Research into Policy: Improving the research evidence base for transport policy makers in NSW

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Abstract

Worldwide, research has been and is being undertaken in the public transport arena which has great relevance for transport policy development. Yet international experience is that jurisdictions vary in their use of research in the development of policy. This paper is concerned with the way in which the connections between research and policy are made (or not made) between transport researchers and transport policy-makers using NSW, Australia as a case-study.

The paper synthesises the literature to extract evidence, particularly relevant to the Australian context, concerning the utilisation and barriers to use of research in a policy-making framework. The main body of the paper reports on recent research conducted in NSW to provide quantitative and qualitative evidence on the needs of researchers, policy makers and other interested parties in NSW and the perceived barriers to making greater connections between the evidence base that exists and transport policy for relevant stakeholders. The results of this case-study investigation include recommendations which have emerged from this NSW case study as well as an exploration of the relevance of structural change, such as a government backed Strategic Research Agenda to create an effective transmission mechanism for evidence based public transport policy.

1. Introduction

This paper builds on previous theoretical frameworks by undertaking a case study examining how public transport research can improve the diffusion of evidence based public transport policy innovation in NSW. In particular this paper seeks to identify how public transport research can be more effectively utilised in the mechanism of policy development in NSW.

The research uses a methodological framework designed to identify and document the barriers to effective research in a public transport planning context and to explore solutions in NSW. As a case study, the outcomes are NSW specific but the exploration of solutions are transferable to other jurisdictions where the specific barriers to effective public transport research uptake maybe different.

The paper begins with a critical synthesis of the literature (academic published and grey) concerned with policy transfer. The synthesis is concerned with extracting evidence, particularly relevant to the Australian context, concerning the utilisation and barriers to use of research in a policy-making framework. This is followed by a section on the methodological approach of this research. The main body of the paper reports on recent research conducted in NSW to provide quantitative and qualitative evidence on the needs of researchers, policy makers and other interested parties in NSW and the perceived barriers to making greater connections between the evidence base that exists and transport policy for relevant stakeholders. The final section discusses outcomes emerging from this NSW case study including an exploration of the relevance of structural change, such as a government backed Strategic Research Agenda to create an effective transmission mechanism for evidence based public transport policy.

2. The literature context

Transport is traditionally viewed as a multi-disciplinary field involving economics, geography, engineering, and psychology and this gives rise to a lack of an agreed disciplinary framework with research, and policy-making occurring from a variety of perspectives or frames of reference. While other social science disciplines are also multi-disciplinary, Kingdon (1984) specifically identified transportation as a policy community which is highly fragmented.

Transportation is now a multi-disciplinary field in which the professional paradigm has changed from the early days of being the responsibility of engineers to now embracing many disciplines to help solve problems. Jones (2009) identifies a sequence of five paradigms beginning with the home of transport research and teaching in the Engineering discipline where concerns were largely vehicle based. The need to address alternative modes and traffic constraints led to a more trip-based perspective and the inclusion of micro-economists with their interests in individual travel behaviour. Recognising the activity based nature of transportation problems included geography and planning disciplines and a recognition of the dynamic nature and differences between short and long term interventions relates to the interests of the finance and marketing disciplines. Finally, the current paradigm which recognises the role of traveller's attitudes and perceptions as being important has embraced the psychology discipline. The development of different paradigms and the involvement of more disciplines in transportation research undoubtedly substantiate Kingdon (1984)'s view that problems and solutions may well be framed in different ways by different parts of the professional community.

Understanding transport policy transfer, using the definition of Dolowitz and Marsh (1996, p. 344) as "a process in which knowledge about policies, administrative arrangements, institutions, etc. in one time and /or place is used in the development of policies, administrative arrangements and institutions in another time and/or place". Ison et al. (2011) notes there is comparatively little work which explains why some transport policies seem to achieve widespread adoption whilst others stall, and that whilst policy transfer is under-researched in a transport context, there is a wealth of studies in wider public policy to draw on. Marsden and Stead (2011) concluded that the study of policy transfer in transport is still in its infancy, but that policy transfer is important, because if the process of policy transfer is better understood it is likely that mechanisms for sharing knowledge could be substantially improved.

