitable foundations promoting the adoption of BRT systems in

China. It is important to note here that the motivations of actors in policy transfer are not neutral and even when a 'bottom up' search process occurs, it is not occurring in a neutral policy landscape. Wang (2010) and Stead et al. (2008) underline the importance of considering local cultural and institutional settings such that policies are considered that are likely to fit well with the needs of the adopting organisation.

There is some support for the existence of 'policy entrepreneurs', individuals who are motivated to effect policy changes. Mintrom's work (1997) shows that policy entrepreneurs were influential in the extent to which school choice policy was both considered and adopted. However, Mintrom's work and that of others (e.g. Bulmer and Padgett, 2004) suggest that complex governance arrangements and implementation issues can limit their real effectiveness. Kingdon (2003) suggests that the presence of a political champion is critical to getting policies implemented which Matsumoto (2007) also found in Seoul and Jakarta in the development of BRT policies.

What is transferred?

Dolowitz and Marsh (2000) suggest that policy transfer involves a range of copying strategies including "direct and complete transfer; emulation, which involves transfer of the ideas behind the policy or program; combinations, which involve mixtures of several different policies; and inspiration, where policy in another jurisdiction may inspire a policy change, but where the final outcome does not actually draw upon the original..." (p13).

There is some debate about the extent to which policies are ever directly transferred from one place to another. It is suggested that direct borrowing (emulation) is rare as the local institutional contexts of the "exporter" and "importer" of policies are important in implementation (Rose, 2005). Stead et al., (2008) concluded for example, that differences in institutional composition were one important reason why the proposed transport system reforms were not adopted in Wroclow and Riga.

This description provides a challenge to researchers seeking to identify what is learnt. Inspiration for a policy change is difficult to track, particularly if inspiration is drawn from multiple sources. At an implementation level, the uptake of several small scale system innovations from different systems is also difficult to track. It is yet more difficult to understand the extent to which any one aspect is particularly beneficial to the new policy and therefore to understand the full benefits of the transfer process.

From where are policy lessons learnt?

The policy diffusion literature places a strong emphasis on the social process of exchange of information which in turn leads to more informed decisions as to whether or not to uptake policies (Rogers, 2003). There is evidence to support the importance of national context in the degree to which policies spread. Heichal et al. (2005) identified a strong national influence on the extent to which environmental policies transfer whilst Kern et al., (2007)

found that Local Agenda 21 policies spread more rapidly across close geographic and cultural neighbours.

Whilst there is some evidence to support diffusion as a means of 'natural transfer' there are examples of policies which are resisted in some areas or are more prevalent in others. This suggests that formal institutional or cultural issues are at play. Crozet (2009) explores the rapid adoption (and readoption) of tramways in France, drawing on some European regional influences from Switzerland and Germany. However, trams are by no means dominant as a public transport mode in the UK for example.

Ward (2007) suggests that agents sometimes seek to learn from 'philosophical neighbours' noting the traditional ties between the UK and US in the planning sphere despite the UK being closer to many important and potentially preferable competing European approaches.

The lack of a common language may be a substantial barrier to the transfer of policies across boundaries. There may therefore be a tendency for learning to take place around clusters of countries with strong historical (often colonial) ties. Attard and Enoch (2009) for example found that Malta looked to the UK for lessons on access control to the historic capital Valetta rather than the examples that could have been used from Italy. The closer institutional framework between the UK and Malta and the ease of transferability of findings may also have supported this choice. Matsumoto (2007) asks why, given Curitiba's well known success in 1974, it took so long for Bus Rapid Transit to spread to Asia. He concludes that the success of BRT in a broader range of institutional settings was important to generating trust in the potential transferability of the system, although other factors such as a worsening financial position made BRT more attractive than fixed rail systems.

Does it work?

Rose (2005) is clear that when studying policies which have been adopted in cities it is essential to learn from failed implementations and to ask questions of critics of the implementations as well as to talk to those responsible for the policy. Marsh and Sharman (2009) note that whilst the more voluntary search processes imply a rational choice of effective policies there are other mechanisms at play (bounded rationality in choice, coercive forces and broader normative pressures) that lead to sub-optimal policy choice (see Wang, 2010). It should not be presumed that transfer is synonymous with effectiveness. The dimensions of effectiveness also need to be made clear. At one level, the use of knowledge from elsewhere may simply be important in getting a proposal past a stumbling block in the local political process. At another level the design of the policy or project may draw directly on the design parameters in another place and therefore have a clearer direct impact on the outcomes of the project.

4. RESEARCH METHOD

Levi-Faur and Vigoda-Gadot (2006) note that two complementary, but philosophically different, paradigms have been used to study the same phenomenon. Policy transfer has derived from a political science approach which typically pre-supposes the importance of the state in policy transfer. This suggests a primary approach of mapping the existence of policies over space and time against the institutional contexts to understand the facilitators and barriers to transfer. The literature on policy diffusion comes from sociological roots and focuses more on the transfer of information through social systems, sometimes to the exclusion of the influence of governance systems. Their review of both fields suggests that each phenomenon needs to be considered. Wolman and Page (2002) also highlight this distinction and criticise the policy transfer literature and diffusion literatures for lacking attention to detail on the process of transfer. This study attempted to overcome these problems by identifying a series of cities that had adopted or tried to adopt a number of transport policies and tracking the process of their development. The comparative case study approach allows for some discussion of the role of formal institutions to emerge without presupposing this to be critical in the uptake of the policies.

