

UC Berkeley

Earlier Faculty Research

Title

How do cities approach policy innovation and policy learning? A study of 30 policies in Northern Europe and North America

Permalink

<https://escholarship.org/uc/item/7hn2h8g1>

Authors

Marsden, Greg
Frick, Karen Trapenberg
May, Anthony D.
et al.

Publication Date

2010-11-01

University of California Transportation Center
UCTC-FR-2010-35

**How do cities approach policy innovation and policy learning? A study
of 30 policies in Northern Europe and North America**

Greg Marsden, Karen Trapenberg Frick,
Anthony D. May and Elizabeth Deakin
University of California, Berkeley
November 2010



Contents lists available at ScienceDirect

Transport Policy

journal homepage: www.elsevier.com/locate/tranpol

How do cities approach policy innovation and policy learning? A study of 30 policies in Northern Europe and North America

G. Marsden^{a,*}, K.T. Frick^b, A.D. May^a, E. Deakin^c

^a Institute for Transport Studies, University of Leeds, UK

^b University of California Transportation Center, CA, USA

^c City and Regional Planning Department, University of California at Berkeley, Berkeley, CA, USA

ARTICLE INFO

Keywords:

Policy transfer
Innovation
Urban transport
Policy learning
Implementation

ABSTRACT

This paper reports on a study of current practice in policy transfer, and ways in which its effectiveness can be increased. A literature review identifies important factors in examining the transfer of policies. Results of interviews in eleven cities in Northern Europe and North America investigate these factors further.

The principal motivations for policy transfer were strategic need and curiosity. Local officials and politicians dominated the process of initiating policy transfer, and local officials were also the leading players in transferring experience.

A range of information sources are used in the search process but human interaction was the most important source of learning for two main reasons. First, there is too much information available through the Internet and the search techniques are not seen to be wholly effective in identifying the necessary information. Secondly, the information available on websites, portals and even good practice guides is not seen to be of mixed quality with risks of focussing only on successful implementation and therefore subject to some bias. Officials therefore rely on their trusted networks of peers for lessons as here they can access the 'real implementation' story and the unwritten lessons. Organisations which have a culture that is supportive of learning from elsewhere had strong and broad networks of external contacts and resourced their development whilst others are more insular or inward looking and reluctant to invest in policy lessons from elsewhere. Solutions to the problems identified in the evidence base are proposed.

City to city policy transfer is a very active process in the field of transport. Not enough is yet understood about its benefits or the conditions under which it is most effective. Such understandings should help to promote and accelerate the uptake of effective and well matched policies.

© 2010 Elsevier Ltd. All rights reserved.

1. Introduction

There is considerable interest in identifying examples of good practice in urban transport policy (e.g. Cifti, 2001; Dunphy et al., 2003; Knapp, 2005; 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 (Heichel et al., 2005; Van den Bergh 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, p. 5)

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; Bulmer and Padgett, 2004). This has been particularly true within the European Union where the extra legislative layer has generated opportunities and resources to bypass the nation state level (Marshall, 2005).

* Corresponding author.

E-mail address: G.R.Marsden@its.leeds.ac.uk (G. Marsden).

Whilst there has been a strong institutional tradition to the study of policy transfer other theoretical domains argue their legitimacy in studying the movement of policies. Marsh and Sharman (2009) for example discuss the importance of policy diffusion literature in explaining how policies move over space and time (see also Rogers, 2003). 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 agency within governance systems (Marsh and Sharman, 2009; Levi-Faur and Vigoda-Gadot, 2006). DiMaggio and Powell (1983) highlight the importance of the broader system within which policies are made and note that there are pressures upon institutions to mimic other institutions as a result of competitive forces and to reduce the costs associated with uncertainty. Organisational learning literature also has insights to offer the study of policy transfer as transfer implies the exchange of knowledge (Boonstra, 2004). The conditions under which organisations are open to learning are important. This literature also pays attention to the role of individuals engaged in the development and operation of policies as they hold crucial aspects of the workings of these policies internally (implicit knowledge). Importance is placed on the mechanisms of exchange of information between these actors and their learning counterparts (Lam, 2002; Delbridge, 2003).

Wolman and Page (2002) suggest that whilst the policy transfer and diffusion literatures have much to offer, they lack attention to detail on the process of transfer. Taken together the literature on the study of policy transfer implies the need to study the process, the broader social system within which transfer is occurring and the institutional conditions that influence it.

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), the project took an interview-led approach to studying the process of policy transfer for thirty innovations in eleven cities in Northern Europe and North America. The purpose of the paper is to describe the key aspects of policy transfer under investigation (see also Marsden and Stead, *this issue*) and to conclude on the importance of the transfer process in the transport sector, the key elements of it and the difficulties that cities face in seeking to learn from elsewhere. Section 2 of the paper provides a brief review of the findings of the literature review. Section 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 concludes by summarising the implications of the research for the practice and research communities.

2. 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).

2.1. 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). 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.

2.2. 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). Of particular interest to this study is the notion of 'policy entrepreneurs', individuals who are motivated to effect policy changes. Kingdon (2003) for example suggest that the presence of a political champion is critical to getting policies implemented. Whilst Mintrom's work (1997) shows that policy entrepreneurs were influential in the extent to which school choice policy was both considered and adopted, his work and that of others (e.g. Bulmer and Padgett, 2004) suggest that complex governance arrangements and implementation issues can limit their real effectiveness.

2.3. What is transferred?

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). 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.

2.4. From where are policy lessons learnt?

The extent to which policies can successfully transfer across socio-political boundaries is of key interest. Heichel et al. (2005) identified a strong national influence on the extent to which environmental policies transfer. Kern et al. (2007) also supports the notion that policy transfer is more prevalent across close geographic and cultural neighbours (sometimes referred to as policy diffusion). Ward (2007) also identified the potential influence of strong philosophical neighbours noting the traditional ties between the UK and the US in the planning sphere despite the UK being closer to many important and potentially preferable competing European approaches. In one of the few transport studies of this process, 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.