Wolman and Page (2002) argue that an analytical framework for investigating policy transfer would facilitate understanding. They suggest that policy transfer be understood as occurring through a communications and information framework. Policy transfer is distinguished from policy diffusion with the former being how policy-makers learn from the experience of others (if the policy is not adopted) whereas policy diffusion is associated with the process of how policy is adopted and the policy has to be adopted for diffusion to be investigated (Woman and Page 2002).

Timms (2011) interviewed policy-makers from seven European cities on the information needs of cities with respect to the development and implementation of their transport policies with interview topics including decision-making processes in the city; information needs for policy-making; information sources; limitations on currently available information; and suggestions about future types of information availability. Timms (2011) identified the issue of information overload as a significant barrier to policy transfer with professional networks and personal contacts being used instead as a way of information gathering. The importance of (peer) information exchange, was also identified by Wolman and Page (2002) as important form of communication in their investigation in local government policy transfer in the UK.

Marsden et al. (2011) took an interview-led research approach to study the process of policy transfer for thirty transport innovations in eleven cities in Northern Europe and North

America. Marsden et al. (2011) found that a range of information sources was used in the search process but human interaction was the most important source of learning for two main reasons: too much information, and mixed data quality leading to bias. Marsden et al. (2011) commented on the role of academic researchers and research in policy transfer when concluding that academics were not identified as being initiators of policy transfer directly, although academics were involved to varying degrees in just under 20% of the policy search and transfer processes including direct involvement and as expert advisors. Respondents in several cities noted the difficulty in accessing and translating academic findings into useful policy messages, suggesting that academic literature is often difficult to read and lacking in well thought through policy lessons for practitioners and that the inclusion of shorter and/or more policy relevant summaries would help the policy transfer process.

Roorda and Alkema (2011) surveyed end users of New Zealand Transport Agency research reports, where the 165 end users included both researchers and policy-makers. They concluded that the research is of substantial value to end users in all areas of the transport sector and the research is "highly regarded because it provides practical, innovative New Zealand-based solutions to their issues" (p. 10) but "currently, there is more use at the conceptual end of the "use continuum" and less evidence of research being used to inform decision-making, programme/policy formation and/or improvement. More value could be gained by considering, up front, how research findings can be linked to policy and programme decision making and whose responsibility it is to follow this through" (p.39).

In the early 1980s, the Bureau of Transport Economics (BTE), the research unit for the Australian Department of Transport, attempted to reflect on the effectiveness of transport research in Australia with transport research being expected to represent some beneficial change to the transport system or its administration (Bureau of Transport Economics 1982). BTE (1982) suggests a quantitative measurement of this in the form of a Policy Interaction Potential Index, but it was not pursued. BTE (1982, p. 63) concluded that the ultimate worth of transport research depends on the effect such research produces on the generation and implementation of policy, but recognised that monitoring this effect was not easy (and may not be productive).

Academics tend to prioritise the dissemination of their research through academic publications. Bray (2009) surveyed 94 transport policy-makers in the policy and strategy divisions of state and territory transport agencies in Australia on their allocation of time and found limited use of the formal transport literature by policy professionals. Bray also found that informal contacts from trusted colleagues were important for the mechanism for policy diffusion and policy transfer. Bray et al. (2011) reviewed 43 transport strategies for five Australian capital cities published between 1965 and 2010 and identified evidence of policy transfer, but no explicit indication of how the diffusion had occurred. However, consistent with this evidence would be the interpretation that Australian cities were learning from international trends based on research (and not necessarily learning from each other). Bray et al. (2011) also noted the "(possibly coincidental) existence of peer-to-peer networks at a national level"(p. 530), including the National Committee on Transport of Engineers Australia, the Australasian Transport Research Forum annual conference, and Austroads for state road agencies with its system of technical working groups