The study was conducted with eleven cities as shown in Table 1. The selection of cities was based on those with a core population of over 250,000 and a wider metropolitan area of at least 1 million that are known to have pursued leading edge transport policies. The focus was not solely on success stories as these cities have also experienced some policy failures over time and these are equally informative. The reasoning for the selection of these cities was two-fold. First, the literature suggests that policy innovations are most likely to be adjusted and tailored more specifically to local needs by early adopters or 'pioneer cities' (Kern et al., 2007) who take a more pro-active role in the policy learning process. By contrast, later adopters tend to adopt policies as a response to pressure to do so and are more likely to accept the most common practices (Westphall, Gulati and Shortell, 1997). It may be more productive to study early adopters to capture in-depth thinking about policy transfer. Secondly, the literature suggests that one enabler to adopting new policies may be greater personnel and resource capacity within an organisation (Berry, 1994). Whilst we cannot confirm this hypothesis, two of the three cities that were approached, but felt unable to participate, were small with a wider metropolitan area closer to half a million than one million. This research covered cities which had implemented policies and projects and those which were seeking to do so. Of those that had implemented policies the process of learning was revisited as well as discussing the extent to which other cities came to visit them and what they appeared to be looking for.

The cities are all in North America and North Europe. The literature in Section 2 suggests that cities look to geographic or philosophical neighbours so this seemed a logical approach to limit the sources of variation in the study. However, this means that extrapolations to other regions would be risky. In Europe the selection of city sites was based on a review of cities involved in innovative transport implementation projects funded by the European Commission. This was supplemented by discussions with experts. In North America the selection of city sites was based on known innovations in aspects of sustainable transport policy.

Data were collected for each city through interviews and document review. The interviews were conducted using a semi-structured approach which allowed interviewees to raise additional issues. Thematic analysis was conducted of the interview notes and/or transcripts and the reported findings were presented to participants for comment. The research is qualitative in nature and the interview process allows for rich insights of the processes involved. There are however some important limitations. The cities largely determined who would be interviewed, which in turn was conditioned by the types of innovation that were proposed. Different post-holders were therefore interviewed in different cities. The responses from each city only represent the views of these individuals. The key 'gatekeepers' were interviewed however and these individuals seem to exert strong influence over implementation processes. Whilst consultants, suppliers and operators were interviewed, the overwhelming majority of interviewees were past or current local government officials. This will inevitably colour the view of the relative importance of different players in the process although we maintain that they are critical to the implementation process.

Table 1: Case Study Cities

Site	Population	Innovations known about at time of site selection
Lyon	415,000	Highly integrated public transport system with bus, trolley bus, Metro and rail. Advanced information systems and
France	Larger Met Area 1.78M	ticketing. Early adopter of driverless Metro system. Rent-a-bike system and school travel initiatives. Home of research institute CERTU
Nanay France	260,000	Rubber tyred tram
Nancy, France	Larger Met Area 0.5M	
Edinburgh	450,000	Held a referendum on congestion charging, early adopter of high priority bus corridors, planning a tram
Scotland	Larger Met Area 0.78M	implementation project and UK's leading car club city.
Leeds	443,000	Early adopter of HOV lane, home zones and safe routes to school. A major hub for commercial car share. Involved
England	Larger Met Area 1.5M	in several road pricing studies. Recent failed tram proposal with trolley bus system now under consideration.
Bremen	546,000	Participant in CIVITAS Vivaldi project with car sharing, introduction of some CNG stations, environmentally friendly
Germany	Wide Met Area 2.37m	delivery vehicles, tram-bus integration and environmental residential zones.
Stockholm	744,000	Active adopted of sustainable travel measures such as cleaner bus fleet (Ethanol buses), smartcards, car sharing,
Sweden	Larger Met Area	safe routes to school. One of the few cities adopting congestion charging. Linked to sensitive urban area there are
	1,95M	environmental restrictions and a freight consolidation centre.
Copenhagen	656,000	High levels of cycle use, public cycle rental and evidence of policy transfer to other cities (Copenhagenize). Urban
Denmark	Larger Met Area 1,6M	rail, bus and Metro system. Famous 'finger plan' land use approach. Host of Walk 21 conference and major
		pedestrianisation. Adoption of high quality bus corridors.
Seattle	582,000	High quality transit service and transit information, early visioning process for multiple dense centers (1970's and
USA	Larger Met Area 3.9M	1980's), creative use of density bonuses for transit & highway shoulders for bus lanes
Dallas	1,230,000	healthy core downtown with high rise buildings, free market transit-oriented development sites along light rail, also
USA	Larger Met Area 6.15M	TOD-like sites along highway but without transit
San Francisco	765,000	Congestion pricing proposals, multimodal transit and pedestrian/bicycle planning and issues, parking management,
USA	Larger Met Area 7.3 M	carsharing. Complex institutional dynamics due to numerous cities and transportation agencies.
Vancouver	600,000	Significant transit service, high quality design for buildings and overall sites, long term strategies for high density
Canada	Larger Met Area 2.5M	urban development/infill coordinated with transit and to build markets for transit, traffic calming, busways

5. CITY CONTEXT, INSTITUTIONAL STRUCTURES AND POLICY OBJECTIVES

Institutional structures have an influence over the types of policies and innovations that can be brought forward, the barriers faced, and the ways in which projects are implemented (e.g. Rietveld and Stough, 2005). The case study cities all exist within different institutional frameworks. Some key differences and similarities are briefly highlighted below as they provide an important context for interpreting the findings. However, the study was not designed to isolate the role of specific institutional factors in explaining the uptake of innovations.

The governance structure in the European cases varies widely. Copenhagen is the most 'independent' of the cities as it is responsible for developing and funding its own transport policies. Lyon, as with other French cities, is significantly devolved from national government, although the state still contributes to funding larger projects. Bremen also has a strong degree of control over policy and spending locally; however, it must work within the strong regional structures (Länder) and national legal and regulatory frameworks, which can act as a constraint. The other EU cities (Stockholm, Edinburgh, Leeds) each has a slightly different structure but all feature a strong connection between the budget setting process at the national level and the actions of the city. Importantly, these cities are largely dependent on the approval of individual bids to the respective national governments for major new projects. In the United States, cities work to varying degrees with their regional transportation planning agencies, called metropolitan planning organizations (MPOs) and their state departments of transportation. In most cases, the cities have local land use authority, whereas federal transportation funds fall under the purview of state departments of transportation and MPOs as was the case in Dallas, San Francisco and Seattle. Vancouver, in Canada, is fairly independent in setting its own policies and uses of funds; however, it must defer to the Province of British Columbia for intercity projects.