2.5. 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.

2.6. Criticisms of policy transfer

Policy transfer is not without its critics. Evans (2009a) outlines three main criticisms. First, that it is not possible to fully separate out policy learning from normal policy making processes and so, essentially, it adds little value. Second, insufficient attention is given to whether policy transfer occurred or not. Third, that policy transfer is descriptive in nature and fails to identify explanatory theories for movement (James and Lodge, 2003).

This project was designed to try and shed insights on the first and second elements of this critique. Of course, transfer is not separate from a policy making process so the in-depth qualitative research described below investigated whether or not the transfer processes appear sufficiently important to be worthy of further study. Working with key actors in the processes provided a detailed understanding of what information was used where in the decision-making process which addresses the second issue. The third issue is not tackled here. As Section 1 and the review paper by Marsden and Stead *this issue* set out, there are a number of potential theoretical frameworks to embrace. The study of policy transfer is in its infancy in transport so this study offers insights from the qualitative research to inform which theories and variables to test in future research (Evans, 2009b). As Mintrom (1997) showed in his investigation of the role of policy entrepreneurs, it is possible to isolate and quantitatively test specific hypotheses about the importance of different elements of the transfer process.

3. Methods

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. In all, 30 policies were examined. 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 et al., 1997). It may therefore 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, 1997). 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.

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.

Table 1
Case study cities.

Site	Population	Innovations known about at time of site selection
Lyon France	415,000 Larger Met Area 1.78 M	Highly integrated public transport system with bus, trolley bus, Metro and rail. Advanced information systems and ticketing. Early adopter of driverless Metro system. Rent-a-bike system and school travel initiatives. Home of research institute CERTU
Nancy France	260,000 Larger Met Area 0.5 M	Rubber tyred tram, urban development project
Edinburgh Scotland	450,000 Larger Met Area 0.78 M	Held a referendum on congestion charging, early adopter of high priority bus corridors, planning a tram implementation project and UK's first major car club city.
Leeds England	443,000 Larger Met Area 1.5 M	Early adopter of HOV lane, home zones and safe routes to school. A major hub for commercial car share. Involved in several road pricing studies. Recent failed tram proposal with trolley bus system now under consideration.
Bremen Germany	546,000 Wide Met Area 2.37 m	Participant in CIVITAS Vivaldi project with car sharing, introduction of some CNG stations, environmentally friendly delivery vehicles, tram-bus integration and environmental residential zones.
Stockholm Sweden	744,000 Larger Met Area 1.95 M	Active adopter of sustainable travel measures such as cleaner bus fleet (Ethanol buses), smart cards, car sharing, safe routes to school. One of the few cities adopting congestion charging. Environmental restrictions around central urban area.
Copenhagen Denmark	656,000 Larger Met Area 1.6 M	High levels of cycle use, public cycle rental and evidence of policy transfer to other cities (Copenhagenize). Urban rail, bus and Metro system. Famous 'finger plan' land use approach. Major pedestrianisation of historic core. Adoption of high quality bus corridors.
Seattle USA	582,000 Larger Met Area 3.9 M	High quality transit service and transit information, early visioning process for multiple dense centres (1970s and 1980s), creative use of density bonuses for transit & highway shoulders for bus lanes.
Dallas USA	1,230,000 Larger Met Area 6.15 M	Healthy core downtown with high rise buildings, free market transit-oriented development sites along light rail, also TOD-like sites along highway but without transit.
San Francisco USA	765,000 Larger Met Area 7.3 M	Congestion pricing proposals, multimodal transit and pedestrian/bicycle planning and issues, parking management, car sharing. Complex institutional dynamics due to numerous cities and transportation agencies.
Vancouver Canada	600,000 Larger Met Area 2.5 M	Significant transit service, high quality design for buildings and overall sites, long term strategies for high density urban development/infill coordinated with transit and to build markets for transit, traffic calming, busways.

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. 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. In all, 30 innovations were discussed in detail and these are categorised by type of policy in

Table 2. 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.

4. 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, 2004). 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. The study was not however, 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 (Lander) and national legal and regulatory frameworks, which can act as a constraint. The other EU cities (Stockholm, Edinburgh, Leeds) each have 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 organisations (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 3.

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.

5. Principal findings

Several key findings on policy transfer emerge from our research. In this section, we review why cities undertake policy

Table 2
Different types of policies studied.

Policy Type	Number	Example
Public transport systems	9	Lyon driverless Metro Line D
Demand management	6	High occupancy vehicle lane leads
Pricing	4	Stockholm congestion charging
Public transport integration	3	Copenhagen metro-bus integration
Urban realm	2	Nancy station redevelopment (Grand Coeur)
Strategic planning	2	<i>forwardDallas</i> strategic plan
Cleaner fleets	2	Low emission taxis and buses in Bremen
Active travel	2	Edinburgh bike hire scheme

Table 3
Key policy objectives.

	Lee	Bre	Cop	Sto	Edi	Lyo	Nan	SFra	Dal	Sea	Van
Growth/Economy	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓
Congestion	✓✓		✓	✓	✓✓	✓	✓✓	✓✓	✓✓		✓✓
Air quality	✓	✓✓		✓✓		✓	✓✓	✓✓	✓✓	✓✓	✓✓
Climate change	✓	✓		✓		✓	✓✓	✓✓		✓✓	✓✓
Safety	✓		✓	✓	✓		✓	✓	✓	✓	✓
Accessibility	✓	✓	✓	✓	✓	✓	✓✓	✓	✓	✓	✓
Built environment	✓	✓	✓✓	✓	✓✓		✓✓				✓✓
Bus/Tram subsidy reduction		✓	✓		✓	✓					

✓✓A strong recurrent theme.