Currie et al. (2010) surveyed users of the Social Research in Transport (SORT) electronic clearinghouse, an advanced web tool for electronic dissemination of transport research (primarily academic papers) which offers free access to abstracts when the full paper is copyrighted and the full paper when it is open access. The 50 survey respondents included government policy providers, academics and consultants. Although a small sample, Currie et al (2010 found most users use the research content accessed from SORT for "conceptual" applications (to keep informed), while "instrumental" use of research (to implement a transport plan, policy or service) represented a minority of users (20% on average). Currie et al. (2010) concluded that thematic research clearinghouses have a role to play in bridging

the gap between quality academic research published in research journals and professional practitioners planning and operating transport systems.

The literature appears to be agreed that understanding the process of policy transfer or the process of policy diffusion is crucial to understanding public advocacy and policy change more broadly. In line with other areas of policy, transport policy transfer and the process of diffusion is a complex array of processes which need to align for the policy transfer to occur but which are impacted by significant barriers (Timms 2011, Bray et al, 2011, Marsden et al 2011, Roorda and Alkema 2011). As identified above, the research –side barriers include poor research, not targeted at policy makers, poor communications with policy implications not being clear, poor dissemination with policy makers being unable to access information and research with different objectives from those of the policy makers. Policy-makers often have no access to research, either other jurisdictions keep it confidential and much academic research is not open access. Policy-makers nevertheless claim to be overwhelmed with information and find much of the information from other jurisdictions to be too differently framed to be useful. Strategic need prompted more utilisation of research for an evidence base for research (Marsden et al 2011). Timing issues can also create barriers as academic research often has a long lead time to undertake before being able to influence policy.

This paper provides a case study concerned with how public transport research can promote evidence based public transport policy in NSW, Australia. In particular this case study is used to identify how public transport research can be more effectively utilised inr policy development in NSW.

3. Methodology

3.1 The research process

There is significant research being undertaken in the public transport environment in NSW with results of relevance for public transport policy development. Yet there appears to be little transfer from this research environment to policy formulation and its implementation.

A workshop with stakeholders central to the research and policy environments was held to explore the barriers in NSW that inhibit the transfer of research findings into public transport policy. Invitations were made to the most senior representatives with view to enabling critical discussion at a strategic level. The format of the workshop included three very short talks from an international expert, the bureaucrat heading policy development in NSW and an academic. Approximately half of the workshop time of 90 minutes was devoted to roundtable discussion and feedback.

The views of the participants were sought in two phases within this workshop. In the first phase, participants were asked about which evidence based research they used in their work, its frequency of use and the barriers to greater use of research (drawn from the literature above). Responses were sought with an electronic voting device, specifically used to provide anonymity. In the second phase, roundtable discussions with more of a focus group approach considered the following two questions in more depth:

1.   What barriers exist in your work to greater transfer of research into policy?

2.   What could make a difference?

The workshop was attended by the mix of stakeholders shown in Table 1. Participants were mixed, in terms of background and discipline, for discussion with a moderator facilitating five separate groups.

Table 1: The mix of participants

Background	Number of Participants
Academics	8
Peak representatives	5
Politician	2
Professional	4
Public Service policy makers	10
Discussion moderators	5

4. Results

4.1. Phase 1 questions: responses of participants to the use of evidence based research

Four questions were informed by the research literature on policy transfer and posed in turn to participants who indicated their response with the electronic voting device. The questions and responses are provided in Tables 2 to 5 below.

Table 2: Ranking of sources of evidence based research to participating stakeholders

Question: If you look at evidence to inform your work, order the importance of these sources for YOU?