A major difference in formal institutional structures surrounds the ownership and planning of public transport. In the UK, outside London, the bus services are provided in a deregulated environment whilst other European cities have a local and/or regional agency responsible for specifying and planning service delivery and setting fares. In all cities the provision is by the private sector. Similarly in the Canadian case, Vancouver's main public transit is provided by Translink, a public agency that contracts out its primary services. In contrast, major US public transit agencies typically provide their main services and have primary control over planning services and setting fares, as was the case in Dallas, San Francisco and Seattle.

With this underlying institutional backdrop, interviewees were asked what their principal policy objectives were and hence, implicitly, what the underlying problems were which they faced. Underlying the key challenges faced by all the cities is strong projected growth in housing, population and employment over the next two to three decades. However, the impacts on policy objectives of accommodating this growth were expressed in different ways by the interviewees as shown in Table 2.

Table 2: Key Policy Objectives

	Lee	Bre	Cop	Sto	Edi	Lyo	Nan	SFra	Dal	Sea	Van
Growth/Economy	V V	V V	√√	√√	√√	V V	✓✓	✓	✓	✓	✓
Congestion	V V		✓	✓	√√	✓	✓✓	✓✓	√√		√ ✓
Air Quality	✓	√√		√√		✓	✓✓	✓✓	√√	√√	√ ✓
Climate Change	✓	✓		✓		✓	✓✓	✓✓		√√	√ ✓
Safety	✓		✓	✓	✓		✓	✓	✓	✓	✓
Accessibility	✓	✓	✓	✓	✓	✓	✓✓	✓	✓	✓	✓
Built Environment	✓	✓	√√	✓	√√		✓✓				√√
Bus/Tram Subsidy		./	./		./	./					
Reduction		•	•		•	•					

[✓] A strong recurrent theme

The cities share a strong degree of commonality of overarching key strategy elements such as reducing the need to travel, reducing vehicle emissions or improving public transport supply. However, the degree of emphasis varies from city to city. For example in the EU, cities such as Stockholm and Bremen which face the most extreme air quality problems are much more pro-active in clean vehicle procurement. Clean vehicle procurement is a part of strategies elsewhere (e.g. Leeds) but not as dominant. Similarly Bremen and Stockholm have important freight flows through their ports which, combined with air quality problems, make freight management strategies more important. Cities with historic cores are more focused on minimising the impact of deliveries to the core area.

Whilst it is attractive to consider a model whereby the knowledge gleaned by developed countries is exported and adopted by developing countries, thus shortcutting the learning process the very significant differences in institutional conditions, technical expertise (and therefore capacity to learn lessons) and governance capacity to change and adopt may be a significant limiting factor on transfer (Stead et al., 2008, Evans, 2009a).

6. PRINCIPAL FINDINGS

Why do cities transfer policies?

Dolowitz and Marsh suggest that the range of motivations varies from a purely rational and voluntary search for policies to a coercive enforced uptake of pre-specified solutions.

This research identified six main reasons for looking for new policies:

- Strategic Need: Where it is apparent that continuing with current policies will not lead to the achievement of the organisation's objectives, typically identified through some form of long term strategic modelling exercise. This notion of "need" for a new intervention was a common theme across all of the case study cities and is the primary driver for looking (both internally and externally) at solutions.
- 2. Curiosity: Curiosity about the policies put in place elsewhere or seen on a visit (work or holiday!) often led organisations to consider new policies which might not currently be in their plans. The ideas could be identified by officials, elected politicians or other

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

[✓] Discussed

agents such as suppliers and non-governmental organisations. This was seen to be part of a natural cycle of continuous self-improvement. For example, Vancouver and Copenhagen are continuously trying to improve their cycle and walk networks even though they would already be the envy of many cities. They still actively look elsewhere for lessons.

Both of these motivations allow for an open approach to considering the range of options available and their potential suitability for implementation. The next three reasons generate more constrained searches with the latter two being more coercive (from local or national political direction).

- 3. Policy or Project Collapse: Cities also have pressing cases where a search for new projects or policies was instigated due to the failure of a planned project. The search for alternative ideas can be more urgent, due to the political difficulty generated by the failure of a previous plan. Examples of this were seen in Leeds (where funding for a tram scheme was withdrawn) and Bremen (where manufacturers did not deliver clean vehicle technologies for vans). In both cases, funds had been committed to the project so alternatives were quickly sought. In the case of Leeds this has been a search to define a replacement high quality bus-based system whilst in Bremen the funds were more time limited and had to be diverted to other clean vehicle support mechanisms.
- 4. Political Intervention: Local agency officials determine the majority of proposals for new policies, but ideas are also brought to the table by directly elected politicians. These ideas have an initial momentum which staff-led suggestions sometimes lack. The highest profile example is the Stockholm Congestion Charge where the six-month trial was decided as part of negotiations to form a national coalition government and the solution was essentially imposed on the city. In Edinburgh, a local elected official had tried the 'VéloV' bike rental scheme whilst visiting Lyon and, through the Council's transport committee, instigated a feasibility study.
- 5. Enhanced Support: The availability of funding for at least part of any new innovation has acted as a catalyst for policy transfer. In the European cities, the availability of EU project funds has supported policy transfer. Whilst for some initiatives this has accelerated developments which were already planned and added greater potential to learn from partner sites, for others it has provided the spark for investments which might not otherwise have been made. This was also seen in Leeds and Edinburgh where national government funding is more important (relative to other sources) and where national initiatives brought forward schemes which might not otherwise have happened. Although the funding may not be sufficient to pay for complete implementation, interviewees considered it to be a significant bargaining tool to attract local funding. The conditions attached to funding can however limit the search to particular types of measures which may not be wholly appropriate to transfer.

The final reason for looking for examples of policies elsewhere is to build support for deploying an example in a city by demonstrating that it is acceptable and effective elsewhere and therefore not so risky to adopt.