✓Discussed. Note this table reflects the extent to which the objectives were discussed, not the degree to which they are covered in official policy documents.

transfer, who is involved in initiating and transferring information, what was learnt and how cities approach learning. A project report (Marsden et al., 2009) also considers the implications of institutional structure, the particular contribution of the academic community and the role of cities as disseminators of policy. These issues are not considered further in this paper.

5.1. Why undertake policy transfer?

Six main classes of motivation were identified and are broadly consistent with the literature (Marsden and Stead, *this issue*). The findings here relate to the motivations reported by interviewees for the particular innovations discussed.

5.1.1. Strategic need

The literature (e.g. Rose, 2005) identifies ‘policy failure’ as a key motivator for looking for new policies. Policy failure occurs where it is apparent that continuing with current policies will not lead to the achievement of the organisation’s objectives. The term should not be seen as implying a failure on the part of the city concerned, but more positively a demonstration that there is a strategic need for new policies.

Stockholm identified legislative change as an external trigger of strategic need, in this case the likely breach of European air quality standards for NO_x and PM₁₀. Technological change was also identified as a trigger to seek new options either through the replacement of existing stock (e.g. the trolley fleet in Seattle and Nancy) or through the integration of new systems (e.g. the new Metro and existing bus system in Copenhagen).

Most cities identified the current congestion problems and the difficulties in accommodating future economic growth. Modelling studies were commonly used to assess the degree to which these more established strategic needs could be met. This typically includes the development of a business as usual option based around more intensive application of existing policies (as described in Leeds, Copenhagen and Edinburgh).

There is evidence to support the initial search for solutions as being ‘internal’ (*Ibid*). For example, in Vancouver one respondent concluded “it is better... to look to ourselves where there is a similar situation within the city”. The inability of current policies to meet future needs is one motivator to search externally for solutions.

5.1.2. Project or policy 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. The search is not necessarily immediate or pressing. Edinburgh triggered a major strategic review of options for the city in the late 1980s when it became clear that funding for a proposed Metro rail system was not going to be provided. The tram scheme currently under construction was one element of that review.

5.1.3. 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. One interviewee summarised this “There is always an inspiration when you

travel to a new place... you always think is that something... would it make sense to have it in your city?”. This is in line with expectations from the organisational learning (e.g. Lam, 2002; Delbridge, 2003) and epistemic community literature (e.g. Stone, 2001; Dunlop, 2009). Salskov-Iverson (2006) examined trans-boundary learning between local authorities in Denmark and outside of Denmark and found that “enthusiastic individuals” was one of the main sources of motivation for participation in exchange.

Ideas were reported that had been identified by officials, elected politicians or other 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.

5.1.4. Legitimization and influence

Cities are also motivated to engage in policy transfer (both in seeking and providing information) in order to build support and recognition for ideas and to influence future funding and policy decisions (Kern and Bulkeley, 2009).

Four of the cities (Bremen and Stockholm, Dallas and San Francisco) drew on policy experiences from elsewhere to demonstrate that innovative ideas could work. One interviewee encapsulated a key reason for this: “We fly in people from London, from Nantes from Rome from I don’t know where to tell our politicians our journalists and via the journalists the citizens why they are doing things in a certain way... if I would say the same thing it would be a different result.” Similarly consultants and academics can sometimes be seen to be more neutral than staff and therefore able to deliver difficult messages “certain academics have a national standing and (policy) boards value their perspective.” (brackets added). By contrast, one authority noted that looking to other cities was not “terribly persuasive because more often than not the response is well... we are not Berlin, or well London is much bigger than us”.

Some of the cities were also far more pro-active than others in pushing their achievements into the policy exchange arena. Lyon, Stockholm, Bremen and Seattle appeared particularly pro-active in this regard. Bremen for example was interested in influencing the European policy agenda and was leading the CIVITAS CATALIST programme, which is a good practice exchange programme for cities in Europe. It had won several national and international awards. Stockholm noted that a side effect of the congestion charging scheme innovation was the marketing this did for the city. Both Bremen and Stockholm felt that, combined with other cities, they could put pressure on vehicle manufacturers to bring forward more advanced clean vehicles.

Other cities were less pro-active in promoting their achievements with one interviewee summarising “we have not put effort into telling the world that it is a success and it is because the priorities have been about doing other things... we are not necessarily here to change the rest of the world. Erm you know we have got to have got lots of other things to do.” It was suggested that the extent to which a city was outward facing was dictated by the leadership and that this varied significantly over time.

5.1.5. Enhanced support

The availability of funding for at least part of any new policy or project has acted as a catalyst for policy transfer, particularly in the European context. In the European cities, the availability of EU project funds has supported policy transfer. In the US, scanning visits are funded by national agencies or groups such as the US Federal Transit Administration or the American Association of State Highway and Transportation Officials. Whilst for some initiatives

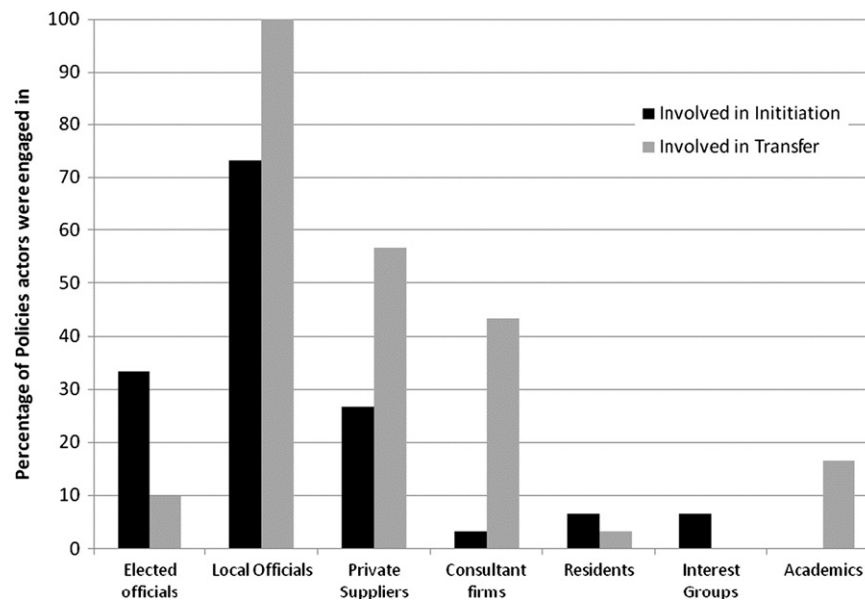


Fig. 1. Engagement of actors during the policy transfer process.