Sources of research	Order by participants for importance
Academic papers/University Reports	2
Peak body Reports	3
Consultant Reports	4
Government Reports	1
Other	5

Rank of 1 is most important, rank of 5 least important

Whilst Government reports and Academic papers and reports were ranked 1 and 2 respectively, the weighted response from the electronic devices was close at 28% and 27% respectively (the weighting regime gave five points to the first selection of each person, four to the next and so on). Peak body reports and Consultant reports were similarly close at 22% and 21 % respectively.

Table 3: Frequency of use of evidence based research by participating stakeholders

Frequency	% of participants
More than once a week	65
About once a week	16
About once a month	13
About once a year	6
Never	0

Table 3 shows a majority of stakeholders at a senior level are considering evidence based research on a regular basis. This is encouraging for research into policy transfer and for research as part of the policy diffusion mechanism, particularly if these stakeholders, central to the research and policy environment, promote an evidence based culture in their teams.

Table 4: Ranking of barriers to evidence based research for participating stakeholders

Frequency	Ordering of most important barriers by participants
Poor Research	7
Irrelevant research	3
Poor communication of research results	5
Poor dissemination of research results	4
Not enough time to consider what research exists	1
Swamped with information	2
Difficulty in transferring from other contexts	7
Lack of evidence available	6

Rank of 1 is most important, rank of 7 least important

Whilst participants ranked lack of time and being swamped with information as 1st and 2nd most important, the weighted response was close at 22% and 21% respectively and these two must be considered as equal top barriers. Similarly the ranking of irrelevant research, poor dissemination, poor communication of results and lack of evidence, ranked as 3, 4, 5 and 6 were similarly close to each other at 13%, 12%, 11% and 10% respectively. Responses to this question suggest that the key barriers fall into these two main groups with lack of time and being swamped with information being significantly more important than the second set of barriers relating to poor dissemination and communication on the one hand and lack of relevant research on the other. Poor research was very low down on the list of weighted responses as was difficulty in transferring evidence from other contexts at 2%.

Table 5: Identification of actions to increase the transfer of evidence based research into policy

Question: What makes MOST difference to your use of evidence based research in policy development and implementation?

Frequency	% of participants
Training	6
Transport Research and Policy Network	26
Masterclasses	10
Greater use of clearing house evidence	13
Strategic research plan for policy formulation	32
None of these	13

This question showed the importance of the presence of a strategic research plan for greater use of evidence based research in policy formulation and implementation. This is in line with the literature concerned with the fragmentation of research and policy in the transport domain (Timms 2011, Bray et al 2011, Marsden and Stead 2011 and O'Dolan and Rye 2012). The international evidence is that there is more take-up of evidenced based research in institutional settings where strategic research direction is provided by policy-makers, usually but not exclusively through a rolling program of research. The inference is that researchers align their activities with the interests of policy-makers if they know what is likely to be of interest. The creation of a public transport research and policy network which addresses evidence based research in topical areas was also identified as making an important difference and supports many of the case studies in which informal networks and personal contacts are exploited in seeking knowledge (Timms 2011, Wolman and Page 2002).

4.2 Phase 2 questions: Moderated table-based discussions

Moderated roundtable discussions were the central part of gaining stakeholder views on the barriers to the use of evidence based research in their work environment. The discussions were also important in unpacking the final question of the Phase 1 questions as to what might make a difference to increase the use of evidence in the development and implementation of policy.

There was a general consensus that public transport practice would be improved if it were better informed by research findings and that there is a need for the most up-to date- findings to be considered in the decision making process. However, for evidence based research to inform policy and practice, a complex array of processes must link up to ensure that 'evidence based policy' making actually occurs. Overall, participants were well informed on the pressures and considerations involved in research and policy transfer. Across all tables there was a general 'call for action' in linking public transport research and policy formation in NSW.

Five themes relating to barriers and solutions emerged from the discussions as discussed in the next subsections.