6. Legitimization and Consensus Building: Bremen, San Francisco and Dallas drew on policy experiences from elsewhere that helped to demonstrate that innovative ideas

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

could work. It was noted that this is not always successful as it can antagonise elected officials rather than being seen as proof that a new idea would work in their own city.

The voluntary mechanisms of strategic need and curiosity were observed in all of the cities for at least some of the innovations, suggesting the ability of cities in this context to innovate or seek new policies to solve known and projected problems. Political intervention was observed in most of the sites at least for one innovation with the other motivations found in around half of the case study sites. In the developed country context at least, a mixture of voluntary and more coercive reasons for transfer were observed with voluntary being more prevalent.

Who is involved in policy transfer?

Local officials and elected politicians are the main determinants of what policies are looked at in more detail. However, there was evidence of a number of other players helping determine which ideas to consider and, where the city was minded to pursue a new idea, how knowledge about other applications was obtained.

Table 3 summarises the role played by different groups in initiating policy transfer in the innovations we discussed. It shows a dominance of elected and appointed local officials. Whilst many actors have a role in discussing policy transfer it is rare for agents other than elected or appointed officials to initiate policy transfer.

Table 3: Who was involved in *initiating* policy transfer

	Lee	Brem	Cop	Stoc	Edi	Lyon	Nan	SFra	Dal	Sea	Van
Elected officials	✓	✓✓	✓	✓✓	✓	√ ✓	√√	✓	✓		✓
Local Officials	√√	√ ✓	√√	√ √	√√	√ ✓	√ ✓	√ ✓	√√	√√	√√
Private Suppliers	✓					✓	✓			√√	
Consultant firms							✓				
Residents	✓										
Interest Groups		✓		✓	✓						✓
Academics					√			√			

Table 4 summarises the role of different actors in transferring experience. In nearly all cases, local officials played the largest role in transferring information. This was suggested by interviewees to be crucial as their role encompasses the political and institutional setting, the policy or project goals and the implementation process. Some of these roles could not be effectively outsourced. Private suppliers are more important in transferring experience as they have system implementation and operational knowledge from elsewhere on which the city will be dependent. In a similar manner, consultants are important agents in this process as they may have been involved in similar implementations in other cities. It was acknowledged in two cities where this topic was explored that this was one of the reasons for an increasing reliance on consultants, allied to cutbacks in staff in the public sector. Other agents appear less important in the transfer of implementation detail although academic

researchers have played a role, particularly in advising staff and elected officials on project details and key contacts.

Table 4: Who was involved in transferring experience

	Lee	Brem	Сор	Stoc	Edi	Lyon	Nan	SFra	Dal	Sea	Van
Elected officials						✓					
Local Officials	√√	✓✓	✓✓	√ √	√√	√√	√ √	✓✓	√√	√√	√ ✓
Private	11	11	/	11	11	11	11			1	
Suppliers	•	•	•	•	•	•	•			•	
Consultant firms	√√		√		√√	✓	√ √		√	✓	
Residents											
Interest Groups		✓	✓								
Academics	✓			√	✓			✓	✓		

What did they learn?

A very strong feature of the different policies studied was the extent to which they are bespoke adaptations of policies, practices and technologies from elsewhere. Four examples were found where one main site was the source of inspiration and a further three where lessons were largely drawn from one site. For the remaining 23 innovations studied the lessons were a combination from various sites. This notion of drawing together lessons from multiple sites is sometimes referred to as 'hybridisation' and is seen to be good practice (Rose, 2005). This of itself suggests that the search process will require significant resources and that the solutions to any city's problems are not immediately self-evident from elsewhere. Even world leading cities such as Copenhagen (with cycling) looked to learn from other cities (e.g. in the Netherlands).

There is some evidence that policy concepts or ideas were transferred. The inspiration for road charging systems around Europe has undoubtedly been London and latterly Stockholm. Bike Hire schemes along the model of the Paris Vélib scheme have for example spread in consideration despite the limited knowledge of their impacts. Cities in the US also visit London and Stockholm to consider the prospects for transfer of elements of the scheme to their local context (despite the presence of arguably similar concepts such as "value pricing" or "High Occupancy Toll" lanes closer to home).

Interviewees were keen to point out the need to tailor solutions to local circumstances which leads much of the remaining transfer to be related to processes or system components which might be adapted. For example, Copenhagen reported that the majority of its learning about charging is focussed on the system functionality and back office architecture as local conditions and negotiations will necessarily determine the design of matters such as cordon location and pricing structures. Stockholm reported learning valuable lessons from London about the implementation process and the evaluation but noted that the system itself was quite different in nature to London. The Leeds HOV lane examined the introduction of a similar scheme in Madrid but ultimately concluded that only the enforcement lessons were relevant due to the more urban nature of the Leeds scheme.

How did they approach learning?

The interviews revealed that staff gather information about innovations informally and sometimes quite randomly – a process described as "unsystematic". For example, they may read about an innovation when perusing an item "in print" (particularly short form writing such as newspapers, professional journals and the technical press) or learn about it through interactions with others through conference attendance, word of mouth, formal strategy groups, and external contacts. E-newsletters and mailings are also growing in use although it was suggested in one city that such sources are not sufficiently relevant or concise. Moreover, practitioners described the search for information, particularly on the internet, as like looking for a "needle in a haystack". Several interviewees suggested that the process of information search could be improved. The potentially large volume of information and the difficulties in understanding the transferability of the results limit the degree to which these sources are used.

The interviewees often look to contacts or acquaintances in their professional networks for advice. Peer to peer contacts are crucial sources of information and they appear to be trusted and knowledgeable. They provide not just information but also intelligence on how to apply the information. Peers also provide contacts with experts in other fields which connect overlapping interests (the notion of "boundary objects" (Star and Greisemer, 1989)). A "snowball effect" then occurs in which an initial inquiry generates substantially more information across a variety of fields.

Table 5 summarises the relative importance of the various information sources across the different case study cities in the innovations studied.