this has accelerated developments which were already planned (e.g. HOV lanes in Leeds) 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 (such as the technological enhancements to the car club system seen in Bremen which allowed its development in Edinburgh). 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 by topping up staff time, paying for feasibility study work, moving a project up a priority list or simply creating a contractual and sometimes political commitment to deliver that might otherwise be absent.

5.1.6. Political intervention

Local agency officials appeared to determine the majority of proposals for new policies.¹ This is perhaps a feature of the greater embedded awareness of options which the professional community has and the limited 'visibility' of many smaller transport innovations. Iseki et al. (2007) for example identify the adoption of Smart Cards in US Transit Agencies as "characterized more as planning decisions than as political board level decisions." (p. 52).

Ideas are however, 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 (see also Isaksson and Richardson, 2009). The Nancy station area redevelopment project (Grand Coeur) was also instigated by the Mayor. 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. One interviewee stated that opposition to tram extensions in Bremen was dropped by politicians when they went together with officials to visit Karlsruhe, Zurich and Strasbourg "It was one of these processes

where you really see the impacts of learning from other cities". This mirrors the findings of Matsumoto (2007) where visits by politicians to see other systems were key to unlocking progress.

5.1.7. Voluntary or coercive motivations?

Dolowitz and Marsh (2000) suggest a continuum from purely voluntary and unbounded rational search for policies through to more coercive motivations (e.g. through direct political imposition). The case studies identified three examples of coercive transfer processes driven by political interventions (e.g. Stockholm Charging, Nancy Grand Coeur and Edinburgh bike hire). Whilst legislative change (e.g. air quality regulations) also motivates a search for solutions, the search process is not predefined.

Despite the influence of political intervention, the overwhelming majority of innovations studied (23²) were driven by (e.g. Edinburgh road pricing and car clubs, Leeds HOV lanes, Dallas transit oriented development policies) or the search for preferred solutions strongly influenced by (e.g. Copenhagen Metro, Edinburgh Tram) local officials. Funding streams attached to particular innovations (e.g. San Francisco charging) can influence the type of policy measures considered. The search process is reviewed further in Section 5.3 but it is strongly influenced by the individuals engaged in the process and is clearly bounded in nature (see Lodge, 2003).

5.2. Who is involved in policy transfer?

Seven categories of actor were identified as being involved in the transfer of policies. The decision to consider, study and adopt or reject a policy is a long process and different actors emerge as important in different stages of the process. Fig. 1 below shows a distinction between those actors engaged in the initiation of a policy search and those involved in the details of the policy search and the application of the results.

5.2.1. Elected officials

Elected officials play a more important role in the initiation of the search for ideas than in the transfer process themselves (see Section 5.1.6). This is perhaps less true of more controversial

¹ This may be a feature of the sample selection where local officials identified the key individuals to be interviewed.

² Four innovations were not able to be clearly classified as 'voluntary' or 'coercive' containing elements of both or not being discussed in sufficient detail.

schemes such as congestion charging and major infrastructure schemes where political intervention throughout the process can be critical (e.g. Matsumoto, 2007).

5.2.2. Local officials

Local officials dominate the search for ideas which reflects the dominance of more voluntary transfer processes evident in the North European and North American contexts. This is also a reflection of the dominance of strong epistemic communities in policy transfer processes (Dunlop, 2009). Strong networks of professionals were identified in the Nordic region, the UK, France and North America. It was evident through some of the interviews that the local officials felt an ability to judge the likely policy fit of solutions to their areas and would therefore constrain the search for solutions in some respect. One interviewee reflected on the strategic transport review in Edinburgh and the decision to develop a case for tram schemes: *"Was Trolley bus ever a serious option? Were the alternatives... serious competitors or did they stick with the Edinburgh vision?"* An interviewee from Copenhagen noted the important role local officials play in mediating what decision-makers actually see: *"Nobody reads the thick reports. But the mayors have relied on me... I can convince my colleagues in this system and the politicians.... They read the front page...."* Regardless of the provenance of the idea, there is a strong 'gatekeeper' role for officials in the mediation and development of externally informed ideas.

5.2.3. Private suppliers

The next most prevalent actor in the system appears to be private suppliers. They are engaged in around one quarter of policy search initiations and over one half of all transfer processes. Suppliers can initiate policy developments spontaneously and then approach and attempt to convince local government partners to adopt. For example Veolia had developed mobile phone based public transport information services in Bordeaux and was promoting the inclusion of this in the negotiation of other franchises around France. In the policies discussed, the suppliers rarely acted alone as there was either a benefit in sharing the risk of an innovation (e.g. in the development of guided bus infrastructure in Leeds to match the vehicle innovation) or a potential cost (e.g. in new technology adoption) which would need to be passed through in public transport provision contracts.