4.2.1 Transport and governance

The governance of public transport in NSW has a culture of modal silos which, although beginning to be broken down, was generally seen by participants to be the dominant culture. The policy of putting the 'customer at the centre' was perceived as still developing in NSW. Participants generally wanted more focus on public transport users and measuring policy outcomes. The significant impact that transport and planning policy decisions can have on how people live, their long-term health, and the vitality and productivity of our society was

acknowledged by participants as central. There was a general feeling that there was a lack of evidence-based decision-making for public transport, despite its great impact on all aspects of society. One participant noted that in the health sector a bad policy decision has a major impact – literally life or death – which focuses health professional's attention on the necessity of having the right evidence. Showing the all encompassing nature of transport policy would help to communicate the need for quality policy research, and importantly the role of evidence based research to influence decision-making.

Transport issues have a high public profile in part because everyone uses transport as part of their daily lives and therefore has a view on how it works and how it does not. This is important in developing policy as, highlighted in Professor Collin's presentation, the way individuals view the transport system orientating around their own use and needs can be very different from the way in which society needs transport to serve the wider population.

4.2.2   Availability of transport data for research

The opportunity to use publicly available data was identified as contributing to the problem of providing 'evidence' on or about Sydney. Criticisms about the quantity of 'usable' information in the public domain for public transport research in Sydney came primarily from academics and professionals who are users, rather than part of the community generating or collecting data. There was a call for more raw data to be available for researchers, analysts and advocates. Participants noted that data on urban planning is largely unavailable despite it being key to transport outcomes.

Improving data exchange between transport policy-makers and researchers would be a way of dispelling current perceptions that policy makers are unwilling to share data. Against this it was recognised that policy-makers often do not know about a researcher's interest in data. For some participants, policy making in public transport was seen to be like a black box in terms of its evidence base.

Advocate participants in particular expressed concern on the lack of evaluation of policy after implementation as being one way of improving the evidence available in future policy implementation cycles.

4.2.3   Availability and quality of research underpinning public transport policies

It was acknowledged that government contracts extensive research to underpin its understanding but these research findings are not available publicly. It was acknowledged that this is not unique to NSW with, for example, the studies on Brisbane's transportation network not being publicly available. The confidentiality of these studies hindered policy transfer as findings and/or recommendations that might apply to other cities facing similar challenges cannot take place.

A greater availability of research would provide the impetus for raising the quality of future research. From a policy-maker perspective, there was concern about the quality of research, with much of research available not being validated. This becomes a time challenge for those who want to make informed decisions but have too little time to sift through and assess the research available. Advocates and peak bodies noted journal papers are time consuming to retrieve as well as being expensive with the context unlikely to be about Sydney.

Policy research was identified by all discussions as having a greater impact when it is better communicated. Much academic research is dense and fails to communicate why the research matters, what are its implications and conclusions. Greater clarity is needed for the time-poor to assess better the value of investing more time understanding the issues and acting on them. This is in line with the conclusions of Marsden et al (2011).

For some participants, time spent with politicians was an important way of persuasion through the verbal communication of ideas thus lending support to the ideas of Wolman and Page (2002) that communication is an important element of policy transfer. The strength of a

verbal approach is that it can become a basis for introducing and generating interest in new ideas. The roundtable discussions identified the creation of a network of academics, consultants and others who can act as conduits to communicate and translate research into ideas to discuss was appealing. This links back to the Phase 1 questions where the creation of a transport research and policy network was thought to make a significant difference.

Discussion at one table noted that transport policy research, perhaps more than other topic areas, suffers from the lack of consensus about the right solution and about what constitutes the top priority. Media also plays a role with the judging of ideas as they emerge and with the presentation of alternative opinions to 'balance' the story. The discussion centred on whether it was possible to have a building of consensus amongst researchers so that the divisiveness of policy research can be reduced. The media was seen by some participants as a threat to innovation for public transport in NSW because of the way it attempted to intervene in the policy domain.