Table 5: Relative importance of information sources used in policy transfer

	The control and control control and the contro										
	Lee	Bre	Cop	Sto	Edi	Lyo	Nan	SFra	Dal	Sea	Van
Peer to peer contacts	✓ ✓	///	√√	///	√√	✓ ✓	✓	√√	✓ ✓	√√	√√
Policy networks	✓	//	✓	✓	✓	✓	√ √	✓ ✓	√√	✓ ✓	√√
Private Suppliers	✓	✓	✓	✓	✓	//	//			//	
Consultants	✓		✓		√ √		√√		√√	✓	
General Literature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Academic literature				√				√	✓	√	✓
Academics	√			√	√			√	✓	✓	√

^{✓✓✓} Used significantly

Formal policy networks are used to some degree in all of the cities, sometimes as a source of information exchange but, as found from the literature, this was weak (Betsill and Bulkeley, 2004). Private suppliers are knowledgeable about potential system designs and are drawn on in considering options but are trusted less than fellow governmental contacts. Consultants are drawn on for specific technical expertise and can often bring experience of working in

^{✓ ✓} Often used

[√] Sometimes used

other cities. In Europe, consultants tended to be used for supporting the technical aspects of policy transfer. It is interesting to observe that general literature such as government guidance or resources found on Google are more likely to be accessed than academic literature although there is more of a tradition of using academic sources in North America than Europe.

In our discussions on cities' approaches to dissemination of their own innovations, most respondents indicated that they did not consistently disseminate their successes, and even less so their failures. There was, partly as a result of this, a general acceptance that the practitioner community lacked a thorough and consistent evaluation evidence base.

Where did they look for lessons?

The learning styles of the organisations and the culture of interaction between practitioners, consultants and academics strongly determine the approach taken. In particular, the commonality of policy context has some influence on where staff and others are prepared to look for lessons and new ideas. So, for example, Bremen saw other harbour cities with similar size populations in Northern Europe as good comparators. Copenhagen saw other Nordic cities which have similar populations, similar political conditions and similar problems as key comparators. There is some support for the notion of looking to local neighbours and cities which are close 'philosophically'. Thus Dallas was interested in learning from Denver, also a growing city looking to transit-oriented development. Cities had also searched for new ideas which stretched beyond their most obvious comparators, but there is a difference in the extent to which they are open to such broad searches. It seems that the European Union research programme has been an important facilitator of contacts amongst cities which would not otherwise have seen themselves as obvious partners. Trust in the findings of other cities is critical and this helps to explain why personal networks are so important, both in Europe and in North America.

Even the most networked cities noted that it could take a lot of time to find the right people to talk to, that knowledge gets lost in the system when people move on and that finding the right written resources is difficult. It is also worth noting that some of the cities found managing the volume of visitors to see their policies as time and resource consuming and that there were limits to the degree of reciprocity which was possible and useful. Both the preference for examples in culturally similar settings and the benefits of trusted networks of contacts suggest that there may be significant barriers in identifying suitable policies to transfer between developed and developing countries (see Wang (2010) for a discussion of the mismatch between a sample of urban transport policies promoted in China and the local context).

7. BARRIERS TO INNOVATION

Through their descriptions of the processes adopted for the development and subsequent implementation of policies and projects, the interviewees provided evidence of barriers which they face. For many innovations the barriers were expressed through the description of

mechanisms which overcame them; these are considered in Section 8. This section summarises the key barriers and presents a rating of their severity based on this evidence.

Barriers to learning policy lessons

The research reported here suggests that cities conduct a significant amount of informal and formal scanning for new ideas and good practice. The interviews also confirmed that there is a substantial amount of city to city visiting to study new ideas. The extent to which this occurs varies between cities and over time within a city and is dependent partly on the **organisational learning culture** which is strongly shaped by the attitude of key individuals in senior management who encourage new ideas and active staff learning and engagement. Cities can be classified as operating on a scale from pro-active to passive information seekers. The degree of connectedness of a city with other cities appears to be another potential indicator of the extent to which innovations will be considered from elsewhere.

Even the most pro-active cities describe the **search for information** as **unsystematic** or adhoc. Cities often do not consistently analyse and document their successes and it appears that staff rely quite heavily on informal networks and word of mouth. The search for new ideas is also **constrained by staff time and resources**. This is in terms of finding the time both to scan effectively for new ideas (informal information gathering) and to investigate ideas which seem interesting (initial scoping). This confirms the notion from the literature that the degree of 'slackness' of institutional resources is important (Berry, 1997). This is potentially important when considering the implication of these findings for smaller cities where resources will be even tighter.

The search for new ideas is also constrained by the **lack of available and accessible information** on innovations elsewhere. This relates in turn to the willingness of cities to evaluate and disseminate their own innovations. An underlying lack of information is sometimes the principal barrier under this heading. But if cities do not know of the existence of available information, or cannot readily access it, then this will also impede policy learning. Some interviewees also raised concerns over the **reliability or objectivity of the information** available. It was suggested that much of the information in the public domain and in guidance notes would exhibit a positive bias.

Barriers to implementation

There is a substantial on-going search for better policies although this is variable and could, according to the cities, be done more effectively. The European case studies in particular suggest that the number of new policies which get implemented is small relative to the numbers of opportunities considered. Policy learning can and should lead to policies being rejected as unsuitable. However, it is clear that there are also substantial implementation barriers which mean that many potentially suitable policies are rejected.

Where there are several organisations involved in developing and approving new investments, conflicts of objectives and preferred solutions can occur. This has been the case for example historically with the Leeds 'Supertram' scheme. These **governance**

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

structure barriers are likely to be more serious in cities where transport responsibilities are spread across tiers of government.

The presence of funding streams which are specific to innovations, even if they only cover a part of the innovation played a very strong role in their uptake, suggesting that **funding requirements** are a potential barrier where such funding streams do not exist. This appears particularly strong when the cities depend on national governments for funding settlements.

Copenhagen has developed a congestion charging proposal but does not have the powers to introduce a new tax and will therefore require a national legislative change. This is also the case in San Francisco where state legislative authorisation is needed to implement congestion pricing. Equally, there were examples where policies had to be amended to take account of local legal differences, such as the enforcement of a low emissions zone in Bremen. These constraints of **legislation and regulations** can make an investment in policy learning appear less worthwhile, and limit what is transferred.