Suppliers were more prevalent during the search process as local authorities sought to understand the range of commercially available opportunities on the market. Leeds reflected on their experience in developing an alternative to the failed tram proposal *"everybody and anybody new from the trolley bus world knows we are here..."* The officials in Copenhagen examining the feasibility of congestion charging had conducted several tours of London and Stockholm *"both with the suppliers and with the municipalities... Of course with the supplier's side they are quite interested in talking with Copenhagen because they know that perhaps we will be a future customer with them."*

5.2.4. Consultant firms

Consultant firms were rarely identified as initiators of policy transfer. One notable exception was in Nancy where demand responsive transport and freight management policies were apparently included in the transport plan for the city by the consultants who prepared it. It was suggested that these ideas appeared in many such plans prepared by consultants, and there appeared to be little interest in pursuing many of them.

Consulting firms though clearly have a crucial role to play in transferring experience once relevant policies are identified. Various motivations for using consultants were identified. First, staffing levels

were generally "lean" within the local governments and consultants offer important capacity captured by one interviewee who stated that: *"you can't keep up to date with absolutely everything... and that's what we pay consultants for"*. Secondly, consultants work across a range of clients and therefore offer firsthand knowledge of innovations from elsewhere (identified as important for example in Dallas in strategic plan development where experience of Portland Oregon and Denver was used). Finally, consultants have a degree of external independence which can provide legitimacy or force to arguments particularly where these challenge long-held positions.

There are, however, limitations to the extent to which consultant firms can fulfil the transfer role. One interviewee noted that *"It's so easy now to throw money at consultants and say – do a survey – do a screening. Then you get all these papers. They're probably just lying somewhere in the corner."* Many interviewees reflected the importance of seeing the innovation or talking directly with the people responsible for its introduction. In Copenhagen a firm had visited a number of cities to discuss public transport integration but the report was felt to cover *"only about 5% of what they have learnt on those trips... 95% I think is in their heads. So I think we should have been on some of those trips to see what goes on and what does it look like and talk with the people who work with it."* This encapsulates some key aspects of the literature on organisational learning which suggests that the knowledge of doing is held by individuals and is difficult to communicate through written procedures (e.g. Nonaka et al., 2000).

5.2.5. Other actors

Residents and interest groups were important initiators of transfer for between five and ten per cent of the policies studied. This included the development of community-led proposals (e.g. Home Zones in Leeds), community consultations (e.g. strategic plan development in Vancouver) and lobbying for solutions (e.g. a pro-tram interest group in Edinburgh). These groups have little influence over the actual search and transfer once an idea enters into the policy assessment process.

Academics were not identified as being initiators of policy transfer directly, although it was noted that the graduate education opens up professionals to considering innovation and to some of the options. Academics were involved to varying degrees in just under 20% of the policy search and transfer processes. This included direct involvement (e.g. as the head of evaluation of the Stockholm Congestion Charging pilot and in the Leeds HOV lane) and as expert advisors (e.g. on the economic impacts of charging in Copenhagen). Leeds, Edinburgh, Lyon, San Francisco, Dallas, Vancouver and San Francisco all have or recently had some form of more regular academic liaison and engagement (e.g. through expert committees). These links appeared stronger in North America. Respondents in several cities noted the difficulty in accessing and translating academic findings into useful policy messages.

5.3. What is transferred?

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 (76%) of projects studied the lessons were a combination from various sites which Rose (2005) identifies as good practice. Leeds for example saw the replacement for the failed tram scheme as an opportunity to identify *"everything that's good about best practice in buses and bringing it together in one place"*. Staff in Seattle look to Vancouver, Portland and occasionally Copenhagen and other European cities for pedestrian and bicycle planning and had recently examined transit systems in San Francisco,

Philadelphia, Boston, and Vancouver for bus technology. This makes tracing the details of exactly what is transferred from where challenging.

There is some evidence that policy concepts or ideas were transferred. The spread of urban bike hire policies (Edinburgh in our case studies) is a good example of this type of ideational transfer. The adoption of Home Zones in Leeds was based loosely on the Dutch 'Woonerf' concept. Edinburgh, San Francisco and Copenhagen all note the influence that the introduction of the London and latterly Stockholm road charging systems had had on the potential for such developments in their cities. Both of the Edinburgh and San Francisco system proposals have been withdrawn which suggests the limits which 'inspiration' from elsewhere may have in final adoption.

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.

The difficulty in identifying the exact nature of the transfer makes evaluating the benefits gleaned from the transfer process a significant challenge also. However, the interviewees were all able to identify benefits of seeking lessons from elsewhere and continued to actively seek such lessons. The evidence here concurs with Evans (2009b) in identifying the need for greater clarity over the nature and magnitude of these benefits. As Section 5.4 discusses, the tightening of budgets is placing such activities under increasing pressure in some organisations.

5.4. How did they approach learning?

This section considers two dimensions of the approach to learning. The first considers the issue of where geographically people look for lessons, reflecting the political science framing of the problem (Evans, 2009a). The second reflects on how they approach the learning task, drawing more on the social learning perspective (Wolman and Page, 2002)

5.4.1. Where do cities look for lessons?

The literature suggests that cities often look to close geographic neighbours as a source of learning (Rogers, 2003; Rose, 2005; Kern et al., 2007). This was specifically mentioned in three of the cities. An interviewee from Copenhagen suggested that the ease of lesson transfer across contexts was a major motivation for this "generally it's easy for me to compare with some societies and countries that I understand and know which have democracy systems like ours who have a political situation that sometimes looks ours – but maybe a little different." Whilst this is a free choice, Edinburgh explained that looking abroad was often seen as an extravagance compared with looking elsewhere in the UK and was harder to justify and obtain funding for (also found in Salskov-Iverson, 2006). National and regional networks of transport planners and local government were mentioned in almost every city as one source of information about activities going on in similar contexts.

Geography alone though does not define comparability. 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. There is some support for the notion of looking to local neighbours and cities which are close 'philosophically' (Dolowitz and Marsh, 2000). Thus Dallas was interested in learning from Denver, also a growing city looking to transit-oriented development. Vancouver and Copenhagen exchanged experiences in cycling improvements and both looked to the Netherlands.