Participants also spoke of the balancing act of assessing evidence/research taking time to hear a range of views whilst being mindful of the political agenda of different proponents. Researchers were criticised for rarely acknowledging the politics of their research outcomes upfront. More communication between academics and the public transport industry sectors was widely supported. It was suggested that the Universities could act as the broker in the relationship between governmental agencies and other stakeholders.

4.2.4   Embedding researchers in policy development

Researchers rarely interact with policy-makers on a day to day basis and their research is rarely embedded in an understanding of the public transport policy environment and implementation cycle. A possible future development would be to link academic researchers to project teams, where researchers would work alongside implementers which in turn would lead to a more robust feedback and evaluation process.

4.2.5   Public transport strategic research planning

The need for clear strategic directions to link public transport research to public transport policy making was discussed at length at all tables. There was an acknowledged mismatch between when policy makers require evidence to support their work and the timeliness with which academic research can respond: this was identified as a significant barrier to the use of academic research by participants. The timing of the need for results by government was suggested as the main reason for contracted research to inform policy development. It was agreed that the timeliness of research would more easily be met by government providing a strategic research agenda to provide academics with more focus as to what would constitute relevant research to government. This fits with the results in the Phase 1 polls where a strategic research plan was identified as the number one development that could make a difference in promoting evidence based research into policy development and implementation.

5. Discussion and Conclusions

The fragmentation of research and policy in the NSW transport policy domain was identified as a challenge by those participating in this case study. The international literature, which highlights similar concerns elsewhere, suggests fragmentation comes from transport being a multi-disciplinary area in which professions with different backgrounds and overlapping skills struggle to work together. This fragmentation was articulated in the roundtable discussions identifying it as an issue in NSW, Australia (as elsewhere).

A strategic approach strengthens the links between public transport research and policy. Government benefits if the research community knows which policy issues are prioritised by government so that policy priorities (both current and future) become research priorities. The international experience shows a greater take-up of evidence based research where

strategic research direction is provided by policy-makers, usually but not exclusively through a rolling program of research. The environment between policy and research in this scenario is one of proactive synergies.

Strategic research agendas to inform policy development and implementation are used by other public bodies in Australia as well as transport agencies in other jurisdictions. Local to NSW in transport is the example of the New Zealand Transport Agency (NZTA) which has recently moved to an evidence based approach for transport with the identification of the information required to meet the needs of transport policy developers, implementation agencies and transport users. The NZTA research programme framework provides clear research objectives and underpins the approach to research investment. The framework is centred around five research areas for land transport, provides research objectives for each of the research areas, and lists research output areas of high and medium strategic fit (albeit the focus is on high strategic fit). In addition, it aligns the programme with the work of transport decision makers, namely the NZTA, Ministry of Transport and approved organisations. The framework identifies that the results of NZTA research must be readily applicable to interventions that can be cost effectively applied in New Zealand in the short-to-medium term for longer term impacts. All research reports are publically available

Another example, but from a different policy area, is the example of the Victorian Police's strategic research agenda. This outlines the organisation's current priority areas for research. Victoria Police seeks to collaborate with researchers who are interested in undertaking projects that are aligned with the research priorities outlined in the Research Agenda. Research is undertaken by various departments within Victoria Police itself and by external research institutions. Victoria Police has built strong research collaborations and is currently an industry partner in more than 15 Australian Research Council (ARC) Linkage Grants.

The literature also identifies that when the strategic dimension is missing, researchers have no coherent framework within which they can understand and help to address the problems facing policy-makers. At best the research environment then reacts to policy-makers current needs through commissioned research. In institutional settings where a strategic component exists, policy transfer is stronger: researchers know what is important to governments and can align their research efforts and consequently policy-makers and researchers have more useful dialogues.