While the private sector is often a significant source of innovation, **private sector involvement** can in some situations limit the implementation of new policies. In general, the de-regulated public transport case study sites in the UK face greater implementation barriers in integration as some co-ordination initiatives are seen as potentially anti-competitive. Elsewhere, where franchise systems exist, short-term franchises were seen to limit innovation as the ability to achieve a return on investment over the franchise period was constrained.

It was suggested that it has become more difficult to introduce innovations over time due to the tightening of **staff resources** within local government. Staff time must be focused on basic programmes and services. Some cities focused on a single innovation at a time as a result.

The full report (Marsden et al, 2009) also discusses barriers of public acceptability and the implementation process, which can be significant for fiscal restraint policies in particular, are not pursued further in this paper.

The barriers to policy learning were raised most widely, and appeared to have the most serious adverse impacts on innovation and policy transfer. Among these, the following seem to be the most serious barriers:

- the lack of an institutional learning culture
- the adoption of an unsystematic search for information
- the time and resources available for such searches.

These are, of course, closely related. Those cities that we observed with stronger learning cultures appeared to make more resources available for looking elsewhere and learning. Unsystematic search processes were a feature in all cities and as these are potentially time intensive and therefore exacerbate the resource barrier this may be problematic. Those cities that had better networks of contacts appeared better equipped to find the information they needed and to exchange it with other cities.

8. POTENTIAL SOLUTIONS

Interviewees were invited to suggest solutions to the barriers which were identified during their interviews. Some of these arose during the course of the interview; others were highlighted in the final part of the interview. We have summarised these here and also drawn on our literature review to identify others. We have grouped them into eight categories, and assessed the ability of each to contribute to overcoming the barriers identified above. On this basis we have produced an initial priority list of recommended actions. The full report (Marsden et al, 2009) also discusses solutions which involve greater collaboration between the academic and practitioner sectors. These issues are beyond the scope of this paper.

Suggested solutions

Help cities to be more effective at policy learning

The fairly unsystematic approach to policy learning suggests that there could be some benefit in training both local government staff and elected officials to become more skilled in effective lesson learning. This may include broadening understanding of where it is most productive to look for lessons as well as how to assimilate those lessons. There is a role for promoting an organisational culture which encourages innovation and understands risk-taking. This could involve sharing good practice from cities which exhibit these characteristics. Expert workshops and taught short courses which involve policy learning (e.g. CIVITAS-CATALIST, www.civitas-initiative.net/) are a potential delivery mechanism.

Invest in strengthening the interaction between policy networks

Much learning is conducted between colleagues in formal and informal professional and academic networks. Dissemination of research through such networks is critical as it builds on existing infrastructure. However, more needs to be done to integrate the 'parallel' practitioner and academic networks. This could take the form of actively working with research contributors to provide their information in an accessible way (see below) or creating opportunities for new networks to develop, such as through conferences, one-day focused workshops, and even email list-serves where short and succinct research snapshots are distributed.

Improve benchmarking and the focused use of awards for innovation

Benchmarking, if conducted effectively, can enable cities to compare their performance with cities in similar circumstances, identify areas in which they are performing less well than their peers, and seek evidence of policy interventions which might help them improve. More could be done to increase participation in such benchmarking programmes, and to extend them from the public transport arena to other aspects of urban transport policy. Where such benchmarking exercises identify particularly successful cities, these lessons can be

reinforced by preparing concise policy-focused interpretations of what has been done (see below). Award schemes can also stimulate a competitive approach to policy enhancement, but run the risk of becoming bureaucratic exercises. One approach could be to link awards more closely with benchmarking, so that the benchmarked data forms the justification for the award.

Highlight innovations which overcome institutional barriers

Complex institutional structures can inhibit policy transfer. However, within different institutional settings there are always cities which resolve particular constraints. Case studies that demonstrate how this has been achieved would be useful to other cities seeking to overcome these hurdles. These case studies would need to explicitly draw out how the innovations could be tailored to other areas.

Develop concise policy-focused literature and interpretation

Interviewees suggested that, in order to make good use of limited staff resources, good practice guides and academic research reports could be more concise and include clearer policy messages. If the information is to be useful for policy transfer, attention needs to be given to how transferable the findings may be to other contexts (see Marsden and Stead, 2010). Policy messages also need to consider more practical issues associated with project implementation such as staffing needs, costs and revenues.

Improve the dissemination process

The first stage in improving the dissemination process would be to trace back the route from the key publications, e-lists and websites from which practitioners and researchers access information and understand how these outlets trawl for their information. Once there is a clearer understanding of that end of the process it should be possible to promote more effective communications strategies such as identification of appropriate media outlets and formats, how to communicate messages and how to meta tag web resources.

Create improved information-searching facilities

There have been several efforts to generate knowledge centres for transport research. It seems that these may not be fulfilling the role for which they were designed. The strengths and weaknesses of existing search tools and knowledge centres should be identified in consultation with cities of different types to determine whether these tools can be modified, whether the tools are functional but are not being used effectively or whether new tools are required.

Make more effective use of consultants

Consultants appear to play an important role in the transfer of scheme designs and of implementation knowledge. Some may also specialise in specific innovations. Cities could

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

potentially benefit from training in identifying where in the learning process consultants of different types could most effectively be contracted. Consultants also offer a further route to dissemination (for academics and for cities) and consideration should be given to the increased involvement of consultants in policy networks.

Assessment of solutions

We assess these eight possible solutions against the barriers identified in Section 7 in the matrix in Table 6 below. The first column lists the barriers under the two headings of barriers to policy learning and barriers to implementation. The second assesses the severity of these barriers (*** high) based on the views of interviewees as summarised in Section 7. For each of the eight possible solutions in turn we then assess the extent of its possible contribution to overcoming each of the barriers. This assessment is based on our own judgment and the experience gained from the interviews.