Cities had also searched for new ideas which stretched beyond their most obvious comparators with some cities demonstrating a substantial network of contacts in different areas of transport policy. 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. This is also true in the US through, for example, the funding of scanning exercises or federally sponsored benchmarking activities. The degree to which participants in the different cities engaged in these activities varied significantly with the learning styles of the organisations and the culture of interaction between practitioners, consultants and academics influencing the approach taken. Some cities demonstrated a broad range of contacts across a range of different transport applications. Others were more insular, not wishing to burden others with requests for information or acting in a pro-active fashion to share their own lessons. The potential importance of the strength and depth of the networks emerges through a consideration of the approach to information gathering reviewed below.

5.4.2. Sources of information used

The interviews revealed that officials gather information about innovations informally and sometimes quite randomly. 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. In several cities the interviewees reflected the contention set out in Stockholm that "The problem is not the lack of information. The problem is the amount of information". It was also suggested that academic literature is often difficult to read and lacking in well thought through policy lessons for practitioners.

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 a general acceptance that the practitioner community lacked a thorough and consistent evaluation evidence base and this was reflected in their own use of it: "you don't really know what is valid. Is this a good source of information or is it not a good source? ...is this true? ...that's very hard to validate". Taken together with the issues of too much information and significant time constraints this suggests a poor match between written sources and user needs other than in identifying potential ideas. This may be a contributory factor in the increased use of consultants and academics to provide expert reviews or inputs.

The main response to the problems with the volumes and quality of information was for interviewees to 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 with an interviewee in Leeds summarising that "it all really depends on getting to a particular individual...once you get that particular individual it's usually quite straightforward". Trust is developed through relationships over a

number of years: “it’s talking from person to person to the people in my position in other cities and really over time get to know them and their system and see the weak and strong points.” Trusted peers provide not just information but also intelligence on how to apply the information such as “political experience and implementation experience” and “the lessons learnt” and “recommendations”. This seems to align itself well with the organisational learning literature which identifies the focus around implicit knowledge and exchange amongst practitioners as crucial in innovations (e.g. Nonaka et al., 2000; Boonstra, 2004). Peers also provide contacts with experts in other fields which connect overlapping interests [the notion of “boundary objects” (Star and Griesemer, 1989)]. A “snowball effect” then occurs in which an initial inquiry generates substantially more information across a variety of fields.

Reflecting on the previous section on where cities look for lessons, some cities were much more deeply embedded in peer networks and therefore, it is presumed, better equipped to exchange information on a range of topics. 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.

Table 4 summarises the relative importance of the various information sources across the different case study cities in the innovations studied. 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). The role of suppliers and consultants is described in Section 5.2. It is interesting to observe that, despite the limitations identified above, general literature such as government guidance or resources found on Google are more likely to be accessed than academic literature although there was a stronger tradition of using academic sources in the North American case study sites.

6. Barriers to learning

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 to identifying suitable examples and learning from other cities. For many innovations the barriers were expressed through the description of mechanisms which overcame them. The focus of this study was on lesson drawing and the use of examples from elsewhere in policy transfer and this section therefore focuses on barriers to these parts of the process.

Barriers to implementation were also raised in particular contexts (e.g. Edinburgh congestion charge proposals). There is a growing literature on implementation barriers (e.g. Schade and Schlag, 2003; Rietveld and Stough, 2004; Rye et al., 2008) and further details on these aspects of the research are available in a project report (Marsden et al., 2009). The presence of barriers to implementation does not necessarily prevent the search for new ideas. Copenhagen for example was actively developing congestion charging proposals despite lacking the local powers for implementation. Researching how policies are implemented and managed in other contexts can be an important part of making the case for change. Institutional differences can be important in determining the extent to which policies are likely to be amenable to transfer (Rose, 2005; Stead et al., 2008). Whilst undoubtedly important, institutional differences were seen to impact on the nature of the adoption of policies without necessarily precluding learning from other sites (e.g. Leeds adopted some enforcement lessons on HOV lanes from Madrid whilst other aspects of the scheme were quite different).

6.1. Organisational learning culture

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. This was demonstrated through the breadth of contacts with other cities, the extent to which external lessons were spontaneously mentioned and the degree of formal funding support available within an organisation to participate in conferences and visits.

Given the preference for peer-peer learning expressed by interviewees across all sites, a more open and outward looking organisational culture would appear to provide greater chance of accessing and exchanging with trusted peers. It also appears to be important in arguing for the resources to support exchange activities with an interviewee from one of the more passive information seeking cities observing that “Securing a trip for one technical officer you know for a couple of days to you know whether it is Copenhagen or Milan or Paris is like you know it is a monumental political hurdle” and another from the same city that “Quite a lot of this is about attitudes of individuals that are at the top either politically or within the organisations.” The emergence of the importance of organisational learning culture ties in strongly with the literature described earlier on social learning processes.

Table 4
Relative importance of information sources used in policy transfer.

	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.

✓✓ Often used.

✓ Sometimes used.

6.2. Unsystematic search

When asked to reflect on the how they learnt about ideas from elsewhere the interviewees generally described the approach as “unsystematic” or “ad hoc”. Whilst such an approach is likely to lead cities to uncover policies that they had not necessarily been looking for the search process was described in tones of frustration “*trying to find something useful to you is like a needle in a haystack sometimes*”.

The search for new ideas is also constrained by staff time and resources: “*time*”, “*nothing but time*”, “*time and resources*”, “*there’s fewer and fewer people with sort of in-house knowledge*”. 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 supports 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. Whilst cities increasingly use consultants to assist with scoping out policy ideas the evidence from Section 5.2.4 suggests that this may limit what is learnt.

The combination of unsystematic search processes, large volumes of information and limited staff resources suggests the opportunity to provide better resource bases and improved search tools and this was suggested by some of the interviewees. A significant degree of personalisation was noted as being essential as there were already too many e-mail listings and websites and it was “*intelligence*” not “*information*” that the interviewees wanted. The written data is usually only an entry point to peer to peer contact.