The establishment of Transport for NSW (TfNSW) on 1 November 2011 reflects a fundamental change to the way transport is planned and delivered in New South Wales. This new structure was established to enable an integrated approach, bringing together all modes of transport to improve transport for customers across the State. The new TfNSW structure provides a framework where it would be much more possible to enable the development of a strategic research agenda than previously.

Obtaining consensus between stakeholders in identifying the themes and topics for a strategic research agenda was considered important and the workshop held in NSW was considered a welcome opportunity to start such discussions. Creating forums and platforms for an ongoing dialogue to bring researchers and policy makers together was well supported and the idea of a Public Transport Research and Policy Network was endorsed during the table-based discussions and through the phase 1 polls.

Participants of the NSW workshop involved in policy development did identify having strong intentions to connect to academics and research sources. They also identified the biggest challenge to integrating research into policy development was the monetary cost of academic papers and the time taken to search and digest. These issues are not mentioned in the literature but could be addressed by a consultation processes designed to underpin a strategic agenda as well as the creation of more informal research dissemination network.

Perhaps the biggest barrier in NSW to the development of a strategic agenda and more public networks for research dissemination comes from a considerable concern over media reporting of transport policy proposals and policy. Policy makers are suspicious that the media would misuse a strategic research agenda, using this as the identification of the questions of interest to government. If this was reported with inferred policy outcomes it could frustrate the task of government to govern. Whilst such barriers are real in NSW, the feared outcome is not borne out by evidence from other institutional settings when the strategic direction is an embedded feature of government practice. Moreover the more the strategic direction is developed collectively with a wide collective of stakeholders, the less newsworthy it becomes.

5. References

Bray, D., Taylor, M. and Scrafton, D. (2011) Transport policy in Australia – evolution, learning and policy transfer, *Transport Policy* 18, 522-532.

Bray, D. (2009) The nature and rationale of urban transport policy in Australia. Unpublished Ph.D. Thesis, University of South Australia, Adelaide.

Bureau of Transport Economics (1982) *Funding Characteristics of Transport Research in Australia*, Report 51, Australian Government Publishing Service, Canberra.

Currie, G., Delbosc, A. and Forbes, P. (2010) Improving the value of transport research using advanced web tools to improve research dissemination, *Proceedings of the 12th World Conference on Transport Research,* 11-15 July 2010, WCTR Society, Lisbon, Portugal, pp. 1-11.

Dolowitz, D. and Marsh, D. (1996) Who learns from whom: a review of the Policy Transfer Literature, *Political Studies* 44 (2), 343–357.

Ison, S., Marsden, G. and May, A. (2011) Transferability of urban transport policy, *Transport Policy* 18, 489-491.

Jones, P. (2009) Changing research and policy perspectives: implications for transport performance, the economy and the environment, *Papers of the 32nd Australasian Transport Research Forum*, Auckland

Kingdon, J. (1984) *Agendas, Alternatives and Public Policies*, Little Brown, Boston MA.
Marsden, G. and Stead, D. (2011) Policy transfer and learning in the field of transport: A review of concepts and evidence, *Transport Policy* 18, 492-500.

Marsden, G., Frick, K., May, A. and Deakin, E. (2011) How do cities approach policy innovation and policy learning? A study of 30 policies in Northern Europe and North America, *Transport Policy* 18, 501-512.

New Zealand Transport Agency Research Report 450. www.nzta.govt.nz

O'Dolan, C. and Rye, T. (2012) An insight into policy transfer processes within an EU project and implications for future project design. *Transport Policy* 24, 273-283

Roorda. M. and Alkema, A. (2011) *Evaluation of the value of NZTA [New Zealand Transport Agency] research programme reports to end users, July 2011*.

Timms, P. (2011) Urban transport policy transfer: ''bottom-up'' and ''top-down'' perspectives, *Transport Policy* 18, 513-521.

Wolman, H. and Page, E. (2002), Policy Transfer among Local Governments: An Information–Theory Approach. Governance, 15: 577–501.