The case for a given solution will depend on the number of barriers to which it can contribute, the severity of those barriers, and the extent to which it is likely to contribute to overcoming each barrier. This leads to a priority for consideration in the final row of the matrix. Those which appear to be of highest merit are:

- Improving cities' policy learning
- Investing in policy networks
- · Concise policy focussed literature
- Improved information searching.

Table 6: Matrix of solutions against barriers

		Solution											
Barrier	Severity	Improve city policy learning	Invest in policy networks	Improve benchmarking	Highlight institutional barrier innovations	Concise policy focused literature	Improve dissemination	Improve information search	Effective use of consultants				
Learning Culture	***	√ √	$\checkmark\checkmark\checkmark$		√ √								
Unsystematic search	**	√ √	√ √					///					
Staff resources	***	///				√ √	✓	√√	√ √				
Information availability	**		√ √	√ √		V V V	✓ ✓	√ √	√ √				
Information reliability	*	✓					✓						
Governance	**	√√			√ √								
Funding	**												
Legislation	*	√√	√ √		√ √		✓	✓					
Private Sector	*	√√	√√	✓	√ √								
	Priorities	High	High	Low	Medium	High	Medium	High	Low				

9. CONCLUSIONS

This paper reports on a study of current practice in policy transfer and ways in which its effectiveness can be increased. The study was conducted in larger cities in North Europe and North America. Whilst we identify some findings which appear to be of broader global interest these extrapolations should be treated with caution.

Cities are actively looking to learn from one another. Six principal motivations for looking for policy lessons from elsewhere were identified. Strategic need was the dominant motivation, but other factors included policy collapse, curiosity, political intervention, financial support and the desire for legitimisation and influence. This is in line with the findings from other fields of study (e.g. Dolowitz and Marsh, 2000 and Rose, 2005). The predominant motivations for searching for lessons are more voluntary than coercive and therefore should lead to open search processes.

Local and elected officials dominated the process of initiating policy transfer, and local officials were also the leading players in transferring experience. However, private suppliers, consultants and to a lesser extent academics also played a role in the provision of information. The beliefs and the experiences of the actors may play a role in the types of policies they look at and the lessons they wish to learn.

These actors used a range of sources of information. Informal networks and information sharing through professional contacts are the predominant methods of initial knowledge transfer. Although officials heard about new developments through shorter media articles in newspapers and the technical press, written material was largely used as support. This is for two main reasons:

- 1. local officials are highly time constrained and document searches created too much information with limited indication of its relevance to their context.
- 2. local officials placed much greater trust in findings and suggestions reported by known colleagues and in first hand data. Good practice guides and project reports were not seen to tell the full story and were thus thought to risk displaying a positive reporting bias. The mix of informal information scanning from news media and the reliance on personal contacts was described as an unsystematic and potentially sub-optimal approach to searching for policies.

This unsystematic approach, and the perceived inadequacies of the available information, are both barriers to effective policy transfer. However, organisational learning culture appears to be the most critical factor in determining the extent to which cities attempt to learn from elsewhere, where they look and how they approach the search. The effects of learning culture are closely linked to the constraints on time and the degree of reliance on informal networks. Cities which reported more supportive environments and which made resources available also reported much larger networks of contacts (in volume, geographic and policy spread). Further work is needed to establish the extent to which organisational learning culture is a barrier to, or facilitator of, policy learning.

Barriers also exist which limit the implementation of promising ideas. The principal barriers to implementation appear to be governance structures and finance. In some cases lack of legislation and restrictive involvement of the private sector are also factors. Dedicated funding streams, even where they pay for only partial implementation, were important in facilitating many of the policies studied.

Our findings strongly support the notion of policy learning being a social process built around curiosity, exchange and trust. Thus our key recommendations focus on ways to strengthen learning by building on the sociological learning model. A prioritisation exercise which assessed solutions proposed by the interviewees against the barriers reported led to four key proposals of: i) improving cities' policy learning; ii) investing in policy networks; iii) developing more concise policy focussed literature which deals with transferability issues; and iv) developing better techniques or opportunities for information searching.

The study of policy transfer and policy learning is in its infancy in transport research. Our research followed the in-depth case study small sample approach which typifies much of the policy learning literature. The approach has led to a rich understanding of what is a very active and real process but it is difficult to further generalise the importance of the findings and to use them to predict the rate at which policies might transfer. The research is also limited by the lack of connection between policy process and policy outcomes — with little indication of the extent to which policy transfer has generated more effective policies. Future research could usefully address these shortcomings by tracking the diffusion (across space and time) and the effectiveness of a policy (or sub-set of policies) which has reached a large number of sites. The research could empirically test the extent to which the factors identified in this paper explain the variation in their uptake and/or effectiveness.

The paper suggests some important potential constraints when considering the transfer of policies across different regions of the world with different policy and socio-cultural contexts. First, language is likely to be a barrier in allowing professionals to access and assimilate information through the Internet. Second, if peer-peer exchange is important then where the networks are weak or non-existent, there will potentially be difficulties in transferring knowledge. Consultants may have an important role to play here as was the case in the transfer of BRT to Lagos (Dairo and Brader, 2009). However, there are also dangers of inappropriate policy models being pushed or exported to institutional settings where there is a poor match. Whilst the globalisation of knowledge through the internet offers the potential for much more rapid transfer of the awareness of policies there appears to be much still to be done to transfer the understanding of how they work and in what circumstances. Improved transparency in the evidence base, greater attention to transferability of findings may help to overcome some of these concerns.

Further work is also needed to test the robustness of our findings in smaller cities where resources are likely to be even more constrained, and in other geographic and institutional contexts.

10. ACKNOWLEDGEMENT

The authors would like to thank the Volvo Research and Educational Foundations for funding the research from which these findings are drawn. Support also is gratefully acknowledged from the University of Leeds and the University of California Transportation Center.