6.3. Quality of the evidence base

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. There was a significant difference between cities in the extent to which they posted information about their innovations. The evidence base will be dominated by those cities that invest in promoting their achievements. Whilst there is nothing inherently wrong with this, there are two caveats which result and affect the overall robustness of the evidence base on new policies. First, other more effective solutions may exist but not be obvious to individuals seeking information. Second, the cities themselves noted that they were more likely to make information available about successes or successful aspects of projects than they were to discuss failures or problems: “*It is quite easy to go on a conference and present something as best practice... it is much harder to say we have spent 40,000 euro on a project and it didn’t work*”. This produces an optimistic implementation picture when there are equally valuable lessons to be learnt from problems and failures.

Several potential solutions were discussed but with little consensus. 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 independent and robust knowledge bases were mentioned although currently available resources were often not identified. It was noted that academic reviews could provide an independent overview of innovations but, particularly in the North European cities these were not frequently accessed and felt to be too long and lack sufficient attention to lessons for practice. Shorter summaries of research findings which gave clear practical lessons were identified as helpful. Expert workshops and

taught short courses which involve policy learning (e.g. CIVITAS-CATALIST, www.civitas-initiative.net/) were also promoted by a city involved in delivering them as these focus on the peer to peer exchange that practitioners identify as critical.

6.4. Risk aversion

New policies carry with them a degree of implementation risk which was identified as a barrier to taking them forward from an initial search stage to a more pro-active review of options and implementation practice. Several examples were provided of the extent to which the provision of funding from national bodies to support some part of the search or potential implementation process were able to facilitate the uptake or search process (e.g. Car Clubs in Edinburgh, Congestion Charging in San Francisco and Guided Bus in Leeds). A nationally or internationally supportive funding regime which provides encouragement and support for seeking policy lessons may play a role in progressing lesson drawing and policy transfer. DiMaggio and Powell (1983) suggest that convergence around particular policies and practices is a natural and sometimes state induced response to uncertainty which may be sub-optimal. Whilst this may be borne out in some of the innovations studied, there is sufficient evidence of divergence of policy choice for this not to be a strong concern.

7. 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 and these conclusions should only be extrapolated beyond this context with caution.

Cities are actively looking to learn from one another and the search for policies and practices across cities in the transport sector is an important process in policy development. There is evidence across the policies and practices studied of all the main dimensions of policy transfer identified through studies in other policy sectors (Dolowitz and Marsh, 2000; Evans, 2009a).

The overwhelming majority of searches for new policies are spontaneous, bottom-up actions driven either by identified shortcomings in urban strategies (which will not be solved by applying current tools) or by curiosity and a desire for continual improvement amongst staff. Some searches are driven by political intervention, legislation or the availability of funding streams. Political intervention in particular can provide impetus to a search process. Local government officials are the dominant players involved in both the initiation and search for new policies (though this finding may have been influenced by our sampling approach). Politicians, residents and interest groups play a role in initiating the search for new policies whilst consultants and suppliers are more engaged in the consideration of different options.

Lessons range from inspiration and consensus building activities (which helped bring a policy to the discussion table or overcame implementation barriers) through to the nuts and bolts of system architecture and operation (which improve system design). Around three-quarters of the innovations studied were ‘hybrid’ solutions, drawing on lessons from multiple sites. This study did not attempt to assess the benefits of the resulting policies. The difficulty in tracing exactly what is learnt from where and the absence of a counterfactual which allows comparison with a solution developed in isolation may explain why the literature across all public policy fields has yet to clearly demonstrate the benefits of transfer (Evans, 2009b). Research looking at the benefits of different system configurations may draw out some of the system design benefits of transfer but would not address the inspirational or deadlock breaking role that examples

from elsewhere bring. Clearly the city practitioners believe there to be benefits as they continue to invest scarce resources in looking for new policies.

Our findings strongly support the notion of policy learning being a social process built around curiosity, exchange and trust. Although officials heard about new developments through shorter media articles in newspapers and the technical press, written material was largely used as support. Informal networks and information sharing through professional contacts were the predominant methods of initial knowledge transfer. This suggests the need to give greater weight to the study of the movement of policies as a social process as advocated by Wolman and Page (2002).

Two principal reasons were identified which contribute to the reliance on human interaction as a source of learning. First, there is too much information available through the Internet and the search techniques are not seen to be wholly effective in identifying the necessary information. Secondly, the information available on websites, portals and even good practice guides is not seen to be of mixed quality with risks of focussing only on successful implementation and therefore subject to some bias. Officials therefore rely on their trusted networks of peers for lessons as here they can access the 'real implementation' story and the unwritten lessons.

The presence of an organisational learning culture which is supportive of external engaging emerged as an important support to learning about policies elsewhere. Some cities have strong and broad networks of external contacts and resource their development whilst others are more insular or inward looking and reluctant to invest in policy lessons from elsewhere. This study was confined to larger cities where these resources are likely to be in greater abundance and it is of interest to know the extent to which this creates a self-selecting network of innovators. It was however evident that the culture of engagement may vary significantly from place to place and over time and size is not the sole determinant of this culture.

Two main solutions emerged from the discussions with practitioners. First, there are opportunities to improve the quality and trustworthiness of the evidence base and to provide better search tools and training to access that information. This may generate a more effective, representative and useful entry point when looking for new ideas. Within this, the academic research base could provide shorter and more policy relevant summaries. Secondly, the reliance on social learning processes suggests the need to support peer-peer exchange networks as a means for promoting the detailed exchange of information on the workings of a policy in practice.

The large volume of city–city interactions regarding policy implementation and the evidence provided here on the extent to which this influences the design and uptake of policies confirms policy transfer to be an important research area. Whilst this study has provided new insights into processes there remains much to be done to understand the benefits of policy transfer, the most effective means of looking for new policies and the conditions under which transfer works best.