11. REFERENCES

- Attard, M. and Enoch, M. (2009) *The role of policy transfer in the introduction of Road Pricing in Valletta, Malta*, Paper Presented at the WCTR SIG10 Special Interest Group Meeting, Gothenburg, 19th April
- Berry, F.S. (1997) Innovation in Public Management: The Adoption of Strategic Planning, *Public Administration Review*, **54**, 322
- Betsill, M. and Bulkeley, M. (2004) Transnational Networks and Global Environmental Governance: The Cities for Climate Protection Program, *International Studies Quarterly*, **48**, 471–493
- Bulmer, S. and Padgett, S. (2004) Policy Transfer in the European Union: An Institutionalist Perspective, *British Journal of Political Science*, **35**, 103–126
- CfIT (Commission for Integrated Transport) (2001) A Study of European Best Practice in the Delivery of Integrated Transport. CfIT, London.
- Crozet, Y. (2009) "Tramway Mania" in France: Facing the Multidimensionality of Transferability Issue, Paper Presented at the WCTR SIG10 Special Interest Group Meeting, Gothenburg, 19th April
- Dairo, G. and Brader, C. (2009) Lagos BRT-Lite: Africa's First Bus Rapid Transit Scheme, Summary Evaluation Report, BHLS COST Action Report, http://www.bhls.eu/, Last Accessed 30/04/10
- Dolowitz, D. and Marsh, D. (2000) 'Learning From Abroad: The Role of Policy Transfer in Contemporary Policy Making', *Governance*, **13** (1), 5-24
- Dunphy, R., Myerson, D. and Pawlukiewicz, M. (2003) *Ten Principles for Successful Development Around Transit*. Urban Land Institute, Washington, D.C.
- Estache, A. (2001), Privatization and Regulation of Transport Infrastructure in the 1990s, *The World Bank Research Observer*, **16** (1), 85-107
- Heichel, S., Pape, J. and Sommerer, T. (2005) Is there convergence in convergence research? an overview of empirical studies on policy convergence, *Journal of European Public Policy*, **12**(5), 817 840
- Ison, S. and Rye, T. (2008) *The Implementation and Effectiveness of Transport Demand Management measures: An International Perspective*, Ashgate, Dewsbury, ISBN: 978-0-7546-4953-3
- Kern, K.K., Malte, C. and Malte, S. (2007) The diffusion of Local Agenda 21 in Germany: Comparing the German federal states, *Environmental Politics*, **16**(4), 604-624
- Kingdon, J.W. (2003) *Agendas, Alternatives and Public Policy*, 2d ed. (New York: Addison-Wesley Educational Publishers, Inc.
- Knapp, K. (2005) Improving Local Road Safety with Lessons from Europe, *Public Works Management Policy*, **10**, 69-76

- Levi-Faur, D. and Vigoda-Gadot, E. (2006) New public policy, new policy transfers: Some characteristics of a new order in the making, *International Journal of Public Administration*, **29** (4), 247-262
- Marsden. G. (2008) Good Practice in the Exploitation of Innovative Strategies in Sustainable Urban Transport: A Review of Evidence, Project Report Volvo Research and Educational Foundation, www.its.leeds.ac.uk
- Marsden, G., Frick, K.T., May, A.D. and Deakin, E. (2009) Good Practice in the Exploitation of Innovative Strategies in Sustainable Urban Transport: City Interview Synthesis, Project Report Volvo Research and Educational Foundation, www.its.leeds.ac.uk
- Marsden, G. and Stead, D. (2010) Policy transfer and learning between cities: A review of concepts and evidence, *Forthcoming in the Journal of Transport Policy*
- Marsh, D. and Sharman, J.C. (2009) Policy diffusion and policy transfer. *Policy Studies*, **30** (3), 269-288.
- Mintrom, M. (1997) Policy Entrepreneurs and the Diffusion of Innovation, *American Journal of Political Science*, **41** (3), 738-770
- Pressman, J.L. and Wildavsky, A. (1984) *Implementation: How Great Expectations in Washington are Dashed In Oakland*. University of California Press, Berkeley, California
- Rietveld, P. and Stough, R. (2004) *Eds. Barriers to Sustainable Transport: Institutions, Regulation and Sustainability*, Routledge, ISBN: 0415323622
- Rose, R. (1991) What is Lesson Drawing? Journal of Public Policy, 11, 3-30
- Rose, R. (2005) Learning from Comparative Public Policy: A practical guide, Routledge, Oxon, ISBN 0-415-31741-8
- Rye, T., Gaunt, M. and Ison, S. (2008) Edinburgh's Congestion Charging Plans: An Analysis of Reasons for Non-Implementation, *Transportation Planning and Technology*, **31**(6), 641-661
- Star, S.I. and Griesemer, J.R. (1989) Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39, Social Studies of Science, **19**, 387-420
- Stead, D., de Jong, M. and Reinholde, I. (2008). Urban transport policy transfer in Central and Eastern Europe. *disP The Planning Review*, **44**(1) pp.62-73.
- Stone,D. (2001) Learning Lessons, Policy Transfer and the International Diffusion of Policy Ideas, CSGR Working Paper No. 69/0, April 2001, University of Warwick, http://www.csgr.org
- Van den Bergh, J., Leeuwen, E., Oosterhuis, F., Rietveld, P. And Verhoef, E. (2007) Social learning by doing in sustainable transport innovations: Ex-post analysis of common factors behind successes and failures, *Research Policy*, **36**, 247–259
- Ward, S.V. (2007) Cross-national learning in the formation of British planning policies 1940-99: A comparison of the Barlow, Buchanan and Rogers Reports, *Town planning review*, 78(3), 369-400
- Westphal, J.D., Gulati, R. & Shortell,S. (1997) Customization or Conformity? An Institutional and Network Perspective on the Content and Consequences of TQM Adoption, *Administrative Science Quarterly*, **42**, 366
- Wolman, H. And Page, E. (2002) Policy Transfer among Local Governments: An Information-Theory approach, *Governance: An International Journal of Policy, Administration, and Institutions*, **15**(4), 477-501

Wang, R. (2010). Shaping urban transport policies in China: Will copying foreign policies work? *Transport Policy*, **17**, 147-152