References

- Berry, F.S., 1997. Innovation in public management: the adoption of strategic planning. *Public Administration Review* 54, 322.
- Betsill, M., Bulkeley, M., 2004. Transnational networks and global environmental governance: the cities for climate protection program. *International Studies Quarterly* 48, 471–493.
- Boonstra, J.J., 2004. 'Conclusion: some reflections and perspectives on organizing, changing and learning'. In: Boonstra, J.J. (Ed.), *Dynamics of Organizational Change and Learning*. John Wiley & Sons Ltd., England, ISBN: 0-471-87737-9, pp. 447–475.
- Bulmer, S., Padgett, S., 2004. Policy transfer in the European Union: an institutional 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.
- Delbridge, R., 2003. Knowledge, innovation and institutional change. *Work, Employment and Society* 17 (1), 187–196.
- DiMaggio, P., Powell, W., 1983. The iron cage revisited: institutional isomorphism and collective rationality in organisational fields. *American Sociological Review* 48, 147–160.
- Dolowitz, D., Marsh, D., 2000. Learning from abroad: the role of policy transfer in contemporary policy making. *Governance* 13 (1), 5–24.
- Dunlop, C., 2009. Policy transfer as learning: capturing variation in what decision-makers learn from epistemic communities. *Policy Studies* 30 (3), 289–311.
- Dunphy, R., Myerson, D., Pawlukiewicz, M., 2003. *Ten Principles for Successful Development Around Transit*. Urban Land Institute, Washington, DC.
- Evans, M., 2009a. Policy transfer in critical perspective. *Policy Studies* 30 (3), 243–268.
- Evans, M., 2009b. New directions in the study of policy transfer. *Policy Studies* 30 (3), 237–241.
- Heichel, S., Pape, J., 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.
- Isakson, K., Richardson, T., 2009. Building legitimacy for risky policies: the cost of avoiding conflict in Stockholm. *Transportation Research Part A* 43 (3), 251–257.
- Iseki, H., Yoh, A., Taylor, B., 2007. Are smart cards the smart way to go? Examining their adoption by US transit agencies. *Transportation Research Record* 1992, 45–53.
- Ison, S., Rye, T., 2008. *The Implementation and Effectiveness of Transport Demand Management Measures: an International Perspective*. Ashgate, Dewsbury, ISBN: 978-0-7546-4953-3.
- James, O., Lodge, M., 2003. The limitations of 'policy transfer' and 'lesson drawing' for contemporary public policy research. *Political Studies Review* 1 (2), 179–193.
- Kern, K.K., Malte, C., Malte, S., 2007. The diffusion of Local Agenda 21 in Germany: comparing the German Federal States. *Environmental Politics* 16 (4), 604–624.
- Kern, K., Bulkeley, H., 2009. Cities, Europeanization and multi-level governance: governing climate change through transnational municipal networks. *Journal of Common Market Studies* 47 (2), 309–332.
- Kingdon, J.W., 2003. *Agendas, Alternatives and Public Policy*, 2nd ed. Addison-Wesley Educational Publishers, Inc., New York.
- Knapp, K., 2005. Improving local road safety with lessons from Europe. *Public Works Management Policy* 10, 69–76.
- Lam, A., 2002. Alternative societal models of learning and innovation in the knowledge economy. *International Social Sciences Journal*, 67–82.
- Levi-Faur, D., 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.
- Lodge, M., 2003. Institutional choice and policy transfer: reforming British and German railway regulation. *Governance* 16 (2), 159–178.
- 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., 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., Stead, D., 2008. Policy transfer and learning in the field of transport: a review of concepts and evidence. *Transport Policy*, this issue, doi:10.1016/j.tranpol.2010.10.007.
- Marsh, D., Sharman, J.C., 2009. Policy diffusion and policy transfer. *Policy Studies* 30 (3), 269–288.
- Marshall, A., 2005. Europeanization at the urban level: local actors, institutions and the dynamics of multi-level interaction. *Journal of European Public Policy* 12 (4), 668–686.
- Matsumoto, N., 2007. Analysis of policy processes to introduce Bus Rapid Transit systems in Asian cities from the perspective of lesson-drawing: case studies of Jakarta, Seoul and Beijing. Institute for Global Environmental Strategies, <www.strategies.org>.
- Mintrom, M., 1997. Policy entrepreneurs and the diffusion of innovation. *American Journal of Political Science* 41 (3), 738–770.
- Nonaka, I., Toyama, R., Konno, N., 2000. SECI, Ba and leadership: a unified model of dynamic knowledge creation. *Long Range Planning* 1 (1), 5–34.
- Pressman, J.L., Wildavsky, A., 1984. *Implementation: How Great Expectations in Washington are Dashed in Oakland*. University of California Press, Berkeley, California.
- Rietveld, P., Stough, R., 2004. *Barriers to Sustainable Transport: Institutions, Regulation and Sustainability*. Routledge, ISBN: 0415323622.
- Rogers, E., 2003. *The Diffusion of Innovations*. Free Press, New York.
- 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., Ison, S., 2008. Edinburgh's congestion charging plans: an analysis of reasons for non-implementation. *Transportation Planning and Technology* 31 (6), 641–661.
- Salskov-Iverson, D., 2006. Learning across borders: the case of Danish local government. *International Journal of Public Sector Management* 19 (7), 673–686.
- Schade, J., Schlag, B., 2003. Acceptability of urban transport pricing strategies. *Transportation Research Part F* 6, 45–61.
- Star, S.L., 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., Reinholde, I., 2008. Urban transport policy transfer in Central and Eastern Europe. *disP—The Planning Review* 44 (1), 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., 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.
- Wang, R., 2010. Shaping urban transport policies in China: will copying foreign policies work? *Transport Policy* 17, 147–152.
- 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., 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.